

Standard ECMA-376

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Office Open XML File Formats – Part 4

Standard

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Foreword

Changes from the 2nd edition were made to align this 3rd edition Standard with ISO/IEC 29500:2011. Both this 3rd edition and ISO/IEC 29500:2011 refer to the 1st edition. As such, this 3rd edition does not cancel or replace the 1st edition. This 3rd edition does, however, cancel and replace the 2nd edition.

Some important differences between ECMA-376:2011 and ECMA-376:2006 are given in Annex D.

ECMA-376 consists of the following parts:

- *Part 1: Fundamentals and Markup Language Reference*
- *Part 2: Open Packaging Conventions*
- *Part 3: Markup Compatibility and Extensibility*
- *Part 4: Transitional Migration Features*

Annex A forms a normative part of this Part of ECMA-376. Annexes B, C, and D are for information only.

This Part of ECMA-376 includes two annexes (Annex A and Annex B) that refer to data files provided in electronic form.

Introduction

ECMA-376 specifies a family of XML schemas, collectively called *Office Open XML*, which define the XML vocabularies for word-processing, spreadsheet, and presentation documents, as well as the packaging of documents that conform to these schemas.

The goal is to enable the implementation of the Office Open XML formats by the widest set of tools and platforms, fostering interoperability across office productivity applications and line-of-business systems, as well as to support and strengthen document archival and preservation, all in a way that is fully compatible with the existing corpus of Microsoft Office documents.

The intent of this Part of ECMA-376 is to enable a transitional period during which existing binary documents being migrated to ECMA-376 can make use of legacy features to preserve their fidelity, while noting that new documents should not use them. Part 1, §2.4, “Document Conformance”, notes that WML Strict, SML Strict and PML Strict documents do not use any of the features defined in Part 4.

This Part of ECMA-376 is normative for the current edition of ECMA-376, but is not guaranteed to be included in future revisions of that Standard. The intent is to enable the group responsible for maintenance of ECMA-376 to choose, at a later date, to remove this set of features from a revised version of that Standard.

In general, this Part of ECMA-376 augments Part 1, and inherits the provisions of that Part. Exceptions to this are indicated explicitly.

The following organizations have participated in the creation of ECMA-376 and their contributions are gratefully acknowledged:

Apple, Barclays Capital, BP, The British Library, Essilor, Intel, Microsoft, NextPage, Novell, Statoil, Toshiba, and the United States Library of Congress.

1. Scope

ECMA-376 defines a set of XML vocabularies for representing word-processing documents, spreadsheets and presentations. On the one hand, the goal of ECMA-376 is to represent faithfully the existing corpus of word-processing documents, spreadsheets and presentations that have been produced by Microsoft Office applications (from Microsoft Office 97 to Microsoft Office 2008, inclusive). It also specifies requirements for Office Open XML consumers and producers. On the other hand, the goal is to facilitate extensibility and interoperability by enabling implementations by multiple vendors and on multiple platforms.

This Part of ECMA-376 defines features for backward-compatibility and that are useful for high-quality migration of existing binary documents to ECMA-376. These features are used only by documents of conformance class WML Transitional (§2.1), SML Transitional (§2.1), or PML Transitional (§2.1). These features are sometimes needed for high-quality migration of existing binary documents to ECMA-376.

2. Conformance

2.1 Document Conformance

Document conformance is purely syntactic.

- A conforming document shall conform to the transitional W3C XML Schema, and any additional syntax constraints.
- The document shall be of category Wordprocessing, Spreadsheet, or Presentation (see Part 1, §4).
- The document character set shall conform to the Unicode Standard and ISO/IEC 10646, with either the UTF-8 or UTF-16 encoding form, as required by the XML 1.0 standard.
- Any XML element or attribute not explicitly included in ECMA-376 shall use the extensibility mechanisms described by ECMA-376-1 and ECMA-376-3.

Each Part of this multi-part standard has its own conformance clause. The term *conformance class* is used to disambiguate conformance within different Parts of this multi-part standard. This Part of ECMA-376 defines the following document conformance classes:

- *WML Transitional*, if the document is a conforming document of category Wordprocessing that conforms to the transitional schema.
- *SML Transitional*, if the document is a conforming document of category Spreadsheet that conforms to the transitional schema.
- *PML Transitional*, if the document is a conforming document of category Presentation that conforms to the transitional schema.

[Note: Other document conformance classes could be defined in the future. *end note*]

[Note: A document cannot be of more than one of the above conformance classes. *end note*]

A document of a transitional conformance class shall not use relationship types <http://purl.oclc.org/ooxml/officeDocument/relationships/...> but shall use <http://schemas.openxmlformats.org/officeDocument/2006/relationships/...> instead.

2.2 Application Conformance

Application conformance incorporates both syntax and semantics.

- A conforming consumer shall not reject any conforming documents of at least one document conformance class.
- A conforming producer shall be able to produce conforming documents of at least one document conformance class.

- A conforming application shall treat the information in Office Open XML documents in a manner consistent with the semantic definitions given in ECMA-376. An application's intended behavior need not require that application to process all of the information in an Office Open XML document. However, the information that it does process shall be processed in a manner that is consistent with the semantic definitions given in ECMA-376.

[*Note*: This note illustrates the third bullet above. Conforming applications might serve various functions. Examples include a viewer, an editor, and a back-end processor. Here is an illustration of how the third bullet applies to each of those examples:

- If a conforming viewer supports a given feature, then when it displays information using that feature, it respects the semantics of that feature as described in the Standard.
- If a conforming editor supports a given feature, then when it provides its user with an interface for manipulating information using that feature, it respects the semantics of that feature as described in the Standard.
- If a conforming back-end processor supports a given feature, then when that processor transforms or assembles information involving that feature, that processor respects the semantics of that feature as described in the Standard.

end note]

This Part of ECMA-376 defines the following application conformance classes:

- *WML Transitional*, if the application is a conforming application that is a consumer or producer of documents having conformance class WML Transitional.
- *SML Transitional*, if the application is a conforming application that is a consumer or producer of documents having conformance class SML Transitional.
- *PML Transitional*, if the application is a conforming application that is a consumer or producer of documents having conformance class PML Transitional.

3. Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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4. Terms and Definitions

For the purposes of this document, the following terms and definitions apply. Other terms are defined where they appear in *italic* typeface, on the left side of a syntax rule, or within subclauses of language-specific grammars. Terms explicitly defined in this Part of ECMA-376 are not to be presumed to refer implicitly to similar terms defined elsewhere. [*Note: This part uses OPC-related terms, which are defined in ECMA-376-2. end note*]

application — A consumer or producer.

behavior — External appearance or action.

behavior, implementation-defined — Unspecified behavior where each implementation is expected to document that behavior, which would thereby promote predictability and reproducibility within any given implementation. (This term is sometimes called “application-defined behavior”.)

behavior, locale-specific — Behavior that depends on local conventions of nationality, culture, and language.

behavior, unspecified — Behavior where ECMA-376 makes no recommendations. [*Note: To add an extension, an implementer must use the extensibility mechanisms described by ECMA-376 rather than trying to do so by giving meaning to otherwise unspecified behavior. end note*]

comment — A note that an author or reviewer attaches to content in a document. Although a consumer might choose to display comments, they are not considered part of the body of the document. A comment might include the text of the note, the comment author's name and initials, and date of creation, among other things.

consumer — A piece of software or a device that reads packages through a package implementer. A consumer is often designed to consume packages only for a specific physical package format.

content type — Describes the content stored in a part. Content types define a media type, a subtype, and an optional set of parameters, as defined in RFC 2616.

document category — One of the three categories of Office Open XML documents: Wordprocessing, Spreadsheet, and Presentation, defined as follows:

- A document whose package-relationship item contains a relationship to a Main Document part (Part 1, §11.3.10) is a document of category Wordprocessing.
- A document whose package-relationship item contains a relationship to a Workbook part (Part 1, §12.3.23) is a document of category Spreadsheet.
- A document whose package-relationship item contains a relationship to a Presentation part (Part 1, §13.3.6) is a document of category Presentation.

An Office Open XML document can contain one or more embedded Office Open XML packages (Part 1, §15.2.11) with each embedded package having any of the three document categories. However, the presence of these embedded packages does not change the category of the document.

DrawingML — A set of conventions for specifying the location and appearance of drawing elements in an Office Open XML document.

extension — Any XML element, XML attribute, relationship, or part not explicitly included in ECMA-376, but that uses the extensibility mechanisms described by ECMA-376.

Office Open XML document — A rendition of a data stream formatted using the wordprocessing, spreadsheet, or presentation ML and its related MLs as described in ECMA-376-1 and ECMA-376-4. Such a document is represented as a package as described in ECMA-376-2.

package— A ZIP archive that conforms to the Open Packaging Conventions specification defined in ECMA-376-2.

package, embedded— A package that has been stored as the target of an Embedded Package relationship (Part 1, §15.2.11) in an Office Open XML document

PresentationML — A set of conventions for representing an Office Open XML document of category Presentation.

producer — A piece of software or a device that writes packages through a package implementer. A producer is often designed to produce packages according to a particular physical package format specification.

relationship —The kind of connection between a source part and a target part in a package. Relationships make the connections between parts directly discoverable without looking at the content in the parts, and without altering the parts themselves. (See also Package Relationships.)

relationships part — A part containing an XML representation of relationships.

relationship, explicit — A relationship in which a resource is referenced from a source part's XML using the Id attribute of a Relationship tag.

relationship, implicit — A relationship that is not explicit.

SpreadsheetML — A set of conventions for representing an Office Open XML document of category Spreadsheet.

WordprocessingML — A set of conventions for representing an Office Open XML document of category Wordprocessing.

5. Notational Conventions

The following typographical conventions are used in this Part of ECMA-376:

1. The first occurrence of a new term is written in italics. [*Example*: The text in ECMA-376 is divided into *normative* and *informative* categories. *end example*]
2. In each definition of a term in §4 (Terms and Definitions), the term is written in bold. [*Example*: **behavior** — External appearance or action. *end example*]
3. The tag name of an XML element is written using an Element style. [*Example*: The bookmarkStart and bookmarkEnd elements specify ... *end example*]
4. The name of an XML attribute is written using an Attribute style. [*Example*: The dropCap attribute specifies ... *end example*]
5. The value of an XML attribute is written using a constant-width style. [*Example*: The attribute value of auto specifies ... *end example*]
6. The qualified or unqualified name of a simple type, complex type, or base datatype is written using a Type style. [*Example*: The possible values for this attribute are defined by the ST_HexColor simple type. *end example*]

6. Acronyms and Abbreviations

This clause is informative.

The following acronyms and abbreviations are used throughout ECMA-376:

IEC — the International Electrotechnical Commission

ISO — the International Organization for Standardization

W3C — World Wide Web Consortium

End of informative text.

7. General Description

This Part is intended for use by implementers, academics, and application programmers. As such, it contains a considerable amount of explanatory material that, strictly speaking, is not necessary in a formal specification.

This Part of ECMA-376 is divided into the following subdivisions:

1. Front matter (clauses 1–7);
2. Main body (clauses 8–20);
3. Annexes

Examples are provided to illustrate possible forms of the constructions described. References are used to refer to related clauses. Notes are provided to give advice or guidance to implementers or programmers. Rationale provides explanatory material as to why something is or is not in ECMA-376. Annexes provide additional information or summarize the information contained in ECMA-376.

The following form the normative pieces of this Part of ECMA-376:

- Introduction
- Clauses 1–5, 7, and 8–20
- Annex A

The following form the informative pieces of this Part of ECMA-376:

- Clause 6
- Annex B–Annex D
- All notes
- All examples

Except for whole clauses or annexes that are identified as being informative, informative text that is contained within normative text is indicated in the following ways:

1. [*Example*: code fragment, possibly with some narrative ... *end example*]
2. [*Note*: narrative ... *end note*]
3. [*Rationale*: narrative ... *end rationale*]
4. [*Guidance*: narrative ... *end guidance*]

Unless stated otherwise in this Part, the functionality defined in Part 1 is applicable to Part 4. However, Part 4 uses namespaces that are different from those used by Part 1. As such, when examples in Part 1 are read in the context of Part 4, they should be understood in the context of the corresponding Part 4 namespaces.

8. Additional Shared Parts

8.1 VML Drawing Part

Content Type:	application/vnd.openxmlformats-officedocument.vmlDrawing
Root Namespace:	not applicable
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/vmlDrawing

An instance of this part type contains markup in the Vector Markup Language (VML) syntax, which is used to provide an alternative image representation of objects stored in a SpreadsheetML or PresentationML document.

[*Note:* The VML format is a legacy format originally introduced with Office 2000 and is included and fully defined in ECMA-376 for backwards compatibility reasons. The DrawingML format is a newer and richer format created with the goal of eventually replacing any uses of VML in the Office Open XML formats. VML should be considered a deprecated format included in Office Open XML for legacy reasons only and new applications that need a file format for drawings are strongly encouraged to use preferentially DrawingML. *end note*]

A package is permitted to contain zero or more VML Drawing parts, each of which shall be the target of an explicit relationship in a Handout Master (Part 1, §13.3.3), Notes Slide (Part 1, §13.3.5), Notes Master (Part 1, §13.3.4), Slide (Part 1, §13.3.8), Slide Layout (Part 1, §13.3.9), or Slide Master (Part 1, §13.3.10) part in a PresentationML document; or a Dialogsheet (Part 1, §12.3.7) or Worksheet part (Part 1, §12.3.24) in a SpreadsheetML document.

[*Example:* The following SpreadsheetML's package-relationship item contains one relationship, for the VML Drawing part stored in the ZIP item ../drawings/drawing1.vml:

```
<Relationships xmlns="...">
  <Relationship Id="rId8"
    Type="http://.../vmlDrawing" Target="../drawings/drawing1.vml"/>
</Relationships>
```

end example]

The root element for a part of this content type shall be xml in the null namespace, encapsulating an arbitrary amount of VML markup as defined by ECMA-376.

[*Example*: Consider the following VML Drawing part:

```
<xml>
  <v:shape ...>
    ...
  </v:shape>
  ...
</xml>
```

end example]

A VML Drawing part shall be located within the package containing the relationships part (expressed syntactically, the TargetMode attribute of the Relationship element shall be Internal).

A VML Drawing part is permitted to have explicit relationships to the following parts defined by ECMA-376:

- Image (Part 1, §15.2.14)

A VML Drawing part shall not have implicit or explicit relationships to any other part defined by ECMA-376.

9. WordprocessingML

The following parts, which are defined in subclauses within Part 1, §11, “WordprocessingML”, have different source relationships and/or root namespaces when used in documents of the Transitional conformance class:

9.1 Part Summary (Part 1, §11.3)

9.1.1 Alternative Format Import Part (Part 1, §11.3.1)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/aFChunk
----------------------	---

9.1.2 Comments Part (Part 1, §11.3.2)

Root Namespace:	http://schemas.openxmlformats.org/wordprocessingml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/comments

9.1.3 Document Settings Part (Part 1, §11.3.3)

Root Namespace:	http://schemas.openxmlformats.org/wordprocessingml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/settings

9.1.4 Endnotes Part (Part 1, §11.3.4)

Root Namespace:	http://schemas.openxmlformats.org/wordprocessingml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/endnotes

9.1.5 Fonts Table Part (Part 1, §11.3.5)

Root Namespace:	http://schemas.openxmlformats.org/wordprocessingml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/fontTable

9.1.6 Footer Part (Part 1, §11.3.6)

Root Namespace:	http://schemas.openxmlformats.org/wordprocessingml/2006/main
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Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/footer
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9.1.7 Footnotes Part (Part 1, §11.3.7)

Root Namespace:	http://schemas.openxmlformats.org/wordprocessingml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/footnotes

9.1.8 Glossary Document Part (Part 1, §11.3.8)

Root Namespace:	http://schemas.openxmlformats.org/wordprocessingml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/glossaryDocument

9.1.9 Header Part (Part 1, §11.3.9)

Root Namespace:	http://schemas.openxmlformats.org/wordprocessingml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/header

9.1.10 Main Document Part (Part 1, §11.3.10)

Root Namespace:	http://schemas.openxmlformats.org/wordprocessingml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/officeDocument

9.1.11 Numbering Definitions Part (Part 1, §11.3.11)

Root Namespace:	http://schemas.openxmlformats.org/wordprocessingml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/numbering

9.1.12 Style Definitions Part (Part 1, §11.3.12)

Root Namespace:	http://schemas.openxmlformats.org/wordprocessingml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/styles

9.1.13 Web Settings Part (Part 1, §11.3.13)

Root	http://schemas.openxmlformats.org/wordprocessingml/2006/main
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Namespace:	
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/webSettings

9.2 Document Template (Part 1, §11.4)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/attachedTemplate
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9.3 Framesets (Part 1, §11.5)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/frame
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9.4 Master Documents and Subdocuments (Part 1, §11.6)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/subDocument
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9.5 Mail Merge Data Source (Part 1, §11.7)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/mailMergeSource
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9.6 Mail Merger Header Data Source (Part 1, §11.8)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/mailMergeHeaderSource
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9.7 XSL Transformation (Part 1, §11.9)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/transform
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10. SpreadsheetML

The following parts, which are defined in subclauses within Part 1, §12, “SpreadsheetML”, have different source relationships and/or root namespaces when used in documents of the Transitional conformance class:

10.1 Part Summary (Part 1, §12.3)

10.1.1 Calculation Chain Part (Part 1, §12.3.1)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/calcChain

10.1.2 Chartsheet Part (Part 1, §12.3.2)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/chartsheet

10.1.3 Comments Part (Part 1, §12.3.3)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/comments

10.1.4 Connections Part (Part 1, §12.3.4)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/connections

10.1.5 Custom Property Part (Part 1, §12.3.5)

Root Namespace:	Not applicable
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/customProperty

10.1.6 Custom XML Mappings Part (Part 1, §12.3.6)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/xmlMaps

10.1.7 Dialogsheet Part (Part 1, §12.3.7)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/dialogsheet

10.1.8 Drawings Part (Part 1, §12.3.8)

Root Namespace:	http://schemas.openxmlformats.org/drawingml/2006/spreadsheetDrawing
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/drawing

10.1.9 External Workbook References Part (Part 1, §12.3.9)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/externalLink

10.1.10 Metadata Part (Part 1, §12.3.10)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/sheetMetadata

10.1.11 Pivot Table Part (Part 1, §12.3.11)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/pivotTable

10.1.12 Pivot Table Cache Definition Part (Part 1, §12.3.12)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/pivotCacheDefinition

10.1.13 Pivot Table Cache Records Part (Part 1, §12.3.13)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/pivotCacheRecords

10.1.14 Query Table Part (Part 1, §12.3.14)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/queryTable

10.1.15 Shared Strings Table Part (Part 1, §12.3.15)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/sharedStrings

10.1.16 Shared Workbook Revision Headers Part (Part 1, §12.3.16)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/revisionHeaders

10.1.17 Shared Workbook Revision Log Part (Part 1, §12.3.17)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/revisionLog

10.1.18 Shared Workbook User Data part (Part 1, §12.3.18)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/usernames

10.1.19 Single Cell Table Definitions Part (Part 1, §12.3.19)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/tableSingleCells

10.1.20 Styles Part (Part 1, §12.3.20)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/styles

10.1.21 Table Definition Part (Part 1, §12.3.21)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/table

10.1.22 Volatile Dependencies Part (Part 1, §12.3.22)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/volatileDependencies

10.1.23 Workbook Part (Part 1, §12.3.23)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/officeDocument

10.1.24 Worksheet Part (Part 1, §12.3.24)

Root Namespace:	http://schemas.openxmlformats.org/spreadsheetml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/worksheet

10.2 External Workbooks (Part 1, §12.4)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/externalLinkPath
----------------------	---

11. PresentationML

The following parts, which are defined in subclauses within Part 1, §13, “PresentationML”, have different source relationships and/or root namespaces when used in documents of the Transitional conformance class:

11.1 Part Summary (Part 1, §13.3)

11.1.1 Comment Authors Part (Part 1, §13.3.1)

Root Namespace:	http://schemas.openxmlformats.org/presentationml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/commentAuthors

11.1.2 Comments Part (Part 1, §13.3.2)

Root Namespace:	http://schemas.openxmlformats.org/presentationml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/comments

11.1.3 Handout Master Part (Part 1, §13.3.3)

Root Namespace:	http://schemas.openxmlformats.org/presentationml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/handoutMaster

11.1.4 Notes Master Part (Part 1, §13.3.4)

Root Namespace:	http://schemas.openxmlformats.org/presentationml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/notesMaster

11.1.5 Notes Slide Part (Part 1, §13.3.5)

Root Namespace:	http://schemas.openxmlformats.org/presentationml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/notesSlide

11.1.6 Presentation Part (Part 1, §13.3.6)

Root Namespace:	http://schemas.openxmlformats.org/presentationml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/officeDocument

11.1.7 Presentation Properties Part (Part 1, §13.3.7)

Root Namespace:	http://schemas.openxmlformats.org/presentationml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/presProps

11.1.8 Slide Part (Part 1, §13.3.8)

Root Namespace:	http://schemas.openxmlformats.org/presentationml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/slide

11.1.9 Slide Layout Part (Part 1, §13.3.9)

Root Namespace:	http://schemas.openxmlformats.org/presentationml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/slideLayout

11.1.10 Slide Master Part (Part 1, §13.3.10)

Root Namespace:	http://schemas.openxmlformats.org/presentationml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/slideMaster

11.1.11 Slide Synchronization Data Part (Part 1, §13.3.11)

Root Namespace:	http://schemas.openxmlformats.org/presentationml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/slideUpdateInfo

11.1.12 User Defined Tags Part (Part 1, §13.3.12)

Root Namespace:	http://schemas.openxmlformats.org/presentationml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/tags

11.1.13 View Properties Part (Part 1, §13.3.13)

Root Namespace:	http://schemas.openxmlformats.org/presentationml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/viewProps

11.2 HTML Publish Location (Part 1, §13.4)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/htmlPubSaveAs
----------------------	---

11.3 Slide Synchronization Server Location (Part 1, §13.5)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/slideUpdateUrl
----------------------	---

12. DrawingML

The following parts, which are defined in subclauses within Part 1, §14, “DrawingML”, have different source relationships and/or root namespaces when used in documents of the Transitional conformance class:

12.1 Part Summary (Part 1, §14.2)

12.1.1 Chart Part (Part 1, §14.2.1)

Root Namespace:	http://schemas.openxmlformats.org/drawingml/2006/chart
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/chart

12.1.2 Chart Drawing Part (Part 1, §14.2.2)

Root Namespace:	http://schemas.openxmlformats.org/drawingml/2006/chart
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/chartUserShapes

12.1.3 Diagram Colors Part (Part 1, §14.2.3)

Root Namespace:	http://schemas.openxmlformats.org/drawingml/2006/diagram
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/diagramColors

12.1.4 Diagram Data Part (Part 1, §14.2.4)

Root Namespace:	http://schemas.openxmlformats.org/drawingml/2006/diagram
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/diagramData

12.1.5 Diagram Layout Definition Part (Part 1, §14.2.5)

Root Namespace:	http://schemas.openxmlformats.org/drawingml/2006/diagram
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/diagramLayout

12.1.6 Diagram Style Part (Part 1, §14.2.6)

Root Namespace:	http://schemas.openxmlformats.org/drawingml/2006/diagram
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/diagramQuickStyle

12.1.7 Theme Part (Part 1, §14.2.7)

Root Namespace:	http://schemas.openxmlformats.org/drawingml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/theme

12.1.8 Theme Override Part (Part 1, §14.2.8)

Root Namespace:	http://schemas.openxmlformats.org/drawingml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/themeOverride

12.1.9 Table Styles Part (Part 1, §14.2.9)

Root Namespace:	http://schemas.openxmlformats.org/drawingml/2006/main
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/tableStyles

13. Shared MLs

The following parts, which are defined in subclauses within Part 1, §15, “Shared”, have different source relationships and/or root namespaces when used in documents of the Transitional conformance class:

13.1 Part Summary (Part 1, §15.2)

13.1.1 Additional Characteristics Part (Part 1, §15.2.1)

Root Namespace:	http://schemas.openxmlformats.org/officeDocument/2006/additionalCharacteristics
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/customXml

13.1.2 Audio Part (Part 1, §15.2.2)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/audio
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13.1.3 Bibliography Part (Part 1, §15.2.3)

Root Namespace:	http://schemas.openxmlformats.org/officeDocument/2006/bibliography
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/customXml

13.1.4 Content Part (Part 1, §15.2.4)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/customXml
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13.1.5 Custom XML Data Storage Part (Part 1, §15.2.5)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/customXml
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13.1.6 Custom XML Data Storage Properties Part (Part 1, §15.2.6)

Root Namespace:	http://schemas.openxmlformats.org/officeDocument/2006/customXmlDataProps
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/customXmlProps

13.1.7 Embedded Control Persistence Part (Part 1, §15.2.9)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/control
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13.1.8 Embedded Object Part (Part 1, §15.2.10)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/oleObject
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13.1.9 Embedded Package Part (Part 1, §15.2.11)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/package
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13.1.10 Core File Properties Part (Part 1, §15.2.12.1)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/metadata/core-properties
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13.1.11 Custom File Properties Part (Part 1, §15.2.12.2)

Root Namespace:	http://schemas.openxmlformats.org/officeDocument/2006/custom-properties
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/custom-properties

13.1.12 Extended File Properties Part (Part 1, §15.2.12.3)

Root Namespace:	http://schemas.openxmlformats.org/officeDocument/2006/extended-properties
Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/extended-properties

13.1.13 Font Part (Part 1, §15.2.13)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/font
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13.1.14 Image Part (Part 1, §15.2.14)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/image
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13.1.15 Printer Settings Part (Part 1, §15.2.15)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/printerSettings
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13.1.16 Thumbnail Part (Part 1, §15.2.16)

Source Relationship:	http://schemas.openxmlformats.org/package/2006/relationships/metadata/thumbnail
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13.1.17 Video Part (Part 1, §15.2.17)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/video
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13.2 Hyperlinks Part (Part 1, §15.3)

Source Relationship:	http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink
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14. WordprocessingML Reference Material

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End of informative text.

14.2 Paragraphs and Rich Formatting

14.2.1 Paragraphs

14.2.1.1 Additional attribute for cnfStyle element (Part 1, §17.3.1.8)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
val (Conditional Formatting Bit Mask)	<p>Specifies the set of conditional formatting properties that have been applied to this object.</p> <p>These properties are expressed using a string serialization of a binary bitmask for each of the following properties (reading from the first character position right):</p> <ul style="list-style-type: none"> • First Row - Is this the first row of the table? • Last Row - Is this the last row of the table? • First Column - Does this belong to the first column of the table? • Last Column - Does this belong to the last column of the table? • Band 1 Vertical - Does this belong to a column which should receive band 1 formatting? This property specifies whether the cell should receive the formatting specified for odd-numbered columns (e.g. 1,3,5,...) • Band 2 Vertical - Does this belong to a column which should receive band 2 formatting? This property specifies whether the cell should receive the formatting specified for even-numbered columns (e.g. 2,4,6,...) • Band 1 Horizontal - Does this receive band 1 formatting? This property specifies whether the cell should receive the formatting specified for odd-numbered rows (e.g. 1,3,5,...) • Band 2 Horizontal - Does this receive band 2 formatting? This property specifies whether the cell should receive the formatting specified for even-numbered rows (e.g. 2,4,6,...) • NE Cell - Is this part of the top-right corner of the table? • NW Cell - Is this part of the top-left corner of the table? • SE Cell - Is this part of the bottom-right corner of the table? • SW Cell - Is this part of the bottom-left corner of the table? <p>For each of these properties, a value of 1 in the specified character position in the string means that the value is true, a value of 0 means false. All values shall be specified.</p>

Attributes	Description
	<p>[<i>Example:</i> Consider a paragraph in the top right corner of a table with a table style applied. This paragraph would need to specify the following WordprocessingML:</p> <pre><w:p> <w:pPr> <w:cnfStyle w:val="101000000100" /> ... </w:pPr> ... </w:p></pre> <p>This paragraph specifies that it has the conditional properties from the table style for the first column, first row, and the NW corner of the parent table by setting the appropriate bits in the val attribute. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_Cnf simple type (§14.10.8).</p>

14.2.1.2 Additional attributes for ind element (Part 1, §17.3.1.12)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
left (Start Indentation)	<p>Semantically equivalent to the start attribute.</p> <p>The possible values for this attribute are defined by the ST_SignedTwipsMeasure simple type (Part 1, §17.18.81).</p>
leftChars (Start Indentation in Character Units)	<p>Semantically equivalent to the startChars attribute.</p> <p>The possible values for this attribute are defined by the ST_DecimalNumber simple type (Part 1, §17.18.10).</p>
right (End Indentation)	<p>Semantically equivalent to the end attribute.</p> <p>The possible values for this attribute are defined by the ST_SignedTwipsMeasure simple type (Part 1, §17.18.81).</p>
rightChars (End Indentation in Character Units)	<p>Semantically equivalent to the endChars attribute.</p> <p>The possible values for this attribute are defined by the ST_DecimalNumber simple type (Part 1, §17.18.10).</p>

14.2.2 Run Content

14.2.2.1 control (Floating Embedded Control)

This element specifies that the parent VML object is a representation of an embedded control at the current location in the document. This element shall be used to associate the VML data with the appropriate embedded control settings and properties when the document is displayed.

If the embedded control is not present, cannot be loaded due to application settings, or is not supported, then the VML data shall be used to provide an image representation of the control at the appropriate location in the document.

[*Example:* Consider a run which consists of an embedded control. That run would be specified using the following WordprocessingML:

```
<w:r>
  <w:pict>
    ...
    <w:control r:id="rId99" w:shapeid="shape01" ... />
  </w:pict>
</w:r>
```

The control element indicates that the parent VML object contains the positioning and last known image representation of an embedded control, whose settings and properties are stored on this element. *end example]*

Parent Elements
pict (§14.2.2.2); pict (§14.5.1)

Attributes	Description
id (Embedded Control Properties Relationship Reference) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship ID for the relationship which contains the properties for this embedded control. This property bag is contained in a separate part within the Office Open XML package.</p> <p>The relationship explicitly targeted by this attribute shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/control or the document shall be considered non-conformant.</p> <p>If this attribute is omitted, then the embedded control shall be given no property bag when instantiated.</p> <p>[<i>Example:</i> Consider the following WordprocessingML markup for an embedded control in a document:</p> <pre><w:control r:id="rId5" w:name="CheckBox1" w:shapeid="_x0000_s1027" /></pre> <p>The id attribute in the relationship reference namespace specifies that the relationship with relationship ID rId5 must contain the property data for this embedded control. <i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

Attributes	Description
name (Unique Name for Embedded Control)	<p>Specifies a unique name for this embedded control. This name shall be unique across all controls in this document.</p> <p>[<i>Example:</i> Consider the following WordprocessingML markup for an embedded control in a document:</p> <pre><w:control r:id="rId5" w:name="CheckBox1" w:shapeid="_x0000_s1027" /></pre> <p>The name attribute specifies that the unique name for this control must be CheckBox1. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_String simple type (Part 1, §22.9.2.13).</p>
shapeid (Shape Reference)	<p>Specifies the shape ID for a shape which shall be used to define the presentation and location of this embedded control within the document if the control is floating using the DrawingML syntax.</p> <p>[<i>Note:</i> This positioning data is sufficient to display the control in any case where:</p> <ul style="list-style-type: none"> • The embedded control is not on the current machine • Embedded controls are disabled • Embedded controls of this control type are not supported <p><i>end note</i>]</p> <p>This shape ID reference is resolved by looking for a DrawingML object whose id attribute matches the value specified within this attribute. If no such shape exists, then the control shall be rendered inline in the document content at the current run content location.</p> <p>If this attribute is omitted, then this embedded control shall be displayed inline in the current location in the parent run.</p> <p>[<i>Example:</i> Consider the following WordprocessingML markup for an embedded control in a document:</p> <pre><w:control r:id="rId5" w:name="CheckBox1" w:shapeid="10" /></pre> <p>The shapeid attribute specifies that the DrawingML object with an id attribute value of 10 must contain the positioning data for this embedded control. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_String simple type (Part 1, §22.9.2.13).</p>

[*Note:* The W3C XML Schema definition of this element's content model ([CT_Control](#)) is located in §A.1. *end note*]

14.2.2.2 pict (VML Object)

This element specifies that an object is located at this position in the run's contents. The layout properties of this object are specified using the VML syntax (§19.1).

[*Example:* Consider a run which consists of an object specified using VML. That run would be specified using the following WordprocessingML:

```
<w:r>
  <w:pict>
    ...
  </w:pict>
</w:r>
```

The pict element indicates that an object specified in VML is located at the current position in the run (e.g. a floating embedded control). *end example*

Parent Elements
r (Part 1, §22.1.2.87); r (Part 1, §17.3.2.25)

Child Elements	Subclause
control (Floating Embedded Control)	§14.2.2.1
movie (Embedded Video)	Part 1, §17.3.3.17
Any element in the urn:schemas-microsoft-com:vml namespace	§19.1
Any element in the urn:schemas-microsoft-com:office:office namespace	§19.2

[*Note:* The W3C XML Schema definition of this element's content model ([CT_Picture](#)) is located in §A.1. *end note*]

14.3 Tables

14.3.1 left (Table Cell Leading Edge Border)

This element is semantically equivalent to start (Part 1, §17.4.34), specified above.

For tables which have the bidiVisual property (Part 1, §17.4.1) applied, this border is applied to the right edge of the cell.

Parent Elements
tcBorders (Part 1, §17.4.67)

This element’s content model is defined by the common border properties definition in Part 1, §17.3.4.

14.3.2 left (Table Leading Edge Border)

This element is semantically equivalent to start (Part 1, §17.4.37), specified above.

For tables which have the bidiVisual property (Part 1, §17.4.1) applied, this border is applied to the right edge of the table.

Parent Elements
tblBorders (Part 1, §17.4.39); tblBorders (Part 1, §17.4.40)

This element’s content model is defined by the common border properties definition in Part 1, §17.3.4.

14.3.3 left (Table Cell Leading Margin Exception)

This element is semantically equivalent to start (Part 1, §17.4.36), specified above.

For tables which have the bidiVisual property (Part 1, §17.4.1) applied, this cell margin is applied to the right edge of the cell.

Parent Elements
tcMar (Part 1, §17.4.69)

This element’s content model is defined by the common table measurement definition in Part 1, §17.4.88.

14.3.4 left (Table Cell Leading Margin Default)

This element is semantically equivalent to start (Part 1, §17.4.35), specified above.

For tables which have the bidiVisual property (Part 1, §17.4.1) applied, this cell margin is applied to the right edge of the cell.

Parent Elements
tblCellMar (Part 1, §17.4.42); tblCellMar (Part 1, §17.4.43)

This element’s content model is defined by the common table measurement definition in Part 1, §17.4.88.

14.3.5 right (Table Cell Trailing Edge Border)

This element is semantically equivalent to end (Part 1, §17.4.12), specified above.

For tables which have the bidiVisual property (Part 1, §17.4.1) applied, this border is applied to the left edge of the cell.

Parent Elements
tcBorders (Part 1, §17.4.67)

This element's content model is defined by the common border properties definition in Part 1, §17.3.4.

14.3.6 right (Table Trailing Edge Border)

This element is semantically equivalent to end (Part 1, §17.4.13), specified above.

For tables which have the bidiVisual property (Part 1, §17.4.1) applied, this border is applied to the left edge of the table.

Parent Elements
tblBorders (Part 1, §17.4.39); tblBorders (Part 1, §17.4.40)

This element's content model is defined by the common border properties definition in Part 1, §17.3.4.

14.3.7 right (Table Cell Trailing Margin Default)

This element is semantically equivalent to end (Part 1, §17.4.11), specified above.

For tables which have the bidiVisual property (Part 1, §17.4.1) applied, this cell margin is applied to the left edge of the cell.

Parent Elements
tblCellMar (Part 1, §17.4.42); tblCellMar (Part 1, §17.4.43)

This element's content model is defined by the common table measurement definition in Part 1, §17.4.88.

14.3.8 right (Table Cell Trailing Margin Exception)

This element is semantically equivalent to end (Part 1, §17.4.10), specified above.

For tables which have the bidiVisual property (Part 1, §17.4.1) applied, this cell margin is applied to the left edge of the cell.

Parent Elements
tcMar (Part 1, §17.4.69)

This element's content model is defined by the common table measurement definition in Part 1, §17.4.88.

14.3.9 Additional attribute for cnfStyle element (Part 1, §17.4.7)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
val (Conditional Formatting Bit Mask)	<p>Specifies the set of conditional formatting properties that have been applied to this object.</p> <p>These properties are expressed using a string serialization of a binary bitmask for each of the following properties (reading from the first character position right):</p> <ul style="list-style-type: none"> • First Row - Is this the first row of the table? • Last Row - Is this the last row of the table? • First Column - Does this belong to the first column of the table? • Last Column - Does this belong to the last column of the table? • Band 1 Vertical - Does this belong to a column which should receive band 1 formatting? This property specifies whether the cell should receive the formatting specified for odd-numbered columns (e.g. 1,3,5,...) • Band 2 Vertical - Does this belong to a column which should receive band 2 formatting? This property specifies whether the cell should receive the formatting specified for even-numbered columns (e.g. 2,4,6,...) • Band 1 Horizontal - Does this receive band 1 formatting? This property specifies whether the cell should receive the formatting specified for odd-numbered rows (e.g. 1,3,5,...) • Band 2 Horizontal - Does this receive band 2 formatting? This property specifies whether the cell should receive the formatting specified for even-numbered rows (e.g. 2,4,6,...) • NE Cell - Is this part of the top-right corner of the table? • NW Cell - Is this part of the top-left corner of the table? • SE Cell - Is this part of the bottom-right corner of the table? • SW Cell - Is this part of the bottom-left corner of the table? <p>For each of these properties, a value of 1 in the specified character position in the string means that the value is true, a value of 0 means false. All values shall be specified.</p> <p>[Example: Consider a paragraph in the top right corner of a table with a table style applied. This paragraph would need to specify the following WordprocessingML:</p> <pre> <w:p> <w:pPr> <w:cnfStyle w:val="101000000100" /> ... </w:pPr> ... </w:p> </pre> <p>This paragraph specifies that it has the conditional properties from the table style for the</p>

Attributes	Description
	<p>first column, first row, and the NW corner of the parent table by setting the appropriate bits in the val attribute. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_Cnf simple type (§14.10.8).</p>

14.3.10 Additional attribute for cnfStyle element (Part 1, §17.4.8)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
val (Conditional Formatting Bit Mask)	<p>Specifies the set of conditional formatting properties that have been applied to this object.</p> <p>These properties are expressed using a string serialization of a binary bitmask for each of the following properties (reading from the first character position right):</p> <ul style="list-style-type: none"> • First Row - Is this the first row of the table? • Last Row - Is this the last row of the table? • First Column - Does this belong to the first column of the table? • Last Column - Does this belong to the last column of the table? • Band 1 Vertical - Does this belong to a column which should receive band 1 formatting? This property specifies whether the cell should receive the formatting specified for odd-numbered columns (e.g. 1,3,5,...) • Band 2 Vertical - Does this belong to a column which should receive band 2 formatting? This property specifies whether the cell should receive the formatting specified for even-numbered columns (e.g. 2,4,6...) • Band 1 Horizontal - Does this receive band 1 formatting? This property specifies whether the cell should receive the formatting specified for odd-numbered rows (e.g. 1,3,5,...) • Band 2 Horizontal - Does this receive band 2 formatting? This property specifies whether the cell should receive the formatting specified for even-numbered rows (e.g. 2,4,6...) • NE Cell - Is this part of the top-right corner of the table? • NW Cell - Is this part of the top-left corner of the table? • SE Cell - Is this part of the bottom-right corner of the table? • SW Cell - Is this part of the bottom-left corner of the table? <p>For each of these properties, a value of 1 in the specified character position in the string means that the value is true, a value of 0 means false. All values shall be specified.</p> <p>[Example: Consider a paragraph in the top right corner of a table with a table style applied. This paragraph would need to specify the following WordprocessingML:</p> <pre><w:p> <w:pPr> <w:cnfStyle w:val="101000000100" /></pre>

Attributes	Description
	<pre> ... </w:pPr> ... </w:p> </pre> <p>This paragraph specifies that it has the conditional properties from the table style for the first column, first row, and the NW corner of the parent table by setting the appropriate bits in the val attribute. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_Cnf simple type (§14.10.8).</p>

14.3.11 Additional attribute for tblLook element (Part 1, §17.4.55)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
val (Bitmask of Table Conditional Formatting)	<p>Specifies a hexadecimal code containing a bitmask of options, interpreted as follows:</p> <ul style="list-style-type: none"> • 0x0020=Apply first row conditional formatting • 0x0040=Apply last row conditional formatting • 0x0080=Apply first column conditional formatting • 0x0100=Apply last column conditional formatting • 0x0200=Do not apply row banding conditional formatting • 0x0400=Do not apply column banding conditional formatting <p>If omitted, the bitmask of table style options on the current table shall be assumed to be 0000.</p> <p>[<i>Example:</i> Consider a table which must use the following conditional formatting properties from the referenced table style:</p> <ul style="list-style-type: none"> • First row conditional formatting • Last row conditional formatting <p>This table would then apply the following portions of the bitmask:</p> <ul style="list-style-type: none"> • 0x0020=Apply first row conditional formatting • 0x0040=Apply last row conditional formatting • 0x0200=Do not apply row banding conditional formatting • 0x0400=Do not apply column banding conditional formatting <p>The resulting WordprocessingML would be specified as follows:</p> <pre> <w:tblPr> <w:tblLook w:val="0660"/> </w:tblPr> </pre> <p>The val attribute specifies a bitmask which determines the components of the table style applied to the current table. <i>end example</i>]</p>

Attributes	Description
	The possible values for this attribute are defined by the ST_ShortHexNumber simple type (Part 1, §17.18.79).

14.3.12 Additional attribute for tblLook element (Part 1, §17.4.56)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
val (Bitmask of Table Conditional Formatting)	<p>Specifies a hexadecimal code containing a bitmask of options, interpreted as follows:</p> <ul style="list-style-type: none"> • 0x0020=Apply first row conditional formatting • 0x0040=Apply last row conditional formatting • 0x0080=Apply first column conditional formatting • 0x0100=Apply last column conditional formatting • 0x0200=Do not apply row banding conditional formatting • 0x0400=Do not apply column banding conditional formatting <p>If omitted, the bitmask of table style options on the current table shall be assumed to be 0000.</p> <p>[Example: Consider a table which must use the following conditional formatting properties from the referenced table style:</p> <ul style="list-style-type: none"> • First row conditional formatting • Last row conditional formatting <p>This table would then apply the following portions of the bitmask:</p> <ul style="list-style-type: none"> • 0x0020=Apply first row conditional formatting • 0x0040=Apply last row conditional formatting • 0x0200=Do not apply row banding conditional formatting • 0x0400=Do not apply column banding conditional formatting <p>The resulting WordprocessingML would be specified as follows:</p> <pre><w:tblPr> <w:tblLook w:val="0660"/> </w:tblPr></pre> <p>The val attribute specifies a bitmask which determines the components of the table style applied to the current table. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_ShortHexNumber simple type (Part 1, §17.18.79).</p>

14.4 Fonts

14.4.1 Elements

14.4.1.1 Additional attribute for charset element (Part 1, §17.8.3.2)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description																																								
val (Value)	<p>Specifies a value specified as single octet (two digit) hexadecimal number whose contents are interpreted based on the context of the parent XML element.</p> <p>The value of this attribute shall be interpreted as follows:</p> <table> <tr> <th>Value</th><th>Description</th></tr> <tr> <td>0x00</td><td>Specifies a Latin character set. (IANA name iso-8859-1)</td></tr> <tr> <td>0x01</td><td>Specifies the default character set.</td></tr> <tr> <td>0x02</td><td>Specifies the Symbol character set. This value specifies that the characters in the Unicode private use area (U+FF00 to U+FFFF) of the font should be used to display the corresponding characters in the range U+0000 to U+00FF.</td></tr> <tr> <td>0x4D</td><td>Specifies a Macintosh (Standard Roman) character set. (IANA name macintosh)</td></tr> <tr> <td>0x80</td><td>Specifies the JIS character set. (IANA name shift_jis)</td></tr> <tr> <td>0x81</td><td>Specifies the Hangul character set. (IANA name ks_c-5601-1987)</td></tr> <tr> <td>0x82</td><td>Specifies a Johab character set. (IANA name KS_C-5601-1992)</td></tr> <tr> <td>0x86</td><td>Specifies the GB-2312 character set. (IANA name GBK)</td></tr> <tr> <td>0x88</td><td>Specifies the Chinese Big Five character set. (IANA name Big5)</td></tr> <tr> <td>0xA1</td><td>Specifies a Greek character set. (IANA name windows-1253)</td></tr> <tr> <td>0xA2</td><td>Specifies a Turkish character set. (IANA name iso-8859-9)</td></tr> <tr> <td>0xA3</td><td>Specifies a Vietnamese character set. (IANA name windows-1258)</td></tr> <tr> <td>0xB1</td><td>Specifies a Hebrew character set. (IANA name windows-1255)</td></tr> <tr> <td>0xB2</td><td>Specifies an Arabic character set. (IANA name windows-1256)</td></tr> <tr> <td>0xBA</td><td>Specifies a Baltic character set. (IANA name windows-1257)</td></tr> <tr> <td>0xCC</td><td>Specifies a Russian character set. (IANA name windows-1251)</td></tr> <tr> <td>0xDE</td><td>Specifies a Thai character set. (IANA name windows-874)</td></tr> <tr> <td>0xEE</td><td>Specifies an Eastern European character set. (IANA name windows-1250)</td></tr> <tr> <td>0xFF</td><td>Specifies an OEM character set not defined by ECMA-376.</td></tr> </table>	Value	Description	0x00	Specifies a Latin character set. (IANA name iso-8859-1)	0x01	Specifies the default character set.	0x02	Specifies the Symbol character set. This value specifies that the characters in the Unicode private use area (U+FF00 to U+FFFF) of the font should be used to display the corresponding characters in the range U+0000 to U+00FF.	0x4D	Specifies a Macintosh (Standard Roman) character set. (IANA name macintosh)	0x80	Specifies the JIS character set. (IANA name shift_jis)	0x81	Specifies the Hangul character set. (IANA name ks_c-5601-1987)	0x82	Specifies a Johab character set. (IANA name KS_C-5601-1992)	0x86	Specifies the GB-2312 character set. (IANA name GBK)	0x88	Specifies the Chinese Big Five character set. (IANA name Big5)	0xA1	Specifies a Greek character set. (IANA name windows-1253)	0xA2	Specifies a Turkish character set. (IANA name iso-8859-9)	0xA3	Specifies a Vietnamese character set. (IANA name windows-1258)	0xB1	Specifies a Hebrew character set. (IANA name windows-1255)	0xB2	Specifies an Arabic character set. (IANA name windows-1256)	0xBA	Specifies a Baltic character set. (IANA name windows-1257)	0xCC	Specifies a Russian character set. (IANA name windows-1251)	0xDE	Specifies a Thai character set. (IANA name windows-874)	0xEE	Specifies an Eastern European character set. (IANA name windows-1250)	0xFF	Specifies an OEM character set not defined by ECMA-376.
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0x00	Specifies a Latin character set. (IANA name iso-8859-1)																																								
0x01	Specifies the default character set.																																								
0x02	Specifies the Symbol character set. This value specifies that the characters in the Unicode private use area (U+FF00 to U+FFFF) of the font should be used to display the corresponding characters in the range U+0000 to U+00FF.																																								
0x4D	Specifies a Macintosh (Standard Roman) character set. (IANA name macintosh)																																								
0x80	Specifies the JIS character set. (IANA name shift_jis)																																								
0x81	Specifies the Hangul character set. (IANA name ks_c-5601-1987)																																								
0x82	Specifies a Johab character set. (IANA name KS_C-5601-1992)																																								
0x86	Specifies the GB-2312 character set. (IANA name GBK)																																								
0x88	Specifies the Chinese Big Five character set. (IANA name Big5)																																								
0xA1	Specifies a Greek character set. (IANA name windows-1253)																																								
0xA2	Specifies a Turkish character set. (IANA name iso-8859-9)																																								
0xA3	Specifies a Vietnamese character set. (IANA name windows-1258)																																								
0xB1	Specifies a Hebrew character set. (IANA name windows-1255)																																								
0xB2	Specifies an Arabic character set. (IANA name windows-1256)																																								
0xBA	Specifies a Baltic character set. (IANA name windows-1257)																																								
0xCC	Specifies a Russian character set. (IANA name windows-1251)																																								
0xDE	Specifies a Thai character set. (IANA name windows-874)																																								
0xEE	Specifies an Eastern European character set. (IANA name windows-1250)																																								
0xFF	Specifies an OEM character set not defined by ECMA-376.																																								

Attributes	Description		
	<table border="1"> <tr> <td>Any other value</td><td>Application-defined, can be ignored.</td></tr> </table> <p>[Example: Consider the following value for an attribute of type ST_UCharHexNumber:</p> <pre><... w:val="BE"/></pre> <p>This value is permitted, as it contains two hexadecimal digits, an encoding of an octet of the actual decimal number value. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_UCharHexNumber simple type (Part 1, §17.18.98).</p>	Any other value	Application-defined, can be ignored.
Any other value	Application-defined, can be ignored.		

14.5 Numbering

14.5.1 pict (Picture Numbering Symbol Properties)

This element specifies the properties for a picture which shall be used as a picture numbering symbol in a given document, using the VML syntax.

[Example: Consider the WordprocessingML below illustrating the usage of the pict element in a document containing a single picture numbering symbol:

```
<w:numPicBullet w:numPicBulletId="0">
  <w:pict>
    <v:shapetype id="_x0000_t75" coordsize="21600,21600" o:spt="75"
o:preferrelative="t" path="m@4@51@4@11@9@11@9@5xe" filled="f" stroked="f">
      <v:stroke joinstyle="miter" />
      <v:formulas>
        <v:f eqn="if lineDrawn pixelLineWidth 0" />
        <v:f eqn="sum @0 1 0" />
        <v:f eqn="sum 0 0 @1" />
        <v:f eqn="prod @2 1 2" />
        <v:f eqn="prod @3 21600 pixelWidth" />
        <v:f eqn="prod @3 21600 pixelHeight" />
        <v:f eqn="sum @0 0 1" />
        <v:f eqn="prod @6 1 2" />
        <v:f eqn="prod @7 21600 pixelWidth" />
        <v:f eqn="sum @8 21600 0" />
        <v:f eqn="prod @7 21600 pixelHeight" />
        <v:f eqn="sum @10 21600 0" />
      </v:formulas>
      <v:path o:extrusionok="f" gradientshapeok="t" o:connecttype="rect" />
      <o:lock v:ext="edit" aspectratio="t" />
    </v:shapetype>
```

```
<v:shape id="_x0000_i1029" type="#_x0000_t75"
style="width:11.25pt;height:11.25pt" o:bullet="t">
  <v:imagedata r:id="rId1" o:title="sample picture" />
</v:shape>
</w:pict>
</w:numPicBullet>
```

end example]

Parent Elements
numPicBullet (Part 1, §17.9.21)

Child Elements	Subclause
control (Floating Embedded Control)	§14.2.2.1
movie (Embedded Video)	Part 1, §17.3.3.17
Any element in the urn:schemas-microsoft-com:vml namespace	§19.1
Any element in the urn:schemas-microsoft-com:office:office namespace	§19.2

[*Note:* The W3C XML Schema definition of this element’s content model ([CT Picture](#)) is located in §A.1. *end note]*

14.6 Annotations

14.6.1 Revisions

14.6.1.1 numberingChange (Previous Numbering Field Properties)

This element specifies the previous state of the numbering displayed by a LISTNUM field (Part 1, §17.16.5.33) within a WordprocessingML document when additional LISTNUM fields are added and revisions are being tracked.

[*Rationale:* The legacy numbering mechanism provided by the LISTNUM field relies on the presence of fields in the run content of the document, rather than being a paragraph property (as numbering typically is represented). For this reason, these fields must store their previous state as a unique revision type on the field character of the numbering field. *end rationale]*

If this element is supplied for a field which is not of type LISTNUM as defined by its field codes (Part 1, §17.16.5), then this property shall be ignored.

[*Example:* Consider the following paragraph containing a single LISTNUM field, as follows:

Some 1. text

If another LISTNUM field is added before it in the document, resulting in its evaluation to a different number, as follows:

Some ~~1~~.2. text

This revision to the field result would be stored as follows in the WordprocessingML:

```
<w:fldChar w:fldCharType="begin">
  <w:numberingChange w:id="0" ... w:original="1." />
</w:fldChar>
<w:r>
  <w:instrText>LISTNUM</w:instrText>
</w:r>
<w:fldChar w:fldCharType="separate"/>
<w:r>
  <w:t>2.</w:t>
</w:r>
<w:fldChar w:fldCharType="end" />
```

The numberingChange element specifies that the numbering resulting from this LISTNUM field was modified and this change was tracked as a revision. The previous numbering result of 1. is cached in the original attribute. *end example*]

For numbering fields, the original attribute shall specify the previous numbering displayed by the parent LISTNUM field within a WordprocessingML document. This information is a performance-enhancing cache of the state of the numbering before the revision to allow applications to show the previous state without having to recalculate all of the LISTNUM fields in the document.

If this attribute is omitted, then no previous numbering value is implied and applications can choose to calculate this value, or display no previous numbering value.

[*Example:* Consider the following paragraph containing a single LISTNUM field with a revision, as follows:

Some ~~1~~.2. text

This revision to the field result would be stored as follows in the WordprocessingML:

```
<w:fldChar w:fldCharType="begin">
  <w:numberingChange w:id="0" ... w:original="1." />
</w:fldChar>
```

The original attribute specifies that the previous numbering value of the field was 1. *end example*]

Parent Elements
fldChar (Part 1, §17.16.18)

Attributes	Description
author (Annotation Author)	<p>Specifies the author for an annotation within a WordprocessingML document.</p> <p>If this attribute is omitted, then no author shall be associated with the parent annotation type.</p> <p>[<i>Example</i>: Consider a comment represented using the following WordprocessingML fragment:</p> <pre><... w:id="1" w:author="Example Author"> ... </...></pre> <p>The author attribute specifies that the author of the current annotation is Example Author, which can be used as desired. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_String simple type (Part 1, §22.9.2.13).</p>
date (Annotation Date)	<p>Specifies the date information for an annotation within a WordprocessingML document. The use of this information is outside of the scope of ECMA-376.</p> <p>If this attribute is omitted, then no date information shall be associated with the parent annotation type.</p> <p>[<i>Example</i>: Consider a comment represented using the following WordprocessingML fragment:</p> <pre><... w:id="1" w:date="2006-01-01T10:00:00"> ... </...></pre> <p>The date attribute specifies that the date of the current annotation is January 1st 2006 at 10:00 AM, which can be used as desired. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_DateTime simple type (Part 1, §17.18.9).</p>
id (Annotation Identifier)	<p>Specifies a unique identifier for an annotation within a WordprocessingML document. The restrictions on the id attribute, if any, are defined by the parent XML element.</p> <p>If this attribute is omitted, then the document is non-conformant.</p>

Attributes	Description
	<p>[<i>Example:</i> Consider an annotation represented using the following WordprocessingML fragment:</p> <pre><... w:id="1" ... > ... </...></pre> <p>The id attribute specifies that the ID of the current annotation is 1. This value is used to uniquely identify this annotation within the document content. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_DecimalNumber simple type (Part 1, §17.18.10).</p>
original (Previous Numbering Value)	<p>Specifies the previous numbering displayed by the parent numbering change revision. Its format is specified by the parent element.</p> <p>If this attribute is omitted, then no previous numbering value is implied and applications can choose to calculate this value, or display no previous numbering value.</p> <p>[<i>Example:</i> Consider the following paragraph containing a single LISTNUM field with a revision, as follows:</p> <p style="color: red;">Some 1<ins>2</ins>. text</p> <p>This revision to the field result would be stored as follows in the WordprocessingML:</p> <pre><w:fldChar w:fldCharType="begin"> <w:numberingChange w:id="0" ... w:original="1." /> </w:fldChar></pre> <p>The original attribute specifies that the previous numbering value of the field was 1. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_String simple type (Part 1, §22.9.2.13).</p>

[*Note:* The W3C XML Schema definition of this element's content model ([CT_TrackChangeNumbering](#)) is located in §A.1. *end note*]

14.6.1.2 numberingChange (Previous Paragraph Numbering Properties)

This element specifies the previous state of the numbering on a paragraph when revisions are being tracked.

[*Rationale:* This mechanism is simply used to provide storage for revisions to numbering produced by legacy word processing applications, and applications are encouraged to use the pPrChange element to store these changes as changes to the paragraph properties instead. *end rationale*]

[Example: Consider the following list using Arabic numerals as the numbering, as follows:

1. one
2. two
3. three

Consider a revision where the numbering definition is changed from Arabic numerals to Roman numerals, as follows:

i. one
ii. two
iii. three

This revision to the numbering definition would be stored as follows in the WordprocessingML:

```
<w:p>
  <w:pPr>
    <w:numPr>
      <w:ilvl w:val="0" />
      <w:numId w:val="1" />
      <w:numberingChange w:id="0" ... w:original="%1:1:0:." />
    </w:numPr>
  </w:pPr>
  <w:r>
    <w:t>one</w:t>
  </w:r>
</w:p>
<w:p>
  <w:pPr>
    <w:numPr>
      <w:ilvl w:val="0" />
      <w:numId w:val="1" />
      <w:numberingChange w:id="1" ... w:original="%1:2:0:." />
    </w:numPr>
  </w:pPr>
  <w:r>
    <w:t>two</w:t>
  </w:r>
</w:p>
<w:p>
  <w:pPr>
    <w:numPr>
      <w:ilvl w:val="0" />
      <w:numId w:val="1" />
```

```

        <w:numberingChange w:id="2" ... w:original="%1:3:0:." />
    </w:numPr>
</w:pPr>
<w:r>
    <w:t>three</w:t>
</w:r>
</w:p>

```

The numberingChange element specifies that the numbering definition was modified and this change was tracked as a revision. The previous Arabic numeral numbering definition is cached in the original attribute. *end example]*

For paragraph numbering, the original attribute shall specify the previous numbering definition for an individual paragraph of text within a WordprocessingML document while revisions are being tracked.

The value of original is represented as separate numbering level definitions defined as follows:

```

< %[numbering level]:[nfc value]:[numbering format]:[separator]>[repeat if more
than one level]

```

where

- **numbering level** – The level for which the numbering definition is defined
- **nfc value** – The value of the numbering style at the specific numbering level
- **numbering format** – The nfc value of the numbering format, as referenced in the table below.
- **separator** – The separator used to separate the numbering level definitions

The numbering format values are mapped as follows:

nfc Value	ST_NumberFormat enumeration equivalent
0	decimal
1	upperRoman
2	lowerRoman
3	upperLetter
4	lowerLetter
5	ordinal
6	cardinalText
7	ordinalText
8	hex
9	chicago
10	ideographDigital
11	japaneseCounting
12	Aiueo

nfc Value	ST_NumberFormat enumeration equivalent
13	Iroha
14	decimalFullWidth
15	decimalHalfWidth
16	japaneseLegal
17	japaneseDigitalTenThousand
18	decimalEnclosedCircle
19	decimalFullWidth2
20	aiueoFullWidth
21	irohaFullWidth
22	decimalZero
23	bullet
24	ganada
25	chosung
26	decimalEnclosedFullstop
27	decimalEnclosedParen
28	decimalEnclosedCircleChinese
29	ideographEnclosedCircle
30	ideographTraditional
31	ideographZodiac
32	ideographZodiacTraditional
33	taiwaneseCounting
34	ideographLegalTraditional
35	taiwaneseCountingThousand
36	taiwaneseDigital
37	chineseCounting
38	chineseLegalSimplified
39	chineseCountingThousand
40	Application-defined. Can be ignored.
41	koreanDigital
42	koreanCounting
43	koreanLegal
44	koreanDigital2
45	hebrew1
46	arabicAlpha
47	hebrew2
48	arabicAbjad
49	hindiVowels
50	hindiConsonants

nfc Value	ST_NumberFormat enumeration equivalent
51	hindiNumbers
52	hindiCounting
53	thaiLetters
54	thaiNumbers
55	thaiCounting
56	vietnameseCounting
57	numberInDash
58	russianLower
59	russianUpper
60 or above	Application-defined. Can be ignored.

[Example: Consider the following numbered paragraph where the numbering definition has changed while revisions are being tracked, as follows:

~~1.1.1.~~ Three

This revision to the numbered paragraph would be stored as follows in the WordprocessingML:

```
<w:numPr>
...
  <w:numberingChange ... w:original="%1:1:0:.%2:1:2:.%3:1:0:." />
</w:numPr>
```

In the above example there are three levels in the original numbering definition, thus three numbering level definitions are needed to represent the original numbering definition.

The first level is specified by %1, and says that it was number value 1 in the nfc format 0 (arabic).

The original attribute specifies that the previous numbering definition was made up of three levels whose value was 1.i.1.. *end example*]

Parent Elements
numPr (Part 1, §17.3.1.19)

Attributes	Description
author (Annotation Author)	<p>Specifies the author for an annotation within a WordprocessingML document.</p> <p>If this attribute is omitted, then no author shall be associated with the parent annotation type.</p> <p>[Example: Consider a comment represented using the following WordprocessingML</p>

Attributes	Description
	<p>fragment:</p> <pre><... w:id="1" w:author="Example Author"> ... </...></pre> <p>The author attribute specifies that the author of the current annotation is Example Author, which can be used as desired. <i>end example</i></p> <p>The possible values for this attribute are defined by the ST_String simple type (Part 1, §22.9.2.13).</p>
date (Annotation Date)	<p>Specifies the date information for an annotation within a WordprocessingML document. The use of this information is outside of the scope of ECMA-376.</p> <p>If this attribute is omitted, then no date information shall be associated with the parent annotation type.</p> <p>[<i>Example:</i> Consider a comment represented using the following WordprocessingML fragment:</p> <pre><... w:id="1" w:date="2006-01-01T10:00:00"> ... </...></pre> <p>The date attribute specifies that the date of the current annotation is January 1st 2006 at 10:00 AM, which can be used as desired. <i>end example</i></p> <p>The possible values for this attribute are defined by the ST_DateTime simple type (Part 1, §17.18.9).</p>
id (Annotation Identifier)	<p>Specifies a unique identifier for an annotation within a WordprocessingML document. The restrictions on the id attribute, if any, are defined by the parent XML element.</p> <p>If this attribute is omitted, then the document is non-conformant.</p> <p>[<i>Example:</i> Consider an annotation represented using the following WordprocessingML fragment:</p> <pre><... w:id="1" ... > ... </...></pre> <p>The id attribute specifies that the ID of the current annotation is 1. This value is used to uniquely identify this annotation within the document content. <i>end example</i></p> <p>The possible values for this attribute are defined by the ST_DecimalNumber simple type (Part 1, §17.18.10).</p>

Attributes	Description
original (Previous Numbering Value)	<p>Specifies the previous numbering displayed by the parent numbering change revision. Its format is specified by the parent element.</p> <p>If this attribute is omitted, then no previous numbering value is implied and applications can choose to calculate this value, or display no previous numbering value.</p> <p>[<i>Example:</i> Consider the following paragraph containing a single LISTNUM field with a revision, as follows:</p> <p style="text-align: center;">Some 1<ins>2</ins>. text</p> <p>This revision to the field result would be stored as follows in the WordprocessingML:</p> <pre><w:fldChar w:fldCharType="begin"> <w:numberingChange w:id="0" ... w:original="1." /> </w:fldChar></pre> <p>The original attribute specifies that the previous numbering value of the field was 1. <i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_String simple type (Part 1, §22.9.2.13).</p>

[*Note:* The W3C XML Schema definition of this element's content model ([CT_TrackChangeNumbering](#)) is located in §A.1. *end note]*

14.7 Settings

14.7.1 Legacy Password Hash Algorithm

When a password hash value is stored using the transitional hashing mechanism described in the following subclause, that process shall be done in two stages:

The following steps assume that all words are unsigned, the word size is two bytes, and that bit-level SHL/SHR operations shift in the direction of the highest-order and lowest-order bit, respectively. [*Example:* 0x61 SHR 1 is 0xC2, as 01100001 shifted one position in the direction of its highest-order bit is 11000010. *end example]*

The UTF-16LE encoded password shall be hashed using the following algorithm (if there is a leading BOM character (U+FEFF) in the encoded password it is removed before hash calculation):

- Passwords of 15 or fewer characters shall be used in the hash without further change; passwords longer than 15 characters shall be truncated to 15 characters.
- Construct a new NULL-terminated string consisting of single-byte values using the algorithm described by the following bullet. The input to this step should be the series of UTF-16 characters defined above:

- Get the single-byte values by iterating through the Unicode characters of the truncated password. For each character, if the low byte is not equal to 0, take it. Otherwise, take the high byte.
- From now on, the single-byte character string is used.
- If the password is empty, return 0.
- Compute the high-order word of the new key:
 - Initialize from the initial code array (see below), depending on the password's length. For each character in the password:
 - For every bit in the character, starting with the least significant and progressing to (but excluding) the most significant, if the bit is set, XOR the key's high-order word with the corresponding word from the encryption matrix
- Compute the low-order word of the new key:
 - Initialize with 0
 - For each character in the password, going backwards, low-order word = (((low-order word SHR 14) AND 0x0001) OR (low-order word SHL 1) AND 0x7FFF) XOR character
 - Lastly, low-order word = (((low-order word SHR 14) AND 0x0001) OR (low-order word SHL 1) AND 0x7FFF) XOR password length XOR 0xCE4B.

Initial code array

The initial code array contains the initial values for the key's high-order word. The initial value depends on the length of the password, as follows:

Password length	Initial value for the key's high-order word
1	0xE1F0
2	0x1D0F
3	0xCC9C
4	0x84C0
5	0x110C
6	0x0E10
7	0xF1CE
8	0x313E
9	0x1872
10	0xE139
11	0xD40F
12	0x84F9
13	0x280C

Password length	Initial value for the key's high-order word
14	0xA96A
15	0x4EC3

Encryption matrix

The encryption matrix contains codes used during the calculation of the key's high-order word. As described in the algorithm above, for every bit of the password's characters, if the bit is set, a corresponding value is taken from this encryption matrix and is used to XOR the key's high-order word with it. Each row in the encryption matrix corresponds to a single character from the password, and each of the seven columns corresponds to a particular bit (0-6) in this character.

The values are taken in such a way so that the last character of the password uses the last row in the encryption matrix. The next-to-last character uses the next-to-last row in the matrix, and so on. This means that the beginning of the matrix might be unused, depending on the length of the password.

	Bit 0	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6
Last-14	0xAEFC	0x4DD9	0x9BB2	0x2745	0x4E8A	0x9D14	0x2A09
Last-13	0x7B61	0xF6C2	0xFDA5	0xEB6B	0xC6F7	0x9DCF	0x2BBF
Last-12	0x4563	0x8AC6	0x05AD	0x0B5A	0x16B4	0x2D68	0x5AD0
Last-11	0x0375	0x06EA	0x0DD4	0x1BA8	0x3750	0x6EA0	0xDD40
Last-10	0xD849	0xA0B3	0x5147	0xA28E	0x553D	0xAA7A	0x44D5
Last-9	0x6F45	0xDE8A	0xAD35	0x4A4B	0x9496	0x390D	0x721A
Last-8	0xEB23	0xC667	0x9CEF	0x29FF	0x53FE	0xA7FC	0x5FD9
Last-7	0x47D3	0x8FA6	0x0F6D	0x1EDA	0x3DB4	0x7B68	0xF6D0
Last-6	0xB861	0x60E3	0xC1C6	0x93AD	0x377B	0x6EF6	0xDDEC
Last-5	0x45A0	0x8B40	0x06A1	0x0D42	0x1A84	0x3508	0x6A10
Last-4	0xAA51	0x4483	0x8906	0x022D	0x045A	0x08B4	0x1168
Last-3	0x76B4	0xED68	0xCAF1	0x85C3	0x1BA7	0x374E	0x6E9C
Last-2	0x3730	0x6E60	0xDCC0	0xA9A1	0x4363	0x86C6	0x1DAD
Last-1	0x3331	0x6662	0xCCC4	0x89A9	0x0373	0x06E6	0x0DCC
Last	0x1021	0x2042	0x4084	0x8108	0x1231	0x2462	0x48C4

[Example: Consider a password which has been supplied - the string "Example". It is already under 15 characters, so truncation does not affect it. It is then converted to a string of single-byte characters.

- The password is 7 characters long, so, from the initial code array, the initial value for the key's high-order word is 0xF1CE.
- The key's high-order word is then computed further depending on the password's characters:

- The first character is 'E' (0x45). This is the first character of a 7-character password, so its corresponding row in the encryption matrix is "Last-6".
 - Bit 0 is set, therefore the key's high-order word is combined (via XOR) with the corresponding value for Bit 0 on row "Last-6", which is 0xB861. The new result is 0xF1CE XOR 0xB861 = 0x49AF.
 - Bit 2 is set, so the key's high-order word is XOR-ed with the corresponding value for Bit 2 on row "Last-6", which is 0xC1C6. The new result is 0x49AF XOR 0xC1C6 = 0x8869.
 - This process is repeated for each bit.
- The next character is 'x' (0x78). Its corresponding row in the encryption matrix is "Last-5".
 - Bit 3 is set. The value for Bit 3 on row "Last-5" in the encryption matrix is 0x0D42. The current value for the key's high-order byte is 0x5585, so the new one should be 0x5585 XOR 0x0D42 = 0x58C7.
 - This process is repeated for each bit.
- This process is repeated for all characters.
- After the last character has been processed, the above step produced 0x64CE for the key's high-order word. Now the low-order word needs to be calculated:
 - The initial value is 0.
 - It is then calculated using the password:
 - The last character of the password is 'e' (0x65), so, by the formula, low-order word = (((low-order word SHR 14) AND 0x0001) OR ((low-order word SHL 1) AND 0x7FFF)) XOR 'e' = (((0 SHR 14) AND 0x0001) OR ((0 SHL 1) AND 0x7FFF)) XOR 0x65 = 0x0065.
 - The next to last character of the password is 'l' (0x6C). Again, by the formula, (((0x0065 SHR 14) AND 0x0001) OR ((0x0065 SHL 1) AND 0x7FFF)) XOR 0x6C = (0x0000 OR 0x00CA) XOR 0x6C = 0x00CA XOR 0x6C = 0x00A6.
 - This process is repeated for each character.
 - After the password's first character has been processed, we have 0x1199 for the key's low-order word. Lastly, the password's length is combined into it: low-order word = (((0x1199 SHR 14) AND 0x0001) OR ((0x1199 SHL 1) AND 0x7FFF)) XOR 0x0007 XOR 0xCE4B = 0x2332 XOR 0x0007 XOR 0xCE4B = 0x2335 XOR 0xCE4B = 0xED7E.
- The end result for the key is 0x64CEED7E.

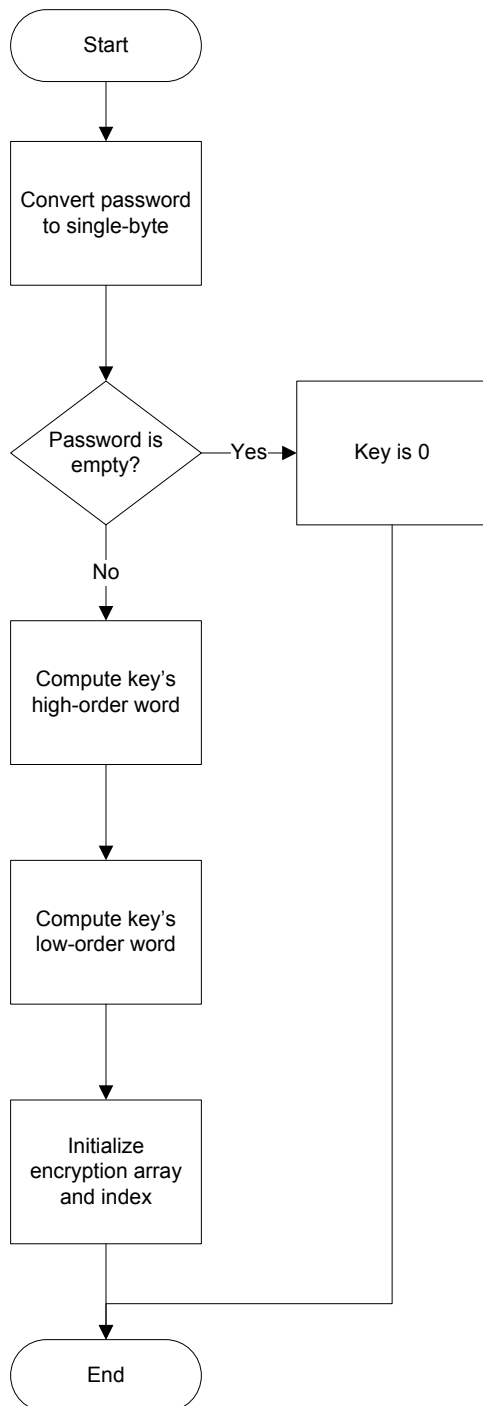
end example]

[*Rationale:* This pre-processing step is necessary for compatibility with legacy word processing applications which hashed their password solely using this mechanism. *end rationale]*

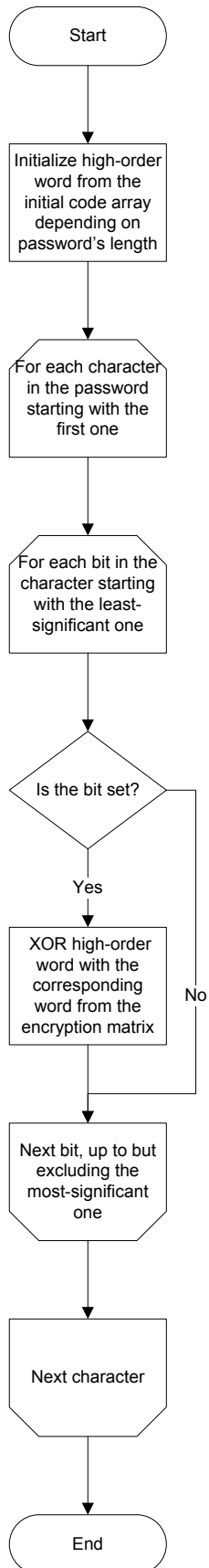
Second, the byte order of the result shall be reversed [*Example: 0x64CEED7E becomes 7EEDCE64. end example*], and that value shall be hashed as defined by the attribute values.

[*Note: The algorithm above can be stated as follows using diagrams:*

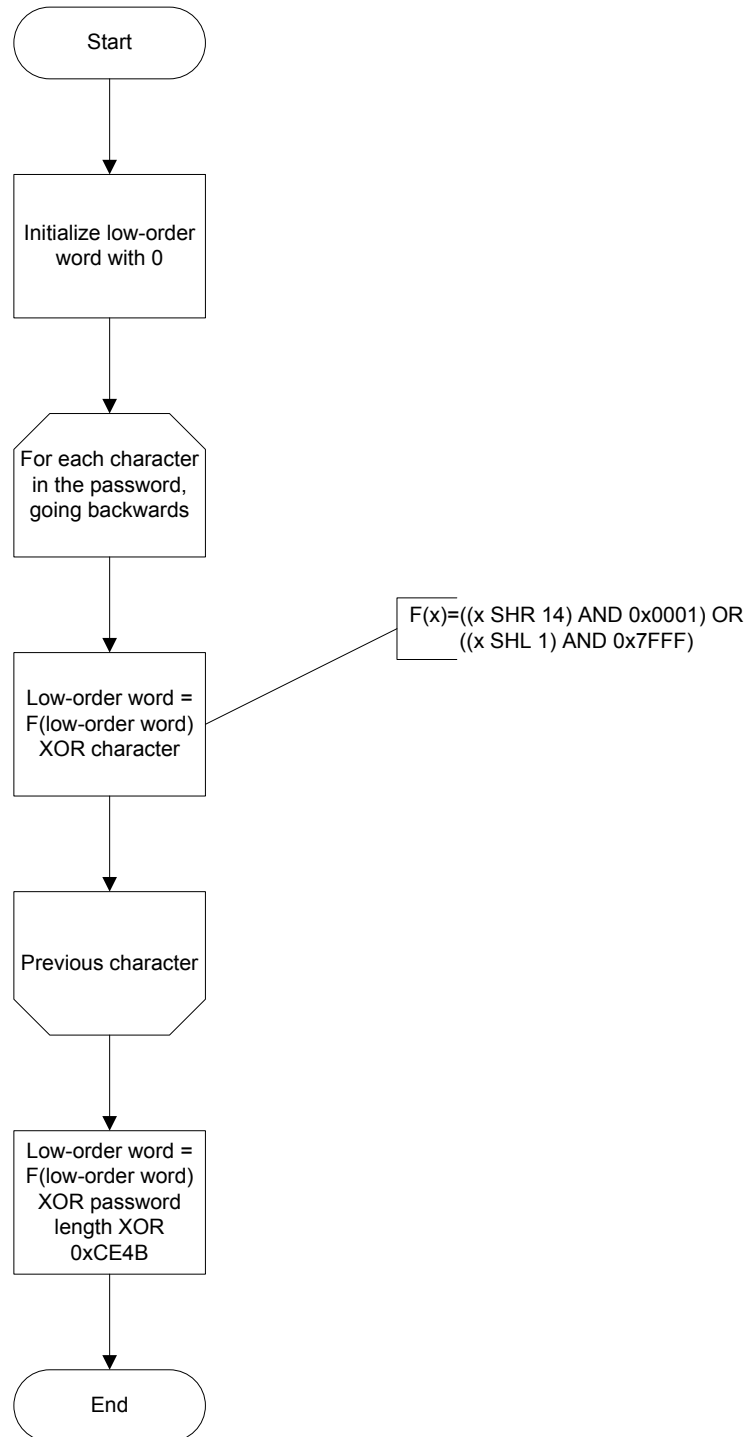
Calculate Key



Compute Key's High-Order Word



Compute Key's Low-Order Word



end note]

[*Example:* Consider a WordprocessingML document which specifies that applications must not allow any modifications to this document other than the addition of comments. This requirement would be specified using the following WordprocessingML in the document settings:

```
<w:documentProtection w:edit="comments" w:enforcement="true" ...
  w:cryptAlgorithmClass="hash" w:cryptAlgorithmType="typeAny"
  w:cryptAlgorithmSid="1" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" />
```

The documentProtection element has an edit attribute value of comments, specifying that the only modification allowed should be comments, the enforcement attribute has a value of true, specifying that the document protection specified is to be enforced on the given document. Finally, in order for the hosting application to stop enforcement of the document protection applied to the document, the hosting application would have to be provided with a password that the hosting application would then hash, compare to the value of the hash attribute (9oN7nWkCAyEZib1RomSJTjmPpCY=), and if the two values matched, halt enforcement of any document protection. *end example*]

14.7.2 Document Settings

14.7.2.1 hdrShapeDefaults (Default Properties for VML Objects in Header and Footer)

This element specifies the default parameters for object using the VML syntax (§19.1) inserted in the header and footer of a WordprocessingML document. The definition and semantics of these parameters is described in the VML - Office Drawing subclause (§19.2) of ECMA-376.

If this element is omitted, then no default properties are applied to VML objects in the header and footer of this document.

[*Example:* Consider a WordprocessingML document whose document settings contain the following markup:

```
<w:hdrShapeDefaults>
  <o:shapedefaults v:ext="edit" spidmax="2050" fillcolor="none [3207]"
strokecolor="none [3041]">
    <v:fill color="none [3207]" />
    <v:stroke color="none [3041]" weight="3pt" />
    <v:shadow on="t" type="perspective" color="none [1607]" opacity=".5"
offset="1pt" offset2="1pt" />
  </o:shapedefaults>
  <o:shapelayout v:ext="edit">
    <o:idmap v:ext="edit" data="2" />
  </o:shapelayout>
</w:hdrShapeDefaults>
```

The hdrShapeDefaults element specifies a set of shape defaults which must be applied to the set of all shapes present in the header and footer of this document. *end example*]

Parent Elements
settings (Part 1, §17.15.1.78)

Child Elements	Subclause
Any element in the urn:schemas-microsoft-com:office:office namespace	§19.2

[*Note:* The W3C XML Schema definition of this element's content model ([CT_ShapeDefaults](#)) is located in §A.1. *end note*]

14.7.2.2 [shapeDefaults \(Default Properties for VML Objects in Main Document\)](#)

This element specifies the default parameters for object using the VML syntax (§19.1) inserted in the body (the main document story, comments, footnotes, and endnotes) of the WordprocessingML document. The definition and semantics of these parameters is described in the VML - Office Drawing subclause (§19.2) of ECMA-376.

If this element is omitted, then no default properties are applied to VML objects in the body of this document.

[*Example:* Consider a WordprocessingML document whose document settings contain the following markup:

```
<w:shapeDefaults>
  <o:shapedefaults v:ext="edit" spidmax="1026" />
  <o:shapelayout v:ext="edit">
    <o:idmap v:ext="edit" data="1" />
  </o:shapelayout>
</w:shapeDefaults>
```

The shapeDefaults element specifies a set of shape defaults which must be applied to the set of all shapes present in the body document. *end example*]

Parent Elements
settings (Part 1, §17.15.1.78)

Child Elements	Subclause
Any element in the urn:schemas-microsoft-com:office:office namespace	§19.2

[*Note:* The W3C XML Schema definition of this element's content model ([CT_ShapeDefaults](#)) is located in §A.1. *end note*]

14.7.2.3 [Additional attributes for documentProtection element \(Part 1, §17.15.1.29\)](#)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
algIdExt (Cryptographic Algorithm Extensibility)	<p>Specifies that a cryptographic algorithm which was not defined by ECMA-376 has been used to generate the hash value stored with this document.</p> <p>This value, when present, shall be interpreted based on the value of the algIdExtSource attribute in order to determine the algorithm used, which shall be application-defined. <i>[Rationale: This extensibility affords the fact that with exponentially increasing computing power, documents created in the future might need to utilize as yet undefined hashing algorithms in order to remain secure. end rationale]</i></p> <p>If this value is present, the cryptAlgorithmClass, cryptAlgorithmType, and cryptAlgorithmSid attribute values shall be ignored in favor of the algorithm defined by this attribute.</p> <p><i>[Example: Consider a WordprocessingML document with the following information stored in one of its protection elements:</i></p> <pre><... w:algIdExt="0000000A" w:algIdExtSource="futureCryptography" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The algIdExt attribute value of 0000000A specifies that the algorithm with hex code A must be used as defined by the futureCryptography application. <i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_LongHexNumber simple type (Part 1, §17.18.50).</p>
algIdExtSource (Algorithm Extensibility Source)	<p>Specifies the application which defined the algorithm value specified by the algIdExt attribute.</p> <p><i>[Example: Consider a WordprocessingML document with the following information stored in one of its protection elements:</i></p> <pre><... w:algIdExt="0000000A" w:algIdExtSource="futureCryptography" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The algIdExtSource attribute value of futureCryptography specifies that the algorithm used here was published by the futureCryptography application. <i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_String simple type (Part 1, §22.9.2.13).</p>
cryptAlgorithmClass (Cryptographic Algorithm Class)	<p>Specifies the class of cryptographic algorithm used by this protection. <i>[Note: The initial version of ECMA-376 only supports a single version - hash - but future versions can expand this as necessary. end note]</i></p> <p><i>[Example: Consider a WordprocessingML document with the following information stored in one of its protection elements:</i></p>

Attributes	Description																																
	<pre><... w:cryptAlgorithmClass="hash" w:cryptAlgorithmType="typeAny" w:cryptAlgorithmSid="1" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The cryptAlgorithmClass attribute value of hash specifies that the algorithm used for the password is a hashing algorithm. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_AlgClass simple type (§20.1.2.1).</p>																																
cryptAlgorithmSid (Cryptographic Hashing Algorithm)	<p>Specifies the specific cryptographic hashing algorithm which shall be used along with the salt attribute and user-supplied password in order to compute a hash value for comparison.</p> <p>The possible values for this attribute shall be interpreted as follows:</p> <table> <tr> <th>Value</th><th>Algorithm</th></tr> <tr><td>1</td><td>MD2</td></tr> <tr><td>2</td><td>MD4</td></tr> <tr><td>3</td><td>MD5</td></tr> <tr><td>4</td><td>SHA-1</td></tr> <tr><td>5</td><td>MAC</td></tr> <tr><td>6</td><td>RIPEMD</td></tr> <tr><td>7</td><td>RIPEMD-160</td></tr> <tr><td>8</td><td>Undefined. Shall not be used.</td></tr> <tr><td>9</td><td>HMAC</td></tr> <tr><td>10</td><td>Undefined. Shall not be used.</td></tr> <tr><td>11</td><td>Undefined. Shall not be used.</td></tr> <tr><td>12</td><td>SHA-256</td></tr> <tr><td>13</td><td>SHA-384</td></tr> <tr><td>14</td><td>SHA-512</td></tr> <tr><td>Any other value</td><td>Undefined. Shall not be used.</td></tr> </table> <p>[<i>Example:</i> Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:cryptAlgorithmClass="hash" w:cryptAlgorithmType="typeAny" w:cryptAlgorithmSid="4"</pre>	Value	Algorithm	1	MD2	2	MD4	3	MD5	4	SHA-1	5	MAC	6	RIPEMD	7	RIPEMD-160	8	Undefined. Shall not be used.	9	HMAC	10	Undefined. Shall not be used.	11	Undefined. Shall not be used.	12	SHA-256	13	SHA-384	14	SHA-512	Any other value	Undefined. Shall not be used.
Value	Algorithm																																
1	MD2																																
2	MD4																																
3	MD5																																
4	SHA-1																																
5	MAC																																
6	RIPEMD																																
7	RIPEMD-160																																
8	Undefined. Shall not be used.																																
9	HMAC																																
10	Undefined. Shall not be used.																																
11	Undefined. Shall not be used.																																
12	SHA-256																																
13	SHA-384																																
14	SHA-512																																
Any other value	Undefined. Shall not be used.																																

Attributes	Description
	<p><code>w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></code></p> <p>The <code>cryptAlgorithmSid</code> attribute value of 4 specifies that the SHA-1 hashing algorithm must be used to generate a hash from the user-defined password. <i>end example</i></p> <p>The possible values for this attribute are defined by the <code>ST_DecimalNumber</code> simple type (Part 1, §17.18.10).</p>
<p><code>cryptAlgorithmType</code> (Cryptographic Algorithm Type)</p>	<p>Specifies the type of cryptographic algorithm used by this protection. [Note: The initial version of ECMA-376 only supports a single algorithm type - <code>typeAny</code> - but future versions can expand this as necessary. <i>end note</i>]</p> <p>[Example: Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:cryptAlgorithmClass="hash" w:cryptAlgorithmType="typeAny" w:cryptAlgorithmSid="1" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The <code>cryptAlgorithmType</code> attribute value of <code>typeAny</code> specifies that any type of algorithm might have been used for the password. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the <code>ST_AlgType</code> simple type (§20.1.2.2).</p>
<p><code>cryptProvider</code> (Cryptographic Provider)</p>	<p>Specifies the cryptographic provider which was used to generate the hash value stored in this document. If the user provided a cryptographic provider which was not the system's built-in provider, then that provider shall be stored here so it can subsequently be used if available.</p> <p>If this attribute is omitted, then the built-in cryptographic provider on the system shall be used.</p> <p>[Example: Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:cryptProvider="Krista'sProvider" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The <code>cryptProvider</code> attribute value of <code>Krista'sProvider</code> specifies that the cryptographic provider with name "Krista's Provider" must be used if available. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the <code>ST_String</code> simple type (Part 1, §22.9.2.13).</p>
<p><code>cryptProviderType</code> (Cryptographic</p>	<p>Specifies the type of cryptographic provider to be used.</p>

Attributes	Description
Provider Type)	<p>[<i>Example:</i> Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:cryptProviderType="rsaAES" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The cryptProviderType attribute value of rsaAES specifies that the cryptographic provider type must be an Advanced Encryption Standard provider. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_CryptProv simple type (§20.1.2.4).</p>
cryptProviderType Ext (Cryptographic Provider Type Extensibility)	<p>Specifies that a cryptographic provider type which was not defined by ECMA-376 has been used to generate the hash value stored with this document.</p> <p>This value, when present, shall be interpreted based on the value of the cryptProviderTypeExtSource attribute in order to determine the provider type used, which shall be application-defined. [<i>Rationale:</i> This extensibility affords the fact that with exponentially increasing computing power, documents created in the future might need to utilize as yet undefined cryptographic provider types in order to remain secure. <i>end rationale</i>]</p> <p>If this value is present, the cryptProviderType attribute value shall be ignored in favor of the provider type defined by this attribute.</p> <p>[<i>Example:</i> Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:cryptProviderTypeExt="00A5691D" w:cryptProvideTypeExtSource="futureCryptography" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The cryptProviderTypeExt attribute value of 00A5691D specifies that the provider type associated with hex code A5691D must be used as defined by the futureCryptography application. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_LongHexNumber simple type (Part 1, §17.18.50).</p>
cryptProviderType ExtSource (Provider Type Extensibility Source)	<p>Specifies the application which defined the provider type value specified by the cryptProviderTypeExt attribute.</p> <p>[<i>Example:</i> Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:cryptProviderTypeExt="00A5691D" w:cryptProvideTypeExtSource="futureCryptography" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre>

Attributes	Description
	<p>The cryptProvideTypeExtSource attribute value of futureCryptography specifies that the provider type used here was published by the futureCryptography application. <i>end example</i></p> <p>The possible values for this attribute are defined by the ST_String simple type (Part 1, §22.9.2.13).</p>
cryptSpinCount (Iterations to Run Hashing Algorithm)	<p>Specifies the number of times the hashing function shall be iteratively run (runs using each iteration's result plus a 4 byte value (0-based, little endian) containing the number of the iteration as the input for the next iteration) when attempting to compare a user-supplied password with the value stored in the hash attribute. [<i>Rationale</i>: Running the algorithm many times increases the cost of exhaustive search attacks correspondingly. Storing this value allows for the number of iterations to be increased over time to accommodate faster hardware (and hence the ability to run more iterations in less time). <i>end rationale</i>]</p> <p>[<i>Example</i>: Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:cryptSpinCount="100000" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The cryptSpinCount attribute value of 100000 specifies that the hashing function must be run one hundred thousand times to generate a hash value for comparison with the hash attribute. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_DecimalNumber simple type (Part 1, §17.18.10).</p>
hash (Password Hash)	<p>Specifies the hash value for the password stored with this document. This value shall be compared with the resulting hash value after hashing the user-supplied password using the algorithm specified by the preceding attributes and parent XML element, and if the two values match, the protection shall no longer be enforced.</p> <p>If this value is omitted, then no password shall be associated with the protection, and it can be turned off without supplying any password.</p> <p>[<i>Example</i>: Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:cryptAlgorithmClass="hash" w:cryptAlgorithmType="typeAny" w:cryptAlgorithmSid="1" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The hash attribute value of 9oN7nWkCAyEZib1RomSJTjmPpCY= specifies that the user-supplied password must be hashed using the pre-processing defined by the parent</p>

Attributes	Description
	<p>element (if any) followed by the SHA-1 algorithm (specified via the <code>cryptAlgorithmSid</code> attribute value of 1) and that the resulting hash value must be 9oN7nWkCAyEZib1RomSJTjmPpCY= for the protection to be disabled. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema <code>base64Binary</code> datatype.</p>
salt (Salt for Password Verifier)	<p>Specifies the salt which was prepended to the user-supplied password before it was hashed using the hashing algorithm defined by the preceding attribute values to generate the hash attribute, and which shall also be prepended to the user-supplied password before attempting to generate a hash value for comparison. A <i>salt</i> is a random string which is added to a user-supplied password before it is hashed in order to prevent a malicious party from pre-calculating all possible password/hash combinations and simply using those precalculated values (often referred to as a "dictionary attack").</p> <p>If this attribute is omitted, then no salt shall be prepended to the user-supplied password before it is hashed for comparison with the stored hash value.</p> <p>[<i>Example:</i> Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:salt="ZUdHa+D8F/OAKP3I7ssUnQ==" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The salt attribute value of ZUdHa+D8F/OAKP3I7ssUnQ== specifies that the user-supplied password must have this value prepended before it is run through the specified hashing algorithm to generate a resulting hash value for comparison. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema <code>base64Binary</code> datatype.</p>

14.7.2.4 Additional attribute for stylePaneFormatFilter element (Part 1, §17.15.1.85)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description								
val (Bitmask of Suggested Filtering Options)	<p>Specifies a bitmask of the following filtering options:</p> <table> <tr> <th>Value</th><th>Description</th></tr> <tr> <td>0x0001</td><td>Specifies that all styles present in the styles part should be displayed in the list of document styles.</td></tr> <tr> <td>0x0002</td><td>Specifies that only styles with the <code>customStyle</code> attribute should be displayed in the list of document styles.</td></tr> <tr> <td>0x0004</td><td>Specifies that all latent styles should be displayed in the list of document styles.</td></tr> </table>	Value	Description	0x0001	Specifies that all styles present in the styles part should be displayed in the list of document styles.	0x0002	Specifies that only styles with the <code>customStyle</code> attribute should be displayed in the list of document styles.	0x0004	Specifies that all latent styles should be displayed in the list of document styles.
Value	Description								
0x0001	Specifies that all styles present in the styles part should be displayed in the list of document styles.								
0x0002	Specifies that only styles with the <code>customStyle</code> attribute should be displayed in the list of document styles.								
0x0004	Specifies that all latent styles should be displayed in the list of document styles.								

Attributes	Description	
	0x0008	Specifies that only styles used in the document should be displayed in the list of document styles.
	0x0010	Undefined. Shall not be used.
	0x0020	Specifies that heading styles (styles with a styleId of Heading1 to Heading9) should be displayed in the list of document styles when the previous style is used in the document and/or is present in the styles part.
	0x0040	Specifies that numbering styles should be displayed in the list of document styles.
	0x0080	Specifies that table styles should be displayed in the list of document styles.
	0x0100	Specifies that all unique forms of run-level direct formatting should be displayed in the list of document styles as though they were each a unique style.
	0x0200	Specifies that all unique forms of paragraph-level direct formatting should be displayed in the list of document styles as though they were each a unique style.
	0x0400	Specifies that all unique forms of direct formatting of numbering data should be displayed in the list of document styles as though they were each a unique style.
	0x0800	Specifies that all unique forms of direct formatting of tables should be displayed in the list of document styles as though they were each a unique style.
	0x1000	Specifies that a style should be present which removes all formatting and styles from text.
	0x2000	Specifies that heading styles with a styleId of Heading1 to Heading3 should always be displayed in the list of document styles.
	0x4000	Specifies that styles should only be shown the semiHidden element (Part 1, §17.7.4.16) is false and the hidden element (Part 1, §17.7.4.4) is false.
	0x8000	Specifies that primary names for styles should not be shown if an alternate name using the name element (Part 1, §17.7.4.9) exists.
	Any other value	Undefined. Shall not be used.
<p><i>[Example: Consider a document with the following value in its document settings:</i></p> <pre><w:stylePaneFormatFilter w:val="2002" /></pre> <p>The val attribute specifies two suggested filter options for the list of document styles:</p> <ul style="list-style-type: none"> • Only custom styles should be shown (0002) 		

Attributes	Description
	<ul style="list-style-type: none"> Heading styles with a styleId of Heading1 to Heading3 should always be displayed in the list (2000) <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ShortHexNumber simple type (Part 1, §17.18.79).</p>

14.7.2.5 Additional attributes for writeProtection element (Part 1, §17.15.1.93)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
algIdExt (Cryptographic Algorithm Extensibility)	<p>Specifies that a cryptographic algorithm which was not defined by ECMA-376 has been used to generate the hash value stored with this document.</p> <p>This value, when present, shall be interpreted based on the value of the algIdExtSource attribute in order to determine the algorithm used, which shall be application-defined. <i>[Rationale: This extensibility affords the fact that with exponentially increasing computing power, documents created in the future might need to utilize as yet undefined hashing algorithms in order to remain secure. end rationale]</i></p> <p>If this value is present, the cryptAlgorithmClass, cryptAlgorithmType, and cryptAlgorithmSid attribute values shall be ignored in favor of the algorithm defined by this attribute.</p> <p><i>[Example: Consider a WordprocessingML document with the following information stored in one of its protection elements:</i></p> <pre><... w:algIdExt="0000000A" w:algIdExtSource="futureCryptography" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The algIdExt attribute value of 0000000A specifies that the algorithm with hex code A must be used as defined by the futureCryptography application. <i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_LongHexNumber simple type (Part 1, §17.18.50).</p>
algIdExtSource (Algorithm Extensibility Source)	<p>Specifies the application which defined the algorithm value specified by the algIdExt attribute.</p> <p><i>[Example: Consider a WordprocessingML document with the following information stored in one of its protection elements:</i></p> <pre><... w:algIdExt="0000000A" w:algIdExtSource="futureCryptography"</pre>

Attributes	Description																								
	<p><code>w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></code></p> <p>The <code>algIdExtSource</code> attribute value of <code>futureCryptography</code> specifies that the algorithm used here was published by the <code>futureCryptography</code> application. <i>end example</i></p> <p>The possible values for this attribute are defined by the <code>ST_String</code> simple type (Part 1, §22.9.2.13).</p>																								
cryptAlgorithmClass (Cryptographic Algorithm Class)	<p>Specifies the class of cryptographic algorithm used by this protection. [<i>Note</i>: The initial version of ECMA-376 only supports a single version - <code>hash</code> - but future versions can expand this as necessary. <i>end note</i>]</p> <p>[<i>Example</i>: Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:cryptAlgorithmClass="hash" w:cryptAlgorithmType="typeAny" w:cryptAlgorithmSid="1" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The <code>cryptAlgorithmClass</code> attribute value of <code>hash</code> specifies that the algorithm used for the password is a hashing algorithm. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the <code>ST_AlgClass</code> simple type (§20.1.2.1).</p>																								
cryptAlgorithmSid (Cryptographic Hashing Algorithm)	<p>Specifies the specific cryptographic hashing algorithm which shall be used along with the salt attribute and user-supplied password in order to compute a hash value for comparison.</p> <p>The possible values for this attribute shall be interpreted as follows:</p> <table border="1"> <thead> <tr> <th>Value</th><th>Algorithm</th></tr> </thead> <tbody> <tr><td>1</td><td>MD2</td></tr> <tr><td>2</td><td>MD4</td></tr> <tr><td>3</td><td>MD5</td></tr> <tr><td>4</td><td>SHA-1</td></tr> <tr><td>5</td><td>MAC</td></tr> <tr><td>6</td><td>RIPEMD</td></tr> <tr><td>7</td><td>RIPEMD-160</td></tr> <tr><td>8</td><td>Undefined. Shall not be used.</td></tr> <tr><td>9</td><td>HMAC</td></tr> <tr><td>10</td><td>Undefined. Shall not be used.</td></tr> <tr><td>11</td><td>Undefined. Shall not be used.</td></tr> </tbody> </table>	Value	Algorithm	1	MD2	2	MD4	3	MD5	4	SHA-1	5	MAC	6	RIPEMD	7	RIPEMD-160	8	Undefined. Shall not be used.	9	HMAC	10	Undefined. Shall not be used.	11	Undefined. Shall not be used.
Value	Algorithm																								
1	MD2																								
2	MD4																								
3	MD5																								
4	SHA-1																								
5	MAC																								
6	RIPEMD																								
7	RIPEMD-160																								
8	Undefined. Shall not be used.																								
9	HMAC																								
10	Undefined. Shall not be used.																								
11	Undefined. Shall not be used.																								

Attributes	Description								
	<table border="1"> <tr> <td>12</td><td>SHA-256</td></tr> <tr> <td>13</td><td>SHA-384</td></tr> <tr> <td>14</td><td>SHA-512</td></tr> <tr> <td>Any other value</td><td>Undefined. Shall not be used.</td></tr> </table> <p>[<i>Example:</i> Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:cryptAlgorithmClass="hash" w:cryptAlgorithmType="typeAny" w:cryptAlgorithmSid="4" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The cryptAlgorithmSid attribute value of 4 specifies that the SHA-1 hashing algorithm must be used to generate a hash from the user-defined password. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_DecimalNumber simple type (Part 1, §17.18.10).</p>	12	SHA-256	13	SHA-384	14	SHA-512	Any other value	Undefined. Shall not be used.
12	SHA-256								
13	SHA-384								
14	SHA-512								
Any other value	Undefined. Shall not be used.								
cryptAlgorithmType (Cryptographic Algorithm Type)	<p>Specifies the type of cryptographic algorithm used by this protection. [<i>Note:</i> The initial version of ECMA-376 only supports a single algorithm type - typeAny - but future versions can expand this as necessary. <i>end note</i>]</p> <p>[<i>Example:</i> Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:cryptAlgorithmClass="hash" w:cryptAlgorithmType="typeAny" w:cryptAlgorithmSid="1" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The cryptAlgorithmType attribute value of typeAny specifies that any type of algorithm might have been used for the password. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_AlgType simple type (§20.1.2.2).</p>								
cryptProvider (Cryptographic Provider)	<p>Specifies the cryptographic provider which was used to generate the hash value stored in this document. If the user provided a cryptographic provider which was not the system's built-in provider, then that provider shall be stored here so it can subsequently be used if available.</p> <p>If this attribute is omitted, then the built-in cryptographic provider on the system shall be used.</p>								

Attributes	Description
	<p>[<i>Example:</i> Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:cryptProvider="Krista'sProvider" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The cryptProvider attribute value of Krista'sProvider specifies that the cryptographic provider with name "Krista's Provider" must be used if available. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_String simple type (Part 1, §22.9.2.13).</p>
cryptProviderType (Cryptographic Provider Type)	<p>Specifies the type of cryptographic provider to be used.</p> <p>[<i>Example:</i> Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:cryptProviderType="rsaAES" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The cryptProviderType attribute value of rsaAES specifies that the cryptographic provider type must be an Advanced Encryption Standard provider. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_CryptProv simple type (§20.1.2.4).</p>
cryptProviderType Ext (Cryptographic Provider Type Extensibility)	<p>Specifies that a cryptographic provider type which was not defined by ECMA-376 has been used to generate the hash value stored with this document.</p> <p>This value, when present, shall be interpreted based on the value of the cryptProviderTypeExtSource attribute in order to determine the provider type used, which shall be application-defined. [<i>Rationale:</i> This extensibility affords the fact that with exponentially increasing computing power, documents created in the future might need to utilize as yet undefined cryptographic provider types in order to remain secure. <i>end rationale</i>]</p> <p>If this value is present, the cryptProviderType attribute value shall be ignored in favor of the provider type defined by this attribute.</p> <p>[<i>Example:</i> Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:cryptProviderTypeExt="00A5691D" w:cryptProvideTypeExtSource="futureCryptography" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The cryptProviderTypeExt attribute value of 00A5691D specifies that the provider type associated with hex code A5691D must be used as defined by the futureCryptography</p>

Attributes	Description
	<p>application. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_LongHexNumber simple type (Part 1, §17.18.50).</p>
<p>cryptProviderTypeExtSource (Provider Type Extensibility Source)</p>	<p>Specifies the application which defined the provider type value specified by the cryptProviderTypeExt attribute.</p> <p>[<i>Example</i>: Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:cryptProviderTypeExt="00A5691D" w:cryptProvideTypeExtSource="futureCryptography" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The cryptProvideTypeExtSource attribute value of futureCryptography specifies that the provider type used here was published by the futureCryptography application. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_String simple type (Part 1, §22.9.2.13).</p>
<p>cryptSpinCount (Iterations to Run Hashing Algorithm)</p>	<p>Specifies the number of times the hashing function shall be iteratively run (runs using each iteration's result plus a 4 byte value (0-based, little endian) containing the number of the iteration as the input for the next iteration) when attempting to compare a user-supplied password with the value stored in the hash attribute. [<i>Rationale</i>: Running the algorithm many times increases the cost of exhaustive search attacks correspondingly. Storing this value allows for the number of iterations to be increased over time to accommodate faster hardware (and hence the ability to run more iterations in less time). <i>end rationale</i>]</p> <p>[<i>Example</i>: Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:cryptSpinCount="100000" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The cryptSpinCount attribute value of 100000 specifies that the hashing function must be run one hundred thousand times to generate a hash value for comparison with the hash attribute. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_DecimalNumber simple type (Part 1, §17.18.10).</p>
<p>hash (Password Hash)</p>	<p>Specifies the hash value for the password stored with this document. This value shall be compared with the resulting hash value after hashing the user-supplied password using the algorithm specified by the preceding attributes and parent XML element, and if the two values match, the protection shall no longer be enforced.</p>

Attributes	Description
	<p>If this value is omitted, then no password shall be associated with the protection, and it can be turned off without supplying any password.</p> <p>[<i>Example:</i> Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:cryptAlgorithmClass="hash" w:cryptAlgorithmType="typeAny" w:cryptAlgorithmSid="1" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The hash attribute value of 9oN7nWkCAyEZib1RomSJTjmPpCY= specifies that the user-supplied password must be hashed using the pre-processing defined by the parent element (if any) followed by the SHA-1 algorithm (specified via the cryptAlgorithmSid attribute value of 1) and that the resulting hash value must be 9oN7nWkCAyEZib1RomSJTjmPpCY= for the protection to be disabled. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema base64Binary datatype.</p>
salt (Salt for Password Verifier)	<p>Specifies the salt which was prepended to the user-supplied password before it was hashed using the hashing algorithm defined by the preceding attribute values to generate the hash attribute, and which shall also be prepended to the user-supplied password before attempting to generate a hash value for comparison. A <i>salt</i> is a random string which is added to a user-supplied password before it is hashed in order to prevent a malicious party from pre-calculating all possible password/hash combinations and simply using those precalculated values (often referred to as a "dictionary attack").</p> <p>If this attribute is omitted, then no salt shall be prepended to the user-supplied password before it is hashed for comparison with the stored hash value.</p> <p>[<i>Example:</i> Consider a WordprocessingML document with the following information stored in one of its protection elements:</p> <pre><... w:salt="ZUdHa+D8F/OAKP3I7ssUnQ==" w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The salt attribute value of ZUdHa+D8F/OAKP3I7ssUnQ== specifies that the user-supplied password must have this value prepended before it is run through the specified hashing algorithm to generate a resulting hash value for comparison. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema base64Binary datatype.</p>

14.7.3 Compatibility Settings

The last group of settings stored in WordprocessingML is compatibility settings. *Compatibility Settings* are optional settings used to preserve visual fidelity of documents created in earlier word processing applications. Some of these settings provide affordance for specific behaviors, described in detail below; and others simply instruct applications to mimic the behavior of an existing word processing application.

If compatibility settings are needed, they are stored in the Document Settings part.

It is important to note that all compatibility settings are optional in nature - applications can freely ignore all behaviors described within this section and these settings should not be added unless compatibility is specifically needed in one or more cases. The compatibility settings are provided for backward compatibility with documents created in legacy applications. As such, a number of the settings reference specific applications and specific versions of those applications. This is solely for backward compatibility reasons, and any of those settings are not intended for use by typical applications.

[*Note:* These settings can also be expressed using the generic compatSetting element defined in ECMA-376-1. *end note*]

[*Example:* Consider the following WordprocessingML fragment for the compatibility settings in a WordprocessingML document:

```
<w:settings>
...
  <w:compat>
    <w:noTabHangInd />
  </w:compat>
</w:settings>
```

The compat element contains all of the document settings for this document. In this case, the single setting applied is the suppression of a tab stop when using a hanging indent using the noTabHangInd element (§14.7.3.31). *end example*]

14.7.3.1 alignTablesRowByRow (Align Table Rows Independently)

This element specifies whether applications shall align each row within a table independently based on the alignment setting of the jc element (Part 1, §17.4.28) when displaying the contents of a table in a WordprocessingML document.

When the justification of a table using the jc element is typically applied, that alignment is applied to the contents of the table (the table is centered, left justified, or right-aligned), and then individual rows are laid out based on the resulting table's position. This element, when present with a val attribute value of true (or equivalent), specifies that each table row shall be independently aligned based on the table alignment setting, ignoring the placement of all other rows.

[Example: Consider a WordprocessingML document with a single centered table, whose second row is defined such that one-half of an inch is left before the row begins, as follows:

```
<w:tbl>
  <w:tblPr>
    <w:jc w:val="center" />
  </w:tblPr>
  <w:tr>
    ...
  </w:tr>
  <w:tr>
    <w:trPr>
      <w:gridBefore w:val="1" />
      <w:wBefore w:w="720" w:type="dxa" />
    </w:trPr>
    ...
  </w:tr>
  <w:tr>
    ...
  </w:tr>
</w:tbl>
```

The default presentation would have the entire table centered, then the second row indented beyond that by 720 points:

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:alignTablesRowByRow />
</w:compat>
```

Then that second row would instead be centered on the page independently of the other table rows, resulting in the following output:

In this case, the `wBefore` element's value is ignored, since the row was centered on the line as a row, and there is no table to be indented relative to. *end example*]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.2 allowSpaceOfSameStyleInTable (Allow Contextual Spacing of Paragraphs in Tables)

This element specifies whether the suppression of additional space (contextual spacing) defined using the `contextualSpacing` element (Part 1, §17.3.1.9) shall be applied to paragraphs contained within tables.

Typically, the rules for the removal of additional paragraph spacing via the `contextualSpacing` element are applied to all paragraphs in a WordprocessingML document. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that this setting shall always be ignored for paragraphs in table cells (and additional spacing shall be allowed).

[*Example:* Consider a WordprocessingML document with a default paragraph style with additional spacing after and contextual spacing set, as follows:

```
<w:style w:name="Normal" w:default="1">
...
  <w:pPr>
    <w:spacing w:after="200" />
    <w:contextualSpacing />
  </w:pPr>
</w:style>
```

The default presentation would have the spacing suppressed between all paragraphs, since they are all of the default paragraph style defined above (contextual spacing applies):

On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.

On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.

You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Styles gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.

On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:allowSpaceOfSameStyleInTable />
</w:compat>
```

Then the paragraphs in the table never have their spacing suppressed, resulting in the following output:

On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.

On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.

You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Styles gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.

On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.3 autofitToFirstFixedWidthCell (Allow Table Columns To Exceed Preferred Widths of Constituent Cells)

This element specifies that when performing an AutoFit on a table in a WordprocessingML document in order to display it, applications shall alter that logic slightly in order to mimic the behavior of a previous word processing application.

Normally, the AutoFit behavior of a table is as is described in the associated simple type. This element, when present with a val attribute value of true (or equivalent), specifies that this logic shall be changed as follows:

- If the width of a grid column in a table has been set by a preferred table cell width, then that column's width can be enlarged by the content of cells which themselves do not have a preferred width (in contrast, the normal logic never allows the content of cells to override a preferred width on a grid column).

[Example: Consider a WordprocessingML table with only one preferred cell width, a width of 720 points on the second cell in the first column, as follows:

```
<w:tbl>
...
<w:tr>
  <w:tc>
    <w:p/>
  </w:tc>
  <w:tc>
    <w:p/>
  </w:tc>
</w:tr>
<w:tr>
  <w:tc>
    <w:tcPr>
      <w:tcW w:w="720" w:type="dxa" />
    </w:tcPr>
    <w:p/>
  </w:tc>
  <w:tc>
    <w:p/>
```

```

    </w:tc>
  </w:tr>
</w:tbl>

```

The default presentation would have the first column constrained to 720 points by the preferred width of the second cell in the first column:

This is an example of a cell with lots of content.	

However, if this compatibility setting is turned on:

```

<w:compat>
  <w:autoFitToFirstFixedWidthCell />
</w:compat>

```

Then the column would be resized proportionally based on the content (ignoring the preferred width in that row), resulting in the following output:

This is an example of a cell with lots of content.	

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.4 [autoSpaceLikeWord95 \(Incorrectly Adjust Text Spacing for Specific Unicode Ranges\)](#)

This element specifies adjustments (detailed below) which should be applied to the spacing between adjoining regions of non-ideographic and ideographic text when the `autoSpaceDE` (Part 1, §17.3.1.2) and `autoSpaceDN` (Part 1, §17.3.1.3) elements have a value of `true` (or equivalent). This algorithm typically results in the following:

- An increase in the inter-character spacing added between non-ideographic and/or number characters and certain full-width characters

- No inter-character spacing between non-ideographic and/or number characters and certain half-width characters

Typically, applications apply additional spacing between ideographic and non-ideographic characters/numeric characters when the autoSpaceDE / autoSpaceDN properties are applied. This element, when present with a val attribute value of true (or equivalent), specifies that applications shall apply the following adjustments to this logic:

- Characters in the following Unicode ranges should be treated as ideographic, even though those characters are full-width forms of non-ideographic text: U+FF10–U+FF19, U+FF21–U+FF3A, and U+FF41–U+FF5A. [*Note: This results in the unnecessary addition of space. end note*]
- Characters in the following Unicode ranges should be treated as non-ideographic, even though those characters are ideographic: U+FF66–U+FF9F. [*Note: This results in the omission of the intended additional space. end note*]

[*Example: Consider a WordprocessingML document with two paragraphs containing a mix of East Asian and Latin characters:*

```
<w:p>
  <w:r>
    <w:t>ab</w:t>
  </w:r>
  <w:r>
    <w:t>ア</w:t>
  </w:r>
  <w:r>
    <w:t>ア</w:t>
  </w:r>
  <w:r>
    <w:t>cd</w:t>
  </w:r>
</w:p>
<w:p>
  <w:r>
    <w:t>ab</w:t>
  </w:r>
  <w:r>
    <w:t> 2 </w:t>
  </w:r>
  <w:r>
    <w:t> 2 </w:t>
  </w:r>
  <w:r>
    <w:t>cd</w:t>
```

```
</w:r>
</w:p>
```

The first paragraph contains characters with Unicode value U+FF66 (𐤆). The second paragraph contains characters with Unicode value U+FF12 (2). If autoSpaceDE is true, spacing is added in the first paragraph (between the ideographs and the non-ideographic characters), but not in the second (all four characters are not ideographs):

```
ab 𐤆𐤆 cd
ab 2 2 cd
```

If this compatibility setting is turned on:

```
<w:compat>
  <w:autoSpaceLikeWord95 />
</w:compat>
```

Then, although it appears incorrect, applications should not add space in the first paragraph and should apply it in the second:

```
ab𐤆𐤆cd
ab 2 2 cd
```

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.5 **cachedColBalance** (Use Cached Paragraph Information for Column Balancing)

This element specifies whether applications shall incorrectly calculate the height of a paragraph for the purposes of column balancing when rendering WordprocessingML documents. Specifically, this element specifies that when a paragraph's lines have differing heights, an application shall treat this paragraph as though it had only one line equaling the full paragraph height, regardless of the actual number of lines in the paragraph.

[*Guidance:* It is recommended that applications not intentionally replicate this behavior; it is maintained only for compatibility with existing documents from a legacy application. *end guidance*]

Typically, lines are correctly measured for their height when balancing columns as part of a WordprocessingML document. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that applications shall perform the incorrect calculation in the conditions described above.

[*Example:* Consider a WordprocessingML document with two columns of text which shall be balanced.

If this compatibility setting is turned on:

```
<w:compat>
  <w:cachedColBalance />
</w:compat>
```

Then applications should perform the calculation described above to balance the columns, as needed. *end example]*

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.6 convMailMergeEsc (Treat Backslash Quotation Delimiter as Two Quotation Marks)

This element specifies whether applications should perform a conversion of the contents of a mail merge data source when reading those contents in order to perform a mail merge operation with their contents.

Typically, the contents of a mail merge data source are read in exactly as specified when performing a mail merge with the contents of a data source. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that applications shall interpret delimiters composed of a backslash and quotation mark (`\"`) as two quotation marks (`""`), within external data sources to be connected to via a mail merge.

[*Example:* Consider a WordprocessingML document with the following content in its data source:

This is a \

The default presentation would have the resulting merged data read in just as it appears:

This is a \

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:convMailMergeEsc />
</w:compat>
```

Then instances of a backslash and quotation mark would be converted, resulting in the following output:

This is a ""

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.7 `displayHangulFixedWidth` (Always Use Fixed Width for Hangul Characters)

This element specifies whether applications should assume that all characters in the Hangul Syllables Unicode sub range (character values between 0xAC00 and 0xD7FF) are of a single fixed width or shall use the characters widths defined by the font in use (typical for a proportional width font).

Typically, applications shall retrieve the character width for any character in a document from the associated font, allowing each character to be of its own width (a proportional width character). This element, when present with a `val` attribute value of `true` (or equivalent), specifies that applications shall instead assume a single fixed width for all characters in the Hangul Syllables sub range, by reading the width of Unicode character 0x4E00 from the associated font and using that width for all Hangul characters (or, if that character is not present, the next available character in the font).

[*Example:* Consider a WordprocessingML document with three Hangul characters:



The default presentation would have each of those characters using the widths defined by the font (the highlighting indicates that each character has its own width):



However, if this compatibility setting is turned on:

```
<w:compat>
  <w:displayHangulFixedWidth />
</w:compat>
```

Then all three characters are forced to the fixed width of character 0x4E00 from the font (or, in this case, the next available character), resulting in the characters in the font being forced to that fixed width, which results in the following output:



Notice from the highlighting that the characters have been compressed to the width of the single character and displayed at that fixed width. *end example*]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.8 **doNotAutofitConstrainedTables (Do Not AutoFit Tables To Fit Next To Wrapped Objects)**

This element specifies whether applications shall allow tables to be resized to the remaining available line width when they are using the AutoFit algorithm and part of that line is filled by a shape with a wrapping type with a value of square or tight.

Typically, a table which is AutoFit and has a preferred width shall have its width reduced in order to allow a floating shape to wrap around its contents within the document, as that shape simply reduces the width of the line and the AutoFit algorithm applies to the remaining line width. This element, when present with a val attribute value of true (or equivalent), specifies that tables shall never have any preferred width overridden to allow them to wrap around that floating object, and shall instead be pushed to the next full width line in the document to be displayed.

[*Example:* Consider a WordprocessingML document with a floating shape centered in the document, followed by a table with preferred cell widths of 2.22", as follows:

This is some text.

This is some text.



This is some text.

The default presentation of this document overrides the preferred cell widths to force the table to fit on the line next to the floating shape with tight wrapping.

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:doNotAutofitConstrainedTables />
</w:compat>
```

Then that table is not resized, so it cannot fit and must be pushed to the next full width line, resulting in the following output:

This is some text.

This is some text.



This is some text.

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.9 doNotBreakConstrainedForcedTable (Don't Break Table Rows Around Floating Tables)

This element specifies whether applications shall allow a table row to be split in two when its contents are displayed under the following circumstances:

- The table row exceeds one page in height (it shall be split into two pages)
- The table row would need to be split in order to accommodate a floating table also on the page (tables which have been set to floating using the `tblpPr` element (Part 1, §17.4.58))

Typically, assuming the `cantSplit` property (Part 1, §17.4.6) is not set, a table row which cannot fit on one single page shall be split as needed around any floating table on a page, in order to allow its contents to be fully displayed across two or more pages. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that table rows which exceed one page in height shall never be split around floating tables in the document, and shall instead be displayed on the first page below the floating table, even if that means that part of the table row is clipped by the edge of the page.

[Example: Consider a WordprocessingML document with a long single table row which must be split across two separate pages in the document, in order to accommodate a floating table anchored in the footer, as follows:

[illegible]

The default presentation of this document forces that row to be split as needed around that floating table.

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:doNotBreakConstrainedForcedTable />
</w:compat>
```

Then that table row is never split around the floating table, so it is always placed below that floating table on the page, and allowed to flow off the page as needed, resulting in the following output:

[1]	[2]				
<div>This is a single table cell in the footer</div> <table><tr><td>This is example text. This is example text. This is example text. This is example text. This is example text. This is example text.</td><td></td><td></td><td></td></tr></table>	This is example text. This is example text. This is example text. This is example text. This is example text. This is example text.				<div>This is a single table cell in the footer</div>
This is example text. This is example text. This is example text. This is example text. This is example text. This is example text.					

This example, while extreme, shows how the row is placed below the floating table, rather than breaking around it. *end example*]

Parent Elements
compat (Part 1, §17.15.1.21)

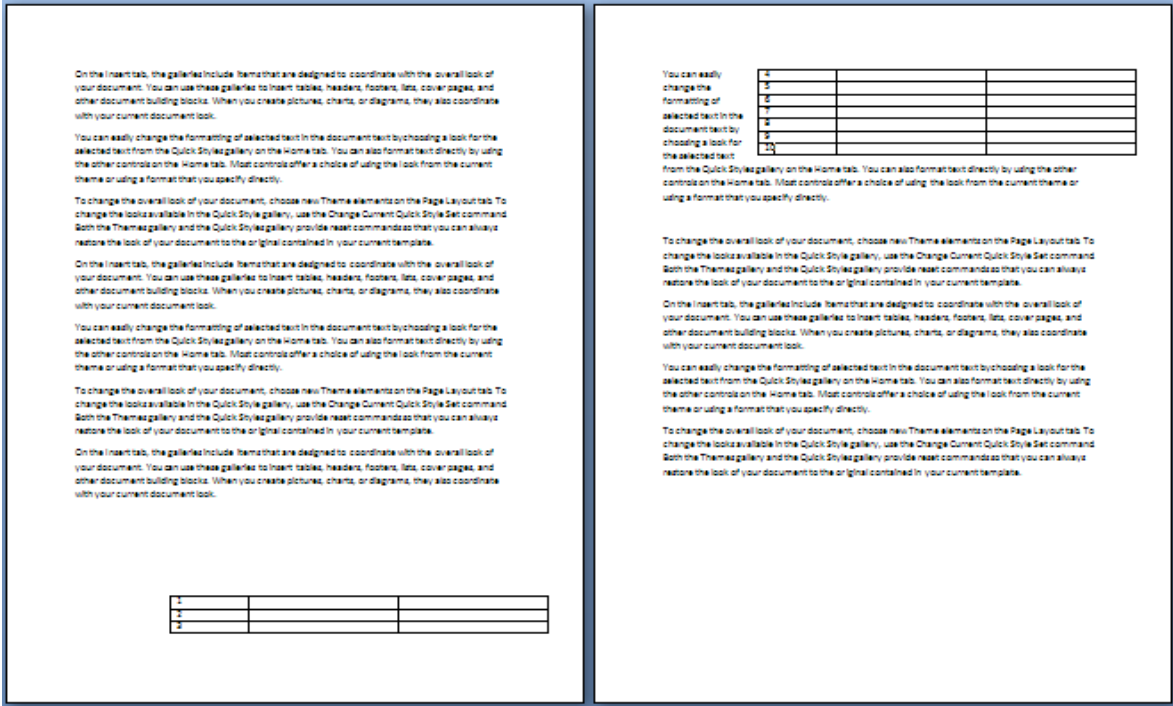
This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.10 `doNotBreakWrappedTables` (Do Not Allow Floating Tables To Break Across Pages)

This element specifies whether applications shall allow tables which have been set to floating using the `tblpPr` element (Part 1, §17.4.58) shall be allowed to break across multiple pages when needed.

Typically, a table whose contents cannot all be displayed on one page is broken as needed across multiple pages in order to preserve the location of the table (just as a paragraph of multiple lines is broken across pages as needed). This element, when present with a `val` attribute value of `true` (or equivalent), specifies that floating tables shall never be broken across pages, and shall instead be put on the first page by adjusting the starting position of the table as needed to fit on that single page.

[*Example:* Consider a WordprocessingML document with a floating table positioned at the bottom of a page , as follows:



The default presentation of this document results in that table being broken across two pages of content.

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:doNotBreakWrappedTables />
</w:compat>
```

Then that table is not broken across the page boundary, so it must be moved further up on the first page to accommodate its entire size, resulting in the following output:

On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.

You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Style gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.

To change the overall look of your document, choose new Theme elements on the Page Layout tab. To change the looks available in the Quick Style gallery, use the Change Current Quick Style Set command. Both the Themes gallery and the Quick Styles gallery provide reset commands so that you can always restore the look of your document to the original contained in your current template.

On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.

You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Style gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.

To change the overall look of your document, choose new Theme elements on the Page Layout tab. To change the looks available in the Quick Style gallery, use the Change Current Quick Style Set command. Both the Themes gallery and the Quick Styles gallery provide reset commands so that you can always restore the look of your document to the original contained in your current template.

On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.

You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Style gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.

To change the overall look of your document, choose new Theme elements on the Page Layout tab. To change the looks available in the Quick Style gallery, use the Change Current Quick Style Set command. Both the Themes gallery and the Quick Styles gallery provide reset commands so that you can always restore the look of your document to the original contained in your current template.

On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.

You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Style gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.

To change the overall look of your document, choose new Theme elements on the Page Layout tab. To change the looks available in the Quick Style gallery, use the Change Current Quick Style Set command. Both the Themes gallery and the Quick Styles gallery provide reset commands so that you can always restore the look of your document to the original contained in your current template.

Notice that the table now flows into the page margins in order to keep it on one page. *end example*]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.11 doNotSnapToGridInCell (Do Not Snap to Document Grid in Table Cells with Objects)

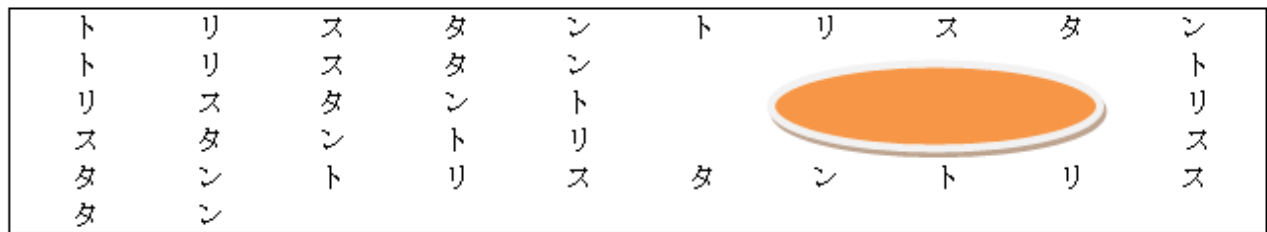
This element specifies whether a document grid defined using the docGrid element (Part 1, §17.6.5) shall be applied to the contents of table cells in that section which also contain floating objects. Note that the floating object shall be part of the cell, and simply not displayed over the cell due to its anchoring relative to another part of the document.

Typically, if a floating object is present in a table cell, then that setting shall have no impact on whether East Asian text in that cell is snapped to the document grid (as text is always snapped to the grid). This element, when present with a `val` attribute value of `true` (or equivalent), specifies that whenever a floating object is present in a table cell, that the cell's contents shall not be snapped to the document grid.

[Example: Consider a WordprocessingML document consisting of a single section, whose document grid settings specify that each page must be exactly 10 characters wide, as follows:

```
<w:sectPr>
  <w:docGrid w:type="snapToChars" w:charSpace="146636" />
</w:sectPr>
```

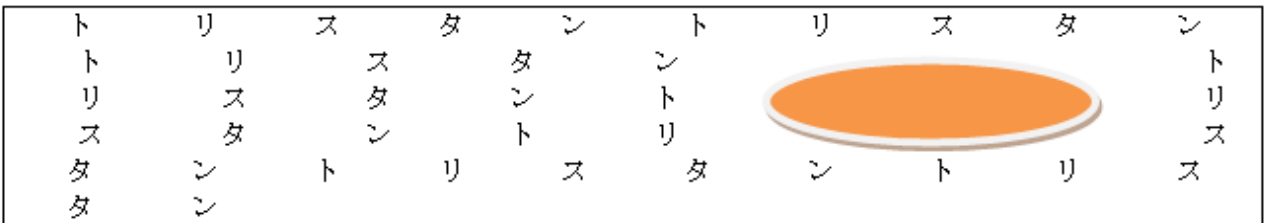
If this document contains a table with a single cell, containing some text and a single floating shape, the contents of the cell are still snapped to the 10 characters per line character grid, as follows:



However, if this compatibility setting is turned on:

```
<w:compat>
  <w:doNotSnapToGridInCell />
</w:compat>
```

Then the presence of a floating object in each cell must result in the document grid setting being ignored, resulting in the following output:



The additional character pitch was still added to each character on the line, but those characters are no longer snapped to the document grid. *end example*]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.12 doNotSuppressIndentation (Do Not Ignore Floating Objects When Calculating Paragraph Indentation)

This element specifies whether applications should ignore the presence of floating objects when calculating the starting position of paragraphs which are wrapped around floating objects.

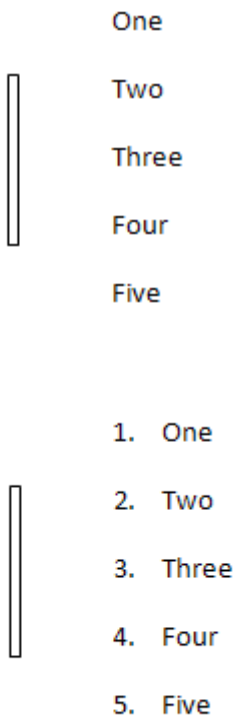
Typically, the presence of a floating object on the same line or lines as a paragraph shall only affect the text when the floating object occurs where that text would normally be presented. [*Example: Text at a 1" indentation would only be displaced by a floating object that appears at that position and not one that appears from 0" to 0.5" on the same line. end example*].

This element, when present with a `val` attribute value of `true` (or equivalent), specifies that floating objects shall always impact paragraphs on the same line in two ways:

- If the paragraph is not numbered, then it shall tightly wrap any floating object which precedes it on the same line, ignoring its own indentation settings. [*Example: A paragraph with a 1" left indent shall tightly wrap a floating object which appears at only 0.25" on the same line. end example*]
- If the paragraph is numbered using the `numPr` element (Part 1, §17.3.1.19), then it shall calculate and use its full indent relative to the edge of the floating object, not relative to the edge of the page. [*Example: A numbered paragraph with a 1" left indent must appear 1.5" into the page if it is preceded by a floating object which appears at 0.5" on the same line. end example*]

[*Example: Consider a WordprocessingML document with a narrow floating object at 0.5" on the page, surrounded by both numbered and unnumbered paragraphs.*

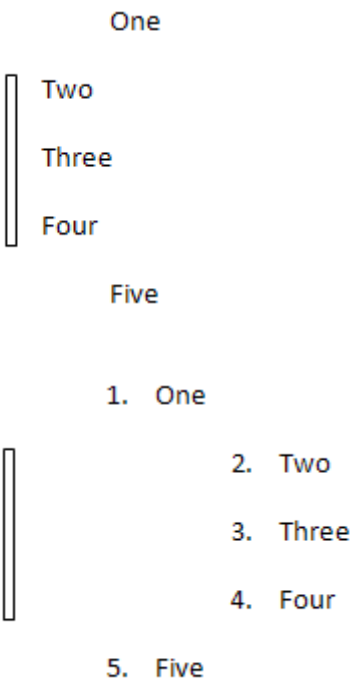
The default presentation would have no impact on the paragraphs based on that floating object, since the two do not intersect:



However, if this compatibility setting is turned on:

```
<w:compat>
  <w:doNotSuppressIndentation />
</w:compat>
```

Then the two alternate rules defined above would apply, resulting in the following output:



end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

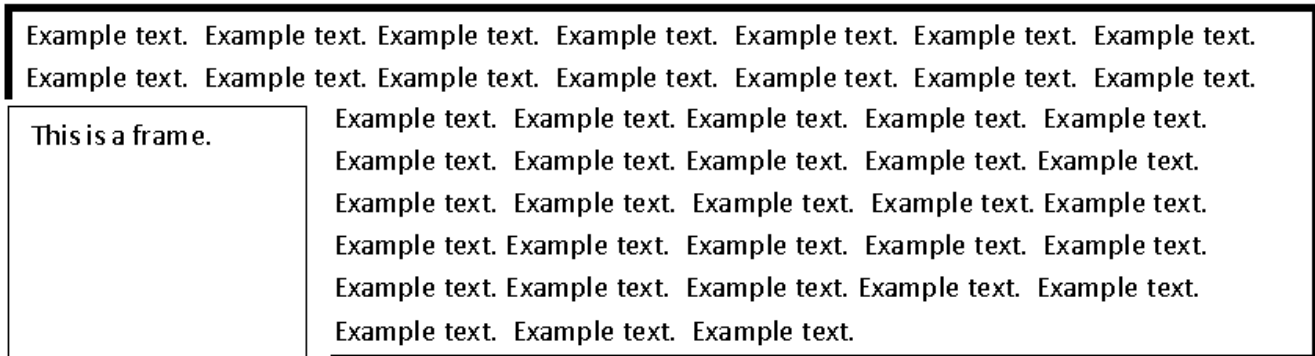
14.7.3.13 [doNotSuppressParagraphBorders \(Do Not Suppress Paragraph Borders Next To Frames\)](#)

This element specifies whether applications should suppress paragraph borders defined using the pBdr element (Part 1, §17.3.1.24) when those borders would be displayed next to the contents of paragraphs which have been defined as frames using the framePr element (Part 1, §17.3.1.11).

Typically, when a paragraph's borders appear next to a frame, those borders are suppressed to avoid having two borders in close proximity. This element, when present with a val attribute value of true (or equivalent), specifies that those borders shall not be suppressed.

[*Example:* Consider a WordprocessingML document with a paragraph with a paragraph border that is bounded on its bottom left side by a text frame.

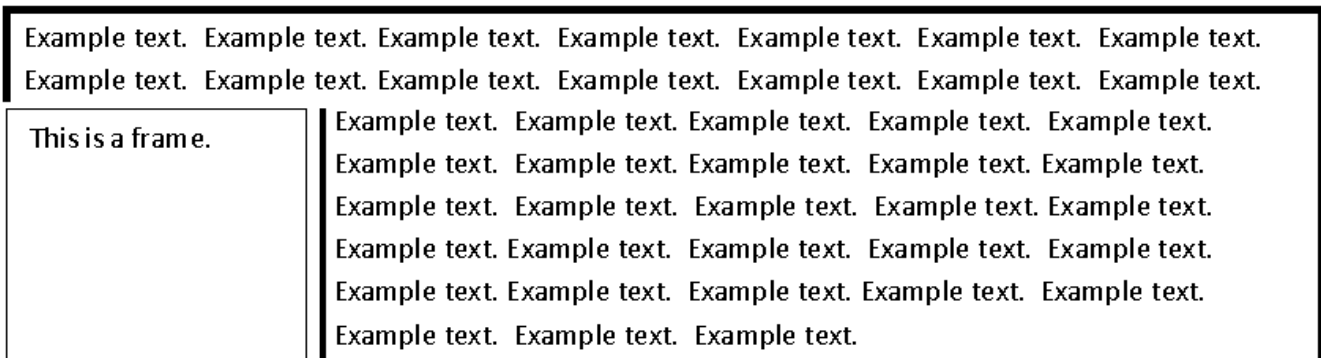
The default presentation would suppress the borders which intersect the frame (in this case, the right border of lines three through eight):



However, if this compatibility setting is turned on:

```
<w:compat>
  <w:doNotSuppressParagraphBorders />
</w:compat>
```

Then no border suppression must take place, resulting in the following output:



end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.14 doNotUseEastAsianBreakRules (Do Not Compress Compressible Characters When Using Document Grid)

This element specifies whether applications should compress characters with identical compression rules when the document grid has been defined using the docGrid element (Part 1, §17.6.5). *Compression rules* refer to the additional bearing on the left and/or right side of a typical character, which can be compressed as needed without modifying the actual width of the character (its breadth).

Typically, punctuation characters with an identical set of compression rules are compressed when the contents of a document are displayed. This element, when present with a val attribute value of true (or equivalent), specifies that if a document grid is defined for the current section, compression shall never be performed on any character - all compressible characters shall be individually snapped to the document grid.

[*Example:* Consider a WordprocessingML document with a document grid set to allow 10 characters per line:

```
<w:sectPr>
  <w:docGrid w:type="snapToChars" w:charSpace="146636" ... />
</w:sectPr>
```

The default presentation would allow characters with identical compression rules to compress and utilize a single slot on the document grid (notice that the four parenthesis on the first line are combined since they can be compressed identically, while the two parenthesis with different compression on line two are not):

あ	あ	あ	あ))))	v	あ	あ	あ	あ
あ	あ	あ	あ	a	あ	あ)		(

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:doNotUseEastAsianBreakRules />
</w:compat>
```

Then no character with compression is compressed and instead are snapped to the grid individually, resulting in the following output:

あ	あ	あ	あ))))	v	あ			
あ	あ	あ	あ	あ	あ	あ	a	あ	あ)		
(

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.15 doNotUseHTMLParagraphAutoSpacing (Use Fixed Paragraph Spacing for HTML Auto Setting)

This element specifies whether applications should use a fixed definition when interpreting automatic paragraph spacing defined by a value of `true` (or equivalent) on the `beforeAutospacing` and/or `afterAutospacing` attributes on the `spacing` element (Part 1, §17.3.1.33).

Typically, applications shall interpret these settings to match the behavior of most HTML user agents, mimicking the default spacing above and below an HTML `p` element without additional spacing information. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that those two attributes shall result in the following settings for each value:

- `beforeAutospacing` = 5 points of spacing before
- `afterAutospacing` = 10 points of spacing after

[*Example:* Consider a WordprocessingML document with a three paragraphs using HTML autospacing, as follows:

```
<w:p>
  <w:pPr>
    <w:spacing w:beforeAutospacing="true" w:afterAutospacing="true" />
  </w:pPr>
  <w:r>
    <w:t>Paragraph One</w:t>
  </w:r>
</w:p>
<w:p>
  <w:pPr>
    <w:spacing w:beforeAutospacing="true" w:afterAutospacing="true" />
  </w:pPr>
  <w:r>
    <w:t>Paragraph Two</w:t>
  </w:r>
</w:p>
```

```
<w:p>
  <w:pPr>
    <w:spacing w:beforeAutospacing="true" w:afterAutospacing="true" />
  </w:pPr>
  <w:r>
    <w:t>Paragraph Three</w:t>
  </w:r>
</w:p>
```

The default presentation would result in output designed to match that of all common HTML user agents:

Paragraph One.

Paragraph Two.

Paragraph Three.

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:doNotUseHTMLParagraphAutoSpacing />
</w:compat>
```

Then the paragraphs has exact spacing of 5 points before and 10 points after, resulting in the following output:

Paragraph One.

Paragraph Two.

Paragraph Three.

Notice that the paragraphs are more condensed in the second example. *end example*]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.16 [doNotUseIndentAsNumberingTabStop \(Ignore Hanging Indent When Creating Tab Stop After Numbering\)](#)

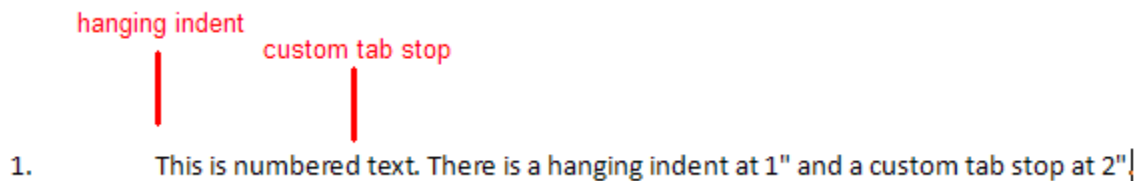
This element specifies whether applications shall use the custom tab stop generated by the hanging indent (if any) when advancing the text after the numbering for a numbered paragraph.

Typically, a hanging indent on a paragraph creates a virtual custom tab stop at that location, and therefore a tab added after the numbering on a numbered paragraph by the `suff` element (Part 1, §17.9.29) shall advance to that tab stop, so that the text of the numbered paragraph begins at that location. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that a tab stop added as the suffix to the numbering of a numbered paragraph shall ignore that virtual custom tab stop and shall instead advance to the next real tab stop (custom or automatic) on the current line.

[*Example:* Consider a WordprocessingML document with numbering, whose first level of numbering specifies a tab stop suffix, a hanging indent at 1", and a custom tab stop at 2":

```
<w:abstractNum w:abstractNumId="0">
...
<w:lvl w:ilvl="0">
  <w:suff w:val="tab" />
  <w:pPr>
    <w:ind w:left="1440" w:hanging="1440" />
    <w:tabs>
      <w:tab w:val="2880" />
    </w:tabs>
  </w:pPr>
</w:lvl>
</w:abstractNum>
```

The default presentation of this document results in the tab stop generated by the numbering advancing to the virtual tab stop generated by the hanging indent at 1", as follows:

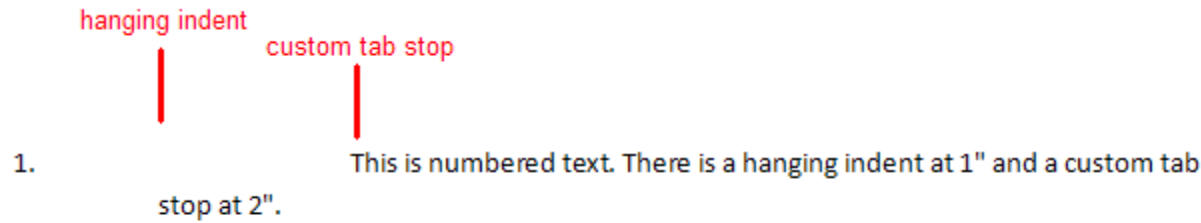


1. This is numbered text. There is a hanging indent at 1" and a custom tab stop at 2"|

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:doNotUseIndentAsNumberingTabStop />
</w:compat>
```

Then that tab suffix ignores the virtual tab stop of the hanging indent, so it must advance to the next custom tab stop on the line (at 2"), resulting in the following output:



end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.17 **doNotVertAlignCellWithSp (Don't Vertically Align Cells Containing Floating Objects)**

This element specifies whether applications shall vertically align the contents of a table cell, even when the contents of that table cell include one or more floating objects. Note that the floating object shall be part of the cell, and simply not displayed over the cell due to its anchoring relative to another part of the document.

Typically, if the alignment of a table cell in a WordprocessingML document is specified, then the entire contents of that cell are aligned as specified [*Example*: The entire contents of the cell are centered vertically and moved right-aligned horizontally at that point. *end example*]. This element, when present with a val attribute value of true (or equivalent), specifies that whenever a floating object is present in a table cell, that no vertical alignment shall be applied to the contents of that cell, and the contents of the cell shall instead always be top aligned to the cell's contents.

[*Example*: Consider a WordprocessingML table with two cells, each containing some text and a single floating shape. The first cell is vertically aligned to the bottom of the cell, and the second cell is vertically aligned to the center of the cell.

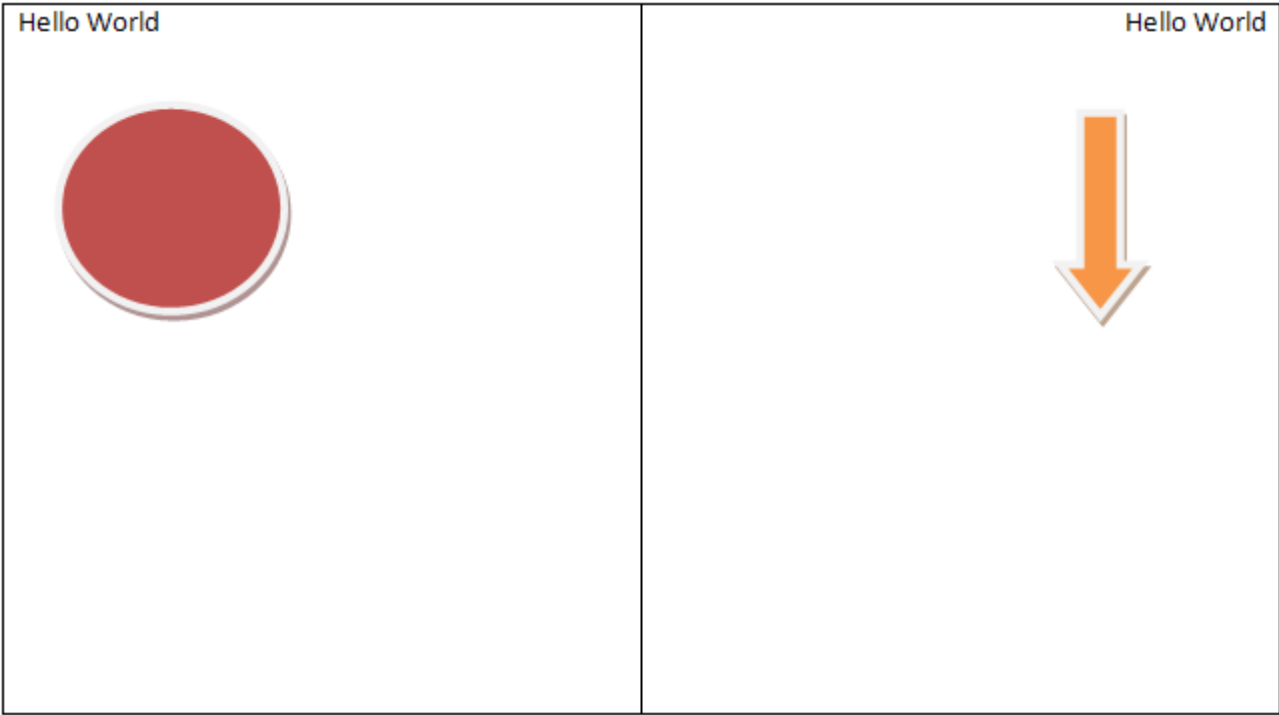
The default presentation of this document results in each cell (including the extents of the floating objects) being vertically aligned as specified, as follows:



However, if this compatibility setting is turned on:

```
<w:compat>  
  <w:doNotVertAlignCellWithSp />  
</w:compat>
```

Then the presence of a floating object in each cell must result in the vertical alignment setting being ignored (each vertical alignment must be top-aligned relative to the cell), resulting in the following output:



end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.18 doNotVertAlignInTxbx (Ignore Vertical Alignment in Textboxes)

This element specifies whether applications shall allow text within text boxes to be vertically aligned when the `v-text-anchor` property is set within the parent VML shape.

Typically, if when the `v-text-anchor` property is set within the parent VML shape, then based on the value of that property, the text is top, center, or bottom aligned appropriately. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that the property shall be ignored, and instead the contents of the table shall always be top-aligned.

[*Example:* Consider a WordprocessingML table with a single center-aligned text box:

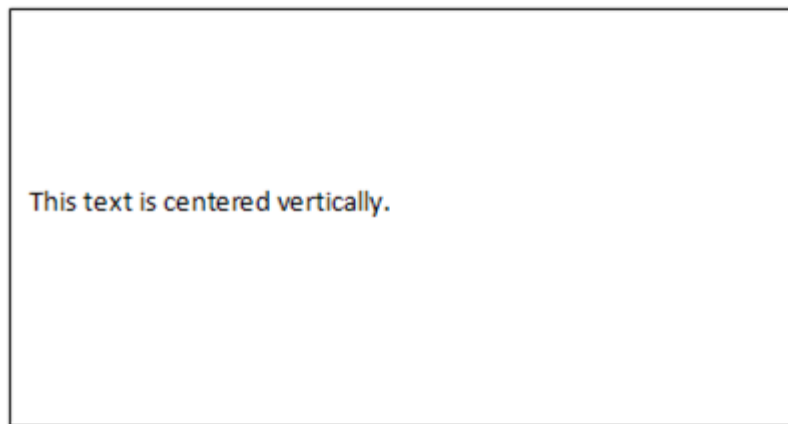
```
<v:shape id="_x0000_s1026" type="#_x0000_t202" style="v-text-anchor:middle">
  <v:textbox>
    <w:txbxContent>
```

```

<w:p>
  <w:r>
    <w:t>This text is centered vertically.</w:t>
  </w:r>
</w:p>
</w:txbxContent>
</v:textbox>
</v:shape>

```

The default presentation of this document results in the contents of the text box being center aligned, as follows:



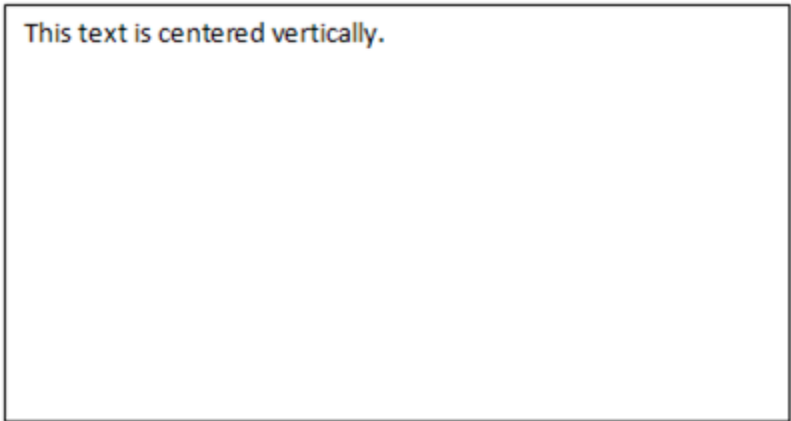
However, if this compatibility setting is turned on:

```

<w:compat>
  <w:doNotVertAlignInTxbx />
</w:compat>

```

Then the text must always be top aligned, regardless of the -text-anchor property, resulting in the following output:



end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.19 **doNotWrapTextWithPunct (Do Not Allow Hanging Punctuation With Character Grid)**

This element specifies whether applications shall allowing hanging punctuation when:

- The overflowPunct element (Part 1, §17.3.1.21) is turned on for a paragraph
- A document grid is defined using the docGrid element (Part 1, §17.6.5) which defines the number of characters per line

Typically, paragraphs which allow hanging punctuation shall allow the number of characters on a line as specified by the document grid to be exceeded by one in order to allow for hanging punctuation. This element, when present with a val attribute value of true (or equivalent), specifies that the document grid shall never be exceeded for hanging punctuation.

[Example: Consider a WordprocessingML document with a document grid set to allow 10 characters per line:

```
<w:sectPr>
  <w:docGrid w:type="snapToChars" w:charSpace="146636" ... />
</w:sectPr>
```

If the eleventh character on the line was a punctuation characters, the default presentation would allow that character to behave as hanging punctuation on the first line:

“ 言 葉 が 言 葉 が 言 葉 が ”
 言 葉 が 言 葉

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:doNotwrapTextWithPunct />
</w:compat>
```

Then the character grid cannot be exceeded even for the hanging punctuation, resulting in the following output:

“ 言 葉 が 言 葉 が 言 葉
 が ” 言 葉 が 言 葉

The hanging punctuation was disallowed, moving it (and the character before it, since that character cannot begin a line) to the following line. *end example*]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.20 footnoteLayoutLikeWW8 (Ignore Page Break from Continuous Section Break)

This element specifies that applications should override the default behaviour for a continuous section break when one or more footnotes are present on the page with the footnote. This override typically results in text being displayed on the same page as a continuous section break (after the break, which would normally move all following text to the next page).

Typically, applications render a continuous section break as a page break when one or more footnoteRef elements (Part 1, §17.11.13) occur on that page before the break, as described in Part 1, §17.18.77. This element, when present with a val attribute value of true (or equivalent), specifies that applications should allow any paragraph after the section break that contains no footnoteRef elements (Part 1, §17.11.13) to be displayed on the same page. If the resulting content reaches the page extents, the section’s page break is ignored.

[*Example:* Consider a WordprocessingML document with two footnotes contained in two sections, separated by a continuous section break:

```
<w:p>
```

```

    <w:r>
      <w:t xml:space="preserve">Here is the first paragraph in the first
section.</w:t>
    </w:r>
  </w:p>
  <w:p>
    <w:r>
      <w:t>Here is the second paragraph in the first section.</w:t>
    </w:r>
    <w:r>
      <w:rPr>
        <w:rStyle w:val="FootnoteReference" />
      </w:rPr>
      <w:footnoteReference w:id="2" />
    </w:r>
  </w:p>
</w:p/>
<w:p>
  <w:pPr>
    <w:sectPr>
      ...
    </w:sectPr>
  </w:pPr>
</w:p>
<w:p>
  <w:r>
    <w:t>Here is the first paragraph in the second section.</w:t>
  </w:r>
</w:p>
<w:p>
  <w:r>
    <w:t xml:space="preserve">Here is the second paragraph in the second
section.</w:t>
  </w:r>
  <w:r>
    <w:rPr>
      <w:rStyle w:val="FootnoteReference" />
    </w:rPr>
    <w:footnoteReference w:id="3" />
  </w:r>
</w:p>
<w:p>
  <w:r>

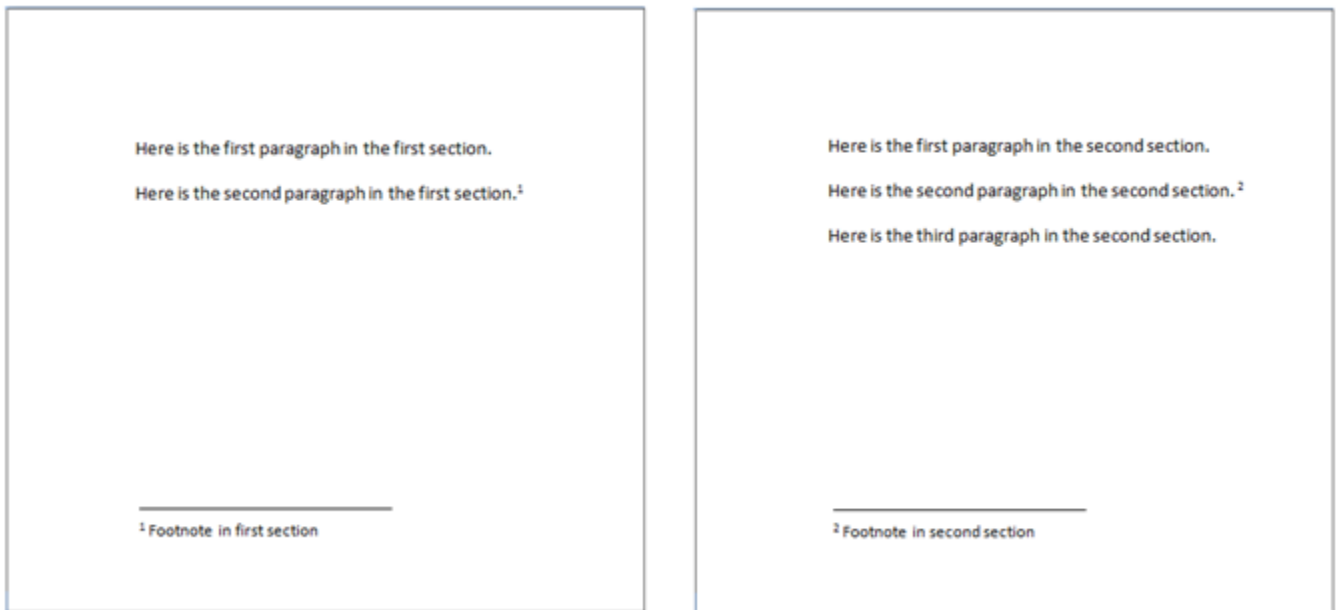
```

```

    <w:t xml:space="preserve">Here is the third paragraph in the second section.
  </w:t>
  </w:r>
</w:p>
<w:sectPr>
  <w:type w:val="continuous" />
  ...
</w:sectPr>

```

The default rendering of such a document results in the continuous section break as a page break, resulting in the following two page document:



However, if this compatibility setting is turned on:

```

<w:compat>
  <w:footnoteLayoutLikeWW8 />
</w:compat>

```

Then the first paragraph following the section break (not having any footnote references) is displayed on the same page, despite the section break, resulting in the following output:

<p>Here is the first paragraph in the first section.</p> <p>Here is the second paragraph in the first section.¹</p> <p>.....Section Break (Continuous)</p> <p>Here is the first paragraph in the second section.</p> <hr/> <p>¹ Footnote in first section</p>	<p>Here is the second paragraph in the second section.²</p> <p>Here is the third paragraph in the second section.</p> <hr/> <p>² Footnote in second section</p>
---	---

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.21 forgetLastTabAlignment (Ignore Width of Last Tab Stop When Aligning Paragraph If It Is Not Left Aligned)

This element specifies how applications should handle the final tab stop on a line when aligning the contents of a paragraph as specified by the jc element (Part 1, §17.3.1.13) in the paragraph's properties.

Typically, aligning the contents of a paragraph involves the following:

- Determining the layout of that line before the alignment (including all tab stops)
- Aligning the resulting contents of the line

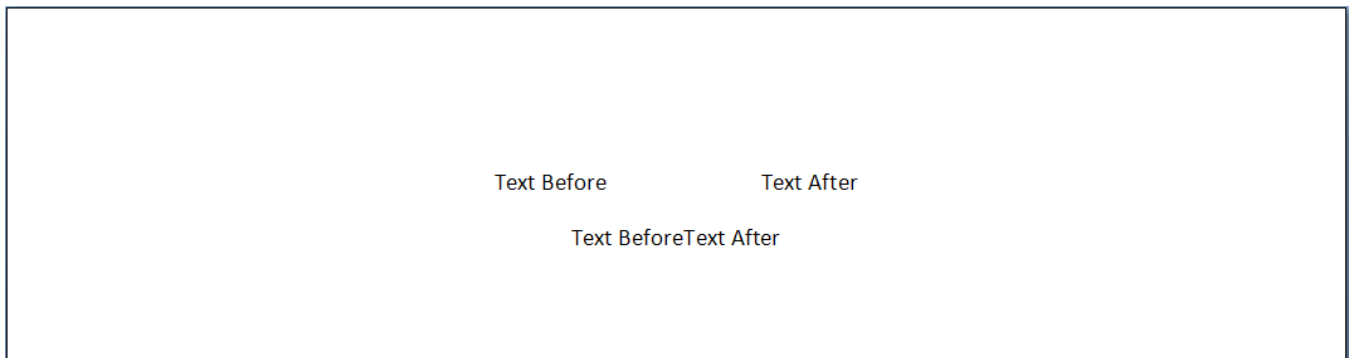
This is done to ensure that tab stops on a line do not change when the contents of the paragraph are aligned (i.e. the tab stops should not have to take into account the paragraph alignment).

This element, when present with a val attribute value of true (or equivalent), specifies that applications shall ignore the additional line width generated by the last tab stop (and only the last tab stop) when the alignment of the tab stop as defined by the val attribute on the tab element (Part 1, §17.3.1.37) is not left (or bar, which as defined by ECMA-376, is not a tab stop per se) when determining the width of the line. The resulting full line shall then be aligned at the position where the line would have been aligned without that tab stop.

[Example: Consider a WordprocessingML document with two center aligned paragraphs of text - the first also containing a centered tab stop positioned at 2":

```
<w:p>
  <w:pPr>
    <w:tabs>
      <w:tab w:val="center" w:pos="2880" />
    </w:tabs>
    <w:jc w:val="center" />
  </w:pPr>
  <w:r>
    <w:t>Text Before</w:t>
    <w:tab/>
    <w:t>Text After</w:t>
  </w:r>
</w:p>
<w:p>
  <w:pPr>
    <w:jc w:val="center" />
  </w:pPr>
  <w:r>
    <w:t>Text BeforeText After</w:t>
  </w:r>
</w:p>
```

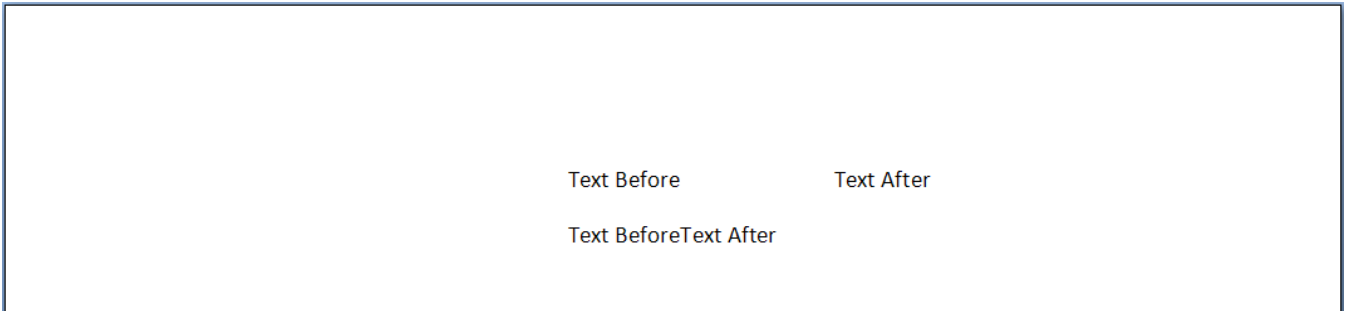
The default presentation would determine the full width of each line including the tab stops, finally aligning the resulting text to the center position as requested by the jc element:



However, if this compatibility setting is turned on:

```
<w:compat>
  <w:forgetLastTabAlignment />
</w:compat>
```

Then the width added to the line by the last tab is ignored when centering the paragraph because that tab is a center aligned tab stop, resulting in the following output:



In the resulting output, the starting location of both lines is at the same place on the page, as the resulting width of both lines is identical when the tab stop is removed from the line width calculation. *end example*]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.22 growAutofit (Allow Tables to AutoFit Into Page Margins)

This element specifies whether applications shall allow a table which is using the AutoFit table layout algorithm to extend beyond the margins of the page if the minimum width of each table cell would result in an overall table width which is wider than those page margins.

Typically, if a table is using the AutoFit layout algorithm, then based on the definition of that logic, each column in the table shall be increased to the minimum width of its contents (e.g. the longest non-breaking run of text contained within it and/or the width of an inline image contained in one of its cells) until the overall width of the table reaches that of the text extents on the page, at which point text shall be broken and images shall be clipped as needed to maintain the width of the table at the page width (i.e. the page width is an immutable maximum width for the table). This element, when present with a val attribute value of true (or equivalent), specifies that the minimum width of the cells shall not be constrained by the page width, and instead the table shall be allowed to extend into the page margins as needed in order to meet the minimum widths of each of its cells.

[Example: Consider a WordprocessingML table with three cells in each row. If the contents of each cell in that first row each contain a long non-breaking string (such that the minimum widths of each cell's contents exceed the page width), then the rules for table AutoFit specify that each cell must be broken proportionally when the overall width of the table reaches the page width.

The default presentation of this document results in each cell being broken as needed to maintain the table width, as follows:

veryverylongnonbreakingstringin thistable	veryverylongnonbreakingstringin thistable	veryverylongnonbreakingstringin thistable

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:growAutofit />
</w:compat>
```

Then the presence of those long non-breaking strings (and the resulting large minimum widths for each table cell) must result in a table width which is then allowed to override the page margins, resulting in the following output:

veryverylongnonbreakingstringinthis table	veryverylongnonbreakingstringinthis table	veryverylongnonbreakingstringin this table

The resulting table is clipped by the edge of the page on its right side, but the minimum widths of each cell are maintained as defined by the long non-breaking string contents of each. *end example*

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.23 `layoutRawTableWidth` (Ignore Space Before Table When Deciding If Table Should Wrap Floating Object)

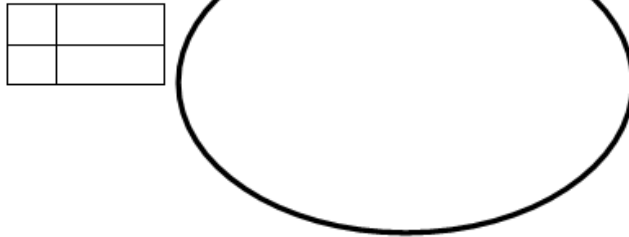
This element specifies how tables which have been indented from the margin using the `tblInd` element (Part 1, §17.4.51) shall be wrapped around floating objects.

Typically, when a table is positioned next to a floating object, the table shall only remain next to the object if it can fit in the remaining space on the line when considering the full width needed for the table: the space before the table, plus the width of the table. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that the calculation determining whether the table shall fit next to the object shall not include the space before the table, even if that means that the table is actually clipped by the object.

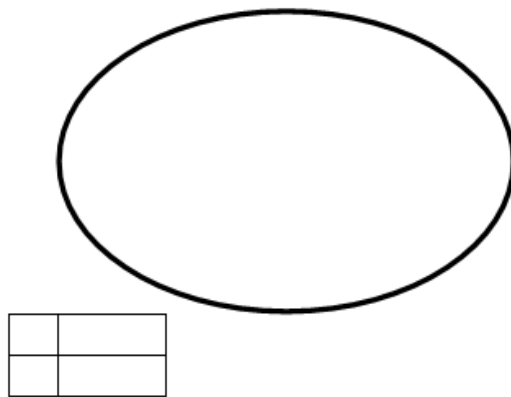
[*Example:* Consider a WordprocessingML document with a floating shape using square wrapping, next to a table which has been indented one inch from the left margin:

```
<w:tbl>
  <w:tblPr>
    <w:tblInd w:w="1440" w:type="dxa" />
  </w:tblPr>
  ...
</w:tbl>
```

The resulting presentation would place the table next to the object:



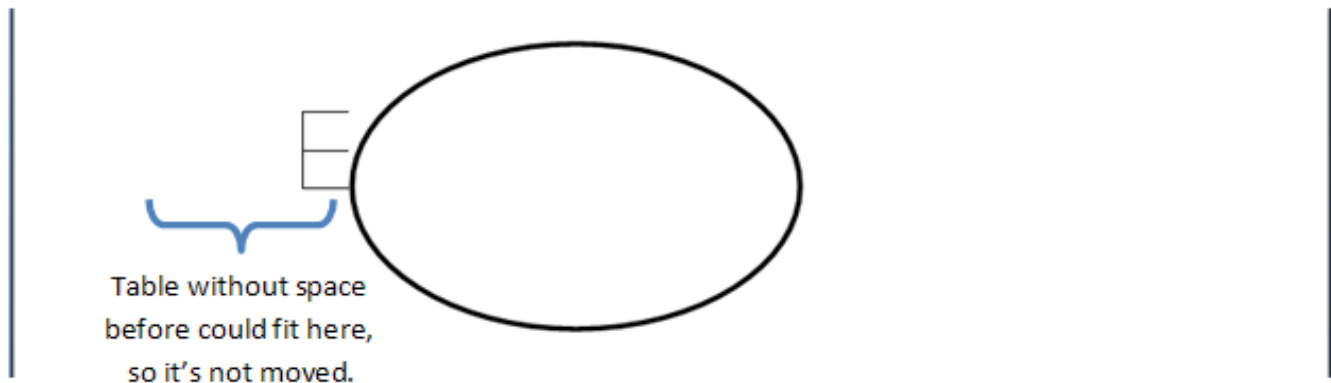
If this object is then moved to the left, such that it would clip the table, the default presentation would have the entire table moved below the shape, since it does not fit in the remaining space on the line:



However, if this compatibility setting is turned on:

```
<w:compat>
  <w:layoutRawTableWidth />
</w:compat>
```

Then the determination to move the table is done ignoring the spaced needed before the table, resulting in the following output:



The resulting table is clipped behind the object, as the fit calculation ignores the space needed before the table.
end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.24 `layoutTableRowsApart` (Allow Table Rows to Wrap Inline Objects Independently)

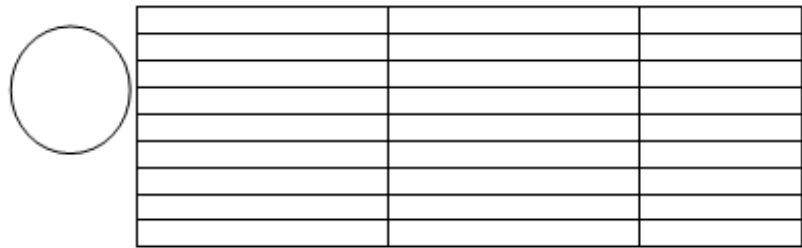
This element specifies whether tables which are wrapping around floating objects shall wrap around the object as a whole, or if each table row shall individually wrap the object as needed (causing a more stuttered, yet tighter, wrapping of the object).

Typically, when a table wraps around a floating object, the table shall wrap the object as a unit (i.e. the whole table square wraps the object). This element, when present with a `val` attribute value of `true` (or equivalent), specifies that wrapping is applied to each row in the table one by one, even if it means that each row has a different resulting position with respect to the table.

[Example: Consider a WordprocessingML document with a floating shape using square wrapping.

The default presentation would have the entire table wrapping around that shape:

On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.

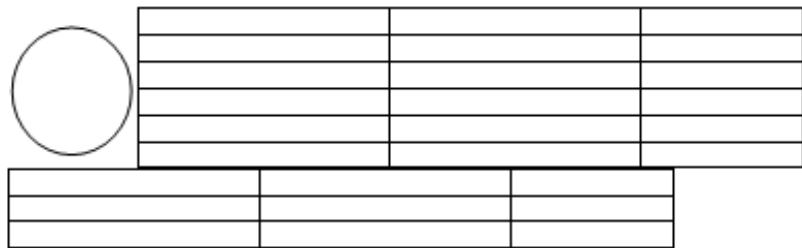


However, if this compatibility setting is turned on:

```
<w:compat>
  <w:layoutTableRowsApart />
</w:compat>
```

Then each row would wrap around the shape one by one, resulting in the following output:

On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.



end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.25 `lineWrapLikeWord6` (Ignore Compression of Full-Width Punctuation Ending a Line)

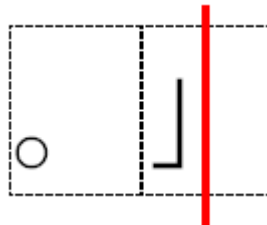
This element specifies that applications should ignore the character compression settings specified by the `characterSpacingControl` element (Part 1, §17.15.1.18) when determining if one more character fits within the text margins on each line of the document. This setting typically results in a character being pushed to the following line, ignoring the fact that the character compression settings would have allowed it to fit within the text boundaries.

Typically, an application would check the character compression settings, and apply any character-level whitespace compression before attempting to fit the last character on the line. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that applications shall ignore that compression and fit the character as if it should be displayed at its full width, regardless of whether the compression settings are applied.

[*Example:* Consider a paragraph which ends with the following two characters (with each character's bounding box outlined for illustrative purposes:



If the document's character compression settings were not set to `doNotCompress` and text extent fell at the location identified by this red line:



The last character would have compression applied to its blank half, and would fit on the line.

If this compatibility setting is turned on:

```
<w:compat>
  <w:lineWrapLikeWord6 />
</w:compat>
```

Then applications should compress the character, but should treat the character as full width when determining if it fits on the line; in this case, the second character would be displayed on the following line. *end example*]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.26 mwSmallCaps (Use Specific Small Caps Algorithm)

This element specifies that applications should use a specific algorithm to determine the font size of small caps (the formatting resulting from the use of the smallCaps element (Part 1, §17.3.2.33). This emulation typically results in small caps which are smaller than typical small caps at most font sizes.

Typically, applications can utilize any algorithm that results in small caps formatting. This element, when present with a val attribute value of true (or equivalent), specifies that applications should determine the font size for small caps using the following algorithm:

- If $font \leq 7$, then the font size for small caps is 7 points.
- Otherwise, sequentially iterate through *sequence* until $sequence[i] \leq font \leq sequence[i + 1]$, at which point the font size for small caps is $sequence[i]$ points.

where

- *sequence* is an array defined as follows:
 $\{7, 9, 10, 12, 14, 18, 24, 36, 48, 60, 72, 80, x_1, x_2, \dots, x_n\}$ where $x_n = 80 + 10 * n$.
- *font* is an integer calculated as follows:
The font size of the run to which small caps formatting is applied (in points).

[Example: Consider a WordprocessingML document with small caps on its text contents.

If this compatibility setting is turned on:

```
<w:compat>
  <w:mwSmallCaps />
</w:compat>
```

And the font size for a single run is 16 points, and performing the algorithm above would result in 14 points as the calculated font size for small caps. *end example*]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.27 `noColumnBalance` (Do Not Balance Text Columns within a Section)

This element specifies whether the contents of sections with multiple columns defined using the `cols` element (Part 1, §17.6.4) should automatically be balanced. In terms of column layout, *balancing* is the act of attempting to ensure that the number of lines in each column is equivalent (rather than completely filling one column before populating the next).

Typically, column balancing is automatically performed on the contents of sections with multiple columns. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that column balancing shall not occur, and each column shall be filled individually until the end of the current page, until all text has been displayed, even if this means one or more columns are unused.

[*Example:* Consider a WordprocessingML document with an initial section with three columns, defined by the following section properties:

```
<w:sectPr>
  <w:cols w:num="3" w:space="720" />
</w:sectPr>
```

The default presentation would have the text in that section balanced between those three columns:

This is some text in a section
of three columns. This is
some text in a section of
three columns. This is some
text in a section of three
columns. This is some text in
a section of three columns.
This is some text in a section
of three columns. This is
some text in a section of
three columns. This is some
text in a section of three
columns. This is some text in
a section of three columns.
This is some text in a section
of three columns. This is
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This is some text in a section
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three columns. This is some
text in a section of three
columns. This is some text in
a section of three columns.
This is some text in a section
of three columns. This is
some text in a section of
three columns.

This is text in a section with one column. This is text in a section with one column. This is text in a section with one column. This is text in a section with one column. This is text in a section with one column. This is text in a section with one column.

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:noColumnBalance />
</w:compat>
```

Then the columns are not balanced, and the contents of the section are used to fill each column to the bottom of the current page in succession, resulting in the following output:


```
<w:p>
  <w:pPr>
    <w:spacing w:line="640" w:lineRule="exact" />
  </w:pPr>
  <w:r>
    <w:t>This is text on a line that's exactly 32 points high.</w:t>
  </w:r>
</w:p>
```

The default presentation would have the resulting text centered on that line:

This is text

This is text on a line that’s exactly 32 points high.

This is text.

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:noExtraLineSpacing />
</w:compat>
```

Then all line spacing is added after the text, resulting in the following output:

This is text

This is text on a line that’s exactly 32 points high.

This is text.

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.29 **noLeading (Do Not Add Leading Between Lines of Text)**

This element specifies whether the additional leading specified by the current font face shall be added between each line of text when that text is displayed. *Leading* refers to the additional spacing requested by a particular

font in order to ensure that letters on subsequent lines do not display in a fashion where they are positioned too closely together.

Typically, leading should be added as specified by the associated font. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that the additional leading specified by the font shall never be output when the text is displayed.

[*Example:* Consider a WordprocessingML document with three lines of text. The default presentation would have the text displayed as follows:

EXAMPLE TEXT

Some text.
Some text.
Some text.

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:noLeading />
</w:compat>
```

Then no leading is added between lines, resulting in the following output:

EXAMPLE TEXT

Some text.
Some text.
Some text.

This adjustment is usually very minute in nature; therefore the result is better illustrated by showing how the characters were pushed out due to the leading added to that text:

EXAMPLE TEXT

Some text.
Some text.
Some text.

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.30 **noSpaceRaiseLower (Do Not Increase Line Height for Raised/Lowered Text)**

This element specifies whether the height which is allotted to any given line of text when the contents of this document are displayed shall include additional spacing in order to ensure that all raised and/or lowered text can be fully displayed.

Typically, any extra space needed is added to the line to prevent raised and lowered text from being truncated or hidden. This element, when present with a val attribute value of true (or equivalent), specifies that the height of the line shall be determined solely by the spacing settings on the parent paragraph, and any raised/lowered text shall just be clipped if it exceeds that space.

[Example: Consider a WordprocessingML document with both raised and lowered text. The default presentation would have that text visible:

This is text.

This is text – a lowered word, a raised word.

This is text.

However, if this compatibility setting is turned on:

```
<w:compat>  
  <w:noSpaceRaiseLower />  
</w:compat>
```

Then no additional space should be added to the line height, resulting in the following output:

This is text.

This is text – a lowered word, a raised word.

This is text.

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.31 noTabHangInd (Do Not Create Custom Tab Stop for Hanging Indent)

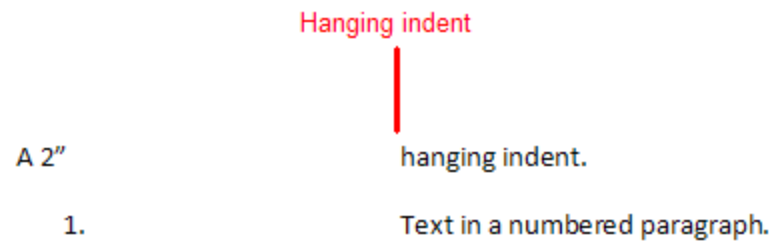
This element specifies whether applications should always create a hanging indent as a custom tab stop when handling tabs within the contents of a WordprocessingML paragraph. The dontUseIndentAsNumberingTabStop element (§14.7.3.16) specifies if this tab stop shall be used in the case of a tab added as the suffix to numbering in a numbered paragraph, while this element handles the same functionality in the generic case (i.e. this element, when set, renders that setting irrelevant as the tab stop is never used).

Typically, the hanging indent on a paragraph shall be treated as a custom tab stop location within that paragraph, allowing the first tab on the first line in the paragraph to advance to the location of the hanging indent. This element, when present with a val attribute value of true (or equivalent), specifies that no custom tab stop shall be created for a hanging indent on a line under any circumstances.

[Example: Consider a WordprocessingML document with two paragraphs (the second numbered, the first not), each with a 2" hanging indent defined as follows (assume the numbering suffix - not shown - is a tab character):

```
<w:p>
  <w:pPr>
    <w:ind w:left="2880" w:hanging="2880" />
  </w:pPr>
  <w:r>
    <w:t>A 2"</w:t>
    <w:tab/>
    <w:t>hanging indent</w:t>
  </w:r>
</w:p>
<w:p>
  <w:pPr>
    <w:numPr>
      <w:ilvl w:val="0" />
      <w:numId w:val="1" />
    </w:numPr>
    <w:ind w:left="2880" w:hanging="2880" />
  </w:pPr>
  <w:r>
    <w:t>Text in a numbered paragraph.</w:t>
  </w:r>
</w:p>
```

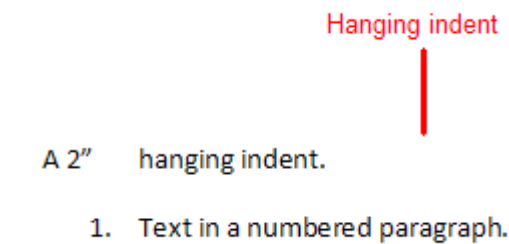
The default presentation would have both the numbering and the tab in the regular paragraph advancing to the 2" custom tab stop generated by the hanging indent:



However, if this compatibility setting is turned on:

```
<w:compat>
  <w:noTabHangInd />
</w:compat>
```

Then no tab stop exists at 2", and therefore the tab stops must advance to the location of the next automatic tab stop for this document (which is set to occur every 0.5"), resulting in the following output:



end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.32 printBodyTextBeforeHeader (Print Body Text before Header/Footer Contents)

This element specifies the order in which the contents of the main document story and any headers and/or footers shall be sent to the printer.

Typically, the contents of a document are sent to the printer as follows:

- First, the contents of headers/footers are sent to the printer
- Finally, the contents of the main document story are sent to the printer

This element, when present with a `val` attribute value of `true` (or equivalent), specifies that this order shall be reversed, and that the body text shall be sent to the printer before any header/footer text. This reversal allows for the processing of PostScript codes in the text layer in the same order as afforded by some legacy word processing applications.

[*Example:* Consider a WordprocessingML document which is printed. The default resulting print order is the headers and footers for each page, followed by the page contents.

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:printBodyTextBeforeHeader />
</w:compat>
```

Then this order must be reversed, and the page contents must be printed before the corresponding header and/or footer for each page. *end example]*

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.33 `printColBlack` (Print Colors as Black And White without Dithering)

This element specifies the way in which colored text and/or objects shall be handled when printed to a printer whose printer settings indicate that it can only handle black and white text.

Typically, the contents of a colored document are sent to a black and white printer using grayscale (different shades of gray) to represent each of the possible colors. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that colors are not printed as mapped shades of grey, but rather exclusively in solid black and white. This setting prevents the fuzzy look that can occur when gray or blue content is dithered. *Dithering* is the process by which colors are simulated using various patterns of black dots on a white background

[*Example:* Consider a WordprocessingML document which is printed to a black and white printer. The default resulting printed content is typically dithered to appear in the appropriate shade of grayscale text.

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:printColBlack />
</w:compat>
```

Then the page contents must be printed as exclusively black or exclusively white text as needed, and no grayscale output must occur. *end example]*

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.34 [selectFldWithFirstOrLastChar \(Select Field When First or Last Character Is Selected\)](#)

This element specifies whether applications should automatically select the entire contents of a field in a WordprocessingML document when the first or last character is selected.

Typically, users can select any character individually within the result of a field in the document. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that selecting the first or last character of that field result shall automatically result in the selection of the entire field.

[*Example:* Consider a WordprocessingML document which contains the following (with a field marked in gray shading):

Author Tristan Davis would like to welcome you.

The default presentation would allow the first character of that field to be selected:

Author Tristan Davis would like to welcome you.

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:selectFldWithFirstOrLastChar />
</w:compat>
```

Then that selection would automatically result in the entire field being selected, resulting in the following:

Author Tristan Davis would like to welcome you.

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.35 `shapeLayoutLikeWW8` (Ignore Text Wrapping around Objects at Bottom of Page)

This element specifies that applications should ignore the line wrapping setting specified by a floating object, instead allowing text to be displayed beneath it under the specific set of conditions identified below.

Typically, text wrapping around a floating object is dictated by the presence of one of the following as a child element of the object's anchor element (Part 1, §20.4.2.3):

- `wrapNone` (Part 1, §20.4.2.15) element, which specifies no text wrapping
- `wrapSquare` (Part 1, §20.4.2.17) element, which specifies square text wrapping
- `wrapThrough` (Part 1, §20.4.2.18) element, which specifies through text wrapping
- `wrapTight` (Part 1, §20.4.2.19) element, which specifies tight text wrapping
- `wrapTopAndBottom` (Part 1, §20.4.2.19) element, which specifies top and bottom text wrapping

This element, when present with a `val` attribute value of `true` (or equivalent), specifies that applications shall allow text to wrap beneath a floating object, ignoring the object's true wrapping setting, when the following conditions are met:

- The floating object has any of the following elements present as a child of the object's anchor element: `wrapSquare`, `wrapTight`, or `wrapTopAndBottom`.
- The floating object has a `positionV` element (Part 1, §20.4.2.11) with a `relativeFrom` attribute value of `line`.
- The floating object has a negative value for the child `posOffset` element (Part 1, §20.4.2.12) of the `positionV` element.
- The paragraph containing the anchor element would appear directly after the previous paragraph if the wrapping settings were ignored.
- The paragraph containing the anchor element would be pushed to the next page if the wrapping settings were respected.

[*Example:* Consider a WordprocessingML document containing a DrawingML object which meets the conditions outlined above:

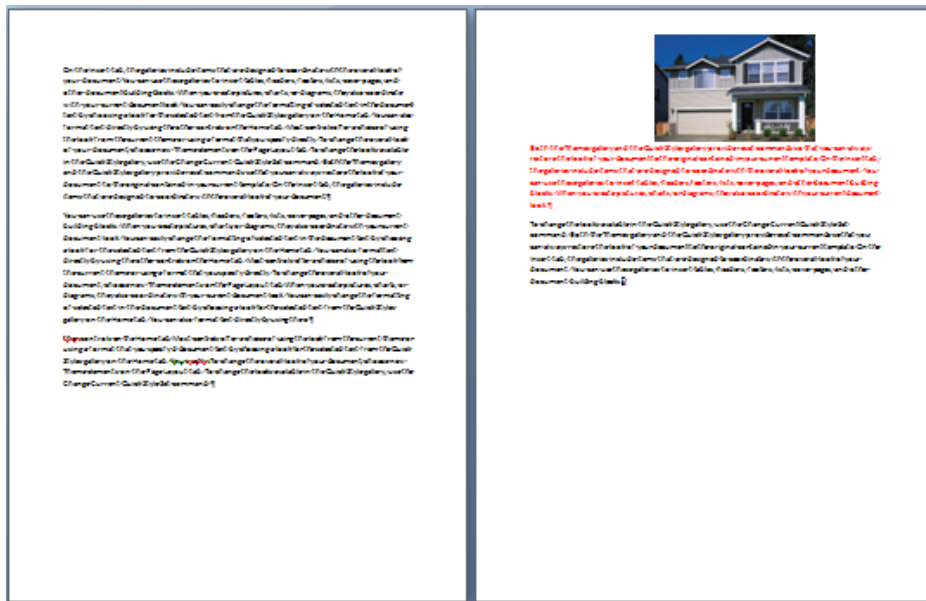
```
<w:p>
  <w:r>
    <w:t>Sample text. Sample text. Sample text. Sample text. Sample text. Sample
text.</w:t>
  </w:r>
  <w:r>
    <w:drawing>
      <wp:anchor ... >
        <wp:positionV relativeFrom="line">
          <wp:posOffset>-428914</wp:posOffset>
        </wp:positionV>
```

```

    <wp:wrapTopAndBottom />
    ...
  </wp:anchor>
</w:drawing>
</w:r>
<w:r>
  <w:t> Sample text. Sample text. Sample text. Sample text. Sample text.
Sample text.</w:t>
</w:r>
...
</w:p>

```

When the wrapping settings are respected, the shape and its paragraph do not fit on the page, so they are moved to the next page (the paragraph containing the anchor has been highlighted for illustrative purposes):



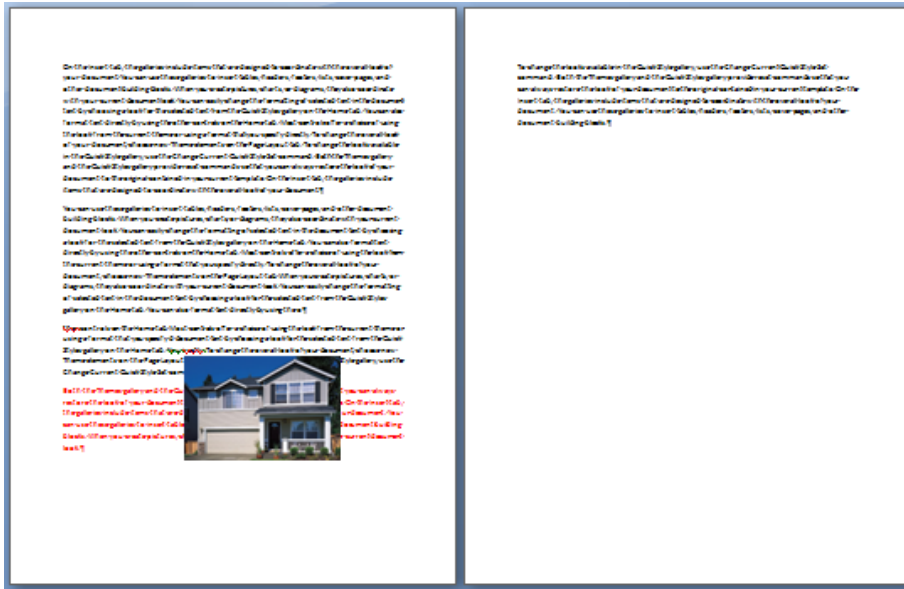
If this compatibility setting is turned on:

```

<w:compat>
  <w:shapeLayoutLikeWW8 />
</w:compat>

```

Then applications should ignore the wrapping setting and allow text to wrap below the object. This behaviour results in the following (again, the paragraph containing the anchor has been highlighted for illustrative purposes):



end example]

Parent Elements

compat (Part 1, §17.15.1.21)

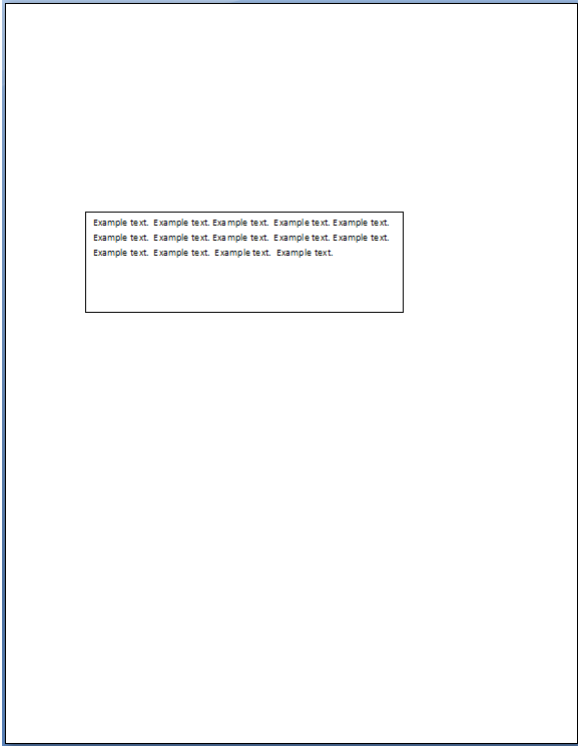
This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.36 showBreaksInFrames (Display Page/Column Breaks Present in Frames)

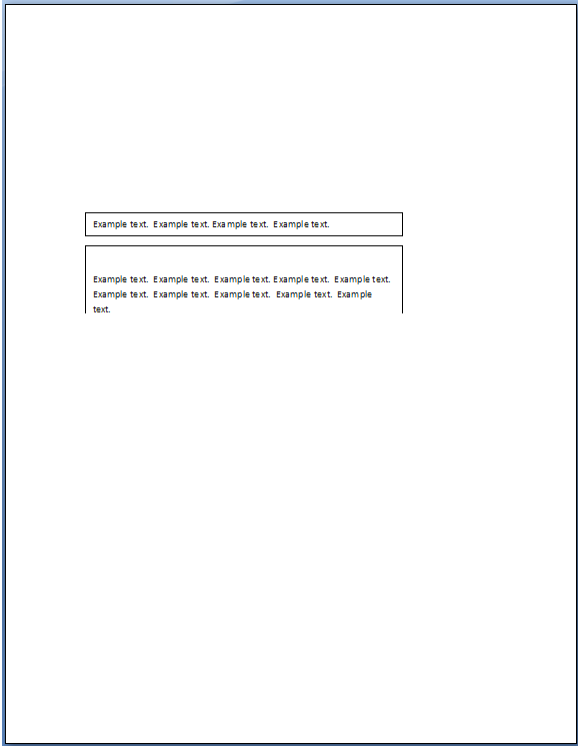
This element specifies whether applications should honor the presence of page and/or column breaks which are present within the contents of paragraphs which have been defined as frames using the framePr element (Part 1, §17.3.1.11).

Typically, breaks within frames shall be ignored and shall have no effect on the display of the paragraph in which they are contained. This element, when present with a val attribute value of true (or equivalent), specifies that rather than completely ignoring these breaks, applications should display the break and move the remaining frame content, and all subsequent text, to the next page and/or column, as needed.

[Example: Consider a WordprocessingML document with a paragraph contained within a text frame:



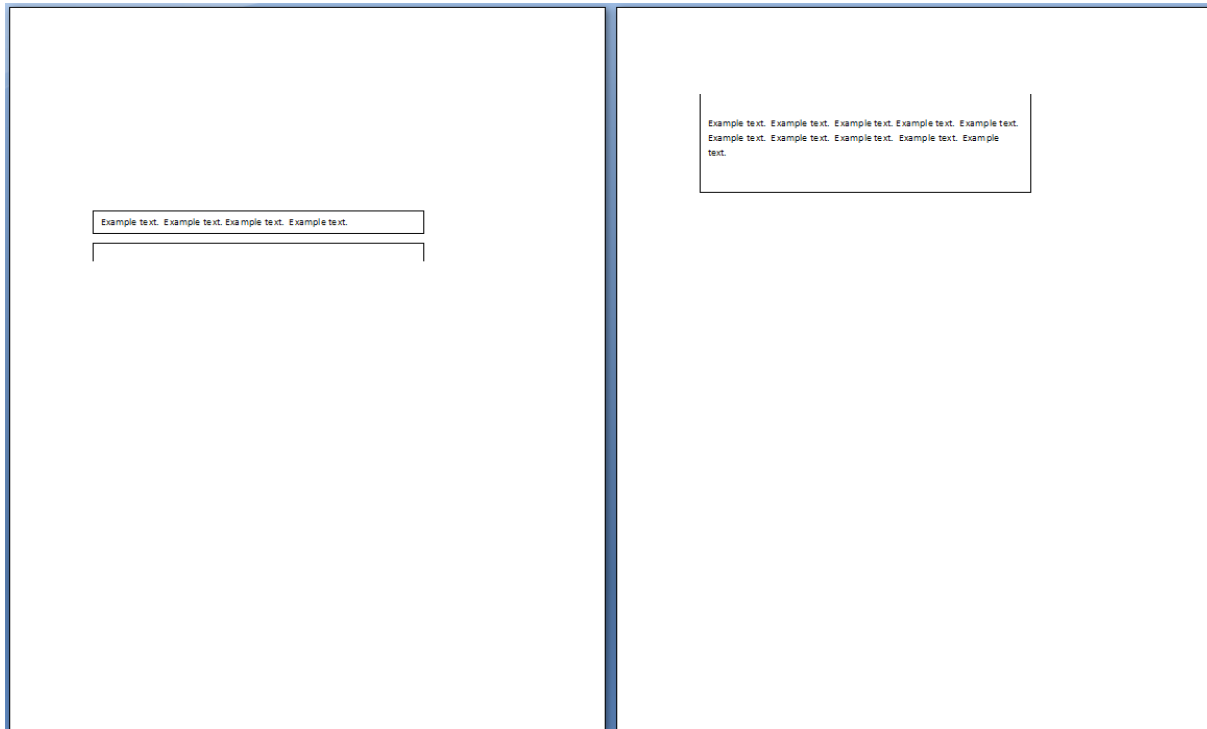
The default presentation would display the page break inline in the frame (breaking the frame into two) but would not actually break the page:



However, if this compatibility setting is turned on:

```
<w:compat>
  <w:showBreaksInFrames />
</w:compat>
```

Then the page breaks is used even though they are present in the frame, breaking the page and resulting in the following output:



end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.37 [spacingInWholePoints \(Only Expand/Condense Text By Whole Points\)](#)

This element specifies how applications should apply text expansion/compression defined using the spacing element (Part 1, §17.3.2.35) within a set of run properties.

Typically, as defined in the spacing element, text within runs in a WordprocessingML document can be expanded or compressed in increments of twentieths of a point. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that the expansion and compression of text shall only be performed in increments of points. Any value which is not equal to an expansion or compression of a whole point shall be rounded down to the nearest whole point when the text is expanded/compressed within the WordprocessingML document.

[Example: Consider a WordprocessingML document with three paragraphs of text, each expanded by a varying amount, as follows:

```
<w:p>
...
<w:r>
  <w:t>This is text.</w:t>
</w:r>
</w:p>
<w:p>
...
<w:r>
  <w:rPr>
    <w:spacing w:val="20" />
  </w:rPr>
  <w:t>This is text.</w:t>
</w:r>
</w:p>
<w:p>
...
<w:r>
  <w:rPr>
    <w:spacing w:val="36" />
  </w:rPr>
  <w:t>This is text.</w:t>
</w:r>
</w:p>
```

The default presentation would have each run of text expanded exactly as requested:

Regular Text:	This is text.
Text expanded by 1 point:	This is text.
Text expanded by 1.8 points:	This is text.

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:spacingInWholePoints />
</w:compat>
```

Then the third line - with an expansion of 1.8 points - would instead be rounded down to the nearest whole number of points when expanded, resulting in the following output:

Regular Text: This is text.

Text expanded by 1 point: This is text.

Text expanded by 1.8 points: This is text.

In the resulting output, the second and third lines are identical, as the third line has a next expansion of exactly one point. *end example*]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.38 `splitPgBreakAndParaMark` (Always Move Paragraph Mark to Page after a Page Break)

This element specifies whether a page break shall automatically complete the line on which it appears, moving the end of the paragraph to a new line on the next page, or if it shall behave as true run-level content within its current paragraph.

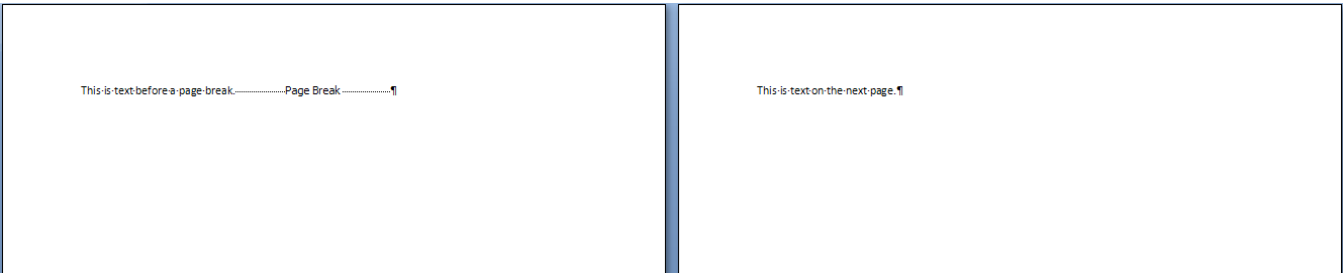
Typically, a page break defined using the `br` element (Part 1, §17.3.3.1) is treated as run-level content, which means that although it delimits the end of the page, if there is no content after it within the current paragraph, that the paragraph shall also end on that page. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that a page break shall always immediately end the current page, moving the paragraph mark which delimits the end of its parent paragraph to a new line on the next page.

Note that this setting only affects the case where there is no run-level content after the page break within the paragraph - if any further run content appears in the paragraph it shall appear on subsequent lines on the next page.

[*Example*: Consider a WordprocessingML document with two paragraphs of content - the first ending with a page break:

```
<w:p>
  <w:r>
    <w:t>This is text before a page break.</w:t>
    <w:br w:type="page" />
  </w:r>
</w:p>
<w:p>
  <w:r>
    <w:t>This is text on the next page.</w:t>
  </w:r>
</w:p>
```

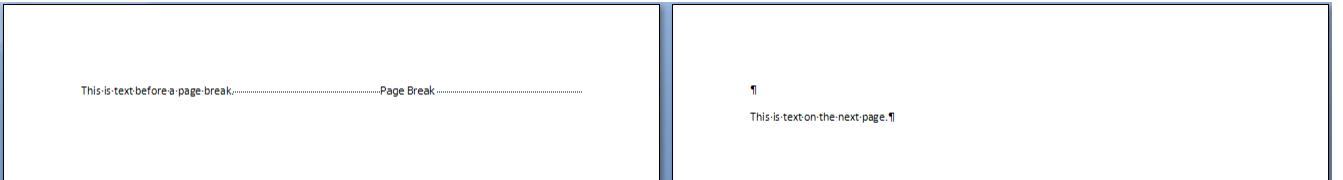
The default presentation would have the text content `This is text on the next page.` as the first line of the second page, as there is no run content after the page break in paragraph one, and therefore no need for a new line on page two (in this image, a graphical illustration of the pilcrow and the page break have been added for clarity):



However, if this compatibility setting is turned on:

```
<w:compat>
  <w:splitPgBreakAndParaMark />
</w:compat>
```

Then even though it is followed by no additional content, the page break must immediately end the first page, pushing the end of the first paragraph onto the first line of the second page, resulting in the following output:



end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.39 **subFontBySize (Require Exact Size During Font Substitution)**

This element specifies whether applications shall accept fonts which cannot be rendered at the size specified by the `sz` (Part 1, §17.3.2.38) and/or `szCs` (Part 1, §17.3.2.39) elements on the parent run when performing font substitution.

Typically, applications can perform font substitution as defined in Part 1, §17.8.2, with no additional restrictions. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that when a potential substitute font has been located, an application shall check whether that font is capable of displaying characters at the specified point size. If it is not, that font is not considered as a substitute font (i.e. it is rejected, and the next closest match is considered).

[*Example:* Consider a WordprocessingML document with a series of characters in an unavailable font. The default presentation would use any method used by the application to perform that font substitution.

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:subFontBySize />
</w:compat>
```

For each run, the application determines if the substitute font produced by its font substitution algorithm can be displayed at the size specified by the run's `sz` and/or `szCs` elements. If it cannot, that font is not used and the next closest match as substitute font is considered. *end example*]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.40 **suppressBottomSpacing (Ignore Exact Line Height for Last Line on Page)**

This element specifies whether an exact line height specified using the `spacing` element (Part 1, §17.3.1.33) with a `lineRule` attribute value of `exact` shall be ignored for the last line on each page.

Typically, if an exact line height has been specified using the `spacing` element, then all lines within that paragraph have the necessary line spacing added to them in order to meet this constraint. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that no additional spacing shall be added below the last line on each page as a result of these line spacing requirements - a line shall be placed on the bottom of the page if its characters fit on that page ignoring the necessary space after.

[*Example:* Consider a WordprocessingML document whose first paragraph has a line spacing setting requiring exactly 48 points of space per line:

```

<w:p>
  <w:pPr>
    <w:spacing w:line="960" w:lineRule="exact" />
  </w:pPr>
  ...
</w:p>

```

The default presentation would have the necessary amount of space added between each line such that all lines in the paragraph are centered within 48 points of spacing:

This is example text. This is example text. This is example text. This is example text.	This is example text. This is example text. This is example text. This is example
This is example text. This is example text. This is example text. This is example text.	This is example text. This is example text. This is example text. This is example text.
This is example text. This is example text. This is example text. This is example text.	This is example text. This is example text. This is example text. This is example text.
This is example text. This is example text. This is example text. This is example text.	This is example text. This is example text. This is example text. This is example text.
This is example text. This is example text. This is example text. This is example text.	This is example text. This is example text. This is example text. This is example text.
This is example text. This is example text. This is example text. This is example text.	This is example text. This is example text. This is example text. This is example text.
This is example text. This is example text. This is example text. This is example text.	This is example text. This is example text. This is example text. This is example text.
This is example text. This is example text. This is example text. This is example text.	This is example text. This is example text. This is example text. This is example text.
This is example text. This is example text. This is example text. This is example	This is example text. This is example text. This is example text. This is example text.
This is example text. This is example text. This is example text. This is	This is example text. This is example text. This is example text. This is example text.
Example text.	

However, if this compatibility setting is turned on:

```

<w:compat>
  <w:suppressBottomSpacing />
</w:compat>

```

Then that constraint must be lifted for the last line on the page (although all other lines are unaffected), resulting in the following output:

[illegible]

The first line from the following page was moved on the first page, as without being subjected to the line height constraint, it is possible to fit it at the bottom of the first page. *end example*]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.41 suppressSpacingAtTopOfPage (Ignore Minimum Line Height for First Line on Page)

This element specifies whether the minimum line height specified using the spacing element (Part 1, §17.3.1.33) with a `lineRule` attribute value of `atLeast` shall be ignored for the first line on each page.

Typically, if a minimum line height has been specified using the spacing element, then all lines within that paragraph have the necessary line spacing added to them in order to meet this constraint. This element, when present with a val attribute value of true (or equivalent), specifies that no additional spacing shall be added above the first line on each page as a result of this line spacing requirements - the top of the text characters on the first line shall be at the top edge of the page.

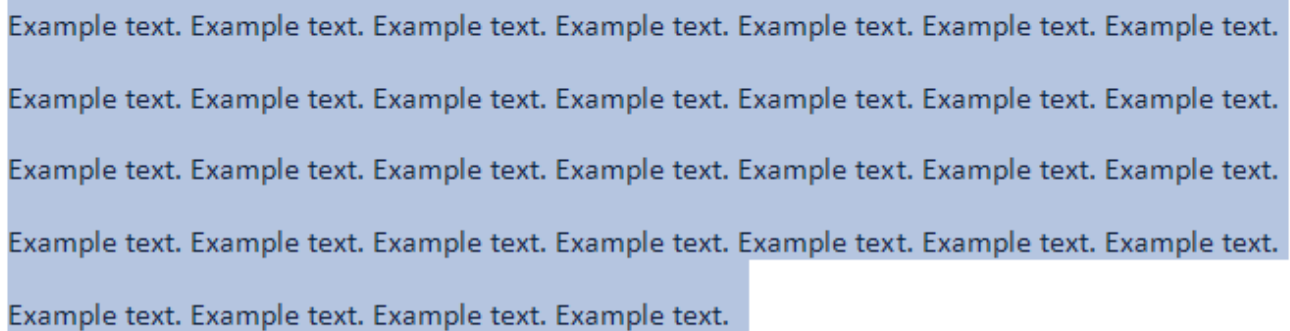
[Example: Consider a WordprocessingML document whose first paragraph has a line spacing setting requiring at least 25 points of space per line:

```

<w:p>
  <w:pPr>
    <w:spacing w:line="500" w:lineRule="atLeast" />
  </w:pPr>
  ...
</w:p>

```

The default presentation would have the necessary amount of space added between each line such that all lines in the paragraph are centered within 25 points of spacing (highlighting has been added to the image below in order to illustrate the additional spacing above the first line):



Example text. Example text. Example text. Example text. Example text. Example text. Example text.
 Example text. Example text. Example text. Example text. Example text. Example text. Example text.
 Example text. Example text. Example text. Example text. Example text. Example text. Example text.
 Example text. Example text. Example text. Example text. Example text. Example text. Example text.
 Example text. Example text. Example text. Example text.

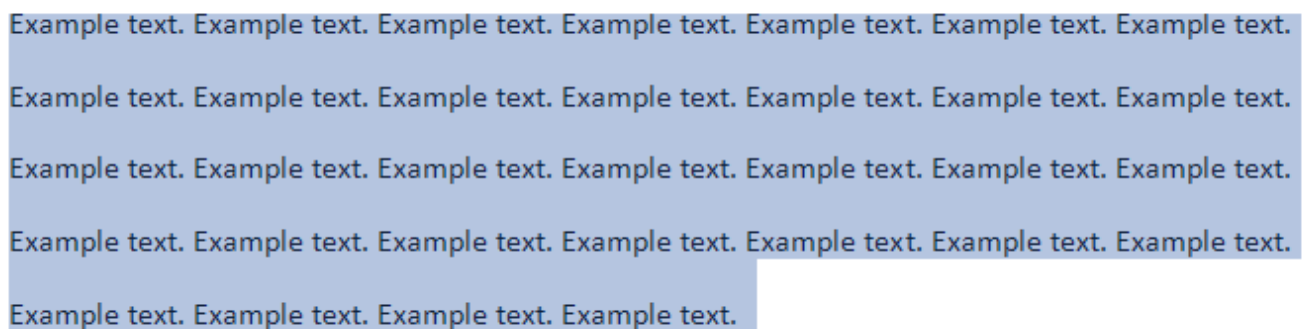
However, if this compatibility setting is turned on:

```

<w:compat>
  <w:suppressSpacingAtTopOfPage />
</w:compat>

```

Then no additional line spacing must be added above the first line on the page (although all other lines are unaffected), resulting in the following output:



Example text. Example text. Example text. Example text. Example text. Example text. Example text.
 Example text. Example text. Example text. Example text. Example text. Example text. Example text.
 Example text. Example text. Example text. Example text. Example text. Example text. Example text.
 Example text. Example text. Example text. Example text. Example text. Example text. Example text.
 Example text. Example text. Example text. Example text.

However, if this line spacing constraint was exactly 25 points, then this setting would have no effect:

Example text. Example text. Example text. Example text. Example text. Example text. Example text.
 Example text. Example text. Example text. Example text. Example text. Example text. Example text.
 Example text. Example text. Example text. Example text. Example text. Example text. Example text.
 Example text. Example text. Example text. Example text. Example text. Example text. Example text.
 Example text. Example text. Example text. Example text.

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.42 `suppressSpBfAfterPgBrk` (Do Not Use Space Before On First Line After a Page Break)

This element specifies that applications should not postpone any before paragraph spacing to the first line containing content after a page break.

Typically, a page break defined using the `br` element (Part 1, §17.3.3.1) is treated as run-level content, which means that although it delimits the end of the page, if there is no content after it within the current paragraph, that the paragraph shall also end on that page. However, in the case where there is additional run-level content within the same paragraph, that content, although part of the same paragraph as the page break, is displayed on the following page.

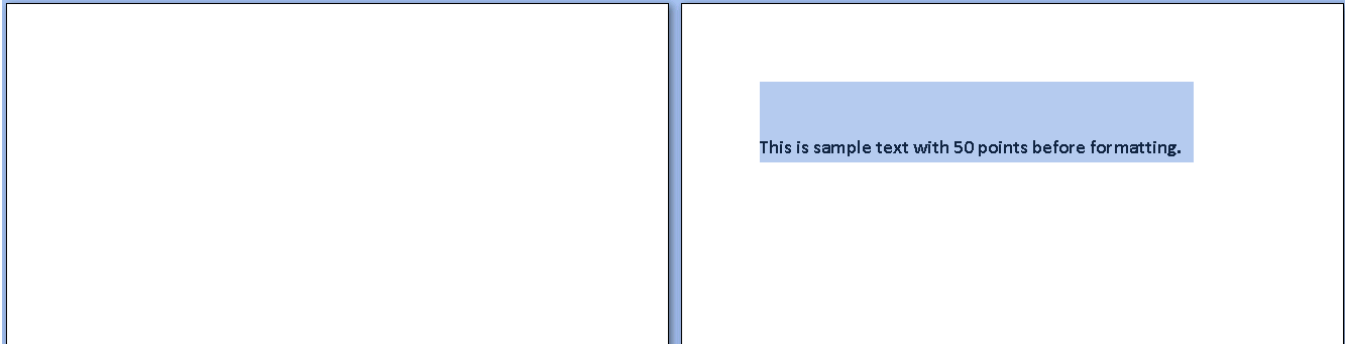
This leads to a situation where the only run content on the page with the page break is the break itself, with all subsequent content on the following page. In this case, applications shall apply the value specified by the spacing element's `before` attribute to the first line on the new page (since it is ostensibly the only page with content in that paragraph).

This element, when present with a `val` attribute value of `true` (or equivalent), specifies the paragraph before spacing shall not be 'postponed' in this way - if the line with the page break has no content, then the spacing element's `before` attribute is simply ignored.

[*Example:* Consider a WordprocessingML document whose first paragraph specifies that it must be preceded by 50 points of additional spacing:

```
<w:p>
  <w:pPr>
    <w:spacing w:before="1000" />
  </w:pPr>
  <w:r>
    <w:br w:type="page" />
    <w:t>This is sample text with 50 points before formatting.</w:t>
  </w:r>
</w:p>
```

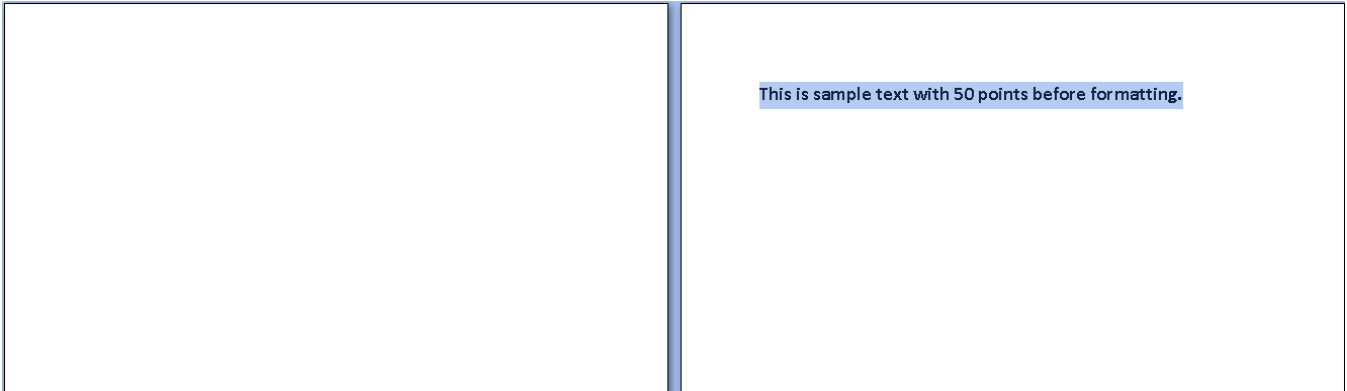
The default presentation would have the necessary amount of space added to the first line on the second page, as the page break was not preceded by any run content (highlighting has been added to the image below in order to illustrate the additional spacing above the first line):



However, if this compatibility setting is turned on:

```
<w:compat>
  <w:suppressSpBfAfterPgBrk />
</w:compat>
```

Then the spacing must not be added above the first line on the page (it is essentially ignored), resulting in the following output:



end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.43 `suppressTopSpacing` (Ignore Minimum and Exact Line Height for First Line on Page)

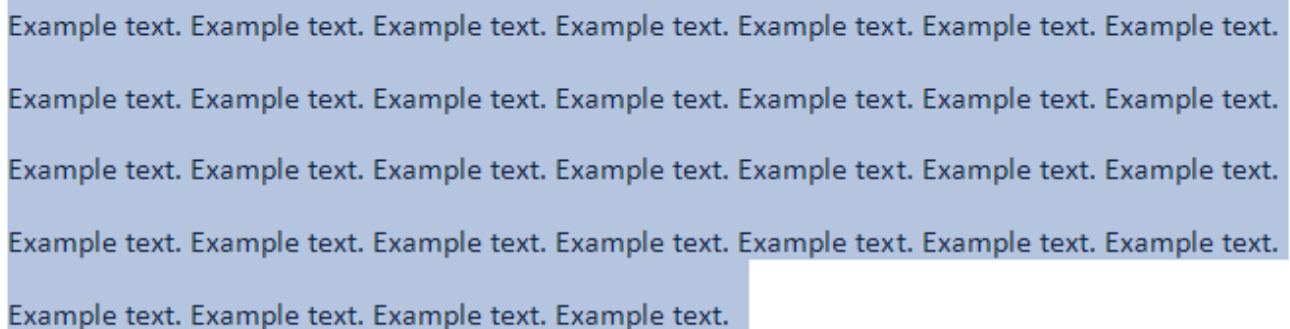
This element specifies whether the minimum line height specified using the spacing element (Part 1, §17.3.1.33) with a `lineRule` attribute value of `atLeast` or `exact` shall be ignored for the first line on each page.

Typically, if a minimum or exact line height has been specified using the spacing element, then all lines within that paragraph have the necessary line spacing added to them in order to meet this constraint. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that no additional spacing shall be added above the first line on each page as a result of these line spacing requirements - the top of the text characters on the first line shall be at the top edge of the page.

[*Example:* Consider a WordprocessingML document whose first paragraph has a line spacing setting requiring exactly 25 points of space per line:

```
<w:p>
  <w:pPr>
    <w:spacing w:line="500" w:lineRule="exact" />
  </w:pPr>
  ...
</w:p>
```

The default presentation would have the necessary amount of space added between each line such that all lines in the paragraph are centered within 25 points of spacing (highlighting has been added to the image below in order to illustrate the additional spacing above the first line):



Example text. Example text. Example text. Example text. Example text. Example text. Example text.
 Example text. Example text. Example text. Example text. Example text. Example text. Example text.
 Example text. Example text. Example text. Example text. Example text. Example text. Example text.
 Example text. Example text. Example text. Example text. Example text. Example text. Example text.
 Example text. Example text. Example text. Example text.

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:suppressTopSpacing />
</w:compat>
```

Then no additional line spacing must be added above the first line on the page (although all other lines are unaffected), resulting in the following output:

Example text. Example text. Example text. Example text. Example text. Example text. Example text.
Example text. Example text. Example text. Example text. Example text. Example text. Example text.
Example text. Example text. Example text. Example text. Example text. Example text. Example text.
Example text. Example text. Example text. Example text. Example text. Example text. Example text.
Example text. Example text. Example text. Example text.

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.44 suppressTopSpacingWP (Use Static Text Leading)

(The terms *baseline to baseline distance* and *unitsPerEm*, used below, are defined in ISO/IEC 14496-22.)

This element specifies that applications should use the values defined below to calculate the baseline to baseline distance (BTBD) in this document. This can result in lines appearing slightly condensed vertically.

Without this setting, applications calculate baseline to baseline distance using the metrics defined by ISO/IEC 14496-22. This element, when present with a val attribute value of true (or equivalent), specifies that applications should calculate this as follows:

$$BTBD = \text{unitsPerEm} + 2\text{pt}$$

[*Example:* If this compatibility setting is turned on:

```
<w:compat>
  <w:suppressTopSpacingWP />
</w:compat>
```

Then applications use a baseline to baseline distance as calculated before. With a 16 point font, this would result in a baseline to baseline distance of 18 points. *end example]*

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.45 `swapBordersFacingPages` (Swap Paragraph Borders on Odd Numbered Pages)

This element specifies whether left and right paragraph borders defined under the `pBdr` element (Part 1, §17.3.1.24) shall be swapped under conditions where it is possible that the those pages are intended to be used to create a book-like publication.

Typically, no changes shall be made to the positions of paragraph borders defined under the `pBdr` element - a right border is always on the right, and a left border is always on the left. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that under the two following conditions:

- The margins in this document are mirrored using the `mirrorMargins` element (Part 1, §17.15.1.57)
- The header/footers in this document are different on even and odd numbered pages using the `evenAndOddHeaders` element (Part 1, §17.10.1)

That paragraph borders on odd-numbered pages are swapped - that is, left borders shall be displayed on the right and right borders shall be displayed on the left.

[*Example:* Consider a WordprocessingML document for which the `mirrorMargins` element is present, and whose default paragraph style includes a paragraph border to be displayed on the right side of each paragraph:

```
<w:style w:type="paragraph" w:default="1" w:styleId="Normal" >
...
<w:pPr>
  <w:pBdr>
    <w:right w:val="single" w:color="auto" />
  </w:pBdr>
  ...
</w:pPr>
</w:style>
```

If a two-page document is created using this default paragraph style, then all paragraphs has a border on the right side, as follows:

<p>On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.</p> <p>You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Styles gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.</p> <p>To change the overall look of your document, choose new Theme elements on the Page Layout tab. To change the looks available in the Quick Style gallery, use the Change Current Quick Style Set command. Both the Themes gallery and the Quick Styles gallery provide reset commands so that you can always restore the look of your document to the original contained in your current template.</p> <p>On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.</p> <p>You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Styles gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.</p> <p>To change the overall look of your document, choose new Theme elements on the Page Layout tab. To change the looks available in the Quick Style gallery, use the Change Current Quick Style Set command. Both the Themes gallery and the Quick Styles gallery provide reset commands so that you can always restore the look of your document to the original contained in your current template.</p> <p>On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.</p> <p>You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Styles gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.</p> <p>To change the overall look of your document, choose new Theme elements on the Page Layout tab. To change the looks available in the Quick Style gallery, use the Change Current Quick Style Set command. Both the Themes gallery and the Quick Styles gallery provide reset commands so that you can always restore the look of your document to the original contained in your current template.</p>	<p>On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.</p> <p>You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Styles gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.</p> <p>To change the overall look of your document, choose new Theme elements on the Page Layout tab. To change the looks available in the Quick Style gallery, use the Change Current Quick Style Set command. Both the Themes gallery and the Quick Styles gallery provide reset commands so that you can always restore the look of your document to the original contained in your current template.</p> <p>On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.</p> <p>You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Styles gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.</p> <p>To change the overall look of your document, choose new Theme elements on the Page Layout tab. To change the looks available in the Quick Style gallery, use the Change Current Quick Style Set command. Both the Themes gallery and the Quick Styles gallery provide reset commands so that you can always restore the look of your document to the original contained in your current template.</p>
---	---

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:swapBordersFacingPages />
</w:compat>
```

Then the borders on the first page (being an odd-numbered page) must be swapped, resulting in the following output:

<p>On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.</p> <p>You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Styles gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.</p> <p>To change the overall look of your document, choose new Theme elements on the Page Layout tab. To change the looks available in the Quick Style gallery, use the Change Current Quick Style Set command. Both the Themes gallery and the Quick Styles gallery provide reset commands so that you can always restore the look of your document to the original contained in your current template.</p> <p>On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.</p> <p>You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Styles gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.</p> <p>To change the overall look of your document, choose new Theme elements on the Page Layout tab. To change the looks available in the Quick Style gallery, use the Change Current Quick Style Set command. Both the Themes gallery and the Quick Styles gallery provide reset commands so that you can always restore the look of your document to the original contained in your current template.</p> <p>On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.</p> <p>You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Styles gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.</p> <p>To change the overall look of your document, choose new Theme elements on the Page Layout tab. To change the looks available in the Quick Style gallery, use the Change Current Quick Style Set command. Both the Themes gallery and the Quick Styles gallery provide reset commands so that you can always restore the look of your document to the original contained in your current template.</p>	<p>On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.</p> <p>You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Styles gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.</p> <p>To change the overall look of your document, choose new Theme elements on the Page Layout tab. To change the looks available in the Quick Style gallery, use the Change Current Quick Style Set command. Both the Themes gallery and the Quick Styles gallery provide reset commands so that you can always restore the look of your document to the original contained in your current template.</p> <p>On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.</p> <p>You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Styles gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.</p> <p>To change the overall look of your document, choose new Theme elements on the Page Layout tab. To change the looks available in the Quick Style gallery, use the Change Current Quick Style Set command. Both the Themes gallery and the Quick Styles gallery provide reset commands so that you can always restore the look of your document to the original contained in your current template.</p>
---	---

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.46 `truncateFontHeightsLikeWP6` (Use Truncated Integer Division For Font Calculation)

This element specifies that applications should perform a specific method of calculation when converting font heights, specified in points using the `sz` (Part 1, §17.3.2.38) and `szCs` (Part 1, §17.3.2.39) elements, into pixels. This algorithm often results in a smaller than typical visual appearance of text for a given point size.

Typically, applications convert points to pixels using any approximate mathematical conversion mechanism (often, rounded integer division). This element, when present with a `val` attribute value of `true` (or equivalent), specifies that applications should use truncated integer division when performing this conversion (any non-integer value is truncated to determine the integer value resulting from the conversions).

[Example: If this compatibility setting is turned on:

```
<w:compat>
  <w:truncateFontHeightsLikeWP6 />
</w:compat>
```

Then applications shall use truncated integer division when calculating the height of characters.

For example, if the conversion is done as follows:

$$sz_{px} = sz_{pt} * N \frac{px}{inch} * \frac{1 inch}{72 pt}$$

where:

- sz_{pt} = size in points
- sz_{px} = size in pixels
- N = resolution in pixels per inch

Converting a 14 point font on a 96 dpi device results in $sz_{px} = 14 * 96 * \frac{1}{72} = 18\frac{2}{3} px$. If this setting is on, the result is truncated and the font is displayed using 18 pixels, even though 19 would be closer to the actual value. *end example*]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.47 underlineTabInNumList (Underline Following Character Following Numbering)

This element specifies whether applications shall underline the character following the numbering defined using the suff element (Part 1, §17.9.29) when both the numbering itself and the first letter of the corresponding numbered paragraph is underlined.

Typically, the tab or space character generated between numbering and the corresponding paragraph of text is never formatted, since it is automatically generated by the suff element. This element, when present with a val attribute value of true (or equivalent), specifies that the tab or space shall tab or space shall be underlined the same way as the numbering symbol itself in the following conditions:

- The numbering is underlined
- The first character of the paragraph is underlined

[Example: Consider a WordprocessingML document with two numbered paragraphs: one with underlined text and the other without. The default presentation would have the tab characters free of underlining in both cases:

1. Example Text2. Example Text

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:underlineTabInNumList />
</w:compat>
```

Then the second paragraph meets the criteria defined above for having the suffix character underlined, resulting in the following output:

1. Example Text2. Example Text

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.48 [useAltKinsokuLineBreakRules \(Use Alternate Set of East Asian Line Breaking Rules\)](#)

This element specifies an alternate set of characters which can be used to determine which characters can begin and/or end a line when kinsoku line breaking rules are enabled using the kinsoku element (Part 1, §17.3.1.16).

Typically, the characters used to determine which characters shall not end a line are those listed by the kinsoku element in the paragraph properties subclause of this document. This element, when present with a val attribute value of true (or equivalent), specifies that the following settings shall be used instead (for brevity, only those settings which are different are listed below):

Chinese (Simplified)

- Cannot start a line:

!,.,:;?]}~--||'":...、。〃々>》」』】〕！" ') , . : ; ?] ` | } ~ ¢

- Cannot end a line:

{{'“ < 《 「 『 【 〔 〔 (. [{ £ ¥

Chinese (Traditional)

- Cannot start a line:

!);,:;?]}¢—”•.....’-、。>》┘』】) ” : || { ~~~~~~ } !) , . : ; ? | }、

Korean

- Cannot end a line:

([\ { £ ¥ “ ” ‹ › ‹‹ ¶ § ¶ 【 】 ⌈ ⌋ \$ ([{ ≠

[*Example:* Consider a line of text in a WordprocessingML document within a paragraph marked as Chinese (Simplified) which begins with a % symbol, as follows:

%...

Typically, the kinsoku settings for Chinese (Simplified) do not allow this character to begin a line, so the character before that symbol would be moved down onto this line:

【%...

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:useAltKinsokuLineBreakRules />
</w:compat>
```

Then the alternate kinsoku rules are in place, which do not prevent the % character from beginning the new line, resulting in the following output:

%...

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.49 useAnsiKerningPairs (Use ANSI Kerning Pairs from Fonts)

This element specifies whether applications shall use the ANSI or Unicode kerning pair information from fonts stored in the document when displaying those characters within the document's contents.

Typically, applications shall use the Unicode kerning pair information in order to determine all possible kerning pairs in the fonts in use. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that the ANSI kerning information shall be used instead.

[*Example:* Consider a WordprocessingML document with text that contains one or more kerning pairs.

If this compatibility setting is turned on:

```
<w:compat>
  <w:useAnsiKerningPairs />
</w:compat>
```

Then the ANSI kerning pairs are used in place of the Unicode kerning pairs, potentially resulting in different line breaks.

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.50 useFELayout (Do Not Bypass East Asian/Complex Script Layout Code)

This element specifies that applications shall not bypass code relating to the layout of East Asian and/or Complex Script characters when presenting this document.

[*Guidance:* Previous word processing applications relied on this flag to determine whether to perform functions which allow for the correct layout of East Asian and Complex Script text. Although current applications no longer rely on this flag (as they should correctly use the Unicode subranges and code pages of the text in use), this flag should be output in order to ensure that files with this content can be viewed correctly in previous word processors. *end guidance]*

[*Example:* Consider a WordprocessingML document with East Asian text.

If this compatibility setting is turned on:

```
<w:compat>
  <w:useFELayout />
</w:compat>
```

Then the flag is set telling previous applications that East Asian content is present, and they should display the document accordingly. *end example]*

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.51 `useNormalStyleForList` (Do Not Automatically Apply List Paragraph Style To Bulleted/Numbered Text)

This element specifies whether applications shall automatically apply the paragraph style with the `styleId` attribute `ListParagraph` when numbering is applied to a paragraph currently formatted using the default paragraph style.

Typically, when a paragraph is formatted using the default paragraph style, and numbering is subsequently applied, the paragraph style with the `styleId` attribute `ListParagraph` when numbering is applied to ensure that paragraph properties are appropriate for a numbered paragraph. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that no alternate paragraph style shall ever be applied

[*Example:* Consider a `WordprocessingML` document with five unnumbered paragraphs:

Example text.

Example text.

Example text.

Example text.

Example text.

If numbering is applied to the three center paragraphs, the default presentation would have the `ListParagraph` style applied as well:

Example text.

- Example text.
- Example text.
- Example text.

Example text.

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:useNormalStyleForList />
</w:compat>
```

Then the new paragraph style must not be applied, resulting in the following output:

Example text.

- Example text.
- Example text.
- Example text.

Example text.

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.52 usePrinterMetrics (Use Printer Metrics To Display Documents)

This element specifies whether applications shall use the printer metrics of the currently active printer when determining how to display the contents of a WordprocessingML document. *Printer metrics* are printer-specific settings which can be queried to tell an application how and where text shall be displayed on a printed page.

Typically, applications display the content of a document in a device independent manner - the application is therefore not changing the layout of a document based on the currently attached printer, and instead shall dictate to the printer where characters shall be presented on the page when printed. This element, when present with a val attribute value of true (or equivalent), specifies that the metrics of the current printer shall be used to display the document instead.

Specifically, when this setting is enabled, the printer metrics are used to determine the number of pixels per logical inch along the screen width and height. This should then be used to compute the pixel height of the fonts requested when displaying the document, as well as to scale between any logical units within the document (e.g. drawing object sizes) to the appropriate device units. Those units would then need to be scaled back into screen units for final display to a screen, but not scaled again when displayed to a printer.

[Note: On the Windows platform, you can use the `GetDeviceCaps` function to retrieve device-specific information for the specified printer. For this specific setting, you can use `GetDeviceCaps(hdc, LOGPIXELSX)` and `GetDeviceCaps(hdc, LOGPIXELSY)` with a printer DC to retrieve the number of pixels per logical inch along the screen width and height. With this, you can then use those DPI metrics to compute a pixel value for the font request in the LOGFONT structure (the LOGFONT structure defines the attributes of a font). A common formula to do this is $S_{px} = S_{pts} * \frac{LOGPIXELSY}{72}$. *end note]*

[Example: Consider a WordprocessingML document. The default must use device-independent layout to present the contents of the page.

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:usePrinterMetrics />
</w:compat>
```

Then the printer metrics of the current active printer must be used to determine the display of the contents of the document instead, as needed. *end example*]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

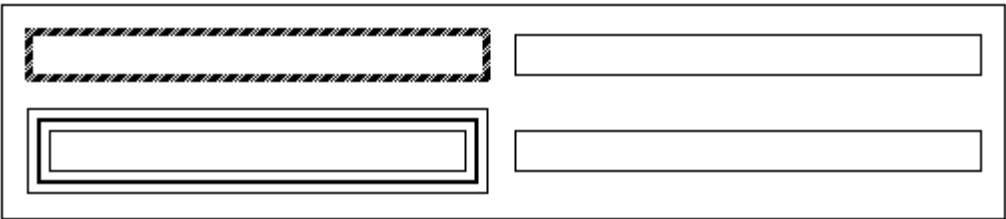
14.7.3.53 useSingleBorderforContiguousCells (Use Simplified Rules For Table Border Conflicts)

This element specifies whether applications should use an alternate simplified algorithm when handling conflicts between adjacent table borders within a table.

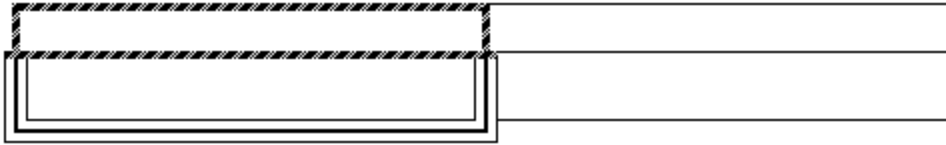
Typically, the conflicts between two adjacent table borders are handled using the conflict resolution algorithm defined in Part 1, §17.4.39 of ECMA-376. This element, when present with a val attribute value of true (or equivalent), specifies that rather than using that algorithm to determine the outcome of the conflict to two adjacent borders, that the following logic shall be used instead:

- Cell borders shall supersede table borders
- Cell borders to the right shall supersede cell borders to the left (i.e. the rightmost border wins in conflicts between vertical borders)
- Cell borders below shall supersede cell borders above (i.e. the bottommost border wins in conflicts between horizontal borders)

[*Example:* Consider a WordprocessingML document with cell and table borders defined as follows. In the image below, 0.1" of padding has been added between each cell temporarily to clearly illustrate the borders on each cell and on the table:



The default presentation would have the border conflicts resolved using the algorithm defined by ECMA-376, resulting in the following table:



However, if this compatibility setting is turned on:

```
<w:compat>
  <w:useSingleBorderforContiguousCells />
</w:compat>
```

Then the simplified table algorithm above shall be used instead (bottom and right cell borders always win), resulting in the following output:



end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.54 [useWord2002TableStyleRules \(Incorrectly Display Top Border of Conditional Columns\)](#)

This element specifies whether applications should incorrectly calculate the top border of conditional columns (as specified by a `tblStylePr` element (Part 1, §17.7.6.6) with a `type` attribute value of `firstCol`, `lastCol`, `band1Vert`, or `band2Vert`) under the following conditions:

- A conditional formatting has also been defined for the first row (a `tblStylePr` element with a `type` attribute of `firstRow`)
- That conditional formatting has been applied to the table using the `tblLook` element (Part 1, §17.4.56)

Typically, table styles are applied according to the logic defined in Part 1, §17.7.2. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that the top border of those conditionally formatted columns should instead be displayed as the top border of the following row.

[Example: Consider a WordprocessingML document with table style that defines two conditional formats:

The first column has a one point border

The first row has red shading

That style would be defined as follows:

```
<w:style w:type="table" w:customStyle="1" w:styleId="TableTest">
  <w:name w:val="CompatibilitySetting"/>
  <w:tblStylePr w:type="firstRow">
    <w:tcPr>
      <w:shd w:val="clear" w:color="auto" w:fill="FF0000"/>
    </w:tcPr>
  </w:tblStylePr>
  <w:tblStylePr w:type="firstCol">
    <w:tcPr>
      <w:tcBorders>
        <w:top w:val="single" w:sz="4" w:space="0" w:color="auto"/>
        <w:left w:val="single" w:sz="4" w:space="0" w:color="auto"/>
        <w:bottom w:val="single" w:sz="4" w:space="0" w:color="auto"/>
        <w:right w:val="single" w:sz="4" w:space="0" w:color="auto"/>
      </w:tcBorders>
    </w:tcPr>
  </w:tblStylePr>
</w:style>
```

If the first column and first row formatting is applied, the table would appear as follows:

1,1	1,2
2,1	2,2

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:useWord2002TableStyleRules />
</w:compat>
```

Then the condition described by this element causes the top border defined by the conditional format for the first column to be displayed as the top border for the second column, resulting in the following output:

1,1	1,2
2,1	2,2

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.55 useWord97LineBreakRules (Use Incorrect Inter-Character Spacing Rules)

This element specifies that applications should perform specific calculations (detailed below) when determining inter-character spacing under certain conditions. These calculations would not normally be considered correct.

Typically, the behaviors specified by the following elements are applied unconditionally:

- The autoSpaceDE (Part 1, §17.3.1.2) and autoSpaceDN (Part 1, §17.3.1.3) elements
- The topLinePunct (Part 1, §17.3.1.43) element

The compatibility element described in this subclause, when present with a val attribute value of true (or equivalent), specifies that applications should ignore the settings listed above in the following scenarios:

1. If an ideographic character and a non-ideographic/numeric character are logically adjacent (ignoring all content which is not within a t element), but separated by a field boundary, i.e.:
 - The first character is within a fldSimple element, but the second is not.
 - The characters are separated by a fldChar element with a fldCharType attribute value of end

Then any appropriate inter-character spacing should be omitted. [*Note*: Inter-character spacing should still be calculated correctly within the field result. *end note*]

2. If a full-width punctuation character appears at the start of a paragraph which also specifies numbering via the numPr element (Part 1, §17.3.1.19), the compression specified by the topLinePunct element is ignored.

[*Example*: Consider a paragraph which contains a field ending in an ideograph and another paragraph, with numbering, which contains a full-width punctuation character in the first character position:

```
<w:p>
  <w:r>
    <w:fldChar w:fldCharType="begin" />
  </w:r>
  ...
  <w:r>
    <w:t>日</w:t>
  </w:r>
  <w:r>
    <w:fldChar w:fldCharType="end" />
```

```
</w:r>
<w:r>
  <w:t>1</w:t>
</w:r>
</w:p>
<w:p>
  <w:pPr>
    <w:numPr>
      ...
    </w:numPr>
  </w:pPr>
  <w:r>
    <w:t> (</w:t>
  </w:r>
</w:p>
```

Typically, if both the autoSpaceDN and topLinePunct are true, additional spacing is added after the ideograph in the first paragraph and punctuation kerning is applied in the second paragraph (with gridlines added for visual reference):

平成	19	年	12	月	20	日	1
1.	(

If this compatibility setting is turned on:

```
<w:compat>
  <w:useWord97LineBreakRules />
</w:compat>
```

Then applications should not add any inter-character spacing at th end of the field and should turn off punctuation kerning in the second paragraph:

平成	19	年	12	月	20	日	1
1.	(

end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element's content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.56 wpJustification (Fit To Expanded Width When Performing Full Justification)

This element specifies that applications should perform a specific algorithm when determining the contents of each line in a fully justified paragraph (resulting from the use of the jc element (Part 1, §17.3.1.13)). This setting typically results in more words being fitted into lines (by reducing inter-word spacing as necessary).

Typically, applying full justification to a paragraph does not change the placement of line breaks, as inter-word spacing is expanded to ensure the resulting text is fully justified. This element, when present with a val attribute value of true (or equivalent), specifies that applications shall determine the contents of each line in a fully justified paragraph using the following algorithm:

For each line in the fully justified paragraph,

- Determine the actual line width, w , in pixels
- Calculate the “effective” line width by the following factor:

$$w_{\text{effective}} = w_{\text{actual}} + \left(w_{\text{actual}} * \frac{281}{7200} \right)$$

- Determine the text which can be displayed in a line of the “effective” line width
- Decrease the inter-word spacing as necessary to fit that text in the actual line width

[Example: Consider a WordprocessingML document with one or more paragraphs using full paragraph justification:

```
<w:p>
  <w:pPr>
    <w:jc w:val="both" />
  </w:pPr>
  ...
</w:p>
```

If this compatibility setting is turned on:

```
<w:compat>
  <w:wpJustification />
</w:compat>
```

Then, for a line 1000 pixels wide, an application would calculate the effective width as follows:

$$w_{\text{effective}} = 1000 + \left(1000 * \frac{281}{7200} \right) = 1039 \text{ pixels}$$

This effective width is then used to determine how much text can be displayed on line. After calculating the text, the application can display the text on the actual line, fully justified. *end example*]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.57 **wpSpaceWidth (Use Specific Space Width)**

(The terms *ascent* and *descent* are used as defined in ISO/IEC 14496-22.)

This element specifies that applications should perform determine the width of the space character for all proportional fonts used in this document using the calculation specified below.

Typically, applications calculate the width of a whitespace character dynamically to optimize for the output device. This element, when present with a *val* attribute value of *true* (or equivalent), specifies that applications should instead use the following algorithm to determine the width of a whitespace character:

$$w_{space} = \left(\frac{ascent + descent}{3} \right)$$

where

- w_{space} is the width of a space character
- is the ascent for the font
- is the descent for the font

[*Example*: Consider a WordprocessingML document with this compatibility setting turned on:

```
<w:compat>
  <w:suppressTopSpacingWP />
</w:compat>
```

If the font applied to a run specified an ascent value of 8 points and a descent value of 2 points, each space in that run would have a width of three and one-third points. *end example*]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.7.3.58 wrapTrailSpaces (Line Wrap Trailing Spaces)

This element specifies whether applications shall perform line wrapping on trailing spaces in the contents of a line when displaying in it a paragraph. *Trailing spaces* are all space characters which are not followed by non-space characters on the same line.

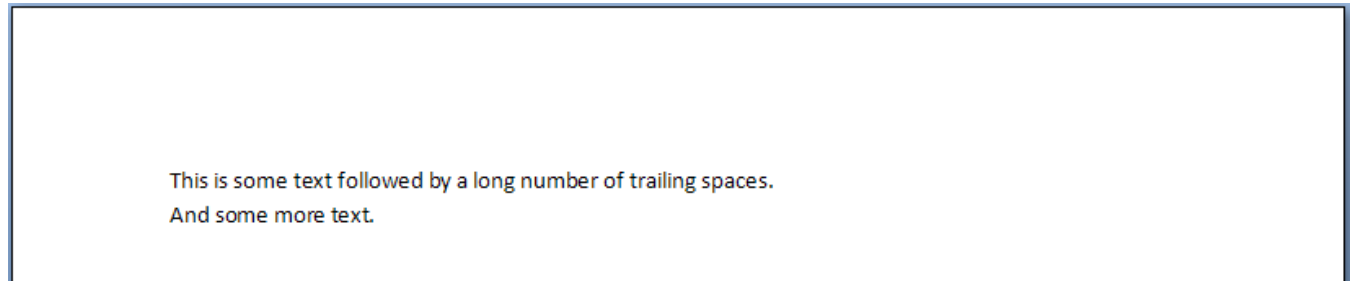
Typically, applications do not line wrap trailing spaces, instead allowing an unbounded number of trailing spaces on a line, with the next non-space character starting at the first character position on the next line. This element, when present with a `val` attribute value of `true` (or equivalent), specifies that all characters, including trailing spaces, shall be line wrapped normally.

[*Example:* Consider a WordprocessingML document with the following paragraph of text, including a long interstitial of spaces which become trailing spaces when the paragraph is displayed:

```
<w:r>
  <w:t> This is some text followed by a long number of trailing spaces.

                And some more text.</w:t>
</w:r>
```

The default presentation would not wrap those trailing spaces, so the text at the end of the run would begin at the first character position on the second line:

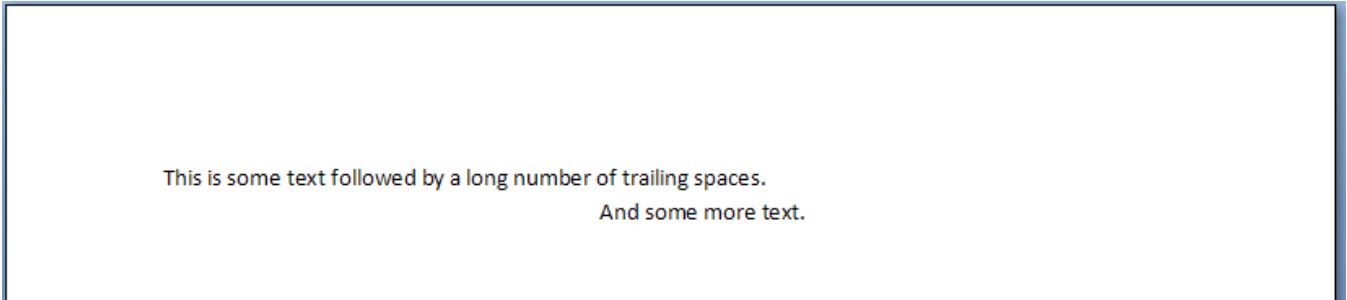


```
This is some text followed by a long number of trailing spaces.
And some more text.
```

However, if this compatibility setting is turned on:

```
<w:compat>
  <w:wrapTrailSpaces />
</w:compat>
```

Then all trailing spaces would be handled as regular characters when line wrapping, resulting in the following output:



end example]

Parent Elements
compat (Part 1, §17.15.1.21)

This element’s content model is defined by the common boolean property definition in Part 1, §17.17.4.

14.8 Miscellaneous Topics

14.8.1 Text Box Content

All VML-based drawing objects (except for connectors) support the addition of rich WordprocessingML content within their extents. When WordprocessingML contents have been added to a VML drawing object, the resulting text is contained within a *text box*.

When WordprocessingML content is contained within a text box, it is allowed within the object by specifying the VML textbox element (§19.1.2.22), which contains within it a single txbxContent element that contains all of the desired WordprocessingML content.

14.8.1.1 txbxContent (Rich Text Box Content Container)

This element specifies that its contents shall be any rich WordprocessingML content, and that this content is the rich contents of a drawing object defined using the Vector Markup Language (VML) syntax (§19.1).

If this element contains within any of its contents any of the following content, then the document shall be considered non-conformant:

- References to other WordprocessingML document stories (comments, footnotes, endnotes)
- Additional txbxContent elements (as part of nested VML objects)

[*Example:* Consider a WordprocessingML document consisting of a single VML shape element (§19.1.2.19) (in this case, a star) that contains within it some WordprocessingML content:



That drawing object now contains a text box, and so uses the syntax for that text box:

```
<v:shape id="_x0000_s1026" type="#_x0000_t12" style="...">
  <v:textbox>
    <w:txbxContent>
      <w:p>
        <w:pPr>
          <w:jc w:val="center"/>
        </w:pPr>
        <w:r>
          <w:t>Rich WordprocessingML content!</w:t>
        </w:r>
      </w:p>
    </w:txbxContent>
  </v:textbox>
</v:shape>
```

The txbxContent element is the container for the WordprocessingML contained within the text box inside that shape - once inside this element any content (subject to the restrictions defined above) can be used. *end example*

Parent Elements
textbox (§19.1.2.22)

Child Elements	Subclause
altChunk (Anchor for Imported External Content)	Part 1, §17.17.2.1
bookmarkEnd (Bookmark End)	Part 1, §17.13.6.1
bookmarkStart (Bookmark Start)	Part 1, §17.13.6.2
commentRangeEnd (Comment Anchor Range End)	Part 1, §17.13.4.3
commentRangeStart (Comment Anchor Range Start)	Part 1, §17.13.4.4
customXml (Block-Level Custom XML Element)	Part 1, §17.5.1.6
customXmlDelRangeEnd (Custom XML Markup Deletion End)	Part 1, §17.13.5.4
customXmlDelRangeStart (Custom XML Markup Deletion Start)	Part 1, §17.13.5.5
customXmlInsRangeEnd (Custom XML Markup Insertion End)	Part 1, §17.13.5.6
customXmlInsRangeStart (Custom XML Markup Insertion Start)	Part 1, §17.13.5.7
customXmlMoveFromRangeEnd (Custom XML Markup Move Source End)	Part 1, §17.13.5.8
customXmlMoveFromRangeStart (Custom XML Markup Move Source Start)	Part 1, §17.13.5.9
customXmlMoveToRangeEnd (Custom XML Markup Move Destination Location End)	Part 1, §17.13.5.10
customXmlMoveToRangeStart (Custom XML Markup Move Destination Location Start)	Part 1, §17.13.5.11
del (Deleted Run Content)	Part 1, §17.13.5.14
ins (Inserted Run Content)	Part 1, §17.13.5.18
moveFrom (Move Source Run Content)	Part 1, §17.13.5.22
moveFromRangeEnd (Move Source Location Container - End)	Part 1, §17.13.5.23
moveFromRangeStart (Move Source Location Container - Start)	Part 1, §17.13.5.24
moveTo (Move Destination Run Content)	Part 1, §17.13.5.25
moveToRangeEnd (Move Destination Location Container - End)	Part 1, §17.13.5.27
moveToRangeStart (Move Destination Location Container - Start)	Part 1, §17.13.5.28
oMath (Office Math)	Part 1, §22.1.2.77
oMathPara (Office Math Paragraph)	Part 1, §22.1.2.78
p (Paragraph)	Part 1, §17.3.1.22
permEnd (Range Permission End)	Part 1, §17.13.7.1
permStart (Range Permission Start)	Part 1, §17.13.7.2
proofErr (Proofing Error Anchor)	Part 1, §17.13.8.1
sdt (Block-Level Structured Document Tag)	Part 1, §17.5.2.29
tbl (Table)	Part 1, §17.4.38

[Note: The W3C XML Schema definition of this element's content model ([CT_TxbxContent](#)) is located in §A.1.
end note]

14.9 Fields and Hyperlinks

14.9.1 Syntax

This subclause modifies the fields grammar defined in Part 1, §17.16.1 as necessary to support transitional use of fields.

The syntax rules in this subclause follow the system shown in ISO/IEC 14977: literal text is surrounded by double-quotes (or by apostrophes); the left-square-bracket and right-square-bracket designate the start and end of an option; the left-curly-bracket and right-curly-bracket designate the start and end of a sequence of one-or-more items; the vertical-line indicates an alternative; and each rule ends with a semicolon. Whenever hyphen is used as the exception-symbol (as per ISO/IEC 14977), it is surrounded by white space, and further clarified by a comment.

```

field-type=
    date-and-time |
    document-automation |
    document-information |
    document-property |
    equations-and-formulas |
    index-and-tables |
    links-and-references |
    mail-merge |
    numbering |
    user-information |
    form-field |
    user-defined-field |
    transitional-fields ;
transitional-fields=
    "AUTONUM" |
    "AUTONUMLGL" |
    "AUTONUMOUT" |
    "BARCODE", field-argument |
    "BIDIOUTLINE" |
    "EQ", [switches], "(", [eq-argument-list], ")" (* and see §14.9.4.6 *) |
    "INFO", info-category, [field-argument] ;
eq-argument-list=
    expression, {eq-list-separator, expression} ;
eq-list-separator=
    comma | semicolon ;          (* depending on the rules in §14.9.4.6 *)

```

```

info-category:
  "AUTHOR" | "COMMENTS" | "CREATEDATE" | "EDITTIME" |
  "FILENAME" | "FILESIZE" | "KEYWORDS" | "LASTSAVEDBY" |
  "NUMCHARS" | "NUMPAGES" | "NUMWORDS" | "PRINTDATE" |
  "REVNUM" | "SAVEDATE" | "SUBJECT" | "TEMPLATE" | "TITLE" ;

```

14.9.2 Legacy language references

Whenever a field requires a language identifier as one of its *field-switches*, that language identifier should be provided using the syntax defined by the ST_Lang simple type (Part 1, §22.9.2.6). However, there exists a legacy mechanism by which language identifiers can be stored. For that mechanism, the following table lists those language codes and their corresponding languages.

This mechanism can be used within the following *field-switches*:

- ADDRESSBLOCK (Part 1, §17.16.5.1), \l switch
- BIBLIOGRAPHY (Part 1, §17.16.5.7), \l and \f switches
- CITATION (Part 1, §17.16.5.8), \l switch
- GREETINGLINE (Part 1, §17.16.5.24), \l switch
- INDEX (Part 1, §17.16.5.29), \z switch

[*Rationale*: This list is maintained for compatibility with documents containing these values. The use of these identifiers is discouraged. *end rationale*]

[*Note*: The second column "Description" is informative only, and is provided as an aid to implementers. Note also that the inclusion of country subtags in the BCP 47 codes makes no assertion about the relationship between nations and languages. Rather, it reflects the historical commercial process by which office software products were localized for some particular market. For example, the Swahili language is spoken in several Eastern African nations. However, the localization identified by the legacy language code 1089 reflected work done in Kenya to address the needs of Swahili users there and thus is mapped to the modern BCP 47 code sw-KE. *end note*]

Language Code	Description (informative)	BCP 47 Code
1025	Arabic - Saudi Arabia	ar-SA
1026	Bulgarian	bg-BG
1027	Catalan	ca-ES
1028	Chinese - Taiwan	zh-TW
1029	Czech	cs-CZ
1030	Danish	da-DK
1031	German - Germany	de-DE
1032	Greek	el-GR
1033	English - United States	en-US

Language Code	Description (informative)	BCP 47 Code
1034	Spanish - Spain (Traditional Sort)	es-ES
1035	Finnish	fi-FI
1036	French - France	fr-FR
1037	Hebrew	he-IL
1038	Hungarian	hu-HU
1039	Icelandic	is-IS
1040	Italian - Italy	it-IT
1041	Japanese	ja-JP
1042	Korean	ko-KR
1043	Dutch - Netherlands	nl-NL
1044	Norwegian (Bokmål)	nb-NO
1045	Polish	pl-PL
1046	Portuguese - Brazil	pt-BR
1047	Rhaeto-Romanic	rm-CH
1048	Romanian	ro-RO
1049	Russian	ru-RU
1050	Croatian	hr-HR
1051	Slovak	sk-SK
1052	Albanian - Albania	sq-AL
1053	Swedish	sv-SE
1054	Thai	th-TH
1055	Turkish	tr-TR
1056	Urdu - Pakistan	ur-PK
1057	Indonesian	id-ID
1058	Ukrainian	uk-UA
1059	Belarusian	be-BY
1060	Slovenian	sl-SI
1061	Estonian	et-EE
1062	Latvian	lv-LV
1063	Lithuanian	lt-LT
1064	Tajik	tg-Cyrl-TJ
1065	Farsi	fa-IR
1066	Vietnamese	vi-VN
1067	Armenian - Armenia	hy-AM

Language Code	Description (informative)	BCP 47 Code
1068	Azeri (Latin)	az-Latn-AZ
1069	Basque	eu-ES
1070	Sorbian	wen-DE
1071	FYRO Macedonian	mk-MK
1072	Sutu	st-ZA
1073	Tsonga	ts-ZA
1074	Tswana	tn-ZA
1075	Venda	ven-ZA
1076	Xhosa	xh-ZA
1077	Zulu	zu-ZA
1078	Afrikaans - South Africa	af-ZA
1079	Georgian	ka-GE
1080	Faroese	fo-FO
1081	Hindi	hi-IN
1082	Maltese	mt-MT
1083	Sami	se-NO
1084	Gaelic (Scotland)	gd-GB
1085	Yiddish	yi
1086	Malay - Malaysia	ms-MY
1087	Kazakh	kk-KZ
1088	Kyrgyz (Cyrillic)	ky-KG
1089	Swahili	sw-KE
1090	Turkmen	tk-TM
1091	Uzbek (Latin)	uz-Latn-UZ
1092	Tatar	tt-RU
1093	Bengali (India)	bn-IN
1094	Punjabi	pa-IN
1095	Gujarati	gu-IN
1096	Oriya	or-IN
1097	Tamil	ta-IN
1098	Telugu	te-IN
1099	Kannada	kn-IN
1100	Malayalam	ml-IN
1101	Assamese	as-IN

Language Code	Description (informative)	BCP 47 Code
1102	Marathi	mr-IN
1103	Sanskrit	sa-IN
1104	Mongolian (Cyrillic)	mn-MN
1105	Tibetan - People's Republic of China	bo-CN
1106	Welsh	cy-GB
1107	Khmer	km-KH
1108	Lao	lo-LA
1109	Burmese	my-MM
1110	Galician	gl-ES
1111	Konkani	kok-IN
1112	Manipuri	mni
1113	Sindhi - India	sd-IN
1114	Syriac	syr-SY
1115	Sinhalese - Sri Lanka	si-LK
1116	Cherokee - United States	chr-US
1117	Inuktitut	iu-Cans-CA
1118	Amharic - Ethiopia	am-ET
1119	Tamazight (Arabic)	tmz
1120	Kashmiri (Arabic)	ks-Arab-IN
1121	Nepali	ne-NP
1122	Frisian - Netherlands	fy-NL
1123	Pashto	ps-AF
1124	Filipino	fil-PH
1125	Divehi	dv-MV
1126	Edo	bin-NG
1127	Fulfulde - Nigeria	fuv-NG
1128	Hausa - Nigeria	ha-Latn-NG
1129	Ibibio - Nigeria	ibb-NG
1130	Yoruba	yo-NG
1131	Quecha - Bolivia	quz-BO
1132	Sepedi	nso-ZA
1136	Igbo - Nigeria	ig-NG
1137	Kanuri - Nigeria	kr-NG
1138	Oromo	gaz-ET

Language Code	Description (informative)	BCP 47 Code
1139	Tigrigna - Ethiopia	ti-ER
1140	Guarani - Paraguay	gn-PY
1141	Hawaiian - United States	haw-US
1142	Latin	la
1143	Somali	so-SO
1144	Yi	ii-CN
1145	Papiamentu	pap-AN
1152	Uighur - China	ug-Arab-CN
1153	Maori - New Zealand	mi-NZ
2049	Arabic - Iraq	ar-IQ
2052	Chinese - People's Republic of China	zh-CN
2055	German - Switzerland	de-CH
2057	English - United Kingdom	en-GB
2058	Spanish - Mexico	es-MX
2060	French - Belgium	fr-BE
2064	Italian - Switzerland	it-CH
2067	Dutch - Belgium	nl-BE
2068	Norwegian (Nynorsk)	nn-NO
2070	Portuguese - Portugal	pt-PT
2072	Romanian - Moldava	ro-MO
2073	Russian - Moldava	ru-MO
2074	Serbian (Latin)	sr-Latn-CS
2077	Swedish - Finland	sv-FI
2080	Urdu - India	ur-IN
2092	Azeri (Cyrillic)	az-Cyrl-AZ
2108	Gaelic (Ireland)	ga-IE
2110	Malay - Brunei Darussalam	ms-BN
2115	Uzbek (Cyrillic)	uz-Cyrl-UZ
2117	Bengali (Bangladesh)	bn-BD
2118	Punjabi (Pakistan)	pa-PK
2128	Mongolian (Mongolian)	mn-Mong-CN
2129	Tibetan - Bhutan	bo-BT
2137	Sindhi - Pakistan	sd-PK
2143	Tamazight (Latin)	tzm-Latn-DZ

Language Code	Description (informative)	BCP 47 Code
2144	Kashmiri (Devanagari)	ks-Deva-IN
2145	Nepali - India	ne-IN
2155	Quecha - Ecuador	quz-EC
2163	Tigrigna - Eritrea	ti-ET
3073	Arabic - Egypt	ar-EG
3076	Chinese - Hong Kong SAR	zh-HK
3079	German - Austria	de-AT
3081	English - Australia	en-AU
3082	Spanish - Spain (Modern Sort)	es-ES
3084	French - Canada	fr-CA
3098	Serbian (Cyrillic)	sr-Cyrl-CS
3179	Quecha - Peru	quz-PE
4097	Arabic - Libya	ar-LY
4100	Chinese - Singapore	zh-SG
4103	German - Luxembourg	de-LU
4105	English - Canada	en-CA
4106	Spanish - Guatemala	es-GT
4108	French - Switzerland	fr-CH
4122	Croatian (Bosnia/Herzegovina)	hr-BA
5121	Arabic - Algeria	ar-DZ
5124	Chinese - Macao SAR	zh-MO
5127	German - Liechtenstein	de-LI
5129	English - New Zealand	en-NZ
5130	Spanish - Costa Rica	es-CR
5132	French - Luxembourg	fr-LU
5146	Bosnian (Bosnia/Herzegovina)	bs-Latn-BA
6145	Arabic - Morocco	ar-MO
6153	English - Ireland	en-IE
6154	Spanish - Panama	es-PA
6156	French - Monaco	fr-MC
7169	Arabic - Tunisia	ar-TN
7177	English - South Africa	en-ZA
7178	Spanish - Dominican Republic	es-DO
7180	French - West Indies	fr-029

Language Code	Description (informative)	BCP 47 Code
8193	Arabic - Oman	ar-OM
8201	English - Jamaica	en-JM
8202	Spanish - Venezuela	es-VE
8204	French - Reunion	fr-RE
9217	Arabic - Yemen	ar-YE
9225	English - Caribbean	en-029
9226	Spanish - Colombia	es-CO
9228	French - Democratic Rep. of Congo	fr-CG
10241	Arabic - Syria	ar-SY
10249	English - Belize	en-BZ
10250	Spanish - Peru	es-PE
10252	French - Senegal	fr-SN
11265	Arabic - Jordan	ar-JO
11273	English - Trinidad	en-TT
11274	Spanish - Argentina	es-AR
11276	French - Cameroon	fr-CM
12289	Arabic - Lebanon	ar-LB
12297	English - Zimbabwe	en-ZW
12298	Spanish - Ecuador	es-EC
12300	French - Cote d'Ivoire	fr-CI
13313	Arabic - Kuwait	ar-KW
13321	English - Philippines	en-PH
13322	Spanish - Chile	es-CL
13324	French - Mali	fr-ML
14337	Arabic - U.A.E.	ar-AE
14345	English - Indonesia	en-ID
14346	Spanish - Uruguay	es-UY
14348	French - Morocco	fr-MA
15361	Arabic - Bahrain	ar-BH
15369	English - Hong Kong SAR	en-HK
15370	Spanish - Paraguay	es-PY
15372	French - Haiti	fr-HT
16385	Arabic - Qatar	ar-QA
16393	English - India	en-IN

Language Code	Description (informative)	BCP 47 Code
16394	Spanish - Bolivia	es-BO
17417	English - Malaysia	en-MY
17418	Spanish - El Salvador	es-SV
18441	English - Singapore	en-SG
18442	Spanish - Honduras	es-HN
19466	Spanish - Nicaragua	es-NI
20490	Spanish - Puerto Rico	es-PR
21514	Spanish - United States	es-US
58378	Spanish - Latin America	es-419
58380	French - North Africa	fr-015
Any other value	Undefined. Shall not be used.	

14.9.3 Use of DOS File Paths

The following fields allow the use of a DOS file path in place of the (preferred) IRI syntax:

- INCLUDEPICTURE (Part 1, §17.16.5.27)
- INCLUDETTEXT (Part 1, §17.16.5.28)

When a DOS file path is specified in a *field-argument*, each backslash character shall be preceded directly by another backslash character [*Example*: E:\\example.docx *end example*]

14.9.4 Field definitions

14.9.4.1 AUTONUM

Syntax:

AUTONUM [*switches*]

Description: In paragraphs formatted with one of the nine built-in heading styles, paragraph numbering restarts at 1 in each successive heading level. If headings that contain AUTONUM fields are followed by body text paragraphs that also contain AUTONUM fields, the paragraph numbering of the body text is restarted at 1 after each heading. If the headings don't contain AUTONUM fields, body text paragraphs that contain AUTONUM fields are numbered in a continuous, sequential series throughout the document. [*Note*: This field is supported for legacy reasons, It is recommended that LISTNUM (Part 1, §17.16.5.33) be used instead. *end note*]

The XML generated for a complex field implementation shall not have the optional field value stored.

Field Value: A new paragraph number in ascending sequential order.

Switches: Zero or one of the *general-formatting-switches*, or zero or more of the following *field-specific-switches*.

<code>\s <i>field-argument</i></code>	<i>text</i> in this switch's <i>field-argument</i> specifies the separator character to be used. If \s is omitted, a period (.) is used.
---------------------------------------	--

[*Example:* When the following fields are updated:

```
AUTONUM
AUTONUM \* Arabic \s :
AUTONUM \* alphabetic \s " "xxx
AUTONUM \* ROMAN
AUTONUM \* OrdText
```

The results are:

```
1.
2:
c xxx
IV.
fifth.
```

end example]

14.9.4.2 AUTONUMLGL

Syntax:

AUTONUMLGL [*switches*]

Description: For legal and technical publications, use the nine built-in heading styles to format headings in the document, and then insert an AUTONUMLGL field at the beginning of each heading paragraph. The numbers reflect the heading levels that correspond to the heading styles. If an AUTONUMLGL field is inserted in paragraphs of body text paragraphs not formatted with built-in heading styles, the number of the preceding heading is included in the paragraph number. [*Note:* This field is supported for legacy reasons, It is recommended that LISTNUM (Part 1, §17.16.5.33) be used instead. *end note]*

This field only makes sense in terms of multi-level headings. Given the following headings:

```
Heading 1
Heading 2
Heading 2
Heading 1
```


this field allows

- 1. Heading 1
- 1.1. Heading 2
- 1.2. Heading 2
- 2. Heading 1

At each level, the numbering sequence does two things—it increments specific to that level, and it includes the value from the previous level.

The XML generated for a complex field implementation shall not have the optional field value stored.

Field Value: A new paragraph number in ascending sequential order.

Switches: Zero or one of the *general-formatting-switches*, or zero or more of the following *field-specific-switches*.

<code>\e</code>	Removes the trailing separator (period).
<code>\s <i>field-argument</i></code>	<i>text</i> in this switch's <i>field-argument</i> specifies the separator character to be used. If <code>\s</code> is omitted, a period (.) is used.

[*Example:* When the following fields are updated:

```
AUTONUMLGL
AUTONUMLGL \* Arabic \s :
AUTONUMLGL \* alphabetic \s " "xxx
AUTONUMLGL \* ROMAN
AUTONUMLGL \e xxx
```

The results are:

```
1.
2:
c xxx
IV.
5xxx
```

end example]

14.9.4.3 AUTONUMOUT

Syntax:

```
AUTONUMOUT
```

Description: Use the nine built-in heading styles to format headings in the document, and then insert an AUTONUMOUT field at the beginning of each heading paragraph. The numbers reflect the heading levels that

correspond to the heading styles. [*Note: This field is supported for legacy reasons, It is recommended that LISTNUM (Part 1, §17.16.5.33) be used instead. end note*]

The XML generated for a complex field implementation shall not have the optional field value stored.

This field allows the numbering to be incremented based on the heading level. Given the following:

```
{AutoNumOut} Heading 1
{AutoNumOut} Heading 2
{AutoNumOut} Heading 2
{AutoNumOut} Heading 1
```

results in

```
I. Heading 1
A. Heading 2
B. Heading 2
II. Heading 1
```

Field Value: A paragraph number.

Switches: None.

[*Example: When the following fields are updated:*

```
AUTONUMOUT
AUTONUMOUT
```

The results are:

```
1.
2.
```

end example]

14.9.4.4 BARCODE

Syntax:

```
BARCODE field-argument [ switches ]
```

Description: Produces a postal bar code in a machine-readable form of address used by the U.S. Postal Service. The barcode is in the form of either a POSTNET delivery-point bar code or a Facing Identification Mark (FIM). *text* in *field-argument* can be either a postal address or a bookmark name. In the case of a postal address, all that is needed is a 5-digit or 9-digit ZIP code; the rest of the address is superfluous.

Field Value: A postal bar code.

14.9.4.5 BIDIOUTLINE

Syntax:

BIDIOUTLINE

Description: This field is identical to the AUTONUMLGL field (§14.9.4.3), except for the separator that delimits each level of the paragraph numbering (this field uses a hyphen-minus (U+002D) instead of a full stop (U+002E) character as the default separator character).

Field Value: A new paragraph number in ascending sequential order, as defined by the description in §14.9.4.3.

Switches: None.

14.9.4.6 EQ

Syntax:

EQ [*switches*] (*eq-argument-list*) [*switches*]

eq-argument-list is a list of arguments separated using a separator character. For implementations using a period (.) as the radix point, the separator character is a comma (,). For implementations using a comma (,) as the radix point, the separator character is a semicolon (;).

Description: Computes the specified mathematical equation.

Field Value: The result of the specified mathematical equation. [*Note:* The result of an EQ field can be used as an argument in another EQ field's *eq-argument-list*. *end note*]

Switches: The left-hand *switches* can only be one of the following: \a, \b, \d, \f, \i, \l, \o, \r, \s, and \x. Each of these switches has one or more subswitches, as shown below.

\a produces an array using the argument values in *eq-argument-list* (which are in row-major order) and the *field-specific-switches* below:

\ac	Alignment is centered in each array column.
\al	Alignment is left in each array column.
\ar	Alignment is right in each array column.
\co <i>field-argument</i>	The number of columns in the array is specified by <i>text</i> in this switch's <i>field-argument</i> . In the absence of this switch, the number is 1.
\hs <i>field-argument</i>	Adds the integral number of points of horizontal spacing specified by <i>text</i> in this switch's <i>field-argument</i> between columns.
\vs <i>field-argument</i>	Adds the integral number of points of vertical spacing specified by <i>text</i> in this switch's <i>field-argument</i> between lines.

`\b` brackets the single element in *eq-argument-list* in a size appropriate for that element. The default form of brackets is parentheses. The *field-specific-switches* below can be used:

<code>\bc \char</code>	Uses the character designated by <i>char</i> as both the left and right bracket character. However, if <i>char</i> is {, [, (, or <, that character is used for the left bracket, and },],), or >, respectively, is used for right bracket.
<code>\lc \char</code>	Uses the character designated by <i>char</i> as the left bracket character.
<code>\rc \char</code>	Uses the character designated by <i>char</i> as the right bracket character.

`\d` Controls where the next character following the EQ field is drawn (that is, the displacement). *eq-argument-list* shall have no arguments. The *field-specific-switches* below can be used:

<code>\ba field-argument</code>	Draws to the left (backward) the integral number of points specified by <i>text</i> in this switch's <i>field-argument</i> .
<code>\fo field-argument</code>	Draws to the right (forward) the integral number of points specified by <i>text</i> in this switch's <i>field-argument</i> .
<code>\li</code>	Underlines the space up to the next character.

`\f` Creates a fraction with the first argument as numerator and the second argument as denominator, centered above and below the division line, respectively. *eq-argument-list* shall have exactly two arguments. There are no *field-specific-switches* for this switch.

`\i` Creates an integral using the specified or default symbol and three elements. The first argument is the lower limit, the second is the upper limit, and the third is the integrand. *eq-argument-list* shall have exactly three arguments. The *field-specific-switches* below can be used:

<code>\fc \char</code>	Uses the character designated by <i>char</i> as the fixed-height character for the symbol.
<code>\in</code>	Uses an inline format with the limits displayed to the right of the symbol instead of above and below it.
<code>\pr</code>	Uses the symbol Capital pi and creates a product.
<code>\su</code>	Uses the symbol Capital sigma and creates a summation.
<code>\vc \char</code>	Uses the character designated by <i>char</i> as the variable-height character for the symbol. The symbol matches the height of the third argument.

`\lf` Creates a list from an arbitrary number of arguments. There are no *field-specific-switches* for this switch.

`\o` Using an arbitrary number of arguments, displays each successive argument on top of the previous one. Each character is displayed within an invisible character box, with the switches being available to align the boxes on top of one another. The *field-specific-switches* below can be used:

<code>\ac</code>	Alignment character box center (the default).
<code>\al</code>	Alignment character box left.
<code>\ar</code>	Alignment character box right.

`\r` Creates a radical. *eq-argument-list* shall have either one or two arguments. If it has one argument, the result is the square root of that argument. If it has two arguments, the result is the *n*th root of the second argument, where *n* is the first argument. There are no *field-specific-switches* for this switch.

`\s` Creates a subscript or superscript. One or more arguments are permitted. If more than one element is specified, the elements are stacked and left-aligned. The *field-specific-switches* below can be used:

<code>\ai <i>field-argument</i></code>	Adds space above a line in a paragraph by the integral number of points specified by <i>text</i> in this switch's <i>field-argument</i> . The default is 2 points.
<code>\di <i>field-argument</i></code>	Adds space below a line in a paragraph by the integral number of points specified by <i>text</i> in this switch's <i>field-argument</i> .
<code>\do <i>field-argument</i></code>	Moves a single argument below the adjacent text by the integral number of points specified by <i>text</i> in this switch's <i>field-argument</i> . The default is 2 points.
<code>\up <i>field-argument</i></code>	Moves a single argument above the adjacent text by the integral number of points specified by <i>text</i> in this switch's <i>field-argument</i> .

`\x` Creates one or more border segments around a single argument. By default, all four borders are added. *eq-argument-list* shall have no arguments. The *field-specific-switches* below can be used:

<code>\bo</code>	Draws a horizontal border below the argument.
<code>\le</code>	Draws a vertical border to the left of the argument.
<code>\ri</code>	Draws a vertical border to the right of the argument.
<code>\to</code>	Draws a horizontal border above the argument.

[Example: When the following fields are updated:

```
EQ \a \co 2 \ac \hs 10 ( 1000, 20, A, Sunday )
EQ \b \bc \l ( -100 ) EQ \b \bc \l ( \r(3, a + b)
xx EQ \d \fo 20 ( ) xx EQ \d \fo 30 \li ( )xx
EQ \f ( 1, 32 ) EQ \f ( 7, 64 )
EQ \i ( 0, ∞, x ) EQ \i \su \in ( 0, 10, x ) EQ \i \pr \in ( 0, 5, x )
EQ \i \fc \{ ( 0, 5, \f (x, 0.34) ) EQ \i \vc \{ ( 0, 5, \f (x, 0.34) )

EQ \l ( 0, 10 )
EQ \b \lc \l ( \rc \l ( \l ( 0, 10) )
```

$\text{EQ}\backslash\text{o}(0,0,0)$ $\text{EQ}\backslash\text{o}(0,+)$ $\text{EQ}\backslash\text{o}\backslash\text{ar}(0,|,_{-})$
 $\text{EQ}\backslash\text{r}(2)$ $\text{EQ}\backslash\text{r}(2,x)$
 $a\text{EQ}\backslash\text{s}\backslash\text{up}(2)+b\text{EQ}\backslash\text{s}\backslash\text{up}(2)$
 $a\text{EQ}\backslash\text{x}(+)b$ $a\text{EQ}\backslash\text{x}\backslash\text{to}\backslash\text{le}(+)b$ $a\text{EQ}\backslash\text{x}\backslash\text{bo}\backslash\text{ri}(+)b$

The results are:

$\begin{matrix} 1000 & 20 \\ A & \text{Sunday} \end{matrix}$
 $|-100|$ $\left|\sqrt[3]{a+b}\right|$

xx xx_____ xx

$\frac{1}{32} \frac{7}{64}$

$\int_0^{\infty} x \sum_0^{10x} \prod_0^{5x}$

$\left\{ \frac{x}{0.34} \right\}_0^5 \left\{ \frac{x}{0.34} \right\}_0^5$

$0,10$
 $[0,10)$

0 θ \emptyset

$\sqrt{2}$ $\sqrt[2]{x}$

$a^2 + b^2$

$a\boxed{+}b$ $a\overline{+}b$ $a\underline{+}b$

end example]

14.9.4.7 [INFO](#)

Syntax:

INFO info-category [*field-argument*] [*switches*]

This field is documented for purposes of backwards compatibility. Each permitted value for *info-category* is also permitted as a *field-type*. Instances of the INFO field shall be treated as an instance of the *field-type* with the same value as *info-category*; that is, as if the INFO token was not present.

14.9.4.8 QUOTE

This field retrieves the text specified by *text* in *field-argument*. In strict conformance mode, this text may include any other fields except SYMBOL. However, in transitional conformance mode, this text may include any other fields except AUTONUM, AUTONUMLGL, AUTONUMOUT, and SYMBOL.

14.9.5 fldData (Custom Field Data)

This element specifies custom field data which shall be associated with the parent field. No information or semantics are applied to the contents of this data by ECMA-376, and therefore this field can be used as desired to store additional application-defined data with the field. However, applications should not lose the contents of this custom data if they do not understand or utilize it (i.e. the information should continue to be saved with the file).

If this element is omitted, then no custom field data is stored with the parent field. If the type attribute of the current field character is not start, then his setting can be ignored.

[Example: Consider the following WordprocessingML fragment for a complex field:

```
<w:r>
  <w:fldChar w:fldCharType="start">
    <w:fldData xml:space="preserve">///3645ERKJHE</w:fldData>
  </w:fldChar>
</w:r>
<w:r>
  <w:instrText>PRIVATE</w:instrText>
</w:r>
<w:r>
  <w:fldChar w:fldCharType="separate" />
</w:r>
...
```

The fldData element contains custom data stored with this PRIVATE field (Part 1, §17.16.5.48), the contents of which are determined by a hosting application. *end example*]

Parent Elements
fldChar (Part 1, §17.16.18)

Attributes	Description
xml:space (Content	Specifies how white space should be handled for the contents of this element using the

Attributes	Description
Contains Significant Whitespace) Namespace: http://www.w3.org/XML/1998/namespace	<p>W3C space preservation rules.</p> <p>[<i>Example:</i> Consider the following run contained within a WordprocessingML document:</p> <pre><w:r> <w:t> significant whitespace </w:t> </w:r></pre> <p>Although there are three spaces on each side of the text content in the run, that whitespace has not been specifically marked as significant, therefore it is subject to the space preservation rules currently specified in that run's scope. <i>end example</i>]</p> <p>The possible values for this attribute are defined by §2.10 of the XML 1.0 specification.</p>

[*Note:* The W3C XML Schema definition of this element's content model ([CT_Text](#)) is located in §A.1. *end note*]

14.9.6 fldData (Custom Field Data)

This element specifies custom field data which shall be associated with the parent field. No information or semantics are applied to the contents of this data by ECMA-376, and therefore this field can be used as desired to store additional application-defined data with the field. However, applications should not lose the contents of this custom data if they do not understand or utilize it (i.e. the information should continue to be saved with the file).

If this element is omitted, then no custom field data is stored with the parent field.

[*Example:* Consider the following WordprocessingML fragment for a simple field:

```
<w:fldSimple w:instr="PRIVATE">
  <w:fldData xml:space="preserve">///3645ERKJHE</w:fldData>
</w:fldSimple>
```

The fldData element contains custom data stored with this PRIVATE field (Part 1, §17.16.5.48), the contents of which are determined by a hosting application. *end example*]

Parent Elements
fldSimple (Part 1, §17.16.19)

Attributes	Description
xml:space (Content Contains Significant Whitespace)	<p>Specifies how white space should be handled for the contents of this element using the W3C space preservation rules.</p> <p>[<i>Example:</i> Consider the following run contained within a WordprocessingML document:</p>

Attributes	Description
Namespace: http://www.w3.org/XML/1998/namespace	<pre><w:r> <w:t> significant whitespace </w:t> </w:r></pre> <p>Although there are three spaces on each side of the text content in the run, that whitespace has not been specifically marked as significant, therefore it is subject to the space preservation rules currently specified in that run's scope. <i>end example</i></p> <p>The possible values for this attribute are defined by §2.10 of the XML 1.0 specification.</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_Text](#)) is located in §A.1. *end note*]

14.9.7 hyperlink (Hyperlink) (Part 1, §17.16.22)

Attributes	Description
id (Hyperlink Target) Namespace: .../officeDocument/2006/relationships	The same as the id attribute in Part 1, §17.16.22.

14.10 Simple Types

The following additional simple type information in the <http://schemas.openxmlformats.org/wordprocessingml/2006/main> namespace is used for documents of a transitional conformance class.

14.10.1 Additional member types for the union in ST_DecimalNumberOrPercent (Part 1, §17.18.11)

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

- The ST_UnqualifiedPercentage simple type (§14.10.10).

14.10.2 Additional enumeration values for ST_Jc (Part 1, §17.18.44)

The following additional enumeration values can be specified for a document of a transitional conformance class.

Enumeration Value	Description
left (Align to Leading Edge)	Semantically equivalent to start.
right (Align to Trailing Edge)	Semantically equivalent to end.

14.10.3 Additional enumeration values for ST_JcTable (Part 1, §17.18.45)

The following additional enumeration values can be specified for a document of a transitional conformance class.

Enumeration Value	Description
left (Align to Starting Edge)	Specifies that the table shall be aligned to the leading edge of the text flow – the left text margin (for a left-to-right table); or the right text margin (for a right-to-left table) in the document. (See Part 1, §17.4.1)
right (Align to Trailing Edge)	Specifies that the table shall be aligned to the trailing edge of the text flow – the right text margin (for a left-to-right table); or the left text margin (for a right-to-left table) in the document. (See Part 1, §17.4.1)

14.10.4 Additional enumeration values for ST_NumberFormat (Part 1, §17.18.59)

Enumeration Value	Description
decimalFullWidth2 (Full Width Arabic Numerals Alternate)	<p>Specifies that the sequence shall consist of a set of full-width Arabic numbering.</p> <p>To determine the text that is displayed for any value, this sequence specifies a set of characters that represent positions 1–9 and then those same characters are combined with each other and 0 (represents the number zero) to construct the remaining values.</p> <p>The set of characters used by this numbering format for values 0–9 is U+FF10–U+FF19, respectively.</p> <p>For values greater than the size of the set, the number is constructed by following these steps:</p> <ol style="list-style-type: none"> 1. Divide the value by 10 and write the symbol which represents the remainder. 2. Divide the quotient of the previous division by 10 and write the symbol, which represents the remainder, to the left of the existing position. 3. Repeat step 2 until the remaining value is equal to zero. <p>[Example: The numbering for the items should be represented by the following pattern: 1, 2, 3, ..., 8, 9, 10, 11, 12, ..., 18, 19, 20, 21, ... end example]</p>

14.10.5 Additional enumeration values for ST_StyleSort (Part 1, §17.18.82)

The following additional enumeration values can be specified for a document of a transitional conformance class.

Enumeration Value	Description
0000 (Sort by Style Name)	Specifies that styles which are visible should be sorted by their names.
0001 (Sort by Style Priority)	Specifies that styles which are visible should be sorted by their UI priority using the uiPriority element (Part 1, §17.7.4.19).
0002 (Sort by Default Method)	Specifies that styles which are visible should be sorted by the default sorting of the host application.
0003 (Sort by Font)	Specifies that styles which are visible should be sorted by the font which they apply.
0004 (Sort by Based On Style)	Specifies that styles which are visible should be sorted by the style on which they are based using the basedOn element (Part 1, §17.7.4.3).
0005 (Sort by Style Type)	Specifies that styles which are visible should be sorted by their style types (i.e. character, linked, paragraph).

14.10.6 Additional enumeration values for ST_TabJc (Part 1, §17.18.84)

The following additional enumeration values can be specified for a document of a transitional conformance class.

Enumeration Value	Description
left (Leading Tab)	Semantically equivalent to start.
right (Trailing Tab)	Semantically equivalent to end.

14.10.7 Additional enumeration values for ST_TextDirection (Part 1, §17.18.93)

The following additional enumeration values can be specified for a document of a transitional conformance class.

Enumeration Value	Description
btLr (Lines Flow From Left to Right)	Semantically equivalent to lr.
lrTb (Lines Flow From Top To Bottom)	Semantically equivalent to tb.
lrTbV (Lines Flow From Top to Bottom, Rotated)	Semantically equivalent to tbV.
tbLrV (Lines Flow From Left to Right, Rotated)	Semantically equivalent to lrV.
tbRl (Lines Flow From Right to Left)	Semantically equivalent to rl.
tbRlV (Lines Flow From Right to Left, Rotated)	Semantically equivalent to rlV.

14.10.8 Additional member types for the union in ST_TextScale (Part 1, §17.18.95)

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

The ST_TextScaleDecimal simple type (§9.10.11).

14.10.9 ST_Cnf (Conditional Formatting Bitmask)

This simple type specifies the format for the set of conditional formatting properties that have been applied to this object.

These properties are expressed using a string serialization of a binary bitmask for each of the following properties (reading from the first character position right):

- First Row - Is this the first row of the table?
- Last Row - Is this the last row of the table?
- First Column - Does this belong to the first column of the table?
- Last Column - Does this belong to the last column of the table?
- Band 1 Vertical - Does this belong to a column which should receive band 1 formatting? This property specifies whether the cell should receive the formatting specified for odd-numbered columns (e.g. 1,3,5,...)
- Band 2 Vertical - Does this belong to a column which should receive band 2 formatting? This property specifies whether the cell should receive the formatting specified for even-numbered columns (e.g. 2,4,6...)
- Band 1 Horizontal - Does this receive band 1 formatting? This property specifies whether the cell should receive the formatting specified for odd-numbered rows (e.g. 1,3,5,...)
- Band 2 Horizontal - Does this receive band 2 formatting? This property specifies whether the cell should receive the formatting specified for even-numbered rows (e.g. 2,4,6...)
- NE Cell - Is this part of the top-right corner of the table?
- NW Cell - Is this part of the top-left corner of the table?
- SE Cell - Is this part of the bottom-right corner of the table?
- SW Cell - Is this part of the bottom-left corner of the table?

For each of these properties, a value of 1 in the specified character position in the string means that the value is true, a value of 0 means false. All values shall be specified.

[*Example:* Consider a paragraph in the top right corner of a table with a table style applied. This paragraph would need to specify the following WordprocessingML:

```
<w:p>
  <w:pPr>
    <w:cnfStyle w:val="101000000100" />
    ...
  </w:pPr>
```

...
</w:p>

This paragraph specifies that it has the conditional properties from the table style for the first column, first row, and the NW corner of the parent table by setting the appropriate bits in the val attribute. *end example*

This simple type's contents are a restriction of the W3C XML Schema string datatype.

This simple type also specifies the following restrictions:

- This simple type's contents have a length of exactly 12 characters.
- This simple type's contents shall match the following regular expression pattern: [01]*.

Referenced By
cnfStyle@val (§14.3.9); cnfStyle@val (§14.2.1.1); cnfStyle@val (§14.3.9)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_Cnf](#)) is located in §A.1. *end note*]

14.10.10 ST_UnqualifiedPercentage (Percentage Value Without Percent Sign)

This simple type specifies additional formats for percentage-based values which can only be used within the transitional conformance class.

Specifically, this value allows percentage-based values to be specified as follows:

- For the w attribute in CT_TblWidth (Part 1, §17.4.88), the value is stored in 50ths of a percent.
- For all other uses, the value is stored in whole percentage points.

[Example: Consider the following WordprocessingML fragment:

```
<w:tblW w:w="1000" w:type="pct" />
```

The tblW element is based on the CT_TblWidth complex type, and the type attribute's value is pct, which means that this value is measured in 50ths of a percent (i.e. 1000 is equal to 20%). *end example*

This simple type's contents are a restriction of the W3C XML Schema integer datatype.

Referenced By
ST_DecimalNumberOrPercent (Part 1, §17.18.11)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_UnqualifiedPercentage](#)) is located in §A.1. *end note*]

14.10.11 ST_TextScaleDecimal (Text Expansion/Compression Percentage)

This simple type specifies that the percentage by which the contents of a run shall be expanded or compressed with respect to its normal (100%) character width, with a minimum width of 1% and maximum width of 600%.

[*Example:* Consider a run of text which must be expanded to 300% when displaying each character within the contents of the run. This constraint is specified using the following WordprocessingML:

```
<w:rPr>
  <w:w w:val="300"/>
</w:rPr>
```

This run explicitly declares that the *w* value is 300, so the contents of this run appear at 300% of their normal character width by expanding the width of each character. *end example*]

This simple type's contents are a restriction of the W3C XML Schema integer datatype.

This simple type also specifies the following restrictions:

This simple type has a minimum value of greater than or equal to 0.

This simple type has a maximum value of less than or equal to 600.

Referenced By
ST_TextScale (§17.18.95)

14.11 Changed attributes

The following attributes, which are defined in subclauses within Part 1, §17, “WordprocessingML”, have different source relationships when used in documents of the Transitional conformance class:

14.11.1 Changed attribute for contentPart element (Part 1, §17.3.3.2)

Attributes	Description
id (Relationship to Part)	Specifies the relationship ID to a specified part.
Namespace: .../officeDocument /2006/relationships	<p>The specified relationship shall match the relationship type required by the parent element:</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/customXml for the contentPart element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/footer for the footerReference element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/header for the headerReference element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/font for the embedBold, embedBoldItalic, embedItalic, or embedRegular elements</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/printe</p>

Attributes	Description
	<p>rSettings for the printerSettings element http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink for the longDesc or hyperlink element</p> <p>[<i>Example:</i> Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 contains the corresponding relationship information for the parent XML element. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.2 Changed attribute for control element (Part 1, §17.3.3.3)

Attributes	Description
<p>id (Embedded Control Properties Relationship Reference)</p> <p>Namespace: .../officeDocument/2006/relationships</p>	<p>Specifies the relationship ID for the relationship that contains the properties for this embedded control. This property bag is contained in a separate part within the Office Open XML package.</p> <p>The relationship explicitly targeted by this attribute shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/control or the document shall be considered non-conformant.</p> <p>If this attribute is omitted, then the embedded control shall be given no property bag when instantiated.</p> <p>[<i>Example:</i> Consider the following WordprocessingML markup for an embedded control in a document:</p> <pre><w:control r:id="rId5" w:name="CheckBox1" w:shapeid="_x0000_s1027" /></pre> <p>The id attribute in the relationship reference namespace specifies that the relationship with relationship ID rId5 must contain the property data for this embedded control. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.3 Changed attribute for movie element (Part 1, §17.3.3.17)

Attributes	Description
<p>id (Relationship to Part)</p>	<p>Specifies the relationship ID to a specified part.</p>

Attributes	Description
<p>Namespace: .../officeDocument/2006/relationships</p>	<p>The specified relationship shall match the relationship type required by the parent element:</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/customXml for the contentPart element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/footer for the footerReference element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/header for the headerReference element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/font for the embedBold, embedBoldItalic, embedItalic, or embedRegular elements</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/printerSettings for the printerSettings element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink for the longDesc or hyperlink element</p> <p>[<i>Example:</i> Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 contains the corresponding relationship information for the parent XML element. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.4 Changed attribute for objectEmbed element (Part 1, §17.3.3.20)

Attributes	Description
<p>id (Relationship to Embedded Object Data)</p> <p>Namespace: .../officeDocument/2006/relationships</p>	<p>Specifies the relationship ID for the relationship that targets the Embedded Object Part containing the embedded object data.</p> <p>The specified relationship shall be of type http://schemas.openxmlformats.org/officeDocument/2006/oleObject or the document shall be considered non-conformant.</p> <p>[<i>Example:</i> Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 targets the part containing the corresponding embedded object information. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.5 Changed attribute for objectLink element (Part 1, §17.3.3.21)

Attributes	Description
id (Relationship to Embedded Object Data) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship ID for the relationship that targets the Embedded Object Part containing the embedded object data.</p> <p>The specified relationship shall be of type <code>http://schemas.openxmlformats.org/officeDocument/2006/oleObject</code> or the document shall be considered non-conformant.</p> <p>[<i>Example</i>: Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 targets the part containing the corresponding embedded object information. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.6 Changed attribute for bottom element (Part 1, §17.6.2)

Attributes	Description
bottomLeft (Custom Defined Bottom Left Border Relationship Reference) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship ID for the relationship that contains the custom bottom left border image for the parent element. This custom border image is contained in a separate part within the WordprocessingML package.</p> <p>The relationship explicitly targeted by this attribute shall be of type <code>http://schemas.openxmlformats.org/officeDocument/2006/relationships/image</code> or the document shall be considered non-conformant.</p> <p>If this attribute is omitted, then no custom bottom left border shall be used.</p> <p>[<i>Example</i>: Consider the following WordprocessingML markup for a custom bottom left border in a document:</p> <pre><w:bottom w:val="custom" r:bottomLeft="rIdCustomBottomLeftBorder" .../></pre> <p>The id attribute in the relationship reference namespace specifies that the relationship with relationship ID rIdCustomBottomLeftBorder must contain the custom bottom left border image for the document. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>
bottomRight (Custom Defined	<p>Specifies the relationship ID for the relationship that contains the custom bottom right border image for the parent element. This custom border image is contained in a</p>

Attributes	Description
<p>Bottom Right Border Relationship Reference)</p> <p>Namespace: .../officeDocument/2006/relationships</p>	<p>separate part within the WordprocessingML package.</p> <p>The relationship explicitly targeted by this attribute shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/image or the document shall be considered non-conformant.</p> <p>If this attribute is omitted, then no custom bottom right border shall be used.</p> <p>[<i>Example:</i> Consider the following WordprocessingML markup for a custom bottom right border in a document:</p> <pre><w:bottom w:val="custom" r:bottomRight="rIdCustomBottomRightBorder" .../></pre> <p>The id attribute in the relationship reference namespace specifies that the relationship with relationship ID rIdCustomBottomRightBorder must contain the custom bottom right border image for the document. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>
<p>id (Custom Defined Border Relationship Reference)</p> <p>Namespace: .../officeDocument/2006/relationships</p>	<p>Specifies the relationship ID for the relationship that contains the custom border image for the parent element. This custom border image is contained in a separate part within the WordprocessingML package.</p> <p>The relationship explicitly targeted by this attribute shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/image or the document shall be considered non-conformant.</p> <p>If this attribute is omitted, then no custom border shall be used.</p> <p>[<i>Example:</i> Consider the following WordprocessingML markup for a custom bottom border in a document:</p> <pre><w:bottom w:val="custom" r:id="rIdCustomBottomBorder" .../></pre> <p>The id attribute in the relationship reference namespace specifies that the relationship with relationship ID rIdCustomBottomBorder must contain the custom bottom border image for the document. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.7 Changed attribute for left element (Part 1, §17.6.7)

Attributes	Description
id (Custom Defined	Specifies the relationship ID for the relationship that contains the custom border image

Attributes	Description
Border Relationship Reference) Namespace: .../officeDocument/2006/relationships	<p>for the parent element. This custom border image is contained in a separate part within the WordprocessingML package.</p> <p>The relationship explicitly targeted by this attribute shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/image or the document shall be considered non-conformant.</p> <p>If this attribute is omitted, then no custom border shall be used.</p> <p>[<i>Example:</i> Consider the following WordprocessingML markup for a custom bottom border in a document:</p> <pre><w:bottom w:val="custom" r:id="rIdCustomBottomBorder" .../></pre> <p>The id attribute in the relationship reference namespace specifies that the relationship with relationship ID rIdCustomBottomBorder must contain the custom bottom border image for the document. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.8 Changed attribute for printerSettings element (Part 1, §17.6.14)

Attributes	Description
id (Relationship to Part) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship ID to a specified part.</p> <p>The specified relationship shall match the relationship type required by the parent element:</p> <ul style="list-style-type: none"> http://schemas.openxmlformats.org/officeDocument/2006/customXml for the contentPart element http://schemas.openxmlformats.org/officeDocument/2006/relationships/footer for the footerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/header for the headerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/font for the embedBold, embedBoldItalic, embedItalic, or embedRegular elements http://schemas.openxmlformats.org/officeDocument/2006/relationships/printerSettings for the printerSettings element http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink for the longDesc or hyperlink element <p>[<i>Example:</i> Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 contains</p>

Attributes	Description
	<p>the corresponding relationship information for the parent XML element. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.9 Changed attribute for right element (Part 1, §17.6.15)

Attributes	Description
<p>id (Custom Defined Border Relationship Reference)</p> <p>Namespace: .../officeDocument/2006/relationships</p>	<p>Specifies the relationship ID for the relationship that contains the custom border image for the parent element. This custom border image is contained in a separate part within the WordprocessingML package.</p> <p>The relationship explicitly targeted by this attribute shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/image or the document shall be considered non-conformant.</p> <p>If this attribute is omitted, then no custom border shall be used.</p> <p>[<i>Example:</i> Consider the following WordprocessingML markup for a custom bottom border in a document:</p> <pre><w:bottom w:val="custom" r:id="rIdCustomBottomBorder" .../></pre> <p>The id attribute in the relationship reference namespace specifies that the relationship with relationship ID rIdCustomBottomBorder must contain the custom bottom border image for the document. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.10 Changed attribute for top element (Part 1, §17.6.21)

Attributes	Description
<p>id (Custom Defined Border Relationship Reference)</p> <p>Namespace: .../officeDocument/2006/relationships</p>	<p>Specifies the relationship ID for the relationship that contains the custom border image for the parent element. This custom border image is contained in a separate part within the WordprocessingML package.</p> <p>The relationship explicitly targeted by this attribute shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/image or the document shall be considered non-conformant.</p> <p>If this attribute is omitted, then no custom border shall be used.</p> <p>[<i>Example:</i> Consider the following WordprocessingML markup for a custom bottom border in a document:</p>

Attributes	Description
	<p><code><w:bottom w:val="custom" r:id="rIdCustomBottomBorder" .../></code></p> <p>The id attribute in the relationship reference namespace specifies that the relationship with relationship ID <code>rIdCustomBottomBorder</code> must contain the custom bottom border image for the document. <i>end example</i></p> <p>The possible values for this attribute are defined by the <code>ST_RelationshipId</code> simple type (Part 1, §22.8.2.1).</p>
<p><code>topLeft</code> (Custom Defined Top Left Border Relationship Reference)</p> <p>Namespace: .../officeDocument/2006/relationships</p>	<p>Specifies the relationship ID for the relationship that contains the custom top left border image for the parent element. This custom border image is contained in a separate part within the WordprocessingML package.</p> <p>The relationship explicitly targeted by this attribute shall be of type <code>http://schemas.openxmlformats.org/officeDocument/2006/relationships/image</code> or the document shall be considered non-conformant.</p> <p>If this attribute is omitted, then no custom top left border shall be used.</p> <p>[<i>Example:</i> Consider the following WordprocessingML markup for a custom top left border in a document:</p> <p><code><w:top w:val="custom" r:topLeft="rIdCustomTopLeftBorder" .../></code></p> <p>The id attribute in the relationship reference namespace specifies that the relationship with relationship ID <code>rIdCustomTopLeftBorder</code> must contain the custom top left border image for the document. <i>end example</i></p> <p>The possible values for this attribute are defined by the <code>ST_RelationshipId</code> simple type (Part 1, §22.8.2.1).</p>
<p><code>topRight</code> (Custom Defined Top Right Border Relationship Reference)</p> <p>Namespace: .../officeDocument/2006/relationships</p>	<p>Specifies the relationship ID for the relationship that contains the custom top right border image for the parent element. This custom border image is contained in a separate part within the WordprocessingML package.</p> <p>The relationship explicitly targeted by this attribute shall be of type <code>http://schemas.openxmlformats.org/officeDocument/2006/relationships/image</code> or the document shall be considered non-conformant.</p> <p>If this attribute is omitted, then no custom top right border shall be used when the parent element is instantiated.</p> <p>[<i>Example:</i> Consider the following WordprocessingML markup for a custom top right border in a document:</p> <p><code><w:top w:val="custom" r:topRight="rIdCustomTopRightBorder" ... /></code></p>

Attributes	Description
	<p>The id attribute in the relationship reference namespace specifies that the relationship with relationship ID rIdCustomTopRightBorder must contain the custom top right border image for the document. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.11 Changed attribute for embedBold element (Part 1, §17.8.3.3)

Attributes	Description
<p>id (Relationship to Part)</p> <p>Namespace: .../officeDocument/2006/relationships</p>	<p>Specifies the relationship ID to a specified part.</p> <p>The specified relationship shall match the relationship type required by the parent element:</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/customXml for the contentPart element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/footer for the footerReference element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/header for the headerReference element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/font for the embedBold, embedBoldItalic, embedItalic, or embedRegular elements</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/printerSettings for the printerSettings element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink for the longDesc or hyperlink element</p> <p>[Example: Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 contains the corresponding relationship information for the parent XML element. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.12 Changed attribute for embedBoldItalic element (Part 1, §17.8.3.4)

Attributes	Description
<p>id (Relationship to Part)</p> <p>Namespace: .../officeDocument/2006/relationships</p>	<p>Specifies the relationship ID to a specified part.</p> <p>The specified relationship shall match the relationship type required by the parent element:</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/customXml for the contentPart element</p>

Attributes	Description
ps	<p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/footer for the footerReference element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/header for the headerReference element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/font for the embedBold, embedBoldItalic, embedItalic, or embedRegular elements</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/printerSettings for the printerSettings element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink for the longDesc or hyperlink element</p> <p>[Example: Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 contains the corresponding relationship information for the parent XML element. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.13 Changed attribute for embedItalic element (Part 1, §17.8.3.5)

Attributes	Description
id (Relationship to Part) Namespace: .../officeDocument/2006/relationships ps	<p>Specifies the relationship ID to a specified part.</p> <p>The specified relationship shall match the relationship type required by the parent element:</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/customXml for the contentPart element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/footer for the footerReference element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/header for the headerReference element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/font for the embedBold, embedBoldItalic, embedItalic, or embedRegular elements</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/printerSettings for the printerSettings element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink for the longDesc or hyperlink element</p> <p>[Example: Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 contains the corresponding relationship information for the parent XML element. <i>end example</i>]</p>

Attributes	Description
	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

14.11.14 Changed attribute for embedRegular element (Part 1, §17.8.3.6)

Attributes	Description
id (Relationship to Part) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship ID to a specified part.</p> <p>The specified relationship shall match the relationship type required by the parent element:</p> <ul style="list-style-type: none"> http://schemas.openxmlformats.org/officeDocument/2006/customXml for the contentPart element http://schemas.openxmlformats.org/officeDocument/2006/relationships/footer for the footerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/header for the headerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/font for the embedBold, embedBoldItalic, embedItalic, or embedRegular elements http://schemas.openxmlformats.org/officeDocument/2006/relationships/printerSettings for the printerSettings element http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink for the longDesc or hyperlink element <p>[Example: Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 contains the corresponding relationship information for the parent XML element. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.15 Changed attribute for footerReference element (Part 1, §17.10.2)

Attributes	Description
id (Relationship to Part) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship ID to a specified part.</p> <p>The specified relationship shall match the relationship type required by the parent element:</p> <ul style="list-style-type: none"> http://schemas.openxmlformats.org/officeDocument/2006/customXml for the contentPart element http://schemas.openxmlformats.org/officeDocument/2006/relationships/footer for the footerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/header

Attributes	Description
	<p> http://schemas.openxmlformats.org/officeDocument/2006/relationships/font for the headerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/printerSettings for the embedBold, embedBoldItalic, embedItalic, or embedRegular elements http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink for the printerSettings element http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink for the longDesc or hyperlink element </p> <p>[Example: Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 contains the corresponding relationship information for the parent XML element. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.16 Changed attribute for headerReference element (Part 1, §17.10.5)

Attributes	Description
<p>id (Relationship to Part)</p> <p>Namespace: .../officeDocument/2006/relationships</p>	<p>Specifies the relationship ID to a specified part.</p> <p>The specified relationship shall match the relationship type required by the parent element:</p> <p> http://schemas.openxmlformats.org/officeDocument/2006/customXml for the contentPart element http://schemas.openxmlformats.org/officeDocument/2006/relationships/footer for the footerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/header for the headerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/font for the embedBold, embedBoldItalic, embedItalic, or embedRegular elements http://schemas.openxmlformats.org/officeDocument/2006/relationships/printerSettings for the printerSettings element http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink for the longDesc or hyperlink element </p> <p>[Example: Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 contains the corresponding relationship information for the parent XML element. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type</p>

Attributes	Description
	(Part 1, §22.8.2.1).

14.11.17 Changed attribute for dataSource element (Part 1, §17.14.9)

Attributes	Description
id (Relationship to Part) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship ID to a specified part.</p> <p>The specified relationship shall match the relationship type required by the parent element:</p> <ul style="list-style-type: none"> http://schemas.openxmlformats.org/officeDocument/2006/customXml for the contentPart element http://schemas.openxmlformats.org/officeDocument/2006/relationships/footer for the footerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/header for the headerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/font for the embedBold, embedBoldItalic, embedItalic, or embedRegular elements http://schemas.openxmlformats.org/officeDocument/2006/relationships/printerSettings for the printerSettings element http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink for the longDesc or hyperlink element <p>[Example: Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 contains the corresponding relationship information for the parent XML element. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.18 Changed attribute for headerSource element (Part 1, §17.14.16)

Attributes	Description
id (Relationship to Part) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship ID to a specified part.</p> <p>The specified relationship shall match the relationship type required by the parent element:</p> <ul style="list-style-type: none"> http://schemas.openxmlformats.org/officeDocument/2006/customXml for the contentPart element http://schemas.openxmlformats.org/officeDocument/2006/relationships/footer for the footerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/header for the headerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/font

Attributes	Description
	<p>for the embedBold, embedBoldItalic, embedItalic, or embedRegular elements http://schemas.openxmlformats.org/officeDocument/2006/relationships/printerSettings for the printerSettings element http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink for the longDesc or hyperlink element</p> <p>[<i>Example:</i> Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 contains the corresponding relationship information for the parent XML element. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.19 Changed attribute for recipientData element (Part 1, §17.14.28)

Attributes	Description
<p>id (Relationship to Part)</p> <p>Namespace: .../officeDocument/2006/relationships</p>	<p>Specifies the relationship ID to a specified part.</p> <p>The specified relationship shall match the relationship type required by the parent element:</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/customXml for the contentPart element http://schemas.openxmlformats.org/officeDocument/2006/relationships/footer for the footerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/header for the headerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/font for the embedBold, embedBoldItalic, embedItalic, or embedRegular elements http://schemas.openxmlformats.org/officeDocument/2006/relationships/printerSettings for the printerSettings element http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink for the longDesc or hyperlink element</p> <p>[<i>Example:</i> Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 contains the corresponding relationship information for the parent XML element. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.20 Changed attribute for src element (Part 1, §17.14.30)

Attributes	Description
id (Relationship to Part) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship ID to a specified part.</p> <p>The specified relationship shall match the relationship type required by the parent element:</p> <ul style="list-style-type: none"> http://schemas.openxmlformats.org/officeDocument/2006/customXml for the contentPart element http://schemas.openxmlformats.org/officeDocument/2006/relationships/footer for the footerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/header for the headerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/font for the embedBold, embedBoldItalic, embedItalic, or embedRegular elements http://schemas.openxmlformats.org/officeDocument/2006/relationships/printerSettings for the printerSettings element http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink for the longDesc or hyperlink element <p>[Example: Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 contains the corresponding relationship information for the parent XML element. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.21 Changed attribute for attachedTemplate element (Part 1, §17.15.1.6)

Attributes	Description
id (Relationship to Part) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship ID to a specified part.</p> <p>The specified relationship shall match the relationship type required by the parent element:</p> <ul style="list-style-type: none"> http://schemas.openxmlformats.org/officeDocument/2006/customXml for the contentPart element http://schemas.openxmlformats.org/officeDocument/2006/relationships/footer for the footerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/header for the headerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/font for the embedBold, embedBoldItalic, embedItalic, or embedRegular elements http://schemas.openxmlformats.org/officeDocument/2006/relationships/printerSettings for the printerSettings element http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink

Attributes	Description
	<p>link for the longDesc or hyperlink element</p> <p>[<i>Example:</i> Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 contains the corresponding relationship information for the parent XML element. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.22 Changed attribute for saveThroughXslt element (Part 1, §17.15.1.76)

Attributes	Description
id (XSL Transformation Location) Namespace: .../officeDocument/2006/relationships	<p>Specifies an explicit relationship to the location of the XSL Transformation which shall be applied.</p> <p>The relationship targeted by this element shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/transform, or this document shall be declared non-conformant.</p> <p>[<i>Example:</i> Consider a XML document that must have the XSL transform located at c:\Example Transform.xslt applied when the document is saved as a single XML file. This requirement would be specified using the following WordprocessingML in the document settings:</p> <pre><w:saveThroughXslt r:id="rId5" /></pre> <p>The saveThroughXslt element specifies that the relationship located at rId5 must be used when saving as a single XML file in this case, that relationship must target c:\Example Transform.xslt. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.23 Changed attribute for longDesc element (Part 1, §17.15.2.23)

Attributes	Description
id (Relationship to Part) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship ID to a specified part.</p> <p>The specified relationship shall match the relationship type required by the parent element:</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/customXml for the contentPart element</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/relationships/footer</p>

Attributes	Description
	<p>for the footerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/header for the headerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/font for the embedBold, embedBoldItalic, embedItalic, or embedRegular elements http://schemas.openxmlformats.org/officeDocument/2006/relationships/printerSettings for the printerSettings element http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink for the longDesc or hyperlink element</p> <p>[Example: Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 contains the corresponding relationship information for the parent XML element. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.24 Changed attribute for sourceFileName element (Part 1, §17.15.2.39)

Attributes	Description
id (Relationship to Part) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship ID to a specified part.</p> <p>The specified relationship shall match the relationship type required by the parent element:</p> <p>http://schemas.openxmlformats.org/officeDocument/2006/customXml for the contentPart element http://schemas.openxmlformats.org/officeDocument/2006/relationships/footer for the footerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/header for the headerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/font for the embedBold, embedBoldItalic, embedItalic, or embedRegular elements http://schemas.openxmlformats.org/officeDocument/2006/relationships/printerSettings for the printerSettings element http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink for the longDesc or hyperlink element</p> <p>[Example: Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 contains the corresponding relationship information for the parent XML element. <i>end example</i>]</p>

Attributes	Description
	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

14.11.25 Changed attribute for subDoc element (Part 1, §17.17.1.1)

Attributes	Description
id (Relationship to Part) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship ID to a specified part.</p> <p>The specified relationship shall match the relationship type required by the parent element:</p> <ul style="list-style-type: none"> http://schemas.openxmlformats.org/officeDocument/2006/customXml for the contentPart element http://schemas.openxmlformats.org/officeDocument/2006/relationships/ for the footerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/header for the headerReference element http://schemas.openxmlformats.org/officeDocument/2006/relationships/font for the embedBold, embedBoldItalic, embedItalic, or embedRegular elements http://schemas.openxmlformats.org/officeDocument/2006/relationships/printerSettings for the printerSettings element http://schemas.openxmlformats.org/officeDocument/2006/relationships/hyperlink for the longDesc or hyperlink element <p>[Example: Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 contains the corresponding relationship information for the parent XML element. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

14.11.26 Changed attribute for altChunk element (Part 1, §17.17.2.1)

Attributes	Description
id (Relationship to Part) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship ID to a specified part containing alternate content for import.</p> <p>If the specified relationship does not match the relationship type required by the parent element, then this document shall be considered to be non-conformant.</p> <p>[Example: Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre>

Attributes	Description
	<p>The markup specifies the associated relationship part with relationship ID rId1 contains the corresponding relationship information for the parent XML element. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (\$Part 1, §22.8.2.1).</p>

15. SpreadsheetML Reference Material

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End of informative text.

15.2 Workbook

15.2.1 Additional attribute for fileSharing element (Part 1, §18.2.12)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
reservationPassword (Write Reservation Password)	<p>Specifies the legacy hash of the password required for editing this workbook.</p> <p>The hash is generated using the logic defined in the revisionsPassword attribute of the workbookProtection element (Part 1, §18.2.29).</p> <p>The possible values for this attribute are defined by the ST_UnsignedShortHex simple type (§15.7.2).</p>

15.2.2 Additional attribute for webPublishing element (Part 1, §18.2.24)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
codePage (Code Page)	<p>This attribute is used only for compatibility with the existing corpus of binary documents, and is ignored if the characterSet attribute is present. Specifies the encoding the application uses when a Web page is saved. A code page is a table that relates the binary character codes used by a program to keys on the keyboard or to the appearance of characters on the display. Code pages are a means of providing support for the languages used in different countries.</p> <p>[Note: There are a number of code page technologies. One example of potential values can be found at: http://www.unicode.org/Public/MAPPINGS/ end note]</p> <p>The default value for this attribute is the workbook's encoding.</p> <p>The possible values for this attribute are defined by the W3C XML Schema unsignedInt datatype.</p>

15.2.3 Additional attributes for workbookProtection element (Part 1, §18.2.29)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
revisionsPassword (Legacy Revisions Password)	<p>Specifies the legacy hash of the password required for unlocking revisions in this workbook. The hash is generated from an 8-bit wide character. The input string shall be in UTF-16LE format (if there is a leading BOM character (U+FEFF) in the encoded password it is removed before hash calculation), and these 16-bit Unicode characters shall be converted down to 8 bits before the hash is computed, using the following logic:</p> <p>[Note: This legacy conversion attempts to fit UTF-16 encoded characters into a single-byte character set. As such, if the input string uses characters from multiple character sets, many characters are unmapped in the destination character set and take on the default value, 0x3F. For this reason, it is recommended that applications choose a character set which maps the maximum number of characters from the input string and explicitly declare the character set used in the revisionsCharacterSet attribute. Not</p>

Attributes	Description
	<p>doing so will inhibit interoperability. <i>end note</i>]</p> <p>For SpreadsheetML password hash purposes, Unicode UTF-16 input code points are converted to a single or double byte character set.</p> <p>Code points with no representation in the target character set are replaced with Unicode character 0x3f (?).</p> <p>The values permitted by this attribute are names and aliases listed in the IANA character set listing found at http://www.iana.org/assignments/character-sets.</p> <p>For single byte character sets, each Unicode code point is replaced by a single byte or 0x3f if an appropriate character doesn't exist in the character set.</p> <p>For double byte character sets, each Unicode code point is replaced by either a single byte, or a two byte sequence, depending on the input character, or 0x3f if an appropriate character doesn't exist in the character set. In our tables the target is a single byte sequence if the most significant byte is 0x00, otherwise it is a double byte sequence, with the lead byte being the most significant byte.</p> <p>To convert, first check if conversion is being done to a single or double byte code page and load the appropriate WCTABLE code page table.</p> <p>For each input character, look up the code point in the WCTABLE. There are 3 possibilities: Not found, single byte, or double byte.</p> <ul style="list-style-type: none"> • If the input character is not found, append 0x3f and continue to the next character. • If the result is a single byte, check to make sure the entry in the MBTABLE matches the input. If it matches, append the single byte to the output. If it does not match, append 0x3f to the output. • If the result is a double byte, check to make sure the entry in the DBCSEENTRY table for the appropriate lead byte matches the input character. If it matches, append the lead byte and trail byte to the output. If it does not match, append 0x3f to the output. <p>The following pseudocode describes how this conversion should be done:</p> <pre> int WideCharToMultiByte(wchar_t* wszInput, byte* szOutput) { // Remember output start so we can return length byte* szOutputStart = szOutput; // Load Character Set Tables and determine // double/single byte nature. // This will depend on how the character sets are </pre>

Attributes	Description
	<pre> represented on // the target machine. TABLECLASS represents some abstract // representation of this structure here. TABLECLASS pTables = LoadCharacterSetTables(); Bool bDoubleByte = IsCharacterSetDoubleByte(); while (*wszInput != 0) { if (bDoubleByte) szOutput = AppendDoubleByte(pTables, *wszInput, szOutput); else szOutput = AppendSingleByte(pTables, *wszInput, szOutput); // Read next input wchar_t wszInput++; } // Null terminate the output *szOutput = 0; // Return output length return szOutput - szOutputStart; } byte* AppendSingleByte(TABLECLASS pTables, wchar_t wcIn, byte* szOutput) { // Look up byte that we want to append. byte bOut = pTables->LookupSingleByte(wcIn); // Make sure that bOut matches the input, otherwise use ? // (ie: no best fit behavior allowed) if (wcIn != pTables->LookupWideChar(bOut)) bOut = 0x3f; *szOutput = bOut; szOutput++; return szOutput; } byte* AppendDoubleByte(TABLECLASS pTables, wchar_t wcIn, byte* szOutput) { // Look up bytes that we want to append. UINT16 bytesOut = pTables->LookupDoubleByte(wcIn); </pre>

Attributes	Description
	<pre> // See if it is a single or double byte sequence if (bytesOut & 0xFF00) { // It is a double byte sequence // Make sure that bytesOut matches the input, otherwise use ? // (ie: no best fit behavior allowed) if (wcIn != pTables->LookUpWideChar(bytesOut)) { // Use ?, it will be added below bytesOut = 0x003f; } else { // It matched, use the lead byte we found // trail byte will be added below *szOutput = bytesOut >> 8; szOutput++; } } else { // It is a single byte sequence // Make sure that bytesOut matches the input, otherwise use ? // (ie: no best fit behavior allowed) if (wcIn != pTables->LookUpWideChar(bytesOut & 0xFF)) bytesOut = 0x003f; } // Add the single or trail byte *szOutput = bytesOut & 0xFF; szOutput++; return szOutput; } class pTables { // Construction depends on how you choose to store & load the // table files byte LookUpSingleByte(wchar_t wcIn) { // How you access the table depends on your storage mechanism. // Look up the line in WCTABLE where the first column </pre>

Attributes	Description
	<pre> matches wcIn, // and then return the byte value from the second column. if (exists WCTABLE{wcIn}) return WCTABLE{wcIn}.SecondColumn; // If it doesn't exist, return ? return 0x3f; } UINT16 LookUpDoubleByte(wchar_t wcIn) { // How you access the table depends on your storage mechanism. // Look up the line in WCTABLE where the first column matches wcIn, // and then return the double byte value from the second column. if (exists WCTABLE{wcIn}) return WCTABLE{wcIn}.SecondColumn; // If it doesn't exist, return ? return 0x003f; } // Overload that looks up wide chars from single byte code points. wchar_t LookUpWideChar(byte bIn) { // How you access the table depends on your storage mechanism. // Look up the line in MBTABLE where the first column matches bIn, // and then return the wchar_t value from the second column. if (exists MBTABLE{bIn}) return MBTABLE{bIn}.SecondColumn; // If it doesn't exist, return ? return 0x003f; } // Overload that looks up wide chars from double byte code points wchar_t LookUpWideChar(UINT16 bytesIn) { // How you access the table depends on your storage mechanism. </pre>

Attributes	Description
	<pre> // First find the DBCSTABLE where the LeadByte matches // the lead (most significant) input byte. if (exists DBCSTABLE{bytesIn >> 8}) { DbcsTable = DBCSTABLE{bytesIn >> 8}; // Look up the line in DbcsTable where the first column // matches the input trail (least significant) byte, // and then return the wchar_t value from the second column. if (exists DbcsTable{bytesIn & 0xFF}) return DbcsTable{bytesIn & 0xFF}.SecondColumn; } // Either the lead byte table or specific trail byte // doesn't exist in the table, return ? return 0x003f; } } </pre> <p>The resulting value is hashed using the low-order word algorithm defined in §14.7.1. This step assumes that all words are unsigned, the word size is two bytes, and that bit-level shift-left/shift-right operations shift in the direction of the highest-order and lowest-order bit, respectively. [Example: 0x61 SHR 1 is 0xC2, as 01100001 shifted one position in the direction of its highest-order bit is 11000010. end example]</p> <p>[Example: This algorithm can be represented by the following pseudocode:</p> <pre> // Function Input: // szPassword: NULL terminated C-Style string // cchPassword: The number of characters in szPassword (not // including the NULL terminator) unsigned_short GetPasswordHash(const char *szPassword, int cchPassword) { unsigned_short wPasswordHash; const char *pch; wPasswordHash = 0; if (cchPassword > 0) { pch = &szPassword[cchPassword]; while (pch-- != szPassword) { wPasswordHash = ((wPasswordHash >> 14) & 0x01) ((wPasswordHash << 1) & 0x7fff); </pre>

Attributes	Description
	<pre> wPasswordHash ^= *pch; } wPasswordHash = ((wPasswordHash >> 14) & 0x01) ((wPasswordHash << 1) & 0x7fff); wPasswordHash ^= cchPassword; wPasswordHash ^= (0x8000 ('N' << 8) 'K'); } return(wPasswordHash); } end example] </pre> <p>The possible values for this attribute are defined by the ST_UnsignedShortHex simple type (§15.7.2).</p>
revisionsPassword CharacterSet (Revisions Password Character Set)	<p>Name of the character set associated with the legacy revisionsPassword hash. The values permitted by this attribute are names and aliases listed in the IANA CHARACTER SETS listing found at http://www.iana.org/assignments/character-sets.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
workbookPasswor d (Legacy Workbook Password)	<p>Specifies the legacy hash of the password required for unlocking revisions in this workbook.</p> <p>The hash is generated using the logic defined in the preceding revisionsPassword attribute.</p> <p>The possible values for this attribute are defined by the ST_UnsignedShortHex simple type (§15.7.2).</p>
workbookPasswor dCharacterSet (Workbook Password Character Set)	<p>Name of the character set associated with the workbookPassword hash. The values permitted by this attribute are the names and aliases listed in the IANA CHARACTER SETS listing found at http://www.iana.org/assignments/character-sets.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

15.3 Worksheets

15.3.1 Worksheets

15.3.1.1 legacyDrawing (Legacy Drawing Reference)

This element is present when the sheet contains drawing shapes defined by VML. In this case, the element contains an explicit relationship whose ID points to the part containing the VML definitions.

[Example:

<drawing r:id="rId1"/>

end example]

Parent Elements
chartsheet (Part 1, §18.3.1.12); dialogsheets (Part 1, §18.3.1.34); worksheet (Part 1, §18.3.1.99)

Attributes	Description
id (Relationship Id)	This value references a relationship Id for the sheet. The relationship shall point to the part containing the VML definition.
Namespace: .../officeDocument /2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

[Note: The W3C XML Schema definition of this element’s content model ([CT_LegacyDrawing](#)) is located in §A.2.
end note]

15.3.1.2 legacyDrawingHF (Legacy Drawing Reference in Header Footer)

This element specifies the explicit relationship to the part containing the VML defining pictures rendered in the header / footer of the sheet.

Parent Elements
chartsheet (Part 1, §18.3.1.12); dialogsheets (Part 1, §18.3.1.34); worksheet (Part 1, §18.3.1.99)

Attributes	Description
id (Relationship Id)	This value references a relationship Id for the sheet. The relationship shall point to the part containing the VML definition.
Namespace: .../officeDocument /2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

[Note: The W3C XML Schema definition of this element’s content model ([CT_LegacyDrawing](#)) is located in §A.2.
end note]

15.3.1.3 Additional attribute for dataConsolidate element (Part 1, §18.3.1.29)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
leftLabels (Starting Column Labels)	Semantically equivalent to startLabels. The possible values for this attribute are defined by the W3C XML Schema boolean datatype.

15.3.1.4 Additional attributes for protectedRange element (Part 1, §18.3.1.71)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
password (Legacy Password)	Specifies the legacy hash of the password required for editing this range. The hash is generated using the logic defined in the revisionsPassword attribute of the workbookProtection element (Part 1, §18.2.29). The possible values for this attribute are defined by the ST_UnsignedShortHex simple type (§15.7.2).
securityDescriptor (Security Descriptor)	Optional setting to specify the relative security descriptor. The security descriptor defines user accounts who can edit this range without providing a password to access the range. The format of a securityDescriptor is application defined; however, it is recommended that the following format be used for interoperability between implementations: <ul style="list-style-type: none"> <code>username@domain</code> <p>If multiple user accounts are specified in the securityDescriptor attribute, each account shall be delimited by parentheses.</p> <p>[Example: This example demonstrates two user accounts in the security descriptor attribute:</p> <pre><protectedRanges> <protectedRange sqref="A1:C5" name="Range1" securityDescriptor="(user1@iso.org)(user2@iso.org)"/> </protectedRanges></pre> <p>end example]</p> <p>If an application is unable to resolve the meaning of the securityDescriptor, it shall treat the attribute as if it had been removed.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

15.3.1.5 Additional attribute for sheetProtection element (Part 1, §18.3.1.84)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
password (Password)	<p>Specifies the hash of the password required for editing this chart sheet.</p> <p>The hash is generated using the logic defined in the revisionPassword attribute of the workbookProtection element (Part 1, §18.2.29).</p> <p>The possible values for this attribute are defined by the ST_UnsignedShortHex simple type (§15.7.2).</p>

15.3.1.6 Additional attribute for sheetProtection element (Part 1, §18.3.1.85)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
password (Legacy Password)	<p>Specifies the legacy hash of the password required for editing this worksheet.</p> <p>The hash is generated using the logic defined in the revisionsPassword attribute of the workbookProtection element (Part 1, §18.2.29).</p> <p>The possible values for this attribute are defined by the ST_UnsignedShortHex simple type (§15.7.2).</p>

15.3.2 AutoFilter Settings

15.3.2.1 Attributes with modified descriptions for dynamicFilter element (Part 1, §18.3.2.5)

The following attributes have modified descriptions when specified for a document of a transitional conformance class:

Attributes	Description
maxVal (Max Value)	<p>A maximum value for dynamic filter. maxVal/maxValIso shall be required for today, yesterday, tomorrow, nextWeek, thisWeek, lastWeek, nextMonth, thisMonth, lastMonth, nextQuarter, thisQuarter, lastQuarter, nextYear, thisYear, lastYear, and yearToDate.</p> <p>The above criteria are based on a value range. <i>[Example: If today's date is September 22nd, then the range for thisWeek is the values greater than or equal to September 17 and less than September 24. end example]</i> In the thisWeek range, the lower value is expressed using val or valIso. The higher value is expressed using maxVal or maxValIso.</p> <p>These dynamic filter shall not require val/valIso or maxVal/maxValIso: Q1, Q2, Q3, Q4, M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11 and M12.</p> <p>The above criteria shall not specify the range using val/valIso and maxVal/maxValIso because Q1 always starts from M1 to M3, and M1 is always January.</p>

Attributes	Description
	<p>These types of dynamic filters shall use val and shall not use maxVal/maxValIso: aboveAverage and belowAverage.</p> <p>If maxValIso and maxVal are both present, maxValIso shall take precedence.</p> <p>The possible values for this attribute are defined by the W3C XML Schema double datatype.</p>
val (Value)	<p>A minimum numeric or serial date value for dynamic filter. (See description of ValIso to understand when val is required.)</p> <p>If valIso and val are both present, valIso shall take precedence.</p> <p>The possible values for this attribute are defined by the W3C XML Schema double datatype.</p>
valIso (ISO Value)	<p>A minimum date value for dynamic filter. (See description of maxVal/maxValIso to understand when val/valIso is required.)</p> <p>The possible values for this attribute are defined by the W3C XML Schema dateTime datatype.</p>

15.4 Styles

15.4.1 left (Leading Edge Border)

Semantically equivalent to start (Part 1, §18.8.37).

Parent Elements
border (Part 1, §18.8.4)

Child Elements	Subclause
color (Data Bar Color)	Part 1, §18.3.1.15

Attributes	Description
style (Line Style)	<p>The line style for this border.</p> <p>The possible values for this attribute are defined by the ST_BorderStyle simple type (Part 1, §18.18.3).</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_BorderPr](#)) is located in §A.2. *end note*]

15.4.2 right (Trailing Edge Border)

Semantically equivalent to end (Part 1, §18.8.16).

Parent Elements
border (Part 1, §18.8.4)

Child Elements	Subclause
color (Data Bar Color)	Part 1, §18.3.1.15

Attributes	Description
style (Line Style)	The line style for this border. The possible values for this attribute are defined by the ST_BorderStyle simple type (Part 1, §18.18.3).

[Note: The W3C XML Schema definition of this element's content model ([CT_BorderPr](#)) is located in §A.2. *end note*]

15.5 Pivot Tables

15.5.1 Pivot Tables

15.5.1.1 Additional attribute for pivotCacheDefinition element (Part 1, §18.10.1.67)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
refreshedDate (PivotCache Last Refreshed Date)	Specifies the date when the cache was last refreshed. This attribute depends on whether the application exposes mechanisms via the user interface whereby the end-user can refresh the cache. If refreshedDateIso and refreshedDate are both present, refreshedDateIso shall take precedence. The possible values for this attribute are defined by the W3C XML Schema double datatype.

15.6 External Data Connections

15.6.1 Additional attribute for textPr element (Part 1, §18.13.12)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
codePage (Code Page)	<p>Code page associated with the text file. This attribute is used only for backwards compatibility, and is ignored if the characterSet attribute is present.</p> <p>[<i>Note:</i> There are a number of code page technologies. One example of potential values can be found at: http://www.unicode.org/Public/MAPPINGS <i>end note</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema unsignedInt datatype.</p>

15.7 Simple Types

The following additional simple type information in the <http://schemas.openxmlformats.org/spreadsheetml/2006/main> namespace is used for documents of a transitional conformance class.

15.7.1 Additional enumeration values for ST_PivotAreaType (Part 1, §18.18.58)

The following additional enumeration values can be specified for a document of a transitional conformance class.

Enumeration Value	Description
topRight (Top Corner, Trailing Edge)	Semantically equivalent to topEnd.

15.7.2 ST_UnsignedShortHex (Unsigned Short Hex)

This simple type defines the Hex representation of an unsigned short.

This simple type's contents are a restriction of the W3C XML Schema hexBinary datatype.

This simple type also specifies the following restrictions:

- This simple type's contents have a length of exactly 4 hexadecimal digit(s).

Referenced By
fileSharing@reservationPassword (§15.2.1); protectedRange@password (§15.3.1.4); sheetProtection@password (§15.3.1.5); sheetProtection@password (§15.3.1.6); workbookProtection@revisionsPassword (§15.2.3); workbookProtection@workbookPassword (§15.2.3)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST_UnsignedShortHex](#)) is located in §A.2. *end note*]

15.8 Formulas

15.8.1 Attribute synonym for c element (Part 1, §18.6.1)

The following additional attribute can be specified for a document of a transitional conformance class:

Attributes	Description
ref (Cell Reference)	An A-1 style reference to a cell. The possible values for this attribute are defined by the ST_CellRef simple type (Part 1, §18.18.7).

This attribute is semantically equivalent to r (Part 1, §18.6.1).

Only one or the other of r and ref can be defined in any given instance.

15.8.2 Additional representation for dates and times (Part 1, §18.17.4)

For a document of a transitional conformance class, each unique instant in SpreadsheetML time shall be stored as an ISO 8601-formatted string or as a serial value.

15.9 Changed attributes

The following attributes, which are defined in subclauses within Part 1, §18, “SpreadsheetML”, have different source relationships when used in documents of the Transitional conformance class:

15.9.1 Changed attribute for externalReference element (Part 1, §18.2.8)

Attributes	Description
id (Relationship Id) Namespace: .../officeDocument /2006/relationships	Specifies a unique identifier that is used to identify a relationship to another part in the file. Relationship identifiers link the element definition with the part where data for the element is stored. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

15.9.2 Changed attribute for pivotCache element (Part 1, §18.2.17)

Attributes	Description
id (Relationship Id) Namespace: .../officeDocument /2006/relationships	Specifies the identifier to a pivot cache definition part where cached data is stored. This attribute is required. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

15.9.3 Changed attribute for sheet element (Part 1, §18.2.19)

Attributes	Description
id (Relationship Id) Namespace: .../officeDocument /2006/relationships	Specifies the identifier of the sheet part where the definition for this sheet is stored. This attribute is required. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

15.9.4 Changed attribute for control element (Part 1, §18.3.1.19)

Attributes	Description
id (Relationship Id) Namespace: .../officeDocument /2006/relationships	This relationship ID references an Embedded Control Data part that contains control-specific properties and state information about this particular embedded control. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

15.9.5 Changed attribute for controlPr element (Part 1, §18.3.1.20)

Attributes	Description
id (Relationship ID for Embedded Control Properties) Namespace: .../officeDocument /2006/relationships	<p>Specifies the relationship ID for the relationship which contains the properties for this embedded control. This property bag is contained in a separate part within the package.</p> <p>The relationship explicitly targeted by this attribute shall be of relationship type http://schemas.openxmlformats.org/officeDocument/2006/relationships/control or the document shall be considered non-conformant.</p> <p>If this attribute is omitted, then the embedded control shall be given no property bag when instantiated.</p> <p>[<i>Example:</i> Consider the following WordprocessingML markup for an embedded control in a document:</p> <pre><w:control r:id="rId5" w:id="CheckBox1" w:name="CheckBox1" w:shapeid="_x0000_s1027" w:class="shape" w:w="145" w:h="28" w:align="left" /></pre> <p>The id attribute in the relationship reference namespace specifies that the relationship with relationship ID rId5 must contain the property data for this embedded control. <i>end example</i></p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

15.9.6 Changed attribute for customPr element (Part 1, §18.3.1.22)

Attributes	Description
id (Relationship Id) Namespace: .../officeDocument /2006/relationships	<p>This relationship references the binary part containing the specified custom properties.</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

15.9.7 Changed attribute for dataRef element (Part 1, §18.3.1.30)

Attributes	Description
id (relationship Id) Namespace: .../officeDocument /2006/relationships	Used only when the source range is external to this workbook. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

15.9.8 Changed attribute for drawing element (Part 1, §18.3.1.36)

Attributes	Description
id (Relationship id) Namespace: .../officeDocument /2006/relationships	Relationship Id referencing a part containing DrawingML definitions for this worksheet. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

15.9.9 Changed attribute for drawingHF element (Part 1, §18.3.1.37)

Attributes	Description
id (Relationship ID for Embedded Control Properties) Namespace: .../officeDocument /2006/relationships	Specifies the relationship ID for the relationship to the DrawingML part that contains the drawing objects used in the header and footer. This DrawingML part is a separate part within the package. [Example: <div style="text-align: center;"> <code><drawingHF r:id="rId2" lho="7" lhf="6"/></code> </div> The id attribute in the relationship reference namespace specifies that the relationship with relationship ID rId5 must contain the drawing objects used in the header and footer. <i>end example</i>] The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

15.9.10 Changed attribute for hyperlink element (Part 1, §18.3.1.47)

Attributes	Description
id (Relationship Id) Namespace: .../officeDocument /2006/relationships	Relationship Id in this sheet's relationships part, expressing the target location of the resource. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

15.9.11 Changed attribute for objectPr element (Part 1, §18.3.1.56)

Attributes	Description
id (Relationship ID to Embedded Object Data) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship ID for the relationship that targets the Embedded Object Part containing the embedded object data.</p> <p>The specified relationship shall be of type <code>http://schemas.openxmlformats.org/officeDocument/2006/oleObject</code> or the document shall be considered non-conformant.</p> <p>[<i>Example:</i> Consider an XML element which has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 targets the part containing the corresponding embedded object information. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

15.9.12 Changed attribute for oleObject element (Part 1, §18.3.1.59)

Attributes	Description
id (Relationship Id) Namespace: .../officeDocument/2006/relationships	<p>Relationship Id of the relationship pointing to the object persistence part.</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

15.9.13 Changed attribute for pageSetup element (Part 1, §18.3.1.63)

Attributes	Description
id (Id) Namespace: .../officeDocument/2006/relationships	<p>Relationship Id of the devMode printer settings part.</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

15.9.14 Changed attribute for pageSetup element (Part 1, §18.3.1.64)

Attributes	Description
id (Id) Namespace: .../officeDocument/2006/relationships	<p>Relationship Id of the devMode printer settings part.</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

Attributes	Description
ps	

15.9.15 Changed attribute for picture element (Part 1, §18.3.1.67)

Attributes	Description
id (Relationship Id)	Relationship Id pointing to the image part.
Namespace: .../officeDocument /2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).
ps	

15.9.16 Changed attribute for pivotSelection element (Part 1, §18.3.1.69)

Attributes	Description
id (Relationship Id)	Relationship Id pointing to the particular PivotTable Part corresponding to this selection.
Namespace: .../officeDocument /2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).
ps	

15.9.17 Changed attribute for tablePart element (Part 1, §18.3.1.94)

Attributes	Description
id (Relationship Id)	This relationship Id is used to locate a particular table definition part.
Namespace: .../officeDocument /2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).
ps	

15.9.18 Changed attribute for pivotCacheDefinition element (Part 1, §18.10.1.67)

Attributes	Description
id (Relationship Identifier)	Specifies the unique identifier that corresponds to the related pivotCacheRecords part. See (Part 1, §18.10.1.68) for more information.
Namespace: .../officeDocument /2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).
ps	

15.9.19 Changed attribute for rangeSet element (Part 1, §18.10.1.79)

Attributes	Description
id (Relationship Id)	Specifies the unique identifier of the Workbook part where the range set is stored. See

Attributes	Description
Namespace: .../officeDocument /2006/relationships	Workbook (Part 1, §18.2) for more information. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

15.9.20 Changed attribute for worksheetSource element (Part 1, §18.10.1.95)

Attributes	Description
id (Relationship Id) Namespace: .../officeDocument /2006/relationships	Specifies the identifier to the Sheet part whose data is stored in the cache. See the Sheet section (Part 1, §18.2) for more information. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

15.9.21 Changed attribute for header element (Part 1, §18.11.1.1)

Attributes	Description
id (Relationship ID) Namespace: .../officeDocument /2006/relationships	This is the ID that is used to find the corresponding log record of the changes made for this header. Use the corresponding relationship expressed in the revisionHeaders part to locate the log record that lists the specific changes. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

15.9.22 Changed attribute for externalBook element (Part 1, §18.14.7)

Attributes	Description
id (Relationship to supporting book file path) Namespace: .../officeDocument /2006/relationships	Relationship ID that references a link in the relationships collection. The target attribute in the associated relationship will specify the worksheet XML file in the current SpreadsheetML document ZIP archive that makes use of this externalbook. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

15.9.23 Changed attribute for oleLink element (Part 1, §18.14.11)

Attributes	Description
id (Object Link Relationship) Namespace:	Relationship ID that references a link in the relationships collection. The target attribute in the associated relationship will specify the external file name used for this oleLink. The possible values for this attribute are defined by the ST_RelationshipId simple type

Attributes	Description
.../officeDocument/2006/relationships	(Part 1, §22.8.2.1).

16. PresentationML Reference Material

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End of informative text.

16.2 Presentation

16.2.1 Presentation Properties

16.2.1.1 htmlPubPr (HTML Publishing Properties)

This element specifies the publishing properties to be used when publishing this presentation document to the HTML file format. The target output profile is identified by the contents of the target attribute.

Parent Elements
presentationPr (Part 1, §19.2.1.27)

Child Elements	Subclause
custShow (Custom Show)	Part 1, §19.2.1.5
extLst (Extension List)	Part 1, §19.2.1.12
sldAll (All Slides)	Part 1, §19.2.1.32
sldRg (Slide Range)	Part 1, §19.2.1.38

Attributes	Description
id (Publish Path)	Specifies the path that should be used when publishing.
Namespace: .../officeDocument /2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

Attributes	Description										
showSpeakerNotes (Show Speaker Notes)	<p>Specifies whether to show speaker notes when publishing.</p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>										
target (Target Output Profile)	<p>Specifies the version of HTML output targeted by the output of any web page produced by this document. This attribute shall only contain a string that represents an output profile defined by published standards and W3C recommendations. Product names shall not be used to define a profile.</p> <p>The following reserved values and their targets are listed below:</p> <table> <tr> <th>Value</th><th>Target</th></tr> <tr> <td>W3C XHTML+CSS1</td><td>W3C XHTML 1.0 + CSS 1</td></tr> <tr> <td>W3C HTML4+CSS1</td><td>W3C HTML 4.01 + CSS 1</td></tr> <tr> <td>W3C XHTML+CSS2</td><td>W3C XHTML 1.0 + CSS 2</td></tr> <tr> <td>W3C HTML4+CSS2</td><td>W3C HTML 4.01 + CSS 2</td></tr> </table> <p>[<i>Example:</i> For example, consider the following set of HTML publishing settings:</p> <pre><p:htmlPubPr ... target="W3C HTML4+CSS2"> ... </p:htmlPubPr></pre> <p>The target attribute explicitly declares that any web page generated from this document should target the W3C HTML4+CSS2 profile. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>	Value	Target	W3C XHTML+CSS1	W3C XHTML 1.0 + CSS 1	W3C HTML4+CSS1	W3C HTML 4.01 + CSS 1	W3C XHTML+CSS2	W3C XHTML 1.0 + CSS 2	W3C HTML4+CSS2	W3C HTML 4.01 + CSS 2
Value	Target										
W3C XHTML+CSS1	W3C XHTML 1.0 + CSS 1										
W3C HTML4+CSS1	W3C HTML 4.01 + CSS 1										
W3C XHTML+CSS2	W3C XHTML 1.0 + CSS 2										
W3C HTML4+CSS2	W3C HTML 4.01 + CSS 2										
title (HTML Output Title)	<p>Specifies a title for the HTML output file.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>										

[*Note:* The W3C XML Schema definition of this element's content model ([CT_HtmlPublishProperties](#)) is located in §A.3. *end note*]

16.2.1.2 webPr (Web Properties)

This element specifies all general output properties that pertain to generating a web format version of the presentation document.

Parent Elements
presentationPr (Part 1, §19.2.1.27)

Child Elements	Subclause
extLst (Extension List)	Part 1, §19.2.1.12

Attributes	Description
allowPng (Allow PNG in HTML output)	Specifies whether to allow the output of PNG format pictures in the HTML document. The possible values for this attribute are defined by the W3C XML Schema boolean datatype.
clr (Slide Navigation Colors for HTML output)	Specifies the color constraints that are to be used when generating HTML output. The possible values for this attribute are defined by the ST_WebColorType simple type (§16.4.1).
encoding (Encoding for HTML output)	Specifies the particular HTML character set encoding that should be used when generating output. The possible values for this attribute are defined by the ST_WebEncoding simple type (§16.4.2).
imgSz (Image size for HTML output)	Specifies the screen size for which the images in the HTML output should be optimized. The possible values for this attribute are defined by the ST_WebScreenSize simple type (§16.4.3).
organizeInFolders (Organize HTML output in folders)	Specifies whether the supporting output files should be automatically organized into a folder. The possible values for this attribute are defined by the W3C XML Schema boolean datatype.
relyOnVml (Rely on VML for HTML output)	Specifies whether graphics should be output in VML within the HTML. The possible values for this attribute are defined by the W3C XML Schema boolean datatype.
resizeGraphics (Resize graphics in HTML output)	Specifies whether to resize graphics to fit within the browser window when generating the HTML output. The possible values for this attribute are defined by the W3C XML Schema boolean datatype.
showAnimation (Show animation in	Specifies whether to show presentation animation in the HTML output file.

Attributes	Description
HTML output)	The possible values for this attribute are defined by the W3C XML Schema boolean datatype.
useLongFilenames (Use long file names in HTML output)	Specifies whether to allow the use of long file names when generating the HTML output. The possible values for this attribute are defined by the W3C XML Schema boolean datatype.

[Note: The W3C XML Schema definition of this element's content model ([CT_WebProperties](#)) is located in §A.3.
end note]

16.2.1.3 Additional attributes for modifyVerifier element (Part 1, §19.2.1.19)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
algIdExt (Cryptographic Algorithm Extensibility)	<p>Specifies that a cryptographic algorithm which was not defined by ECMA-376 has been used to generate the hash value stored with this document.</p> <p>This value, when present, shall be interpreted based on the value of the algIdExtSource attribute in order to determine the algorithm used, which shall be application-defined. [<i>Rationale</i>: This extensibility affords the fact that with exponentially increasing computing power, documents created in the future might need to utilize as yet undefined hashing algorithms in order to remain secure. <i>end rationale</i>]</p> <p>If this value is present, the cryptAlgorithmClass, cryptAlgorithmType, and cryptAlgorithmSid attribute values shall be ignored in favor of the algorithm defined by this attribute.</p> <p>[<i>Example</i>: Consider a PresentationML document with the following information stored in its protection element:</p> <pre><... p:algIdExt="0000000A" p:algIdExtSource="futureCryptography" p:hashData="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The algIdExt attribute value of 0000000A specifies that the algorithm with hex code A shall be used as defined by the futureCryptography application. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema unsignedInt datatype.</p>
algIdExtSource (Algorithm Extensibility Source)	<p>Specifies the application which defined the algorithm value specified by the algIdExt attribute.</p> <p>[<i>Example</i>: Consider a PresentationML document with the following information stored in</p>

Attributes	Description																		
	<p>one its protection element:</p> <pre><... p:algIdExt="0000000A" p:algIdExtSource="futureCryptography" p:hashData="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The algIdExtSource attribute value of futureCryptography specifies that the algorithm used here was published by the futureCryptography application. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>																		
cryptAlgorithmClass (Cryptographic Algorithm Class)	<p>Specifies the class of cryptographic algorithm used by this protection. [<i>Note</i>: The initial version of ECMA-376 only supports a single version - hash - but future versions can expand this as necessary. <i>end note</i>]</p> <p>[<i>Example</i>: Consider a PresentationML document with the following information stored in its protection element:</p> <pre><... p:cryptAlgorithmClass="hash" p:cryptAlgorithmType="typeAny" p:cryptAlgorithmSid="1" p:hashData="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The cryptAlgorithmClass attribute value of hash specifies that the algorithm used for the password is a hashing algorithm. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_AlgClass simple type (§20.1.2.1).</p>																		
cryptAlgorithmSid (Cryptographic Hashing Algorithm)	<p>Specifies the specific cryptographic hashing algorithm which shall be used along with the saltData attribute and user-supplied password in order to compute a hash value for comparison.</p> <p>The possible values for this attribute shall be interpreted as follows:</p> <table border="1"> <thead> <tr> <th>Value</th><th>Algorithm</th></tr> </thead> <tbody> <tr> <td>1</td><td>MD2</td></tr> <tr> <td>2</td><td>MD4</td></tr> <tr> <td>3</td><td>MD5</td></tr> <tr> <td>4</td><td>SHA-1</td></tr> <tr> <td>5</td><td>MAC</td></tr> <tr> <td>6</td><td>RIPEMD</td></tr> <tr> <td>7</td><td>RIPEMD-160</td></tr> <tr> <td>8</td><td>Undefined. Shall not be used.</td></tr> </tbody> </table>	Value	Algorithm	1	MD2	2	MD4	3	MD5	4	SHA-1	5	MAC	6	RIPEMD	7	RIPEMD-160	8	Undefined. Shall not be used.
Value	Algorithm																		
1	MD2																		
2	MD4																		
3	MD5																		
4	SHA-1																		
5	MAC																		
6	RIPEMD																		
7	RIPEMD-160																		
8	Undefined. Shall not be used.																		

Attributes	Description														
	<table border="1"> <tr><td>9</td><td>HMAC</td></tr> <tr><td>10</td><td>Undefined. Shall not be used.</td></tr> <tr><td>11</td><td>Undefined. Shall not be used.</td></tr> <tr><td>12</td><td>SHA-256</td></tr> <tr><td>13</td><td>SHA-384</td></tr> <tr><td>14</td><td>SHA-512</td></tr> <tr><td>Any other value</td><td>Undefined. Shall not be used.</td></tr> </table> <p>[Example: Consider a PresentationML document with the following information stored in its protection element:</p> <pre><... p:cryptAlgorithmClass="hash" p:cryptAlgorithmType="typeAny" p:cryptAlgorithmSid="1" p:hashData="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The cryptAlgorithmSid attribute value of 1 specifies that the SHA-1 hashing algorithm shall be used to generate a hash from the user-defined password. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema unsignedInt datatype.</p>	9	HMAC	10	Undefined. Shall not be used.	11	Undefined. Shall not be used.	12	SHA-256	13	SHA-384	14	SHA-512	Any other value	Undefined. Shall not be used.
9	HMAC														
10	Undefined. Shall not be used.														
11	Undefined. Shall not be used.														
12	SHA-256														
13	SHA-384														
14	SHA-512														
Any other value	Undefined. Shall not be used.														
cryptAlgorithmType (Cryptographic Algorithm Type)	<p>Specifies the kind of cryptographic algorithm used by this protection. [Note: The initial version of ECMA-376 only supports a single type - typeAny - but future versions can expand this as necessary. <i>end note</i>]</p> <p>[Example: Consider a PresentationML document with the following information stored in its protection element:</p> <pre><... p:cryptAlgorithmClass="hash" p:cryptAlgorithmType="typeAny" p:cryptAlgorithmSid="1" p:hashData="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The cryptAlgorithmType attribute value of typeAny specifies that any algorithm type might have been used for the password. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_AlgorithmType simple type (§20.1.2.2).</p>														
cryptProvider (Cryptographic Provider)	<p>Specifies the cryptographic provider which was used to generate the hash value stored in this document. If the user provided a cryptographic provider which was not the system's built-in provider, then that provider shall be stored here so it can subsequently be used if available.</p>														

Attributes	Description
	<p>If this attribute is omitted, then the built-in cryptographic provider on the system shall be used.</p> <p>[<i>Example</i>: Consider a PresentationML document with the following information stored in its protection element:</p> <pre><... p:cryptProvider="Krista'sProvider" p:hashData="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The cryptProvider attribute value of Krista'sProvider specifies that the cryptographic provider with name "Krista's Provider" shall be used if available. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
cryptProviderType (Cryptographic Provider Type)	<p>Specifies the kind of cryptographic provider to be used.</p> <p>[<i>Example</i>: Consider a PresentationML document with the following information stored in its protection element:</p> <pre><... p:cryptProviderType="rsaAES" p:hashData="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The cryptProviderType attribute value of rsaAES specifies that the cryptographic provider type shall be an Advanced Encryption Standard provider. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_CryptProv simple type (§20.1.2.4).</p>
cryptProviderType Ext (Cryptographic Provider Type Extensibility)	<p>Specifies that a cryptographic provider type which was not defined by ECMA-376 has been used to generate the hash value stored with this document.</p> <p>This value, when present, shall be interpreted based on the value of the cryptProviderTypeExtSource attribute in order to determine the provider type used, which shall be application-defined. [<i>Rationale</i>: This extensibility affords the fact that with exponentially increasing computing power, documents created in the future might need to utilize as yet undefined cryptographic provider types in order to remain secure. <i>end rationale</i>]</p> <p>If this value is present, the cryptProviderType attribute value shall be ignored in favor of the provider type defined by this attribute.</p> <p>[<i>Example</i>: Consider a PresentationML document with the following information stored in its protection element:</p> <pre><... p:cryptProviderTypeExt="00A5691D" p:cryptProvideTypeExtSource="futureCryptography"</pre>

Attributes	Description
	<p><code>p:hashData="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></code></p> <p>The cryptProviderTypeExt attribute value of 00A5691D specifies that the provider type associated with hex code A5691D shall be used as defined by the futureCryptography application. <i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema unsignedInt datatype.</p>
cryptProviderTypeExtSource (Provider Type Extensibility Source)	<p>Specifies the application which defined the provider type value specified by the cryptProviderTypeExt attribute.</p> <p>[<i>Example:</i> Consider a PresentationML document with the following information stored in its protection element:</p> <pre><... p:cryptProviderTypeExt="00A5691D" p:cryptProvideTypeExtSource="futureCryptography" p:hashData="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The cryptProvideTypeExtSource attribute value of futureCryptography specifies that the provider type used here was published by the futureCryptography application. <i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
hashData (Password Hash)	<p>Specifies the hash value for the password stored with this document. This value shall be compared with the resulting hash value after hashing the user-supplied password using the algorithm specified by the preceding attributes and parent XML element, and if the two values match, the protection shall no longer be enforced.</p> <p>If this value is omitted, then no password shall be associated with the protection, and it can be turned off without supplying any password.</p> <p>[<i>Example:</i> Consider a PresentationML document with the following information stored in its protection element:</p> <pre><... p:cryptAlgorithmClass="hash" p:cryptAlgorithmType="typeAny" p:cryptAlgorithmSid="1" p:hashData="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The hashData attribute value of 9oN7nWkCAyEZib1RomSJTjmPpCY= specifies that the user-supplied password shall be hashed using the pre-processing defined by the parent element (if any) followed by the SHA-1 algorithm (specified via the cryptAlgorithmSid attribute value of 1) and that the resulting has value must be 9oN7nWkCAyEZib1RomSJTjmPpCY= for the protection to be disabled. <i>end example]</i></p>

Attributes	Description
	<p>The possible values for this attribute are defined by the W3C XML Schema base64Binary datatype.</p>
saltData (Salt for Password Verifier)	<p>Specifies the salt which was prepended to the user-supplied password before it was hashed using the hashing algorithm defined by the preceding attribute values to generate the hashData attribute, and which shall also be prepended to the user-supplied password before attempting to generate a hash value for comparison. A <i>salt</i> is a random string which is added to a user-supplied password before it is hashed in order to prevent a malicious party from pre-calculating all possible password/hash combinations and simply using those precalculated values (often referred to as a "dictionary attack").</p> <p>If this attribute is omitted, then no salt shall be prepended to the user-supplied password before it is hashed for comparison with the stored hash value.</p> <p>[<i>Example</i>: Consider a PresentationML document with the following information stored in its protection element:</p> <pre><... p:saltData="ZUdHa+D8F/OAKP3I7ssUnQ==" p:hashData="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The saltData attribute value of ZUdHa+D8F/OAKP3I7ssUnQ== specifies that the user-supplied password shall have this value prepended before it is run through the specified hashing algorithm to generate a resulting hash value for comparison. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema base64Binary datatype.</p>
spinCount (Iterations to Run Hashing Algorithm)	<p>Specifies the number of times the hashing function shall be iteratively run (runs using each iteration's result plus a 4 byte value (0-based, little endian) containing the number of the iteration as the input for the next iteration) when attempting to compare a user-supplied password with the value stored in the hashData attribute. [<i>Rationale</i>: Running the algorithm many times increases the cost of exhaustive search attacks correspondingly. Storing this value allows for the number of iterations to be increased over time to accommodate faster hardware (and hence the ability to run more iterations in less time). <i>end rationale</i>]</p> <p>[<i>Example</i>: Consider a PresentationML document with the following information stored in its protection element:</p> <pre><... p:spinCount="100000" p:hashData="9oN7nWkCAyEZib1RomSJTjmPpCY=" /></pre> <p>The spinCount attribute value of 100000 specifies that the hashing function shall be run one hundred thousand times to generate a hash value for comparison with the hash attribute. <i>end example</i>]</p>

Attributes	Description
	The possible values for this attribute are defined by the W3C XML Schema unsignedInt datatype.

16.3 Slides

16.3.1 Embedded Objects

16.3.1.1 Additional attribute for control element (Part 1, §19.3.2.1)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
spid (Embedded object Shape ID)	Specifies the identifier of the shape associated with this Embedded object. The shape contains all coordinate anchoring information. The possible values for this attribute are defined by the ST_ShapeID simple type (Part 1, §20.1.10.55).

16.3.1.2 Additional attribute for oleObj element (Part 1, §19.3.2.4)

The following additional attributes can be specified for a document of a transitional conformance class:

Attributes	Description
spid (Embedded object Shape ID)	Specifies the identifier of the shape associated with this Embedded object. The shape contains all coordinate anchoring information. The possible values for this attribute are defined by the ST_ShapeID simple type (Part 1, §20.1.10.55).

16.4 Simple Types

The following additional simple type information in the <http://schemas.openxmlformats.org/presentationml/2006/main> namespace is used for documents of a transitional conformance class.

16.4.1 ST_WebColorType (HTML Slide Navigation Control Colors)

This simple type specifies the coloring that should be used when outputting to web formats.

This simple type's contents are a restriction of the W3C XML Schema token datatype.

Enumeration Value	Description
blackTextOnWhite (Black Text on White Colors)	Black Text on White coloring should be used.
browser (Browser Colors)	Browser coloring should be used.
none (Non-specific Colors)	No specific coloring has been specified.
presentationAccent (Presentation Accent Colors)	Presentation accent coloring should be used.

Enumeration Value	Description
presentationText (Presentation Text Colors)	Presentation text coloring should be used.
whiteTextOnBlack (White Text on Black Colors)	White text on black coloring should be used.

Referenced By
webPr@clr (§16.2.1.2)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_WebColorType](#)) is located in §A.3. *end note*]

16.4.2 ST_WebEncoding (Web Encoding)

This simple type specifies a string representing the HTML character set used when outputting to web formats.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Referenced By
webPr@encoding (§16.2.1.2)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_WebEncoding](#)) is located in §A.3. *end note*]

16.4.3 ST_WebScreenSize (HTML/Web Screen Size Target)

This simple type specifies the intended screen resolution for output to web formats.

This simple type's contents are a restriction of the W3C XML Schema token datatype.

Enumeration Value	Description
1024x768 (HTML/Web Size Enumeration 1024x768)	Screen size is 1024x768 pixels
1152x882 (HTML/Web Size Enumeration 1152x882)	Screen size is 1152x882 pixels
1152x900 (HTML/Web Size Enumeration 1152x900)	Screen size is 1152x900 pixels
1280x1024 (HTML/Web Size Enumeration 1280x1024)	Screen size is 1280x1024 pixels
1600x1200 (HTML/Web Size Enumeration 1600x1200)	Screen size is 1600x1200 pixels
1800x1400 (HTML/Web Size Enumeration 1800x1400)	Screen size is 1800x1400 pixels
1920x1200 (HTML/Web Size Enumeration 1920x1200)	Screen size is 1920x1200 pixels

Enumeration Value	Description
544x376 (HTML/Web Size Enumeration 544x376)	Screen size is 544x376 pixels
640x480 (HTML/Web Size Enumeration 640x480)	Screen size is 640x480 pixels
720x512 (HTML/Web Size Enumeration 720x512)	Screen size is 720x512 pixels
800x600 (HTML/Web Size Enumeration 800x600)	Screen size is 800x600 pixels

Referenced By
webPr@imgSz (§16.2.1.2)

[Note: The W3C XML Schema definition of this simple type’s content model ([ST_WebScreenSize](#)) is located in §A.3. *end note*]

16.5 Changed attributes

The following attributes, which are defined in subclauses within Part 1, §19, “PresentationML”, have different source relationships when used in documents of the Transitional conformance class:

16.5.1 Changed attribute for bold element (Part 1, §19.2.1.1)

Attributes	Description
id (Relationship Identifier) Namespace: .../officeDocument /2006/relationships	Specifies the relationship identifier that is used in conjunction with a corresponding relationship file to resolve the location of this embedded font that is referenced in a presentation. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

16.5.2 Changed attribute for boldItalic element (Part 1, §19.2.1.2)

Attributes	Description
id (Relationship Identifier) Namespace: .../officeDocument /2006/relationships	Specifies the relationship identifier that is used in conjunction with a corresponding relationship file to resolve the location of this embedded font that is referenced in a presentation. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

16.5.3 Changed attribute for font element (Part 1, §19.2.1.13)

Attributes	Description
charset (Similar Character Set)	Specifies the character set that is supported by the parent font. This information can be used in font substitution logic to locate an appropriate substitute font when this font is

Attributes	Description																																										
Namespace: .../drawingml/2006/main	<p>not available. This information is determined by querying the font when present and shall not be modified when the font is not available.</p> <p>The value of this attribute shall be interpreted as follows:</p> <table> <tr> <th>Value</th><th>Description</th></tr> <tr> <td>0x00</td><td>Specifies the ANSI character set. (IANA name iso-8859-1)</td></tr> <tr> <td>0x01</td><td>Specifies the default character set.</td></tr> <tr> <td>0x02</td><td>Specifies the Symbol character set. This value specifies that the characters in the Unicode private use area (U+FF00 to U+FFFF) of the font should be used to display characters in the range U+0000 to U+00FF.</td></tr> <tr> <td>0x4D</td><td>Specifies a Macintosh (Standard Roman) character set. (IANA name macintosh)</td></tr> <tr> <td>0x80</td><td>Specifies the JIS character set. (IANA name shift_jis)</td></tr> <tr> <td>0x81</td><td>Specifies the Hangul character set. (IANA name ks_c_5601-1987)</td></tr> <tr> <td>0x82</td><td>Specifies a Johab character set. (IANA name KS C-5601-1992)</td></tr> <tr> <td>0x86</td><td>Specifies the GB-2312 character set. (IANA name GBK)</td></tr> <tr> <td>0x88</td><td>Specifies the Chinese Big Five character set. (IANA name Big5)</td></tr> <tr> <td>0xA1</td><td>Specifies a Greek character set. (IANA name windows-1253)</td></tr> <tr> <td>0xA2</td><td>Specifies a Turkish character set. (IANA name iso-8859-9)</td></tr> <tr> <td>0xA3</td><td>Specifies a Vietnamese character set. (IANA name windows-1258)</td></tr> <tr> <td>0xB1</td><td>Specifies a Hebrew character set. (IANA name windows-1255)</td></tr> <tr> <td>0xB2</td><td>Specifies an Arabic character set. (IANA name windows-1256)</td></tr> <tr> <td>0xBA</td><td>Specifies a Baltic character set. (IANA name windows-1257)</td></tr> <tr> <td>0xCC</td><td>Specifies a Russian character set. (IANA name windows-1251)</td></tr> <tr> <td>0xDE</td><td>Specifies a Thai character set. (IANA name windows-874)</td></tr> <tr> <td>0xEE</td><td>Specifies an Eastern European character set. (IANA name windows-1250)</td></tr> <tr> <td>0xFF</td><td>Specifies an OEM character set not defined by ECMA-376.</td></tr> <tr> <td>Any other value</td><td>Application-defined, can be ignored.</td></tr> </table> <p>The possible values for this attribute are defined by the W3C XML Schema byte datatype.</p>	Value	Description	0x00	Specifies the ANSI character set. (IANA name iso-8859-1)	0x01	Specifies the default character set.	0x02	Specifies the Symbol character set. This value specifies that the characters in the Unicode private use area (U+FF00 to U+FFFF) of the font should be used to display characters in the range U+0000 to U+00FF.	0x4D	Specifies a Macintosh (Standard Roman) character set. (IANA name macintosh)	0x80	Specifies the JIS character set. (IANA name shift_jis)	0x81	Specifies the Hangul character set. (IANA name ks_c_5601-1987)	0x82	Specifies a Johab character set. (IANA name KS C-5601-1992)	0x86	Specifies the GB-2312 character set. (IANA name GBK)	0x88	Specifies the Chinese Big Five character set. (IANA name Big5)	0xA1	Specifies a Greek character set. (IANA name windows-1253)	0xA2	Specifies a Turkish character set. (IANA name iso-8859-9)	0xA3	Specifies a Vietnamese character set. (IANA name windows-1258)	0xB1	Specifies a Hebrew character set. (IANA name windows-1255)	0xB2	Specifies an Arabic character set. (IANA name windows-1256)	0xBA	Specifies a Baltic character set. (IANA name windows-1257)	0xCC	Specifies a Russian character set. (IANA name windows-1251)	0xDE	Specifies a Thai character set. (IANA name windows-874)	0xEE	Specifies an Eastern European character set. (IANA name windows-1250)	0xFF	Specifies an OEM character set not defined by ECMA-376.	Any other value	Application-defined, can be ignored.
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Any other value	Application-defined, can be ignored.																																										

Attributes	Description																																						
<p>panose (Panose Setting)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Specifies the Panose-1 classification number for the current font using the mechanism defined in §5.2.7.17 of ISO/IEC 14496-22.</p> <p>The possible values for this attribute are defined by the ST_Panose simple type (Part 1, §22.9.2.8).</p>																																						
<p>pitchFamily (Similar Font Family)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Specifies the font pitch as well as the font family for the corresponding font. Because the value of this attribute is determined by a byte variable this value shall be interpreted as follows:</p> <table> <tr> <th>Value</th><th>Description</th></tr> <tr><td>0x00</td><td>DEFAULT PITCH + UNKNOWN FONT FAMILY</td></tr> <tr><td>0x01</td><td>FIXED PITCH + UNKNOWN FONT FAMILY</td></tr> <tr><td>0x02</td><td>VARIABLE PITCH + UNKNOWN FONT FAMILY</td></tr> <tr><td>0x10</td><td>DEFAULT PITCH + ROMAN FONT FAMILY</td></tr> <tr><td>0x11</td><td>FIXED PITCH + ROMAN FONT FAMILY</td></tr> <tr><td>0x12</td><td>VARIABLE PITCH + ROMAN FONT FAMILY</td></tr> <tr><td>0x20</td><td>DEFAULT PITCH + SWISS FONT FAMILY</td></tr> <tr><td>0x21</td><td>FIXED PITCH + SWISS FONT FAMILY</td></tr> <tr><td>0x22</td><td>VARIABLE PITCH + SWISS FONT FAMILY</td></tr> <tr><td>0x30</td><td>DEFAULT PITCH + MODERN FONT FAMILY</td></tr> <tr><td>0x31</td><td>FIXED PITCH + MODERN FONT FAMILY</td></tr> <tr><td>0x32</td><td>VARIABLE PITCH + MODERN FONT FAMILY</td></tr> <tr><td>0x40</td><td>DEFAULT PITCH + SCRIPT FONT FAMILY</td></tr> <tr><td>0x41</td><td>FIXED PITCH + SCRIPT FONT FAMILY</td></tr> <tr><td>0x42</td><td>VARIABLE PITCH + SCRIPT FONT FAMILY</td></tr> <tr><td>0x50</td><td>DEFAULT PITCH + DECORATIVE FONT FAMILY</td></tr> <tr><td>0x51</td><td>FIXED PITCH + DECORATIVE FONT FAMILY</td></tr> <tr><td>0x52</td><td>VARIABLE PITCH + DECORATIVE FONT FAMILY</td></tr> </table> <p>This information is determined by querying the font when present and shall not be modified when the font is not available. This information can be used in font substitution logic to locate an appropriate substitute font when this font is not available.</p> <p>The possible values for this attribute are defined by the W3C XML Schema byte datatype.</p>	Value	Description	0x00	DEFAULT PITCH + UNKNOWN FONT FAMILY	0x01	FIXED PITCH + UNKNOWN FONT FAMILY	0x02	VARIABLE PITCH + UNKNOWN FONT FAMILY	0x10	DEFAULT PITCH + ROMAN FONT FAMILY	0x11	FIXED PITCH + ROMAN FONT FAMILY	0x12	VARIABLE PITCH + ROMAN FONT FAMILY	0x20	DEFAULT PITCH + SWISS FONT FAMILY	0x21	FIXED PITCH + SWISS FONT FAMILY	0x22	VARIABLE PITCH + SWISS FONT FAMILY	0x30	DEFAULT PITCH + MODERN FONT FAMILY	0x31	FIXED PITCH + MODERN FONT FAMILY	0x32	VARIABLE PITCH + MODERN FONT FAMILY	0x40	DEFAULT PITCH + SCRIPT FONT FAMILY	0x41	FIXED PITCH + SCRIPT FONT FAMILY	0x42	VARIABLE PITCH + SCRIPT FONT FAMILY	0x50	DEFAULT PITCH + DECORATIVE FONT FAMILY	0x51	FIXED PITCH + DECORATIVE FONT FAMILY	0x52	VARIABLE PITCH + DECORATIVE FONT FAMILY
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Attributes	Description
typeface (Text Typeface) Namespace: .../drawingml/2006/main	<p>Specifies the typeface, or name of the font that is to be used. The typeface is a string name of the specific font that should be used in rendering the presentation. If this font is not available within the font list of the generating application than font substitution logic should be utilized in order to select an alternate font.</p> <p>The possible values for this attribute are defined by the ST_TextTypeface simple type (Part 1, §20.1.10.81).</p>

16.5.4 Changed attribute for handoutMasterId element (Part 1, §19.2.1.14)

Attributes	Description
id (Relationship Identifier) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship identifier that is used in conjunction with a corresponding relationship file to resolve the location within a presentation of the handoutMaster element defining this handout master.</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

16.5.5 Changed attribute for italic element (Part 1, §19.2.1.16)

Attributes	Description
id (Relationship Identifier) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship identifier that is used in conjunction with a corresponding relationship file to resolve the location of this embedded font that is referenced in a presentation.</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

16.5.6 Changed attribute for notesMasterId element (Part 1, §19.2.1.20)

Attributes	Description
id (Relationship Identifier) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship identifier that is used in conjunction with a corresponding relationship file to resolve the location within a presentation of the notesMaster element defining this notes master.</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

16.5.7 Changed attribute for notesSz element (Part 1, §19.2.1.22)

Attributes	Description
cx (Extent Length) Namespace:	<p>Specifies the length of the extents rectangle in EMUs. This rectangle shall dictate the size of the object as displayed (the result of any scaling to the original object).</p>

Attributes	Description
.../drawingml/2006/main	<p>[<i>Example:</i> Consider a DrawingML object specified as follows:</p> <pre><... cx="1828800" cy="200000"/></pre> <p>The cx attributes specifies that this object has a height of 1828800 EMUs (English Metric Units). <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_PositiveCoordinate simple type (Part 1, §20.1.10.42).</p>
cy (Extent Width) Namespace: .../drawingml/2006/main	<p>Specifies the width of the extents rectangle in EMUs. This rectangle shall dictate the size of the object as displayed (the result of any scaling to the original object).</p> <p>[<i>Example:</i> Consider a DrawingML object specified as follows:</p> <pre>< ... cx="1828800" cy="200000"/></pre> <p>The cy attribute specifies that this object has a width of 200000 EMUs (English Metric Units). <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_PositiveCoordinate simple type (Part 1, §20.1.10.42).</p>

16.5.8 Changed attribute for regular element (Part 1, §19.2.1.29)

Attributes	Description
id (Relationship Identifier) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship identifier that is used in conjunction with a corresponding relationship file to resolve the location of this embedded font that is referenced in a presentation.</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

16.5.9 Changed attribute for sld element (Part 1, §19.2.1.31)

Attributes	Description
id (Relationship ID) Namespace: .../officeDocument/2006/relationships	<p>This attribute specifies the relationship id that is used to reference to the actual slide XML file that contains all the information to the slide listed within the slide list.</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

16.5.10 Changed attribute for sldId element (Part 1, §19.2.1.33)

Attributes	Description
id (Relationship Identifier)	Specifies the relationship identifier that is used in conjunction with a corresponding relationship file to resolve the location within a presentation of the sld element defining this slide.
Namespace: .../officeDocument /2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

16.5.11 Changed attribute for sldMasterId element (Part 1, §19.2.1.36)

Attributes	Description
id (Relationship Identifier)	Specifies the relationship identifier that is used in conjunction with a corresponding relationship file to resolve the location within a presentation of the sldMaster element defining this slide master.
Namespace: .../officeDocument /2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

16.5.12 Changed attribute for SmartTags element (Part 1, §19.2.1.40)

Attributes	Description
id (Relationship Identifier)	Specifies the relationship identifier that is used in conjunction with a corresponding relationship file to resolve the location of this smart tag.
Namespace: .../officeDocument /2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

16.5.13 Changed attribute for gridSpacing element (Part 1, §19.2.2.3)

Attributes	Description
cx (Extent Length)	Specifies the length of the extents rectangle in EMUs. This rectangle shall dictate the size of the object as displayed (the result of any scaling to the original object).
Namespace: .../drawingml/2006/main	<p>[<i>Example:</i> Consider a DrawingML object specified as follows:</p> <pre><... cx="1828800" cy="200000"/></pre> <p>The cx attributes specifies that this object has a height of 1828800 EMUs (English Metric Units). <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_PositiveCoordinate simple type (Part 1, §20.1.10.42).</p>

Attributes	Description
cy (Extent Width) Namespace: .../drawingml/2006/main	<p>Specifies the width of the extents rectangle in EMUs. This rectangle shall dictate the size of the object as displayed (the result of any scaling to the original object).</p> <p>[<i>Example:</i> Consider a DrawingML object specified as follows:</p> <pre>< ... cx="1828800" cy="200000" /></pre> <p>The cy attribute specifies that this object has a width of 200000 EMUs (English Metric Units). <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_PositiveCoordinate simple type (Part 1, §20.1.10.42).</p>

16.5.14 Changed attribute for origin element (Part 1, §19.2.2.9)

Attributes	Description
x (X-Axis Coordinate) Namespace: .../drawingml/2006/main	<p>Specifies a coordinate on the x-axis. The origin point for this coordinate shall be specified by the parent XML element.</p> <p>[<i>Example:</i> Consider the following point on a basic wrapping polygon for a DrawingML object:</p> <pre><... x="0" y="100" /></pre> <p>The x attribute defines an x-coordinate of 0. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_Coordinate simple type (Part 1, §20.1.10.16).</p>
y (Y-Axis Coordinate) Namespace: .../drawingml/2006/main	<p>Specifies a coordinate on the y-axis. The origin point for this coordinate shall be specified by the parent XML element.</p> <p>[<i>Example:</i> Consider the following point on a basic wrapping polygon for a DrawingML object:</p> <pre><... x="0" y="100" /></pre> <p>The y attribute defines a y-coordinate of 100. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_Coordinate simple type (Part 1, §20.1.10.16).</p>

16.5.15 Changed attribute for sld element (Part 1, §19.2.2.14)

Attributes	Description
id (Relationship Identifier)	Specifies the relationship identifier that is used in conjunction with a corresponding relationship file to resolve the location of this presentation slide within a presentation.

Attributes	Description
Namespace: .../officeDocument /2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

16.5.16 Changed attribute for bgRef element (Part 1, §19.3.1.3)

Attributes	Description
idx (Style Matrix Index) Namespace: .../drawingml/2006/main	Specifies the style matrix index of the style referred to. The possible values for this attribute are defined by the ST_StyleMatrixColumnIndex simple type (Part 1, §20.1.10.57).

16.5.17 Changed attribute for blipFill element (Part 1, §19.3.1.4)

Attributes	Description
dpi (DPI Setting) Namespace: .../drawingml/2006/main	Specifies the DPI (dots per inch) used to calculate the size of the blip. If not present or zero, the DPI in the blip is used. [Note: This attribute is primarily used to keep track of the picture quality within a document. There are different levels of quality needed for print than on-screen viewing and thus a need to track this information. <i>end note</i>] The possible values for this attribute are defined by the W3C XML Schema unsignedInt datatype.
rotWithShape (Rotate With Shape) Namespace: .../drawingml/2006/main	Specifies that the fill should rotate with the shape. That is, when the shape that has been filled with a picture and the containing shape (say a rectangle) is transformed with a rotation then the fill is transformed with the same rotation. The possible values for this attribute are defined by the W3C XML Schema boolean datatype.

16.5.18 Changed attribute for clrMap element (Part 1, §19.3.1.6)

Attributes	Description
accent1 (Accent 1) Namespace: .../drawingml/2006/main	Specifies a color defined which is associated as the accent 1 color. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).

Attributes	Description
accent2 (Accent 2) Namespace: .../drawingml/2006/main	Specifies a color defined which is associated as the accent 2 color. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).
accent3 (Accent 3) Namespace: .../drawingml/2006/main	Specifies a color defined which is associated as the accent 3 color. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).
accent4 (Accent 4) Namespace: .../drawingml/2006/main	Specifies a color defined which is associated as the accent 4 color. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).
accent5 (Accent 5) Namespace: .../drawingml/2006/main	Specifies a color defined which is associated as the accent 5 color. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).
accent6 (Accent 6) Namespace: .../drawingml/2006/main	Specifies a color defined which is associated as the accent 6 color. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).
bg1 (Background 1) Namespace: .../drawingml/2006/main	A color defined which is associated as the first background color. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).
bg2 (Background 2) Namespace: .../drawingml/2006/main	Specifies a color defined which is associated as the second background color. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).
folHlink (Followed Hyperlink) Namespace: .../drawingml/2006/main	Specifies a color defined which is associated as the color for a followed hyperlink. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).

Attributes	Description
hlink (Hyperlink) Namespace: .../drawingml/2006/main	Specifies a color defined which is associated as the color for a hyperlink. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).
tx1 (Text 1) Namespace: .../drawingml/2006/main	Specifies a color defined which is associated as the first text color. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).
tx2 (Text 2) Namespace: .../drawingml/2006/main	Specifies a color defined which is associated as the second text color. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).

16.5.19 Changed attribute for cNvPicPr element (Part 1, §19.3.1.11)

Attributes	Description
preferRelativeResize (Relative Resize Preferred) Namespace: .../drawingml/2006/main	Specifies if the user interface should show the resizing of the picture based on the picture's current size or its original size. If this attribute is set to true, then scaling is relative to the original picture size as opposed to the current picture size. [<i>Example</i> : Consider the case where a picture has been resized within a document and is now 50% of the originally inserted picture size. Now if the user chooses to make a later adjustment to the size of this picture within the generating application, then the value of this attribute should be checked. If this attribute is set to true then a value of 50% is shown. Similarly, if this attribute is set to false, then a value of 100% should be shown because the picture has not yet been resized from its current (smaller) size. <i>end example</i>] The possible values for this attribute are defined by the W3C XML Schema boolean datatype.

16.5.20 Changed attribute for cNvPr element (Part 1, §19.3.1.12)

Attributes	Description
descr (Alternative Text for Object) Namespace: .../drawingml/2006/main	Specifies alternative text for the current DrawingML object, for use by assistive technologies or applications that do not display the current object. If this element is omitted, then no alternative text is present for the parent object. [<i>Example</i> : Consider a DrawingML object defined as follows: <... descr="A picture of a bowl of fruit">

Attributes	Description
	<p>The descr attribute contains alternative text that can be used in place of the actual DrawingML object. <i>end example</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>hidden (Hidden)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Specifies whether this DrawingML object is displayed. When a DrawingML object is displayed within a document, that object can be hidden (i.e., present, but not visible). This attribute determines whether the object is rendered or made hidden. [<i>Note</i>: An application can have settings which allow this object to be viewed. <i>end note</i>]</p> <p>If this attribute is omitted, then the parent DrawingML object shall be displayed (i.e., not hidden).</p> <p>[<i>Example</i>: Consider an inline DrawingML object that must be hidden within the document's content. This setting would be specified as follows:</p> <pre><... hidden="true" /></pre> <p>The hidden attribute has a value of true, which specifies that the DrawingML object is hidden and not displayed when the document is displayed. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>
<p>id (Unique Identifier)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Specifies a unique identifier for the current DrawingML object within the current document. This ID can be used to assist in uniquely identifying this object so that it can be referred to by other parts of the document.</p> <p>If multiple objects within the same document share the same id attribute value, then the document shall be considered non-conformant.</p> <p>[<i>Example</i>: Consider a DrawingML object defined as follows:</p> <pre><... id="10" ... ></pre> <p>The id attribute has a value of 10, which is the unique identifier for this DrawingML object. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_DrawingElementId simple type (Part 1, §20.1.10.21).</p>
<p>name (Name)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Specifies the name of the object. [<i>Note</i>: Typically, this is used to store the original file name of a picture object. <i>end note</i>]</p> <p>[<i>Example</i>: Consider a DrawingML object defined as follows:</p>

Attributes	Description
	<p>< ... name="foo.jpg" ></p> <p>The name attribute has a value of <code>foo.jpg</code>, which is the name of this DrawingML object. <i>end example</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>title (Title)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Specifies the title (caption) of the current DrawingML object.</p> <p>If this attribute is omitted, then no title text is present for the parent object.</p> <p>[Example: Consider a DrawingML object defined as follows:</p> <p><... title="Process Flow Diagram"></p> <p><i>end example</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

16.5.21 Changed attribute for cNvSpPr element (Part 1, §19.3.1.13)

Attributes	Description
<p>txBox (Text Box)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Specifies that the corresponding shape is a text box and thus should be treated as such by the generating application. If this attribute is omitted then it is assumed that the corresponding shape is not specifically a text box.</p> <p>[Note: Because a shape is not specified to be a text box does not mean that it cannot have text attached to it. A text box is merely a specialized shape with specific properties. <i>end note</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>

16.5.22 Changed attribute for contentPart element (Part 1, §19.3.1.14)

Attributes	Description
<p>id (Relationship to Part)</p> <p>Namespace: .../officeDocument/2006/relationships</p>	<p>Specifies the relationship ID to a content part.</p> <p>[Example: Consider an XML element which has the following id attribute:</p> <p><... r:id="rId1" /></p> <p>The markup specifies the associated relationship part with relationship ID <code>rId1</code> contains the corresponding relationship information for the parent XML element. <i>end example</i></p>

Attributes	Description
	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

16.5.23 Changed attribute for custData element (Part 1, §19.3.1.17)

Attributes	Description
id (Relationship ID) Namespace: .../officeDocument/2006/relationships	This attribute specifies the relationship id for referencing other resources outside the scope of the current PresentationML file. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

16.5.24 Changed attribute for grpSpPr element (Part 1, §19.3.1.23)

Attributes	Description
bwMode (Black and White Mode) Namespace: .../drawingml/2006/main	Specifies that the group shape should be rendered using only black and white coloring. That is the coloring information for the group shape should be converted to either black or white when rendering the corresponding shapes. No gray is to be used in rendering this image, only stark black and stark white. [Note: This does not mean that the group shapes themselves are stored with only black and white color information. This attribute instead sets the rendering mode that the shapes use when rendering. <i>end note</i>] The possible values for this attribute are defined by the ST_BlackWhiteMode simple type (Part 1, §20.1.10.10).

16.5.25 Changed attribute for sldLayoutId element (Part 1, §19.3.1.40)

Attributes	Description
id (ID Tag) Namespace: .../officeDocument/2006/relationships	Specifies the relationship id value that the generating application can use to resolve which slide layout is used in the creation of the slide. This relationship id is used within the relationship file for the master slide to expose the location of the corresponding layout file within the presentation. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

16.5.26 Changed attribute for spPr element (Part 1, §19.3.1.44)

Attributes	Description
bwMode (Black and White Mode)	Specifies that the picture should be rendered using only black and white coloring. That is the coloring information for the picture should be converted to either black or white when rendering the picture.


Attributes	Description
Namespace: .../drawingml/2006/main	<p>No gray is to be used in rendering this image, only stark black and stark white.</p> <p>[<i>Note</i>: This does not mean that the picture itself that is stored within the file is necessarily a black and white picture. This attribute instead sets the rendering mode that the picture has applied to when rendering. <i>end note</i>]</p> <p>The possible values for this attribute are defined by the ST_BlackWhiteMode simple type (Part 1, §20.1.10.10).</p>

16.5.27 Changed attribute for tags element (Part 1, §19.3.1.47)

Attributes	Description
id (Relationship ID) Namespace: .../officeDocument/2006/relationships	<p>This attribute specifies the relationship identifier for the customer data tag. This allows for a link to a resource that is external from the current XML document but still contained within the presentation document.</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

16.5.28 Changed attribute for xfrm element (Part 1, §19.3.1.53)

Attributes	Description
flipH (Horizontal Flip) Namespace: .../drawingml/2006/main	<p>Specifies a horizontal flip. When true, this attribute defines that the shape is flipped horizontally about the center of its bounding box.</p> <p>[<i>Example</i>: The following illustrates the effect of a horizontal flip.</p> <div> </div> <p><i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>

Attributes	Description
flipV (Vertical Flip) Namespace: .../drawingml/2006/main	<p>Specifies a vertical flip. When true, this attribute defines that the group is flipped vertically about the center of its bounding box.</p> <p>[Example: The following illustrates the effect of a vertical flip.]</p>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>
rot (Rotation) Namespace: .../drawingml/2006/main	<p>Specifies the rotation of the Graphic Frame. The units for which this attribute is specified in reside within the simple type definition referenced below.</p> <p>The possible values for this attribute are defined by the ST_Angle simple type (Part 1, §20.1.10.3).</p>

16.5.29 Changed attribute for control element (Part 1, §19.3.2.1)

Attributes	Description
id (Relationship ID) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship id that is used to identify this Embedded object from within a slide.</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

16.5.30 Changed attribute for oleObj element (Part 1, §19.3.2.4)

Attributes	Description
id (Relationship ID) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship id that is used to identify this Embedded object from within a slide.</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

16.5.31 Changed attribute for pos element (Part 1, §19.4.5)

Attributes	Description
x (X-Axis Coordinate)	<p>Specifies a coordinate on the x-axis. The origin point for this coordinate shall be specified by the parent XML element.</p>

Attributes	Description
Namespace: .../drawingml/2006/main	<p>[<i>Example</i>: Consider the following point on a basic wrapping polygon for a DrawingML object:</p> <pre><... x="0" y="100" /></pre> <p>The x attribute defines an x-coordinate of 0. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_Coordinate simple type (Part 1, §20.1.10.16).</p>
y (Y-Axis Coordinate) Namespace: .../drawingml/2006/main	<p>Specifies a coordinate on the y-axis. The origin point for this coordinate shall be specified by the parent XML element.</p> <p>[<i>Example</i>: Consider the following point on a basic wrapping polygon for a DrawingML object:</p> <pre><... x="0" y="100" /></pre> <p>The y attribute defines a y-coordinate of 100. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_Coordinate simple type (Part 1, §20.1.10.16).</p>

16.5.32 Changed attribute for snd element (Part 1, §19.5.68)

Attributes	Description
embed (Embedded Audio File Relationship ID) Namespace: .../officeDocument/2006/relationships	<p>Specifies the identification information for an embedded audio file. This attribute is used to specify the location of an object that resides locally within the file. [<i>Note</i>: A list of suggested audio types is provided in Part 1, §15.2.2. <i>end note</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>
name (Sound Name) Namespace: .../drawingml/2006/main	<p>Specifies the original name or given short name for the corresponding sound. This is used to distinguish this sound from others by providing a human readable name for the attached sound should the user need to identify the sound among others within the UI.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

16.5.33 Changed attribute for sndTgt element (Part 1, §19.5.70)

Attributes	Description
embed (Embedded Audio File Relationship ID)	<p>Specifies the identification information for an embedded audio file. This attribute is used to specify the location of an object that resides locally within the file. [<i>Note</i>: A list of suggested audio types is provided in Part 1, §15.2.2. <i>end note</i>]</p>

Attributes	Description
Namespace: .../officeDocument /2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).
name (Sound Name) Namespace: .../drawingml/2006/main	<p>Specifies the original name or given short name for the corresponding sound. This is used to distinguish this sound from others by providing a human readable name for the attached sound should the user need to identify the sound among others within the UI.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

17. DrawingML - Framework Reference Material

17.1 DrawingML - Main

17.1.1 Table of Contents

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End of informative text.

17.1.2 Simple Types

The following additional simple type information in the <http://schemas.openxmlformats.org/drawingml/2006/main> namespace is used for documents of a transitional conformance class.

17.1.2.1 Additional member types for the union in ST_FixedPercentage (Part 1, §20.1.10.24)

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

- The ST_FixedPercentageDecimal simple type (§17.1.2.7).

17.1.2.2 Additional member types for the union in ST_Percentage (Part 1, §20.1.10.40)

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

- The ST_PercentageDecimal simple type (Part 4, §12.1.2.12).

17.1.2.3 Additional member types for the union in ST_PositiveFixedPercentage (Part 1, §20.1.10.45)

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

- The ST_PositiveFixedPercentageDecimal simple type (§17.1.2.8).

17.1.2.4 Additional member types for the union in ST_PositivePercentage (Part 1, §20.1.10.46)

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

- The ST_PositivePercentageDecimal simple type (§17.1.2.9).

17.1.2.5 Additional member types for the union in ST_TextFontScalePercentOrPercentString (Part 1, §20.1.10.67)

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

- The ST_TextFontScalePercent simple type (§17.1.2.10).

17.1.2.6 Additional member types for the union in ST_TextSpacingPercentOrPercentString (Part 1, §20.1.10.77)

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

- The ST_TextSpacingPercent simple type (§17.1.2.11).

17.1.2.7 ST_FixedPercentageDecimal (Fixed Percentage)

This simple type represents a fixed percentage in 1000ths of a percent. Range from [-100%, 100%].

This simple type's contents are a restriction of the ST_PercentageDecimal datatype (Part 1, §20.1.10.41).

This simple type also specifies the following restrictions:

- This simple type has a minimum value of greater than or equal to -100000.
- This simple type has a maximum value of less than or equal to 100000.

Referenced By
ST_FixedPercentage (Part 1, §20.1.10.24)

[*Note*: The W3C XML Schema definition of this simple type's content model ([ST_FixedPercentageDecimal](#)) is located in §A.4.1. *end note*]

17.1.2.8 ST_PositiveFixedPercentageDecimal (Positive Fixed Percentage)

This simple type represents a positive fixed percentage in 1000ths of a percent. Range from [0%, 100%].

This simple type's contents are a restriction of the ST_PercentageDecimal datatype (Part 1, §20.1.10.41).

This simple type also specifies the following restrictions:

- This simple type has a minimum value of greater than or equal to 0.
- This simple type has a maximum value of less than or equal to 100000.

Referenced By
ST_PositiveFixedPercentage (Part 1, §20.1.10.45); ST_TLTimeAnimateValueTime (Part 1, §19.7.39)

[*Note*: The W3C XML Schema definition of this simple type's content model ([ST_PositiveFixedPercentageDecimal](#)) is located in §A.4.1. *end note*]

17.1.2.9 ST_PositivePercentageDecimal (Positive Percentage as Decimal Number)

This simple type represents a positive percentage in 1000ths of a percent. Range from 0% up to and including infinity.

This simple type's contents are a restriction of the ST_PercentageDecimal datatype (Part 1, §20.1.10.41).

This simple type also specifies the following restrictions:

- This simple type has a minimum value of greater than or equal to 0.

Referenced By
ST_PositivePercentage (Part 1, §20.1.10.46)

[*Note*: The W3C XML Schema definition of this simple type's content model ([ST_PositivePercentageDecimal](#)) is located in §A.4.1. *end note*]

17.1.2.10 ST_TextFontScalePercent (Text Font Scale Percentage)

This simple type specifies the percentage range text can be scaled to in order to fit, in 1000ths of a percent.

This simple type's contents are a restriction of the ST_PercentageDecimal datatype (Part 1, §20.1.10.41).

This simple type also specifies the following restrictions:

- This simple type has a minimum value of greater than or equal to 1000.
- This simple type has a maximum value of less than or equal to 100000.

Referenced By
ST_TextFontScalePercentOrPercentString (Part 1, §20.1.10.67)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST_TextFontScalePercent](#)) is located in §A.4.1. *end note*]

17.1.2.11 ST_TextSpacingPercent (Text Spacing Percent)

This type specifies the range of text spacing in thousandths of a percent, in terms of a line.

This simple type's contents are a restriction of the ST_PercentageDecimal datatype (Part 1, §20.1.10.41).

This simple type also specifies the following restrictions:

- This simple type has a minimum value of greater than or equal to 0.
- This simple type has a maximum value of less than or equal to 13200000.

Referenced By
ST_TextSpacingPercentOrPercentString (Part 1, §20.1.10.77)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST_TextSpacingPercent](#)) is located in §A.4.1. *end note*]

17.1.2.12 ST_PercentageDecimal (Percentage as Decimal Number)

This simple type represents a percentage in 1000ths of a percent, e.g., a value of 1 represents 0.001% == 0.00001; a value of 100000 is equal to 100%. Percentages have no intrinsic units, but are used to scale other values with units.

This simple type's contents are a restriction of the W3C XML Schema int datatype.

Referenced By
ST_Percentage (Part 1, §20.1.10.40)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST_PercentageDecimal](#)) is located in §A.4.1. *end note*]

17.1.2.13 Additional member types for the union in ST_PrSetCustVal (Part 1, §21.4.7.66)

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

The W3C XML Schema int datatype.

17.1.2.14 ST_TextBulletSizeDecimal (Bullet Size Percentage)

This simple type specifies the range that the bullet percent can be. A bullet percent is the size of the bullet with respect to the text that should follow it. 25000 = 25%, 400000 = 400%

This simple type's contents are a restriction of the ST_PercentageDecimal datatype (Part 4, §12.1.2.12).

This simple type also specifies the following restrictions:

This simple type has a minimum value of greater than or equal to 25000.

This simple type has a maximum value of less than or equal to 400000.

Referenced By
ST_TextBulletSize (Part 1, §20.1.10.86)

[Note: The W3C XML Schema definition of this simple type’s content model (ST_TextBulletSizeDecimal) is located in §A.4.1. *end note*]

17.1.2.15 Additional member types for the union in ST_TextBulletSize (Part 1, §20.1.10.86)

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

The ST_TextBulletSizeDecimal simple type (Part 4, §12.1.2.14).

17.2 DrawingML - Legacy Compatibility

Within the context of DrawingML, it shall be possible (for considerations to legacy compatibility) to be able to include explicit references to specific shapes within VML Drawing parts.

[Example: A VML Drawing part is used to define ink on a PresentationML slide, but the resulting ink is referenced from the slide by its shape ID using the elements of this namespace. *end example*]

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End of informative text.

17.2.2 Basics

Legacy Compatibility is part of the shape definitions and properties of the DrawingML framework.

17.2.2.1 legacyDrawing (Legacy Drawing Object)

This element specifies the shape ID for a legacy drawing object. These legacy drawing objects all have a shape ID associated with them that is unique across the entire document. In order to store these legacy shape IDs as well as new shape IDs this legacyDrawing element should be used.

Attributes	Description
spid (Shape ID)	<p>Legacy Shape ID that is unique throughout the entire document. Legacy shape IDs should be assigned based on which portion of the document the drawing resides on. The assignment of these ids is broken down into clusters of 1024 values. The first cluster is 1-1024, the second 1025-2048 and so on.</p> <p><i>[Example: Within a word processing application the spid should be assigned based on the page that the drawing resides on. If the drawing resides on the second page then the assigned spid should be a value between 1025 and 2048. end example]</i></p> <p><i>[Example: Within a spreadsheet application the spid should be assigned based on the sheet that the drawing resides on. If the drawing resides on the second sheet then the assigned spid should be a value between 1025 and 2048. end example]</i></p> <p><i>[Example: Within a presentation application the spid should be assigned based on the slide that the drawing resides on. If the drawing resides on the second slide then the assigned spid should be a value between 1025 and 2048. end example]</i></p> <p>The possible values for this attribute are defined by the ST_ShapeID simple type (Part 1, §20.1.10.55).</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_Compat](#)) is located in §A.4.3. end note]

17.3 Changed attributes

The following attributes, which are defined in subclauses within Part 1, §20, "DrawingML - Framework Reference Material", have different source relationships when used in documents of the Transitional conformance class:

17.3.1 Changed attribute for hlinkHover element (Part 1, §20.1.2.2.23)

Attributes	Description
id (Drawing Object Hyperlink Target)	Specifies the relationship id that when looked up in this slides relationship file contains the target of this hyperlink. This attribute cannot be omitted.
Namespace: .../officeDocument /2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

17.3.2 Changed attribute for snd element (Part 1, §20.1.2.2.32)

Attributes	Description
embed (Embedded Audio File Relationship ID)	Specifies the identification information for an embedded audio file. This attribute is used to specify the location of an object that resides locally within the file. [Note: A list of suggested audio types is provided in Part 1, §15.2.2. <i>end note</i>]
Namespace: .../officeDocument /2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

17.3.3 Changed attribute for audioFile element (Part 1, §20.1.3.2)

Attributes	Description
link (Linked Relationship ID)	Specifies the identification information for a linked object. This attribute is used to specify the location of an object that does not reside within this file.
Namespace: .../officeDocument /2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

17.3.4 Changed attribute for quickTimeFile element (Part 1, §20.1.3.4)

Attributes	Description
link (Linked Relationship ID)	Specifies the identification information for a linked object. This attribute is used to specify the location of an object that does not reside within this file.
Namespace: .../officeDocument /2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

17.3.5 Changed attribute for videoFile element (Part 1, §20.1.3.6)

Attributes	Description
link (Linked Relationship ID)	Specifies the identification information for a linked object. This attribute is used to specify the location of an object that does not reside within this file.
Namespace: .../officeDocument /2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

17.3.6 Changed attribute for wavAudioFile element (Part 1, §20.1.3.7)

Attributes	Description
embed (Embedded Audio File Relationship ID)	Specifies the identification information for an embedded audio file. This attribute is used to specify the location of an object that resides locally within the file. [<i>Note</i> : A list of suggested audio types is provided in Part 1, §15.2.2. <i>end note</i>]
Namespace: .../officeDocument/2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

17.3.7 Changed attribute for blip element (Part 1, §20.1.8.13)

Attributes	Description
embed (Embedded Picture Reference)	Specifies the identification information for an embedded picture. This attribute is used to specify an image that resides locally within the file.
Namespace: .../officeDocument/2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).
link (Linked Picture Reference)	Specifies the identification information for a linked picture. This attribute is used to specify an image that does not reside within this file.
Namespace: .../officeDocument/2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

17.3.8 Changed attribute for blipFill element (Part 1, §20.2.2.1)

Attributes	Description
dpi (DPI Setting)	Specifies the DPI (dots per inch) used to calculate the size of the blip. If not present or zero, the DPI in the blip is used.
Namespace: .../drawingml/2006/main	[<i>Note</i> : This attribute is primarily used to keep track of the picture quality within a document. There are different levels of quality needed for print than on-screen viewing and thus a need to track this information. <i>end note</i>] The possible values for this attribute are defined by the W3C XML Schema unsignedInt datatype.

Attributes	Description
rotWithShape (Rotate With Shape) Namespace: .../drawingml/2006/main	<p>Specifies that the fill should rotate with the shape. That is, when the shape that has been filled with a picture and the containing shape (say a rectangle) is transformed with a rotation then the fill is transformed with the same rotation.</p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>

17.3.9 Changed attribute for cNvPicPr element (Part 1, §20.2.2.2)

Attributes	Description
preferRelativeResi ze (Relative Resize Preferred) Namespace: .../drawingml/2006/main	<p>Specifies if the user interface should show the resizing of the picture based on the picture's current size or its original size. If this attribute is set to true, then scaling is relative to the original picture size as opposed to the current picture size.</p> <p>[<i>Example</i>: Consider the case where a picture has been resized within a document and is now 50% of the originally inserted picture size. Now if the user chooses to make a later adjustment to the size of this picture within the generating application, then the value of this attribute should be checked.</p> <p>If this attribute is set to true then a value of 50% is shown. Similarly, if this attribute is set to false, then a value of 100% should be shown because the picture has not yet been resized from its current (smaller) size. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>

17.3.10 Changed attribute for cNvPr element (Part 1, §20.2.2.3)

Attributes	Description
descr (Alternative Text for Object) Namespace: .../drawingml/2006/main	<p>Specifies alternative text for the current DrawingML object, for use by assistive technologies or applications that do not display the current object.</p> <p>If this element is omitted, then no alternative text is present for the parent object.</p> <p>[<i>Example</i>: Consider a DrawingML object defined as follows:</p> <pre><... descr="A picture of a bowl of fruit"></pre> <p>The descr attribute contains alternative text that can be used in place of the actual DrawingML object. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

Attributes	Description
<p>hidden (Hidden)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Specifies whether this DrawingML object is displayed. When a DrawingML object is displayed within a document, that object can be hidden (i.e., present, but not visible). This attribute determines whether the object is rendered or made hidden. [<i>Note</i>: An application can have settings that allow this object to be viewed. <i>end note</i>]</p> <p>If this attribute is omitted, then the parent DrawingML object shall be displayed (i.e., not hidden).</p> <p>[<i>Example</i>: Consider an inline DrawingML object that must be hidden within the document's content. This setting would be specified as follows:</p> <pre><... hidden="true" /></pre> <p>The hidden attribute has a value of true, which specifies that the DrawingML object is hidden and not displayed when the document is displayed. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>
<p>id (Unique Identifier)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Specifies a unique identifier for the current DrawingML object within the current document. This ID can be used to assist in uniquely identifying this object so that it can be referred to by other parts of the document.</p> <p>If multiple objects within the same document share the same id attribute value, then the document shall be considered non-conformant.</p> <p>[<i>Example</i>: Consider a DrawingML object defined as follows:</p> <pre><... id="10" ... ></pre> <p>The id attribute has a value of 10, which is the unique identifier for this DrawingML object. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_DrawingElementId simple type (Part 1, §20.1.10.21).</p>

Attributes	Description
name (Name) Namespace: .../drawingml/2006/main	<p>Specifies the name of the object. [<i>Note</i>: Typically, this is used to store the original file name of a picture object. <i>end note</i>]</p> <p>[<i>Example</i>: Consider a DrawingML object defined as follows:</p> <pre>< ... name="foo.jpg" ></pre> <p>The name attribute has a value of foo.jpg, which is the name of this DrawingML object. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
title (Title) Namespace: .../drawingml/2006/main	<p>Specifies the title (caption) of the current DrawingML object.</p> <p>If this attribute is omitted, then no title text is present for the parent object.</p> <p>[<i>Example</i>: Consider a DrawingML object defined as follows:</p> <pre><... title="Process Flow Diagram"></pre> <p><i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

17.3.11 Changed attribute for spPr element (Part 1, §20.2.2.6)

Attributes	Description
bwMode (Black and White Mode) Namespace: .../drawingml/2006/main	<p>Specifies that the picture should be rendered using only black and white coloring. That is the coloring information for the picture should be converted to either black or white when rendering the picture.</p> <p>No gray is to be used in rendering this image, only stark black and stark white.</p> <p>[<i>Note</i>: This does not mean that the picture itself that is stored within the file is necessarily a black and white picture. This attribute instead sets the rendering mode that the picture has applied to when rendering. <i>end note</i>]</p> <p>The possible values for this attribute are defined by the ST_BlackWhiteMode simple type (Part 1, §20.1.10.10).</p>

17.3.12 Changed attribute for docPr element (Part 1, §20.4.2.5)

Attributes	Description
descr (Alternative Text for Object)	<p>Specifies alternative text for the current DrawingML object, for use by assistive technologies or applications that do not display the current object.</p>

Attributes	Description
<p>Namespace: .../drawingml/2006/main</p>	<p>If this element is omitted, then no alternative text is present for the parent object.</p> <p>[<i>Example</i>: Consider a DrawingML object defined as follows:</p> <pre><... descr="A picture of a bowl of fruit"></pre> <p>The descr attribute contains alternative text that can be used in place of the actual DrawingML object. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>hidden (Hidden)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Specifies whether this DrawingML object is displayed. When a DrawingML object is displayed within a document, that object can be hidden (i.e., present, but not visible). This attribute determines whether the object is rendered or made hidden. [<i>Note</i>: An application can have settings that allow this object to be viewed. <i>end note</i>]</p> <p>If this attribute is omitted, then the parent DrawingML object shall be displayed (i.e., not hidden).</p> <p>[<i>Example</i>: Consider an inline DrawingML object that must be hidden within the document's content. This setting would be specified as follows:</p> <pre><... hidden="true" /></pre> <p>The hidden attribute has a value of true, which specifies that the DrawingML object is hidden and not displayed when the document is displayed. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>
<p>id (Unique Identifier)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Specifies a unique identifier for the current DrawingML object within the current document. This ID can be used to assist in uniquely identifying this object so that it can be referred to by other parts of the document.</p> <p>If multiple objects within the same document share the same id attribute value, then the document shall be considered non-conformant.</p> <p>[<i>Example</i>: Consider a DrawingML object defined as follows:</p> <pre><... id="10" ... ></pre> <p>The id attribute has a value of 10, which is the unique identifier for this DrawingML object. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_DrawingElementId simple</p>

Attributes	Description
	type (Part 1, §20.1.10.21).
name (Name) Namespace: .../drawingml/2006/main	<p>Specifies the name of the object. [<i>Note</i>: Typically, this is used to store the original file name of a picture object. <i>end note</i>]</p> <p>[<i>Example</i>: Consider a DrawingML object defined as follows:</p> <pre>< ... name="foo.jpg" ></pre> <p>The name attribute has a value of <code>foo.jpg</code>, which is the name of this DrawingML object. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
title (Title) Namespace: .../drawingml/2006/main	<p>Specifies the title (caption) of the current DrawingML object.</p> <p>If this attribute is omitted, then no title text is present for the parent object.</p> <p>[<i>Example</i>: Consider a DrawingML object defined as follows:</p> <pre><... title="Process Flow Diagram"></pre> <p><i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

17.3.13 Changed attribute for extent element (Part 1, §20.4.2.7)

Attributes	Description
cx (Extent Width) Namespace: .../drawingml/2006/main	<p>Specifies the width of the extents rectangle in EMUs. This rectangle shall dictate the size of the object as displayed (the result of any scaling to the original object).</p> <p>[<i>Example</i>: Consider a DrawingML object specified as follows:</p> <pre><... cx="1828800" cy="200000"/></pre> <p>The <code>cx</code> attribute specifies that this object has a width of 1828800 EMUs (English Metric Units). <i>end example</i>]</p> <p>The possible values for this attribute are defined by the <code>ST_PositiveCoordinate</code> simple type (Part 1, §20.1.10.42).</p>

Attributes	Description
cy (Extent Height) Namespace: .../drawingml/2006/main	<p>Specifies the height of the extents rectangle in EMUs. This rectangle shall dictate the size of the object as displayed (the result of any scaling to the original object).</p> <p>[<i>Example:</i> Consider a DrawingML object specified as follows:</p> <pre>< ... cx="1828800" cy="200000" /></pre> <p>The cy attribute specifies that this object has a height of 200000 EMUs (English Metric Units). <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_PositiveCoordinate simple type (Part 1, §20.1.10.42).</p>

17.3.14 Changed attribute for lineTo element (Part 1, §20.4.2.9)

Attributes	Description
x (X-Axis Coordinate) Namespace: .../drawingml/2006/main	<p>Specifies a coordinate on the x-axis. The origin point for this coordinate shall be specified by the parent XML element.</p> <p>[<i>Example:</i> Consider the following point on a basic wrapping polygon for a DrawingML object:</p> <pre><... x="0" y="100" /></pre> <p>The x attribute defines an x-coordinate of 0. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_Coordinate simple type (Part 1, §20.1.10.16).</p>
y (Y-Axis Coordinate) Namespace: .../drawingml/2006/main	<p>Specifies a coordinate on the y-axis. The origin point for this coordinate shall be specified by the parent XML element.</p> <p>[<i>Example:</i> Consider the following point on a basic wrapping polygon for a DrawingML object:</p> <pre><... x="0" y="100" /></pre> <p>The y attribute defines a y-coordinate of 100. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_Coordinate simple type (Part 1, §20.1.10.16).</p>

17.3.15 Changed attribute for simplePos element (Part 1, §20.4.2.13)

Attributes	Description
x (X-Axis Coordinate)	<p>Specifies a coordinate on the x-axis. The origin point for this coordinate shall be specified by the parent XML element.</p>

Attributes	Description
Namespace: .../drawingml/2006/main	<p>[<i>Example:</i> Consider the following point on a basic wrapping polygon for a DrawingML object:</p> <pre><... x="0" y="100" /></pre> <p>The x attribute defines an x-coordinate of 0. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_Coordinate simple type (Part 1, §20.1.10.16).</p>
y (Y-Axis Coordinate) Namespace: .../drawingml/2006/main	<p>Specifies a coordinate on the y-axis. The origin point for this coordinate shall be specified by the parent XML element.</p> <p>[<i>Example:</i> Consider the following point on a basic wrapping polygon for a DrawingML object:</p> <pre><... x="0" y="100" /></pre> <p>The y attribute defines a y-coordinate of 100. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_Coordinate simple type (Part 1, §20.1.10.16).</p>

17.3.16 Changed attribute for start element (Part 1, §20.4.2.14)

Attributes	Description
x (X-Axis Coordinate) Namespace: .../drawingml/2006/main	<p>Specifies a coordinate on the x-axis. The origin point for this coordinate shall be specified by the parent XML element.</p> <p>[<i>Example:</i> Consider the following point on a basic wrapping polygon for a DrawingML object:</p> <pre><... x="0" y="100" /></pre> <p>The x attribute defines an x-coordinate of 0. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_Coordinate simple type (Part 1, §20.1.10.16).</p>

Attributes	Description
y (Y-Axis Coordinate) Namespace: .../drawingml/2006/main	<p>Specifies a coordinate on the y-axis. The origin point for this coordinate shall be specified by the parent XML element.</p> <p>[<i>Example</i>: Consider the following point on a basic wrapping polygon for a DrawingML object:</p> <pre><... x="0" y="100" /></pre> <p>The y attribute defines a y-coordinate of 100. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_Coordinate simple type (Part 1, §20.1.10.16).</p>

17.3.17 Changed attribute for blipFill element (Part 1, §20.5.2.2)

Attributes	Description
dpi (DPI Setting) Namespace: .../drawingml/2006/main	<p>Specifies the DPI (dots per inch) used to calculate the size of the blip. If not present or zero, the DPI in the blip is used.</p> <p>[<i>Note</i>: This attribute is primarily used to keep track of the picture quality within a document. There are different levels of quality needed for print than on-screen viewing and thus a need to track this information. <i>end note</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema unsignedInt datatype.</p>
rotWithShape (Rotate With Shape) Namespace: .../drawingml/2006/main	<p>Specifies that the fill should rotate with the shape. That is, when the shape that has been filled with a picture and the containing shape (say a rectangle) is transformed with a rotation then the fill is transformed with the same rotation.</p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>

17.3.18 Changed attribute for cNvPicPr element (Part 1, §20.5.2.7)

Attributes	Description
preferRelativeResize (Relative Resize Preferred) Namespace: .../drawingml/2006/main	<p>Specifies if the user interface should show the resizing of the picture based on the picture's current size or its original size. If this attribute is set to true, then scaling is relative to the original picture size as opposed to the current picture size.</p> <p>[<i>Example</i>: Consider the case where a picture has been resized within a document and is now 50% of the originally inserted picture size. Now if the user chooses to make a later adjustment to the size of this picture within the generating application, then the value of this attribute should be checked.</p> <p>If this attribute is set to true then a value of 50% is shown. Similarly, if this attribute is set to false, then a value of 100% should be shown because the picture has not yet been</p>

Attributes	Description
	<p>resized from its current (smaller) size. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>

17.3.19 Changed attribute for cNvPr element (Part 1, §20.5.2.8)

Attributes	Description
<p>descr (Alternative Text for Object)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Specifies alternative text for the current DrawingML object, for use by assistive technologies or applications that do not display the current object.</p> <p>If this element is omitted, then no alternative text is present for the parent object.</p> <p>[<i>Example</i>: Consider a DrawingML object defined as follows:</p> <pre><... descr="A picture of a bowl of fruit"></pre> <p>The descr attribute contains alternative text that can be used in place of the actual DrawingML object. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>hidden (Hidden)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Specifies whether this DrawingML object is displayed. When a DrawingML object is displayed within a document, that object can be hidden (i.e., present, but not visible). This attribute determines whether the object is rendered or made hidden. [<i>Note</i>: An application can have settings that allow this object to be viewed. <i>end note</i>]</p> <p>If this attribute is omitted, then the parent DrawingML object shall be displayed (i.e., not hidden).</p> <p>[<i>Example</i>: Consider an inline DrawingML object that must be hidden within the document's content. This setting would be specified as follows:</p> <pre><... hidden="true" /></pre> <p>The hidden attribute has a value of true, which specifies that the DrawingML object is hidden and not displayed when the document is displayed. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>

Attributes	Description
id (Unique Identifier) Namespace: .../drawingml/2006/main	<p>Specifies a unique identifier for the current DrawingML object within the current document. This ID can be used to assist in uniquely identifying this object so that it can be referred to by other parts of the document.</p> <p>If multiple objects within the same document share the same id attribute value, then the document shall be considered non-conformant.</p> <p>[<i>Example</i>: Consider a DrawingML object defined as follows:</p> <pre><... id="10" ... ></pre> <p>The id attribute has a value of 10, which is the unique identifier for this DrawingML object. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_DrawingElementId simple type (Part 1, §20.1.10.21).</p>
name (Name) Namespace: .../drawingml/2006/main	<p>Specifies the name of the object. [<i>Note</i>: Typically, this is used to store the original file name of a picture object. <i>end note</i>]</p> <p>[<i>Example</i>: Consider a DrawingML object defined as follows:</p> <pre>< ... name="foo.jpg" ></pre> <p>The name attribute has a value of foo.jpg, which is the name of this DrawingML object. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the type W3C XML Schema string.</p>
title (Title) Namespace: .../drawingml/2006/main	<p>Specifies the title (caption) of the current DrawingML object.</p> <p>If this attribute is omitted, then no title text is present for the parent object.</p> <p>[<i>Example</i>: Consider a DrawingML object defined as follows:</p> <pre><... title="Process Flow Diagram"></pre> <p><i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

17.3.20 Changed attribute for cNvSpPr element (Part 1, §20.5.2.9)

Attributes	Description
txBox (Text Box)	Specifies that the corresponding shape is a text box and thus should be treated as such by the generating application. If this attribute is omitted then it is assumed that the

Attributes	Description
Namespace: .../drawingml/2006/main	<p>corresponding shape is not specifically a text box.</p> <p>[<i>Note</i>: Because a shape is not specified to be a text box does not mean that it cannot have text attached to it. A text box is merely a specialized shape with specific properties. <i>end note</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>

17.3.21 Changed attribute for contentPart element (Part 1, §20.5.2.12)

Attributes	Description
id (Relationship to Part) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship ID to a content part.</p> <p>[<i>Example</i>: Consider an XML element that has the following id attribute:</p> <pre><... r:id="rId1" /></pre> <p>The markup specifies the associated relationship part with relationship ID rId1 contains the corresponding relationship information for the parent XML element. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>

17.3.22 Changed attribute for ext element (Part 1, §20.5.2.14)

Attributes	Description
cx (Extent Width) Namespace: .../drawingml/2006/main	<p>Specifies the width of the extents rectangle in EMUs. This rectangle shall dictate the size of the object as displayed (the result of any scaling to the original object).</p> <p>[<i>Example</i>: Consider a DrawingML object specified as follows:</p> <pre><... cx="1828800" cy="200000"/></pre> <p>The cx attribute specifies that this object has a width of 1828800 EMUs (English Metric Units). <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_PositiveCoordinate simple type (Part 1, §20.1.10.42).</p>

Attributes	Description
cy (Extent Height) Namespace: .../drawingml/2006/main	<p>Specifies the height of the extents rectangle in EMUs. This rectangle shall dictate the size of the object as displayed (the result of any scaling to the original object).</p> <p>[<i>Example:</i> Consider a DrawingML object specified as follows:</p> <pre>< ... cx="1828800" cy="200000" /></pre> <p>The cy attribute specifies that this object has a height of 200000 EMUs (English Metric Units). <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_PositiveCoordinate simple type (Part 1, §20.1.10.42).</p>

17.3.23 Changed attribute for grpSpPr element (Part 1, §20.5.2.18)

Attributes	Description
bwMode (Black and White Mode) Namespace: .../drawingml/2006/main	<p>Specifies that the group shape should be rendered using only black and white coloring. That is the coloring information for the group shape should be converted to either black or white when rendering the corresponding shapes.</p> <p>No gray is to be used in rendering this image, only stark black and stark white.</p> <p>[<i>Note:</i> This does not mean that the group shapes themselves are stored with only black and white color information. This attribute instead sets the rendering mode that the shapes use when rendering. <i>end note</i>]</p> <p>The possible values for this attribute are defined by the ST_BlackWhiteMode simple type (Part 1, §20.1.10.10).</p>

17.3.24 Changed attribute for pos element (Part 1, §20.5.2.26)

Attributes	Description
x (X-Axis Coordinate) Namespace: .../drawingml/2006/main	<p>Specifies a coordinate on the x-axis. The origin point for this coordinate shall be specified by the parent XML element.</p> <p>[<i>Example:</i> Consider the following point on a basic wrapping polygon for a DrawingML object:</p> <pre><... x="0" y="100" /></pre> <p>The x attribute defines an x-coordinate of 0. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_Coordinate simple type (Part 1, §20.1.10.16).</p>


Attributes	Description
y (Y-Axis Coordinate) Namespace: .../drawingml/2006/main	<p>Specifies a coordinate on the y-axis. The origin point for this coordinate shall be specified by the parent XML element.</p> <p>[<i>Example:</i> Consider the following point on a basic wrapping polygon for a DrawingML object:</p> <pre><... x="0" y="100" /></pre> <p>The y attribute defines a y-coordinate of 100. <i>end example</i></p> <p>The possible values for this attribute are defined by the ST_Coordinate simple type (Part 1, §20.1.10.16).</p>

17.3.25 Changed attribute for spPr element (Part 1, §20.5.2.30)

Attributes	Description
bwMode (Black and White Mode) Namespace: .../drawingml/2006/main	<p>Specifies that the picture should be rendered using only black and white coloring. That is the coloring information for the picture should be converted to either black or white when rendering the picture.</p> <p>No gray is to be used in rendering this image, only stark black and stark white.</p> <p>[<i>Note:</i> This does not mean that the picture itself that is stored within the file is necessarily a black and white picture. This attribute instead sets the rendering mode that the picture has applied to when rendering. <i>end note</i>]</p> <p>The possible values for this attribute are defined by the ST_BlackWhiteMode simple type (Part 1, §20.1.10.10).</p>

17.3.26 Changed attribute for xfrm element (Part 1, §20.5.2.36)

Attributes	Description
flipH (Horizontal Flip) Namespace: .../drawingml/2006/main	<p>Specifies a horizontal flip. When true, this attribute defines that the shape is flipped horizontally about the center of its bounding box.</p> <p>[<i>Example:</i> The following illustrates the effect of a horizontal flip.</p> <div> </div> <p><i>end example</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>

Attributes	Description
<p>flipV (Vertical Flip)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Specifies a vertical flip. When true, this attribute defines that the group is flipped vertically about the center of its bounding box.</p> <p>[Example: The following illustrates the effect of a vertical flip.</p> <div></div> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>
<p>rot (Rotation)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Specifies the rotation of the Graphic Frame. The units for that this attribute is specified in reside within the simple type definition referenced below.</p> <p>The possible values for this attribute are defined by the ST_Angle simple type (Part 1, §20.1.10.3).</p>

18. DrawingML - Components Reference Material

18.1 DrawingML - Charts

18.1.1 Table of Contents

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End of informative text.

18.1.2 Elements

18.1.2.1 legacyDrawingHF (Legacy Drawing for Headers and Footers)

This element specifies the VML Drawing part that contains any pictures used in the header or footer of the chart.

Parent Elements
printSettings (Part 1, §21.2.2.148)

Attributes	Description
id (Relationship Reference)	Specifies the relationship ID for the relationship for this Chart or Chart Drawing part. The type of relationship needed is specified by the parent element.
Namespace: .../officeDocument /2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

[Note: The W3C XML Schema definition of this element’s content model (CT_RelId) is located in §A.5.1. *end note*]

18.1.3 Simple Types

18.1.3.1 Additional member types for union in ST_DepthPercent

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

- The ST_DepthPercentUShort simple type (§13.1.3.2).

18.1.3.2 ST_DepthPercentUShort (Depth Percent UnsignedShort) (Part 1, §21.2.3.9)

This simple type specifies that its contents contain a whole number between 20 and 2000, whose contents are a percentage. This simple type's contents are a restriction of the W3C XML Schema unsignedShort datatype.

This simple type also specifies the following restrictions:

This simple type has a minimum value of greater than or equal to 20.

This simple type has a maximum value of less than or equal to 2000.

Referenced By
ST_DepthPercent (Part 1, §21.2.3.9)

18.1.3.3 Additional member types for union in ST_HPercent (Part 1, §21.2.3.19)

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

- The ST_HPercentUShort simple type (§13.1.3.4).

18.1.3.4 ST_HPercentUShort (Depth Percent UnsignedShort)

This simple type specifies that its contents contain a whole number between 5 and 500, whose contents are a percentage.

This simple type's contents are a restriction of the W3C XML Schema unsignedShort datatype.

This simple type also specifies the following restrictions:

This simple type has a minimum value of greater than or equal to 5.

This simple type has a maximum value of less than or equal to 500.

Referenced By
ST_HPercent (Part 1, §21.2.3.19)

18.1.3.5 Additional member types for union in ST_GapAmount (Part 1, §21.2.3.16)

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

- The ST_GapAmountUShort simple type (§13.1.3.6).

18.1.3.6 ST_GapAmountUShort (Gap Amount UnsignedShort)

This simple type specifies that its contents contain a whole number between 0 and 500, whose contents are a percentage.

This simple type's contents are a restriction of the W3C XML Schema unsignedShort datatype.

This simple type also specifies the following restrictions:

This simple type has a minimum value of greater than or equal to 0.

This simple type has a maximum value of less than or equal to 500.

Referenced By
ST_GapAmount (Part 1, §21.2.3.16)

18.1.3.7 Additional member types for union in ST_SecondPieSize (Part 1, §21.2.3.41)

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

- The ST_SecondPieSizeUShort simple type (§13.1.3.10).

18.1.3.8 ST_SecondPieSizeUShort (Second Pie Size UnsignedShort)

This simple type specifies that its contents contain a whole number between 5 and 200, whose contents are a percentage.

This simple type's contents are a restriction of the W3C XML Schema unsignedShort datatype.

This simple type also specifies the following restrictions:

This simple type has a minimum value of greater than or equal to 5.

This simple type has a maximum value of less than or equal to 200.

Referenced By
ST_SecondPieSize (Part 1, §21.2.3.41)

18.1.3.9 Additional member types for union in ST_HoleSize (Part 1, §21.2.3.18)

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

- The ST_HoleSizeUByte simple type (§13.1.3.12).

18.1.3.10 ST_HoleSizeUByte (Hole Size UnsignedByte)

This simple type specifies that its contents contain a whole number between 10 and 90, whose contents are a percentage.

This simple type's contents are a restriction of the W3C XML Schema unsignedByte datatype.

This simple type also specifies the following restrictions:

This simple type has a minimum value of greater than or equal to 10.

This simple type has a maximum value of less than or equal to 90.

Referenced By
ST_HoleSize (Part 1, §21.2.3.18)

18.1.3.11 Additional member types for union in ST_LblOffset (Part 1, §21.2.3.23)

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

- The ST_LblOffsetUShort simple type (§13.1.3.14).

18.1.3.12 ST_LblOffsetUShort (Label Offset UnsignedShort)

This simple type specifies that its contents contain a whole number between 0 and 1000, whose contents are a percentage.

This simple type's contents are a restriction of the W3C XML Schema unsignedShort datatype.

This simple type also specifies the following restrictions:

This simple type has a minimum value of greater than or equal to 0.

This simple type has a maximum value of less than or equal to 1000.

Referenced By
ST_LblOffset (Part 1, §21.2.3.23)

18.1.3.13 Additional member types for union in ST_Overlap (Part 1, §21.2.3.31)

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

- The ST_OverlapByte simple type (§13.1.3.16).

18.1.3.14 ST_OverlapByte (Overlap Byte)

This simple type specifies that its contents contain a whole number between -100 and 100, whose contents are a percentage.

This simple type's contents are a restriction of the W3C XML Schema byte datatype.

This simple type also specifies the following restrictions:

- This simple type has a minimum value of greater than or equal to -100.

This simple type has a maximum value of less than or equal to 100.

Referenced By
ST_Overlap (Part 1, §21.2.3.31)

18.1.3.15 **Additional member types for union in ST_BubbleScale (Part 1, §21.2.3.5)**

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

- The ST_BubbleScaleUInt simple type (§13.1.3.18).

18.1.3.16 **ST_BubbleScaleUInt (Bubble Scale UnsignedInt)**

This simple type specifies that its contents contain a whole number between 0 and 300, whose contents are a percentage.

This simple type's contents are a restriction of the W3C XML Schema unsignedInt datatype.

This simple type also specifies the following restrictions:

This simple type has a minimum value of greater than or equal to 0.

This simple type has a maximum value of less than or equal to 300.

Referenced By
ST_BubbleScale (Part 1, §21.2.3.5)

18.1.3.17 **Additional member types for union in ST_Thickness (Part 1, §21.2.3.206)**

The value space of the following additional member types can be used within the context of this simple type for a document of a transitional conformance class.

- The W3C XML Schema unsignedInt datatype.

18.2 **Changed attributes**

The following attributes, which are defined in subclauses within Part 1, §21, “DrawingML - Components Reference Material”, have different source relationships when used in documents of the Transitional conformance class:

18.2.1 **Changed attribute for hlinkClick element (Part 1, §21.1.2.3.5)**

Attributes	Description
id (Drawing Object Hyperlink Target)	Specifies the relationship id that when looked up in this slides relationship file contains the target of this hyperlink. This attribute cannot be omitted.
Namespace: .../officeDocument	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

Attributes	Description
/2006/relationships	

18.2.2 Changed attribute for hlinkMouseOver element (Part 1, §21.1.2.3.6)

Attributes	Description
id (Drawing Object Hyperlink Target)	Specifies the relationship id that when looked up in this slides relationship file contains the target of this hyperlink. This attribute cannot be omitted.
Namespace: .../officeDocument/2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

18.2.3 Changed attribute for chart element (Part 1, §21.2.2.26)

Attributes	Description
id (Relationship Reference)	Specifies the relationship ID for the relationship for this Chart or Chart Drawing part. The type of relationship needed is specified by the parent element.
Namespace: .../officeDocument/2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

18.2.4 Changed attribute for clrMapOvr element (Part 1, §21.2.2.30)

Attributes	Description
accent1 (Accent 1)	Specifies a color defined that is associated as the accent 1 color.
Namespace: .../drawingml/2006/main	The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).
accent2 (Accent 2)	Specifies a color defined that is associated as the accent 2 color.
Namespace: .../drawingml/2006/main	The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).
accent3 (Accent 3)	Specifies a color defined that is associated as the accent 3 color.
Namespace: .../drawingml/2006/main	The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).

Attributes	Description
accent4 (Accent 4) Namespace: .../drawingml/2006/main	Specifies a color defined that is associated as the accent 4 color. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).
accent5 (Accent 5) Namespace: .../drawingml/2006/main	Specifies a color defined that is associated as the accent 5 color. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).
accent6 (Accent 6) Namespace: .../drawingml/2006/main	Specifies a color defined that is associated as the accent 6 color. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).
bg1 (Background 1) Namespace: .../drawingml/2006/main	A color defined that is associated as the first background color. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).
bg2 (Background 2) Namespace: .../drawingml/2006/main	Specifies a color defined that is associated as the second background color. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).
folHlink (Followed Hyperlink) Namespace: .../drawingml/2006/main	Specifies a color defined that is associated as the color for a followed hyperlink. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).
hlink (Hyperlink) Namespace: .../drawingml/2006/main	Specifies a color defined that is associated as the color for a hyperlink. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).
tx1 (Text 1) Namespace: .../drawingml/2006/main	Specifies a color defined that is associated as the first text color. The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).

Attributes	Description
tx2 (Text 2)	Specifies a color defined that is associated as the second text color.
Namespace: .../drawingml/2006/main	The possible values for this attribute are defined by the ST_ColorSchemeIndex simple type (Part 1, §20.1.10.14).

18.2.5 Changed attribute for externalData element (Part 1, §21.2.2.63)

Attributes	Description
id (Relationship Reference)	Specifies the relationship ID for the relationship for this chart. The relationship explicitly targeted by this attribute shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/package .
Namespace: .../officeDocument/2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

18.2.6 Changed attribute for spPr element (Part 1, §21.2.2.197)

Attributes	Description
bwMode (Black and White Mode)	Specifies that the picture should be rendered using only black and white coloring. That is the coloring information for the picture should be converted to either black or white when rendering the picture.
Namespace: .../drawingml/2006/main	No gray is to be used in rendering this image, only stark black and stark white. [Note: This does not mean that the picture itself that is stored within the file is necessarily a black and white picture. This attribute instead sets the rendering mode that the picture has applied to when rendering. <i>end note</i>] The possible values for this attribute are defined by the ST_BlackWhiteMode simple type (Part 1, §20.1.10.10).

18.2.7 Changed attribute for userShapes element (Part 1, §21.2.2.221)

Attributes	Description
id (Relationship Reference)	Specifies the relationship ID for the relationship for this Chart or Chart Drawing part. The type of relationship needed is specified by the parent element.
Namespace: .../officeDocument/2006/relationships	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

18.2.8 Changed attribute for blipFill element (Part 1, §21.3.2.2)

Attributes	Description
dpi (DPI Setting) Namespace: .../drawingml/2006/main	<p>Specifies the DPI (dots per inch) used to calculate the size of the blip. If not present or zero, the DPI in the blip is used.</p> <p>[<i>Note</i>: This attribute is primarily used to keep track of the picture quality within a document. There are different levels of quality needed for print than on-screen viewing and thus a need to track this information. <i>end note</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema unsignedInt datatype.</p>
rotWithShape (Rotate With Shape) Namespace: .../drawingml/2006/main	<p>Specifies that the fill should rotate with the shape. That is, when the shape that has been filled with a picture and the containing shape (say a rectangle) is transformed with a rotation then the fill is transformed with the same rotation.</p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>

18.2.9 Changed attribute for cNvPicPr element (Part 1, §21.3.2.6)

Attributes	Description
preferRelativeResi ze (Relative Resize Preferred) Namespace: .../drawingml/2006/main	<p>Specifies if the user interface should show the resizing of the picture based on the picture's current size or its original size. If this attribute is set to true, then scaling is relative to the original picture size as opposed to the current picture size.</p> <p>[<i>Example</i>: Consider the case where a picture has been resized within a document and is now 50% of the originally inserted picture size. Now if the user chooses to make a later adjustment to the size of this picture within the generating application, then the value of this attribute should be checked.</p> <p>If this attribute is set to true then a value of 50% is shown. Similarly, if this attribute is set to false, then a value of 100% should be shown because the picture has not yet been resized from its current (smaller) size. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>

18.2.10 Changed attribute for cNvPr element (Part 1, §21.3.2.7)

Attributes	Description
descr (Alternative Text for Object) Namespace: .../drawingml/2006/main	<p>Specifies alternative text for the current DrawingML object, for use by assistive technologies or applications that do not display the current object.</p> <p>If this element is omitted, then no alternative text is present for the parent object.</p> <p>[<i>Example</i>: Consider a DrawingML object defined as follows:</p>

Attributes	Description
	<p><... descr="A picture of a bowl of fruit"></p> <p>The descr attribute contains alternative text that can be used in place of the actual DrawingML object. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>hidden (Hidden)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Specifies whether this DrawingML object is displayed. When a DrawingML object is displayed within a document, that object can be hidden (i.e., present, but not visible). This attribute determines whether the object is rendered or made hidden. [<i>Note</i>: An application can have settings that allow this object to be viewed. <i>end note</i>]</p> <p>If this attribute is omitted, then the parent DrawingML object shall be displayed (i.e., not hidden).</p> <p>[<i>Example</i>: Consider an inline DrawingML object that must be hidden within the document's content. This setting would be specified as follows:</p> <p><... hidden="true" /></p> <p>The hidden attribute has a value of true, which specifies that the DrawingML object is hidden and not displayed when the document is displayed. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>
<p>id (Unique Identifier)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Specifies a unique identifier for the current DrawingML object within the current document. This ID can be used to assist in uniquely identifying this object so that it can be referred to by other parts of the document.</p> <p>If multiple objects within the same document share the same id attribute value, then the document shall be considered non-conformant.</p> <p>[<i>Example</i>: Consider a DrawingML object defined as follows:</p> <p><... id="10" ... ></p> <p>The id attribute has a value of 10, which is the unique identifier for this DrawingML object. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_DrawingElementId simple type (Part 1, §20.1.10.21).</p>
<p>name (Name)</p> <p>Namespace:</p>	<p>Specifies the name of the object. [<i>Note</i>: Typically, this is used to store the original file name of a picture object. <i>end note</i>]</p>

Attributes	Description
.../drawingml/2006/main title (Title) Namespace: .../drawingml/2006/main	<p>[<i>Example</i>: Consider a DrawingML object defined as follows:</p> <pre>< ... name="foo.jpg" ></pre> <p>The name attribute has a value of <code>foo.jpg</code>, which is the name of this DrawingML object. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p> <p>Specifies the title (caption) of the current DrawingML object.</p> <p>If this attribute is omitted, then no title text is present for the parent object.</p> <p>[<i>Example</i>: Consider a DrawingML object defined as follows:</p> <pre><... title="Process Flow Diagram"></pre> <p><i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

18.2.11 Changed attribute for cNvSpPr element (Part 1, §21.3.2.8)

Attributes	Description
txBx (Text Box) Namespace: .../drawingml/2006/main	<p>Specifies that the corresponding shape is a text box and thus should be treated as such by the generating application. If this attribute is omitted then it is assumed that the corresponding shape is not specifically a text box.</p> <p>[<i>Note</i>: Because a shape is not specified to be a text box does not mean that it cannot have text attached to it. A text box is merely a specialized shape with specific properties. <i>end note</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>

18.2.12 Changed attribute for ext element (Part 1, §21.3.2.10)

Attributes	Description
cx (Extent Width) Namespace: .../drawingml/2006/main	<p>Specifies the width of the extents rectangle in EMUs. This rectangle shall dictate the size of the object as displayed (the result of any scaling to the original object).</p> <p>[<i>Example</i>: Consider a DrawingML object specified as follows:</p> <pre><... cx="1828800" cy="200000"/></pre>

Attributes	Description
	<p>The cx attribute specifies that this object has a width of 1828800 EMUs (English Metric Units). <i>end example</i></p> <p>The possible values for this attribute are defined by the ST_PositiveCoordinate simple type (Part 1, §20.1.10.42).</p>
cy (Extent Height) Namespace: .../drawingml/2006/main	<p>Specifies the height of the extents rectangle in EMUs. This rectangle shall dictate the size of the object as displayed (the result of any scaling to the original object).</p> <p>[<i>Example</i>: Consider a DrawingML object specified as follows:</p> <pre>< ... cx="1828800" cy="200000" /></pre> <p>The cy attribute specifies that this object has a height of 200000 EMUs (English Metric Units). <i>end example</i></p> <p>The possible values for this attribute are defined by the ST_PositiveCoordinate simple type (Part 1, §20.1.10.42).</p>

18.2.13 Changed attribute for grpSpPr element (Part 1, §21.3.2.14)



Attributes	Description
bwMode (Black and White Mode) Namespace: .../drawingml/2006/main	<p>Specifies that the group shape should be rendered using only black and white coloring. That is the coloring information for the group shape should be converted to either black or white when rendering the corresponding shapes.</p> <p>No gray is to be used in rendering this image, only stark black and stark white.</p> <p>[<i>Note</i>: This does not mean that the group shapes themselves are stored with only black and white color information. This attribute instead sets the rendering mode that the shapes use when rendering. <i>end note</i>]</p> <p>The possible values for this attribute are defined by the ST_BlackWhiteMode simple type (Part 1, §20.1.10.10).</p>

18.2.14 Changed attribute for spPr element (Part 1, §21.3.2.23)

Attributes	Description
bwMode (Black and White Mode) Namespace: .../drawingml/2006/main	<p>Specifies that the picture should be rendered using only black and white coloring. That is the coloring information for the picture should be converted to either black or white when rendering the picture.</p> <p>No gray is to be used in rendering this image, only stark black and stark white.</p> <p>[<i>Note</i>: This does not mean that the picture itself that is stored within the file is necessarily a black and white picture. This attribute instead sets the rendering mode that the picture has applied to when rendering. <i>end note</i>]</p>

Attributes	Description
	The possible values for this attribute are defined by the ST_BlackWhiteMode simple type (Part 1, §20.1.10.10).

18.2.15 Changed attribute for xfrm element (Part 1, §21.3.2.28)

Attributes	Description
flipH (Horizontal Flip) Namespace: .../drawingml/2006/main	<p>Specifies a horizontal flip. When true, this attribute defines that the shape is flipped horizontally about the center of its bounding box.</p> <p>[Example: The following illustrates the effect of a horizontal flip.</p>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>
flipV (Vertical Flip) Namespace: .../drawingml/2006/main	<p>Specifies a vertical flip. When true, this attribute defines that the group is flipped vertically about the center of its bounding box.</p> <p>[Example: The following illustrates the effect of a vertical flip.</p>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema boolean datatype.</p>
rot (Rotation) Namespace: .../drawingml/2006/main	<p>Specifies the rotation of the Graphic Frame. The units for which this attribute is specified in reside within the simple type definition referenced below.</p> <p>The possible values for this attribute are defined by the ST_Angle simple type (Part 1, §20.1.10.3).</p>

18.2.16 Changed attribute for relIds element (Part 1, §21.4.2.22)

Attributes	Description
cs (Explicit Relationship to	Specifies the relationship ID for the explicit relationship to the Diagram Colors part used by this diagram.

Attributes	Description
Diagram Colors Part) Namespace: .../officeDocument/2006/relationships	This relationship shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/diagramColors or the document shall be considered non-conformant. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).
dm (Explicit Relationship to Diagram Data Part) Namespace: .../officeDocument/2006/relationships	Specifies the relationship ID for the explicit relationship to the Diagram Data part used by this diagram. This relationship shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/diagramData or the document shall be considered non-conformant. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).
lo (Explicit Relationship to Diagram Layout Definition Part) Namespace: .../officeDocument/2006/relationships	Specifies the relationship ID for the explicit relationship to the Diagram Layout Definition part used by this diagram. This relationship shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/diagramLayout or the document shall be considered non-conformant. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).
qs (Explicit Relationship to Style Definition Part) Namespace: .../officeDocument/2006/relationships	Specifies the relationship ID for the explicit relationship to the Diagram Style part used by this diagram. This relationship shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/diagramQuickStyle or the document shall be considered non-conformant. The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

18.2.17 Changed attribute for shape element (Part 1, §21.4.2.27)

Attributes	Description
blip (Relationship to Image Part) Namespace: .../officeDocument/2006/relationships	Specifies the relationship ID of the explicit relationship to an image that shall be used as the image for the contents of this shape. This relationship shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/image or the document shall be considered non-conformant.

Attributes	Description
	The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).

18.2.18 Changed attribute for spPr element (Part 1, §21.4.3.7)

Attributes	Description
bwMode (Black and White Mode) Namespace: .../drawingml/2006/main	<p>Specifies that the picture should be rendered using only black and white coloring. That is the coloring information for the picture should be converted to either black or white when rendering the picture.</p> <p>No gray is to be used in rendering this image, only stark black and stark white.</p> <p>[<i>Note</i>: This does not mean that the picture itself that is stored within the file is necessarily a black and white picture. This attribute instead sets the rendering mode that the picture has applied to when rendering. <i>end note</i>]</p> <p>The possible values for this attribute are defined by the ST_BlackWhiteMode simple type (Part 1, §20.1.10.10).</p>

18.2.19 Changed attribute for sp3d element (Part 1, §21.4.5.6)

Attributes	Description
contourW (Contour Width) Namespace: .../drawingml/2006/main	<p>Defines the width of the contour on the shape.</p> <p>[<i>Example</i>: Consider the following example of a contourW in use within the sp3d element:</p> <pre><a:sp3d extrusionH="165100" contourW="50800" prstMaterial="plastic"> <a:bevelT w="254000" h="254000"/> <a:bevelB w="254000" h="254000"/> <a:extrusionClr> <a:srgbClr val="FF0000"/> </a:extrusionClr> <a:contourClr> <a:schemeClr val="accent3"/> </a:contourClr> </a:sp3d></pre> <p>In this example, we see a countourW defined as 50800. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_PositiveCoordinate simple type (Part 1, §20.1.10.42).</p>

Attributes	Description
<p>extrusionH (Extrusion Height)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Defines the height of the extrusion applied to the shape.</p> <p>[<i>Example:</i> Consider the following example of an extrusionH in use within the sp3d element:</p> <pre><a:sp3d extrusionH="165100" contourW="50800" prstMaterial="plastic"> <a:bevelT w="254000" h="254000"/> <a:bevelB w="254000" h="254000"/> <a:extrusionClr> <a:srgbClr val="FF0000"/> </a:extrusionClr> <a:contourClr> <a:schemeClr val="accent3"/> </a:contourClr> </a:sp3d></pre> <p>In this example, we see a extrusionH defined as 165100. <i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_PositiveCoordinate simple type (Part 1, §20.1.10.42).</p>
<p>prstMaterial (Preset Material Type)</p> <p>Namespace: .../drawingml/2006/main</p>	<p>Defines the preset material that is combined with the lighting properties to give the final look and feel of a shape.</p> <p>[<i>Example:</i> Consider the following example of a prstMaterial in use within the sp3d element:</p> <pre><a:sp3d extrusionH="165100" contourW="50800" prstMaterial="plastic"> <a:bevelT w="254000" h="254000"/> <a:bevelB w="254000" h="254000"/> <a:extrusionClr> <a:srgbClr val="FF0000"/> </a:extrusionClr> <a:contourClr> <a:schemeClr val="accent3"/> </a:contourClr> </a:sp3d></pre> <p>In this example, we see a prstMaterial defined as plastic. <i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_PresetMaterialType simple type (Part 1, §20.1.10.50).</p>

Attributes	Description
z (Shape Depth) Namespace: .../drawingml/2006/main	Defines the z coordinate for the 3D shape. The possible values for this attribute are defined by the ST_Coordinate simple type (Part 1, §20.1.10.16).

19. VML Reference Material

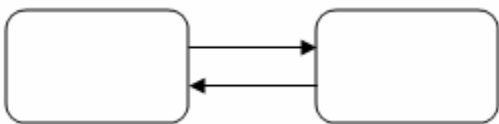
[No documentation has been entered for this section heading.]

19.1 VML

VML is a language for defining graphical objects in cases where DrawingML does not apply, such as text boxes and shapes in WordprocessingML documents and comments and controls in SpreadsheetML documents. The urn:schemas-microsoft-com:vml namespace provides the base elements and attributes for defining shape primitives. The urn:schemas-microsoft-com:office:office, urn:schemas-microsoft-com:office:word, urn:schemas-microsoft-com:office:excel and urn:schemas-microsoft-com:office:powerpoint namespaces define elements that layer on information beyond the baseline graphical definition. To maintain backward compatibility, all VML namespaces defined in ECMA-376 maintain the legacy namespace structure used by the existing corpus of binary documents.

[*Note:* The VML format is a legacy format used in an existing corpus of binary documents and is included and fully defined in ECMA-376 for backwards compatibility reasons. The DrawingML format is a newer and richer format created with the goal of eventually replacing any uses of VML in the Office Open XML formats. VML should be considered a transitional format included in Office Open XML for legacy reasons only and new applications that need a file format for drawings are strongly encouraged to use preferentially DrawingML .*end note*]

[*Example:* Assume the following shapes exist in a WordprocessingML document:



The drawing consists of four shapes. The arrows are specified by extending the shape type base definition in the shapetype element. Each shape representing an arrow references the shapetype it is extending via its type attribute.

```
<v:shapetype id="_x0000_t32" coordsize="21600,21600" o:spt="32" o:oned="t"
  path="m,l21600,21600e" filled="f">
  <v:path arrowok="t" fillok="f" o:connecttype="none"/>
  <o:lock v:ext="edit" shapetype="t"/>
</v:shapetype>
```

```
<v:shape id="_x0000_s1030" type="#_x0000_t32" style="position:absolute;left:0;
  text-align:left;margin-left:105pt;margin-top:36pt;width:48pt;height:0;flip:x;
  z-index:251661312" o:connectortype="straight">
```

```
<v:stroke endarrow="block"/>
</v:shape>

<v:shape id="_x0000_s1029" type="#_x0000_t32" style="position:absolute;left:0;
text-align:left;margin-left:105pt;margin-top:21.75pt;width:48pt;height:0;
z-index:251660288" o:connectortype="straight">
  <v:stroke endarrow="block"/>
</v:shape>
```

The rounded rectangles use the VML roundrect element.

```
<v:roundrect id="_x0000_s1028" style="position:absolute;left:0;
text-align:left;margin-left:153pt;margin-top:8.25pt;width:68.25pt;height:42pt;
z-index:251659264" arcsize="10923f"/>

<v:roundrect id="_x0000_s1027" style="position:absolute;left:0;
text-align:left;margin-left:36.75pt;margin-top:8.25pt;width:68.25pt;
height:42pt;z-index:251658240" arcsize="10923f"/>
```

end example]

Throughout VML, numeric values that are allowed to take units can be specified in: cm (centimeters), mm (millimeters), in (inches), pt (points), pc (picas), px (pixels).

19.1.1 Table of Contents

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End of informative text.

19.1.2 Elements

The following elements comprise the contents of the urn:schemas-microsoft-com:vml namespace:

[*Note:* As the VML format is a format provided for backward compatibility, many VML elements are defined in the same urn:schemas-microsoft-com:vml namespace that is already used by millions of documents already using VML. *end note*]

19.1.2.1 arc (Arc Segment)

This element specifies an arc defined as a segment of an oval. The CSS2 style content width and height define the width and height of that oval. The arc is defined by the intersection of the oval with the start and end radius vectors given by the angles. The angles are calculated on the basis of a circle (width equal to height) which is then scaled anisotropically to the desired width and height.

[*Example:* The following specifies a simple half-circle arc open at the top:

```
<v:arc
  style="position:relative;top:120;left:20;width:200;height:200"
  startangle="90" endangle="270">
</v:arc>
```

The shape looks like this:



end example]

Parent Elements
background (Part 1, §17.2.1); group (§19.1.2.7); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1)

Child Elements	Subclause
anchorlock (Anchor Location Is Locked)	§19.3.2.1
borderbottom (Bottom Border)	§19.3.2.2
borderleft (Left Border)	§19.3.2.3
borderright (Right Border)	§19.3.2.4
bordertop (Top Border)	§19.3.2.5
callout (Callout)	§19.2.2.2
ClientData (Attached Object Data)	§19.4.2.12
clippath (Shape Clipping Path)	§19.2.2.3
extrusion (3D Extrusion)	§19.2.2.11
fill (Shape Fill Properties)	§19.1.2.5
formulas (Set of Formulas)	§19.1.2.6
handles (Set of Handles)	§19.1.2.9
imagedata (Image Data)	§19.1.2.11
lock (Shape Protections)	§19.2.2.18
path (Shape Path)	§19.1.2.14
shadow (Shadow Effect)	§19.1.2.18
signatureline (Digital Signature Line)	§19.2.2.30
skew (Skew Transform)	§19.2.2.31
stroke (Line Stroke Settings)	§19.1.2.21
textbox (Text Box)	§19.1.2.22
textdata (VML Diagram Text)	§19.5.2.2
textpath (Text Layout Path)	§19.1.2.23
wrap (Text Wrapping)	§19.3.2.6



Attributes	Description
<p>allowincell (Allow in Table Cell)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape can be placed in a table. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:allowincell="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>allowoverlap (Allow Shape Overlap)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape can overlap another shape. Default is true. If false, the shape shifts left or right so as not to overlap another shape, similar to the behavior of the HTML float attribute.</p> <p>[Example:</p> <pre><v:shape ... o:allowoverlap="false" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>alt (Alternate Text)</p>	<p>Specifies alternative text describing the graphical object. This text should provide a brief description of the shape for use by accessibility tools. Default is no value.</p> <p>[Example: The alt text describes the basic shape:</p> <pre><v:shape ... fillcolor="red" alt="Red rectangle"> </v:shape></pre> <p>The alt text describes the contents of a shape displaying an image:</p> <pre><v:shape ... alt="Picture of a sunset"> </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>borderbottomcolor (Bottom Border Color)</p>	<p>Specifies the bottom border color of an inline shape. Default is no value.</p> <p>[Example:</p>

Attributes	Description
Namespace: urn:schemas-microsoft-com:office:office	<pre><v:shape ... o:borderbottomcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
borderleftcolor (Border Left Color) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the left border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderleftcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
borderrightcolor (Border Right Color) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the right border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderrightcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
bordertopcolor (Border Top Color) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the top border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:bordertopcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
bullet (Graphical Bullet) Namespace:	<p>Specifies whether the shape is a graphical bullet. Default is <code>false</code>.</p> <p>[Example:</p>

Attributes	Description
urn:schemas-microsoft-com:office:office	<pre><v:shape ... o:bullet="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
button (Button Behavior Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether a shape exhibits button press behavior on click. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:button="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
bwmode (Black-and-White Mode) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies how a shape renders for black-and-white output devices. When a shape is printed on a black-and-white printer or displayed in a black-and-white view in an application, several options are possible. Default is auto, which uses o:bwnormal for normal black-and-white rendering and o:bwpure for pure black-and-white rendering.</p> <p>bwnormal and bwpure are subordinate to bwmode. If bwmode is "auto" then the value for bwnormal or bwpure is used depending on what the output format is. An application can define for itself what, if any, difference there is between normal B&W and pure B&W. [Example: Normal B&W might allow greyscale and pure B&W might not. <i>end example]</i></p> <p>[Example: This shape renders in grayscale in a black-and-white environment:</p> <pre><v:shape ... o:bwmode="grayscale" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
bwnormal (Normal Black-and-White Mode) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the black-and-white mode for normal black-and-white output devices. Default is auto.</p> <p>[Example: This shape renders in a pale grayscale in a normal black-and-white environment:</p> <pre><v:shape ... o:bwmode="auto" o:bwnormal="lightgrayscale" ... > </v:shape></pre>


Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
<p>bwpure (Pure Black-and-White Mode)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the black-and-white mode for pure black-and-white output devices. Default is auto.</p> <p>[<i>Example:</i> This shape renders in high contrast when in a pure black-and-white environment:</p> <pre><v:shape ... o:bwmode="auto" o:bwpure="highcontrast" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
<p>chromakey (Image Transparency Color)</p>	<p>Specifies a color value that is transparent and show anything behind the shape. Default is no value.</p> <p>[<i>Example:</i></p> <pre><v:image ... chromakey="white" ...> </v:image></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
<p>class (CSS Reference)</p>	<p>Specifies a reference to the definition of a CSS style. Default is no value.</p> <p>[<i>Example:</i> The snippets below are equivalent:</p> <pre>... .narrowstyle {width:50;height:100} ... <v:shape ... class="narrowstyle" style="top:1;left:1"> </v:shape></pre> <pre><v:shape ... style="top:1;left:1; width:50;height:100"> </v:shape></pre>

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>clip (Clipping Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that the clipping region is active. This is used in conjunction with the clippath (§19.2.2.3) element to create a clipping region.</p> <p>[Example:</p> <pre><v:shape ... o:clip="true"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>cliptowrap (Clip to Wrapping Polygon)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that the clipping region for the shape aligns with the wrapping polygon that tightly surrounds the entire shape (essentially, that the shape shall not be drawn beyond its wrapping polygon's extents – if it does, the shape shall be clipped). Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:cliptowrap="true"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>connectortype (Shape Connector Type)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the kind of connector used for joining shapes. Default is straight.</p> <p>[Example:</p> <pre><v:shape ... o:connectortype="elbow" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ConnectorType simple type (§19.2.3.7).</p>
<p>coordorigin (Coordinate Space Origin)</p>	<p>Specifies the coordinate of the top left corner of the shape's coordinate space. This determines the position of the (0,0) coordinate space origin within the shape's bounding box. Default is "0,0", which places the (0,0) origin at the top left corner of the bounding box.</p>

Attributes	Description
	<p>This affects shape properties that specify coordinate positions, such as the path attribute. Thus a path can be defined against a generic (0,0) origin and the coordorigin value translates the entire path within the shape's bounding space.</p> <p>[<i>Example:</i> The horizontal and vertical coordinate space ranges from -100 to +100 because the coordinate space (coordsize) is 200 by 200 and the top left coordinate is (-100,-100). The (0,0) origin lies at the center of the shape's bounding box, as evidenced by the position of the shape's path within the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
coordsize (Coordinate Space Size)	<p>Specifies the size of the shape's coordinate space in coordinate units. Default is "1000,1000".</p> <p>The physical size of a coordinate unit length is determined by both the size of the coordinate space (coordsize) and the size of the shape (style width and height). The coordsize attribute defines the number of horizontal and vertical subdivisions into which the shape's bounding box is divided. The combination of coordsize and style width/height effective scales the shape anisotropically.</p> <p>[<i>Example:</i> The path is 50 units wide and tall, which is 25% of the size of the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p>



Attributes	Description
	The possible values for this attribute are defined by the W3C XML Schema string datatype.
dgmlayout (Diagram Node Layout Identifier) Namespace: urn:schemas-microsoft-com:office:office	Specifies the kind of automatic layout to apply to the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element. <i>[Example:</i> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).
dgmlayoutmru (Diagram Node Recent Layout Identifier) Namespace: urn:schemas-microsoft-com:office:office	Specifies the kind of automatic layout most recently used on the child elements of the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element. <i>[Example:</i> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).
dgmnodekind (Diagram Node Identifier) Namespace: urn:schemas-microsoft-com:office:office	Specifies an optional, application-defined parameter that is intended to be used by the application to tag different types of nodes in a diagram. <i>[Example:</i> <pre><v:shape ... dgmnodekind="1"> </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the W3C XML Schema integer datatype.
doubleclicknotify (Double-click Notification Toggle) Namespace:	Specifies that an event message is sent when a shape is double-clicked. Default is false. <i>[Example:</i> <pre><v:shape ... o:doubleclicknotify="true" ... ></pre>

Attributes	Description
urn:schemas-microsoft-com:office:office	<p><code></v:shape></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
endAngle (Ending Angle)	<p>Specifies the angle that defines the endpoint of the arc. The angle is measured in degrees clockwise from the vertical. Default is 90.</p> <p>[Example: This arc ends at the bottom center of the shape's region:</p> <pre><v:arc ... endangle="180" ... > </v:arc></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema decimal datatype.</p>
fillcolor (Fill Color)	<p>Specifies the color to use for the fill. Default is white. If the fill element (§19.1.2.5) is present, its color attribute takes precedence. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example: This shape is red if its fill is visible:</p> <pre><v:shape ... fillcolor="red" ... > </v:shape></pre> <p>This is equivalent to:</p> <pre><v:shape ... fillcolor="#ff0000" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
filled (Shape Fill Toggle)	<p>Specifies whether the closed path is filled. Default is true. This attribute is overridden by the fill on attribute.</p> <p>[Example:</p> <pre><v:shape ... filled="f" fillcolor="red" ...></pre>


Attributes	Description
	<p><code></v:shape></code></p>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>forcedash (Force Dashed Outline)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a dashed outline is used to draw a shape when a shape has no line or fill. Default is <code>false</code>.</p> <p>Used by PresentationML placeholders to draw a dashed outline when there is no line and no fill for a shape.</p> <p>[Example:</p> <pre><v:shape ... o:forcedash="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>hr (Horizontal Rule Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that a shape is a horizontal rule. Default is <code>false</code>.</p> <p>[Example:</p> <pre><v:shape ... o:hr="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>hralign (Horizontal Rule Alignment)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the alignment of a horizontal rule. Default is <code>left</code>.</p> <p>[Example:</p> <pre><v:shape ... o:hralign="center" ... > </v:shape></pre> <p><i>end example]</i></p>



Attributes	Description
	The possible values for this attribute are defined by the ST_HrAlign simple type (§19.2.3.16).
href (Hyperlink Target) Namespace: urn:schemas-microsoft-com:office:office	Specifies a hyperlink URL target for the shape. Default is no value. <i>[Example:</i> <pre><v:shape ... href="http://www.openxmlformats.org" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the W3C XML Schema string datatype.
hrnoshade (Horizontal Rule 3D Shading Toggle) Namespace: urn:schemas-microsoft-com:office:office	Specifies that the horizontal rule does not have 3-D shading. Default is false. <i>[Example:</i> <pre><v:shape ... o:hrnoshade="true" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).
hrpct (Horizontal Rule Length Percentage) Namespace: urn:schemas-microsoft-com:office:office	Specifies the length of a horizontal rule as a percentage of page width. Default is 0. <i>[Example:</i> <pre><v:shape ... o:hrpct="85" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the W3C XML Schema float datatype.
hrstd (Horizontal Rule Standard Display Toggle) Namespace: urn:schemas-microsoft-com:office:office	Specifies whether a shape is displayed as a standard horizontal rule. Only applies if hr is true. Default is false. <i>[Example:</i> <pre><v:shape ... o:hrstd="true" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the ST_TrueFalse simple type

Attributes	Description
<p>id (Unique Identifier)</p>	<p>(§20.1.2.5).</p> <p>Specifies a unique identifier that can be used to reference a VML object.</p> <p>Default is no value.</p> <p>[Example:</p> <pre><v:shape ... id="myShape" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>insetmode (Text Inset Mode)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the application calculates the internal text margin instead of using the inset attribute. Default is custom. This attribute is only meaningful for text boxes.</p> <p>[Example:</p> <pre><v:shape ... o:insetmode="auto" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_InsetMode simple type (§19.2.3.17).</p>
<p>insetpen (Inset Border From Path)</p>	<p>Specifies that the border shall be displayed inside of the path defining the shape, rather than along the path (the default border placement), or outside of the path as might be done with an image.</p> <p>[Example:</p> <pre><v:shape ... insetpen="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>ole (Embedded Object Toggle)</p> <p>Namespace: urn:schemas-microsoft-</p>	<p>Specifies whether the shape is an embedded object. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:ole="true" ... > </v:shape></pre>

Attributes	Description
com:office:office	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).</p>
<p>oleicon (Embedded Object Icon Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether an embedded object is displayed as an icon. Default is <code>false</code>.</p> <p>[Example:</p> <pre><v:shape ... o:oleicon="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>oned (Shape Handle Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the extra handles of a shape are hidden. If <code>true</code>, hides all shape handles except the top left and bottom right; that is, the same handles that are used for a straight line segment. Default is <code>false</code>.</p> <p>[Example:</p> <pre><v:shape ... o:oned="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
opacity (Fill Color Opacity)	<p>Specifies the opacity of the primary fill color. Default is 1.0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. [Example: A value of "52429f" represents 52429/65536 or 0.8. <i>end example]</i></p> <p>[Example: The red color is 25% opaque:</p> <pre><v:fill type="gradient" color="red" color2="blue" opacity=".25"> </v:fill></pre> <div>  <p>opacity="1"</p>  <p>opacity=".25"</p> </div>

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>preferrelative (Relative Resize Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the original size of an object is saved after reformatting. Default is false. If true, the original size of the object is stored and all resizing is based on a percentage of that original size. Otherwise, each resizing resets the scale to 100%.</p> <p>[Example:</p> <pre><v:shape ... o:preferrelative="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>print (Print Toggle)</p>	<p>Specifies whether the shape is printed. Default is true.</p> <p>[Example:</p> <pre><v:shape ... print="false" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>regroupid (Regroup ID)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies a previous group for a shape. An ID number is used to identify groups of shapes that are no longer grouped. This allows shapes to be regrouped programmatically.</p> <p>[Example: The shape was part of a group identified by the ID 040754:</p> <pre><v:shape ... o:regroupid="040754" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
<p>spid (Optional String)</p> <p>Namespace:</p>	<p>Specifies an optional string that an application can use to identify the particular shape. Default is no value.</p>

Attributes	Description
urn:schemas-microsoft-com:office:office	The possible values for this attribute are defined by the W3C XML Schema string datatype.
spt (Optional Number) Namespace: urn:schemas-microsoft-com:office:office	Specifies an optional number that an application can use to associate the particular shape with a defined shape type. Default is 0. The possible values for this attribute are defined by the W3C XML Schema float datatype.
startAngle (Starting Angle)	Specifies an angle that defines the starting point of the arc. The angle is measured in degrees clockwise from the vertical. Default is 0. <i>[Example: This arc begins in the upper-right quadrant:</i> <pre><v:arc ... startangle="45" ... > </v:arc></pre> <i>end example]</i> The possible values for this attribute are defined by the W3C XML Schema decimal datatype.
strokecolor (Shape Stroke Color)	Specifies the primary color of the brush to use to stroke the path of the shape. Default is black. The color attribute of the stroke element (§19.1.2.21) overrides this. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description. <i>[Example:</i> <pre><v:shape ... strokecolor="red" ...> </v:shape></pre>  <i>end example]</i> The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).
stroked (Shape Stroke Toggle)	Specifies whether the path defining the shape is stroked with a solid line. The stroke element (§19.1.2.21) defines other strokes. The on attribute of the stroke element

Attributes	Description
	<p>overrides this attribute. Default is true.</p> <p>[Example:</p> <pre><v:shape ... fillcolor="red" stroked="false" strokecolor="blue"...> </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>strokeweight (Shape Stroke Weight)</p>	<p>Specifies the width of the brush to use to stroke the path. Default is 1 point. If a number is given without units, the emu is used. The weight attribute of the stroke element (§19.1.2.21) overrides this attribute.</p> <p>[Example:</p> <pre><v:shape ... strokeweight="3pt" ... > </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>style (Shape Styling Properties)</p>	<p>Specifies the CSS2 styling properties of the shape. The CSS2 (Cascading Style Sheets, Level 2) specification, a Recommendation of the World Wide Web Consortium, is available here: http://www.w3.org/TR/REC-CSS2.</p> <p>This attribute uses a semi-colon delimited list of “name:value” pairs, the syntax defined by section 4.1.8 of the CSS2 specification for grouped declarations (without the surrounding braces). The following tables define the allowed properties and the VML treatment of each.</p> <p>[Example:</p> <pre><v:shape ... style='position:absolute;width:100pt;height:50pt' ... > </v:shape></pre>

Attributes	Description									
	<i>end example]</i>									
	<table> <tr> <th>Property</th><th>Description</th></tr> <tr> <td>flip</td><td> <p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. </td></tr> <tr> <td>height</td><td> <p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. </td></tr> <tr> <td>left</td><td> <p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width. </td></tr> <tr> <td>margin-bottom</td><td> <p>Specifies the position of the bottom of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. </td></tr> </table>	Property	Description	flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. 	height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. 	left	<p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width. 	margin-bottom
Property	Description									
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height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. 									
left	<p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width. 									
margin-bottom	<p>Specifies the position of the bottom of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. 									

Attributes	Description	
		<ul style="list-style-type: none"> • <percentage>- Value expressed as a percentage of the parent object's height.
	margin-left	<p>Specifies the position of the left of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-right	<p>Specifies the position of the right of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-top	<p>Specifies the position of the top of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	mso-position-horizontal	<p>Specifies the horizontal positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • left

Attributes	Description	
		<ul style="list-style-type: none"> • center • right • inside • outside
	mso-position-horizontal-relative	<p>Specifies relative horizontal position data for objects in WordprocessingML documents. This modifies the mso-position-horizontal property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • char
	mso-position-vertical	<p>Specifies the vertical positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • top • center • bottom • inside • outside
	mso-position-vertical-relative	<p>Specifies relative vertical position data for objects in WordprocessingML documents. This modifies the mso-position-vertical property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • line
	mso-wrap-distance-bottom	<p>Specifies the distance from the bottom of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-left	<p>Specifies the distance from the left side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change</p>

Attributes	Description	
		the origin.
	mso-wrap-distance-right	Specifies the distance from the right side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-distance-top	Specifies the distance from the top of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-edited	Specifies whether the wrap coordinates were customized by the user. If the wrap coordinates are generated by an editor, this property is true; otherwise they were customized by a user. Default is false.
	mso-wrap-style	<p>Specifies the wrapping mode for text in shapes in WordprocessingML documents. Default is square. Allowed values are:</p> <ul style="list-style-type: none"> • square - Wraps text inside the shape in a square. • none - Text does not wrap.
	position	<p>Specifies the kind of positioning used to place an element. Default is static. When the element is contained inside a group, this property shall be absolute. Allowed values are:</p> <ul style="list-style-type: none"> • static - The element is positioned according to the normal flow of the page. The top and left properties are ignored. If the object is anchored inline, this value is used. • absolute - The element is positioned relative to the parent, using the top and left properties. • relative - The element is positioned according to the normal flow of the page, but the top and left properties are used. The overlap of overlapping elements is governed by the z-index property.
	rotation	Specifies the angle that a shape is rotated, in degrees. Default is 0. Positive angles are clockwise.
	top	Specifies the position of the top of the containing block of the shape relative to the element above it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:

Attributes	Description	
		<ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	visibility	<p>Specifies whether a shape is displayed. Only inherit and hidden are used; any other values are mapped to inherit. Default is inherit. Allowed values are:</p> <ul style="list-style-type: none"> • hidden - The shape is not visible, but is still part of the flow of the objects in the browser. Mouse events are not processed. • inherit - The visibility state is inherited from the parent of the shape.
	width	<p>Specifies the width of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	z-index	<p>Specifies the display order of overlapping shapes. Default is 0. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Uses the order that the shapes appear in the page, bottom to top. • <order>- A number that represents the stacking precedence. Shapes with higher numbers are placed on top of those with lower numbers. Negative numbers are allowed.
The following properties are only used by the textbox element (§19.1.2.22):		
	Property	Description
	direction	Specifies the direction of the text in the textbox. Default is ltr. This property is superseded by the mso-direction-alt property

Attributes	Description
	<p>if that is specified. Allowed values are:</p> <ul style="list-style-type: none"> • <code>ltr</code> - Text is displayed left-to-right. • <code>rtl</code> - Text is displayed right-to-left.
<code>layout-flow</code>	<p>Determines the flow of the text layout in a textbox. Default is <code>horizontal</code>. Allowed values are:</p> <ul style="list-style-type: none"> • <code>horizontal</code> - Text is displayed horizontally. • <code>vertical</code> - Text is displayed vertically. • <code>vertical-ideographic</code> - Ideographic text is displayed vertically. • <code>horizontal-ideographic</code> - Ideographic text is displayed horizontally.
<code>mso-direction-alt</code>	<p>Specifies an alternate direction for text in textboxes. Overrides the <code>direction</code> property. The only allowed value is <code>context</code>.</p>
<code>mso-fit-shape-to-text</code>	<p>Specifies whether the shape stretches to fit the text in the textbox. Default is <code>false</code>.</p>
<code>mso-fit-text-to-shape</code>	<p>Specifies whether the text stretches to fit the textbox. Default is <code>false</code>.</p>
<code>mso-layout-flow-alt</code>	<p>Specifies the alternate layout flow for text in textboxes. This property is used instead of <code>layout-flow</code> when the layout flow is from bottom to top for non-ideographic languages. Its only value is <code>bottom-to-top</code>.</p>
<code>mso-next-textbox</code>	<p>Specifies the ID of the next textbox in a series. Used to keep track of a set of linked textboxes. Default is no value.</p>
<code>mso-rotate</code>	<p>Specifies a specific rotation value for text in a textbox. Default is 0. Allowed values are:</p> <ul style="list-style-type: none"> • 0 • 90 • 180 • -90
<code>mso-text-scale</code>	<p>Specifies the scaling factor for fitting text to shapes. Default is 0. This property is only used if <code>mso-fit-text-to-shape</code> is <code>true</code>.</p>
<code>v-text-anchor</code>	<p>Specifies the vertical anchoring of text in a textbox. Default is <code>top</code>. The alignment of a text anchor only becomes evident if <code>mso-fit-text-to-shape</code> is <code>false</code>. This property is different from the</p>

Attributes	Description	
		<p>vertical-align CSS property, which is used for ideographic languages. Allowed values are:</p> <ul style="list-style-type: none">• top• middle• bottom• top-center• middle-center• bottom-center• top-baseline• bottom-baseline• top-center-baseline• bottom-center-baseline
	The following properties are only used by the textpath element (§19.1.2.23):	
		</

Attributes	Description										
		<table><tr><th>Value</th><th>Description</th></tr><tr><td>normal</td><td rowspan="6">Treated as non-bold.</td></tr><tr><td>lighter</td></tr><tr><td>100</td></tr><tr><td>200</td></tr><tr><td>300</td></tr><tr><td>400</td></tr></table>	Value	Description	normal	Treated as non-bold.	lighter	100	200	300	400
		Value	Description								
		normal	Treated as non-bold.								
		lighter									
		100									
		200									
		300									
400											
<table><tr><td>bold</td><td rowspan="7">Treated as bold.</td></tr><tr><td>bolder</td></tr><tr><td>500</td></tr><tr><td>600</td></tr><tr><td>700</td></tr><tr><td>800</td></tr><tr><td>900</td></tr></table>	bold	Treated as bold.	bolder	500	600	700	800	900			
bold	Treated as bold.										
bolder											
500											
600											
700											
800											
900											
mso-text-shadow	Specifies whether a shadow is applied to the text on a text path. Default is false.										
text-decoration	Specifies the style of text decoration. Default is none. The values are the same as those of the CSS text-decoration property. Allowed values are: <ul style="list-style-type: none">• none• underline• overline• line-through• blink										
v-rotate-letters	Specifies whether the letters of the text are rotated counterclockwise by 90 degrees. Default is false.										
v-same-letter-heights	Specifies whether all letters are the same height regardless of initial case. If true, the lowercase letters are stretched to the height of the uppercase letters. Default is false.										
v-text-align	Specifies the alignment of text. Default is left. Allowed values are:										

Attributes	Description	
		<ul style="list-style-type: none"> • left • right • center • justify • letter-justify - Distributes the extra space between the letters. • stretch-justify - Stretches the letters to fill in the space.
	v-text-kern	Specifies whether kerning is turned on. Default is false.
	v-text-reverse	Specifies whether the layout order of rows is reversed. Default is false. This is used for vertical text layout.
	v-text-spacing-mode	<p>Specifies the mode for letter spacing. Default is tightening. This property determines whether space is removed between each letter (tightening) or added between each letter (tracking). The amount of letter spacing change is defined by the v-text-spacing property. Allowed values are:</p> <ul style="list-style-type: none"> • tightening • tracking
	v-text-spacing	Specifies the amount of spacing for text in 100ths of single line spacing. Default is 100.
<p>The line (§19.1.2.12), polyline (§19.1.2.15) and curve (§19.1.2.3) elements ignore the following properties:</p> <ul style="list-style-type: none"> • top • left • width • height <p>The following properties are not inherited by an element that references a shapetype element (§19.1.2.20) via the id attribute:</p> <ul style="list-style-type: none"> • flip • height • left • margin-left • margin-top • position • rotation • top 		

Attributes	Description																
	<ul style="list-style-type: none"> • visibility • width • z-index <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>																
target (Hyperlink Display Target)	<p>Specifies a frame or window that a URL is displayed in. Default is no value. Allowed values are:</p> <table border="1"> <thead> <tr> <th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td><targetname></td><td>String containing the name of the frame or window in which to load the document.</td></tr> <tr> <td>_blank</td><td>Specifies that the linked document is loaded into a new blank window. This window is not named.</td></tr> <tr> <td>_media</td><td>Specifies that the linked document is loaded into the browser's multimedia pane.</td></tr> <tr> <td>_parent</td><td>Specifies that the linked document is loaded into the immediate parent of the document containing the link.</td></tr> <tr> <td>_search</td><td>Specifies that the linked document is loaded into the browser's search pane.</td></tr> <tr> <td>_self</td><td>Specifies that the linked document is loaded into the window in which the link was clicked (the active window).</td></tr> <tr> <td>_top</td><td>Specifies that the linked document is loaded into the topmost window.</td></tr> </tbody> </table> <p>[Example:</p> <pre> <v:shape ... href="http://www.openxmlformats.org" target="_self" ... > </v:shape> </pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>	Value	Description	<targetname>	String containing the name of the frame or window in which to load the document.	_blank	Specifies that the linked document is loaded into a new blank window. This window is not named.	_media	Specifies that the linked document is loaded into the browser's multimedia pane.	_parent	Specifies that the linked document is loaded into the immediate parent of the document containing the link.	_search	Specifies that the linked document is loaded into the browser's search pane.	_self	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).	_top	Specifies that the linked document is loaded into the topmost window.
Value	Description																
<targetname>	String containing the name of the frame or window in which to load the document.																
_blank	Specifies that the linked document is loaded into a new blank window. This window is not named.																
_media	Specifies that the linked document is loaded into the browser's multimedia pane.																
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_self	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).																
_top	Specifies that the linked document is loaded into the topmost window.																
title (Shape Title)	<p>Specifies the text displayed when the mouse pointer moves over the shape. Default is no value.</p> <p>[Example:</p> <pre> <v:shape ... title="tooltip" ... > </v:shape> </pre>																

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>userdrawn (Exists In Master Slide)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the user has added the shape to a master slide. Default is <code>false</code>. Used by PresentationML.</p> <p>[Example:</p> <pre><v:shape ... o:userdrawn="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>userhidden (Hide Script Anchors)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a script anchor is hidden. Default is <code>false</code>. If <code>true</code>, script anchors stay hidden even if the shape is otherwise visible. A script anchor is the visual representation of a script that when displayed in an application.</p> <p>[Example:</p> <pre><v:shape ... o:userhidden="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>wrapcoords (Shape Bounding Polygon)</p>	<p>Specifies the bounding polygon that surrounds a shape. This is specified using a comma-delimited list of x and y coordinates: "x1,y1,x2,y2,x3,y3,..." This is used when text is tightly wrapped around a shape. Default is no value until the <code>mso-wrap-mode</code> style attribute is set to <code>tight</code> or <code>through</code>.</p> <p>[Example:</p> <pre><v:shape ... wrapcoords="0,0 0,200, 200,200, 200,0" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[*Note:* The W3C XML Schema definition of this element's content model ([CT_Arc](#)) is located in §A.6.1. *end note*]

19.1.2.2 background (Document Background)

This element describes the fill of the background of a page using vector graphics fills. Fills consist of simple colors, more advanced effects defined through the fill element (§19.1.2.5), or images.

[*Example:* The following shades the page background a pale red:

```
<v:background fillcolor="#c0504d">
</v:background>
```

This uses the fill element (§19.1.2.5) to create a gradient background fill:

```
<v:background>
  <v:fill type="gradient" color="#c0504d" color2="#f0504d" angle="45"/>
</v:background>
```


end example]

Parent Elements
background (Part 1, §17.2.1); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1)

Child Elements	Subclause
fill (Shape Fill Properties)	§19.1.2.5

Attributes	Description
bwmode (Black-and-White Mode) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies how a shape renders for black-and-white output devices. When a shape is printed on a black-and-white printer or displayed in a black-and-white view in an application, several options are possible. Default is auto, which uses o:bwnormal for normal black-and-white rendering and o:bwpure for pure black-and-white rendering</p> <p>[<i>Example:</i> This shape renders in grayscale in a black-and-white environment:</p> <pre><v:shape ... o:bwmode="grayscale" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
bwnormal (Normal)	Specifies the black-and-white mode for normal black-and-white output devices. Default

Attributes	Description
<p>Black-and-White Mode)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>is auto.</p> <p>[<i>Example:</i> This shape renders in a pale grayscale in a normal black-and-white environment:</p> <pre><v:shape ... o:bwmode="lightgrayscale" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
<p>bwpure (Pure Black-and-White Mode)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the black-and-white mode for pure black-and-white output devices. Default is auto.</p> <p>[<i>Example:</i> This shape renders in high contrast when in a pure black-and-white environment:</p> <pre><v:shape ... o:bwmode="highcontrast" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
<p>fillcolor (Fill Color)</p>	<p>Specifies the color to use for the fill. Default is white. If the fill element (§19.1.2.5) is present, its color attribute takes precedence. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[<i>Example:</i> This shape is red if its fill is visible:</p> <pre><v:shape ... fillcolor="red" ... > </v:shape></pre> <p>This is equivalent to:</p> <pre><v:shape ... fillcolor="#ff0000" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>

Attributes	Description
<p>filled (Shape Fill Toggle)</p>	<p>Specifies whether the closed path is filled. Default is true. This attribute is overridden by the fill on attribute.</p> <p>[Example:</p> <pre><v:shape ... filled="f" fillcolor="red" ...> </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>id (Unique Identifier)</p>	<p>Specifies a unique identifier that can be used to reference a VML object.</p> <p>Default is no value.</p> <p>[Example:</p> <pre><v:shape ... id="myShape" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>targetscreensize (Target Screen Size)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the target resolution used for WordprocessingML documents with a gradient or picture filled background. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • 544,376 • 640,480 • 720,512 • 800,600 • 1024,768 • 1152,862 <p>The possible values for this attribute are defined by the ST_ScreenSize simple type (§19.2.3.23).</p>

[*Note*: The W3C XML Schema definition of this element’s content model ([CT_Background](#)) is located in §A.6.1.
end note]

19.1.2.3 [curve \(Bezier Curve\)](#)

This element is used to draw a cubic bézier curve.

The following properties of the style attribute are ignored:

- top
- margin-top
- center-y
- left
- margin-left
- center-x
- width
- height

[*Example*: The following specifies a simple curve that opens upward:

```
<v:curve id="mycurve"
  from="10pt,10pt" to="100pt,10pt"
  control1="40pt,30pt" control2="85pt,30pt">
</v:curve>
```

This shape is created:



end example]

Parent Elements
background (Part 1, §17.2.1); group (§19.1.2.7); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1)

Child Elements	Subclause
anchorlock (Anchor Location Is Locked)	§19.3.2.1
borderbottom (Bottom Border)	§19.3.2.2
borderleft (Left Border)	§19.3.2.3
borderright (Right Border)	§19.3.2.4
bordertop (Top Border)	§19.3.2.5
callout (Callout)	§19.2.2.2
ClientData (Attached Object Data)	§19.4.2.12
clippath (Shape Clipping Path)	§19.2.2.3

Child Elements	Subclause
extrusion (3D Extrusion)	§19.2.2.11
fill (Shape Fill Properties)	§19.1.2.5
formulas (Set of Formulas)	§19.1.2.6
handles (Set of Handles)	§19.1.2.9
imagedata (Image Data)	§19.1.2.11
lock (Shape Protections)	§19.2.2.18
path (Shape Path)	§19.1.2.14
shadow (Shadow Effect)	§19.1.2.18
signatureline (Digital Signature Line)	§19.2.2.30
skew (Skew Transform)	§19.2.2.31
stroke (Line Stroke Settings)	§19.1.2.21
textbox (Text Box)	§19.1.2.22
textdata (VML Diagram Text)	§19.5.2.2
textpath (Text Layout Path)	§19.1.2.23
wrap (Text Wrapping)	§19.3.2.6

Attributes	Description
<p>allowincell (Allow in Table Cell)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape can be placed in a table. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:allowincell="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>allowoverlap (Allow Shape Overlap)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape can overlap another shape. Default is true. If false, the shape shifts left or right so as not to overlap another shape, similar to the behavior of the HTML float attribute.</p> <p>[Example:</p> <pre><v:shape ... o:allowoverlap="false" ... > </v:shape></pre> <p>end example]</p>


Attributes	Description
	The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).
alt (Alternate Text)	<p>Specifies alternative text describing the graphical object. This text should provide a brief description of the shape for use by accessibility tools. Default is no value.</p> <p>[Example: The alt text describes the basic shape:</p> <pre><v:shape ... fillcolor="red" alt="Red rectangle"> </v:shape></pre> <p>The alt text describes the contents of a shape displaying an image:</p> <pre><v:shape ... alt="Picture of a sunset"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
borderbottomcolor (Bottom Border Color) Namespace: urn:schemas- microsoft- com:office:office	<p>Specifies the bottom border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderbottomcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
borderleftcolor (Border Left Color) Namespace: urn:schemas- microsoft- com:office:office	<p>Specifies the left border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderleftcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
borderrightcolor (Border Right Color)	<p>Specifies the right border color of an inline shape. Default is no value.</p> <p>[Example:</p>


Attributes	Description
Namespace: urn:schemas-microsoft-com:office:office	<pre><v:shape ... o:borderrightcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
bordertopcolor (Border Top Color) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the top border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:bordertopcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
bullet (Graphical Bullet) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the shape is a graphical bullet. Default is <i>false</i>.</p> <p>[Example:</p> <pre><v:shape ... o:bullet="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
button (Button Behavior Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether a shape exhibits button press behavior on click. Default is <i>false</i>.</p> <p>[Example:</p> <pre><v:shape ... o:button="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
bwmode (Black-and-White Mode) Namespace:	<p>Specifies how a shape renders for black-and-white output devices. When a shape is printed on a black-and-white printer or displayed in a black-and-white view in an application, several options are possible. Default is <i>auto</i>, which uses <i>o:bwnormal</i> for normal black-and-white rendering and <i>o:bwpure</i> for pure black-and-white rendering.</p>


Attributes	Description
urn:schemas-microsoft-com:office:office	<p>bwnormal and bwpure are subordinate to bwmode. If bwmode is "auto" then the value for bwnormal or bwpure is used depending on what the output format is. An application can define for itself what, if any, difference there is between normal B&W and pure B&W. <i>[Example: Normal B&W might allow greyscale and pure B&W might not. end example]</i></p> <p><i>[Example: This shape renders in grayscale in a black-and-white environment:</i></p> <pre><v:shape ... o:bwmode="grayscale" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
bwnormal (Normal Black-and-White Mode) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the black-and-white mode for normal black-and-white output devices. Default is auto.</p> <p><i>[Example: This shape renders in a pale grayscale in a normal black-and-white environment:</i></p> <pre><v:shape ... o:bwmode="auto" o:bwnormal="lightgrayscale" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
bwpure (Pure Black-and-White Mode) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the black-and-white mode for pure black-and-white output devices. Default is auto.</p> <p><i>[Example: This shape renders in high contrast when in a pure black-and-white environment:</i></p> <pre><v:shape ... o:bwmode="auto" o:bpure="highcontrast" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
chromakey (Image Transparency Color)	<p>Specifies a color value that is transparent and show anything behind the shape. Default is no value.</p> <p><i>[Example:</i></p>

Attributes	Description
	<pre><v:image ... chromakey="white" ...> </v:image></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
class (CSS Reference)	<p>Specifies a reference to the definition of a CSS style. Default is no value.</p> <p>[Example: The snippets below are equivalent:</p> <pre>... .narrowstyle {width:50;height:100} ... <v:shape ... class="narrowstyle" style="top:1;left:1"> </v:shape></pre> <pre><v:shape ... style="top:1;left:1; width:50;height:100"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
clip (Clipping Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies that the clipping region is active. This is used in conjunction with the clippath (§19.2.2.3) element to create a clipping region.</p> <p>[Example:</p> <pre><v:shape ... o:clip="true"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
cliptowrap (Clip to Wrapping Polygon) Namespace: urn:schemas-microsoft-	<p>Specifies that the clipping region for the shape aligns with the wrapping polygon that tightly surrounds the entire shape (essentially, that the shape shall not be drawn beyond its wrapping polygon's extents – if it does, the shape shall be clipped). Default is false.</p> <p>[Example:</p>

Attributes	Description
com:office:office	<pre><v:shape ... o:cliptowrap="true"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
connectortype (Shape Connector Type) Namespace: urn:schemas- microsoft- com:office:office	<p>Specifies the kind of connector used for joining shapes. Default is straight.</p> <p>[Example:</p> <pre><v:shape ... o:connectortype="elbow" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ConnectorType simple type (§19.2.3.7).</p>
control1 (First Curve Control Point)	<p>Specifies the first control point for the curve, given in the coordinate space of the parent element. Default is "10,10". If the parent is not a VML element, the default unit is a pixel. Allowed units are in, cm, mm, pt, pc and px.</p> <p>[Example:</p> <pre><v:curve ... control1="20,30" ... > </v:curve></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
control2 (Second Curve Control Point)	<p>Specifies the second control point for the curve, given in the coordinate space of the parent element. Default is "20,0". If the parent is not a VML element, the default unit is a pixel. Allowed units are in, cm, mm, pt, pc and px.</p> <p>[Example:</p> <pre><v:curve ... control2="50,20" ... > </v:curve></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

Attributes	Description
coordorigin (Coordinate Space Origin)	<p>Specifies the coordinate of the top left corner of the shape's coordinate space. This determines the position of the (0,0) coordinate space origin within the shape's bounding box. Default is "0,0", which places the (0,0) origin at the top left corner of the bounding box.</p> <p>This affects shape properties that specify coordinate positions, such as the path attribute. Thus a path can be defined against a generic (0,0) origin and the coordorigin value translates the entire path within the shape's bounding space.</p> <p>[<i>Example:</i> The horizontal and vertical coordinate space ranges from -100 to +100 because the coordinate space (coordsize) is 200 by 200 and the top left coordinate is (-100,-100). The (0,0) origin lies at the center of the shape's bounding box, as evidenced by the position of the shape's path within the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
coordsize (Coordinate Space Size)	<p>Specifies the size of the shape's coordinate space in coordinate units. Default is "1000,1000".</p> <p>The physical size of a coordinate unit length is determined by both the size of the coordinate space (coordsize) and the size of the shape (style width and height). The coordsize attribute defines the number of horizontal and vertical subdivisions into which the shape's bounding box is divided. The combination of coordsize and style width/height effective scales the shape anisotropically.</p> <p>[<i>Example:</i> The path is 50 units wide and tall, which is 25% of the size of the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>

Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
dgmlayout (Diagram Node Layout Identifier) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the kind of automatic layout to apply to the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element.</p> <p>[Example:</p> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).</p>
dgmlayoutmru (Diagram Node Recent Layout Identifier) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the kind of automatic layout most recently used on the child elements of the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element.</p> <p>[Example:</p> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).</p>
dgmnodekind (Diagram Node Identifier) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies an optional, application-defined parameter that is intended to be used by the application to tag different types of nodes in a diagram.</p> <p>[Example:</p> <pre><v:shape ... dgmnodekind="1"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema integer</p>

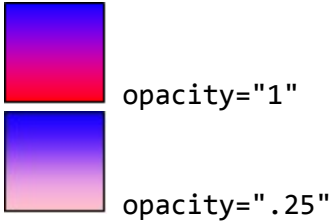
Attributes	Description
<p>doubleclicknotify (Double-click Notification Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>datatype.</p> <p>Specifies that an event message is sent when a shape is double-clicked. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:doubleclicknotify="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>fillcolor (Fill Color)</p>	<p>Specifies the color to use for the fill. Default is white. If the fill element (§19.1.2.5) is present, its color attribute takes precedence. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example: This shape is red if its fill is visible:</p> <pre><v:shape ... fillcolor="red" ... > </v:shape></pre> <p>This is equivalent to:</p> <pre><v:shape ... fillcolor="#ff0000" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
<p>filled (Shape Fill Toggle)</p>	<p>Specifies whether the closed path is filled. Default is true. This attribute is overridden by the fill on attribute.</p> <p>[Example:</p> <pre><v:shape ... filled="f" fillcolor="red" ...> </v:shape></pre> 


Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>forcedash (Force Dashed Outline)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a dashed outline is used to draw a shape when a shape has no line or fill. Default is <code>false</code>.</p> <p>Used by PresentationML placeholders to draw a dashed outline when there is no line and no fill for a shape.</p> <p>[Example:</p> <pre><v:shape ... o:forcedash="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>from (Curve Starting Point)</p>	<p>Specifies the starting point of the line in the coordinate space of the parent element. Default is "0,0". If the parent is not a VML element, the default unit is a pixel. Allowed units are in, cm, mm, pt, pc and px.</p> <p>[Example:</p> <pre><v:curve ... from="10,10" ... > </v:curve></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>hr (Horizontal Rule Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that a shape is a horizontal rule. Default is <code>false</code>.</p> <p>[Example:</p> <pre><v:shape ... o:hr="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>hralign (Horizontal Rule Alignment)</p>	<p>Specifies the alignment of a horizontal rule. Default is <code>left</code>.</p>



Attributes	Description
Namespace: urn:schemas-microsoft-com:office:office	<p>[Example:</p> <pre><v:shape ... o:hralign="center" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_HrAlign simple type (§19.2.3.16).</p>
href (Hyperlink Target)	<p>Specifies a hyperlink URL target for the shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... href="http://www.openxmlformats.org" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
hrnoshade (Horizontal Rule 3D Shading Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies that the horizontal rule does not have 3-D shading. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hrnoshade="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
hrpct (Horizontal Rule Length Percentage) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the length of a horizontal rule as a percentage of page width. Default is 0.</p> <p>[Example:</p> <pre><v:shape ... o:hrpct="85" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
hrstd (Horizontal Rule Standard Display Toggle)	<p>Specifies whether a shape is displayed as a standard horizontal rule. Only applies if hr is true. Default is false.</p> <p>[Example:</p>

Attributes	Description
Namespace: urn:schemas-microsoft-com:office:office	<pre><v:shape ... o:hrstd="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
id (Unique Identifier)	<p>Specifies a unique identifier that can be used to reference a VML object.</p> <p>Default is no value.</p> <p>[Example:</p> <pre><v:shape ... id="myShape" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
insetmode (Text Inset Mode) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the application calculates the internal text margin instead of using the inset attribute. Default is custom. This attribute is only meaningful for text boxes.</p> <p>[Example:</p> <pre><v:shape ... o:insetmode="auto" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_InsetMode simple type (§19.2.3.17).</p>
insetpen (Inset Border From Path)	<p>Specifies that the border shall be displayed inside of the path defining the shape, rather than along the path (the default border placement), or outside of the path as might be done with an image.</p> <p>[Example:</p> <pre><v:shape ... insetpen="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type</p>

Attributes	Description
<p>ole (Embedded Object Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>(§20.1.2.5).</p> <p>Specifies whether the shape is an embedded object. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:ole="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).</p>
<p>oleicon (Embedded Object Icon Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether an embedded object is displayed as an icon. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:oleicon="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>oned (Shape Handle Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the extra handles of a shape are hidden. If true, hides all shape handles except the top left and bottom right; that is, the same handles that are used for a straight line segment. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:oned="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>opacity (Fill Color Opacity)</p>	<p>Specifies the opacity of the primary fill color. Default is 1.0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. [Example: A value of "52429f" represents 52429/65536 or 0.8. end example]</p> <p>[Example: The red color is 25% opaque:</p> <pre><v:fill type="gradient" color="red" color2="blue" opacity=".25"> </v:fill></pre>

Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>preferrelative (Relative Resize Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the original size of an object is saved after reformatting. Default is false. If true, the original size of the object is stored and all resizing is based on a percentage of that original size. Otherwise, each resizing resets the scale to 100%.</p> <p>[Example:</p> <pre><v:shape ... o:preferrelative="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>print (Print Toggle)</p>	<p>Specifies whether the shape is printed. Default is true.</p> <p>[Example:</p> <pre><v:shape ... print="false" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>regroupid (Regroup ID)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies a previous group for a shape. An ID number is used to identify groups of shapes that are no longer grouped. This allows shapes to be regrouped programmatically.</p> <p>[Example: The shape was part of a group identified by the ID 040754:</p> <pre><v:shape ... o:regroupid="040754" ... > </v:shape></pre> <p><i>end example]</i></p>

Attributes	Description
	The possible values for this attribute are defined by the W3C XML Schema integer datatype.
spid (Optional String) Namespace: urn:schemas-microsoft-com:office:office	Specifies an optional string that an application can use to identify the particular shape. Default is no value. The possible values for this attribute are defined by the W3C XML Schema string datatype.
spt (Optional Number) Namespace: urn:schemas-microsoft-com:office:office	Specifies an optional number that an application can use to associate the particular shape with a defined shape type. Default is 0. The possible values for this attribute are defined by the W3C XML Schema float datatype.
strokecolor (Shape Stroke Color)	<p>Specifies the primary color of the brush to use to stroke the path of the shape. Default is black. The color attribute of the stroke element (§19.1.2.21) overrides this. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example:</p> <pre><v:shape ... strokecolor="red" ...> </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
stroked (Shape Stroke Toggle)	<p>Specifies whether the path defining the shape is stroked with a solid line. The stroke element (§19.1.2.21) defines other strokes. The on attribute of the stroke element overrides this attribute. Default is true.</p> <p>[Example:</p> <pre><v:shape ... fillcolor="red" stroked="false" strokecolor="blue"...> </v:shape></pre>

Attributes	Description				
	 <i>end example]</i> The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).				
strokeweight (Shape Stroke Weight)	<p>Specifies the width of the brush to use to stroke the path. Default is 1 point. If a number is given without units, the emu is used. The weight attribute of the stroke element (§19.1.2.21) overrides this attribute.</p> <p>[Example:</p> <pre><v:shape ... strokeweight="3pt" ... > </v:shape></pre>  <i>end example]</i> The possible values for this attribute are defined by the W3C XML Schema string datatype.				
style (Shape Styling Properties)	<p>Specifies the CSS2 styling properties of the shape. The CSS2 (Cascading Style Sheets, Level 2) specification, a Recommendation of the World Wide Web Consortium, is available here: http://www.w3.org/TR/REC-CSS2.</p> <p>This attribute uses a semi-colon delimited list of “name:value” pairs, the syntax defined by section 4.1.8 of the CSS2 specification for grouped declarations (without the surrounding braces). The following tables define the allowed properties and the VML treatment of each.</p> <p>[Example:</p> <pre><v:shape ... style='position:absolute;width:100pt;height:50pt' ... > </v:shape></pre> <i>end example]</i>				
<table><tr><th>Property</th><th>Description</th></tr><tr><td>flip</td><td>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</td></tr></table>		Property	Description	flip	Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:
Property	Description				
flip	Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:				

Attributes	Description	
		<ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis.
	height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	left	<p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-bottom	<p>Specifies the position of the bottom of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	margin-left	<p>Specifies the position of the left of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p>

Attributes	Description	
		<ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-right	<p>Specifies the position of the right of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-top	<p>Specifies the position of the top of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	mso-position-horizontal	<p>Specifies the horizontal positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • left • center • right • inside • outside
	mso-position-	Specifies relative horizontal position data for objects in

Attributes	Description	
	horizontal-relative	<p>WordprocessingML documents. This modifies the mso-position-horizontal property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • char
	mso-position-vertical	<p>Specifies the vertical positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • top • center • bottom • inside • outside
	mso-position-vertical-relative	<p>Specifies relative vertical position data for objects in WordprocessingML documents. This modifies the mso-position-vertical property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • line
	mso-wrap-distance-bottom	<p>Specifies the distance from the bottom of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-left	<p>Specifies the distance from the left side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-right	<p>Specifies the distance from the right side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>

Attributes	Description	
	mso-wrap-distance-top	Specifies the distance from the top of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-edited	Specifies whether the wrap coordinates were customized by the user. If the wrap coordinates are generated by an editor, this property is true; otherwise they were customized by a user. Default is false.
	mso-wrap-style	<p>Specifies the wrapping mode for text in shapes in WordprocessingML documents. Default is square. Allowed values are:</p> <ul style="list-style-type: none"> • square - Wraps text inside the shape in a square. • none - Text does not wrap.
	position	<p>Specifies the kind of positioning used to place an element. Default is static. When the element is contained inside a group, this property shall be absolute. Allowed values are:</p> <ul style="list-style-type: none"> • static - The element is positioned according to the normal flow of the page. The top and left properties are ignored. If the object is anchored inline, this value is used. • absolute - The element is positioned relative to the parent, using the top and left properties. • relative - The element is positioned according to the normal flow of the page, but the top and left properties are used. The overlap of overlapping elements is governed by the z-index property.
	rotation	Specifies the angle that a shape is rotated, in degrees. Default is 0. Positive angles are clockwise.

Attributes	Description	
	top	<p>Specifies the position of the top of the containing block of the shape relative to the element above it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	visibility	<p>Specifies whether a shape is displayed. Only <code>inherit</code> and <code>hidden</code> are used; any other values are mapped to <code>inherit</code>. Default is <code>inherit</code>. Allowed values are:</p> <ul style="list-style-type: none"> • hidden - The shape is not visible, but is still part of the flow of the objects in the browser. Mouse events are not processed. • inherit - The visibility state is inherited from the parent of the shape.
	width	<p>Specifies the width of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	z-index	<p>Specifies the display order of overlapping shapes. Default is 0. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Uses the order that the shapes appear in the page, bottom to top. • <order>- A number that represents the stacking precedence. Shapes with higher numbers are placed on top of those with lower numbers. Negative numbers are allowed.

Attributes	Description																		
	<p>The following properties are only used by the textbox element (§19.1.2.22):</p> <table> <tr> <th>Property</th><th>Description</th></tr> <tr> <td>direction</td><td> <p>Specifies the direction of the text in the textbox. Default is ltr. This property is superceded by the mso-direction-alt property if that is specified. Allowed values are:</p> <ul style="list-style-type: none"> ltr - Text is displayed left-to-right. rtl - Text is displayed right-to-left. </td></tr> <tr> <td>layout-flow</td><td> <p>Determines the flow of the text layout in a textbox. Default is horizontal. Allowed values are:</p> <ul style="list-style-type: none"> horizontal - Text is displayed horizontally. vertical - Text is displayed vertically. vertical-ideographic - Ideographic text is displayed vertically. horizontal-ideographic - Ideographic text is displayed horizontally. </td></tr> <tr> <td>mso-direction-alt</td><td> <p>Specifies an alternate direction for text in textboxes. Overrides the direction property. The only allowed value is context.</p> </td></tr> <tr> <td>mso-fit-shape-to-text</td><td> <p>Specifies whether the shape stretches to fit the text in the textbox. Default is false.</p> </td></tr> <tr> <td>mso-fit-text-to-shape</td><td> <p>Specifies whether the text stretches to fit the textbox. Default is false.</p> </td></tr> <tr> <td>mso-layout-flow-alt</td><td> <p>Specifies the alternate layout flow for text in textboxes. This property is used instead of layout-flow when the layout flow is from bottom to top for non-ideographic languages. Its only value is bottom-to-top.</p> </td></tr> <tr> <td>mso-next-textbox</td><td> <p>Specifies the ID of the next textbox in a series. Used to keep track of a set of linked textboxes. Default is no value.</p> </td></tr> <tr> <td>mso-rotate</td><td> <p>Specifies a specific rotation value for text in a textbox. Default is 0. Allowed values are:</p> <ul style="list-style-type: none"> 0 90 180 </td></tr> </table>	Property	Description	direction	<p>Specifies the direction of the text in the textbox. Default is ltr. This property is superceded by the mso-direction-alt property if that is specified. Allowed values are:</p> <ul style="list-style-type: none"> ltr - Text is displayed left-to-right. rtl - Text is displayed right-to-left. 	layout-flow	<p>Determines the flow of the text layout in a textbox. Default is horizontal. Allowed values are:</p> <ul style="list-style-type: none"> horizontal - Text is displayed horizontally. vertical - Text is displayed vertically. vertical-ideographic - Ideographic text is displayed vertically. horizontal-ideographic - Ideographic text is displayed horizontally. 	mso-direction-alt	<p>Specifies an alternate direction for text in textboxes. Overrides the direction property. The only allowed value is context.</p>	mso-fit-shape-to-text	<p>Specifies whether the shape stretches to fit the text in the textbox. Default is false.</p>	mso-fit-text-to-shape	<p>Specifies whether the text stretches to fit the textbox. Default is false.</p>	mso-layout-flow-alt	<p>Specifies the alternate layout flow for text in textboxes. This property is used instead of layout-flow when the layout flow is from bottom to top for non-ideographic languages. Its only value is bottom-to-top.</p>	mso-next-textbox	<p>Specifies the ID of the next textbox in a series. Used to keep track of a set of linked textboxes. Default is no value.</p>	mso-rotate	<p>Specifies a specific rotation value for text in a textbox. Default is 0. Allowed values are:</p> <ul style="list-style-type: none"> 0 90 180
Property	Description																		
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mso-rotate	<p>Specifies a specific rotation value for text in a textbox. Default is 0. Allowed values are:</p> <ul style="list-style-type: none"> 0 90 180 																		

Attributes	Description												
		<ul style="list-style-type: none">-90											
	mso-text-scale	Specifies the scaling factor for fitting text to shapes. Default is 0. This property is only used if mso-fit-text-to-shape is true.											
	v-text-anchor	<p>Specifies the vertical anchoring of text in a textbox. Default is top. The alignment of a text anchor only becomes evident if mso-fit-text-to-shape is false. This property is different from the vertical-align CSS property, which is used for ideographic languages. Allowed values are:</p> <ul style="list-style-type: none">topmiddlebottomtop-centermiddle-centerbottom-centertop-baselinebottom-baselinetop-center-baselinebottom-center-baseline											
	The following properties are only used by the textpath element (§19.1.2.23):												
	<table><tr><th>Property</th><th>Description</th></tr><tr><td>font</td><td>Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.</td></tr><tr><td>font-family</td><td>Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.</td></tr><tr><td>font-size</td><td>Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.</td></tr><tr><td>font-style</td><td><p>Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are:</p><ul style="list-style-type: none">normalitalicoblique - Treated the same as italic.</td></tr><tr><td>font-variant</td><td>Specifies the variant style of a font. Default is normal. The values are the same as those of the CSS font-variant property. Allowed values are:</td></tr></table>	Property	Description	font	Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.	font-family	Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.	font-size	Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.	font-style	<p>Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are:</p> <ul style="list-style-type: none">normalitalicoblique - Treated the same as italic.	font-variant	Specifies the variant style of a font. Default is normal. The values are the same as those of the CSS font-variant property. Allowed values are:
Property	Description												
font	Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.												
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font-variant	Specifies the variant style of a font. Default is normal. The values are the same as those of the CSS font-variant property. Allowed values are:												

Attributes	Description																		
		<ul style="list-style-type: none">normalsmall-caps																	
	font-weight	<p>Specifies the thickness of the letters of the font. Default is normal. The values are the same as those of the CSS font-weight property. Allowed values are:</p> <table><tr><th>Value</th><th>Description</th></tr><tr><td>normal</td><td rowspan="6">Treated as non-bold.</td></tr><tr><td>lighter</td></tr><tr><td>100</td></tr><tr><td>200</td></tr><tr><td>300</td></tr><tr><td>400</td></tr><tr><td>bold</td><td rowspan="7">Treated as bold.</td></tr><tr><td>bolder</td></tr><tr><td>500</td></tr><tr><td>600</td></tr><tr><td>700</td></tr><tr><td>800</td></tr><tr><td>900</td></tr></table>	Value	Description	normal	Treated as non-bold.	lighter	100	200	300	400	bold	Treated as bold.	bolder	500	600	700	800	900
	Value	Description																	
	normal	Treated as non-bold.																	
	lighter																		
	100																		
200																			
300																			
400																			
bold	Treated as bold.																		
bolder																			
500																			
600																			
700																			
800																			
900																			
mso-text-shadow	Specifies whether a shadow is applied to the text on a text path. Default is false.																		
text-decoration	<p>Specifies the style of text decoration. Default is none. The values are the same as those of the CSS text-decoration property. Allowed values are:</p> <ul style="list-style-type: none">noneunderlineoverlineline-throughblink																		
v-rotate-	Specifies whether the letters of the text are rotated counterclockwise by 90 degrees. Default is false.																		

Attributes	Description	
	letters	
	v-same-letter-heights	Specifies whether all letters are the same height regardless of initial case. If true, the lowercase letters are stretched to the height of the uppercase letters. Default is false.
	v-text-align	<p>Specifies the alignment of text. Default is left. Allowed values are:</p> <ul style="list-style-type: none"> • left • right • center • justify • letter-justify - Distributes the extra space between the letters. • stretch-justify - Stretches the letters to fill in the space.
	v-text-kern	Specifies whether kerning is turned on. Default is false.
	v-text-reverse	Specifies whether the layout order of rows is reversed. Default is false. This is used for vertical text layout.
	v-text-spacing-mode	<p>Specifies the mode for letter spacing. Default is tightening. This property determines whether space is removed between each letter (tightening) or added between each letter (tracking). The amount of letter spacing change is defined by the v-text-spacing property. Allowed values are:</p> <ul style="list-style-type: none"> • tightening • tracking
	v-text-spacing	Specifies the amount of spacing for text in 100ths of single line spacing. Default is 100.
<p>The line (§19.1.2.12), polyline (§19.1.2.15) and curve (§19.1.2.3) elements ignore the following properties:</p> <ul style="list-style-type: none"> • top • left • width • height <p>The following properties are not inherited by an element that references a shapetype element (§19.1.2.20) via the id attribute:</p> <ul style="list-style-type: none"> • flip 		

Attributes	Description																
	<ul style="list-style-type: none"> • height • left • margin-left • margin-top • position • rotation • top • visibility • width • z-index <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>																
target (Hyperlink Display Target)	<p>Specifies a frame or window that a URL is displayed in. Default is no value. Allowed values are:</p> <table border="1"> <thead> <tr> <th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td><targetname></td><td>String containing the name of the frame or window in which to load the document.</td></tr> <tr> <td>_blank</td><td>Specifies that the linked document is loaded into a new blank window. This window is not named.</td></tr> <tr> <td>_media</td><td>Specifies that the linked document is loaded into the browser's multimedia pane.</td></tr> <tr> <td>_parent</td><td>Specifies that the linked document is loaded into the immediate parent of the document containing the link.</td></tr> <tr> <td>_search</td><td>Specifies that the linked document is loaded into the browser's search pane.</td></tr> <tr> <td>_self</td><td>Specifies that the linked document is loaded into the window in which the link was clicked (the active window).</td></tr> <tr> <td>_top</td><td>Specifies that the linked document is loaded into the topmost window.</td></tr> </tbody> </table> <p>[Example:</p> <pre> <v:shape ... href="http://www.openxmlformats.org" target="_self" ... > </v:shape> </pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string</p>	Value	Description	<targetname>	String containing the name of the frame or window in which to load the document.	_blank	Specifies that the linked document is loaded into a new blank window. This window is not named.	_media	Specifies that the linked document is loaded into the browser's multimedia pane.	_parent	Specifies that the linked document is loaded into the immediate parent of the document containing the link.	_search	Specifies that the linked document is loaded into the browser's search pane.	_self	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).	_top	Specifies that the linked document is loaded into the topmost window.
Value	Description																
<targetname>	String containing the name of the frame or window in which to load the document.																
_blank	Specifies that the linked document is loaded into a new blank window. This window is not named.																
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_self	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).																
_top	Specifies that the linked document is loaded into the topmost window.																

Attributes	Description
	datatype.
title (Shape Title)	<p>Specifies the text displayed when the mouse pointer moves over the shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... title="tooltip" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
to (Curve Ending Point)	<p>Specifies the ending point of the line in the coordinate space of the parent element. Default is "30,20". If the parent is not a VML element, the default unit is a pixel. Allowed units are in, cm, mm, pt, pc and px.</p> <p>[Example:</p> <pre><v:curve ... to="40,40" ... > </v:curve></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
userdrawn (Exists In Master Slide) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the user has added the shape to a master slide. Default is false. Used by PresentationML.</p> <p>[Example:</p> <pre><v:shape ... o:userdrawn="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
userhidden (Hide Script Anchors) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether a script anchor is hidden. Default is false. If true, script anchors stay hidden even if the shape is otherwise visible. A script anchor is the visual representation of a script that when displayed in an application.</p> <p>[Example:</p> <pre><v:shape ... o:userhidden="true" ... ></pre>

Attributes	Description
	<p><code></v:shape></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
wrapcoords (Shape Bounding Polygon)	<p>Specifies the bounding polygon that surrounds a shape. This is specified using a comma-delimited list of x and y coordinates: "x1,y1,x2,y2,x3,y3,..." This is used when text is tightly wrapped around a shape. Default is no value until the mso-wrap-mode style attribute is set to tight or through.</p> <p>[Example:</p> <pre> <v:shape ... wrapcoords="0,0 0,200, 200,200, 200,0" ... > </v:shape> </pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_Curve](#)) is located in §A.6.1. *end note]*

19.1.2.4 f (Single Formula)

This element defines a single value as the result of the evaluation of an expression. The expression is defined by the eqn attribute and has the general form of an operation followed by up to three arguments, which consist of adjustment values (see the adj attribute of the shape element (§19.1.2.19)), the results of earlier formulas, fixed numbers or pre-defined values. Each f value is referenced using "@" followed by a number corresponding to the zero-based index for that value in the list of f elements. [Example: For example, the value of the second f element is referenced as "@2". *end example]*

[Example: The following defines a blue arrow pointing to the right:

```

<v:shape coordsize="21600,21600" adj="18000,5400,10800"
  path="m @0,0 l @0,@1 0,@1 0,@3 @0,@3 @0,21600 21600,10800 x e"
  style='left:50pt;top:50pt;width:90pt;height:30pt'
  fillcolor="#4f81bd" strokecolor="#4f81bd" strokeweight="2pt">
<v:formulas>
  <v:f eqn="val #0"/>
  <v:f eqn="val #1"/>
  <v:f eqn="val #2"/>

```

```

<v:f eqn="sum height 0 #1"/>
<v:f eqn="sum #2 0 #1"/>
<v:f eqn="sum width 0 #0"/>
<v:f eqn="prod @5 @4 #2"/>
<v:f eqn="sum width 0 @6"/>
</v:formulas>
</v:shape>

```

The shape looks like this:



end example]

Parent Elements
formulas (§19.1.2.6)

Attributes	Description																		
eqn (Equation)	<p>Specifies a single formula, which consists of a named operation followed by up to three parameters, typically described as v, P1 and P2. Up to 128 formulas can be specified. These operations are defined (calculation accuracy is discussed below):</p> <table> <tr> <th>Operation</th><th>Description</th></tr> <tr> <td>val</td><td>v Returns the supplied value. Exact.</td></tr> <tr> <td>sum</td><td>$v + P1 - P2$ Addition and subtraction. Exact.</td></tr> <tr> <td>product</td><td>$v \times P1 / P2$ Multiplication and division. Rounds up.</td></tr> <tr> <td>mid</td><td>$(v + P1) / 2$ Simple average. Rounds toward zero.</td></tr> <tr> <td>abs</td><td> v Absolute value. Exact.</td></tr> <tr> <td>min</td><td>min(v, P1) The lesser of two values. Exact.</td></tr> <tr> <td>max</td><td>max(v, P1) The greater of two values. Exact.</td></tr> <tr> <td>if</td><td>$v > 0 ? P1 : P2$ Conditional selection. Exact.</td></tr> </table>	Operation	Description	val	v Returns the supplied value. Exact.	sum	$v + P1 - P2$ Addition and subtraction. Exact.	product	$v \times P1 / P2$ Multiplication and division. Rounds up.	mid	$(v + P1) / 2$ Simple average. Rounds toward zero.	abs	v Absolute value. Exact.	min	min(v, P1) The lesser of two values. Exact.	max	max(v, P1) The greater of two values. Exact.	if	$v > 0 ? P1 : P2$ Conditional selection. Exact.
Operation	Description																		
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Attributes	Description	
	mod	$\sqrt{v^2 + P1^2 + P1^2}$ Modulus. Inexact.
	atan2	atan2(P1, v) Trigonometric arc tangent of a quotient. Result is in "fd" units or fractional degrees - degrees $\times 2^{16}$. Inexact.
	sin	$v \times \sin(P1)$ Sine. Argument is in "fd" units or fractional degrees - degrees $\times 2^{16}$. Inexact.
	cos	$v \times \cos(P1)$ Cosine. Argument is in "fd" units or fractional degrees - degrees $\times 2^{16}$. Inexact.
	cosatan2	$v \times \cos(\text{atan2}(P2, P1))$ Preserves full accuracy in the intermediate calculation. Inexact.
	sinatan2	$v \times \sin(\text{atan2}(P2, P1))$ Preserves full accuracy in the intermediate calculation. Inexact.
	sqrt	\sqrt{v} Square root. Result is positive and rounds down. Inexact.
	sumangle	$v + P1 \times 2^{16} - P2 \times 2^{16}$ Adds an existing angle in fd units (v) to two other angles specified in degrees. P1 and P2 are scaled by 2^{16} . Exact.
	ellipse	$P2 \sqrt{1 - \left(\frac{v}{P1}\right)^2}$ The eccentricity formula for an ellipse, where v is length of the semiminor axis and P1 is the length of the semimajor axis. Inexact.
	tan	$v \times \tan(P1)$ Tangent. Argument is in "fd" units or fractional degrees - degrees $\times 2^{16}$. Inexact.
<p>Formulas are evaluated to full precision, but the result is always a 32-bit integer. Formula authors should avoid formulas which are discontinuous - not only are many of the trigonometric operations inexact, the transformations within the coordinate spaces are also inexact. This can mean that a set of formulas which is discontinuous evaluates to give very different path values with the same input on two different systems.</p> <p>When an operation is marked as exact then a conforming implementation shall always generate the correct arithmetic answer (unless the calculations overflow internally). The</p>		

Attributes	Description																								
	<p>product operation is required to round to the nearest integer. If the result is exactly 0.5 then it shall be rounded up to the next numerically greater integer. The mid operation is required to round towards 0.</p> <p>All other operations are inexact, but the implementation shall round non-integral values down (towards -infinity) and should perform internal calculations with this form of rounding.</p> <p>The arguments used in the evaluation of a formula are normally either fixed numbers, the result of the evaluation of a previous formula or an adjust value - the value of the corresponding entry in the shape adj attribute. Fixed numbers shall be positive integral values in the range 0 to 65535 (unsigned 16-bit numbers). The following named values are defined:</p> <table border="1"> <thead> <tr> <th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td>@n</td><td>The value of formula n, where n is the zero-based index of the formula in the list of formulas. n shall be less than the current formula index.</td></tr> <tr> <td>#n</td><td>Adjustment (adj) value n. n shall be in the range 0 to 7.</td></tr> <tr> <td>width</td><td>The width defined by the coordsize attribute.</td></tr> <tr> <td>height</td><td>The height defined by the coordsize attribute.</td></tr> <tr> <td>xcenter</td><td>The x ordinate of the center of the coordinate space defined by coordorigin and coordsize.</td></tr> <tr> <td>ycenter</td><td>The y ordinate of the center of the coordinate space defined by coordorigin and coordsize.</td></tr> <tr> <td>xlimo</td><td>The x value of the limo attribute (see also the path element (§19.1.2.14)).</td></tr> <tr> <td>ylimo</td><td>The y value of the limo attribute (see also the path element (§19.1.2.14)).</td></tr> <tr> <td>hasstroke</td><td>1 if the shape has a stroke operation, 0 if it does not, as determined by the on attribute of the stroke element (§19.1.2.21).</td></tr> <tr> <td>hasfill</td><td>1 if the shape has a fill operation, 0 if it does not, as determined by the on attribute of the fill element (§19.1.2.5).</td></tr> <tr> <td>pixellinewidth</td><td>The line width in output device pixels. This is used to outset lines from the edge of a rectangle on the assumption that the</td></tr> </tbody> </table>	Value	Description	@n	The value of formula n, where n is the zero-based index of the formula in the list of formulas. n shall be less than the current formula index.	#n	Adjustment (adj) value n. n shall be in the range 0 to 7.	width	The width defined by the coordsize attribute.	height	The height defined by the coordsize attribute.	xcenter	The x ordinate of the center of the coordinate space defined by coordorigin and coordsize.	ycenter	The y ordinate of the center of the coordinate space defined by coordorigin and coordsize.	xlimo	The x value of the limo attribute (see also the path element (§19.1.2.14)).	ylimo	The y value of the limo attribute (see also the path element (§19.1.2.14)).	hasstroke	1 if the shape has a stroke operation, 0 if it does not, as determined by the on attribute of the stroke element (§19.1.2.21).	hasfill	1 if the shape has a fill operation, 0 if it does not, as determined by the on attribute of the fill element (§19.1.2.5).	pixellinewidth	The line width in output device pixels. This is used to outset lines from the edge of a rectangle on the assumption that the
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Attributes	Description	
		implementation draws to lower right pixel in preference to the upper left pixel when a line is on a pixel boundary.
	pixelwidth	The width of the shape in device pixels (i.e., the coordsize width transformed into device space).
	pixelheight	The height of the coordsize in device pixels.
	emuwidth	The width of the coordsize in EMUs.
	emuheight	The height of the coordsize in EMUs.
	emuwidth2	Half the width of the coordsize in EMUs.
	emuheight2	Half the height of the coordsize in EMUs.
<p>The EMU, or English Metric Unit, is the smallest unit of measure in VML and corresponds to 914400 EMU per inch or 12700 EMU per point.</p> <p>See above for an example.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>		


[Note: The W3C XML Schema definition of this element's content model (CT_F) is located in §A.6.1. *end note*]



19.1.2.5 fill (Shape Fill Properties)


This element specifies how the path should be filled if something beyond a solid color fill is desired. The attributes of the fill element can be used to describe a powerful set of image- or gradient-based fill patterns. Extensions to the VML fill definition are encoded as sub-elements of fill.

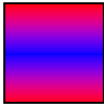
Parent Elements
arc (§19.1.2.1); background (Part 1, §17.2.1); background (§19.1.2.2); curve (§19.1.2.3); group (§19.1.2.7); image (§19.1.2.10); line (§19.1.2.12); object (Part 1, §17.3.3.19); oval (§19.1.2.13); pict (§14.2.2.2); pict (§14.5.1); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapedefaults (§19.2.2.28); shapetype (§19.1.2.20)

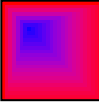
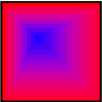
Child Elements	Subclause
fill (Shape Fill Extended Properties)	§19.2.2.13


Attributes	Description
alignshape (Align Image With Shape)	<p>Specifies whether an image aligns with the shape. Default is true.</p> <p>[Example: The image displayed in the shape is not rotated even though the shape is rotated 30 degrees:</p> <pre><v:shape coordorigin="0,0" coordsize="200,200" style="top:1;left:1;width:50; height:50;rotation:30" path="m 1,1 l 1,200, 200,200, 200,1 x e"> <v:fill alignshape="false" type="frame" src="myimage.gif"> </v:fill> </v:shape></pre> <p>Applied to a simple square the fill looks like this:</p>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
althref (Alternate Image Reference Location) Namespace: urn:schemas- microsoft- com:office:office	<p>Defines an alternate reference for an image in Macintosh PICT format.</p> <p>[Example:</p> <pre><v:fill ... althref="myimage.pcz" ... > </v:fill></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
angle (Gradient Angle)	<p>Specifies the direction of a gradient. The vector of a gradient is perpendicular to the vector of the blend direction from one color to another. The default value is zero degrees, which is a horizontal vector from left to right. Positive angles rotate the gradient in a counter-clockwise direction.</p> <p>[Example: The fill is composed of a 45-degree gradient of two colors. Blue is in the top left corner and red is in the bottom right corner.</p> <pre><v:fill type="gradient" color="red"</pre>



Attributes	Description
	<pre>color2="blue" angle="45"> </v:fill></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema decimal datatype.</p>
aspect (Image Aspect Ratio)	<p>Specifies how the fill image aspect ratio is preserved. Default is ignore. Allowed values are:</p> <ul style="list-style-type: none"> • ignore - Ignore aspect ratio. • atleast - At least as large as defined by the size attribute. • atmost - No larger than that defined by the size attribute. <p>In each case, the size attribute is adjusted to preserve the aspect ratio of the image.</p> <p>[Example: The image that makes up the fill is no larger than 20 points by 20 points, limiting the size of the tiles inside the shape.</p> <pre><v:fill type="tile" aspect="atmost" size="20pt,20pt" src="myimage.gif"> </v:fill></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ImageAspect simple type (§19.1.3.5).</p>
color (Primary Color)	<p>Specifies the main fill color; functions the same as the fillcolor attribute of the shape element (§19.1.2.19). This attribute overrides the shape's fillcolor. Default is white. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example: The shape is blue:</p> <pre><v:shape ... fillcolor="red" ... > <v:fill color="blue"/> </v:shape></pre>

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
<p>color2 (Secondary Color)</p>	<p>Specifies the secondary fill color, used when a fill type is a pattern or a gradient. Default is white. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example: The shape is filled with a horizontal gradient with red at the bottom and blue on top:</p> <pre><v:fill type="gradient" color="red" color2="blue"> </v:fill></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
<p>colors (Intermediate Colors)</p>	<p>Specifies an array of comma-separated percentage-color pairs that define intermediate colors and their positions in a gradient fill. The primary color, specified either by the fillcolor attribute of the shape element (§19.1.2.19) or the color attribute of the fill element (§19.1.2.5), is used at the 0% endpoint. The secondary color, specified by the color2 attribute of the fill element (§19.1.2.5), is used at the 100% endpoint. The numeric values can also be specified in 1/65536-ths if a trailing "f" is supplied. [Example: For example, a value of "52429f" represents 52429/65536 or 0.8. <i>end example]</i></p> <p>[Example: The shape is filled with a horizontal gradient colored, from bottom to top, red, yellow, green, blue:</p> <pre><v:fill type="gradient" color="red" color2="blue" colors="30% yellow,70% green"> </v:fill></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>


Attributes	Description
<p>detectmouseclick (Detect Mouse Click)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a mouse click is detected on the fill of a shape.</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>focus (Gradient Center)</p>	<p>Specifies the center starting position of a gradient. Values are in the range 100% to -100%. Default is 0.</p> <p>A value of 100% or -100% reverses the direction of the gradient (in effect swapping color and color2). A value of 50% changes the gradient so that color is at both ends and color2 is in the middle. A value of -50% changes the gradient so that color2 is at both ends and color is in the middle.</p> <p>[Example: The shape is filled with a horizontal gradient with red at both ends and blue in the middle:</p> <pre><v:fill type="gradient" color="red" color2="blue" focus="50%"> </v:fill></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>focusposition (Radial Gradient Center)</p>	<p>Specifies the position of the center rectangle of a radial gradient. The vector is a fraction of the width and height of the shape. The first is a percentage of the fill to the left edge; the second is a percentage of the fill to the top. Default is 0,0. To position a radial fill at the center of a shape, use a value of 50%,50%.</p> <p>[Example: The shape is filled with a rectangular gradient positioned in the top-left quadrant of the shape. The interior of the gradient is blue and the exterior is red:</p> <pre><v:fill type="gradientradial" color="red" color2="blue" focusposition="25%,25%"> </v:fill></pre>

Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
focussize (Radial Gradient Size)	<p>Specifies the size of the center rectangle of a radial gradient. The vector is a fraction of the width and height of the shape. The first is a percentage of the fill to the right edge; the second is a percentage of the fill to the bottom. Default is 0,0.</p> <p>A focussize value of 100%,100% and a focusposition of 0,0 makes color2 dominate the gradient completely. Small values of around 10%,10% are recommended for balanced gradients.</p> <p>[Example: The shape is filled with a rectangular gradient positioned in the top-left quadrant of the shape. The interior of the gradient is blue and the exterior is red. The red portion is wider on the bottom and right sides of the blue region. The pure blue region is 25% the width and 25% the height of the shape:</p> <pre><v:fill type="gradientradial" color="red" color2="blue" focussize="25%,25%" focusposition="25%,25%"> </v:fill></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>href (Hyperlink Target)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the URL to the original image file. Used only if the picture has been linked and embedded. Default is no value.</p> <p>[Example:</p> <pre><v:fill ... o:href="myimage.gif" ... > </v:fill></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string</p>










Attributes	Description
	datatype.
<p>id (Relationship to Part)</p> <p>Namespace: .../officeDocument/2006/relationships</p>	<p>Specifies the relationship ID of the relationship to the image used for this fill. The specified relationship shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/image or the document shall be considered non-conformant.</p> <p>[Example: The markup specifies the associated relationship part with relationship ID rId10 contains the corresponding relationship information for the fill:</p> <pre>< ... r:id="rId10" /></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>
<p>id (Unique Identifier)</p>	<p>Specifies a unique identifier that can be used to reference a VML object.</p> <p>Default is no value.</p> <p>[Example:</p> <pre><v:shape ... id="myShape" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>method (Gradient Fill Method)</p>	<p>Specifies the method used to generate the transition from color to color2 in a gradient fill. Default is sigma.</p> <p>[Example:</p> <pre><v:fill type="gradient" color="red" color2="blue" method="any"> </v:fill></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_FillMethod simple type (§19.1.3.3).</p>


Attributes	Description
on (Fill Toggle)	<p>Specifies whether to fill the shape. Default is true. This attribute overrides the shape's fill attribute.</p> <p>[<i>Example:</i> The shape has a transparent fill:</p> <pre><v:shape ... fill="true" ... > <v:fill color="red" on="false"> </v:fill> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
opacity (Primary Color Opacity)	<p>Specifies the opacity of the primary fill color. Default is 1.0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. For example, a value of "52429f" represents 52429/65536 or 0.8.</p> <p>[<i>Example:</i> The red color is 25% opaque:</p> <pre><v:fill type="gradient" color="red" color2="blue" opacity=".25"> </v:fill></pre> <div>  <div>opacity="1"</div>  <div>opacity=".25"</div> </div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
opacity2 (Secondary Color Opacity) Namespace: urn:schemas- microsoft- com:office:office	<p>Specifies the opacity of the secondary fill color. Default is 1.0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. [<i>Example:</i> For example, a value of "52429f" represents 52429/65536 or 0.8. <i>end example]</i></p> <p>[<i>Example:</i> The blue color is 25% opaque:</p> <pre><v:fill type="gradient" color="red" color2="blue" o:opacity2=".25"> </v:fill></pre>

Attributes	Description
	<div> </div> <div> <p>opacity2="1"</p> </div> <div> </div> <div> <p>opacity2=".25"</p> </div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
origin (Fill Image Origin)	<p>Specifies the position of the origin of a fill image as a point relative to the top left corner of the image. The vector is a fraction of the width and height of the image. Default is the center of the image. These numeric values can also be specified in 1/65536-ths if a trailing "f" is supplied. <i>[Example: For example, a value of "52429f" represents 52429/65536 or 0.8. end example]</i></p> <p><i>[Example: The origin of the image is 25% to the right and 25% above the image's top left corner:</i></p> <pre> <v:fill type="tile" src="myimage.gif" origin="0.25,-0.25"> </v:fill> </pre> <div> </div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
position (Fill Image Position)	<p>Specifies the position of the origin of a fill image as a point within its containing shape. The vector is a fraction of the width and height of the shape. These numeric values can also be specified in 1/65536-ths if a trailing "f" is supplied. For example, a value of "52429f" represents 52429/65536 or 0.8.</p> <p><i>[Example: The origin of the image is positioned 25% to the right of the left edge of the shape and 25% down from the shape's top:</i></p> <pre> <v:fill type="tile" src="myimage.gif" position="0.25,0.25"> </v:fill> </pre>

Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
recolor (Recolor Fill as Picture)	<p>Specifies that the fill uses an image. Default is false.</p> <p>[Example:</p> <pre><v:fill r:id="rId4" o:title="MyPic" recolor="true" type="frame"> </v:fill></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
relid (Relationship to Part) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the relationship ID of the relationship to the image. The specified relationship shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/image or the document shall be considered non-conformant.</p> <p>[Example: The markup specifies the associated relationship part with relationship ID rId10 contains the corresponding relationship information:</p> <pre><v:fill ... o:relid="rId10" ...> </v:fill></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>
rotate (Rotate Fill with Shape)	<p>Specifies whether the fill is rotated with the shape. Default is false.</p> <p>[Example: The gradient is rotated with the shape:</p> <pre><v:fill color2="white" focus="100%" rotate="true" type="gradient"> </v:fill></pre>

Attributes	Description
	<div> </div> <div> <p>rotate="true"</p> </div> <div> </div> <div> <p>rotate="false"</p> </div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
size (Fill Image Size)	<p>Specifies the size of the fill image. Default is the native image pixel size.</p> <p><i>[Example: The image is reduced in size disproportionately:</i></p> <pre> <v:fill type="tile" src="myimage.gif" size="25pt,15pt"> </v:fill> </pre> <div> </div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
src (Fill Image Source)	<p>Specifies the URL specifying the fill image to use.</p> <p><i>[Example:</i></p> <pre> <v:fill ... src="myimage.gif" ... > </v:fill> </pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>title (Title)</p> <p>Namespace: urn:schemas- microsoft-</p>	<p>Specifies the title of an embedded fill image. This is typically set to the comment property of the image, which is often blank.</p> <p><i>[Example:</i></p>

Attributes	Description				
com:office:office	<pre><v:fill ... o:title="alt text" ... > </v:fill></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>				
type (Fill Type)	<p>Specifies the kind of fill. Default is solid. Allowed values are:</p> <ul style="list-style-type: none"> • solid • gradient • gradientradial • tile • pattern • frame <p>[Example: Applied to a simple square using the following fill element, the three gradient types look like this:</p> <pre><v:fill color="red" color2="blue" type="solid"> </v:fill></pre> <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;">type="solid"</div> </div> <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;">type="gradient"</div> </div> <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;">type="gradientradial"</div> </div> <p>Applied to a simple square using the following fill elements, the three image types look like this:</p> <table border="1"> <tr> <td>  </td><td> <pre><v:fill src="myimage.gif" type="tile" size="50%,50%"> </v:fill></pre> </td></tr> <tr> <td>  </td><td> <pre><v:fill src="myimage.gif" type="frame" size="50%,50%"> </v:fill></pre> </td></tr> </table>		<pre><v:fill src="myimage.gif" type="tile" size="50%,50%"> </v:fill></pre>		<pre><v:fill src="myimage.gif" type="frame" size="50%,50%"> </v:fill></pre>
	<pre><v:fill src="myimage.gif" type="tile" size="50%,50%"> </v:fill></pre>				
	<pre><v:fill src="myimage.gif" type="frame" size="50%,50%"> </v:fill></pre>				

Attributes	Description
	<div></div> <div><pre><v:fill src="myimage.gif" color="red" color2="blue" type="pattern"> </v:fill></pre></div> <div>end example]</div> <div>The possible values for this attribute are defined by the ST_FillType simple type (§19.1.3.4).</div>

[Note: The W3C XML Schema definition of this element’s content model ([CT_Fill](#)) is located in §A.6.1. end note]

19.1.2.6 formulas (Set of Formulas)

This element defines a set of formulas whose calculated values are referenced by other attributes. Each formula is contained in a child *f* element (§19.1.2.4).

Parent Elements
arc (§19.1.2.1); background (Part 1, §17.2.1); curve (§19.1.2.3); group (§19.1.2.7); image (§19.1.2.10); line (§19.1.2.12); object (Part 1, §17.3.3.19); oval (§19.1.2.13); pict (§14.2.2.2); pict (§14.5.1); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapetype (§19.1.2.20)

Child Elements	Subclause
f (Single Formula)	§19.1.2.4

[Note: The W3C XML Schema definition of this element’s content model ([CT_Formulas](#)) is located in §A.6.1. end note]

19.1.2.7 group (Shape Group)

This element is used to collect shapes and groups so they can be positioned and transformed as a single unit. A group contains group, shapetype, shape, pre-defined shape - arc, curve, image, line, oval, polyline, rect, roundrect - and lock elements.

[Example: The following example defines a few basic parts of a flying saucer graphic. The group consists of five shapes. Each shape’s position is determined within the coordinate space of the group, which is defined by the group’s attributes.

```
<v:group id="saucer"
  style='position:relative;left:200;top:200;width:50;height:50'
  coordorigin="0,0" coordsize="6000,6000">
  <v:shape id="body"
```

```

style='position:relative;left:234.75pt;top:208.875pt;
width:235.25pt;height:128.875pt' coordsize="3765,2060"
path="m1285,2511126,469,580,1009,,1285,25,1412,93,1547,194,1673,
1017,2026,2312,2060,3209,1756,3765,1388,3278,680,3059,319,2976,,
1285,251,1285,251xe"
fillcolor="#bcbcd6" stroked="f">
<v:path arrowok="t"/>
</v:shape>
<v:shape id="canopy"
style='position:relative;left:314.625pt;top:140.5pt;
width:104pt;height:102pt' coordsize="1663,1633"
path="m0,13551177,1498,353,1582,840,1633,1378,1498,1663,1295,
1545,456,1260,10,1025,,656,260,253,874,,1355,,1355xe"
fillcolor="#99ebff" stroked="f">
<v:path arrowok="t"/>
</v:shape>
<v:shape id="light1"
style='position:relative;left:408.625pt;top:268.75pt;
width:24.25pt;height:27.375pt' coordsize="388,437"
path="m209,0134,101,,302,125,437,329,327,388,152,209,,209,0xe"
fillcolor="#fff27f" stroked="f">
<v:path arrowok="t"/>
</v:shape>
<v:shape id="light2"
style='position:relative;left:356.625pt;top:279.25pt;
width:28.875pt;height:30pt' coordsize="462,479"
path="m135,010,186,59,422,344,479,462,228,135,,135,0xe"
fillcolor="#fff27f" stroked="f">
<v:path arrowok="t"/>
</v:shape>
<v:shape id="light3"
style='position:relative;left:302.625pt;top:274pt;
width:23pt;height:23.625pt' coordsize="369,378"
path="m0,591226,,369,186,243,378,32,363,,59,,59xe"
fillcolor="#fff27f" stroked="f">
<v:path arrowok="t"/>
</v:shape>
</v:group>

```



end example]

Parent Elements
background (Part 1, §17.2.1); group (§19.1.2.7); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1)


Child Elements	Subclause
anchorlock (Anchor Location Is Locked)	§19.3.2.1
arc (Arc Segment)	§19.1.2.1
borderbottom (Bottom Border)	§19.3.2.2
borderleft (Left Border)	§19.3.2.3
borderright (Right Border)	§19.3.2.4
bordertop (Top Border)	§19.3.2.5
callout (Callout)	§19.2.2.2
ClientData (Attached Object Data)	§19.4.2.12
clippath (Shape Clipping Path)	§19.2.2.3
curve (Bezier Curve)	§19.1.2.3
diagram (VML Diagram)	§19.2.2.8
extrusion (3D Extrusion)	§19.2.2.11
fill (Shape Fill Properties)	§19.1.2.5
formulas (Set of Formulas)	§19.1.2.6
group (Shape Group)	§19.1.2.7
handles (Set of Handles)	§19.1.2.9
image (Image File)	§19.1.2.10
imagedata (Image Data)	§19.1.2.11
line (Line)	§19.1.2.12
lock (Shape Protections)	§19.2.2.18
oval (Oval)	§19.1.2.13
path (Shape Path)	§19.1.2.14
polyline (Multiple Path Line)	§19.1.2.15
rect (Rectangle)	§19.1.2.16
roundrect (Rounded Rectangle)	§19.1.2.17
shadow (Shadow Effect)	§19.1.2.18
shape (Shape Definition)	§19.1.2.19
shapetype (Shape Template)	§19.1.2.20
signatureline (Digital Signature Line)	§19.2.2.30
skew (Skew Transform)	§19.2.2.31
stroke (Line Stroke Settings)	§19.1.2.21


Child Elements	Subclause
textbox (Text Box)	§19.1.2.22
textdata (VML Diagram Text)	§19.5.2.2
textpath (Text Layout Path)	§19.1.2.23
wrap (Text Wrapping)	§19.3.2.6

Attributes	Description
<p>allowincell (Allow in Table Cell)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape can be placed in a table. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:allowincell="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>allowoverlap (Allow Shape Overlap)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape can overlap another shape. Default is true. If false, the shape shifts left or right so as not to overlap another shape, similar to the behavior of the HTML float attribute.</p> <p>[Example:</p> <pre><v:shape ... o:allowoverlap="false" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>alt (Alternate Text)</p>	<p>Specifies alternative text describing the graphical object. This text should provide a brief description of the shape for use by accessibility tools. Default is no value.</p> <p>[Example: The alt text describes the basic shape:</p> <pre><v:shape ... fillcolor="red" alt="Red rectangle"> </v:shape></pre> <p>The alt text describes the contents of a shape displaying an image:</p> <pre><v:shape ... alt="Picture of a sunset"> </v:shape></pre>


Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>borderbottomcolor (Bottom Border Color)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the bottom border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderbottomcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>borderleftcolor (Border Left Color)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the left border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderleftcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>borderrightcolor (Border Right Color)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the right border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderrightcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>bordertopcolor (Border Top Color)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the top border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:bordertopcolor="red" ... > </v:shape></pre>

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>bullet (Graphical Bullet)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the shape is a graphical bullet. Default is <code>false</code>.</p> <p>[Example:</p> <pre><v:shape ... o:bullet="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>button (Button Behavior Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape exhibits button press behavior on click. Default is <code>false</code>.</p> <p>[Example:</p> <pre><v:shape ... o:button="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>class (CSS Reference)</p>	<p>Specifies a reference to the definition of a CSS style. Default is no value.</p> <p>[Example: The snippets below are equivalent:</p> <pre>... .narrowstyle {width:50;height:100} ... <v:shape ... class="narrowstyle" style="top:1;left:1"> </v:shape></pre> <pre><v:shape ... style="top:1;left:1; width:50;height:100"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string</p>

Attributes	Description
coordorigin (Coordinate Space Origin)	<p>datatype.</p> <p>Specifies the coordinate of the top left corner of the shape's coordinate space. This determines the position of the (0,0) coordinate space origin within the shape's bounding box. Default is "0,0", which places the (0,0) origin at the top left corner of the bounding box.</p> <p>This affects shape properties that specify coordinate positions, such as the path attribute. Thus a path can be defined against a generic (0,0) origin and the coordorigin value translates the entire path within the shape's bounding space.</p> <p>[<i>Example:</i> The horizontal and vertical coordinate space ranges from -100 to +100 because the coordinate space (coordsize) is 200 by 200 and the top left coordinate is (-100,-100). The (0,0) origin lies at the center of the shape's bounding box, as evidenced by the position of the shape's path within the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
coordsize (Coordinate Space Size)	<p>Specifies the size of the shape's coordinate space in coordinate units. Default is "1000,1000".</p> <p>The physical size of a coordinate unit length is determined by both the size of the coordinate space (coordsize) and the size of the shape (style width and height). The coordsize attribute defines the number of horizontal and vertical subdivisions into which the shape's bounding box is divided. The combination of coordsize and style width/height effective scales the shape anisotropically.</p> <p>[<i>Example:</i> The path is 50 units wide and tall, which is 25% of the size of the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>

Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>dgmlayout (Diagram Node Layout Identifier)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the kind of automatic layout to apply to the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the <code>orgchart</code> value of the <code>editas</code> attribute of the group element.</p> <p>[Example:</p> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the <code>ST_DiagramLayout</code> simple type (§19.2.3.10).</p>
<p>dgmlayoutmru (Diagram Node Recent Layout Identifier)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the kind of automatic layout most recently used on the child elements of the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the <code>orgchart</code> value of the <code>editas</code> attribute of the group element.</p> <p>[Example:</p> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the <code>ST_DiagramLayout</code> simple type (§19.2.3.10).</p>
<p>dgmnodekind (Diagram Node Identifier)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies an optional, application-defined parameter that is intended to be used by the application to tag different types of nodes in a diagram.</p> <p>[Example:</p> <pre><v:shape ... dgmnodekind="1"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema integer</p>

Attributes	Description
	datatype.
<p>doubleclicknotify (Double-click Notification Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that an event message is sent when a shape is double-clicked. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:doubleclicknotify="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>editas (Group Diagram Type)</p>	<p>Specifies which diagram type the contained shapes represent. This is used in conjunction with the diagram element (§19.2.2.8). A value of canvas indicates that the group is a regular group of shapes and does not represent a diagram. Other values indicate that the diagram element and its children contain semantic information relevant to that type of diagram, which is represented by the shapes in the group.</p> <p>[Example:</p> <pre><v:group ... editas="orgchart"> </v:group></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_EditAs simple type (§19.1.3.1).</p>
<p>fillcolor (Fill Color)</p>	<p>Specifies the color to use for the fill. Default is white. If the fill element (§19.1.2.5) is present, its color attribute takes precedence. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example: This shape is red if its fill is visible:</p> <pre><v:shape ... fillcolor="red" ... > </v:shape></pre> <p>This is equivalent to:</p> <pre><v:shape ... fillcolor="#ff0000" ... > </v:shape></pre> <p>end example]</p>

Attributes	Description
	The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).
filled (Shape Fill Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the closed path is filled. Default is true. This attribute is overridden by the fill on attribute.</p> <p>[Example:</p> <pre><v:shape ... filled="f" fillcolor="red" ...> </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
hr (Horizontal Rule Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies that a shape is a horizontal rule. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hr="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
hralign (Horizontal Rule Alignment) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the alignment of a horizontal rule. Default is left.</p> <p>[Example:</p> <pre><v:shape ... o:hralign="center" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_HrAlign simple type (§19.2.3.16).</p>
href (Hyperlink Target)	<p>Specifies a hyperlink URL target for the shape. Default is no value.</p> <p>[Example:</p>

Attributes	Description
	<p><code><v:shape ... href="http://www.openxmlformats.org" ... ></code> <code></v:shape></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>hrnoshade (Horizontal Rule 3D Shading Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that the horizontal rule does not have 3-D shading. Default is <code>false</code>.</p> <p>[Example:</p> <p><code><v:shape ... o:hrnoshade="true" ... ></code> <code></v:shape></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>hrpct (Horizontal Rule Length Percentage)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the length of a horizontal rule as a percentage of page width. Default is 0.</p> <p>[Example:</p> <p><code><v:shape ... o:hrpct="85" ... ></code> <code></v:shape></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
<p>hrstd (Horizontal Rule Standard Display Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape is displayed as a standard horizontal rule. Only applies if <code>hr</code> is <code>true</code>. Default is <code>false</code>.</p> <p>[Example:</p> <p><code><v:shape ... o:hrstd="true" ... ></code> <code></v:shape></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>id (Unique Identifier)</p>	<p>Specifies a unique identifier that can be used to reference a VML object.</p> <p>Default is no value.</p> <p>[Example:</p>

Attributes	Description
	<pre><v:shape ... id="myShape" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
insetmode (Text Inset Mode) Namespace: urn:schemas-microsoft-com:office:office	Specifies whether the application calculates the internal text margin instead of using the inset attribute. Default is custom. This attribute is only meaningful for text boxes. [Example: <pre><v:shape ... o:insetmode="auto" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the ST_InsetMode simple type (§19.2.3.17).
oned (Shape Handle Toggle) Namespace: urn:schemas-microsoft-com:office:office	Specifies whether the extra handles of a shape are hidden. If true, hides all shape handles except the top left and bottom right; that is, the same handles that are used for a straight line segment. Default is false. [Example: <pre><v:shape ... o:oned="true" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).
print (Print Toggle)	Specifies whether the shape is printed. Default is true. [Example: <pre><v:shape ... print="false" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).
regroupid (Regroup)	Specifies a previous group for a shape. An ID number is used to identify groups of shapes

Attributes	Description						
<p>ID)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>that are no longer grouped. This allows shapes to be regrouped programmatically.</p> <p>[Example: The shape was part of a group identified by the ID 040754:</p> <pre><v:shape ... o:regroupid="040754" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>						
<p>spid (Optional String)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies an optional string that an application can use to identify the particular shape. Default is no value.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>						
<p>style (Shape Styling Properties)</p>	<p>Specifies the CSS2 styling properties of the shape. The CSS2 (Cascading Style Sheets, Level 2) specification, a Recommendation of the World Wide Web Consortium, is available here: http://www.w3.org/TR/REC-CSS2.</p> <p>This attribute uses a semi-colon delimited list of “name:value” pairs, the syntax defined by section 4.1.8 of the CSS2 specification for grouped declarations (without the surrounding braces). The following tables define the allowed properties and the VML treatment of each.</p> <p>[Example:</p> <pre><v:shape ... style='position:absolute;width:100pt;height:50pt' ... > </v:shape></pre> <p>end example]</p> <table><tr><th>Property</th><th>Description</th></tr><tr><td>flip</td><td><p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p><ul style="list-style-type: none">• x - Flip along the y-axis, reversing the x-coordinates.• y - Flip along the x-axis, reversing the y-coordinates.• xy - Flip along both the y- and x-axis.• yx - Flip along both the x- and y-axis.</td></tr><tr><td>height</td><td><p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p></td></tr></table>	Property	Description	flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none">• x - Flip along the y-axis, reversing the x-coordinates.• y - Flip along the x-axis, reversing the y-coordinates.• xy - Flip along both the y- and x-axis.• yx - Flip along both the x- and y-axis.	height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p>
Property	Description						
flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none">• x - Flip along the y-axis, reversing the x-coordinates.• y - Flip along the x-axis, reversing the y-coordinates.• xy - Flip along both the y- and x-axis.• yx - Flip along both the x- and y-axis.						
height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p>						

Attributes	Description	
		<ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	left	<p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-bottom	<p>Specifies the position of the bottom of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	margin-left	<p>Specifies the position of the left of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the

Attributes	Description	
		parent object's width.
	margin-right	<p>Specifies the position of the right of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-top	<p>Specifies the position of the top of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	mso-position-horizontal	<p>Specifies the horizontal positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • left • center • right • inside • outside
	mso-position-horizontal-relative	<p>Specifies relative horizontal position data for objects in WordprocessingML documents. This modifies the mso-position-horizontal property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text

Attributes	Description	
		<ul style="list-style-type: none"> • char
	mso-position-vertical	<p>Specifies the vertical positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • top • center • bottom • inside • outside
	mso-position-vertical-relative	<p>Specifies relative vertical position data for objects in WordprocessingML documents. This modifies the mso-position-vertical property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • line
	mso-wrap-distance-bottom	<p>Specifies the distance from the bottom of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-left	<p>Specifies the distance from the left side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-right	<p>Specifies the distance from the right side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-top	<p>Specifies the distance from the top of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-	<p>Specifies whether the wrap coordinates were customized by the user. If the wrap coordinates are generated by an editor, this</p>

Attributes	Description	
	edited	property is true; otherwise they were customized by a user. Default is false.
	mso-wrap-style	<p>Specifies the wrapping mode for text in shapes in WordprocessingML documents. Default is square. Allowed values are:</p> <ul style="list-style-type: none"> square - Wraps text inside the shape in a square. none - Text does not wrap.
	position	<p>Specifies the kind of positioning used to place an element. Default is static. When the element is contained inside a group, this property shall be absolute. Allowed values are:</p> <ul style="list-style-type: none"> static - The element is positioned according to the normal flow of the page. The top and left properties are ignored. If the object is anchored inline, this value is used. absolute - The element is positioned relative to the parent, using the top and left properties. relative - The element is positioned according to the normal flow of the page, but the top and left properties are used. The overlap of overlapping elements is governed by the z-index property.
	rotation	Specifies the angle that a shape is rotated, in degrees. Default is 0. Positive angles are clockwise.
	top	<p>Specifies the position of the top of the containing block of the shape relative to the element above it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> auto - Default position of an element in the flow of the page. <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. <percentage>- Value expressed as a percentage of the parent object's height.
	visibility	<p>Specifies whether a shape is displayed. Only inherit and hidden are used; any other values are mapped to inherit. Default is inherit. Allowed values are:</p> <ul style="list-style-type: none"> hidden - The shape is not visible, but is still part of the flow of the objects in the browser. Mouse events are not

Attributes	Description						
		<p>processed.</p> <ul style="list-style-type: none">inherit - The visibility state is inherited from the parent of the shape.					
	width	<p>Specifies the width of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none">auto - Default position of an element in the flow of the page.<units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed.<percentage>- Value expressed as a percentage of the parent object's width.					
	z-index	<p>Specifies the display order of overlapping shapes. Default is 0. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none">auto - Uses the order that the shapes appear in the page, bottom to top.<order>- A number that represents the stacking precedence. Shapes with higher numbers are placed on top of those with lower numbers. Negative numbers are allowed.					
	<p>The following properties are only used by the textbox element (§19.1.2.22):</p> <table><tr><th>Property</th><th>Description</th></tr><tr><td>direction</td><td><p>Specifies the direction of the text in the textbox. Default is ltr. This property is superceded by the mso-direction-alt property if that is specified. Allowed values are:</p><ul style="list-style-type: none">ltr - Text is displayed left-to-right.rtl - Text is displayed right-to-left.</td></tr><tr><td>layout-flow</td><td><p>Determines the flow of the text layout in a textbox. Default is horizontal. Allowed values are:</p><ul style="list-style-type: none">horizontal - Text is displayed horizontally.vertical - Text is displayed vertically.vertical-ideographic - Ideographic text is displayed vertically.horizontal-ideographic - Ideographic text is displayed</td></tr></table>		Property	Description	direction	<p>Specifies the direction of the text in the textbox. Default is ltr. This property is superceded by the mso-direction-alt property if that is specified. Allowed values are:</p> <ul style="list-style-type: none">ltr - Text is displayed left-to-right.rtl - Text is displayed right-to-left.	layout-flow
Property	Description						
direction	<p>Specifies the direction of the text in the textbox. Default is ltr. This property is superceded by the mso-direction-alt property if that is specified. Allowed values are:</p> <ul style="list-style-type: none">ltr - Text is displayed left-to-right.rtl - Text is displayed right-to-left.						
layout-flow	<p>Determines the flow of the text layout in a textbox. Default is horizontal. Allowed values are:</p> <ul style="list-style-type: none">horizontal - Text is displayed horizontally.vertical - Text is displayed vertically.vertical-ideographic - Ideographic text is displayed vertically.horizontal-ideographic - Ideographic text is displayed						

Attributes	Description	
		horizontally.
	mso-direction-alt	Specifies an alternate direction for text in textboxes. Overrides the direction property. The only allowed value is context.
	mso-fit-shape-to-text	Specifies whether the shape stretches to fit the text in the textbox. Default is false.
	mso-fit-text-to-shape	Specifies whether the text stretches to fit the textbox. Default is false.
	mso-layout-flow-alt	Specifies the alternate layout flow for text in textboxes. This property is used instead of layout-flow when the layout flow is from bottom to top for non-ideographic languages. Its only value is bottom-to-top.
	mso-next-textbox	Specifies the ID of the next textbox in a series. Used to keep track of a set of linked textboxes. Default is no value.
	mso-rotate	<p>Specifies a specific rotation value for text in a textbox. Default is 0. Allowed values are:</p> <ul style="list-style-type: none"> • 0 • 90 • 180 • -90
	mso-text-scale	Specifies the scaling factor for fitting text to shapes. Default is 0. This property is only used if mso-fit-text-to-shape is true.
	v-text-anchor	<p>Specifies the vertical anchoring of text in a textbox. Default is top. The alignment of a text anchor only becomes evident if mso-fit-text-to-shape is false. This property is different from the vertical-align CSS property, which is used for ideographic languages. Allowed values are:</p> <ul style="list-style-type: none"> • top • middle • bottom • top-center • middle-center • bottom-center • top-baseline • bottom-baseline • top-center-baseline • bottom-center-baseline

Attributes	Description		
	The following properties are only used by the textpath element (§19.1.2.23):		
	Property	Description	
	font	Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.	
	font-family	Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.	
	font-size	Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.	
	font-style	Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are: <ul style="list-style-type: none">normalitalicoblique - Treated the same as italic.	
	font-variant	Specifies the variant style of a font. Default is normal. The values are the same as those of the CSS font-variant property. Allowed values are: <ul style="list-style-type: none">normalsmall-caps	
	font-weight	Specifies the thickness of the letters of the font. Default is normal. The values are the same as those of the CSS font-weight property. Allowed values are:	
		Value	Description
		normal lighter 100 200 300 400	Treated as non-bold.
bold		Treated as bold.	

Attributes	Description	
		<div> bolder 500 600 700 800 900 </div>
mso-text-shadow		Specifies whether a shadow is applied to the text on a text path. Default is false.
text-decoration		<p>Specifies the style of text decoration. Default is none. The values are the same as those of the CSS text-decoration property. Allowed values are:</p> <ul style="list-style-type: none"> • none • underline • overline • line-through • blink
v-rotate-letters		Specifies whether the letters of the text are rotated counterclockwise by 90 degrees. Default is false.
v-same-letter-heights		Specifies whether all letters are the same height regardless of initial case. If true, the lowercase letters are stretched to the height of the uppercase letters. Default is false.
v-text-align		<p>Specifies the alignment of text. Default is left. Allowed values are:</p> <ul style="list-style-type: none"> • left • right • center • justify • letter-justify - Distributes the extra space between the letters. • stretch-justify - Stretches the letters to fill in the space.
v-text-kern		Specifies whether kerning is turned on. Default is false.
v-text-reverse		Specifies whether the layout order of rows is reversed. Default is false. This is used for vertical text layout.

Attributes	Description	
	v-text-spacing-mode	Specifies the mode for letter spacing. Default is tightening. This property determines whether space is removed between each letter (tightening) or added between each letter (tracking). The amount of letter spacing change is defined by the v-text-spacing property. Allowed values are: <ul style="list-style-type: none">• tightening• tracking
	v-text-spacing	Specifies the amount of spacing for text in 100ths of single line spacing. Default is 100.
	The line (§19.1.2.12), polyline (§19.1.2.15) and curve (§19.1.2.3) elements ignore the following properties: <ul style="list-style-type: none">• top• left• width• height	
	The following properties are not inherited by an element that references a shapetype element (§19.1.2.20) via the id attribute: <ul style="list-style-type: none">• flip• height• left• margin-left• margin-top• position• rotation• top• visibility• width• z-index	
	The possible values for this attribute are defined by the W3C XML Schema string datatype.	
tablelimits (Table Row Height Limits) Namespace: urn:schemas-microsoft-com:office:office	Specifies a list of minimum height values for each row in a table. Default is no value. Used by PresentationML for native tables. This attribute is only useful when the table is made up of shapes that are grouped. When text is added to table cells, the row height can increase. The tablelimits attribute stores the original row height so that if text is deleted, the row height does not fall below the original value. [Example:	

Attributes	Description												
	<pre><v:shape ... o:tablelimits="30pt 20pt" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>												
<p>tableproperties (Table Properties)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies a bitmask, represented as an integer, that determines table properties. Only the first three bits of this integer are used. Default is 0.</p> <p>Used by PresentationML for native tables. This attribute is only useful when the table is made up of shapes that are grouped. Allowed values are:</p> <table> <tr> <th>Bit</th><th>Description</th></tr> <tr> <td>1</td><td>Set if the group of shapes is a table.</td></tr> <tr> <td>2</td><td>Set if the shape is a placeholder.</td></tr> <tr> <td>3</td><td>Set if the table text is bi-directional.</td></tr> </table> <p><i>[Example: Decimal 3 means that bits 1 and 2 are set.</i></p> <pre><v:shape ... o:tableproperties="3" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>	Bit	Description	1	Set if the group of shapes is a table.	2	Set if the shape is a placeholder.	3	Set if the table text is bi-directional.				
Bit	Description												
1	Set if the group of shapes is a table.												
2	Set if the shape is a placeholder.												
3	Set if the table text is bi-directional.												
<p>target (Hyperlink Display Target)</p>	<p>Specifies a frame or window that a URL is displayed in. Default is no value. Allowed values are:</p> <table> <tr> <th>Value</th><th>Description</th></tr> <tr> <td><targetname></td><td>String containing the name of the frame or window in which to load the document.</td></tr> <tr> <td>_blank</td><td>Specifies that the linked document is loaded into a new blank window. This window is not named.</td></tr> <tr> <td>_media</td><td>Specifies that the linked document is loaded into the browser's multimedia pane.</td></tr> <tr> <td>_parent</td><td>Specifies that the linked document is loaded into the immediate parent of the document containing the link.</td></tr> <tr> <td>_search</td><td>Specifies that the linked document is loaded into the browser's search pane.</td></tr> </table>	Value	Description	<targetname>	String containing the name of the frame or window in which to load the document.	_blank	Specifies that the linked document is loaded into a new blank window. This window is not named.	_media	Specifies that the linked document is loaded into the browser's multimedia pane.	_parent	Specifies that the linked document is loaded into the immediate parent of the document containing the link.	_search	Specifies that the linked document is loaded into the browser's search pane.
Value	Description												
<targetname>	String containing the name of the frame or window in which to load the document.												
_blank	Specifies that the linked document is loaded into a new blank window. This window is not named.												
_media	Specifies that the linked document is loaded into the browser's multimedia pane.												
_parent	Specifies that the linked document is loaded into the immediate parent of the document containing the link.												
_search	Specifies that the linked document is loaded into the browser's search pane.												

Attributes	Description				
	<table border="1"> <tr> <td><code>_self</code></td><td>Specifies that the linked document is loaded into the window in which the link was clicked (the active window).</td></tr> <tr> <td><code>_top</code></td><td>Specifies that the linked document is loaded into the topmost window.</td></tr> </table> <p><i>[Example:</i></p> <pre><v:shape ... href="http://www.openxmlformats.org" target="_self" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>	<code>_self</code>	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).	<code>_top</code>	Specifies that the linked document is loaded into the topmost window.
<code>_self</code>	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).				
<code>_top</code>	Specifies that the linked document is loaded into the topmost window.				
title (Shape Title)	<p>Specifies the text displayed when the mouse pointer moves over the shape. Default is no value.</p> <p><i>[Example:</i></p> <pre><v:shape ... title="tooltip" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>				
userdrawn (Exists In Master Slide) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the user has added the shape to a master slide. Default is <code>false</code>. Used by PresentationML.</p> <p><i>[Example:</i></p> <pre><v:shape ... o:userdrawn="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>				
userhidden (Hide Script Anchors) Namespace: urn:schemas-	<p>Specifies whether a script anchor is hidden. Default is <code>false</code>. If <code>true</code>, script anchors stay hidden even if the shape is otherwise visible. A script anchor is the visual representation of a script that when displayed in an application.</p> <p><i>[Example:</i></p>				

Attributes	Description
microsoft-com:office:office	<pre><v:shape ... o:userhidden="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
wrapcoords (Shape Bounding Polygon)	<p>Specifies the bounding polygon that surrounds a shape. This is specified using a comma-delimited list of x and y coordinates: "x1,y1,x2,y2,x3,y3,..." This is used when text is tightly wrapped around a shape. Default is no value until the mso-wrap-mode style attribute is set to <i>tight</i> or <i>through</i>.</p> <p>[Example:</p> <pre><v:shape ... wrapcoords="0,0 0,200, 200,200, 200,0" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element’s content model ([CT_Group](#)) is located in §A.6.1. *end note]*

19.1.2.8 h (Shape Handle)

This element defines a single handle, which is a user interface element tied to one or two adj values. Moving the handle changes its linked adj values, which in turn changes formulas and attributes that depend on them. The handle is optionally constrained vertically or horizontally. The linked adj values store the position of the handle in the shape's coordinate space.

[Example: The example below defines a simple kite shape with a resizable width:

```
<v:shape coordsize="200,200" coordorigin="-100,-100" adj="100"
style="width:50;height:50;position:relative"
path="m @1,-50 l 0,-200 @0,-50 0,200 x e">
<v:formulas>
  <v:f eqn="val #0"/>
  <v:f eqn="sum 0 0 @0"/>
</v:formulas>
<v:handles>
```

```

    <v:h position="#0,0"/>
  </v:handles>
</v:shape>

```

end example]

Parent Elements
handles (§19.1.2.9)

Attributes	Description
invx (Invert Handle's X Position)	<p>Specifies whether the x position of the handle should be inverted according to: $x_{\text{new}} = \text{coordorigin}_x + \text{coordsize}_x - x_{\text{old}}$</p> <p>Default is false.</p> <p>[Example:</p> <pre> <v:handles> <v:h ... invx="true" ... /> </v:handles> </pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
invy (Invert Handle's Y Position)	<p>Specifies whether the y position of the handle should be inverted according to: $y_{\text{new}} = \text{coordorigin}_y + \text{coordsize}_y - y_{\text{old}}$</p> <p>Default is false.</p> <p>[Example:</p> <pre> <v:handles> <v:h ... invy="true" ... /> </v:handles> </pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
map (Handle Coordinate Mapping)	<p>Specifies how the x and y positions of the handle are mapped from the coordsize range into the specified range. Default is "0,1000".</p> <p>[Example:</p>

Attributes	Description
	<pre><v:handles> <v:h ... map="-1000,1000" ... /> </v:handles></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
polar (Handle Polar Center)	<p>Specifies the center position of a handle that uses polar coordinates. If specified, the position attribute is assumed to contain radius and angle values. If omitted, the position attribute is assumed to contain x and y positions. Default is no value.</p> <p>[Example:</p> <pre><v:handles> <v:h ... polar="0,0" ... /> </v:handles></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
position (Handle Position)	<p>Specifies the x and y position of the handle. If the polar attribute is present, defines the handle position using radius and angle values. Default is "0,0".</p> <p>Each value in the vector is one of the following:</p> <ul style="list-style-type: none"> • constant • formula (e.g., @2) • adj value (e.g., #2) • center • topleft • bottomright <p>Each of the above except for an adj value reference fixes the handle position for that dimension. Specifying an adj value allows the handle to move in that dimension and the handle position for that dimension is stored in the adj value.</p> <p>[Example: The handle's x position is fixed but it is free to move in the y dimension:</p> <pre><v:handles> <v:h ... position="topleft,#2" ... /> </v:handles></pre> <p><i>end example]</i></p>

Attributes	Description
	The possible values for this attribute are defined by the W3C XML Schema string datatype.
radiusrange (Handle Polar Radius Range)	<p>Specifies a range of minimum and maximum values that constrain the radius of a handle using polar coordinates. Default is "0,0". Each value is either a constant or a formula reference. Omitting a value leaves that bound unconstrained.</p> <p>[Example: The polar handle can only be moved within a radius range of 25 to 50.</p> <pre><v:handles> <v:h ... radiusrange="25,50" ... /> </v:handles></pre> <p><i>end example</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
switch (Handle Inversion Toggle)	<p>Specifies whether the x and y dimensions of the handle are switched when the shape is taller than it is wide. Default is false. This is useful for shapes with limo stretch behavior.</p> <p>[Example:</p> <pre><v:handles> <v:h ... switch="true" ... /> </v:handles></pre> <p><i>end example</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).</p>
xrange (Handle X Position Range)	<p>Specifies a range of minimum and maximum values that constrain the x position of a handle. Default is "0,0". Each value is either a constant or a formula reference. Omitting a value leaves that bound unconstrained.</p> <p>[Example: The handle's x position has a maximum bound of 500 and no minimum bound:</p> <pre><v:handles> <v:h ... xrange=",500" ... /> </v:handles></pre> <p><i>end example</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
yrange (Handle Y	Specifies a range of minimum and maximum values that constrain the y position of a

Attributes	Description
Position Range)	<p>handle. Default is "0,0". Each value is either a constant or a formula reference. Omitting a value leaves that bound unconstrained.</p> <p>[<i>Example:</i> The handle's y position has a minimum bound of -500 and no maximum bound:</p> <pre><v:handles> <v:h ... yrange="-500," ... /> </v:handles></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[*Note:* The W3C XML Schema definition of this element's content model ([CT_H](#)) is located in §A.6.1. *end note]*

19.1.2.9 [handles \(Set of Handles\)](#)

This element defines a set of user interface elements which can vary a shape's adj values. All dependent formulas and attributes are recalculated. Each handle is defined by a child h element.

Parent Elements
arc (§19.1.2.1); background (Part 1, §17.2.1); curve (§19.1.2.3); group (§19.1.2.7); image (§19.1.2.10); line (§19.1.2.12); object (Part 1, §17.3.3.19); oval (§19.1.2.13); pict (§14.2.2.2); pict (§14.5.1); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapetype (§19.1.2.20)

Child Elements	Subclause
h (Shape Handle)	§19.1.2.8

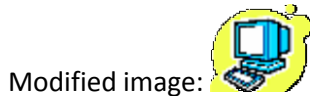
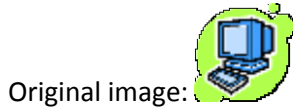
[*Note:* The W3C XML Schema definition of this element's content model ([CT_Handles](#)) is located in §A.6.1. *end note]*

19.1.2.10 [image \(Image File\)](#)

This element is used to draw an image that has been loaded from an external source. There is an implied rectangle that is the same size as the image. Any stroke or fill is applied to this implied rectangle. The stroke is drawn on top of the image. The fill is behind the image and therefore only visible through transparent areas of the image. Image transparency is either encoded in the file or defined via a color value using the chromakey attribute. Unlike the imagedata element (§19.1.2.11), the image element does not have a parent element.

[*Example:*

```
<v:image src="myimage.gif"
  style="position:relative;top:1;left:1;width:50;height:45"
  cropbottom="10%" gamma="0.5" gain="2">
</v:image>
```





end example]

Parent Elements
background (Part 1, §17.2.1); group (§19.1.2.7); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1)

Child Elements	Subclause
anchorlock (Anchor Location Is Locked)	§19.3.2.1
borderbottom (Bottom Border)	§19.3.2.2
borderleft (Left Border)	§19.3.2.3
borderright (Right Border)	§19.3.2.4
bordertop (Top Border)	§19.3.2.5
callout (Callout)	§19.2.2.2
ClientData (Attached Object Data)	§19.4.2.12
clippath (Shape Clipping Path)	§19.2.2.3
extrusion (3D Extrusion)	§19.2.2.11
fill (Shape Fill Properties)	§19.1.2.5
formulas (Set of Formulas)	§19.1.2.6
handles (Set of Handles)	§19.1.2.9
imagedata (Image Data)	§19.1.2.11
lock (Shape Protections)	§19.2.2.18
path (Shape Path)	§19.1.2.14
shadow (Shadow Effect)	§19.1.2.18
signatureline (Digital Signature Line)	§19.2.2.30
skew (Skew Transform)	§19.2.2.31
stroke (Line Stroke Settings)	§19.1.2.21
textbox (Text Box)	§19.1.2.22

Child Elements	Subclause
textdata (VML Diagram Text)	§19.5.2.2
textpath (Text Layout Path)	§19.1.2.23
wrap (Text Wrapping)	§19.3.2.6

Attributes	Description
<p>allowincell (Allow in Table Cell)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape can be placed in a table. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:allowincell="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>allowoverlap (Allow Shape Overlap)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape can overlap another shape. Default is true. If false, the shape shifts left or right so as not to overlap another shape, similar to the behavior of the HTML float attribute.</p> <p>[Example:</p> <pre><v:shape ... o:allowoverlap="false" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>alt (Alternate Text)</p>	<p>Specifies alternative text describing the graphical object. This text should provide a brief description of the shape for use by accessibility tools. Default is no value.</p> <p>[Example: The alt text describes the basic shape:</p> <pre><v:shape ... fillcolor="red" alt="Red rectangle"> </v:shape></pre> <p>The alt text describes the contents of a shape displaying an image:</p> <pre><v:shape ... alt="Picture of a sunset"> </v:shape></pre>



Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>bilevel (Image Bilevel Toggle)</p>	<p>Specifies that all colors in the picture shall be converted to either 0 or full intensity component values. This converts a color bitmap to 8 colors and a grayscale bitmap to black and white. Default is false.</p> <p>[Example:</p> <pre><v:image ... bilevel="true" ...> </v:image></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>blacklevel (Image Brightness)</p>	<p>Specifies the image brightness. Default is 0.</p> <p>[Example:</p> <pre><v:image ... blacklevel="0.1" ...> </v:image></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>borderbottomcolor (Bottom Border Color)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the bottom border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderbottomcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string</p>




Attributes	Description
	datatype.
borderleftcolor (Border Left Color) Namespace: urn:schemas-microsoft-com:office:office	Specifies the left border color of an inline shape. Default is no value. <i>[Example:</i> <pre><v:shape ... o:borderleftcolor="red" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the W3C XML Schema string datatype.
borderrightcolor (Border Right Color) Namespace: urn:schemas-microsoft-com:office:office	Specifies the right border color of an inline shape. Default is no value. <i>[Example:</i> <pre><v:shape ... o:borderrightcolor="red" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the W3C XML Schema string datatype.
bordertopcolor (Border Top Color) Namespace: urn:schemas-microsoft-com:office:office	Specifies the top border color of an inline shape. Default is no value. <i>[Example:</i> <pre><v:shape ... o:bordertopcolor="red" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the W3C XML Schema string datatype.
bullet (Graphical Bullet) Namespace: urn:schemas-microsoft-com:office:office	Specifies whether the shape is a graphical bullet. Default is <code>false</code> . <i>[Example:</i> <pre><v:shape ... o:bullet="true" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).


Attributes	Description
<p>button (Button Behavior Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape exhibits button press behavior on click. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:button="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>bwmode (Black-and-White Mode)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies how a shape renders for black-and-white output devices. When a shape is printed on a black-and-white printer or displayed in a black-and-white view in an application, several options are possible. Default is auto, which uses o:bwnormal for normal black-and-white rendering and o:bwpure for pure black-and-white rendering.</p> <p>bwnormal and bwpure are subordinate to bwmode. If bwmode is "auto" then the value for bwnormal or bwpure is used depending on what the output format is. An application can define for itself what, if any, difference there is between normal B&W and pure B&W. [Example: Normal B&W might allow grayscale and pure B&W might not. end example]</p> <p>[Example: This shape renders in grayscale in a black-and-white environment:</p> <pre><v:shape ... o:bwmode="grayscale" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
<p>bwnormal (Normal Black-and-White Mode)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the black-and-white mode for normal black-and-white output devices. Default is auto.</p> <p>[Example: This shape renders in a pale grayscale in a normal black-and-white environment:</p> <pre><v:shape ... o:bwmode="auto" o:bwnormal="lightgrayscale" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
<p>bwpure (Pure Black-and-White)</p>	<p>Specifies the black-and-white mode for pure black-and-white output devices. Default is auto.</p>

Attributes	Description
Mode) Namespace: urn:schemas- microsoft- com:office:office	<p>[Example: This shape renders in high contrast when in a pure black-and-white environment:</p> <pre><v:shape ... o:bwmode="auto" o:bwpure="highcontrast" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
chromakey (Image Transparency Color)	<p>Specifies a color value that is transparent and show anything behind the shape. Default is no value.</p> <p>[Example:</p> <pre><v:image ... chromakey="white" ...> </v:image></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
class (CSS Reference)	<p>Specifies a reference to the definition of a CSS style. Default is no value.</p> <p>[Example: The snippets below are equivalent:</p> <pre>... .narrowstyle {width:50;height:100} ... <v:shape ... class="narrowstyle" style="top:1;left:1"> </v:shape></pre> <pre><v:shape ... style="top:1;left:1; width:50;height:100"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
clip (Clipping Toggle)	<p>Specifies that the clipping region is active. This is used in conjunction with the clippath (§19.2.2.3) element to create a clipping region.</p>



Attributes	Description
<p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>[Example:</p> <pre><v:shape ... o:clip="true"> </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>cliptowrap (Clip to Wrapping Polygon)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that the clipping region for the shape aligns with the wrapping polygon that tightly surrounds the entire shape (essentially, that the shape shall not be drawn beyond its wrapping polygon's extents – if it does, the shape shall be clipped). Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:cliptowrap="true"> </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>connectortype (Shape Connector Type)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the kind of connector used for joining shapes. Default is straight.</p> <p>[Example:</p> <pre><v:shape ... o:connectortype="elbow" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ConnectorType simple type (§19.2.3.7).</p>
<p>coordorigin (Coordinate Space Origin)</p>	<p>Specifies the coordinate of the top left corner of the shape's coordinate space. This determines the position of the (0,0) coordinate space origin within the shape's bounding box. Default is "0,0", which places the (0,0) origin at the top left corner of the bounding box.</p> <p>This affects shape properties that specify coordinate positions, such as the path attribute. Thus a path can be defined against a generic (0,0) origin and the coordorigin value translates the entire path within the shape's bounding space.</p> <p>[Example: The horizontal and vertical coordinate space ranges from -100 to +100 because the coordinate space (coordsize) is 200 by 200 and the top left coordinate is (-100,-100).</p>



Attributes	Description
	<p>The (0,0) origin lies at the center of the shape's bounding box, as evidenced by the position of the shape's path within the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
coordsize (Coordinate Space Size)	<p>Specifies the size of the shape's coordinate space in coordinate units. Default is "1000,1000".</p> <p>The physical size of a coordinate unit length is determined by both the size of the coordinate space (coordsize) and the size of the shape (style width and height). The coordsize attribute defines the number of horizontal and vertical subdivisions into which the shape's bounding box is divided. The combination of coordsize and style width/height effective scales the shape anisotropically.</p> <p>[<i>Example:</i> The path is 50 units wide and tall, which is 25% of the size of the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
cropbottom (Image Bottom Crop)	<p>Specifies the how much to crop the image from the bottom up as a fraction of picture size. Default is 0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. For example, a value of "52429f" represents 52429/65536 or 0.8.</p> <p>[<i>Example:</i></p>

Attributes	Description
	<pre><v:image ... cropbottom="10%" ...> </v:image></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
cropleft (Image Left Crop)	<p>Specifies how much to crop the image from the left in as a fraction of picture size. Default is 0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. For example, a value of "52429f" represents 52429/65536 or 0.8.</p> <p>[Example:</p> <pre><v:image ... cropleft="10%" ...> </v:image></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
cropright (Image Right Crop)	<p>Specifies how much to crop the image from the right in as a fraction of picture size. Default is 0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. [Example: For example, a value of "52429f" represents 52429/65536 or 0.8.</p> <p><i>end example]</i></p> <p>[Example:</p> <pre><v:image ... cropright="10%" ...> </v:image></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string</p>

Attributes	Description
	datatype.
croptop (Image Top Crop)	<p>Specifies how much to crop the image from the top down as a fraction of picture size. Default is 0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. <i>[Example: For example, a value of "52429f" represents 52429/65536 or 0.8. end example]</i></p> <p><i>[Example:</i></p> <pre><v:image ... croptop="10%" ...> </v:image></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
dgmlayout (Diagram Node Layout Identifier) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the kind of automatic layout to apply to the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element.</p> <p><i>[Example:</i></p> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).</p>
dgmlayoutmru (Diagram Node Recent Layout Identifier) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the kind of automatic layout most recently used on the child elements of the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element.</p> <p><i>[Example:</i></p> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).</p>

Attributes	Description
dgmnodekind (Diagram Node Identifier) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies an optional, application-defined parameter that is intended to be used by the application to tag different types of nodes in a diagram.</p> <p>[Example:</p> <pre><v:shape ... dgmnodekind="1"> </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
doubleclicknotify (Double-click Notification Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies that an event message is sent when a shape is double-clicked. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:doubleclicknotify="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
fillcolor (Fill Color)	<p>Specifies the color to use for the fill. Default is white. If the fill element (§19.1.2.5) is present, its color attribute takes precedence. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example: This shape is red if its fill is visible:</p> <pre><v:shape ... fillcolor="red" ... > </v:shape></pre> <p>This is equivalent to:</p> <pre><v:shape ... fillcolor="#ff0000" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
filled (Shape Fill Toggle)	<p>Specifies whether the closed path is filled. Default is true. This attribute is overridden by the fill on attribute.</p>


Attributes	Description
	<p>[Example:</p> <pre><v:shape ... filled="f" fillcolor="red" ...> </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>forcedash (Force Dashed Outline)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a dashed outline is used to draw a shape when a shape has no line or fill. Default is false.</p> <p>Used by PresentationML placeholders to draw a dashed outline when there is no line and no fill for a shape.</p> <p>[Example:</p> <pre><v:shape ... o:forcedash="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>gain (Image Intensity)</p>	<p>Specifies an adjustment for the intensity of all colors. Essentially sets how bright white is. Default is 1.</p> <p>[Example:</p> <pre><v:image ... gain="0.5" ...> </v:image></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>


Attributes	Description
gamma (Image Gamma Correction)	<p>Specifies the gamma correction. Default is 1.</p> <p>Gamma correction is a factor by which the intended target display gamma differs from the sRGB profile. It can be used to correct for images not prepared for sRGB displays and to adjust overall image contrast. Decreasing it below 1 gives a higher contrast image.</p> <p>[Example:</p> <pre><v:image ... gamma="0.5" ...> </v:image></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
grayscale (Image Grayscale Toggle)	<p>Specifies to display the image in grayscale. Default is false.</p> <p>[Example:</p> <pre><v:image ... gamma="0.5" ...> </v:image></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
hr (Horizontal Rule Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies that a shape is a horizontal rule. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hr="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
hralign (Horizontal	<p>Specifies the alignment of a horizontal rule. Default is left.</p>




Attributes	Description
<p>Rule Alignment)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>[Example:</p> <pre><v:shape ... o:hralign="center" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_HrAlign simple type (§19.2.3.16).</p>
<p>href (Hyperlink Target)</p>	<p>Specifies a hyperlink URL target for the shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... href="http://www.openxmlformats.org" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>hrnoshade (Horizontal Rule 3D Shading Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that the horizontal rule does not have 3-D shading. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hrnoshade="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>hrpct (Horizontal Rule Length Percentage)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the length of a horizontal rule as a percentage of page width. Default is 0.</p> <p>[Example:</p> <pre><v:shape ... o:hrpct="85" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
<p>hrstd (Horizontal Rule Standard Display Toggle)</p>	<p>Specifies whether a shape is displayed as a standard horizontal rule. Only applies if hr is true. Default is false.</p>

Attributes	Description
<p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>[Example:</p> <pre><v:shape ... o:hrstd="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>id (Unique Identifier)</p>	<p>Specifies a unique identifier that can be used to reference a VML object.</p> <p>Default is no value.</p> <p>[Example:</p> <pre><v:shape ... id="myShape" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>insetmode (Text Inset Mode)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the application calculates the internal text margin instead of using the inset attribute. Default is custom. This attribute is only meaningful for text boxes.</p> <p>[Example:</p> <pre><v:shape ... o:insetmode="auto" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_InsetMode simple type (§19.2.3.17).</p>
<p>insetpen (Inset Border From Path)</p>	<p>Specifies that the border shall be displayed inside of the path defining the shape, rather than along the path (the default border placement), or outside of the path as might be done with an image.</p> <p>[Example:</p> <pre><v:shape ... insetpen="true" ... > </v:shape></pre> <p><i>end example]</i></p>

Attributes	Description
<p>ole (Embedded Object Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p> <p>Specifies whether the shape is an embedded object. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:ole="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).</p>
<p>oleicon (Embedded Object Icon Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether an embedded object is displayed as an icon. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:oleicon="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>oned (Shape Handle Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the extra handles of a shape are hidden. If true, hides all shape handles except the top left and bottom right; that is, the same handles that are used for a straight line segment. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:oned="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>opacity (Fill Color Opacity)</p>	<p>Specifies the opacity of the primary fill color. Default is 1.0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. [Example: A value of "52429f" represents 52429/65536 or 0.8. end example]</p> <p>[Example: The red color is 25% opaque:</p> <pre><v:fill type="gradient" color="red" color2="blue" opacity=".25"></pre>

Attributes	Description
	<p><code></v:fill></code></p>  <p>opacity="1"</p> <p>opacity=".25"</p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>preferrelative (Relative Resize Toggle)</p> <p>Namespace: urn:schemas- microsoft- com:office:office</p>	<p>Specifies whether the original size of an object is saved after reformatting. Default is false. If true, the original size of the object is stored and all resizing is based on a percentage of that original size. Otherwise, each resizing resets the scale to 100%.</p> <p>[Example:</p> <pre><v:shape ... o:preferrelative="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>print (Print Toggle)</p>	<p>Specifies whether the shape is printed. Default is true.</p> <p>[Example:</p> <pre><v:shape ... print="false" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>regroupid (Regroup ID)</p> <p>Namespace: urn:schemas- microsoft- com:office:office</p>	<p>Specifies a previous group for a shape. An ID number is used to identify groups of shapes that are no longer grouped. This allows shapes to be regrouped programmatically.</p> <p>[Example: The shape was part of a group identified by the ID 040754:</p> <pre><v:shape ... o:regroupid="040754" ... > </v:shape></pre>

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
<p>spid (Optional String)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies an optional string that an application can use to Identify the particular shape. Default is no value.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>spt (Optional Number)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies an optional number that an application can use to associate the particular shape with a defined shape type. Default is 0.</p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
<p>src (Image Source)</p>	<p>Specifies the URL of the image to use.</p> <p>[Example:</p> <pre><v:image ... src="myimage.gif" ...> </v:image></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>strokecolor (Shape Stroke Color)</p>	<p>Specifies the primary color of the brush to use to stroke the path of the shape. Default is black. The color attribute of the stroke element (§19.1.2.21) overrides this. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example:</p> <pre><v:shape ... strokecolor="red" ...> </v:shape></pre>

Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
stroked (Shape Stroke Toggle)	<p>Specifies whether the path defining the shape is stroked with a solid line. The stroke element (§19.1.2.21) defines other strokes. The on attribute of the stroke element overrides this attribute. Default is true.</p> <p>[Example:</p> <pre><v:shape ... fillcolor="red" stroked="false" strokecolor="blue"...> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
strokeweight (Shape Stroke Weight)	<p>Specifies the width of the brush to use to stroke the path. Default is 1 point. If a number is given without units, the emu is used. The weight attribute of the stroke element (§19.1.2.21) overrides this attribute.</p> <p>[Example:</p> <pre><v:shape ... strokeweight="3pt" ... > </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
style (Shape Styling Properties)	<p>Specifies the CSS2 styling properties of the shape. The CSS2 (Cascading Style Sheets, Level 2) specification, a Recommendation of the World Wide Web Consortium, is available</p>

Attributes	Description								
	<p>here: http://www.w3.org/TR/REC-CSS2.</p> <p>This attribute uses a semi-colon delimited list of “name:value” pairs, the syntax defined by section 4.1.8 of the CSS2 specification for grouped declarations (without the surrounding braces). The following tables define the allowed properties and the VML treatment of each.</p> <p>[Example: <code><v:shape ... style='position:absolute;width:100pt;height:50pt' ...</code> <code>></code> <code></v:shape></code> <i>end example]</i></p> <table> <tr> <th>Property</th><th>Description</th></tr> <tr> <td>flip</td><td> <p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. </td></tr> <tr> <td>height</td><td> <p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. </td></tr> <tr> <td>left</td><td> <p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the </td></tr> </table>	Property	Description	flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. 	height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. 	left	<p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the
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Attributes	Description	
		parent object's width.
	margin-bottom	<p>Specifies the position of the bottom of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	margin-left	<p>Specifies the position of the left of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-right	<p>Specifies the position of the right of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-top	<p>Specifies the position of the top of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page.

Attributes	Description	
		<ul style="list-style-type: none"> • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	mso-position-horizontal	<p>Specifies the horizontal positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • left • center • right • inside • outside
	mso-position-horizontal-relative	<p>Specifies relative horizontal position data for objects in WordprocessingML documents. This modifies the mso-position-horizontal property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • char
	mso-position-vertical	<p>Specifies the vertical positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • top • center • bottom • inside • outside
	mso-position-vertical-relative	<p>Specifies relative vertical position data for objects in WordprocessingML documents. This modifies the mso-position-vertical property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page

Attributes	Description	
		<ul style="list-style-type: none"> • text • line
	mso-wrap-distance-bottom	Specifies the distance from the bottom of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-distance-left	Specifies the distance from the left side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-distance-right	Specifies the distance from the right side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-distance-top	Specifies the distance from the top of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-edited	Specifies whether the wrap coordinates were customized by the user. If the wrap coordinates are generated by an editor, this property is true; otherwise they were customized by a user. Default is false.
	mso-wrap-style	<p>Specifies the wrapping mode for text in shapes in WordprocessingML documents. Default is square. Allowed values are:</p> <ul style="list-style-type: none"> • square - Wraps text inside the shape in a square. • none - Text does not wrap.
	position	<p>Specifies the kind of positioning used to place an element. Default is static. When the element is contained inside a group, this property shall be absolute. Allowed values are:</p> <ul style="list-style-type: none"> • static - The element is positioned according to the normal flow of the page. The top and left properties are ignored. If the object is anchored inline, this value is used. • absolute - The element is positioned relative to the parent, using the top and left properties. • relative - The element is positioned according to the

Attributes	Description	
		normal flow of the page, but the top and left properties are used. The overlap of overlapping elements is governed by the z-index property.
	rotation	Specifies the angle that a shape is rotated, in degrees. Default is 0. Positive angles are clockwise.
	top	<p>Specifies the position of the top of the containing block of the shape relative to the element above it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	visibility	<p>Specifies whether a shape is displayed. Only inherit and hidden are used; any other values are mapped to inherit. Default is inherit. Allowed values are:</p> <ul style="list-style-type: none"> • hidden - The shape is not visible, but is still part of the flow of the objects in the browser. Mouse events are not processed. • inherit - The visibility state is inherited from the parent of the shape.
	width	<p>Specifies the width of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	z-index	<p>Specifies the display order of overlapping shapes. Default is 0. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Uses the order that the shapes appear in the page,

Attributes	Description	
		<p>bottom to top.</p> <ul style="list-style-type: none">• <code><order></code>- A number that represents the stacking precedence. Shapes with higher numbers are placed on top of those with lower numbers. Negative numbers are allowed.
	The following properties are only used by the textbox element (§19.1.2.22):	
	Property	Description
	direction	<p>Specifies the direction of the text in the textbox. Default is <code>ltr</code>. This property is superceded by the <code>mso-direction-alt</code> property if that is specified. Allowed values are:</p> <ul style="list-style-type: none">• <code>ltr</code> - Text is displayed left-to-right.• <code>rtl</code> - Text is displayed right-to-left.
	layout-flow	<p>Determines the flow of the text layout in a textbox. Default is <code>horizontal</code>. Allowed values are:</p> <ul style="list-style-type: none">• <code>horizontal</code> - Text is displayed horizontally.• <code>vertical</code> - Text is displayed vertically.• <code>vertical-ideographic</code> - Ideographic text is displayed vertically.• <code>horizontal-ideographic</code> - Ideographic text is displayed horizontally.
	mso-direction-alt	<p>Specifies an alternate direction for text in textboxes. Overrides the <code>direction</code> property. The only allowed value is <code>context</code>.</p>
	mso-fit-shape-to-text	<p>Specifies whether the shape stretches to fit the text in the textbox. Default is <code>false</code>.</p>
	mso-fit-text-to-shape	<p>Specifies whether the text stretches to fit the textbox. Default is <code>false</code>.</p>
	mso-layout-flow-alt	<p>Specifies the alternate layout flow for text in textboxes. This property is used instead of <code>layout-flow</code> when the layout flow is from bottom to top for non-ideographic languages. Its only value is <code>bottom-to-top</code>.</p>
mso-next-textbox	<p>Specifies the ID of the next textbox in a series. Used to keep track of a set of linked textboxes. Default is no value.</p>	

Attributes	Description										
	mso-rotate	Specifies a specific rotation value for text in a textbox. Default is 0. Allowed values are: <ul style="list-style-type: none">090180-90									
	mso-text-scale	Specifies the scaling factor for fitting text to shapes. Default is 0. This property is only used if mso-fit-text-to-shape is true.									
	v-text-anchor	Specifies the vertical anchoring of text in a textbox. Default is top. The alignment of a text anchor only becomes evident if mso-fit-text-to-shape is false. This property is different from the vertical-align CSS property, which is used for ideographic languages. Allowed values are: <ul style="list-style-type: none">topmiddlebottomtop-centermiddle-centerbottom-centertop-baselinebottom-baselinetop-center-baselinebottom-center-baseline									
	The following properties are only used by the textpath element (§19.1.2.23):										
	<table><tr><th>Property</th><th>Description</th></tr><tr><td>font</td><td>Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.</td></tr><tr><td>font-family</td><td>Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.</td></tr><tr><td>font-size</td><td>Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.</td></tr><tr><td>font-style</td><td>Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are:</td></tr></table>	Property	Description	font	Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.	font-family	Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.	font-size	Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.	font-style	Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are:
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Attributes	Description																			
		<ul style="list-style-type: none">normalitalicoblique - Treated the same as italic.																		
	font-variant	<p>Specifies the variant style of a font. Default is normal. The values are the same as those of the CSS font-variant property. Allowed values are:</p> <ul style="list-style-type: none">normalsmall-caps																		
	font-weight	<p>Specifies the thickness of the letters of the font. Default is normal. The values are the same as those of the CSS font-weight property. Allowed values are:</p> <table><tr><th>Value</th><th>Description</th></tr><tr><td>normal</td><td rowspan="6">Treated as non-bold.</td></tr><tr><td>lighter</td></tr><tr><td>100</td></tr><tr><td>200</td></tr><tr><td>300</td></tr><tr><td>400</td></tr><tr><td>bold</td><td rowspan="7">Treated as bold.</td></tr><tr><td>bolder</td></tr><tr><td>500</td></tr><tr><td>600</td></tr><tr><td>700</td></tr><tr><td>800</td></tr><tr><td>900</td></tr></table>		Value	Description	normal	Treated as non-bold.	lighter	100	200	300	400	bold	Treated as bold.	bolder	500	600	700	800	900
		Value	Description																	
		normal	Treated as non-bold.																	
lighter																				
100																				
200																				
300																				
400																				
bold		Treated as bold.																		
bolder																				
500																				
600																				
700																				
800																				
900																				
mso-text-shadow	<p>Specifies whether a shadow is applied to the text on a text path. Default is false.</p>																			
text-decoration	<p>Specifies the style of text decoration. Default is none. The values are the same as those of the CSS text-decoration property. Allowed values are:</p> <ul style="list-style-type: none">none																			

Attributes	Description	
		<ul style="list-style-type: none"> • underline • overline • line-through • blink
	v-rotate-letters	Specifies whether the letters of the text are rotated counterclockwise by 90 degrees. Default is false.
	v-same-letter-heights	Specifies whether all letters are the same height regardless of initial case. If true, the lowercase letters are stretched to the height of the uppercase letters. Default is false.
	v-text-align	Specifies the alignment of text. Default is left. Allowed values are: <ul style="list-style-type: none"> • left • right • center • justify • letter-justify - Distributes the extra space between the letters. • stretch-justify - Stretches the letters to fill in the space.
	v-text-kern	Specifies whether kerning is turned on. Default is false.
	v-text-reverse	Specifies whether the layout order of rows is reversed. Default is false. This is used for vertical text layout.
	v-text-spacing-mode	Specifies the mode for letter spacing. Default is tightening. This property determines whether space is removed between each letter (tightening) or added between each letter (tracking). The amount of letter spacing change is defined by the v-text-spacing property. Allowed values are: <ul style="list-style-type: none"> • tightening • tracking
	v-text-spacing	Specifies the amount of spacing for text in 100ths of single line spacing. Default is 100.
	<p>The line (§19.1.2.12), polyline (§19.1.2.15) and curve (§19.1.2.3) elements ignore the following properties:</p> <ul style="list-style-type: none"> • top • left • width • height 	

Attributes	Description																
	<p>The following properties are not inherited by an element that references a shapetype element (§19.1.2.20) via the id attribute:</p> <ul style="list-style-type: none"> • flip • height • left • margin-left • margin-top • position • rotation • top • visibility • width • z-index <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>																
target (Hyperlink Display Target)	<p>Specifies a frame or window that a URL is displayed in. Default is no value. Allowed values are:</p> <table border="1"> <thead> <tr> <th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td><targetname></td><td>String containing the name of the frame or window in which to load the document.</td></tr> <tr> <td>_blank</td><td>Specifies that the linked document is loaded into a new blank window. This window is not named.</td></tr> <tr> <td>_media</td><td>Specifies that the linked document is loaded into the browser's multimedia pane.</td></tr> <tr> <td>_parent</td><td>Specifies that the linked document is loaded into the immediate parent of the document containing the link.</td></tr> <tr> <td>_search</td><td>Specifies that the linked document is loaded into the browser's search pane.</td></tr> <tr> <td>_self</td><td>Specifies that the linked document is loaded into the window in which the link was clicked (the active window).</td></tr> <tr> <td>_top</td><td>Specifies that the linked document is loaded into the topmost window.</td></tr> </tbody> </table> <p>[Example:</p> <pre> <v:shape ... href="http://www.openxmlformats.org" target="_self" ... > </pre>	Value	Description	<targetname>	String containing the name of the frame or window in which to load the document.	_blank	Specifies that the linked document is loaded into a new blank window. This window is not named.	_media	Specifies that the linked document is loaded into the browser's multimedia pane.	_parent	Specifies that the linked document is loaded into the immediate parent of the document containing the link.	_search	Specifies that the linked document is loaded into the browser's search pane.	_self	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).	_top	Specifies that the linked document is loaded into the topmost window.
Value	Description																
<targetname>	String containing the name of the frame or window in which to load the document.																
_blank	Specifies that the linked document is loaded into a new blank window. This window is not named.																
_media	Specifies that the linked document is loaded into the browser's multimedia pane.																
_parent	Specifies that the linked document is loaded into the immediate parent of the document containing the link.																
_search	Specifies that the linked document is loaded into the browser's search pane.																
_self	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).																
_top	Specifies that the linked document is loaded into the topmost window.																

Attributes	Description
	<p><code></v:shape></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>title (Shape Title)</p>	<p>Specifies the text displayed when the mouse pointer moves over the shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... title="tooltip" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>userdrawn (Exists In Master Slide)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the user has added the shape to a master slide. Default is false. Used by PresentationML.</p> <p>[Example:</p> <pre><v:shape ... o:userdrawn="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>userhidden (Hide Script Anchors)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a script anchor is hidden. Default is false. If true, script anchors stay hidden even if the shape is otherwise visible. A script anchor is the visual representation of a script that when displayed in an application.</p> <p>[Example:</p> <pre><v:shape ... o:userhidden="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>wrapcoords (Shape Bounding Polygon)</p>	<p>Specifies the bounding polygon that surrounds a shape. This is specified using a comma-delimited list of x and y coordinates: "x1,y1,x2,y2,x3,y3,..." This is used when text is</p>

Attributes	Description
	<p>tightly wrapped around a shape. Default is no value until the mso-wrap-mode style attribute is set to <i>tight</i> or <i>through</i>.</p> <p>[Example:</p> <pre><v:shape ... wrapcoords="0,0 0,200, 200,200, 200,0" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_Image](#)) is located in §A.6.1. *end note]*

19.1.2.11 imagedata (Image Data)

This element is used to draw an image that has been loaded from an external source. There is an implied rectangle that is the same size as the image. Any stroke or fill is applied to this implied rectangle. The stroke is drawn on top of the image. The fill is behind the image and therefore only visible through transparent areas of the image. Image transparency is either encoded in the file or defined via a color value using the chromakey attribute. Unlike the image element (§19.1.2.10), the imagedata element shall have a parent element.



[Example:



```
<v:shape style="position:relative;top:1;left:1;width:50;height:50"
  path="m 0,0 l 1000,0 1000,1000 0,1000 x e" fillcolor="blue">
  <v:imagedata src="myimage.gif"/>
</v:shape>
```








end example]

Parent Elements
arc (§19.1.2.1); background (Part 1, §17.2.1); curve (§19.1.2.3); group (§19.1.2.7); image (§19.1.2.10); line (§19.1.2.12); object (Part 1, §17.3.3.19); oval (§19.1.2.13); pict (§14.2.2.2); pict (§14.5.1); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapetype (§19.1.2.20)

Attributes	Description
althref (Alternate Image Reference) Namespace: urn:schemas-microsoft-com:office:office	<p>Defines an alternate reference for an image in Macintosh PICT format.</p> <p>[Example:</p> <pre><v:imagedata ... althref="myimage.pcz" ... > </v:imagedata></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
bilevel (Image Bilevel Toggle)	<p>Specifies that all colors in the picture shall be converted to either 0 or full intensity component values. This converts a color bitmap to 8 colors and a grayscale bitmap to black and white. Default is <i>false</i>.</p> <p>[Example:</p> <pre><v:image ... bilevel="true" ...> </v:image></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
blacklevel (Image Brightness)	<p>Specifies the image brightness. Default is 0.</p> <p>[Example:</p> <pre><v:image ... blacklevel="0.1" ...> </v:image></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
chromakey (Image Transparency Color)	<p>Specifies a color value that is transparent and show anything behind the shape. Default is no value.</p>



Attributes	Description
	<p>[Example:</p> <pre><v:image ... chromakey="white" ...> </v:image></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
<p>cropbottom (Image Bottom Crop)</p>	<p>Specifies the how much to crop the image from the bottom up as a fraction of picture size. Default is 0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. For example, a value of "52429f" represents 52429/65536 or 0.8.</p> <p>[Example:</p> <pre><v:image ... cropbottom="10%" ...> </v:image></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>cropleft (Image Left Crop)</p>	<p>Specifies how much to crop the image from the left in as a fraction of picture size. Default is 0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. For example, a value of "52429f" represents 52429/65536 or 0.8.</p> <p>[Example:</p> <pre><v:image ... cropleft="10%" ...> </v:image></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>cropright (Image Right Crop)</p>	<p>Specifies how much to crop the image from the right in as a fraction of picture size. Default is 0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. [Example: For example, a value of "52429f" represents 52429/65536 or 0.8.</p>


Attributes	Description
	<p><i>end example]</i></p> <p>[<i>Example:</i></p> <pre><v:image ... cropright="10%" ...> </v:image></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
croptop (Image Top Crop)	<p>Specifies how much to crop the image from the top down as a fraction of picture size. Default is 0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. [<i>Example:</i> For example, a value of "52429f" represents 52429/65536 or 0.8. <i>end example]</i></p> <p>[<i>Example:</i></p> <pre><v:image ... croptop="10%" ...> </v:image></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
detectmouseclick (Detect Mouse Click) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether a mouse click is detected on the fill of a shape.</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
embosscolor (Embossed Color)	<p>Specifies the color to use to create an embossed effect in the image. Default is no value. This can be set to a percentage of the shadow color to create an embossed picture effect.</p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>

Attributes	Description
gain (Image Intensity)	<p>Specifies an adjustment for the intensity of all colors. Essentially sets how bright white is. Default is 1.</p> <p>[Example:</p> <pre><v:image ... gain="0.5" ...> </v:image></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
gamma (Image Gamma Correction)	<p>Specifies the gamma correction. Default is 1.</p> <p>Gamma correction is a factor by which the intended target display gamma differs from the sRGB profile. It can be used to correct for images not prepared for sRGB displays and to adjust overall image contrast. Decreasing it below 1 gives a higher contrast image.</p> <p>[Example:</p> <pre><v:image ... gamma="0.5" ...> </v:image></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
grayscale (Image Grayscale Toggle)	<p>Specifies to display the image in grayscale. Default is false.</p> <p>[Example:</p> <pre><v:image ... gamma="0.5" ...> </v:image></pre> 

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>href (Explicit Relationship to Hyperlink Target)</p> <p>Namespace: .../officeDocument/2006/relationships</p>	<p>Specifies the relationship ID of the relationship to the hyperlink used for this VML object. The specified relationship shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/image or the document shall be considered non-conformant.</p> <p>[<i>Example:</i> The markup specifies the associated relationship part with relationship ID rId10 contains the corresponding relationship information for the image data:</p> <pre>< ... r:href="rId5" /></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>
<p>href (Original Image Reference)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the URL to the original image file. Used only if the picture has been linked and embedded. Default is no value.</p> <p>[<i>Example:</i></p> <pre><v:fill ... o:href="myimage.gif" ... > </v:fill></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>id (Explicit Relationship to Image Data)</p> <p>Namespace: .../officeDocument/2006/relationships</p>	<p>Specifies the relationship ID of the relationship to the image used for this VML object. The specified relationship shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/image or the document shall be considered non-conformant.</p> <p>[<i>Example:</i> The markup specifies the associated relationship part with relationship ID rId10 contains the corresponding relationship information for the image data:</p> <pre>< ... r:id="rId10" /></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>
<p>id (Unique</p>	<p>Specifies a unique identifier that can be used to reference a VML object.</p>

Attributes	Description
Identifier)	<p>Default is no value.</p> <p>[Example:</p> <pre><v:shape ... id="myShape" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
movie (Movie Reference) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies a pointer to a movie image. This is a data block that contains a pointer to a pointer to movie data.</p> <p>[Example:</p> <pre><v:imagedata ... o:movie="1434" ...> </v:imagedata></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
oleid (Image Embedded Object ID) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the embedded object ID of an image.</p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
pict (Explicit Relationship to Alternate Image Data) Namespace: .../officeDocument/2006/relationships	<p>Specifies the relationship ID of the relationship to an alternate format image used for this VML object. The specified relationship shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/image or the document shall be considered non-conformant.</p> <p>If this attribute is specified, the application should attempt to display the image defined by the relationship. If the application cannot display the format of that image, the r:id attribute is used.</p> <p>[Example: The markup specifies the associated relationship part with relationship ID rId7 contains the corresponding relationship information for the image data. The relationship part with relationship ID rId10 is used if the application cannot display the image referenced by rId7.:]</p>

Attributes	Description
	<p>< ... r:id="rId10" r:pict="rId7"/></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>
<p>recolortarget (Black Recoloring Color)</p>	<p>Specifies the color to which black should be recolored.</p> <p>[Example:</p> <p><v:imagedata r:id="rId4" recolortarget="red"> </v:imagedata></p> <div>  </div> <p>no recolor</p> <div>  </div> <p>recolortarget="red"</p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
<p>relid (Relationship to Part)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the relationship ID of the relationship to the image. The specified relationship shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/image or the document shall be considered non-conformant.</p> <p>[Example: The markup specifies the associated relationship part with relationship ID rId10 contains the corresponding relationship information:</p> <p><v:imagedata ... o:relid="rId10" ...> </v:imagedata></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>
<p>src (Image Source)</p>	<p>Specifies the URL of the image to use.</p> <p>[Example:</p> <p><v:image ... src="myimage.gif" ...> </v:image></p>

Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>title (Image Data Title)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the title of an embedded image. This is typically set to the comment property of the image, which is often blank.</p> <p>[Example:</p> <pre><v:fill ... o:title="alt text" ... > </v:fill></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_ImageData](#)) is located in §A.6.1.
end note]

19.1.2.12 line (Line)

This element draws a straight line.

[Example:

```
<v:line from="10pt,10pt" to="75pt,35pt"
strokecolor="blue" strokeweight="3pt">
</v:line>
```



end example]

Parent Elements
background (Part 1, §17.2.1); group (§19.1.2.7); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1)

Child Elements	Subclause
anchorlock (Anchor Location Is Locked)	§19.3.2.1
borderbottom (Bottom Border)	§19.3.2.2
borderleft (Left Border)	§19.3.2.3
borderright (Right Border)	§19.3.2.4
bordertop (Top Border)	§19.3.2.5
callout (Callout)	§19.2.2.2
ClientData (Attached Object Data)	§19.4.2.12
clippath (Shape Clipping Path)	§19.2.2.3
extrusion (3D Extrusion)	§19.2.2.11
fill (Shape Fill Properties)	§19.1.2.5
formulas (Set of Formulas)	§19.1.2.6
handles (Set of Handles)	§19.1.2.9
imagedata (Image Data)	§19.1.2.11
lock (Shape Protections)	§19.2.2.18
path (Shape Path)	§19.1.2.14
shadow (Shadow Effect)	§19.1.2.18
signatureline (Digital Signature Line)	§19.2.2.30
skew (Skew Transform)	§19.2.2.31
stroke (Line Stroke Settings)	§19.1.2.21
textbox (Text Box)	§19.1.2.22
textdata (VML Diagram Text)	§19.5.2.2
textpath (Text Layout Path)	§19.1.2.23
wrap (Text Wrapping)	§19.3.2.6

Attributes	Description
allowincell (Allow in Table Cell) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether a shape can be placed in a table. Default is false.</p> <p><i>[Example:</i></p> <pre><v:shape ... o:allowincell="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>



Attributes	Description
<p>allowoverlap (Allow Shape Overlap)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape can overlap another shape. Default is true. If false, the shape shifts left or right so as not to overlap another shape, similar to the behavior of the HTML float attribute.</p> <p>[Example:</p> <pre><v:shape ... o:allowoverlap="false" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>alt (Alternate Text)</p>	<p>Specifies alternative text describing the graphical object. This text should provide a brief description of the shape for use by accessibility tools. Default is no value.</p> <p>[Example: The alt text describes the basic shape:</p> <pre><v:shape ... fillcolor="red" alt="Red rectangle"> </v:shape></pre> <p>The alt text describes the contents of a shape displaying an image:</p> <pre><v:shape ... alt="Picture of a sunset"> </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>borderbottomcolor (Bottom Border Color)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the bottom border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderbottomcolor="red" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>borderleftcolor (Border Left Color)</p>	<p>Specifies the left border color of an inline shape. Default is no value.</p> <p>[Example:</p>

Attributes	Description
Namespace: urn:schemas-microsoft-com:office:office	<pre><v:shape ... o:borderleftcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
borderrightcolor (Border Right Color) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the right border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderrightcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
bordertopcolor (Border Top Color) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the top border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:bordertopcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
bullet (Graphical Bullet) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the shape is a graphical bullet. Default is <i>false</i>.</p> <p>[Example:</p> <pre><v:shape ... o:bullet="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
button (Button Behavior Toggle) Namespace:	<p>Specifies whether a shape exhibits button press behavior on click. Default is <i>false</i>.</p> <p>[Example:</p>


Attributes	Description
urn:schemas-microsoft-com:office:office	<pre><v:shape ... o:button="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
bwmode (Black-and-White Mode) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies how a shape renders for black-and-white output devices. When a shape is printed on a black-and-white printer or displayed in a black-and-white view in an application, several options are possible. Default is auto, which uses o:bwnormal for normal black-and-white rendering and o:bwpure for pure black-and-white rendering.</p> <p>bwnormal and bwpure are subordinate to bwmode. If bwmode is "auto" then the value for bwnormal or bwpure is used depending on what the output format is. An application can define for itself what, if any, difference there is between normal B&W and pure B&W. <i>[Example: Normal B&W might allow greyscale and pure B&W might not. end example]</i></p> <p><i>[Example: This shape renders in grayscale in a black-and-white environment:</i></p> <pre><v:shape ... o:bwmode="grayscale" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
bwnormal (Normal Black-and-White Mode) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the black-and-white mode for normal black-and-white output devices. Default is auto.</p> <p><i>[Example: This shape renders in a pale grayscale in a normal black-and-white environment:</i></p> <pre><v:shape ... o:bwmode="auto" o:bwnormal="lightgrayscale" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
bwpure (Pure Black-and-White Mode) Namespace: urn:schemas-	<p>Specifies the black-and-white mode for pure black-and-white output devices. Default is auto.</p> <p><i>[Example: This shape renders in high contrast when in a pure black-and-white environment:</i></p>


Attributes	Description
microsoft-com:office:office	<p><code><v:shape ... o:bwmode="auto" o:bwpure="highcontrast" ... ></code> <code></v:shape></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
chromakey (Image Transparency Color)	<p>Specifies a color value that is transparent and show anything behind the shape. Default is no value.</p> <p>[Example:</p> <p><code><v:image ... chromakey="white" ...></code> <code></v:image></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
class (CSS Reference)	<p>Specifies a reference to the definition of a CSS style. Default is no value.</p> <p>[Example: The snippets below are equivalent:</p> <p>...</p> <p><code>.narrowstyle {width:50;height:100}</code></p> <p>...</p> <p><code><v:shape ... class="narrowstyle"</code> <code>style="top:1;left:1"></code> <code></v:shape></code></p> <p><code><v:shape ... style="top:1;left:1;</code> <code>width:50;height:100"></code> <code></v:shape></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
clip (Clipping Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies that the clipping region is active. This is used in conjunction with the clippath (§19.2.2.3) element to create a clipping region.</p> <p>[Example:</p> <p><code><v:shape ... o:clip="true"></code> <code></v:shape></code></p>

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>cliptowrap (Clip to Wrapping Polygon)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that the clipping region for the shape aligns with the wrapping polygon that tightly surrounds the entire shape (essentially, that the shape shall not be drawn beyond its wrapping polygon's extents – if it does, the shape shall be clipped). Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:cliptowrap="true"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>connectortype (Shape Connector Type)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the kind of connector used for joining shapes. Default is straight.</p> <p>[Example:</p> <pre><v:shape ... o:connectortype="elbow" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ConnectorType simple type (§19.2.3.7).</p>
<p>coordorigin (Coordinate Space Origin)</p>	<p>Specifies the coordinate of the top left corner of the shape's coordinate space. This determines the position of the (0,0) coordinate space origin within the shape's bounding box. Default is "0,0", which places the (0,0) origin at the top left corner of the bounding box.</p> <p>This affects shape properties that specify coordinate positions, such as the path attribute. Thus a path can be defined against a generic (0,0) origin and the coordorigin value translates the entire path within the shape's bounding space.</p> <p>[Example: The horizontal and vertical coordinate space ranges from -100 to +100 because the coordinate space (coordsize) is 200 by 200 and the top left coordinate is (-100,-100). The (0,0) origin lies at the center of the shape's bounding box, as evidenced by the position of the shape's path within the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100"</pre>

Attributes	Description
	<pre>path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
coordsize (Coordinate Space Size)	<p>Specifies the size of the shape's coordinate space in coordinate units. Default is "1000,1000".</p> <p>The physical size of a coordinate unit length is determined by both the size of the coordinate space (coordsize) and the size of the shape (style width and height). The coordsize attribute defines the number of horizontal and vertical subdivisions into which the shape's bounding box is divided. The combination of coordsize and style width/height effective scales the shape anisotropically.</p> <p>[Example: The path is 50 units wide and tall, which is 25% of the size of the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
dgmlayout (Diagram Node Layout Identifier) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the kind of automatic layout to apply to the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element.</p> <p>[Example:</p> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <p><i>end example]</i></p>

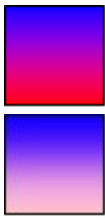
Attributes	Description
	The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).
dgmlayoutmru (Diagram Node Recent Layout Identifier) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the kind of automatic layout most recently used on the child elements of the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element.</p> <p>[Example:</p> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).</p>
dgmnodekind (Diagram Node Identifier) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies an optional, application-defined parameter that is intended to be used by the application to tag different types of nodes in a diagram.</p> <p>[Example:</p> <pre><v:shape ... dgmnodekind="1"> </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
doubleclicknotify (Double-click Notification Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies that an event message is sent when a shape is double-clicked. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:doubleclicknotify="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
fillcolor (Fill Color)	<p>Specifies the color to use for the fill. Default is white. If the fill element (§19.1.2.5) is present, its color attribute takes precedence. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p>

Attributes	Description
	<p>[Example: This shape is red if its fill is visible:</p> <pre><v:shape ... fillcolor="red" ... > </v:shape></pre> <p>This is equivalent to:</p> <pre><v:shape ... fillcolor="#ff0000" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
<p>filled (Shape Fill Toggle)</p>	<p>Specifies whether the closed path is filled. Default is true. This attribute is overridden by the fill on attribute.</p> <p>[Example:</p> <pre><v:shape ... filled="f" fillcolor="red" ...> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>forcedash (Force Dashed Outline)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a dashed outline is used to draw a shape when a shape has no line or fill. Default is false.</p> <p>Used by PresentationML placeholders to draw a dashed outline when there is no line and no fill for a shape.</p> <p>[Example:</p> <pre><v:shape ... o:forcedash="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>



Attributes	Description
from (Line Start) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the starting point of the line in the coordinate space of the parent element. Default is "0,0". If the parent is not a VML element, the default unit is a pixel. Allowed units are in, cm, mm, pt, pc and px.</p> <p>[Example:</p> <pre><v:line from="10pt,10pt" to="50pt,50pt"> </v:line></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
hr (Horizontal Rule Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies that a shape is a horizontal rule. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hr="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
hralign (Horizontal Rule Alignment) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the alignment of a horizontal rule. Default is left.</p> <p>[Example:</p> <pre><v:shape ... o:hralign="center" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_HrAlign simple type (§19.2.3.16).</p>
href (Hyperlink Target)	<p>Specifies a hyperlink URL target for the shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... href="http://www.openxmlformats.org" ... > </v:shape></pre>


Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>hrnoshade (Horizontal Rule 3D Shading Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that the horizontal rule does not have 3-D shading. Default is <code>false</code>.</p> <p>[Example:</p> <pre><v:shape ... o:hrnoshade="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>hrpct (Horizontal Rule Length Percentage)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the length of a horizontal rule as a percentage of page width. Default is 0.</p> <p>[Example:</p> <pre><v:shape ... o:hrpct="85" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
<p>hrstd (Horizontal Rule Standard Display Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape is displayed as a standard horizontal rule. Only applies if <code>hr</code> is <code>true</code>. Default is <code>false</code>.</p> <p>[Example:</p> <pre><v:shape ... o:hrstd="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>id (Unique Identifier)</p>	<p>Specifies a unique identifier that can be used to reference a VML object.</p> <p>Default is no value.</p> <p>[Example:</p> <pre><v:shape ... id="myShape" ... ></pre>

Attributes	Description
	<p><code></v:shape></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>insetmode (Text Inset Mode)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the application calculates the internal text margin instead of using the inset attribute. Default is custom. This attribute is only meaningful for text boxes.</p> <p>[Example:</p> <pre><v:shape ... o:insetmode="auto" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_InsetMode simple type (§19.2.3.17).</p>
<p>insetpen (Inset Border From Path)</p>	<p>Specifies that the border shall be displayed inside of the path defining the shape, rather than along the path (the default border placement), or outside of the path as might be done with an image.</p> <p>[Example:</p> <pre><v:shape ... insetpen="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>ole (Embedded Object Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the shape is an embedded object. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:ole="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).</p>
<p>oleicon (Embedded Object Icon Toggle)</p>	<p>Specifies whether an embedded object is displayed as an icon. Default is false.</p> <p>[Example:</p>

Attributes	Description
Namespace: urn:schemas-microsoft-com:office:office	<pre><v:shape ... o:oleicon="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
oned (Shape Handle Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the extra handles of a shape are hidden. If true, hides all shape handles except the top left and bottom right; that is, the same handles that are used for a straight line segment. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:oned="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
opacity (Fill Color Opacity)	<p>Specifies the opacity of the primary fill color. Default is 1.0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. [Example: A value of "52429f" represents 52429/65536 or 0.8. <i>end example]</i></p> <p>[Example: The red color is 25% opaque:</p> <pre><v:fill type="gradient" color="red" color2="blue" opacity=".25"> </v:fill></pre> <div>  <div> opacity="1" opacity=".25" </div> </div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
preferrelative (Relative Resize Toggle)	<p>Specifies whether the original size of an object is saved after reformatting. Default is false. If true, the original size of the object is stored and all resizing is based on a percentage of that original size. Otherwise, each resizing resets the scale to 100%.</p>

Attributes	Description
Namespace: urn:schemas-microsoft-com:office:office	<p>[Example:</p> <pre><v:shape ... o:preferrelative="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
print (Print Toggle)	<p>Specifies whether the shape is printed. Default is true.</p> <p>[Example:</p> <pre><v:shape ... print="false" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
regroupid (Regroup ID) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies a previous group for a shape. An ID number is used to identify groups of shapes that are no longer grouped. This allows shapes to be regrouped programmatically.</p> <p>[Example: The shape was part of a group identified by the ID 040754:</p> <pre><v:shape ... o:regroupid="040754" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
spid (Optional String) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies an optional string that an application can use to identify the particular shape. Default is no value.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
spt (Optional Number) Namespace: urn:schemas-	<p>Specifies an optional number that an application can use to associate the particular shape with a defined shape type. Default is 0.</p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>

Attributes	Description
microsoft-com:office:office	
strokecolor (Shape Stroke Color)	<p>Specifies the primary color of the brush to use to stroke the path of the shape. Default is black. The color attribute of the stroke element (§19.1.2.21) overrides this. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example:</p> <pre><v:shape ... strokecolor="red" ...> </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
stroked (Shape Stroke Toggle)	<p>Specifies whether the path defining the shape is stroked with a solid line. The stroke element (§19.1.2.21) defines other strokes. The on attribute of the stroke element overrides this attribute. Default is true.</p> <p>[Example:</p> <pre><v:shape ... fillcolor="red" stroked="false" strokecolor="blue"...> </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
strokeweight (Shape Stroke Weight)	<p>Specifies the width of the brush to use to stroke the path. Default is 1 point. If a number is given without units, the emu is used. The weight attribute of the stroke element (§19.1.2.21) overrides this attribute.</p> <p>[Example:</p> <pre><v:shape ... strokeweight="3pt" ... ></pre>

Attributes	Description						
	<p></v:shape></p>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>						
<p>style (Shape Styling Properties)</p>	<p>Specifies the CSS2 styling properties of the shape. The CSS2 (Cascading Style Sheets, Level 2) specification, a Recommendation of the World Wide Web Consortium, is available here: http://www.w3.org/TR/REC-CSS2.</p> <p>This attribute uses a semi-colon delimited list of “name:value” pairs, the syntax defined by section 4.1.8 of the CSS2 specification for grouped declarations (without the surrounding braces). The following tables define the allowed properties and the VML treatment of each.</p> <p><i>[Example:</i></p> <pre> <v:shape ... style='position:absolute;width:100pt;height:50pt' ... > </v:shape> </pre> <p><i>end example]</i></p> <table> <tr> <th>Property</th><th>Description</th></tr> <tr> <td>flip</td><td> <p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. </td></tr> <tr> <td>height</td><td> <p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. </td></tr> </table>	Property	Description	flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. 	height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
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Attributes	Description	
	left	<p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-bottom	<p>Specifies the position of the bottom of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	margin-left	<p>Specifies the position of the left of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-right	<p>Specifies the position of the right of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page.

Attributes	Description	
		<ul style="list-style-type: none"> • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-top	<p>Specifies the position of the top of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	mso-position-horizontal	<p>Specifies the horizontal positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • left • center • right • inside • outside
	mso-position-horizontal-relative	<p>Specifies relative horizontal position data for objects in WordprocessingML documents. This modifies the mso-position-horizontal property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • char
	mso-position-vertical	<p>Specifies the vertical positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • top

Attributes	Description	
		<ul style="list-style-type: none"> • center • bottom • inside • outside
	mso-position-vertical-relative	<p>Specifies relative vertical position data for objects in WordprocessingML documents. This modifies the mso-position-vertical property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • line
	mso-wrap-distance-bottom	<p>Specifies the distance from the bottom of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-left	<p>Specifies the distance from the left side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-right	<p>Specifies the distance from the right side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-top	<p>Specifies the distance from the top of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-edited	<p>Specifies whether the wrap coordinates were customized by the user. If the wrap coordinates are generated by an editor, this property is true; otherwise they were customized by a user. Default is false.</p>
	mso-wrap-style	<p>Specifies the wrapping mode for text in shapes in WordprocessingML documents. Default is square. Allowed values are:</p> <ul style="list-style-type: none"> • square - Wraps text inside the shape in a square.

Attributes	Description	
		<ul style="list-style-type: none"> • none - Text does not wrap.
	position	<p>Specifies the kind of positioning used to place an element. Default is <code>static</code>. When the element is contained inside a group, this property shall be <code>absolute</code>. Allowed values are:</p> <ul style="list-style-type: none"> • <code>static</code> - The element is positioned according to the normal flow of the page. The <code>top</code> and <code>left</code> properties are ignored. If the object is anchored inline, this value is used. • <code>absolute</code> - The element is positioned relative to the parent, using the <code>top</code> and <code>left</code> properties. • <code>relative</code> - The element is positioned according to the normal flow of the page, but the <code>top</code> and <code>left</code> properties are used. The overlap of overlapping elements is governed by the <code>z-index</code> property.
	rotation	<p>Specifies the angle that a shape is rotated, in degrees. Default is 0. Positive angles are clockwise.</p>
	top	<p>Specifies the position of the top of the containing block of the shape relative to the element above it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • <code>auto</code> - Default position of an element in the flow of the page. • <code><units></code> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <code><percentage></code> - Value expressed as a percentage of the parent object's height.
	visibility	<p>Specifies whether a shape is displayed. Only <code>inherit</code> and <code>hidden</code> are used; any other values are mapped to <code>inherit</code>. Default is <code>inherit</code>. Allowed values are:</p> <ul style="list-style-type: none"> • <code>hidden</code> - The shape is not visible, but is still part of the flow of the objects in the browser. Mouse events are not processed. • <code>inherit</code> - The visibility state is inherited from the parent of the shape.
	width	<p>Specifies the width of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p>


Attributes	Description	
		<ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	z-index	<p>Specifies the display order of overlapping shapes. Default is 0. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Uses the order that the shapes appear in the page, bottom to top. • <order>- A number that represents the stacking precedence. Shapes with higher numbers are placed on top of those with lower numbers. Negative numbers are allowed.
The following properties are only used by the textbox element (§19.1.2.22):		
	Property	Description
	direction	<p>Specifies the direction of the text in the textbox. Default is ltr. This property is superceded by the mso-direction-alt property if that is specified. Allowed values are:</p> <ul style="list-style-type: none"> • ltr - Text is displayed left-to-right. • rtl - Text is displayed right-to-left.
	layout-flow	<p>Determines the flow of the text layout in a textbox. Default is horizontal. Allowed values are:</p> <ul style="list-style-type: none"> • horizontal - Text is displayed horizontally. • vertical - Text is displayed vertically. • vertical-ideographic - Ideographic text is displayed vertically. • horizontal-ideographic - Ideographic text is displayed horizontally.
	mso-direction-alt	<p>Specifies an alternate direction for text in textboxes. Overrides the direction property. The only allowed value is context.</p>
	mso-fit-shape-	<p>Specifies whether the shape stretches to fit the text in the textbox. Default is false.</p>

Attributes	Description					
	to-text					
	mso-fit-text-to-shape	Specifies whether the text stretches to fit the textbox. Default is false.				
	mso-layout-flow-alt	Specifies the alternate layout flow for text in textboxes. This property is used instead of layout-flow when the layout flow is from bottom to top for non-ideographic languages. Its only value is bottom-to-top.				
	mso-next-textbox	Specifies the ID of the next textbox in a series. Used to keep track of a set of linked textboxes. Default is no value.				
	mso-rotate	Specifies a specific rotation value for text in a textbox. Default is 0. Allowed values are: <ul style="list-style-type: none">• 0• 90• 180• -90				
	mso-text-scale	Specifies the scaling factor for fitting text to shapes. Default is 0. This property is only used if mso-fit-text-to-shape is true.				
	v-text-anchor	Specifies the vertical anchoring of text in a textbox. Default is top. The alignment of a text anchor only becomes evident if mso-fit-text-to-shape is false. This property is different from the vertical-align CSS property, which is used for ideographic languages. Allowed values are: <ul style="list-style-type: none">• top• middle• bottom• top-center• middle-center• bottom-center• top-baseline• bottom-baseline• top-center-baseline• bottom-center-baseline				
The following properties are only used by the textpath element (§19.1.2.23):						
<table><tr><th>Property</th><th>Description</th></tr><tr><td>font</td><td>Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The</td></tr></table>			Property	Description	font	Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The
Property	Description					
font	Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The					

Attributes	Description														
		order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.													
	font-family	Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.													
	font-size	Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.													
	font-style	Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are: <ul style="list-style-type: none">normalitalicoblique - Treated the same as italic.													
	font-variant	Specifies the variant style of a font. Default is normal. The values are the same as those of the CSS font-variant property. Allowed values are: <ul style="list-style-type: none">normalsmall-caps													
	font-weight	<div>Specifies the thickness of the letters of the font. Default is normal. The values are the same as those of the CSS font-weight property. Allowed values are:</div> <table><tr><th>Value</th><th>Description</th></tr><tr><td>normal</td><td rowspan="6">Treated as non-bold.</td></tr><tr><td>lighter</td></tr><tr><td>100</td></tr><tr><td>200</td></tr><tr><td>300</td></tr><tr><td>400</td></tr><tr><td>bold</td><td rowspan="4">Treated as bold.</td></tr><tr><td>bolder</td></tr><tr><td>500</td></tr><tr><td>600</td></tr></table>	Value	Description	normal	Treated as non-bold.	lighter	100	200	300	400	bold	Treated as bold.	bolder	500
Value	Description														
normal	Treated as non-bold.														
lighter															
100															
200															
300															
400															
bold	Treated as bold.														
bolder															
500															
600															

Attributes	Description	
		<div>700</div> <div>800</div> <div>900</div>
mso-text-shadow		Specifies whether a shadow is applied to the text on a text path. Default is false.
text-decoration		<p>Specifies the style of text decoration. Default is none. The values are the same as those of the CSS text-decoration property. Allowed values are:</p> <ul style="list-style-type: none"> • none • underline • overline • line-through • blink
v-rotate-letters		Specifies whether the letters of the text are rotated counterclockwise by 90 degrees. Default is false.
v-same-letter-heights		Specifies whether all letters are the same height regardless of initial case. If true, the lowercase letters are stretched to the height of the uppercase letters. Default is false.
v-text-align		<p>Specifies the alignment of text. Default is left. Allowed values are:</p> <ul style="list-style-type: none"> • left • right • center • justify • letter-justify - Distributes the extra space between the letters. • stretch-justify - Stretches the letters to fill in the space.
v-text-kern		Specifies whether kerning is turned on. Default is false.
v-text-reverse		Specifies whether the layout order of rows is reversed. Default is false. This is used for vertical text layout.
v-text-spacing-mode		Specifies the mode for letter spacing. Default is tightening. This property determines whether space is removed between each letter (tightening) or added between each letter (tracking). The amount of letter spacing change is defined by the v-text-spacing property. Allowed values are:

Attributes	Description								
	<ul style="list-style-type: none"> • tightening • tracking 								
	<table> <tr> <td>v-text-spacing</td><td>Specifies the amount of spacing for text in 100ths of single line spacing. Default is 100.</td></tr> </table>	v-text-spacing	Specifies the amount of spacing for text in 100ths of single line spacing. Default is 100.						
v-text-spacing	Specifies the amount of spacing for text in 100ths of single line spacing. Default is 100.								
	<p>The line (§19.1.2.12), polyline (§19.1.2.15) and curve (§19.1.2.3) elements ignore the following properties:</p> <ul style="list-style-type: none"> • top • left • width • height <p>The following properties are not inherited by an element that references a shapetype element (§19.1.2.20) via the id attribute:</p> <ul style="list-style-type: none"> • flip • height • left • margin-left • margin-top • position • rotation • top • visibility • width • z-index <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>								
target (Hyperlink Display Target)	<p>Specifies a frame or window that a URL is displayed in. Default is no value. Allowed values are:</p> <table> <tr> <th>Value</th><th>Description</th></tr> <tr> <td><targetname></td><td>String containing the name of the frame or window in which to load the document.</td></tr> <tr> <td>_blank</td><td>Specifies that the linked document is loaded into a new blank window. This window is not named.</td></tr> <tr> <td>_media</td><td>Specifies that the linked document is loaded into the browser's multimedia pane.</td></tr> </table>	Value	Description	<targetname>	String containing the name of the frame or window in which to load the document.	_blank	Specifies that the linked document is loaded into a new blank window. This window is not named.	_media	Specifies that the linked document is loaded into the browser's multimedia pane.
Value	Description								
<targetname>	String containing the name of the frame or window in which to load the document.								
_blank	Specifies that the linked document is loaded into a new blank window. This window is not named.								
_media	Specifies that the linked document is loaded into the browser's multimedia pane.								

Attributes	Description								
	<table border="1"> <tr> <td><code>_parent</code></td><td>Specifies that the linked document is loaded into the immediate parent of the document containing the link.</td></tr> <tr> <td><code>_search</code></td><td>Specifies that the linked document is loaded into the browser's search pane.</td></tr> <tr> <td><code>_self</code></td><td>Specifies that the linked document is loaded into the window in which the link was clicked (the active window).</td></tr> <tr> <td><code>_top</code></td><td>Specifies that the linked document is loaded into the topmost window.</td></tr> </table> <p><i>[Example:</i></p> <pre> <v:shape ... href="http://www.openxmlformats.org" target="_self" ... > </v:shape> </pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>	<code>_parent</code>	Specifies that the linked document is loaded into the immediate parent of the document containing the link.	<code>_search</code>	Specifies that the linked document is loaded into the browser's search pane.	<code>_self</code>	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).	<code>_top</code>	Specifies that the linked document is loaded into the topmost window.
<code>_parent</code>	Specifies that the linked document is loaded into the immediate parent of the document containing the link.								
<code>_search</code>	Specifies that the linked document is loaded into the browser's search pane.								
<code>_self</code>	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).								
<code>_top</code>	Specifies that the linked document is loaded into the topmost window.								
title (Shape Title)	<p>Specifies the text displayed when the mouse pointer moves over the shape. Default is no value.</p> <p><i>[Example:</i></p> <pre> <v:shape ... title="tooltip" ... > </v:shape> </pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>								
to (Line End Point)	<p>Specifies the ending point of the line in the coordinate space of the parent element. Default is "10,10". If the parent is not a VML element, the default unit is a pixel. Allowed units are in, cm, mm, pt, pc and px.</p> <p><i>[Example:</i></p> <pre> <v:line from="10pt,10pt" to="50pt,50pt"> </v:line> </pre> 								

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>userdrawn (Exists In Master Slide)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the user has added the shape to a master slide. Default is <code>false</code>. Used by PresentationML.</p> <p>[Example:</p> <pre><v:shape ... o:userdrawn="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>userhidden (Hide Script Anchors)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a script anchor is hidden. Default is <code>false</code>. If <code>true</code>, script anchors stay hidden even if the shape is otherwise visible. A script anchor is the visual representation of a script that when displayed in an application.</p> <p>[Example:</p> <pre><v:shape ... o:userhidden="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>wrapcoords (Shape Bounding Polygon)</p>	<p>Specifies the bounding polygon that surrounds a shape. This is specified using a comma-delimited list of x and y coordinates: "x1,y1,x2,y2,x3,y3,..." This is used when text is tightly wrapped around a shape. Default is no value until the <code>mso-wrap-mode</code> style attribute is set to <code>tight</code> or <code>through</code>.</p> <p>[Example:</p> <pre><v:shape ... wrapcoords="0,0 0,200, 200,200, 200,0" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[*Note*: The W3C XML Schema definition of this element's content model ([CT_Line](#)) is located in §A.6.1. *end note*]

19.1.2.13 oval (Oval)

This element draws an oval sized according to the CSS2 style content width and height.

[*Example*:

```
<v:oval fillcolor="blue"
  style="position:relative;top:1;left:1;width:150;height:50">
</v:oval>
```



end example]

Parent Elements
background (Part 1, §17.2.1); group (§19.1.2.7); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1)

Child Elements	Subclause
anchorlock (Anchor Location Is Locked)	§19.3.2.1
borderbottom (Bottom Border)	§19.3.2.2
borderleft (Left Border)	§19.3.2.3
borderright (Right Border)	§19.3.2.4
bordertop (Top Border)	§19.3.2.5
callout (Callout)	§19.2.2.2
ClientData (Attached Object Data)	§19.4.2.12
clippath (Shape Clipping Path)	§19.2.2.3
extrusion (3D Extrusion)	§19.2.2.11
fill (Shape Fill Properties)	§19.1.2.5
formulas (Set of Formulas)	§19.1.2.6
handles (Set of Handles)	§19.1.2.9
imagedata (Image Data)	§19.1.2.11
lock (Shape Protections)	§19.2.2.18
path (Shape Path)	§19.1.2.14
shadow (Shadow Effect)	§19.1.2.18
signatureline (Digital Signature Line)	§19.2.2.30

Child Elements	Subclause
skew (Skew Transform)	§19.2.2.31
stroke (Line Stroke Settings)	§19.1.2.21
textbox (Text Box)	§19.1.2.22
textdata (VML Diagram Text)	§19.5.2.2
textpath (Text Layout Path)	§19.1.2.23
wrap (Text Wrapping)	§19.3.2.6


Attributes	Description
<p>allowincell (Allow in Table Cell)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape can be placed in a table. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:allowincell="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>allowoverlap (Allow Shape Overlap)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape can overlap another shape. Default is true. If false, the shape shifts left or right so as not to overlap another shape, similar to the behavior of the HTML float attribute.</p> <p>[Example:</p> <pre><v:shape ... o:allowoverlap="false" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
alt (Alternate Text)	<p>Specifies alternative text describing the graphical object. This text should provide a brief description of the shape for use by accessibility tools. Default is no value.</p> <p>[Example: The alt text describes the basic shape:</p> <pre><v:shape ... fillcolor="red" alt="Red rectangle"> </v:shape></pre> <p>The alt text describes the contents of a shape displaying an image:</p>


Attributes	Description
	<pre><v:shape ... alt="Picture of a sunset"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
borderbottomcolor (Bottom Border Color) Namespace: urn:schemas- microsoft- com:office:office	Specifies the bottom border color of an inline shape. Default is no value. [Example: <pre><v:shape ... o:borderbottomcolor="red" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the W3C XML Schema string datatype.
borderleftcolor (Border Left Color) Namespace: urn:schemas- microsoft- com:office:office	Specifies the left border color of an inline shape. Default is no value. [Example: <pre><v:shape ... o:borderleftcolor="red" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the W3C XML Schema string datatype.
borderrightcolor (Border Right Color) Namespace: urn:schemas- microsoft- com:office:office	Specifies the right border color of an inline shape. Default is no value. [Example: <pre><v:shape ... o:borderrightcolor="red" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the W3C XML Schema string datatype.
bordertopcolor (Border Top Color) Namespace:	Specifies the top border color of an inline shape. Default is no value. [Example:

Attributes	Description
urn:schemas-microsoft-com:office:office	<p> <v:shape ... o:bordertopcolor="red" ... > </v:shape> </p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
bullet (Graphical Bullet) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the shape is a graphical bullet. Default is <code>false</code>.</p> <p>[Example:</p> <p> <v:shape ... o:bullet="true" ... > </v:shape> </p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
button (Button Behavior Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether a shape exhibits button press behavior on click. Default is <code>false</code>.</p> <p>[Example:</p> <p> <v:shape ... o:button="true" ... > </v:shape> </p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
bwmode (Black-and-White Mode) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies how a shape renders for black-and-white output devices. When a shape is printed on a black-and-white printer or displayed in a black-and-white view in an application, several options are possible. Default is <code>auto</code>, which uses <code>o:bwnormal</code> for normal black-and-white rendering and <code>o:bwpure</code> for pure black-and-white rendering.</p> <p><code>bwnormal</code> and <code>bwpure</code> are subordinate to <code>bwmode</code>. If <code>bwmode</code> is "auto" then the value for <code>bwnormal</code> or <code>bwpure</code> is used depending on what the output format is. An application can define for itself what, if any, difference there is between normal B&W and pure B&W. [Example: Normal B&W might allow greyscale and pure B&W might not. <i>end example]</i></p> <p>[Example: This shape renders in grayscale in a black-and-white environment:</p> <p> <v:shape ... o:bwmode="grayscale" ... > </v:shape> </p> <p><i>end example]</i></p>


Attributes	Description
<p>bwnormal (Normal Black-and-White Mode)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p> <p>Specifies the black-and-white mode for normal black-and-white output devices. Default is auto.</p> <p>[Example: This shape renders in a pale grayscale in a normal black-and-white environment:</p> <pre><v:shape ... o:bwmode="auto" o:bwnormal="lightgrayscale" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
<p>bwpure (Pure Black-and-White Mode)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the black-and-white mode for pure black-and-white output devices. Default is auto.</p> <p>[Example: This shape renders in high contrast when in a pure black-and-white environment:</p> <pre><v:shape ... o:bwmode="auto" o:bwpure="highcontrast" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
<p>chromakey (Image Transparency Color)</p>	<p>Specifies a color value that is transparent and show anything behind the shape. Default is no value.</p> <p>[Example:</p> <pre><v:image ... chromakey="white" ...> </v:image></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
<p>class (CSS Reference)</p>	<p>Specifies a reference to the definition of a CSS style. Default is no value.</p> <p>[Example: The snippets below are equivalent:</p>

Attributes	Description
	<pre>narrowstyle {width:50;height:100} ... <v:shape ... class="narrowstyle" style="top:1;left:1"> </v:shape> <v:shape ... style="top:1;left:1; width:50;height:100"> </v:shape> end example] The possible values for this attribute are defined by the W3C XML Schema string datatype. </pre>
<p>clip (Clipping Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that the clipping region is active. This is used in conjunction with the clippath (§19.2.2.3) element to create a clipping region.</p> <p>[Example:</p> <pre> <v:shape ... o:clip="true"> </v:shape> end example] The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5). </pre>
<p>cliptowrap (Clip to Wrapping Polygon)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that the clipping region for the shape aligns with the wrapping polygon that tightly surrounds the entire shape (essentially, that the shape shall not be drawn beyond its wrapping polygon's extents – if it does, the shape shall be clipped). Default is false.</p> <p>[Example:</p> <pre> <v:shape ... o:cliptowrap="true"> </v:shape> end example] The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5). </pre>
<p>connectortype (Shape Connector Type)</p> <p>Namespace:</p>	<p>Specifies the kind of connector used for joining shapes. Default is straight.</p> <p>[Example:</p> <pre> <v:shape ... o:connectortype="elbow" ... > </pre>

Attributes	Description
urn:schemas-microsoft-com:office:office	<p><code></v:shape></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ConnectorType simple type (§19.2.3.7).</p>
coordorigin (Coordinate Space Origin)	<p>Specifies the coordinate of the top left corner of the shape's coordinate space. This determines the position of the (0,0) coordinate space origin within the shape's bounding box. Default is "0,0", which places the (0,0) origin at the top left corner of the bounding box.</p> <p>This affects shape properties that specify coordinate positions, such as the path attribute. Thus a path can be defined against a generic (0,0) origin and the coordorigin value translates the entire path within the shape's bounding space.</p> <p>[Example: The horizontal and vertical coordinate space ranges from -100 to +100 because the coordinate space (coordsize) is 200 by 200 and the top left coordinate is (-100,-100). The (0,0) origin lies at the center of the shape's bounding box, as evidenced by the position of the shape's path within the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
coordsize (Coordinate Space Size)	<p>Specifies the size of the shape's coordinate space in coordinate units. Default is "1000,1000".</p> <p>The physical size of a coordinate unit length is determined by both the size of the coordinate space (coordsize) and the size of the shape (style width and height). The coordsize attribute defines the number of horizontal and vertical subdivisions into which the shape's bounding box is divided. The combination of coordsize and style width/height effective scales the shape anisotropically.</p> <p>[Example: The path is 50 units wide and tall, which is 25% of the size of the coordinate space:</p> <pre><v:shape ... coordsize="200,200"</pre>



Attributes	Description
	<pre>coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>dgmlayout (Diagram Node Layout Identifier)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the kind of automatic layout to apply to the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element.</p> <p>[Example:</p> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).</p>
<p>dgmlayoutmru (Diagram Node Recent Layout Identifier)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the kind of automatic layout most recently used on the child elements of the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element.</p> <p>[Example:</p> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).</p>
<p>dgmnodekind (Diagram Node Identifier)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies an optional, application-defined parameter that is intended to be used by the application to tag different types of nodes in a diagram.</p> <p>[Example:</p> <pre><v:shape ... dgmnodekind="1"> </v:shape></pre>

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
<p>doubleclicknotify (Double-click Notification Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that an event message is sent when a shape is double-clicked. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:doubleclicknotify="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>fillcolor (Fill Color)</p>	<p>Specifies the color to use for the fill. Default is white. If the fill element (§19.1.2.5) is present, its color attribute takes precedence. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example: This shape is red if its fill is visible:</p> <pre><v:shape ... fillcolor="red" ... > </v:shape></pre> <p>This is equivalent to:</p> <pre><v:shape ... fillcolor="#ff0000" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
<p>filled (Shape Fill Toggle)</p>	<p>Specifies whether the closed path is filled. Default is true. This attribute is overridden by the fill on attribute.</p> <p>[Example:</p> <pre><v:shape ... filled="f" fillcolor="red" ...> </v:shape></pre>



Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>forcedash (Force Dashed Outline)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a dashed outline is used to draw a shape when a shape has no line or fill. Default is <code>false</code>.</p> <p>Used by PresentationML placeholders to draw a dashed outline when there is no line and no fill for a shape.</p> <p>[Example:</p> <pre><v:shape ... o:forcedash="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>hr (Horizontal Rule Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that a shape is a horizontal rule. Default is <code>false</code>.</p> <p>[Example:</p> <pre><v:shape ... o:hr="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>hralign (Horizontal Rule Alignment)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the alignment of a horizontal rule. Default is <code>left</code>.</p> <p>[Example:</p> <pre><v:shape ... o:hralign="center" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_HrAlign simple type (§19.2.3.16).</p>


Attributes	Description
href (Hyperlink Target)	<p>Specifies a hyperlink URL target for the shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... href="http://www.openxmlformats.org" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
hrnoshade (Horizontal Rule 3D Shading Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies that the horizontal rule does not have 3-D shading. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hrnoshade="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
hrpct (Horizontal Rule Length Percentage) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the length of a horizontal rule as a percentage of page width. Default is 0.</p> <p>[Example:</p> <pre><v:shape ... o:hrpct="85" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
hrstd (Horizontal Rule Standard Display Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether a shape is displayed as a standard horizontal rule. Only applies if hr is true. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hrstd="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
id (Unique	<p>Specifies a unique identifier that can be used to reference a VML object.</p>

Attributes	Description
Identifier)	<p>Default is no value.</p> <p>[Example:</p> <pre><v:shape ... id="myShape" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
insetmode (Text Inset Mode) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the application calculates the internal text margin instead of using the inset attribute. Default is custom. This attribute is only meaningful for text boxes.</p> <p>[Example:</p> <pre><v:shape ... o:insetmode="auto" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_InsetMode simple type (§19.2.3.17).</p>
insetpen (Inset Border From Path)	<p>Specifies that the border shall be displayed inside of the path defining the shape, rather than along the path (the default border placement), or outside of the path as might be done with an image.</p> <p>[Example:</p> <pre><v:shape ... insetpen="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
ole (Embedded Object Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the shape is an embedded object. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:ole="true" ... > </v:shape></pre> <p><i>end example]</i></p>

Attributes	Description
<p>oleicon (Embedded Object Icon Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>The possible values for this attribute are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).</p> <p>Specifies whether an embedded object is displayed as an icon. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:oleicon="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>oned (Shape Handle Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the extra handles of a shape are hidden. If true, hides all shape handles except the top left and bottom right; that is, the same handles that are used for a straight line segment. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:oned="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>opacity (Fill Color Opacity)</p>	<p>Specifies the opacity of the primary fill color. Default is 1.0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. [Example: A value of "52429f" represents 52429/65536 or 0.8. end example]</p> <p>[Example: The red color is 25% opaque:</p> <pre><v:fill type="gradient" color="red" color2="blue" opacity=".25"> </v:fill></pre> <div>  <div>opacity="1"</div>  <div>opacity=".25"</div> </div> <p>end example]</p>

Attributes	Description
	<p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>preferrelative (Relative Resize Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the original size of an object is saved after reformatting. Default is false. If true, the original size of the object is stored and all resizing is based on a percentage of that original size. Otherwise, each resizing resets the scale to 100%.</p> <p>[Example:</p> <pre><v:shape ... o:preferrelative="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>print (Print Toggle)</p>	<p>Specifies whether the shape is printed. Default is true.</p> <p>[Example:</p> <pre><v:shape ... print="false" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>regroupid (Regroup ID)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies a previous group for a shape. An ID number is used to identify groups of shapes that are no longer grouped. This allows shapes to be regrouped programmatically.</p> <p>[Example: The shape was part of a group identified by the ID 040754:</p> <pre><v:shape ... o:regroupid="040754" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
<p>spid (Optional String)</p> <p>Namespace: urn:schemas-microsoft-</p>	<p>Specifies an optional string that an application can use to identify the particular shape. Default is no value.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

Attributes	Description
com:office:office	
spt (Optional Number) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies an optional number that an application can use to associate the particular shape with a defined shape type. Default is 0.</p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
strokecolor (Shape Stroke Color)	<p>Specifies the primary color of the brush to use to stroke the path of the shape. Default is black. The color attribute of the stroke element (§19.1.2.21) overrides this. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example:</p> <pre><v:shape ... strokecolor="red" ...> </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
stroked (Shape Stroke Toggle)	<p>Specifies whether the path defining the shape is stroked with a solid line. The stroke element (§19.1.2.21) defines other strokes. The on attribute of the stroke element overrides this attribute. Default is true.</p> <p>[Example:</p> <pre><v:shape ... fillcolor="red" stroked="false" strokecolor="blue"...> </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>

Attributes	Description						
<p>strokeweight (Shape Stroke Weight)</p>	<p>Specifies the width of the brush to use to stroke the path. Default is 1 point. If a number is given without units, the emu is used. The weight attribute of the stroke element (§19.1.2.21) overrides this attribute.</p> <p>[Example:</p> <pre><v:shape ... strokeweight="3pt" ... > </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>						
<p>style (Shape Styling Properties)</p>	<p>Specifies the CSS2 styling properties of the shape. The CSS2 (Cascading Style Sheets, Level 2) specification, a Recommendation of the World Wide Web Consortium, is available here: http://www.w3.org/TR/REC-CSS2.</p> <p>This attribute uses a semi-colon delimited list of “name:value” pairs, the syntax defined by section 4.1.8 of the CSS2 specification for grouped declarations (without the surrounding braces). The following tables define the allowed properties and the VML treatment of each.</p> <p>[Example:</p> <pre><v:shape ... style='position:absolute;width:100pt;height:50pt' ... > </v:shape></pre> <p>end example]</p> <table> <tr> <th>Property</th><th>Description</th></tr> <tr> <td>flip</td><td> <p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. </td></tr> <tr> <td>height</td><td> <p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> </td></tr> </table>	Property	Description	flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. 	height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p>
Property	Description						
flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. 						
height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p>						

Attributes	Description	
		<ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	left	<p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-bottom	<p>Specifies the position of the bottom of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	margin-left	<p>Specifies the position of the left of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.

Attributes	Description	
	margin-right	<p>Specifies the position of the right of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-top	<p>Specifies the position of the top of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	mso-position-horizontal	<p>Specifies the horizontal positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • left • center • right • inside • outside
	mso-position-horizontal-relative	<p>Specifies relative horizontal position data for objects in WordprocessingML documents. This modifies the mso-position-horizontal property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • char

Attributes	Description	
	mso-position-vertical	<p>Specifies the vertical positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • top • center • bottom • inside • outside
	mso-position-vertical-relative	<p>Specifies relative vertical position data for objects in WordprocessingML documents. This modifies the mso-position-vertical property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • line
	mso-wrap-distance-bottom	<p>Specifies the distance from the bottom of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-left	<p>Specifies the distance from the left side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-right	<p>Specifies the distance from the right side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-top	<p>Specifies the distance from the top of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-edited	<p>Specifies whether the wrap coordinates were customized by the user. If the wrap coordinates are generated by an editor, this property is true; otherwise they were customized by a user.</p>

Attributes	Description	
		Default is false.
	mso-wrap-style	<p>Specifies the wrapping mode for text in shapes in WordprocessingML documents. Default is square. Allowed values are:</p> <ul style="list-style-type: none"> square - Wraps text inside the shape in a square. none - Text does not wrap.
	position	<p>Specifies the kind of positioning used to place an element. Default is static. When the element is contained inside a group, this property shall be absolute. Allowed values are:</p> <ul style="list-style-type: none"> static - The element is positioned according to the normal flow of the page. The top and left properties are ignored. If the object is anchored inline, this value is used. absolute - The element is positioned relative to the parent, using the top and left properties. relative - The element is positioned according to the normal flow of the page, but the top and left properties are used. The overlap of overlapping elements is governed by the z-index property.
	rotation	<p>Specifies the angle that a shape is rotated, in degrees. Default is 0. Positive angles are clockwise.</p>
	top	<p>Specifies the position of the top of the containing block of the shape relative to the element above it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> auto - Default position of an element in the flow of the page. <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. <percentage>- Value expressed as a percentage of the parent object's height.
	visibility	<p>Specifies whether a shape is displayed. Only inherit and hidden are used; any other values are mapped to inherit. Default is inherit. Allowed values are:</p> <ul style="list-style-type: none"> hidden - The shape is not visible, but is still part of the flow of the objects in the browser. Mouse events are not processed.

Attributes	Description							
		<ul style="list-style-type: none">• <code>inherit</code> - The visibility state is inherited from the parent of the shape.						
	<code>width</code>	<p>Specifies the width of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none">• <code>auto</code> - Default position of an element in the flow of the page.• <code><units></code>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed.• <code><percentage></code>- Value expressed as a percentage of the parent object's width.						
	<code>z-index</code>	<p>Specifies the display order of overlapping shapes. Default is 0. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none">• <code>auto</code> - Uses the order that the shapes appear in the page, bottom to top.• <code><order></code>- A number that represents the stacking precedence. Shapes with higher numbers are placed on top of those with lower numbers. Negative numbers are allowed.						
The following properties are only used by the textbox element (§19.1.2.22):								
<table><tr><th>Property</th><th>Description</th></tr><tr><td><code>direction</code></td><td><p>Specifies the direction of the text in the textbox. Default is <code>ltr</code>. This property is superceded by the <code>mso-direction-alt</code> property if that is specified. Allowed values are:</p><ul style="list-style-type: none">• <code>ltr</code> - Text is displayed left-to-right.• <code>rtl</code> - Text is displayed right-to-left.</td></tr><tr><td><code>layout-flow</code></td><td><p>Determines the flow of the text layout in a textbox. Default is <code>horizontal</code>. Allowed values are:</p><ul style="list-style-type: none">• <code>horizontal</code> - Text is displayed horizontally.• <code>vertical</code> - Text is displayed vertically.• <code>vertical-ideographic</code> - Ideographic text is displayed vertically.• <code>horizontal-ideographic</code> - Ideographic text is displayed horizontally.</td></tr></table>			Property	Description	<code>direction</code>	<p>Specifies the direction of the text in the textbox. Default is <code>ltr</code>. This property is superceded by the <code>mso-direction-alt</code> property if that is specified. Allowed values are:</p> <ul style="list-style-type: none">• <code>ltr</code> - Text is displayed left-to-right.• <code>rtl</code> - Text is displayed right-to-left.	<code>layout-flow</code>	<p>Determines the flow of the text layout in a textbox. Default is <code>horizontal</code>. Allowed values are:</p> <ul style="list-style-type: none">• <code>horizontal</code> - Text is displayed horizontally.• <code>vertical</code> - Text is displayed vertically.• <code>vertical-ideographic</code> - Ideographic text is displayed vertically.• <code>horizontal-ideographic</code> - Ideographic text is displayed horizontally.
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<code>direction</code>	<p>Specifies the direction of the text in the textbox. Default is <code>ltr</code>. This property is superceded by the <code>mso-direction-alt</code> property if that is specified. Allowed values are:</p> <ul style="list-style-type: none">• <code>ltr</code> - Text is displayed left-to-right.• <code>rtl</code> - Text is displayed right-to-left.							
<code>layout-flow</code>	<p>Determines the flow of the text layout in a textbox. Default is <code>horizontal</code>. Allowed values are:</p> <ul style="list-style-type: none">• <code>horizontal</code> - Text is displayed horizontally.• <code>vertical</code> - Text is displayed vertically.• <code>vertical-ideographic</code> - Ideographic text is displayed vertically.• <code>horizontal-ideographic</code> - Ideographic text is displayed horizontally.							

Attributes	Description	
	mso-direction-alt	Specifies an alternate direction for text in textboxes. Overrides the direction property. The only allowed value is context.
	mso-fit-shape-to-text	Specifies whether the shape stretches to fit the text in the textbox. Default is false.
	mso-fit-text-to-shape	Specifies whether the text stretches to fit the textbox. Default is false.
	mso-layout-flow-alt	Specifies the alternate layout flow for text in textboxes. This property is used instead of layout-flow when the layout flow is from bottom to top for non-ideographic languages. Its only value is bottom-to-top.
	mso-next-textbox	Specifies the ID of the next textbox in a series. Used to keep track of a set of linked textboxes. Default is no value.
	mso-rotate	<p>Specifies a specific rotation value for text in a textbox. Default is 0. Allowed values are:</p> <ul style="list-style-type: none"> • 0 • 90 • 180 • -90
	mso-text-scale	Specifies the scaling factor for fitting text to shapes. Default is 0. This property is only used if mso-fit-text-to-shape is true.
	v-text-anchor	<p>Specifies the vertical anchoring of text in a textbox. Default is top. The alignment of a text anchor only becomes evident if mso-fit-text-to-shape is false. This property is different from the vertical-align CSS property, which is used for ideographic languages. Allowed values are:</p> <ul style="list-style-type: none"> • top • middle • bottom • top-center • middle-center • bottom-center • top-baseline • bottom-baseline • top-center-baseline • bottom-center-baseline

Attributes	Description																										
	<p>The following properties are only used by the textpath element (§19.1.2.23):</p> <table border="1"> <thead> <tr> <th>Property</th><th>Description</th></tr> </thead> <tbody> <tr> <td>font</td><td>Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.</td></tr> <tr> <td>font-family</td><td>Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.</td></tr> <tr> <td>font-size</td><td>Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.</td></tr> <tr> <td>font-style</td><td> Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are: <ul style="list-style-type: none"> • normal • italic • oblique - Treated the same as italic. </td></tr> <tr> <td>font-variant</td><td> Specifies the variant style of a font. Default is normal. The values are the same as those of the CSS font-variant property. Allowed values are: <ul style="list-style-type: none"> • normal • small-caps </td></tr> <tr> <td rowspan="8">font-weight</td><td rowspan="7"> Specifies the thickness of the letters of the font. Default is normal. The values are the same as those of the CSS font-weight property. Allowed values are: </td></tr> <tr> </tr> <tr> </tr> <tr> </tr> <tr> </tr> <tr> </tr> <tr> </tr> <tr> <td> <table border="1"> <thead> <tr> <th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td>normal</td><td rowspan="6">Treated as non-bold.</td></tr> <tr> <td>lighter</td></tr> <tr> <td>100</td></tr> <tr> <td>200</td></tr> <tr> <td>300</td></tr> <tr> <td>400</td></tr> <tr> <td>bold</td><td>Treated as bold.</td></tr> </tbody> </table> </td></tr> </tbody> </table>	Property	Description	font	Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.	font-family	Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.	font-size	Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.	font-style	Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are: <ul style="list-style-type: none"> • normal • italic • oblique - Treated the same as italic. 	font-variant	Specifies the variant style of a font. Default is normal. The values are the same as those of the CSS font-variant property. Allowed values are: <ul style="list-style-type: none"> • normal • small-caps 	font-weight	Specifies the thickness of the letters of the font. Default is normal. The values are the same as those of the CSS font-weight property. Allowed values are:	<table border="1"> <thead> <tr> <th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td>normal</td><td rowspan="6">Treated as non-bold.</td></tr> <tr> <td>lighter</td></tr> <tr> <td>100</td></tr> <tr> <td>200</td></tr> <tr> <td>300</td></tr> <tr> <td>400</td></tr> <tr> <td>bold</td><td>Treated as bold.</td></tr> </tbody> </table>	Value	Description	normal	Treated as non-bold.	lighter	100	200	300	400	bold	Treated as bold.
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Attributes	Description	
		<p>bolder</p> <p>500</p> <p>600</p> <p>700</p> <p>800</p> <p>900</p>
mso-text-shadow		<p>Specifies whether a shadow is applied to the text on a text path. Default is false.</p>
text-decoration		<p>Specifies the style of text decoration. Default is none. The values are the same as those of the CSS text-decoration property. Allowed values are:</p> <ul style="list-style-type: none"> • none • underline • overline • line-through • blink
v-rotate-letters		<p>Specifies whether the letters of the text are rotated counterclockwise by 90 degrees. Default is false.</p>
v-same-letter-heights		<p>Specifies whether all letters are the same height regardless of initial case. If true, the lowercase letters are stretched to the height of the uppercase letters. Default is false.</p>
v-text-align		<p>Specifies the alignment of text. Default is left. Allowed values are:</p> <ul style="list-style-type: none"> • left • right • center • justify • letter-justify - Distributes the extra space between the letters. • stretch-justify - Stretches the letters to fill in the space.
v-text-kern		<p>Specifies whether kerning is turned on. Default is false.</p>
v-text-reverse		<p>Specifies whether the layout order of rows is reversed. Default is false. This is used for vertical text layout.</p>

Attributes	Description	
	v-text-spacing-mode	Specifies the mode for letter spacing. Default is tightening. This property determines whether space is removed between each letter (tightening) or added between each letter (tracking). The amount of letter spacing change is defined by the v-text-spacing property. Allowed values are: <ul style="list-style-type: none">tighteningtracking
	v-text-spacing	Specifies the amount of spacing for text in 100ths of single line spacing. Default is 100.
	<p>The line (§19.1.2.12), polyline (§19.1.2.15) and curve (§19.1.2.3) elements ignore the following properties:</p> <ul style="list-style-type: none">topleftwidthheight	
	<p>The following properties are not inherited by an element that references a shapetype element (§19.1.2.20) via the id attribute:</p> <ul style="list-style-type: none">flipheightleftmargin-leftmargin-toppositionrotationtopvisibilitywidthz-index	
	<p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>	
target (Hyperlink Display Target)	Specifies a frame or window that a URL is displayed in. Default is no value. Allowed values are:	
	Value	Description
	<targetname>	String containing the name of the frame or window in which to load the document.

Attributes	Description												
	<table border="1"> <tr> <td><code>_blank</code></td><td>Specifies that the linked document is loaded into a new blank window. This window is not named.</td></tr> <tr> <td><code>_media</code></td><td>Specifies that the linked document is loaded into the browser's multimedia pane.</td></tr> <tr> <td><code>_parent</code></td><td>Specifies that the linked document is loaded into the immediate parent of the document containing the link.</td></tr> <tr> <td><code>_search</code></td><td>Specifies that the linked document is loaded into the browser's search pane.</td></tr> <tr> <td><code>_self</code></td><td>Specifies that the linked document is loaded into the window in which the link was clicked (the active window).</td></tr> <tr> <td><code>_top</code></td><td>Specifies that the linked document is loaded into the topmost window.</td></tr> </table> <p>[Example:</p> <pre> <v:shape ... href="http://www.openxmlformats.org" target="_self" ... > </v:shape> </pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>	<code>_blank</code>	Specifies that the linked document is loaded into a new blank window. This window is not named.	<code>_media</code>	Specifies that the linked document is loaded into the browser's multimedia pane.	<code>_parent</code>	Specifies that the linked document is loaded into the immediate parent of the document containing the link.	<code>_search</code>	Specifies that the linked document is loaded into the browser's search pane.	<code>_self</code>	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).	<code>_top</code>	Specifies that the linked document is loaded into the topmost window.
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<code>_top</code>	Specifies that the linked document is loaded into the topmost window.												
title (Shape Title)	<p>Specifies the text displayed when the mouse pointer moves over the shape. Default is no value.</p> <p>[Example:</p> <pre> <v:shape ... title="tooltip" ... > </v:shape> </pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>												
userdrawn (Exists In Master Slide) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the user has added the shape to a master slide. Default is false. Used by PresentationML.</p> <p>[Example:</p> <pre> <v:shape ... o:userdrawn="true" ... > </v:shape> </pre>												


Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>userhidden (Hide Script Anchors)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a script anchor is hidden. Default is false. If true, script anchors stay hidden even if the shape is otherwise visible. A script anchor is the visual representation of a script that when displayed in an application.</p> <p>[Example:</p> <pre><v:shape ... o:userhidden="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>wrapcoords (Shape Bounding Polygon)</p>	<p>Specifies the bounding polygon that surrounds a shape. This is specified using a comma-delimited list of x and y coordinates: "x1,y1,x2,y2,x3,y3,..." This is used when text is tightly wrapped around a shape. Default is no value until the mso-wrap-mode style attribute is set to tight or through.</p> <p>[Example:</p> <pre><v:shape ... wrapcoords="0,0 0,200, 200,200, 200,0" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_Oval](#)) is located in §A.6.1. *end note]*


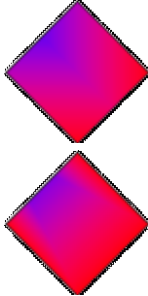
19.1.2.14 path (Shape Path)

This element defines the path that makes up the shape. This is done through a string that contains a rich set of pen movement commands. This element also describes the limo-stretch point, inscribed textbox rectangle locations and connection site locations. The limo-stretch definition and the formulas element (§19.1.2.6) allow greater designer control of how the path scales. [Example: They allow, for example, definition of a true rounded corner rectangle where the corners remain circular even though the rectangle is scaled anisotropically. *end example]*


Parent Elements
arc (§19.1.2.1); background (Part 1, §17.2.1); curve (§19.1.2.3); group (§19.1.2.7); image (§19.1.2.10); line (§19.1.2.12); object (Part 1, §17.3.3.19); oval (§19.1.2.13); pict (§14.2.2.2); pict (§14.5.1); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapetype (§19.1.2.20)

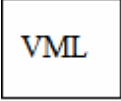

Attributes	Description
arrowok (Arrowhead Display Toggle)	<p>Specifies whether arrowheads are allowed to be displayed. This attribute overrides all other arrowhead attributes in the parent or the stroke element (§19.1.2.21). Default is false.</p> <p>[Example:</p> <pre><v:shape style="width:50;height:50"> <v:stroke endarrow="block"/> <v:path arrowok="true" v="m 0,0 l 1000,0 1000,1000 e"/> </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
connectangles (Connection Point Connect Angles) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the angle at which curves connect to a shape's connection points. The connection angles are defined by a string consisting of angle values delimited by commas. Default is no value.</p> <p>[Example: Connections are made along the horizontal and vertical axes:</p> <pre><v:path ... o:connectangles="0,90,180,270" ... > </v:path></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
connectlocs (Connection Points) Namespace: urn:schemas-microsoft-	<p>Specifies the location of connection points on a path. The connection points are defined by a string consisting of pairs of x and y values, delimited by commas. This is used if connecttype is custom. Default is no value.</p> <p>[Example: Connection points exist at the midpoints of the sides of the square:</p>

Attributes	Description
com:office:office	<pre><v:path ... v="m 0,0 1 100,0 100,100 0,100 x e" o:connectlocs="50,0;100,50;50,100;0,50" ... > </v:path></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
connecttype (Connection Point Type) Namespace: urn:schemas- microsoft- com:office:office	<p>Specifies the kind of connection points used for attaching shapes to other shapes. Default is none. If set to custom, connectlocs is used. Allowed values are:</p> <p>[Example:</p> <pre><v:path ... o:connecttype="custom" o:connectlocs="50,0;100,50;50,100;0,50" ... > </v:path></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ConnectType simple type (§19.2.3.8).</p>
extrusionok (Extrusion Toggle) Namespace: urn:schemas- microsoft- com:office:office	<p>Specifies whether an extrusion is allowed to be displayed. This attribute overrides all other extrusion attributes in the parent or the extrusion element (§19.2.2.11). Default is true.</p> <p>[Example:</p> <pre><v:rect fillcolor="lime" style="width:50;height:50"> <v:extrusion on="true"/> <v:path o:extrusionok="false"/> </v:rect></pre> <div> </div> <pre><v:path o:extrusionok="false"/></pre> <div> </div> <pre><v:path o:extrusionok="true"/></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>

Attributes	Description
fillok (Shape Fill Toggle)	<p>Specifies whether a fill is allowed to be displayed. This attribute overrides all other fill attributes in the parent or fill element (§19.1.2.5). Default is true.</p> <p>[Example:</p> <pre><v:shape style="width:50;height:50" fillcolor="red"> <v:path fillok="false" v="m 0,0 l 0,1000, 1000,1000, 1000,0 x e"/> </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
gradientshapeok (Gradient Shape Toggle)	<p>Specifies whether a gradient path is made up of repeated concentric paths. Default is false.</p> <p>If true, a gradient fill can be produced by repeated drawing of scaled versions of the path - this shall only be set if it is possible to scale the path in such a way that a fill is always contained in the original path. This controls the interpretation of the type="gradientradial" attribute of the fill element (§19.1.2.5).</p> <p>[Example: In the first case, the radial gradient is aligned irrespective of the shape's path:</p> <pre><v:shape style="width:50;height:50;rotation:45" path="m 0,0 l 0,1000, 1000,1000, 1000,0 x e"> <v:path gradientshapeok="false"/> <v:fill type="gradientradial" color="red" color2="blue"/> </v:shape></pre>  <p>gradientshapeok="false"</p> <p>gradientshapeok="true"</p> <p>end example]</p>

Attributes	Description
	<p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>id (Unique Identifier)</p>	<p>Specifies a unique identifier that can be used to reference a VML object.</p> <p>Default is no value.</p> <p>[Example:</p> <pre><v:shape ... id="myShape" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>insetpenok (Inset Stroke From Path Flag)</p>	<p>Specifies whether the stroke can be inset from the path. If this is false, it overrides the insetpen attribute and prevents the stroke from being inset.</p> <p>[Example: The stroke is not inset:</p> <pre><v:shape ... insetpen="true"> <v:path ... insetpenok="false"/> </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>limo (Limo Stretch Point)</p>	<p>Specifies a stretch point on the shape's edge that defines where and how a shape is allowed to be stretched by a user in a graphical editor. Default is "0,0".</p> <p>[Example:</p> <pre><v:line from="20pt,20pt" to="100pt,20pt"> <v:path limo="60pt,20pt"/> </v:line></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>shadowok (Shadow Toggle)</p>	<p>Specifies whether a shadow is allowed to be displayed. This attribute overrides all other shadow attributes in the parent or the shadow element (§19.1.2.18). Default is true.</p>

Attributes	Description
	<p>[Example: The shape has no shadow:</p> <pre><v:shape style="width:50;height:50"> <v:path v="m 0,0 l 0,1000, 1000,1000, 1000,0 x e" shadowok="false"/> <v:shadow on="true"/> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
strokeok (Stroke Toggle)	<p>Specifies whether a stroke is displayed. This attribute overrides all other stroke attributes in the parent or the stroke element (§19.1.2.21). Default is true.</p> <p>[Example: The shape's red stroke is not shown:</p> <pre><v:shape style="width:50;height:50" fillcolor="blue" strokecolor="red"> <v:path v="m 0,0 l 0,1000, 1000,1000, 1000,0 x e" strokeok="false"/> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
textboxrect (Text Box Bounding Box)	<p>Specifies one or more text boxes inside a shape. Default is the same as the geometry's bounding box.</p> <p>A textbox is defined by one or more sets of numbers specifying (in order) the left, top, right, and bottom points of the rectangle. Multiple sets are delimited by a semicolon. The default value is the same dimension value as the containing rectangle. If more than one textbox is defined, the comma-delimited quadruple sets that define each textbox are separated by semicolons. Normally textboxes come in sets of 1, 2, 3, or 6 rectangles on a shape. The textboxrect dimensions clip any text that extends beyond its region.</p> <p>[Example: The textbox is 25% down from the top and the exclamation point is clipped:</p> <pre><v:shape style="width:60;height:50"> <v:path v="m 0,0 l 0,1000, 1000,1000, 1000,0 x e" textboxrect="0,250,850,1000"/></pre>

Attributes	Description
	<pre><v:textbox>VML!</v:textbox> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
textpathok (Text Path Toggle)	<p>Specifies whether a text path is displayed. Default is false.</p> <p>If true, this indicates that the path is an appropriate warping path for the textpath element (§19.1.2.23). Otherwise, the textpath element shall be ignored.</p> <p>[Example: The defined textpath is ignored:</p> <pre><v:curve from="50,100" to="400,100" control1="200,200" control2="300,200"> <v:path textpathok="false"/> <v:textpath on="false" style="font:normal normal normal 36pt Arial" string="textpath"/> </v:curve></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
v (Path Definition)	<p>Specifies a string containing the commands that define the shape's path. This value consists of commands followed by zero or more parameters. Default is no value.</p> <p>The following rules apply to path strings:</p> <ul style="list-style-type: none"> Commas or spaces delimit parameters for each command. Both "m 0,0" and "m0 0" are acceptable. A parameter that is omitted using commas is treated as having a value of zero. Thus, "c 10,10,0,0,25,13" and "c 10,10,,,25,13" are equivalent. Parameterized paths are also allowed. In this case, the shape shall also have a formulas element (§19.1.2.6) with a list of formulas that are substituted into the path using the @ symbol followed by the number of the formula. The adj

Attributes	Description																																								
	<p>property of the shape contains the input parameters for these formulas. [Example: For example, "moveto @1@4". end example] The evaluations of the formulas are substituted into the appropriate positions. The @ character also serves as a delimiter.</p> <p>The allowed commands are given below. An asterisk (*) indicates that the command is allowed to be repeated. For the qb command, the controlpoint parameter is also allowed to be repeated.</p> <table><tr><th>Command</th><th>Name</th><th>Parameters</th><th>Description</th></tr><tr><td>m</td><td>moveto</td><td>2</td><td>Start a new sub-path at the given (x,y) coordinate.</td></tr><tr><td>l</td><td>lineto</td><td>2*</td><td>Draw a line from the current point to the given (x,y) coordinate which becomes the new current point. Specifying a number of coordinate pairs forms a polyline.</td></tr><tr><td>c</td><td>curveto</td><td>6*</td><td>Draw a cubic bézier curve from the current point to the coordinate given by the final two parameters. The control points are given by the first four parameters.</td></tr><tr><td>x</td><td>close</td><td>0</td><td>Close the current sub-path by drawing a straight line from the current point to the original moveto point.</td></tr><tr><td>e</td><td>end</td><td>0</td><td>End the current set of sub-paths. A given set of sub-paths (as delimited by end) is filled. Subsequent sets of sub-paths are filled independently and superimposed on existing ones.</td></tr><tr><td>t</td><td>rmoveto</td><td>2*</td><td>Start a new sub-path at a coordinate relative to the current point, cp (cpx+x, cpy+y).</td></tr><tr><td>r</td><td>rlineto</td><td>2*</td><td>Draw a line from the current point to the given relative coordinate (cpx+x, cpy+y).</td></tr><tr><td>v</td><td>rcurveto</td><td>6*</td><td>Cubic bézier curve using the given coordinate relative to the current point.</td></tr><tr><td>nf</td><td>nofill</td><td>0</td><td>The current set of sub-paths (delimited by e) is not filled.</td></tr></table>	Command	Name	Parameters	Description	m	moveto	2	Start a new sub-path at the given (x,y) coordinate.	l	lineto	2*	Draw a line from the current point to the given (x,y) coordinate which becomes the new current point. Specifying a number of coordinate pairs forms a polyline.	c	curveto	6*	Draw a cubic bézier curve from the current point to the coordinate given by the final two parameters. The control points are given by the first four parameters.	x	close	0	Close the current sub-path by drawing a straight line from the current point to the original moveto point.	e	end	0	End the current set of sub-paths. A given set of sub-paths (as delimited by end) is filled. Subsequent sets of sub-paths are filled independently and superimposed on existing ones.	t	rmoveto	2*	Start a new sub-path at a coordinate relative to the current point, cp (cpx+x, cpy+y).	r	rlineto	2*	Draw a line from the current point to the given relative coordinate (cpx+x, cpy+y).	v	rcurveto	6*	Cubic bézier curve using the given coordinate relative to the current point.	nf	nofill	0	The current set of sub-paths (delimited by e) is not filled.
Command	Name	Parameters	Description																																						
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Attributes	Description			
	ns	nostroke	0	The current set of sub-paths (delimited by e) is not stroked.
	ae	angleellipseto	6*	Draws a segment of an ellipse as described using these parameters. A straight line is drawn from the current point to the start point of the segment. The parameters are: center (x,y), size(w,h), start angle, end angle.
	al	angleellipse	6*	Same as angleellipseto except that there is an implied moveto the starting point of the segment.
	at	arcto	8*	A segment of the ellipse is drawn which starts at the angle defined by the start radius vector and ends at the angle defined by the end vector. A straight line is drawn from the current point to the start of the arc. The arc is always drawn in a counterclockwise direction. The parameters are: left, top, right, bottom, start(x,y), end(x,y). The first four values define the bounding box of an ellipse. The last four define two radial vectors.
	ar	arc	8*	Same as arcto except there is an implied moveto the start point of the arc.
	wa	clockwisearco	8*	Same as arcto but the arc is drawn in a clockwise direction.
	wr	clockwisearc	8*	Same as arc but the arc is drawn in a clockwise direction
	qx	ellipticalquadrant x	2*	A quarter ellipse is drawn from the current point to the given end point. The elliptical segment is initially tangential to a line parallel to the x-axis. (i.e. the segment starts out horizontal). The parameters are: end(x,y).
	qy	ellipticalquadrant y	2*	Same as ellipticalquadrantx except that the elliptical segment is initially tangential to a line parallel to the y-axis (i.e. the segment starts out vertical).

Attributes	Description			
	qb	quadraticbezier	2+2*	Defines one or more quadratic bézier curves by means of control points and an end point. Intermediate (on-curve) points are obtained by interpolation between successive control points as in the OpenType font specification. The sub-path need not be started in which case the sub-path is closed. In this case the last point of the sub-path defines the start point of the quadratic bézier. The parameters are: controlpoint(x,y)*, end(x,y).
	The possible values for this attribute are defined by the W3C XML Schema string datatype.			

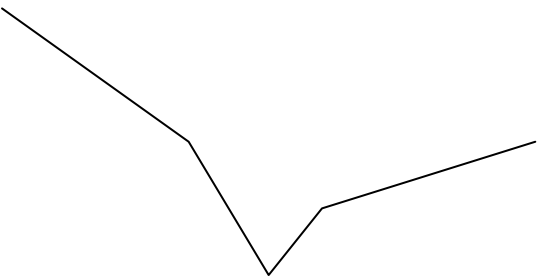
[Note: The W3C XML Schema definition of this element’s content model ([CT_Path](#)) is located in §A.6.1. *end note*]

19.1.2.15 [polyline \(Multiple Path Line\)](#)

This element defines shapes made up of connected line segments.

[Example:

```
<v:polyline
  points="50pt,0pt 120pt,50pt 150pt,100pt 170pt,75pt 250pt,50pt">
</v:polyline>
```



end example]

Parent Elements
background (Part 1, §17.2.1); group (§19.1.2.7); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1)

Child Elements	Subclause
anchorlock (Anchor Location Is Locked)	§19.3.2.1
borderbottom (Bottom Border)	§19.3.2.2
borderleft (Left Border)	§19.3.2.3
borderright (Right Border)	§19.3.2.4
bordertop (Top Border)	§19.3.2.5
callout (Callout)	§19.2.2.2
ClientData (Attached Object Data)	§19.4.2.12
clippath (Shape Clipping Path)	§19.2.2.3
extrusion (3D Extrusion)	§19.2.2.11
fill (Shape Fill Properties)	§19.1.2.5
formulas (Set of Formulas)	§19.1.2.6
handles (Set of Handles)	§19.1.2.9
imagedata (Image Data)	§19.1.2.11
ink (Ink)	§19.2.2.15
lock (Shape Protections)	§19.2.2.18
path (Shape Path)	§19.1.2.14
shadow (Shadow Effect)	§19.1.2.18
signatureline (Digital Signature Line)	§19.2.2.30
skew (Skew Transform)	§19.2.2.31
stroke (Line Stroke Settings)	§19.1.2.21
textbox (Text Box)	§19.1.2.22
textdata (VML Diagram Text)	§19.5.2.2
textpath (Text Layout Path)	§19.1.2.23
wrap (Text Wrapping)	§19.3.2.6

Attributes	Description
allowincell (Allow in Table Cell) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether a shape can be placed in a table. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:allowincell="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type</p>



Attributes	Description
<p>allowoverlap (Allow Shape Overlap)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>(§20.1.2.5).</p> <p>Specifies whether a shape can overlap another shape. Default is true. If false, the shape shifts left or right so as not to overlap another shape, similar to the behavior of the HTML float attribute.</p> <p>[Example:</p> <pre><v:shape ... o:allowoverlap="false" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>alt (Alternate Text)</p>	<p>Specifies alternative text describing the graphical object. This text should provide a brief description of the shape for use by accessibility tools. Default is no value.</p> <p>[Example: The alt text describes the basic shape:</p> <pre><v:shape ... fillcolor="red" alt="Red rectangle"> </v:shape></pre> <p>The alt text describes the contents of a shape displaying an image:</p> <pre><v:shape ... alt="Picture of a sunset"> </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>borderbottomcolor (Bottom Border Color)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the bottom border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderbottomcolor="red" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>borderleftcolor (Border Left Color)</p>	<p>Specifies the left border color of an inline shape. Default is no value.</p>

Attributes	Description
Namespace: urn:schemas-microsoft-com:office:office	<p>[Example:</p> <pre><v:shape ... o:borderleftcolor="red" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
borderrightcolor (Border Right Color) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the right border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderrightcolor="red" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
bordertopcolor (Border Top Color) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the top border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:bordertopcolor="red" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
bullet (Graphical Bullet) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the shape is a graphical bullet. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:bullet="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
button (Button Behavior Toggle)	<p>Specifies whether a shape exhibits button press behavior on click. Default is false.</p> <p>[Example:</p>


Attributes	Description
Namespace: urn:schemas-microsoft-com:office:office	<pre><v:shape ... o:button="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
bwmode (Black-and-White Mode) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies how a shape renders for black-and-white output devices. When a shape is printed on a black-and-white printer or displayed in a black-and-white view in an application, several options are possible. Default is auto, which uses o:bwnormal for normal black-and-white rendering and o:bwpure for pure black-and-white rendering.</p> <p>bwnormal and bwpure are subordinate to bwmode. If bwmode is "auto" then the value for bwnormal or bwpure is used depending on what the output format is. An application can define for itself what, if any, difference there is between normal B&W and pure B&W. <i>[Example: Normal B&W might allow greyscale and pure B&W might not. end example]</i></p> <p><i>[Example: This shape renders in grayscale in a black-and-white environment:</i></p> <pre><v:shape ... o:bwmode="grayscale" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
bwnormal (Normal Black-and-White Mode) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the black-and-white mode for normal black-and-white output devices. Default is auto.</p> <p><i>[Example: This shape renders in a pale grayscale in a normal black-and-white environment:</i></p> <pre><v:shape ... o:bwmode="auto" o:bwnormal="lightgrayscale" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
bwpure (Pure Black-and-White Mode) Namespace:	<p>Specifies the black-and-white mode for pure black-and-white output devices. Default is auto.</p> <p><i>[Example: This shape renders in high contrast when in a pure black-and-white environment:</i></p>

Attributes	Description
urn:schemas-microsoft-com:office:office	<pre><v:shape ... o:bwmode="auto" o:bwpure="highcontrast" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
chromakey (Image Transparency Color)	<p>Specifies a color value that is transparent and show anything behind the shape. Default is no value.</p> <p>[Example:</p> <pre><v:image ... chromakey="white" ...> </v:image></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
class (CSS Reference)	<p>Specifies a reference to the definition of a CSS style. Default is no value.</p> <p>[Example: The snippets below are equivalent:</p> <pre>... .narrowstyle {width:50;height:100} ... <v:shape ... class="narrowstyle" style="top:1;left:1"> </v:shape></pre> <pre><v:shape ... style="top:1;left:1; width:50;height:100"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
clip (Clipping Toggle) Namespace: urn:schemas-microsoft-	<p>Specifies that the clipping region is active. This is used in conjunction with the clippath (§19.2.2.3) element to create a clipping region.</p> <p>[Example:</p> <pre><v:shape ... o:clip="true"></pre>

Attributes	Description
com:office:office	<p></v:shape></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
cliptowrap (Clip to Wrapping Polygon) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies that the clipping region for the shape aligns with the wrapping polygon that tightly surrounds the entire shape (essentially, that the shape shall not be drawn beyond its wrapping polygon's extents – if it does, the shape shall be clipped). Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:cliptowrap="true"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
connectortype (Shape Connector Type) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the kind of connector used for joining shapes. Default is straight.</p> <p>[Example:</p> <pre><v:shape ... o:connectortype="elbow" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ConnectorType simple type (§19.2.3.7).</p>
coordorigin (Coordinate Space Origin)	<p>Specifies the coordinate of the top left corner of the shape's coordinate space. This determines the position of the (0,0) coordinate space origin within the shape's bounding box. Default is "0,0", which places the (0,0) origin at the top left corner of the bounding box.</p> <p>This affects shape properties that specify coordinate positions, such as the path attribute. Thus a path can be defined against a generic (0,0) origin and the coordorigin value translates the entire path within the shape's bounding space.</p> <p>[Example: The horizontal and vertical coordinate space ranges from -100 to +100 because the coordinate space (coordsize) is 200 by 200 and the top left coordinate is (-100,-100). The (0,0) origin lies at the center of the shape's bounding box, as evidenced by the position of the shape's path within the coordinate space:</p> <pre><v:shape ... coordsize="200,200"</pre>

Attributes	Description
	<pre>coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
coordsize (Coordinate Space Size)	<p>Specifies the size of the shape's coordinate space in coordinate units. Default is "1000,1000".</p> <p>The physical size of a coordinate unit length is determined by both the size of the coordinate space (coordsize) and the size of the shape (style width and height). The coordsize attribute defines the number of horizontal and vertical subdivisions into which the shape's bounding box is divided. The combination of coordsize and style width/height effective scales the shape anisotropically.</p> <p>[Example: The path is 50 units wide and tall, which is 25% of the size of the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
dgmlayout (Diagram Node Layout Identifier) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the kind of automatic layout to apply to the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element.</p> <p>[Example:</p> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <p><i>end example]</i></p>



Attributes	Description
	<p>The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).</p>
<p>dgmlayoutmru (Diagram Node Recent Layout Identifier)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the kind of automatic layout most recently used on the child elements of the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element.</p> <p>[Example:</p> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).</p>
<p>dgmnodekind (Diagram Node Identifier)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies an optional, application-defined parameter that is intended to be used by the application to tag different types of nodes in a diagram.</p> <p>[Example:</p> <pre><v:shape ... dgmnodekind="1"> </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
<p>doubleclicknotify (Double-click Notification Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that an event message is sent when a shape is double-clicked. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:doubleclicknotify="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>fillcolor (Fill Color)</p>	<p>Specifies the color to use for the fill. Default is white. If the fill element (§19.1.2.5) is present, its color attribute takes precedence. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p>

Attributes	Description
	<p>[Example: This shape is red if its fill is visible:</p> <pre><v:shape ... fillcolor="red" ... > </v:shape></pre> <p>This is equivalent to:</p> <pre><v:shape ... fillcolor="#ff0000" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
<p>filled (Shape Fill Toggle)</p>	<p>Specifies whether the closed path is filled. Default is <code>true</code>. This attribute is overridden by the fill on attribute.</p> <p>[Example:</p> <pre><v:shape ... filled="f" fillcolor="red" ...> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>forcedash (Force Dashed Outline)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a dashed outline is used to draw a shape when a shape has no line or fill. Default is <code>false</code>.</p> <p>Used by PresentationML placeholders to draw a dashed outline when there is no line and no fill for a shape.</p> <p>[Example:</p> <pre><v:shape ... o:forcedash="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type</p>


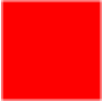

Attributes	Description
<p>hr (Horizontal Rule Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>(§20.1.2.5).</p> <p>Specifies that a shape is a horizontal rule. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hr="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>hralign (Horizontal Rule Alignment)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the alignment of a horizontal rule. Default is left.</p> <p>[Example:</p> <pre><v:shape ... o:hralign="center" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_HrAlign simple type (§19.2.3.16).</p>
<p>href (Hyperlink Target)</p>	<p>Specifies a hyperlink URL target for the shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... href="http://www.openxmlformats.org" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>hrnoshade (Horizontal Rule 3D Shading Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that the horizontal rule does not have 3-D shading. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hrnoshade="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>

Attributes	Description
<p>hrpct (Horizontal Rule Length Percentage)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the length of a horizontal rule as a percentage of page width. Default is 0.</p> <p>[Example:</p> <pre><v:shape ... o:hrpct="85" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
<p>hrstd (Horizontal Rule Standard Display Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape is displayed as a standard horizontal rule. Only applies if hr is true. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hrstd="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>id (Unique Identifier)</p>	<p>Specifies a unique identifier that can be used to reference a VML object.</p> <p>Default is no value.</p> <p>[Example:</p> <pre><v:shape ... id="myShape" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>insetmode (Text Inset Mode)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the application calculates the internal text margin instead of using the inset attribute. Default is custom. This attribute is only meaningful for text boxes.</p> <p>[Example:</p> <pre><v:shape ... o:insetmode="auto" ... > </v:shape></pre> <p>end example]</p>

Attributes	Description
	The possible values for this attribute are defined by the ST_InsetMode simple type (§19.2.3.17).
insetpen (Inset Border From Path)	<p>Specifies that the border shall be displayed inside of the path defining the shape, rather than along the path (the default border placement), or outside of the path as might be done with an image.</p> <p>[Example:</p> <pre><v:shape ... insetpen="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
ole (Embedded Object Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the shape is an embedded object. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:ole="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).</p>
oleicon (Embedded Object Icon Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether an embedded object is displayed as an icon. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:oleicon="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
oned (Shape Handle Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the extra handles of a shape are hidden. If true, hides all shape handles except the top left and bottom right; that is, the same handles that are used for a straight line segment. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:oned="true" ... > </v:shape></pre>

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
opacity (Fill Color Opacity)	<p>Specifies the opacity of the primary fill color. Default is 1.0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. [<i>Example:</i> A value of "52429f" represents 52429/65536 or 0.8. <i>end example]</i></p> <p>[<i>Example:</i> The red color is 25% opaque:</p> <pre><v:fill type="gradient" color="red" color2="blue" opacity=".25"> </v:fill></pre> <div>  opacity="1"  opacity=".25" </div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
points (Points for Compound Line)	<p>Specifies a set of straight line segments that are composed of a series of pairs of points. Default is "0,0 10,10".</p> <p>Points are specified in the coordinate system of the parent element. If the parent is not a VML element, the default unit is a pixel. Allowed units are in, cm, mm, pt, pc and px. While commas are not required, they should be used for easier readability.</p> <p>See above for an example.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
preferrelative (Relative Resize Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the original size of an object is saved after reformatting. Default is false. If true, the original size of the object is stored and all resizing is based on a percentage of that original size. Otherwise, each resizing resets the scale to 100%.</p> <p>[<i>Example:</i></p> <pre><v:shape ... o:preferrelative="true" ... > </v:shape></pre>

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>print (Print Toggle)</p>	<p>Specifies whether the shape is printed. Default is true.</p> <p>[Example:</p> <pre><v:shape ... print="false" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>regroupid (Regroup ID)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies a previous group for a shape. An ID number is used to identify groups of shapes that are no longer grouped. This allows shapes to be regrouped programmatically.</p> <p>[Example: The shape was part of a group identified by the ID 040754:</p> <pre><v:shape ... o:regroupid="040754" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
<p>spid (Optional String)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies an optional string that an application can use to identify the particular shape. Default is no value.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>spt (Optional Number)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies an optional number that an application can use to associate the particular shape with a defined shape type. Default is 0.</p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
<p>strokecolor (Shape Stroke Color)</p>	<p>Specifies the primary color of the brush to use to stroke the path of the shape. Default is black. The color attribute of the stroke element (§19.1.2.21) overrides this. Colors are typically specified as either a named color, such as red, or six hexadecimal digits</p>

Attributes	Description
	<p>representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example:</p> <pre><v:shape ... strokecolor="red" ...> </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
stroked (Shape Stroke Toggle)	<p>Specifies whether the path defining the shape is stroked with a solid line. The stroke element (§19.1.2.21) defines other strokes. The on attribute of the stroke element overrides this attribute. Default is true.</p> <p>[Example:</p> <pre><v:shape ... fillcolor="red" stroked="false" strokecolor="blue"...> </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
strokeweight (Shape Stroke Weight)	<p>Specifies the width of the brush to use to stroke the path. Default is 1 point. If a number is given without units, the emu is used. The weight attribute of the stroke element (§19.1.2.21) overrides this attribute.</p> <p>[Example:</p> <pre><v:shape ... strokeweight="3pt" ... > </v:shape></pre> 

Attributes	Description								
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>								
<p>style (Shape Styling Properties)</p>	<p>Specifies the CSS2 styling properties of the shape. The CSS2 (Cascading Style Sheets, Level 2) specification, a Recommendation of the World Wide Web Consortium, is available here: http://www.w3.org/TR/REC-CSS2.</p> <p>This attribute uses a semi-colon delimited list of “name:value” pairs, the syntax defined by section 4.1.8 of the CSS2 specification for grouped declarations (without the surrounding braces). The following tables define the allowed properties and the VML treatment of each.</p> <p>[Example: <code><v:shape ... style='position:absolute;width:100pt;height:50pt' ...</code> <code>></code> <code></v:shape></code> <i>end example]</i></p> <table border="1"> <thead> <tr> <th>Property</th><th>Description</th></tr> </thead> <tbody> <tr> <td>flip</td><td> <p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. </td></tr> <tr> <td>height</td><td> <p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. </td></tr> <tr> <td>left</td><td> <p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> </td></tr> </tbody> </table>	Property	Description	flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. 	height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. 	left	<p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p>
Property	Description								
flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. 								
height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. 								
left	<p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p>								

Attributes	Description	
		<ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-bottom	<p>Specifies the position of the bottom of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	margin-left	<p>Specifies the position of the left of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-right	<p>Specifies the position of the right of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.

Attributes	Description	
	margin-top	<p>Specifies the position of the top of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	mso-position-horizontal	<p>Specifies the horizontal positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • left • center • right • inside • outside
	mso-position-horizontal-relative	<p>Specifies relative horizontal position data for objects in WordprocessingML documents. This modifies the mso-position-horizontal property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • char
	mso-position-vertical	<p>Specifies the vertical positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • top • center • bottom • inside • outside

Attributes	Description	
	mso-position-vertical-relative	<p>Specifies relative vertical position data for objects in WordprocessingML documents. This modifies the mso-position-vertical property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • line
	mso-wrap-distance-bottom	<p>Specifies the distance from the bottom of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-left	<p>Specifies the distance from the left side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-right	<p>Specifies the distance from the right side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-top	<p>Specifies the distance from the top of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-edited	<p>Specifies whether the wrap coordinates were customized by the user. If the wrap coordinates are generated by an editor, this property is true; otherwise they were customized by a user. Default is false.</p>
	mso-wrap-style	<p>Specifies the wrapping mode for text in shapes in WordprocessingML documents. Default is square. Allowed values are:</p> <ul style="list-style-type: none"> • square - Wraps text inside the shape in a square. • none - Text does not wrap.
	position	<p>Specifies the kind of positioning used to place an element. Default is static. When the element is contained inside a group, this property shall be absolute. Allowed values are:</p>

Attributes	Description	
		<ul style="list-style-type: none"> • static - The element is positioned according to the normal flow of the page. The top and left properties are ignored. If the object is anchored inline, this value is used. • absolute - The element is positioned relative to the parent, using the top and left properties. • relative - The element is positioned according to the normal flow of the page, but the top and left properties are used. The overlap of overlapping elements is governed by the z-index property.
	rotation	Specifies the angle that a shape is rotated, in degrees. Default is 0. Positive angles are clockwise.
	top	<p>Specifies the position of the top of the containing block of the shape relative to the element above it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	visibility	<p>Specifies whether a shape is displayed. Only inherit and hidden are used; any other values are mapped to inherit. Default is inherit. Allowed values are:</p> <ul style="list-style-type: none"> • hidden - The shape is not visible, but is still part of the flow of the objects in the browser. Mouse events are not processed. • inherit - The visibility state is inherited from the parent of the shape.
	width	<p>Specifies the width of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed.

Attributes	Description	
		<ul style="list-style-type: none"> • <percentage>- Value expressed as a percentage of the parent object's width.
	z-index	<p>Specifies the display order of overlapping shapes. Default is 0. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Uses the order that the shapes appear in the page, bottom to top. • <order>- A number that represents the stacking precedence. Shapes with higher numbers are placed on top of those with lower numbers. Negative numbers are allowed.
The following properties are only used by the textbox element (§19.1.2.22):		
	Property	Description
	direction	<p>Specifies the direction of the text in the textbox. Default is ltr. This property is superceded by the mso-direction-alt property if that is specified. Allowed values are:</p> <ul style="list-style-type: none"> • ltr - Text is displayed left-to-right. • rtl - Text is displayed right-to-left.
	layout-flow	<p>Determines the flow of the text layout in a textbox. Default is horizontal. Allowed values are:</p> <ul style="list-style-type: none"> • horizontal - Text is displayed horizontally. • vertical - Text is displayed vertically. • vertical-ideographic - Ideographic text is displayed vertically. • horizontal-ideographic - Ideographic text is displayed horizontally.
	mso-direction-alt	<p>Specifies an alternate direction for text in textboxes. Overrides the direction property. The only allowed value is context.</p>
	mso-fit-shape-to-text	<p>Specifies whether the shape stretches to fit the text in the textbox. Default is false.</p>
	mso-fit-text-to-shape	<p>Specifies whether the text stretches to fit the textbox. Default is false.</p>
	mso-layout-	<p>Specifies the alternate layout flow for text in textboxes. This</p>

Attributes	Description							
	flow-alt	property is used instead of layout-flow when the layout flow is from bottom to top for non-ideographic languages. Its only value is bottom-to-top.						
	mso-next-textbox	Specifies the ID of the next textbox in a series. Used to keep track of a set of linked textboxes. Default is no value.						
	mso-rotate	Specifies a specific rotation value for text in a textbox. Default is 0. Allowed values are: <ul style="list-style-type: none">090180-90						
	mso-text-scale	Specifies the scaling factor for fitting text to shapes. Default is 0. This property is only used if mso-fit-text-to-shape is true.						
	v-text-anchor	Specifies the vertical anchoring of text in a textbox. Default is top. The alignment of a text anchor only becomes evident if mso-fit-text-to-shape is false. This property is different from the vertical-align CSS property, which is used for ideographic languages. Allowed values are: <ul style="list-style-type: none">topmiddlebottomtop-centermiddle-centerbottom-centertop-baselinebottom-baselinetop-center-baselinebottom-center-baseline						
The following properties are only used by the textpath element (§19.1.2.23):								
<table><tr><th>Property</th><th>Description</th></tr><tr><td>font</td><td>Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.</td></tr><tr><td>font-family</td><td>Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.</td></tr></table>			Property	Description	font	Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.	font-family	Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.
Property	Description							
font	Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.							
font-family	Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.							

Attributes	Description																		
	font-size	Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.																	
	font-style	Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are: <ul style="list-style-type: none">normalitalicoblique - Treated the same as italic.																	
	font-variant	Specifies the variant style of a font. Default is normal. The values are the same as those of the CSS font-variant property. Allowed values are: <ul style="list-style-type: none">normalsmall-caps																	
	font-weight	<div>Specifies the thickness of the letters of the font. Default is normal. The values are the same as those of the CSS font-weight property. Allowed values are:</div> <table><tr><th>Value</th><th>Description</th></tr><tr><td>normal</td><td rowspan="6">Treated as non-bold.</td></tr><tr><td>lighter</td></tr><tr><td>100</td></tr><tr><td>200</td></tr><tr><td>300</td></tr><tr><td>400</td></tr><tr><td>bold</td><td rowspan="7">Treated as bold.</td></tr><tr><td>bolder</td></tr><tr><td>500</td></tr><tr><td>600</td></tr><tr><td>700</td></tr><tr><td>800</td></tr><tr><td>900</td></tr></table>	Value	Description	normal	Treated as non-bold.	lighter	100	200	300	400	bold	Treated as bold.	bolder	500	600	700	800	900
	Value	Description																	
normal	Treated as non-bold.																		
lighter																			
100																			
200																			
300																			
400																			
bold	Treated as bold.																		
bolder																			
500																			
600																			
700																			
800																			
900																			
mso-text-	Specifies whether a shadow is applied to the text on a text path.																		

Attributes	Description	
	shadow	Default is false.
	text-decoration	<p>Specifies the style of text decoration. Default is none. The values are the same as those of the CSS text-decoration property. Allowed values are:</p> <ul style="list-style-type: none"> • none • underline • overline • line-through • blink
	v-rotate-letters	Specifies whether the letters of the text are rotated counterclockwise by 90 degrees. Default is false.
	v-same-letter-heights	Specifies whether all letters are the same height regardless of initial case. If true, the lowercase letters are stretched to the height of the uppercase letters. Default is false.
	v-text-align	<p>Specifies the alignment of text. Default is left. Allowed values are:</p> <ul style="list-style-type: none"> • left • right • center • justify • letter-justify - Distributes the extra space between the letters. • stretch-justify - Stretches the letters to fill in the space.
	v-text-kern	Specifies whether kerning is turned on. Default is false.
	v-text-reverse	Specifies whether the layout order of rows is reversed. Default is false. This is used for vertical text layout.
	v-text-spacing-mode	<p>Specifies the mode for letter spacing. Default is tightening. This property determines whether space is removed between each letter (tightening) or added between each letter (tracking). The amount of letter spacing change is defined by the v-text-spacing property. Allowed values are:</p> <ul style="list-style-type: none"> • tightening • tracking
	v-text-spacing	Specifies the amount of spacing for text in 100ths of single line spacing. Default is 100.

Attributes	Description														
	<p>The line (§19.1.2.12), polyline (§19.1.2.15) and curve (§19.1.2.3) elements ignore the following properties:</p> <ul style="list-style-type: none"> • top • left • width • height <p>The following properties are not inherited by an element that references a shapetype element (§19.1.2.20) via the id attribute:</p> <ul style="list-style-type: none"> • flip • height • left • margin-left • margin-top • position • rotation • top • visibility • width • z-index <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>														
target (Hyperlink Display Target)	<p>Specifies a frame or window that a URL is displayed in. Default is no value. Allowed values are:</p> <table border="1"> <thead> <tr> <th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td><targetname></td><td>String containing the name of the frame or window in which to load the document.</td></tr> <tr> <td>_blank</td><td>Specifies that the linked document is loaded into a new blank window. This window is not named.</td></tr> <tr> <td>_media</td><td>Specifies that the linked document is loaded into the browser's multimedia pane.</td></tr> <tr> <td>_parent</td><td>Specifies that the linked document is loaded into the immediate parent of the document containing the link.</td></tr> <tr> <td>_search</td><td>Specifies that the linked document is loaded into the browser's search pane.</td></tr> <tr> <td>_self</td><td>Specifies that the linked document is loaded into the window in which the link was clicked (the active window).</td></tr> </tbody> </table>	Value	Description	<targetname>	String containing the name of the frame or window in which to load the document.	_blank	Specifies that the linked document is loaded into a new blank window. This window is not named.	_media	Specifies that the linked document is loaded into the browser's multimedia pane.	_parent	Specifies that the linked document is loaded into the immediate parent of the document containing the link.	_search	Specifies that the linked document is loaded into the browser's search pane.	_self	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).
Value	Description														
<targetname>	String containing the name of the frame or window in which to load the document.														
_blank	Specifies that the linked document is loaded into a new blank window. This window is not named.														
_media	Specifies that the linked document is loaded into the browser's multimedia pane.														
_parent	Specifies that the linked document is loaded into the immediate parent of the document containing the link.														
_search	Specifies that the linked document is loaded into the browser's search pane.														
_self	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).														

Attributes	Description		
	<table border="1"> <tr> <td><code>_top</code></td><td>Specifies that the linked document is loaded into the topmost window.</td></tr> </table> <p><i>[Example:</i></p> <pre> <v:shape ... href="http://www.openxmlformats.org" target="_self" ... > </v:shape> </pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>	<code>_top</code>	Specifies that the linked document is loaded into the topmost window.
<code>_top</code>	Specifies that the linked document is loaded into the topmost window.		
title (Shape Title)	<p>Specifies the text displayed when the mouse pointer moves over the shape. Default is no value.</p> <p><i>[Example:</i></p> <pre> <v:shape ... title="tooltip" ... > </v:shape> </pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>		
userdrawn (Exists In Master Slide) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the user has added the shape to a master slide. Default is <code>false</code>. Used by PresentationML.</p> <p><i>[Example:</i></p> <pre> <v:shape ... o:userdrawn="true" ... > </v:shape> </pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>		
userhidden (Hide Script Anchors) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether a script anchor is hidden. Default is <code>false</code>. If <code>true</code>, script anchors stay hidden even if the shape is otherwise visible. A script anchor is the visual representation of a script that when displayed in an application.</p> <p><i>[Example:</i></p> <pre> <v:shape ... o:userhidden="true" ... > </pre>		

Attributes	Description
	<p><code></v:shape></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
wrapcoords (Shape Bounding Polygon)	<p>Specifies the bounding polygon that surrounds a shape. This is specified using a comma-delimited list of x and y coordinates: "x1,y1,x2,y2,x3,y3,..." This is used when text is tightly wrapped around a shape. Default is no value until the mso-wrap-mode style attribute is set to tight or through.</p> <p>[Example:</p> <pre> <v:shape ... wrapcoords="0,0 0,200, 200,200, 200,0" ... > </v:shape> </pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_PolyLine](#)) is located in §A.6.1. *end note]*

19.1.2.16 `rect` (Rectangle)

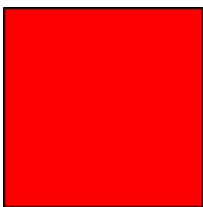
This element is used to draw a simple rectangle. The CSS2 style content width and height define the width and height of the rectangle.

[Example:

```

<v:rect fillcolor="red"
  style="position:relative;top:0;left:0;width:100;height:100">
</v:rect>

```



end example]

Parent Elements
background (Part 1, §17.2.1); group (§19.1.2.7); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1)

Child Elements	Subclause
anchorlock (Anchor Location Is Locked)	§19.3.2.1
borderbottom (Bottom Border)	§19.3.2.2
borderleft (Left Border)	§19.3.2.3
borderright (Right Border)	§19.3.2.4
bordertop (Top Border)	§19.3.2.5
callout (Callout)	§19.2.2.2
ClientData (Attached Object Data)	§19.4.2.12
clippath (Shape Clipping Path)	§19.2.2.3
extrusion (3D Extrusion)	§19.2.2.11
fill (Shape Fill Properties)	§19.1.2.5
formulas (Set of Formulas)	§19.1.2.6
handles (Set of Handles)	§19.1.2.9
imagedata (Image Data)	§19.1.2.11
lock (Shape Protections)	§19.2.2.18
path (Shape Path)	§19.1.2.14
shadow (Shadow Effect)	§19.1.2.18
signatureline (Digital Signature Line)	§19.2.2.30
skew (Skew Transform)	§19.2.2.31
stroke (Line Stroke Settings)	§19.1.2.21
textbox (Text Box)	§19.1.2.22
textdata (VML Diagram Text)	§19.5.2.2
textpath (Text Layout Path)	§19.1.2.23
wrap (Text Wrapping)	§19.3.2.6

Attributes	Description
allowincell (Allow in Table Cell) Namespace: urn:schemas-microsoft-com:office:office	Specifies whether a shape can be placed in a table. Default is false. [Example: <pre><v:shape ... o:allowincell="true" ... > </v:shape></pre>



Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>allowoverlap (Allow Shape Overlap)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape can overlap another shape. Default is true. If false, the shape shifts left or right so as not to overlap another shape, similar to the behavior of the HTML float attribute.</p> <p>[Example:</p> <pre><v:shape ... o:allowoverlap="false" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>alt (Alternate Text)</p>	<p>Specifies alternative text describing the graphical object. This text should provide a brief description of the shape for use by accessibility tools. Default is no value.</p> <p>[Example: The alt text describes the basic shape:</p> <pre><v:shape ... fillcolor="red" alt="Red rectangle"> </v:shape></pre> <p>The alt text describes the contents of a shape displaying an image:</p> <pre><v:shape ... alt="Picture of a sunset"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>borderbottomcolor (Bottom Border Color)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the bottom border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderbottomcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string</p>

Attributes	Description
	datatype.
borderleftcolor (Border Left Color) Namespace: urn:schemas-microsoft-com:office:office	Specifies the left border color of an inline shape. Default is no value. <i>[Example:</i> <pre><v:shape ... o:borderleftcolor="red" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the W3C XML Schema string datatype.
borderrightcolor (Border Right Color) Namespace: urn:schemas-microsoft-com:office:office	Specifies the right border color of an inline shape. Default is no value. <i>[Example:</i> <pre><v:shape ... o:borderrightcolor="red" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the W3C XML Schema string datatype.
bordertopcolor (Border Top Color) Namespace: urn:schemas-microsoft-com:office:office	Specifies the top border color of an inline shape. Default is no value. <i>[Example:</i> <pre><v:shape ... o:bordertopcolor="red" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the W3C XML Schema string datatype.
bullet (Graphical Bullet) Namespace: urn:schemas-microsoft-com:office:office	Specifies whether the shape is a graphical bullet. Default is <code>false</code> . <i>[Example:</i> <pre><v:shape ... o:bullet="true" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).


Attributes	Description
<p>button (Button Behavior Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape exhibits button press behavior on click. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:button="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>bwmode (Black-and-White Mode)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies how a shape renders for black-and-white output devices. When a shape is printed on a black-and-white printer or displayed in a black-and-white view in an application, several options are possible. Default is auto, which uses o:bwnormal for normal black-and-white rendering and o:bwpure for pure black-and-white rendering.</p> <p>bwnormal and bwpure are subordinate to bwmode. If bwmode is "auto" then the value for bwnormal or bwpure is used depending on what the output format is. An application can define for itself what, if any, difference there is between normal B&W and pure B&W. [Example: Normal B&W might allow grayscale and pure B&W might not. end example]</p> <p>[Example: This shape renders in grayscale in a black-and-white environment:</p> <pre><v:shape ... o:bwmode="grayscale" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
<p>bwnormal (Normal Black-and-White Mode)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the black-and-white mode for normal black-and-white output devices. Default is auto.</p> <p>[Example: This shape renders in a pale grayscale in a normal black-and-white environment:</p> <pre><v:shape ... o:bwmode="auto" o:bwnormal="lightgrayscale" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
<p>bwpure (Pure Black-and-White)</p>	<p>Specifies the black-and-white mode for pure black-and-white output devices. Default is auto.</p>

Attributes	Description
Mode) Namespace: urn:schemas- microsoft- com:office:office	<p>[<i>Example:</i> This shape renders in high contrast when in a pure black-and-white environment:</p> <pre><v:shape ... o:bwmode="auto" o:bwpure="highcontrast" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
chromakey (Image Transparency Color)	<p>Specifies a color value that is transparent and show anything behind the shape. Default is no value.</p> <p>[<i>Example:</i></p> <pre><v:image ... chromakey="white" ...> </v:image></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
class (CSS Reference)	<p>Specifies a reference to the definition of a CSS style. Default is no value.</p> <p>[<i>Example:</i> The snippets below are equivalent:</p> <pre>... .narrowstyle {width:50;height:100} ... <v:shape ... class="narrowstyle" style="top:1;left:1"> </v:shape></pre> <pre><v:shape ... style="top:1;left:1; width:50;height:100"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
clip (Clipping Toggle)	<p>Specifies that the clipping region is active. This is used in conjunction with the clippath (§19.2.2.3) element to create a clipping region.</p>

Attributes	Description
Namespace: urn:schemas-microsoft-com:office:office	<p>[Example:</p> <pre><v:shape ... o:clip="true"> </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
cliptowrap (Clip to Wrapping Polygon) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies that the clipping region for the shape aligns with the wrapping polygon that tightly surrounds the entire shape (essentially, that the shape shall not be drawn beyond its wrapping polygon's extents – if it does, the shape shall be clipped). Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:cliptowrap="true"> </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
connectortype (Shape Connector Type) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the kind of connector used for joining shapes. Default is straight.</p> <p>[Example:</p> <pre><v:shape ... o:connectortype="elbow" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ConnectorType simple type (§19.2.3.7).</p>
coordorigin (Coordinate Space Origin)	<p>Specifies the coordinate of the top left corner of the shape's coordinate space. This determines the position of the (0,0) coordinate space origin within the shape's bounding box. Default is "0,0", which places the (0,0) origin at the top left corner of the bounding box.</p> <p>This affects shape properties that specify coordinate positions, such as the path attribute. Thus a path can be defined against a generic (0,0) origin and the coordorigin value translates the entire path within the shape's bounding space.</p> <p>[Example: The horizontal and vertical coordinate space ranges from -100 to +100 because the coordinate space (coordsize) is 200 by 200 and the top left coordinate is (-100,-100).</p>

Attributes	Description
	<p>The (0,0) origin lies at the center of the shape's bounding box, as evidenced by the position of the shape's path within the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>coordsize (Coordinate Space Size)</p>	<p>Specifies the size of the shape's coordinate space in coordinate units. Default is "1000,1000".</p> <p>The physical size of a coordinate unit length is determined by both the size of the coordinate space (coordsize) and the size of the shape (style width and height). The coordsize attribute defines the number of horizontal and vertical subdivisions into which the shape's bounding box is divided. The combination of coordsize and style width/height effective scales the shape anisotropically.</p> <p>[<i>Example:</i> The path is 50 units wide and tall, which is 25% of the size of the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>dgmlayout (Diagram Node Layout Identifier)</p> <p>Namespace:</p>	<p>Specifies the kind of automatic layout to apply to the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element.</p> <p>[<i>Example:</i></p>



Attributes	Description
urn:schemas-microsoft-com:office:office	<pre><v:shape ... dgmlayout="1"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).</p>
dgmlayoutmru (Diagram Node Recent Layout Identifier) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the kind of automatic layout most recently used on the child elements of the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element.</p> <p>[Example:</p> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).</p>
dgmnodekind (Diagram Node Identifier) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies an optional, application-defined parameter that is intended to be used by the application to tag different types of nodes in a diagram.</p> <p>[Example:</p> <pre><v:shape ... dgmnodekind="1"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
doubleclicknotify (Double-click Notification Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies that an event message is sent when a shape is double-clicked. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:doubleclicknotify="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
fillcolor (Fill Color)	<p>Specifies the color to use for the fill. Default is white. If the fill element (§19.1.2.5) is</p>

Attributes	Description
	<p>present, its color attribute takes precedence. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example: This shape is red if its fill is visible:</p> <pre><v:shape ... fillcolor="red" ... > </v:shape></pre> <p>This is equivalent to:</p> <pre><v:shape ... fillcolor="#ff0000" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
<p>filled (Shape Fill Toggle)</p>	<p>Specifies whether the closed path is filled. Default is true. This attribute is overridden by the fill on attribute.</p> <p>[Example:</p> <pre><v:shape ... filled="f" fillcolor="red" ...> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>forcedash (Force Dashed Outline)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a dashed outline is used to draw a shape when a shape has no line or fill. Default is false.</p> <p>Used by PresentationML placeholders to draw a dashed outline when there is no line and no fill for a shape.</p> <p>[Example:</p> <pre><v:shape ... o:forcedash="true" ... > </v:shape></pre>




Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>hr (Horizontal Rule Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that a shape is a horizontal rule. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hr="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>hralign (Horizontal Rule Alignment)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the alignment of a horizontal rule. Default is left.</p> <p>[Example:</p> <pre><v:shape ... o:hralign="center" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_HrAlign simple type (§19.2.3.16).</p>
<p>href (Hyperlink Target)</p>	<p>Specifies a hyperlink URL target for the shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... href="http://www.openxmlformats.org" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>hrnoshade (Horizontal Rule 3D Shading Toggle)</p> <p>Namespace: urn:schemas-microsoft-</p>	<p>Specifies that the horizontal rule does not have 3-D shading. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hrnoshade="true" ... > </v:shape></pre>

Attributes	Description
com:office:office	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>hrpct (Horizontal Rule Length Percentage)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the length of a horizontal rule as a percentage of page width. Default is 0.</p> <p>[Example:</p> <pre><v:shape ... o:hrpct="85" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
<p>hrstd (Horizontal Rule Standard Display Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape is displayed as a standard horizontal rule. Only applies if hr is true. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hrstd="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
id (Unique Identifier)	<p>Specifies a unique identifier that can be used to reference a VML object.</p> <p>Default is no value.</p> <p>[Example:</p> <pre><v:shape ... id="myShape" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>insetmode (Text Inset Mode)</p> <p>Namespace: urn:schemas-microsoft-</p>	<p>Specifies whether the application calculates the internal text margin instead of using the inset attribute. Default is custom. This attribute is only meaningful for text boxes.</p> <p>[Example:</p> <pre><v:shape ... o:insetmode="auto" ... ></pre>

Attributes	Description
com:office:office	<p></v:shape></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_InsetMode simple type (§19.2.3.17).</p>
insetpen (Inset Border From Path)	<p>Specifies that the border shall be displayed inside of the path defining the shape, rather than along the path (the default border placement), or outside of the path as might be done with an image.</p> <p>[Example:</p> <pre><v:shape ... insetpen="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
ole (Embedded Object Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the shape is an embedded object. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:ole="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).</p>
oleicon (Embedded Object Icon Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether an embedded object is displayed as an icon. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:oleicon="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
oned (Shape Handle Toggle) Namespace:	<p>Specifies whether the extra handles of a shape are hidden. If true, hides all shape handles except the top left and bottom right; that is, the same handles that are used for a straight line segment. Default is false.</p>

Attributes	Description
urn:schemas-microsoft-com:office:office	<p>[<i>Example:</i></p> <pre><v:shape ... o:oned="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
opacity (Fill Color Opacity)	<p>Specifies the opacity of the primary fill color. Default is 1.0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. [<i>Example:</i> A value of "52429f" represents 52429/65536 or 0.8. <i>end example]</i></p> <p>[<i>Example:</i> The red color is 25% opaque:</p> <pre><v:fill type="gradient" color="red" color2="blue" opacity=".25"> </v:fill></pre> <div>  <div style="display: inline-block; vertical-align: middle;">opacity="1"</div>  <div style="display: inline-block; vertical-align: middle;">opacity=".25"</div> </div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
preferrelative (Relative Resize Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the original size of an object is saved after reformatting. Default is false. If true, the original size of the object is stored and all resizing is based on a percentage of that original size. Otherwise, each resizing resets the scale to 100%.</p> <p>[<i>Example:</i></p> <pre><v:shape ... o:preferrelative="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
print (Print Toggle)	<p>Specifies whether the shape is printed. Default is true.</p>

Attributes	Description
	<p>[Example:</p> <pre><v:shape ... print="false" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>regroupid (Regroup ID)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies a previous group for a shape. An ID number is used to identify groups of shapes that are no longer grouped. This allows shapes to be regrouped programmatically.</p> <p>[Example: The shape was part of a group identified by the ID 040754:</p> <pre><v:shape ... o:regroupid="040754" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
<p>spid (Optional String)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies an optional string that an application can use to identify the particular shape. Default is no value.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>spt (Optional Number)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies an optional number that an application can use to associate the particular shape with a defined shape type. Default is 0.</p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
<p>strokecolor (Shape Stroke Color)</p>	<p>Specifies the primary color of the brush to use to stroke the path of the shape. Default is black. The color attribute of the stroke element (§19.1.2.21) overrides this. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example:</p> <pre><v:shape ... strokecolor="red" ...> </v:shape></pre>

Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
stroked (Shape Stroke Toggle)	<p>Specifies whether the path defining the shape is stroked with a solid line. The stroke element (§19.1.2.21) defines other strokes. The on attribute of the stroke element overrides this attribute. Default is true.</p> <p>[Example:</p> <pre><v:shape ... fillcolor="red" stroked="false" strokecolor="blue"...> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
strokeweight (Shape Stroke Weight)	<p>Specifies the width of the brush to use to stroke the path. Default is 1 point. If a number is given without units, the emu is used. The weight attribute of the stroke element (§19.1.2.21) overrides this attribute.</p> <p>[Example:</p> <pre><v:shape ... strokeweight="3pt" ... > </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
style (Shape Styling	Specifies the CSS2 styling properties of the shape. The CSS2 (Cascading Style Sheets, Level

Attributes	Description								
Properties)	<p>2) specification, a Recommendation of the World Wide Web Consortium, is available here: http://www.w3.org/TR/REC-CSS2.</p> <p>This attribute uses a semi-colon delimited list of “name:value” pairs, the syntax defined by section 4.1.8 of the CSS2 specification for grouped declarations (without the surrounding braces). The following tables define the allowed properties and the VML treatment of each.</p> <p>[Example: <code><v:shape ... style='position:absolute;width:100pt;height:50pt' ...</code> <code>></code> <code></v:shape></code> end example]</p> <table border="1"> <thead> <tr> <th>Property</th><th>Description</th></tr> </thead> <tbody> <tr> <td>flip</td><td> <p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. </td></tr> <tr> <td>height</td><td> <p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. </td></tr> <tr> <td>left</td><td> <p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. </td></tr> </tbody> </table>	Property	Description	flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. 	height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. 	left	<p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed.
Property	Description								
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Attributes	Description	
		<ul style="list-style-type: none"> • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-bottom	<p>Specifies the position of the bottom of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	margin-left	<p>Specifies the position of the left of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-right	<p>Specifies the position of the right of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-top	<p>Specifies the position of the top of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the

Attributes	Description	
		<p>page.</p> <ul style="list-style-type: none"> • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	mso-position-horizontal	<p>Specifies the horizontal positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • left • center • right • inside • outside
	mso-position-horizontal-relative	<p>Specifies relative horizontal position data for objects in WordprocessingML documents. This modifies the mso-position-horizontal property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • char
	mso-position-vertical	<p>Specifies the vertical positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • top • center • bottom • inside • outside
	mso-position-vertical-relative	<p>Specifies relative vertical position data for objects in WordprocessingML documents. This modifies the mso-position-vertical property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin

Attributes	Description	
		<ul style="list-style-type: none"> • page • text • line
	mso-wrap-distance-bottom	Specifies the distance from the bottom of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-distance-left	Specifies the distance from the left side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-distance-right	Specifies the distance from the right side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-distance-top	Specifies the distance from the top of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-edited	Specifies whether the wrap coordinates were customized by the user. If the wrap coordinates are generated by an editor, this property is true; otherwise they were customized by a user. Default is false.
	mso-wrap-style	<p>Specifies the wrapping mode for text in shapes in WordprocessingML documents. Default is square. Allowed values are:</p> <ul style="list-style-type: none"> • square - Wraps text inside the shape in a square. • none - Text does not wrap.
	position	<p>Specifies the kind of positioning used to place an element. Default is static. When the element is contained inside a group, this property shall be absolute. Allowed values are:</p> <ul style="list-style-type: none"> • static - The element is positioned according to the normal flow of the page. The top and left properties are ignored. If the object is anchored inline, this value is used. • absolute - The element is positioned relative to the parent, using the top and left properties.

Attributes	Description	
		<ul style="list-style-type: none"> • relative - The element is positioned according to the normal flow of the page, but the top and left properties are used. The overlap of overlapping elements is governed by the z-index property.
	rotation	Specifies the angle that a shape is rotated, in degrees. Default is 0. Positive angles are clockwise.
	top	<p>Specifies the position of the top of the containing block of the shape relative to the element above it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	visibility	<p>Specifies whether a shape is displayed. Only inherit and hidden are used; any other values are mapped to inherit. Default is inherit. Allowed values are:</p> <ul style="list-style-type: none"> • hidden - The shape is not visible, but is still part of the flow of the objects in the browser. Mouse events are not processed. • inherit - The visibility state is inherited from the parent of the shape.
	width	<p>Specifies the width of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	z-index	<p>Specifies the display order of overlapping shapes. Default is 0. This property shall not be used for shapes anchored inline. Allowed values are:</p>

Attributes	Description	
		<ul style="list-style-type: none"> • <code>auto</code> - Uses the order that the shapes appear in the page, bottom to top. • <code><order></code> - A number that represents the stacking precedence. Shapes with higher numbers are placed on top of those with lower numbers. Negative numbers are allowed.
	The following properties are only used by the textbox element (§19.1.2.22):	
	Property <code>direction</code>	Description Specifies the direction of the text in the textbox. Default is <code>ltr</code> . This property is superceded by the <code>mso-direction-alt</code> property if that is specified. Allowed values are: <ul style="list-style-type: none"> • <code>ltr</code> - Text is displayed left-to-right. • <code>rtl</code> - Text is displayed right-to-left.
	<code>layout-flow</code>	Determines the flow of the text layout in a textbox. Default is <code>horizontal</code> . Allowed values are: <ul style="list-style-type: none"> • <code>horizontal</code> - Text is displayed horizontally. • <code>vertical</code> - Text is displayed vertically. • <code>vertical-ideographic</code> - Ideographic text is displayed vertically. • <code>horizontal-ideographic</code> - Ideographic text is displayed horizontally.
	<code>mso-direction-alt</code>	Specifies an alternate direction for text in textboxes. Overrides the <code>direction</code> property. The only allowed value is <code>context</code> .
	<code>mso-fit-shape-to-text</code>	Specifies whether the shape stretches to fit the text in the textbox. Default is <code>false</code> .
	<code>mso-fit-text-to-shape</code>	Specifies whether the text stretches to fit the textbox. Default is <code>false</code> .
	<code>mso-layout-flow-alt</code>	Specifies the alternate layout flow for text in textboxes. This property is used instead of <code>layout-flow</code> when the layout flow is from bottom to top for non-ideographic languages. Its only value is <code>bottom-to-top</code> .
	<code>mso-next-textbox</code>	Specifies the ID of the next textbox in a series. Used to keep track of a set of linked textboxes. Default is no value.

Attributes	Description										
	mso-rotate	Specifies a specific rotation value for text in a textbox. Default is 0. Allowed values are: <ul style="list-style-type: none">090180-90									
	mso-text-scale	Specifies the scaling factor for fitting text to shapes. Default is 0. This property is only used if mso-fit-text-to-shape is true.									
	v-text-anchor	Specifies the vertical anchoring of text in a textbox. Default is top. The alignment of a text anchor only becomes evident if mso-fit-text-to-shape is false. This property is different from the vertical-align CSS property, which is used for ideographic languages. Allowed values are: <ul style="list-style-type: none">topmiddlebottomtop-centermiddle-centerbottom-centertop-baselinebottom-baselinetop-center-baselinebottom-center-baseline									
	The following properties are only used by the textpath element (§19.1.2.23):										
	<table><tr><th>Property</th><th>Description</th></tr><tr><td>font</td><td>Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.</td></tr><tr><td>font-family</td><td>Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.</td></tr><tr><td>font-size</td><td>Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.</td></tr><tr><td>font-style</td><td>Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are:</td></tr></table>	Property	Description	font	Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.	font-family	Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.	font-size	Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.	font-style	Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are:
Property	Description										
font	Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.										
font-family	Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.										
font-size	Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.										
font-style	Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are:										

Attributes	Description																		
		<ul style="list-style-type: none">normalitalicoblique - Treated the same as italic.																	
	font-variant	<p>Specifies the variant style of a font. Default is normal. The values are the same as those of the CSS font-variant property. Allowed values are:</p> <ul style="list-style-type: none">normalsmall-caps																	
	font-weight	<p>Specifies the thickness of the letters of the font. Default is normal. The values are the same as those of the CSS font-weight property. Allowed values are:</p> <table><tr><th>Value</th><th>Description</th></tr><tr><td>normal</td><td rowspan="6">Treated as non-bold.</td></tr><tr><td>lighter</td></tr><tr><td>100</td></tr><tr><td>200</td></tr><tr><td>300</td></tr><tr><td>400</td></tr><tr><td>bold</td><td rowspan="7">Treated as bold.</td></tr><tr><td>bolder</td></tr><tr><td>500</td></tr><tr><td>600</td></tr><tr><td>700</td></tr><tr><td>800</td></tr><tr><td>900</td></tr></table>	Value	Description	normal	Treated as non-bold.	lighter	100	200	300	400	bold	Treated as bold.	bolder	500	600	700	800	900
	Value	Description																	
	normal	Treated as non-bold.																	
lighter																			
100																			
200																			
300																			
400																			
bold	Treated as bold.																		
bolder																			
500																			
600																			
700																			
800																			
900																			
mso-text-shadow	<p>Specifies whether a shadow is applied to the text on a text path. Default is false.</p>																		
text-decoration	<p>Specifies the style of text decoration. Default is none. The values are the same as those of the CSS text-decoration property. Allowed values are:</p> <ul style="list-style-type: none">none																		

Attributes	Description	
		<ul style="list-style-type: none"> • underline • overline • line-through • blink
	v-rotate-letters	Specifies whether the letters of the text are rotated counterclockwise by 90 degrees. Default is false.
	v-same-letter-heights	Specifies whether all letters are the same height regardless of initial case. If true, the lowercase letters are stretched to the height of the uppercase letters. Default is false.
	v-text-align	<p>Specifies the alignment of text. Default is left. Allowed values are:</p> <ul style="list-style-type: none"> • left • right • center • justify • letter-justify - Distributes the extra space between the letters. • stretch-justify - Stretches the letters to fill in the space.
	v-text-kern	Specifies whether kerning is turned on. Default is false.
	v-text-reverse	Specifies whether the layout order of rows is reversed. Default is false. This is used for vertical text layout.
	v-text-spacing-mode	<p>Specifies the mode for letter spacing. Default is tightening. This property determines whether space is removed between each letter (tightening) or added between each letter (tracking). The amount of letter spacing change is defined by the v-text-spacing property. Allowed values are:</p> <ul style="list-style-type: none"> • tightening • tracking
<p>v-text-spacing</p> <p>The line (§19.1.2.12), polyline (§19.1.2.15) and curve (§19.1.2.3) elements ignore the following properties:</p> <ul style="list-style-type: none"> • top • left • width • height 		

Attributes	Description																
	<p>The following properties are not inherited by an element that references a shapetype element (§19.1.2.20) via the id attribute:</p> <ul style="list-style-type: none"> • flip • height • left • margin-left • margin-top • position • rotation • top • visibility • width • z-index <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>																
target (Hyperlink Display Target)	<p>Specifies a frame or window that a URL is displayed in. Default is no value. Allowed values are:</p> <table border="1"> <thead> <tr> <th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td><targetname></td><td>String containing the name of the frame or window in which to load the document.</td></tr> <tr> <td>_blank</td><td>Specifies that the linked document is loaded into a new blank window. This window is not named.</td></tr> <tr> <td>_media</td><td>Specifies that the linked document is loaded into the browser's multimedia pane.</td></tr> <tr> <td>_parent</td><td>Specifies that the linked document is loaded into the immediate parent of the document containing the link.</td></tr> <tr> <td>_search</td><td>Specifies that the linked document is loaded into the browser's search pane.</td></tr> <tr> <td>_self</td><td>Specifies that the linked document is loaded into the window in which the link was clicked (the active window).</td></tr> <tr> <td>_top</td><td>Specifies that the linked document is loaded into the topmost window.</td></tr> </tbody> </table> <p>[Example:</p> <pre> <v:shape ... href="http://www.openxmlformats.org" target="_self" ... > </pre>	Value	Description	<targetname>	String containing the name of the frame or window in which to load the document.	_blank	Specifies that the linked document is loaded into a new blank window. This window is not named.	_media	Specifies that the linked document is loaded into the browser's multimedia pane.	_parent	Specifies that the linked document is loaded into the immediate parent of the document containing the link.	_search	Specifies that the linked document is loaded into the browser's search pane.	_self	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).	_top	Specifies that the linked document is loaded into the topmost window.
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_top	Specifies that the linked document is loaded into the topmost window.																

Attributes	Description
	<p><code></v:shape></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>title (Shape Title)</p>	<p>Specifies the text displayed when the mouse pointer moves over the shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... title="tooltip" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>userdrawn (Exists In Master Slide)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the user has added the shape to a master slide. Default is false. Used by PresentationML.</p> <p>[Example:</p> <pre><v:shape ... o:userdrawn="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>userhidden (Hide Script Anchors)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a script anchor is hidden. Default is false. If true, script anchors stay hidden even if the shape is otherwise visible. A script anchor is the visual representation of a script that when displayed in an application.</p> <p>[Example:</p> <pre><v:shape ... o:userhidden="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>wrapcoords (Shape Bounding Polygon)</p>	<p>Specifies the bounding polygon that surrounds a shape. This is specified using a comma-delimited list of x and y coordinates: "x1,y1,x2,y2,x3,y3,..." This is used when text is</p>

Attributes	Description
	<p>tightly wrapped around a shape. Default is no value until the mso-wrap-mode style attribute is set to tight or through.</p> <p>[Example:</p> <pre><v:shape ... wrapcoords="0,0 0,200, 200,200, 200,0" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

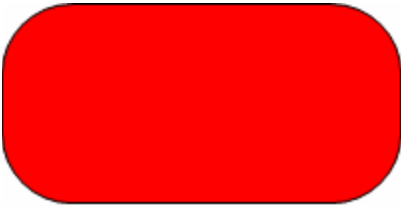
[Note: The W3C XML Schema definition of this element’s content model ([CT_Rect](#)) is located in §A.6.1. end note]

19.1.2.17 **roundrect (Rounded Rectangle)**

This element is used to draw a rectangle with rounded corners. The CSS2 style content width and height define the width and height of the rectangle.

[Example:

```
<v:roundrect fillcolor="red" arcsize="35%"  
  style="position:relative;top:0;left:0;width:200;height:100">  
</v:roundrect>
```



end example]

Parent Elements
background (Part 1, §17.2.1); group (§19.1.2.7); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1)

Child Elements	Subclause
anchorlock (Anchor Location Is Locked)	§19.3.2.1
borderbottom (Bottom Border)	§19.3.2.2
borderleft (Left Border)	§19.3.2.3

Child Elements	Subclause
borderright (Right Border)	§19.3.2.4
bordertop (Top Border)	§19.3.2.5
callout (Callout)	§19.2.2.2
ClientData (Attached Object Data)	§19.4.2.12
clippath (Shape Clipping Path)	§19.2.2.3
extrusion (3D Extrusion)	§19.2.2.11
fill (Shape Fill Properties)	§19.1.2.5
formulas (Set of Formulas)	§19.1.2.6
handles (Set of Handles)	§19.1.2.9
imagedata (Image Data)	§19.1.2.11
lock (Shape Protections)	§19.2.2.18
path (Shape Path)	§19.1.2.14
shadow (Shadow Effect)	§19.1.2.18
signatureline (Digital Signature Line)	§19.2.2.30
skew (Skew Transform)	§19.2.2.31
stroke (Line Stroke Settings)	§19.1.2.21
textbox (Text Box)	§19.1.2.22
textdata (VML Diagram Text)	§19.5.2.2
textpath (Text Layout Path)	§19.1.2.23
wrap (Text Wrapping)	§19.3.2.6

Attributes	Description
<p>allowincell (Allow in Table Cell)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape can be placed in a table. Default is false.</p> <p><i>[Example:</i></p> <pre><v:shape ... o:allowincell="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
allowoverlap (Allow Shape Overlap)	<p>Specifies whether a shape can overlap another shape. Default is true. If false, the shape shifts left or right so as not to overlap another shape, similar to the behavior of the HTML float attribute.</p>



Attributes	Description
Namespace: urn:schemas-microsoft-com:office:office	<p>[<i>Example:</i></p> <pre><v:shape ... o:allowoverlap="false" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
alt (Alternate Text)	<p>Specifies alternative text describing the graphical object. This text should provide a brief description of the shape for use by accessibility tools. Default is no value.</p> <p>[<i>Example:</i> The alt text describes the basic shape:</p> <pre><v:shape ... fillcolor="red" alt="Red rectangle"> </v:shape></pre> <p>The alt text describes the contents of a shape displaying an image:</p> <pre><v:shape ... alt="Picture of a sunset"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
arcsize (Rounded Corner Arc Size)	<p>Specifies the amount of roundness for a rounded rectangle as a percentage of half the smaller dimension of the length and width of the rectangle. Default is 20%. An arc size of 0% yields square corners and 100% forms circular corners. A square with an arc size value of 100% is a circle. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. [<i>Example:</i> For example, a value of "52429f" represents 52429/65536 or 0.8. <i>end example]</i></p> <p>[<i>Example:</i></p> <pre><v:roundrect ... arcsize="35%"> </v:roundrect></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
borderbottomcolor (Bottom Border)	<p>Specifies the bottom border color of an inline shape. Default is no value.</p>

Attributes	Description
<p>Color)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>[Example:</p> <pre><v:shape ... o:borderbottomcolor="red" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>borderleftcolor (Border Left Color)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the left border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderleftcolor="red" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>borderrightcolor (Border Right Color)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the right border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderrightcolor="red" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>bordertopcolor (Border Top Color)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the top border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:bordertopcolor="red" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>bullet (Graphical Bullet)</p>	<p>Specifies whether the shape is a graphical bullet. Default is false.</p> <p>[Example:</p>


Attributes	Description
Namespace: urn:schemas-microsoft-com:office:office	<pre><v:shape ... o:bullet="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
button (Button Behavior Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether a shape exhibits button press behavior on click. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:button="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
bwmode (Black-and-White Mode) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies how a shape renders for black-and-white output devices. When a shape is printed on a black-and-white printer or displayed in a black-and-white view in an application, several options are possible. Default is auto, which uses o:bwnormal for normal black-and-white rendering and o:bwpure for pure black-and-white rendering.</p> <p>bwnormal and bwpure are subordinate to bwmode. If bwmode is "auto" then the value for bwnormal or bwpure is used depending on what the output format is. An application can define for itself what, if any, difference there is between normal B&W and pure B&W. [Example: Normal B&W might allow greyscale and pure B&W might not. <i>end example]</i></p> <p>[Example: This shape renders in grayscale in a black-and-white environment:</p> <pre><v:shape ... o:bwmode="grayscale" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
bwnormal (Normal Black-and-White Mode) Namespace: urn:schemas-microsoft-	<p>Specifies the black-and-white mode for normal black-and-white output devices. Default is auto.</p> <p>[Example: This shape renders in a pale grayscale in a normal black-and-white environment:</p> <pre><v:shape ... o:bwmode="auto" o:bwnormal="lightgrayscale" ... ></pre>

Attributes	Description
com:office:office	<p><code></v:shape></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
bwpure (Pure Black-and-White Mode) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the black-and-white mode for pure black-and-white output devices. Default is auto.</p> <p>[Example: This shape renders in high contrast when in a pure black-and-white environment:</p> <pre><v:shape ... o:bwmode="auto" o:bwpure="highcontrast" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
chromakey (Image Transparency Color)	<p>Specifies a color value that is transparent and show anything behind the shape. Default is no value.</p> <p>[Example:</p> <pre><v:image ... chromakey="white" ...> </v:image></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
class (CSS Reference)	<p>Specifies a reference to the definition of a CSS style. Default is no value.</p> <p>[Example: The snippets below are equivalent:</p> <pre>... .narrowstyle {width:50;height:100} ... <v:shape ... class="narrowstyle" style="top:1;left:1"> </v:shape></pre> <pre><v:shape ... style="top:1;left:1; width:50;height:100"> </v:shape></pre>

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>clip (Clipping Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that the clipping region is active. This is used in conjunction with the clippath (§19.2.2.3) element to create a clipping region.</p> <p>[Example:</p> <pre><v:shape ... o:clip="true"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>cliptowrap (Clip to Wrapping Polygon)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that the clipping region for the shape aligns with the wrapping polygon that tightly surrounds the entire shape (essentially, that the shape shall not be drawn beyond its wrapping polygon's extents – if it does, the shape shall be clipped). Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:cliptowrap="true"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>connectortype (Shape Connector Type)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the kind of connector used for joining shapes. Default is straight.</p> <p>[Example:</p> <pre><v:shape ... o:connectortype="elbow" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ConnectorType simple type (§19.2.3.7).</p>
<p>coordorigin (Coordinate Space Origin)</p>	<p>Specifies the coordinate of the top left corner of the shape's coordinate space. This determines the position of the (0,0) coordinate space origin within the shape's bounding box. Default is "0,0", which places the (0,0) origin at the top left corner of the bounding box.</p>

Attributes	Description
	<p>This affects shape properties that specify coordinate positions, such as the path attribute. Thus a path can be defined against a generic (0,0) origin and the coordorigin value translates the entire path within the shape's bounding space.</p> <p>[<i>Example:</i> The horizontal and vertical coordinate space ranges from -100 to +100 because the coordinate space (coordsize) is 200 by 200 and the top left coordinate is (-100,-100). The (0,0) origin lies at the center of the shape's bounding box, as evidenced by the position of the shape's path within the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
coordsize (Coordinate Space Size)	<p>Specifies the size of the shape's coordinate space in coordinate units. Default is "1000,1000".</p> <p>The physical size of a coordinate unit length is determined by both the size of the coordinate space (coordsize) and the size of the shape (style width and height). The coordsize attribute defines the number of horizontal and vertical subdivisions into which the shape's bounding box is divided. The combination of coordsize and style width/height effective scales the shape anisotropically.</p> <p>[<i>Example:</i> The path is 50 units wide and tall, which is 25% of the size of the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p>



Attributes	Description
	The possible values for this attribute are defined by the W3C XML Schema string datatype.
dgmlayout (Diagram Node Layout Identifier) Namespace: urn:schemas-microsoft-com:office:office	Specifies the kind of automatic layout to apply to the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element. <i>[Example:</i> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).
dgmlayoutmru (Diagram Node Recent Layout Identifier) Namespace: urn:schemas-microsoft-com:office:office	Specifies the kind of automatic layout most recently used on the child elements of the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element. <i>[Example:</i> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).
dgmnodekind (Diagram Node Identifier) Namespace: urn:schemas-microsoft-com:office:office	Specifies an optional, application-defined parameter that is intended to be used by the application to tag different types of nodes in a diagram. <i>[Example:</i> <pre><v:shape ... dgmnodekind="1"> </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the W3C XML Schema integer datatype.
doubleclicknotify (Double-click Notification Toggle) Namespace:	Specifies that an event message is sent when a shape is double-clicked. Default is false. <i>[Example:</i> <pre><v:shape ... o:doubleclicknotify="true" ... ></pre>

Attributes	Description
urn:schemas-microsoft-com:office:office	<p><code></v:shape></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
fillcolor (Fill Color)	<p>Specifies the color to use for the fill. Default is white. If the fill element (§19.1.2.5) is present, its color attribute takes precedence. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example: This shape is red if its fill is visible:</p> <pre><v:shape ... fillcolor="red" ... > </v:shape></pre> <p>This is equivalent to:</p> <pre><v:shape ... fillcolor="#ff0000" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
filled (Shape Fill Toggle)	<p>Specifies whether the closed path is filled. Default is true. This attribute is overridden by the fill on attribute.</p> <p>[Example:</p> <pre><v:shape ... filled="f" fillcolor="red" ...> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
forcedash (Force Dashed Outline)	<p>Specifies whether a dashed outline is used to draw a shape when a shape has no line or fill. Default is false.</p>



Attributes	Description
<p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Used by PresentationML placeholders to draw a dashed outline when there is no line and no fill for a shape.</p> <p>[Example:</p> <pre><v:shape ... o:forcedash="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>hr (Horizontal Rule Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that a shape is a horizontal rule. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hr="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>hralign (Horizontal Rule Alignment)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the alignment of a horizontal rule. Default is left.</p> <p>[Example:</p> <pre><v:shape ... o:hralign="center" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_HrAlign simple type (§19.2.3.16).</p>
<p>href (Hyperlink Target)</p>	<p>Specifies a hyperlink URL target for the shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... href="http://www.openxmlformats.org" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string</p>


Attributes	Description
<p>hrnoshade (Horizontal Rule 3D Shading Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>datatype.</p> <p>Specifies that the horizontal rule does not have 3-D shading. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hrnoshade="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>hrpct (Horizontal Rule Length Percentage)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the length of a horizontal rule as a percentage of page width. Default is 0.</p> <p>[Example:</p> <pre><v:shape ... o:hrpct="85" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
<p>hrstd (Horizontal Rule Standard Display Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape is displayed as a standard horizontal rule. Only applies if hr is true. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hrstd="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>id (Unique Identifier)</p>	<p>Specifies a unique identifier that can be used to reference a VML object.</p> <p>Default is no value.</p> <p>[Example:</p> <pre><v:shape ... id="myShape" ... > </v:shape></pre> <p>end example]</p>

Attributes	Description
	The possible values for this attribute are defined by the W3C XML Schema string datatype.
insetmode (Text Inset Mode) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the application calculates the internal text margin instead of using the inset attribute. Default is custom. This attribute is only meaningful for text boxes.</p> <p>[Example:</p> <pre><v:shape ... o:insetmode="auto" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_InsetMode simple type (§19.2.3.17).</p>
insetpen (Inset Border From Path)	<p>Specifies that the border shall be displayed inside of the path defining the shape, rather than along the path (the default border placement), or outside of the path as might be done with an image.</p> <p>[Example:</p> <pre><v:shape ... insetpen="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
ole (Embedded Object Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the shape is an embedded object. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:ole="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).</p>
oleicon (Embedded Object Icon Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether an embedded object is displayed as an icon. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:oleicon="true" ... > </v:shape></pre>

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>oned (Shape Handle Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the extra handles of a shape are hidden. If true, hides all shape handles except the top left and bottom right; that is, the same handles that are used for a straight line segment. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:oned="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>opacity (Fill Color Opacity)</p>	<p>Specifies the opacity of the primary fill color. Default is 1.0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. [Example: A value of "52429f" represents 52429/65536 or 0.8. <i>end example]</i></p> <p>[Example: The red color is 25% opaque:</p> <pre><v:fill type="gradient" color="red" color2="blue" opacity=".25"> </v:fill></pre> <div>  <p>opacity="1"</p>  <p>opacity=".25"</p> </div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>preferrelative (Relative Resize Toggle)</p> <p>Namespace: urn:schemas-microsoft-</p>	<p>Specifies whether the original size of an object is saved after reformatting. Default is false. If true, the original size of the object is stored and all resizing is based on a percentage of that original size. Otherwise, each resizing resets the scale to 100%.</p> <p>[Example:</p> <pre><v:shape ... o:preferrelative="true" ... ></pre>

Attributes	Description
com:office:office	<p></v:shape></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
print (Print Toggle)	<p>Specifies whether the shape is printed. Default is true.</p> <p>[Example:</p> <pre><v:shape ... print="false" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
regroupid (Regroup ID) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies a previous group for a shape. An ID number is used to identify groups of shapes that are no longer grouped. This allows shapes to be regrouped programmatically.</p> <p>[Example: The shape was part of a group identified by the ID 040754:</p> <pre><v:shape ... o:regroupid="040754" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
spid (Optional String) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies an optional string that an application can use to identify the particular shape. Default is no value.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
spt (Optional Number) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies an optional number that an application can use to associate the particular shape with a defined shape type. Default is 0.</p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
strokecolor (Shape Stroke Color)	<p>Specifies the primary color of the brush to use to stroke the path of the shape. Default is black. The color attribute of the stroke element (§19.1.2.21) overrides this. Colors are</p>

Attributes	Description
	<p>typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example:</p> <pre><v:shape ... strokecolor="red" ...> </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
stroked (Shape Stroke Toggle)	<p>Specifies whether the path defining the shape is stroked with a solid line. The stroke element (§19.1.2.21) defines other strokes. The on attribute of the stroke element overrides this attribute. Default is true.</p> <p>[Example:</p> <pre><v:shape ... fillcolor="red" stroked="false" strokecolor="blue"...> </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
strokeweight (Shape Stroke Weight)	<p>Specifies the width of the brush to use to stroke the path. Default is 1 point. If a number is given without units, the emu is used. The weight attribute of the stroke element (§19.1.2.21) overrides this attribute.</p> <p>[Example:</p> <pre><v:shape ... strokeweight="3pt" ... > </v:shape></pre>

Attributes	Description								
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>								
style (Shape Styling Properties)	<p>Specifies the CSS2 styling properties of the shape. The CSS2 (Cascading Style Sheets, Level 2) specification, a Recommendation of the World Wide Web Consortium, is available here: http://www.w3.org/TR/REC-CSS2.</p> <p>This attribute uses a semi-colon delimited list of “name:value” pairs, the syntax defined by section 4.1.8 of the CSS2 specification for grouped declarations (without the surrounding braces). The following tables define the allowed properties and the VML treatment of each.</p> <p>[Example: <code><v:shape ... style='position:absolute;width:100pt;height:50pt' ...</code> <code>></code> <code></v:shape></code> <i>end example]</i></p> <table border="1"> <thead> <tr> <th>Property</th><th>Description</th></tr> </thead> <tbody> <tr> <td>flip</td><td> <p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. </td></tr> <tr> <td>height</td><td> <p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. </td></tr> <tr> <td>left</td><td> <p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page.</p> </td></tr> </tbody> </table>	Property	Description	flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. 	height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. 	left	<p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page.</p>
Property	Description								
flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. 								
height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. 								
left	<p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page.</p>								

Attributes	Description	
		<p>Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-bottom	<p>Specifies the position of the bottom of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	margin-left	<p>Specifies the position of the left of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-right	<p>Specifies the position of the right of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or

Attributes	Description	
		<p>ex). If no units are given, pixels (px) is assumed.</p> <ul style="list-style-type: none"> • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-top	<p>Specifies the position of the top of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	mso-position-horizontal	<p>Specifies the horizontal positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • left • center • right • inside • outside
	mso-position-horizontal-relative	<p>Specifies relative horizontal position data for objects in WordprocessingML documents. This modifies the mso-position-horizontal property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • char
	mso-position-vertical	<p>Specifies the vertical positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • top • center • bottom

Attributes	Description	
		<ul style="list-style-type: none"> • inside • outside
	mso-position-vertical-relative	<p>Specifies relative vertical position data for objects in WordprocessingML documents. This modifies the mso-position-vertical property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • line
	mso-wrap-distance-bottom	<p>Specifies the distance from the bottom of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-left	<p>Specifies the distance from the left side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-right	<p>Specifies the distance from the right side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-top	<p>Specifies the distance from the top of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-edited	<p>Specifies whether the wrap coordinates were customized by the user. If the wrap coordinates are generated by an editor, this property is true; otherwise they were customized by a user. Default is false.</p>
	mso-wrap-style	<p>Specifies the wrapping mode for text in shapes in WordprocessingML documents. Default is square. Allowed values are:</p> <ul style="list-style-type: none"> • square - Wraps text inside the shape in a square. • none - Text does not wrap.

Attributes	Description	
	position	<p>Specifies the kind of positioning used to place an element. Default is <code>static</code>. When the element is contained inside a group, this property shall be <code>absolute</code>. Allowed values are:</p> <ul style="list-style-type: none"> • <code>static</code> - The element is positioned according to the normal flow of the page. The <code>top</code> and <code>left</code> properties are ignored. If the object is anchored inline, this value is used. • <code>absolute</code> - The element is positioned relative to the parent, using the <code>top</code> and <code>left</code> properties. • <code>relative</code> - The element is positioned according to the normal flow of the page, but the <code>top</code> and <code>left</code> properties are used. The overlap of overlapping elements is governed by the <code>z-index</code> property.
	rotation	<p>Specifies the angle that a shape is rotated, in degrees. Default is 0. Positive angles are clockwise.</p>
	top	<p>Specifies the position of the top of the containing block of the shape relative to the element above it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • <code>auto</code> - Default position of an element in the flow of the page. • <code><units></code> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <code><percentage></code> - Value expressed as a percentage of the parent object's height.
	visibility	<p>Specifies whether a shape is displayed. Only <code>inherit</code> and <code>hidden</code> are used; any other values are mapped to <code>inherit</code>. Default is <code>inherit</code>. Allowed values are:</p> <ul style="list-style-type: none"> • <code>hidden</code> - The shape is not visible, but is still part of the flow of the objects in the browser. Mouse events are not processed. • <code>inherit</code> - The visibility state is inherited from the parent of the shape.
	width	<p>Specifies the width of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • <code>auto</code> - Default position of an element in the flow of the

Attributes	Description	
		<p>page.</p> <ul style="list-style-type: none"> • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	z-index	<p>Specifies the display order of overlapping shapes. Default is 0. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Uses the order that the shapes appear in the page, bottom to top. • <order>- A number that represents the stacking precedence. Shapes with higher numbers are placed on top of those with lower numbers. Negative numbers are allowed.
The following properties are only used by the textbox element (§19.1.2.22):		
	Property	Description
	direction	<p>Specifies the direction of the text in the textbox. Default is ltr. This property is superceded by the mso-direction-alt property if that is specified. Allowed values are:</p> <ul style="list-style-type: none"> • ltr - Text is displayed left-to-right. • rtl - Text is displayed right-to-left.
	layout-flow	<p>Determines the flow of the text layout in a textbox. Default is horizontal. Allowed values are:</p> <ul style="list-style-type: none"> • horizontal - Text is displayed horizontally. • vertical - Text is displayed vertically. • vertical-ideographic - Ideographic text is displayed vertically. • horizontal-ideographic - Ideographic text is displayed horizontally.
	mso-direction-alt	<p>Specifies an alternate direction for text in textboxes. Overrides the direction property. The only allowed value is context.</p>
	mso-fit-shape-to-text	<p>Specifies whether the shape stretches to fit the text in the textbox. Default is false.</p>

Attributes	Description					
	mso-fit-text-to-shape	Specifies whether the text stretches to fit the textbox. Default is false.				
	mso-layout-flow-alt	Specifies the alternate layout flow for text in textboxes. This property is used instead of layout-flow when the layout flow is from bottom to top for non-ideographic languages. Its only value is bottom-to-top.				
	mso-next-textbox	Specifies the ID of the next textbox in a series. Used to keep track of a set of linked textboxes. Default is no value.				
	mso-rotate	Specifies a specific rotation value for text in a textbox. Default is 0. Allowed values are: <ul style="list-style-type: none">090180-90				
	mso-text-scale	Specifies the scaling factor for fitting text to shapes. Default is 0. This property is only used if mso-fit-text-to-shape is true.				
	v-text-anchor	Specifies the vertical anchoring of text in a textbox. Default is top. The alignment of a text anchor only becomes evident if mso-fit-text-to-shape is false. This property is different from the vertical-align CSS property, which is used for ideographic languages. Allowed values are: <ul style="list-style-type: none">topmiddlebottomtop-centermiddle-centerbottom-centertop-baselinebottom-baselinetop-center-baselinebottom-center-baseline				
The following properties are only used by the textpath element (§19.1.2.23):						
<table><tr><th>Property</th><th>Description</th></tr><tr><td>font</td><td>Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.</td></tr></table>			Property	Description	font	Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.
Property	Description					
font	Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.					

Attributes	Description																
	font-family	Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.															
	font-size	Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.															
	font-style	Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are: <ul style="list-style-type: none">normalitalicoblique - Treated the same as italic.															
	font-variant	Specifies the variant style of a font. Default is normal. The values are the same as those of the CSS font-variant property. Allowed values are: <ul style="list-style-type: none">normalsmall-caps															
	font-weight	<div>Specifies the thickness of the letters of the font. Default is normal. The values are the same as those of the CSS font-weight property. Allowed values are:</div> <table><thead><tr><th>Value</th><th>Description</th></tr></thead><tbody><tr><td>normal</td><td rowspan="6">Treated as non-bold.</td></tr><tr><td>lighter</td></tr><tr><td>100</td></tr><tr><td>200</td></tr><tr><td>300</td></tr><tr><td>400</td></tr><tr><td>bold</td><td rowspan="6">Treated as bold.</td></tr><tr><td>bolder</td></tr><tr><td>500</td></tr><tr><td>600</td></tr><tr><td>700</td></tr><tr><td>800</td></tr></tbody></table>	Value	Description	normal	Treated as non-bold.	lighter	100	200	300	400	bold	Treated as bold.	bolder	500	600	700
Value	Description																
normal	Treated as non-bold.																
lighter																	
100																	
200																	
300																	
400																	
bold	Treated as bold.																
bolder																	
500																	
600																	
700																	
800																	

Attributes	Description	
		900
	mso-text-shadow	Specifies whether a shadow is applied to the text on a text path. Default is false.
	text-decoration	<p>Specifies the style of text decoration. Default is none. The values are the same as those of the CSS text-decoration property. Allowed values are:</p> <ul style="list-style-type: none"> • none • underline • overline • line-through • blink
	v-rotate-letters	Specifies whether the letters of the text are rotated counterclockwise by 90 degrees. Default is false.
	v-same-letter-heights	Specifies whether all letters are the same height regardless of initial case. If true, the lowercase letters are stretched to the height of the uppercase letters. Default is false.
	v-text-align	<p>Specifies the alignment of text. Default is left. Allowed values are:</p> <ul style="list-style-type: none"> • left • right • center • justify • letter-justify - Distributes the extra space between the letters. • stretch-justify - Stretches the letters to fill in the space.
	v-text-kern	Specifies whether kerning is turned on. Default is false.
	v-text-reverse	Specifies whether the layout order of rows is reversed. Default is false. This is used for vertical text layout.
	v-text-spacing-mode	<p>Specifies the mode for letter spacing. Default is tightening. This property determines whether space is removed between each letter (tightening) or added between each letter (tracking). The amount of letter spacing change is defined by the v-text-spacing property. Allowed values are:</p> <ul style="list-style-type: none"> • tightening • tracking

Attributes	Description												
	<table border="1"> <tr> <td>v-text-spacing</td><td>Specifies the amount of spacing for text in 100ths of single line spacing. Default is 100.</td></tr> </table> <p>The line (§19.1.2.12), polyline (§19.1.2.15) and curve (§19.1.2.3) elements ignore the following properties:</p> <ul style="list-style-type: none"> • top • left • width • height <p>The following properties are not inherited by an element that references a shapetype element (§19.1.2.20) via the id attribute:</p> <ul style="list-style-type: none"> • flip • height • left • margin-left • margin-top • position • rotation • top • visibility • width • z-index <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>	v-text-spacing	Specifies the amount of spacing for text in 100ths of single line spacing. Default is 100.										
v-text-spacing	Specifies the amount of spacing for text in 100ths of single line spacing. Default is 100.												
target (Hyperlink Display Target)	<p>Specifies a frame or window that a URL is displayed in. Default is no value. Allowed values are:</p> <table border="1"> <thead> <tr> <th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td><targetname></td><td>String containing the name of the frame or window in which to load the document.</td></tr> <tr> <td>_blank</td><td>Specifies that the linked document is loaded into a new blank window. This window is not named.</td></tr> <tr> <td>_media</td><td>Specifies that the linked document is loaded into the browser's multimedia pane.</td></tr> <tr> <td>_parent</td><td>Specifies that the linked document is loaded into the immediate parent of the document containing the link.</td></tr> <tr> <td>_search</td><td>Specifies that the linked document is loaded into the browser's search pane.</td></tr> </tbody> </table>	Value	Description	<targetname>	String containing the name of the frame or window in which to load the document.	_blank	Specifies that the linked document is loaded into a new blank window. This window is not named.	_media	Specifies that the linked document is loaded into the browser's multimedia pane.	_parent	Specifies that the linked document is loaded into the immediate parent of the document containing the link.	_search	Specifies that the linked document is loaded into the browser's search pane.
Value	Description												
<targetname>	String containing the name of the frame or window in which to load the document.												
_blank	Specifies that the linked document is loaded into a new blank window. This window is not named.												
_media	Specifies that the linked document is loaded into the browser's multimedia pane.												
_parent	Specifies that the linked document is loaded into the immediate parent of the document containing the link.												
_search	Specifies that the linked document is loaded into the browser's search pane.												

Attributes	Description				
	<table border="1"> <tr> <td><code>_self</code></td><td>Specifies that the linked document is loaded into the window in which the link was clicked (the active window).</td></tr> <tr> <td><code>_top</code></td><td>Specifies that the linked document is loaded into the topmost window.</td></tr> </table> <p><i>[Example:</i></p> <pre> <v:shape ... href="http://www.openxmlformats.org" target="_self" ... > </v:shape> </pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>	<code>_self</code>	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).	<code>_top</code>	Specifies that the linked document is loaded into the topmost window.
<code>_self</code>	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).				
<code>_top</code>	Specifies that the linked document is loaded into the topmost window.				
<p>title (Shape Title)</p>	<p>Specifies the text displayed when the mouse pointer moves over the shape. Default is no value.</p> <p><i>[Example:</i></p> <pre> <v:shape ... title="tooltip" ... > </v:shape> </pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>				
<p>userdrawn (Exists In Master Slide)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the user has added the shape to a master slide. Default is <code>false</code>. Used by PresentationML.</p> <p><i>[Example:</i></p> <pre> <v:shape ... o:userdrawn="true" ... > </v:shape> </pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>				
<p>userhidden (Hide Script Anchors)</p> <p>Namespace: urn:schemas-</p>	<p>Specifies whether a script anchor is hidden. Default is <code>false</code>. If <code>true</code>, script anchors stay hidden even if the shape is otherwise visible. A script anchor is the visual representation of a script that when displayed in an application.</p> <p><i>[Example:</i></p>				

Attributes	Description
microsoft-com:office:office	<pre><v:shape ... o:userhidden="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
wrapcoords (Shape Bounding Polygon)	<p>Specifies the bounding polygon that surrounds a shape. This is specified using a comma-delimited list of x and y coordinates: "x1,y1,x2,y2,x3,y3,..." This is used when text is tightly wrapped around a shape. Default is no value until the mso-wrap-mode style attribute is set to tight or through.</p> <p>[Example:</p> <pre><v:shape ... wrapcoords="0,0 0,200, 200,200, 200,0" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_RoundRect](#)) is located in §A.6.1.
end note]

19.1.2.18 shadow (Shadow Effect)

This element adds shadow effects to a shape. The on attribute shall be true for the shadow to be displayed.


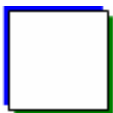
[Example:





```
<v:shadow on="true" type="perspective"
  matrix="1.25,-2,,1.5,,.000001"
  offset="38pt,-6pt">
</v:shadow>
```



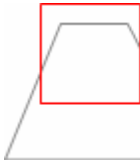



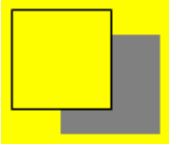

end example]

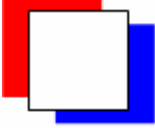

Parent Elements
arc (§19.1.2.1); background (Part 1, §17.2.1); curve (§19.1.2.3); group (§19.1.2.7); image (§19.1.2.10); line (§19.1.2.12); object (Part 1, §17.3.3.19); oval (§19.1.2.13); pict (§14.2.2.2); pict (§14.5.1); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapedefaults (§19.2.2.28); shapetype (§19.1.2.20)

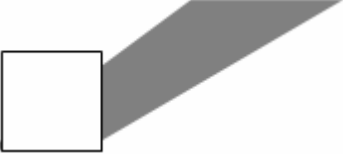
Attributes	Description
color (Shadow Primary Color)	<p>Specifies the color of the primary shadow. Default is gray (RGB 128,128,128).</p> <p>[Example:</p> <pre><v:shadow on="true" color="green"> </v:shadow></pre> <p>Applied to a simple square the shadow looks like this:</p>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
color2 (Shadow Secondary Color)	<p>Specifies the color of the second shadow, or highlight in an embossed or engraved shadow. Default is light gray (RGB 203,203,203).</p> <p>[Example:</p> <pre><v:shadow on="true" type="double" color="green" color2="blue"> </v:shadow></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
id (Unique Identifier)	<p>Specifies a unique identifier that can be used to reference a VML object.</p> <p>Default is no value.</p>

Attributes	Description
	<p>[Example:</p> <pre><v:shape ... id="myShape" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
matrix (Shadow Perspective Matrix)	<p>Specifies a perspective transform for a shadow. Default is no value.</p> <p>The matrix is given in the form "s_{xx}, s_{xy}, s_{yx}, s_{yy}, p_x, p_y" where s = scale and p = perspective. If the offset attribute is in absolute units then p_x, p_y are in 1/EMU units; otherwise they are an inverse fraction of the shape size.</p> <p>[Example: The following snippets explain the matrix parameters. The shadow is applied to a simple square with no fill and a red stroke color (note there is a default shadow offset):</p> <div>  <p>matrix=",,,,"</p> </div> <p>s_{xx}, s_{yy} specify scaling factors for the x and y dimensions:</p> <div>  <p>matrix="2,,,,,"</p> </div> <div>  <p>matrix=",,,2,,"</p> </div> <p>s_{xy}, s_{yx} specify skews in the x and y dimensions:</p> <div>  <p>matrix=",2,,,,,"</p> </div>

Attributes	Description
	<div></div> <div><p>matrix="",-2,,,"</p></div> <p>p_x, p_y effectively set the perspective trapezoid skews along the x and y dimensions:</p> <div></div> <div><p>matrix=",,,0.000001,"</p></div> <div></div> <div><p>matrix=",,,,-0.000002"</p></div> <p><i>end example]</i></p> <p><i>[Example:</i></p> <div><pre><v:shadow on="true" type="perspective" matrix="1.25,-2,,1.5,,0.000001" offset="38pt,-6pt"> </v:shadow></pre></div> <div></div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>obscured (Shadow Transparency)</p>	<p>Specifies whether a shadow is transparent. Default is <code>false</code>. If <code>true</code>, the shadow is transparent if there is no fill on the shape.</p> <p><i>[Example:</i></p>

Attributes	Description
	<pre> <v:background fillcolor="yellow"/> <v:shape style="width:50;height:50" filled="false" fillcolor="red" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"> <v:shadow on="true" offset="50%,25%" obscured="true"> </v:shadow> </v:shape> </pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
offset (Shadow Primary Offset)	<p>Specifies the primary shadow's x,y offset from the shape's location. Default is "2pt,2pt".</p> <p>Values are either an absolute measurement or a fractional value of the shape dimensions, from –50% to 50%.</p> <p>[Example:</p> <pre> <v:shadow on="true" offset="50%,25%"> </v:shadow> </pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
offset2 (Shadow Secondary Offset)	<p>Specifies the secondary shadow's x,y offset from the shape's location. Default is "-2pt,-2pt".</p> <p>[Example:</p> <pre> <v:shadow type="double" on="true" color="blue" offset="10pt,5pt" color2="red" offset2="-10pt,-5pt"> </v:shadow> </pre>

Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
on (Shadow Toggle)	<p>Specifies whether to show a shadow. Default is true.</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
opacity (Shadow Opacity)	<p>Specifies the opacity of the shadow. Default is 1. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. [<i>Example:</i> For example, a value of "52429f" represents 52429/65536 or 0.8. <i>end example]</i></p> <p>[<i>Example:</i></p> <pre><v:shadow type="double" on="true" opacity=".5" color="blue" offset="10pt,5pt" color2="red" offset2="-10pt,-5pt"> </v:shadow></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
origin (Shadow Origin)	<p>Specifies the center of the shadow relative to the shape's origin. Specified as a pair of fractional values of the shape dimensions, ranging from 50% to -50%. Default is "0,0".</p> <p>[<i>Example:</i> This example is unchanged from above except for the addition of the origin attribute:</p> <pre><v:shadow on="true" type="perspective" matrix="1.25,-2,,1.5,,.000001" offset="38pt,-6pt" origin="10%,-10%"> </v:shadow></pre>

Attributes	Description														
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>														
type (Shadow Type)	<p>Specifies the kind of shadow. Default is <code>single</code>. Allowed values are:</p> <table border="1"> <thead> <tr> <th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td><code>single</code></td><td>Single shadow.</td></tr> <tr> <td><code>double</code></td><td>Double shadow. <code>color2</code> and <code>offset2</code> are used for the second shadow's color and offset.</td></tr> <tr> <td><code>perspective</code></td><td>Perspective shadow.</td></tr> <tr> <td><code>shaperelative</code></td><td>The shadow is created relative to the shape.</td></tr> <tr> <td><code>drawingrelative</code></td><td>The shadow is created relative to the drawing.</td></tr> <tr> <td><code>emboss</code></td><td>The shadow has an embossed look.</td></tr> </tbody> </table> <p>The possible values for this attribute are defined by the <code>ST_ShadowType</code> simple type (§19.1.3.6).</p>	Value	Description	<code>single</code>	Single shadow.	<code>double</code>	Double shadow. <code>color2</code> and <code>offset2</code> are used for the second shadow's color and offset.	<code>perspective</code>	Perspective shadow.	<code>shaperelative</code>	The shadow is created relative to the shape.	<code>drawingrelative</code>	The shadow is created relative to the drawing.	<code>emboss</code>	The shadow has an embossed look.
Value	Description														
<code>single</code>	Single shadow.														
<code>double</code>	Double shadow. <code>color2</code> and <code>offset2</code> are used for the second shadow's color and offset.														
<code>perspective</code>	Perspective shadow.														
<code>shaperelative</code>	The shadow is created relative to the shape.														
<code>drawingrelative</code>	The shadow is created relative to the drawing.														
<code>emboss</code>	The shadow has an embossed look.														

[Note: The W3C XML Schema definition of this element's content model ([CT_Shadow](#)) is located in §A.6.1. *end note*]

19.1.2.19 `shape` (Shape Definition)

This element is used to describe a shape, the core object in VML. This element can appear by itself or within a group element (§19.1.2.7). If a `shapetype` element (§19.1.2.20) is referenced using the `type` attribute, any attributes specified in the shape override those found in the `shapetype`.

[Example:

```
<v:shape style="position:absolute;top:50;left:20;width:50;height:50"
  path="m 0,0 l 0,1000 1000,1000 1000,0 x e">
  <v:shadow on="true" type="perspective"
    matrix="1.25,-2,,1.5,,.000001" offset="38pt,-6pt"/>
</v:shape>
```

```
<v:shape style="position:absolute;top:50;left:20;width:50;height:50"
  fillcolor="yellow" path="m 0,0 l 0,1000 1000,1000 1000,0 x e">
  <v:extrusion on="true" lightposition="0,-2000,10000"/>
</v:shape>
```



end example]

Parent Elements
background (Part 1, §17.2.1); group (§19.1.2.7); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1)

Child Elements	Subclause
anchorlock (Anchor Location Is Locked)	§19.3.2.1
borderbottom (Bottom Border)	§19.3.2.2
borderleft (Left Border)	§19.3.2.3
borderright (Right Border)	§19.3.2.4
bordertop (Top Border)	§19.3.2.5
callout (Callout)	§19.2.2.2
ClientData (Attached Object Data)	§19.4.2.12
clippath (Shape Clipping Path)	§19.2.2.3
equationxml (Storage for Alternate Math Content)	§19.2.2.10
extrusion (3D Extrusion)	§19.2.2.11
fill (Shape Fill Properties)	§19.1.2.5
formulas (Set of Formulas)	§19.1.2.6
handles (Set of Handles)	§19.1.2.9
imagedata (Image Data)	§19.1.2.11
ink (Ink)	§19.2.2.15
iscomment (Ink Annotation Flag)	§19.5.2.1
lock (Shape Protections)	§19.2.2.18
path (Shape Path)	§19.1.2.14
shadow (Shadow Effect)	§19.1.2.18
signatureline (Digital Signature Line)	§19.2.2.30

Child Elements	Subclause
skew (Skew Transform)	§19.2.2.31
stroke (Line Stroke Settings)	§19.1.2.21
textbox (Text Box)	§19.1.2.22
textdata (VML Diagram Text)	§19.5.2.2
textpath (Text Layout Path)	§19.1.2.23
wrap (Text Wrapping)	§19.3.2.6

Attributes	Description
adj (Adjustment Parameters)	<p>Specifies a comma-delimited list of parameters, or adjustment values, used to define values for a parameterized formula. Values can be omitted. There can be up to 8 adjust values. Each value is referenced using # followed by a number corresponding to the zero-based index for that value in the list of adjustment values. <i>[Example: For example, #2 references the second value in the adj list. end example]</i></p> <p><i>[Example: The following shape uses formulas to define a simple rectangle. The adj values are referenced by the eqn attribute of the f element (§19.1.2.4) and in turn referenced by the path element (§19.1.2.14).</i></p> <pre> <v:shape coordorigin="0 0" coordsize="200 200" style="position:relative;top:30;left:30;width:20;height:20" adj="1, 1, 1, 200, 200, 200, 200, 1"> <v:path v="m @0,@1 l @2,@3, @4,@5, @6,@7 x e"/> <v:formulas> <v:f eqn="val #0"/> <v:f eqn="val #1"/> <v:f eqn="val #2"/> <v:f eqn="val #3"/> <v:f eqn="val #4"/> <v:f eqn="val #5"/> <v:f eqn="val #6"/> <v:f eqn="val #7"/> </v:formulas> </v:shape> </pre> <p><i>This is the equivalent of:</i></p> <pre> <v:shape coordorigin="0 0" coordsize="200 200" style="position:relative;top:30;left:30;width:20;height:20" path="m 1,1 l 1,200, 200,200, 200,1 x e"> </v:shape> </pre>


Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>allowincell (Allow in Table Cell)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape can be placed in a table. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:allowincell="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>allowoverlap (Allow Shape Overlap)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape can overlap another shape. Default is true. If false, the shape shifts left or right so as not to overlap another shape, similar to the behavior of the HTML float attribute.</p> <p>[Example:</p> <pre><v:shape ... o:allowoverlap="false" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>alt (Alternate Text)</p>	<p>Specifies alternative text describing the graphical object. This text should provide a brief description of the shape for use by accessibility tools. Default is no value.</p> <p>[Example: The alt text describes the basic shape:</p> <pre><v:shape ... fillcolor="red" alt="Red rectangle"> </v:shape></pre> <p>The alt text describes the contents of a shape displaying an image:</p> <pre><v:shape ... alt="Picture of a sunset"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string</p>


Attributes	Description
	datatype.
borderbottomcolor (Bottom Border Color) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the bottom border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderbottomcolor="red" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
borderleftcolor (Border Left Color) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the left border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderleftcolor="red" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
borderrightcolor (Border Right Color) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the right border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderrightcolor="red" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
bordertopcolor (Border Top Color) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the top border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:bordertopcolor="red" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

Attributes	Description
<p>bullet (Graphical Bullet)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the shape is a graphical bullet. Default is <i>false</i>.</p> <p>[Example:</p> <pre><v:shape ... o:bullet="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>button (Button Behavior Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape exhibits button press behavior on click. Default is <i>false</i>.</p> <p>[Example:</p> <pre><v:shape ... o:button="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>bwmode (Black-and-White Mode)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies how a shape renders for black-and-white output devices. When a shape is printed on a black-and-white printer or displayed in a black-and-white view in an application, several options are possible. Default is <i>auto</i>, which uses <i>o:bwnormal</i> for normal black-and-white rendering and <i>o:bwpure</i> for pure black-and-white rendering.</p> <p><i>bwnormal</i> and <i>bwpure</i> are subordinate to <i>bwmode</i>. If <i>bwmode</i> is "auto" then the value for <i>bwnormal</i> or <i>bwpure</i> is used depending on what the output format is. An application can define for itself what, if any, difference there is between normal B&W and pure B&W. [Example: Normal B&W might allow grayscale and pure B&W might not. <i>end example]</i></p> <p>[Example: This shape renders in grayscale in a black-and-white environment:</p> <pre><v:shape ... o:bwmode="grayscale" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
<p>bwnormal (Normal Black-and-White Mode)</p>	<p>Specifies the black-and-white mode for normal black-and-white output devices. Default is <i>auto</i>.</p> <p>[Example: This shape renders in a pale grayscale in a normal black-and-white</p>


Attributes	Description
Namespace: urn:schemas-microsoft-com:office:office	environment: <pre><v:shape ... o:bwmode="auto" o:bwnormal="lightgrayscale" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).
bwpure (Pure Black-and-White Mode) Namespace: urn:schemas-microsoft-com:office:office	Specifies the black-and-white mode for pure black-and-white output devices. Default is auto. <i>[Example: This shape renders in high contrast when in a pure black-and-white environment:</i> <pre><v:shape ... o:bwmode="auto" o:bwpure="highcontrast" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).
chromakey (Image Transparency Color)	Specifies a color value that is transparent and show anything behind the shape. Default is no value. <i>[Example:</i> <pre><v:image ... chromakey="white" ...> </v:image></pre> <i>end example]</i> The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).
class (CSS Reference)	Specifies a reference to the definition of a CSS style. Default is no value. <i>[Example: The snippets below are equivalent:</i> <pre>... .narrowstyle {width:50;height:100} ... <v:shape ... class="narrowstyle" style="top:1;left:1"> </v:shape></pre>

Attributes	Description
	<pre><v:shape ... style="top:1;left:1; width:50;height:100"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>clip (Clipping Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that the clipping region is active. This is used in conjunction with the clippath (§19.2.2.3) element to create a clipping region.</p> <p>[Example:</p> <pre><v:shape ... o:clip="true"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>cliptowrap (Clip to Wrapping Polygon)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that the clipping region for the shape aligns with the wrapping polygon that tightly surrounds the entire shape (essentially, that the shape shall not be drawn beyond its wrapping polygon's extents – if it does, the shape shall be clipped). Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:cliptowrap="true"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>connectortype (Shape Connector Type)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the kind of connector used for joining shapes. Default is straight.</p> <p>[Example:</p> <pre><v:shape ... o:connectortype="elbow" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ConnectorType simple type (§19.2.3.7).</p>

Attributes	Description
coordorigin (Coordinate Space Origin)	<p>Specifies the coordinate of the top left corner of the shape's coordinate space. This determines the position of the (0,0) coordinate space origin within the shape's bounding box. Default is "0,0", which places the (0,0) origin at the top left corner of the bounding box.</p> <p>This affects shape properties that specify coordinate positions, such as the path attribute. Thus a path can be defined against a generic (0,0) origin and the coordorigin value translates the entire path within the shape's bounding space.</p> <p>[<i>Example:</i> The horizontal and vertical coordinate space ranges from -100 to +100 because the coordinate space (coordsize) is 200 by 200 and the top left coordinate is (-100,-100). The (0,0) origin lies at the center of the shape's bounding box, as evidenced by the position of the shape's path within the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
coordsize (Coordinate Space Size)	<p>Specifies the size of the shape's coordinate space in coordinate units. Default is "1000,1000".</p> <p>The physical size of a coordinate unit length is determined by both the size of the coordinate space (coordsize) and the size of the shape (style width and height). The coordsize attribute defines the number of horizontal and vertical subdivisions into which the shape's bounding box is divided. The combination of coordsize and style width/height effective scales the shape anisotropically.</p> <p>[<i>Example:</i> The path is 50 units wide and tall, which is 25% of the size of the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>

Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>dgmlayout (Diagram Node Layout Identifier)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the kind of automatic layout to apply to the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element.</p> <p>[Example:</p> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).</p>
<p>dgmlayoutmru (Diagram Node Recent Layout Identifier)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the kind of automatic layout most recently used on the child elements of the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element.</p> <p>[Example:</p> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).</p>
<p>dgmnodekind (Diagram Node Identifier)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies an optional, application-defined parameter that is intended to be used by the application to tag different types of nodes in a diagram.</p> <p>[Example:</p> <pre><v:shape ... dgmnodekind="1"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema integer</p>



Attributes	Description
	datatype.
doubleclicknotify (Double-click Notification Toggle) Namespace: urn:schemas- microsoft- com:office:office	<p>Specifies that an event message is sent when a shape is double-clicked. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:doubleclicknotify="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
equationxml (Storage for Alternate Math Content)	<p>Specifies alternate XML markup which can be used to rehydrate an equation using the Office Open XML Math syntax. The actual format of the contents of this attribute is application-defined, but shall contain Office Open XML Math as well as any application-specific content. [Note: This form of storing alternate markup is inappropriate, and to be avoided in favor of the more flexible approach used by the child equationxml element (§19.2.2.10). end note]</p> <p>The XML markup stored in this attribute shall be escaped as needed to contain only those characters legal in an attribute value.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
fillcolor (Fill Color)	<p>Specifies the color to use for the fill. Default is white. If the fill element (§19.1.2.5) is present, its color attribute takes precedence. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example: This shape is red if its fill is visible:</p> <pre><v:shape ... fillcolor="red" ... > </v:shape></pre> <p>This is equivalent to:</p> <pre><v:shape ... fillcolor="#ff0000" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
filled (Shape Fill)	<p>Specifies whether the closed path is filled. Default is true. This attribute is overridden</p>

Attributes	Description
Toggle)	<p>by the fill on attribute.</p> <p>[Example:</p> <pre><v:shape ... filled="f" fillcolor="red" ...> </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
forcedash (Force Dashed Outline) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether a dashed outline is used to draw a shape when a shape has no line or fill. Default is false.</p> <p>Used by PresentationML placeholders to draw a dashed outline when there is no line and no fill for a shape.</p> <p>[Example:</p> <pre><v:shape ... o:forcedash="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
gfxdata (Encoded Package) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies a base-64 encoded package as defined in ECMA-376-2 that contains DrawingML content as defined in ECMA-376-1. [<i>Rationale:</i> This attribute allows an application to use VML to represent graphical content for a legacy document while still persisting DrawingML for consuming applications that support DrawingML. For example, a diagram stored within this attribute would have the four parts defined for a DrawingML diagram, as well as any number of application-defined parts and relationships. <i>end rationale</i>]</p> <p>[Example: A DrawingML object is encoded in the gfxdata attribute, leaving VML to handle the visual display:</p> <pre><v:shape id="Diagram 1" o:spid="_x0000_i1025" type="#_x0000_t75" style="width:446.25pt;height:252pt; visibility:visible" o:gfxdata="UESDBBQABgAIAAAAIQDIu8KcTQE..."> <v:imagedata r:id="rId4" o:title=""/> </v:shape></pre>




Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema base64Binary datatype.</p>
<p>hr (Horizontal Rule Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that a shape is a horizontal rule. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hr="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>hralign (Horizontal Rule Alignment)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the alignment of a horizontal rule. Default is left.</p> <p>[Example:</p> <pre><v:shape ... o:hralign="center" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_HrAlign simple type (§19.2.3.16).</p>
<p>href (Hyperlink Target)</p>	<p>Specifies a hyperlink URL target for the shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... href="http://www.openxmlformats.org" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>hrnoshade (Horizontal Rule 3D Shading Toggle)</p> <p>Namespace: urn:schemas-microsoft-</p>	<p>Specifies that the horizontal rule does not have 3-D shading. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hrnoshade="true" ... > </v:shape></pre>

Attributes	Description
com:office:office	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>hrpct (Horizontal Rule Length Percentage)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the length of a horizontal rule as a percentage of page width. Default is 0.</p> <p>[Example:</p> <pre><v:shape ... o:hrpct="85" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
<p>hrstd (Horizontal Rule Standard Display Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape is displayed as a standard horizontal rule. Only applies if hr is true. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:hrstd="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
id (Unique Identifier)	<p>Specifies a unique identifier that can be used to reference a VML object.</p> <p>Default is no value.</p> <p>[Example:</p> <pre><v:shape ... id="myShape" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>insetmode (Text Inset Mode)</p> <p>Namespace: urn:schemas-microsoft-</p>	<p>Specifies whether the application calculates the internal text margin instead of using the inset attribute. Default is custom. This attribute is only meaningful for text boxes.</p> <p>[Example:</p> <pre><v:shape ... o:insetmode="auto" ... ></pre>

Attributes	Description
com:office:office	<p></v:shape></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_InsetMode simple type (§19.2.3.17).</p>
insetpen (Inset Border From Path)	<p>Specifies that the border shall be displayed inside of the path defining the shape, rather than along the path (the default border placement), or outside of the path as might be done with an image.</p> <p>[Example:</p> <pre><v:shape ... insetpen="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
ole (Embedded Object Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the shape is an embedded object. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:ole="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).</p>
oleicon (Embedded Object Icon Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether an embedded object is displayed as an icon. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:oleicon="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
oned (Shape Handle Toggle) Namespace:	<p>Specifies whether the extra handles of a shape are hidden. If true, hides all shape handles except the top left and bottom right; that is, the same handles that are used for a straight line segment. Default is false.</p>

Attributes	Description
urn:schemas-microsoft-com:office:office	<p>[<i>Example:</i></p> <pre><v:shape ... o:oned="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
opacity (Fill Color Opacity)	<p>Specifies the opacity of the primary fill color. Default is 1.0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. [<i>Example:</i> A value of "52429f" represents 52429/65536 or 0.8. <i>end example]</i></p> <p>[<i>Example:</i> The red color is 25% opaque:</p> <pre><v:fill type="gradient" color="red" color2="blue" opacity=".25"> </v:fill></pre> <div>  <div style="display: inline-block; vertical-align: middle;">opacity="1"</div>  <div style="display: inline-block; vertical-align: middle;">opacity=".25"</div> </div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
path (Edge Path)	<p>Specifies the line that makes up the edges of a shape. See the v attribute of the path element (§19.1.2.14) for a full description.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
preferrelative (Relative Resize Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the original size of an object is saved after reformatting. Default is false. If true, the original size of the object is stored and all resizing is based on a percentage of that original size. Otherwise, each resizing resets the scale to 100%.</p> <p>[<i>Example:</i></p> <pre><v:shape ... o:preferrelative="true" ... > </v:shape></pre> <p><i>end example]</i></p>

Attributes	Description
	<p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>print (Print Toggle)</p>	<p>Specifies whether the shape is printed. Default is true.</p> <p><i>[Example:</i></p> <pre><v:shape ... print="false" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>regroupid (Regroup ID)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies a previous group for a shape. An ID number is used to identify groups of shapes that are no longer grouped. This allows shapes to be regrouped programmatically.</p> <p><i>[Example: The shape was part of a group identified by the ID 040754:</i></p> <pre><v:shape ... o:regroupid="040754" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
<p>spid (Optional String)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies an optional string that an application can use to identify the particular shape. Default is no value.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>spt (Optional Number)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies an optional number that an application can use to associate the particular shape with a defined shape type. Default is 0.</p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
<p>strokecolor (Shape Stroke Color)</p>	<p>Specifies the primary color of the brush to use to stroke the path of the shape. Default is black. The color attribute of the stroke element (§19.1.2.21) overrides this. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p>

Attributes	Description
	<p>[Example:</p> <pre><v:shape ... strokecolor="red" ...> </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
<p>stroked (Shape Stroke Toggle)</p>	<p>Specifies whether the path defining the shape is stroked with a solid line. The stroke element (§19.1.2.21) defines other strokes. The on attribute of the stroke element overrides this attribute. Default is true.</p> <p>[Example:</p> <pre><v:shape ... fillcolor="red" stroked="false" strokecolor="blue"...> </v:shape></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>strokeweight (Shape Stroke Weight)</p>	<p>Specifies the width of the brush to use to stroke the path. Default is 1 point. If a number is given without units, the emu is used. The weight attribute of the stroke element (§19.1.2.21) overrides this attribute.</p> <p>[Example:</p> <pre><v:shape ... strokeweight="3pt" ... > </v:shape></pre>  <p>end example]</p>

Attributes	Description								
	<p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>								
<p>style (Shape Styling Properties)</p>	<p>Specifies the CSS2 styling properties of the shape. The CSS2 (Cascading Style Sheets, Level 2) specification, a Recommendation of the World Wide Web Consortium, is available here: http://www.w3.org/TR/REC-CSS2.</p> <p>This attribute uses a semi-colon delimited list of “name:value” pairs, the syntax defined by section 4.1.8 of the CSS2 specification for grouped declarations (without the surrounding braces). The following tables define the allowed properties and the VML treatment of each.</p> <p>[Example: <code><v:shape ... style='position:absolute;width:100pt;height:50pt' ...</code> <code>></code> <code></v:shape></code> <i>end example]</i></p> <table border="1"> <thead> <tr> <th>Property</th><th>Description</th></tr> </thead> <tbody> <tr> <td>flip</td><td> <p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. </td></tr> <tr> <td>height</td><td> <p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. </td></tr> <tr> <td>left</td><td> <p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the </td></tr> </tbody> </table>	Property	Description	flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. 	height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. 	left	<p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the
Property	Description								
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Attributes	Description	
		<p>page.</p> <ul style="list-style-type: none"> • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-bottom	<p>Specifies the position of the bottom of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	margin-left	<p>Specifies the position of the left of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-right	<p>Specifies the position of the right of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-top	<p>Specifies the position of the top of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in</p>

Attributes	Description	
		<p>CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	mso-position-horizontal	<p>Specifies the horizontal positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • left • center • right • inside • outside
	mso-position-horizontal-relative	<p>Specifies relative horizontal position data for objects in WordprocessingML documents. This modifies the mso-position-horizontal property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • char
	mso-position-vertical	<p>Specifies the vertical positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • top • center • bottom • inside • outside
	mso-position-vertical-	<p>Specifies relative vertical position data for objects in WordprocessingML documents. This modifies the mso-</p>

Attributes	Description	
	relative	<p>position-vertical property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • line
	mso-wrap-distance-bottom	<p>Specifies the distance from the bottom of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-left	<p>Specifies the distance from the left side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-right	<p>Specifies the distance from the right side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-top	<p>Specifies the distance from the top of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-edited	<p>Specifies whether the wrap coordinates were customized by the user. If the wrap coordinates are generated by an editor, this property is true; otherwise they were customized by a user. Default is false.</p>
	mso-wrap-style	<p>Specifies the wrapping mode for text in shapes in WordprocessingML documents. Default is square. Allowed values are:</p> <ul style="list-style-type: none"> • square - Wraps text inside the shape in a square. • none - Text does not wrap.
	position	<p>Specifies the kind of positioning used to place an element. Default is static. When the element is contained inside a group, this property shall be absolute. Allowed values are:</p> <ul style="list-style-type: none"> • static - The element is positioned according to the normal flow of the page. The top and left properties

Attributes	Description	
		<p>are ignored. If the object is anchored inline, this value is used.</p> <ul style="list-style-type: none"> • absolute - The element is positioned relative to the parent, using the top and left properties. • relative - The element is positioned according to the normal flow of the page, but the top and left properties are used. The overlap of overlapping elements is governed by the z-index property.
	rotation	Specifies the angle that a shape is rotated, in degrees. Default is 0. Positive angles are clockwise.
	top	<p>Specifies the position of the top of the containing block of the shape relative to the element above it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	visibility	<p>Specifies whether a shape is displayed. Only inherit and hidden are used; any other values are mapped to inherit. Default is inherit. Allowed values are:</p> <ul style="list-style-type: none"> • hidden - The shape is not visible, but is still part of the flow of the objects in the browser. Mouse events are not processed. • inherit - The visibility state is inherited from the parent of the shape.
	width	<p>Specifies the width of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.

Attributes	Description	
	z-index	<p>Specifies the display order of overlapping shapes. Default is 0. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Uses the order that the shapes appear in the page, bottom to top. • <order>- A number that represents the stacking precedence. Shapes with higher numbers are placed on top of those with lower numbers. Negative numbers are allowed.
The following properties are only used by the textbox element (§19.1.2.22):		
	Property	Description
	direction	<p>Specifies the direction of the text in the textbox. Default is ltr. This property is superseded by the mso-direction-alt property if that is specified. Allowed values are:</p> <ul style="list-style-type: none"> • ltr - Text is displayed left-to-right. • rtl - Text is displayed right-to-left.
	layout-flow	<p>Determines the flow of the text layout in a textbox. Default is horizontal. Allowed values are:</p> <ul style="list-style-type: none"> • horizontal - Text is displayed horizontally. • vertical - Text is displayed vertically. • vertical-ideographic - Ideographic text is displayed vertically. • horizontal-ideographic - Ideographic text is displayed horizontally.
	mso-direction-alt	<p>Specifies an alternate direction for text in textboxes. Overrides the direction property. The only allowed value is context.</p>
	mso-fit-shape-to-text	<p>Specifies whether the shape stretches to fit the text in the textbox. Default is false.</p>
	mso-fit-text-to-shape	<p>Specifies whether the text stretches to fit the textbox. Default is false.</p>

Attributes	Description	
	mso-layout-flow-alt	Specifies the alternate layout flow for text in textboxes. This property is used instead of layout-flow when the layout flow is from bottom to top for non-ideographic languages. Its only value is bottom-to-top.
	mso-next-textbox	Specifies the ID of the next textbox in a series. Used to keep track of a set of linked textboxes. Default is no value.
	mso-rotate	<p>Specifies a specific rotation value for text in a textbox. Default is 0. Allowed values are:</p> <ul style="list-style-type: none"> • 0 • 90 • 180 • -90
	mso-text-scale	Specifies the scaling factor for fitting text to shapes. Default is 0. This property is only used if mso-fit-text-to-shape is true.
	v-text-anchor	<p>Specifies the vertical anchoring of text in a textbox. Default is top. The alignment of a text anchor only becomes evident if mso-fit-text-to-shape is false. This property is different from the vertical-align CSS property, which is used for ideographic languages. Allowed values are:</p> <ul style="list-style-type: none"> • top • middle • bottom • top-center • middle-center • bottom-center • top-baseline • bottom-baseline • top-center-baseline • bottom-center-baseline
The following properties are only used by the textpath element (§19.1.2.23):		
	Property	Description
	font	Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.
	font-family	Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.

Attributes	Description																		
	font-size	Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.																	
	font-style	Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are: <ul style="list-style-type: none">normalitalicoblique - Treated the same as italic.																	
	font-variant	Specifies the variant style of a font. Default is normal. The values are the same as those of the CSS font-variant property. Allowed values are: <ul style="list-style-type: none">normalsmall-caps																	
	font-weight	<div>Specifies the thickness of the letters of the font. Default is normal. The values are the same as those of the CSS font-weight property. Allowed values are:</div> <table><tr><th>Value</th><th>Description</th></tr><tr><td>normal</td><td rowspan="6">Treated as non-bold.</td></tr><tr><td>lighter</td></tr><tr><td>100</td></tr><tr><td>200</td></tr><tr><td>300</td></tr><tr><td>400</td></tr><tr><td>bold</td><td rowspan="7">Treated as bold.</td></tr><tr><td>bolder</td></tr><tr><td>500</td></tr><tr><td>600</td></tr><tr><td>700</td></tr><tr><td>800</td></tr><tr><td>900</td></tr></table>	Value	Description	normal	Treated as non-bold.	lighter	100	200	300	400	bold	Treated as bold.	bolder	500	600	700	800	900
	Value	Description																	
normal	Treated as non-bold.																		
lighter																			
100																			
200																			
300																			
400																			
bold	Treated as bold.																		
bolder																			
500																			
600																			
700																			
800																			
900																			
mso-text-	Specifies whether a shadow is applied to the text on a text path.																		

Attributes	Description	
	shadow	Default is false.
	text-decoration	<p>Specifies the style of text decoration. Default is none. The values are the same as those of the CSS text-decoration property. Allowed values are:</p> <ul style="list-style-type: none"> • none • underline • overline • line-through • blink
	v-rotate-letters	Specifies whether the letters of the text are rotated counterclockwise by 90 degrees. Default is false.
	v-same-letter-heights	Specifies whether all letters are the same height regardless of initial case. If true, the lowercase letters are stretched to the height of the uppercase letters. Default is false.
	v-text-align	<p>Specifies the alignment of text. Default is left. Allowed values are:</p> <ul style="list-style-type: none"> • left • right • center • justify • letter-justify - Distributes the extra space between the letters. • stretch-justify - Stretches the letters to fill in the space.
	v-text-kern	Specifies whether kerning is turned on. Default is false.
	v-text-reverse	Specifies whether the layout order of rows is reversed. Default is false. This is used for vertical text layout.
	v-text-spacing-mode	<p>Specifies the mode for letter spacing. Default is tightening. This property determines whether space is removed between each letter (tightening) or added between each letter (tracking). The amount of letter spacing change is defined by the v-text-spacing property. Allowed values are:</p> <ul style="list-style-type: none"> • tightening • tracking
	v-text-spacing	Specifies the amount of spacing for text in 100ths of single line spacing. Default is 100.

Attributes	Description														
	<p>The line (§19.1.2.12), polyline (§19.1.2.15) and curve (§19.1.2.3) elements ignore the following properties:</p> <ul style="list-style-type: none">• top• left• width• height <p>The following properties are not inherited by an element that references a shapetype element (§19.1.2.20) via the id attribute:</p> <ul style="list-style-type: none">• flip• height• left• margin-left• margin-top• position• rotation• top• visibility• width• z-index <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>														
target (Hyperlink Display Target)	<p>Specifies a frame or window that a URL is displayed in. Default is no value. Allowed values are:</p> <table><tr><th>Value</th><th>Description</th></tr><tr><td><targetname></td><td>String containing the name of the frame or window in which to load the document.</td></tr><tr><td>_blank</td><td>Specifies that the linked document is loaded into a new blank window. This window is not named.</td></tr><tr><td>_media</td><td>Specifies that the linked document is loaded into the browser's multimedia pane.</td></tr><tr><td>_parent</td><td>Specifies that the linked document is loaded into the immediate parent of the document containing the link.</td></tr><tr><td>_search</td><td>Specifies that the linked document is loaded into the browser's search pane.</td></tr><tr><td>_self</td><td>Specifies that the linked document is loaded into the window in which the link was clicked (the active window).</td></tr></table>	Value	Description	<targetname>	String containing the name of the frame or window in which to load the document.	_blank	Specifies that the linked document is loaded into a new blank window. This window is not named.	_media	Specifies that the linked document is loaded into the browser's multimedia pane.	_parent	Specifies that the linked document is loaded into the immediate parent of the document containing the link.	_search	Specifies that the linked document is loaded into the browser's search pane.	_self	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).
Value	Description														
<targetname>	String containing the name of the frame or window in which to load the document.														
_blank	Specifies that the linked document is loaded into a new blank window. This window is not named.														
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_parent	Specifies that the linked document is loaded into the immediate parent of the document containing the link.														
_search	Specifies that the linked document is loaded into the browser's search pane.														
_self	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).														

Attributes	Description		
	<table border="1"> <tr> <td><code>_top</code></td><td>Specifies that the linked document is loaded into the topmost window.</td></tr> </table> <p><i>[Example:</i></p> <pre> <v:shape ... href="http://www.openxmlformats.org" target="_self" ... > </v:shape> </pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>	<code>_top</code>	Specifies that the linked document is loaded into the topmost window.
<code>_top</code>	Specifies that the linked document is loaded into the topmost window.		
title (Shape Title)	<p>Specifies the text displayed when the mouse pointer moves over the shape. Default is no value.</p> <p><i>[Example:</i></p> <pre> <v:shape ... title="tooltip" ... > </v:shape> </pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>		
type (Shape Type Reference)	<p>Specifies a reference to a shapetype ID that describes the standard path, fill and stroke properties of a shape. Properties specified in the shape override the shapetype properties. Default is no value.</p> <p><i>[Example:</i> The following example defines a shapetype that is a simple rectangle and an actual shape instance that uses it and overrides the fill color.</p> <pre> <v:shapetype id="mytype" fillcolor="red" strokecolor="blue" coordorigin="0 0" coordsize="200 200" path="m 0,0 l 0,200, 200,200, 200,0 x e"/> </v:shapetype> <v:shape id="shape02" type="#mytype" fillcolor="green" style="position:relative;top:1;left:1;width:20;height:20"> </v:shape> </pre> <p><i>end example]</i></p>		

Attributes	Description
	The possible values for this attribute are defined by the W3C XML Schema string datatype.
<p>userdrawn (Exists In Master Slide)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the user has added the shape to a master slide. Default is <code>false</code>. Used by PresentationML.</p> <p>[Example:</p> <pre><v:shape ... o:userdrawn="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>userhidden (Hide Script Anchors)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a script anchor is hidden. Default is <code>false</code>. If true, script anchors stay hidden even if the shape is otherwise visible. A script anchor is the visual representation of a script that when displayed in an application.</p> <p>[Example:</p> <pre><v:shape ... o:userhidden="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>wrapcoords (Shape Bounding Polygon)</p>	<p>Specifies the bounding polygon that surrounds a shape. This is specified using a comma-delimited list of x and y coordinates: "x1,y1,x2,y2,x3,y3,..." This is used when text is tightly wrapped around a shape. Default is no value until the mso-wrap-mode style attribute is set to <code>tight</code> or <code>through</code>.</p> <p>[Example:</p> <pre><v:shape ... wrapcoords="0,0 0,200, 200,200, 200,0" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_Shape](#)) is located in §A.6.1. *end note*]

19.1.2.20 shapetype (Shape Template)

This element defines a shape template that can be used to create other shapes. Shapetype is identical to the shape element (§19.1.2.19) except it cannot reference another shapetype element. The type attribute shall not be used with shapetype. Attributes defined in the shape override any that appear in the shapetype. CSS positioning attributes (such as top, width, z-index, rotation, flip) are not passed to a shape from a shapetype. To use this element, create a shapetype with a specific id attribute. Then create a shape and reference the shapetype's id using the type attribute.

[Example:

```
<v:shapetype id="mytype" fillcolor="silver" strokecolor="blue">
  <v:path v="m 0,0 l 0,1000, 1000,1000, 1000,0 x e"/>
  <v:fill on="true" type="gradient" color2="navy" angle="-45"/>
</v:shapetype>
<v:shape type="#mytype"
  style="position:absolute;top:10;left:10;width:50;height:50"/>
<v:shape type="#mytype" fillcolor="teal"
  style="position:absolute;top:10;left:75;width:75;height:50"/>
<v:shape type="#mytype"
  style="position:absolute;top:10;left:165;width:50;height:50">
  <v:fill type="solid"/>
</v:shape>
<v:shape type="#mytype" path="m 500,0 l 1000,1000 0,1000 x e"
  style="position:absolute;top:10;left:230;width:50;height:50"/>
```



end example]

Parent Elements
background (Part 1, §17.2.1); group (§19.1.2.7); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1)

Child Elements	Subclause
anchorlock (Anchor Location Is Locked)	§19.3.2.1
borderbottom (Bottom Border)	§19.3.2.2
borderleft (Left Border)	§19.3.2.3
borderright (Right Border)	§19.3.2.4

Child Elements	Subclause
bordertop (Top Border)	§19.3.2.5
callout (Callout)	§19.2.2.2
ClientData (Attached Object Data)	§19.4.2.12
clippath (Shape Clipping Path)	§19.2.2.3
complex (Complex)	§19.2.2.7
extrusion (3D Extrusion)	§19.2.2.11
fill (Shape Fill Properties)	§19.1.2.5
formulas (Set of Formulas)	§19.1.2.6
handles (Set of Handles)	§19.1.2.9
imagedata (Image Data)	§19.1.2.11
lock (Shape Protections)	§19.2.2.18
path (Shape Path)	§19.1.2.14
shadow (Shadow Effect)	§19.1.2.18
signatureline (Digital Signature Line)	§19.2.2.30
skew (Skew Transform)	§19.2.2.31
stroke (Line Stroke Settings)	§19.1.2.21
textbox (Text Box)	§19.1.2.22
textdata (VML Diagram Text)	§19.5.2.2
textpath (Text Layout Path)	§19.1.2.23
wrap (Text Wrapping)	§19.3.2.6

Attributes	Description
adj (Adjustment Parameters)	<p>Specifies a comma-delimited list of parameters, or adjustment values, used to define values for a parameterized formula. Values can be omitted. There can be up to 8 adjust values. Each value is referenced using # followed by a number corresponding to the zero-based index for that value in the list of adjustment values. [Example: For example, #2 references the second value in the adj list. <i>end example</i>]</p> <p>[Example: The following shape uses formulas to define a simple rectangle. The adj values are referenced by the eqn attribute of the f element (§19.1.2.4) and in turn referenced by the path element (§19.1.2.14).</p> <pre> <v:shape coordorigin="0 0" coordsize="200 200" style="position:relative;top:30;left:30;width:20;height:20" adj="1, 1, 1, 200, 200, 200, 200, 1"> <v:path v="m @0,@1 l @2,@3, @4,@5, @6,@7 x e"/> <v:formulas> </pre>


Attributes	Description
	<pre> <v:f eqn="val #0"/> <v:f eqn="val #1"/> <v:f eqn="val #2"/> <v:f eqn="val #3"/> <v:f eqn="val #4"/> <v:f eqn="val #5"/> <v:f eqn="val #6"/> <v:f eqn="val #7"/> </v:formulas> </v:shape> This is the equivalent of: <v:shape coordorigin="0 0" coordsize="200 200" style="position:relative;top:30;left:30;width:20;height:20" path="m 1,1 l 1,200, 200,200, 200,1 x e"> </v:shape> end example] The possible values for this attribute are defined by the W3C XML Schema string datatype. </pre>
<p>allowincell (Allow in Table Cell)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape can be placed in a table. Default is false.</p> <p>[Example:</p> <pre> <v:shape ... o:allowincell="true" ... > </v:shape> end example]</pre> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>allowoverlap (Allow Shape Overlap)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a shape can overlap another shape. Default is true. If false, the shape shifts left or right so as not to overlap another shape, similar to the behavior of the HTML float attribute.</p> <p>[Example:</p> <pre> <v:shape ... o:allowoverlap="false" ... > </v:shape> end example]</pre> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type</p>


Attributes	Description
	(§20.1.2.5).
alt (Alternate Text)	<p>Specifies alternative text describing the graphical object. This text should provide a brief description of the shape for use by accessibility tools. Default is no value.</p> <p>[Example: The alt text describes the basic shape:</p> <pre><v:shape ... fillcolor="red" alt="Red rectangle"> </v:shape></pre> <p>The alt text describes the contents of a shape displaying an image:</p> <pre><v:shape ... alt="Picture of a sunset"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
borderbottomcolor (Bottom Border Color) Namespace: urn:schemas- microsoft- com:office:office	<p>Specifies the bottom border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderbottomcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
borderleftcolor (Border Left Color) Namespace: urn:schemas- microsoft- com:office:office	<p>Specifies the left border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:borderleftcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
borderrightcolor (Border Right Color) Namespace:	<p>Specifies the right border color of an inline shape. Default is no value.</p> <p>[Example:</p>

Attributes	Description
urn:schemas-microsoft-com:office:office	<pre><v:shape ... o:borderrightcolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
bordercolor (Border Top Color) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the top border color of an inline shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... o:bordercolor="red" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
bullet (Graphical Bullet) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the shape is a graphical bullet. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:bullet="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
button (Button Behavior Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether a shape exhibits button press behavior on click. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:button="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
bwmode (Black-and-White Mode) Namespace: urn:schemas-	<p>Specifies how a shape renders for black-and-white output devices. When a shape is printed on a black-and-white printer or displayed in a black-and-white view in an application, several options are possible. Default is auto, which uses o:bwnormal for normal black-and-white rendering and o:bwpure for pure black-and-white rendering.</p>


Attributes	Description
microsoft-com:office:office	<p>bwnormal and bwpure are subordinate to bwmode. If bwmode is "auto" then the value for bwnormal or bwpure is used depending on what the output format is. An application can define for itself what, if any, difference there is between normal B&W and pure B&W. <i>[Example: Normal B&W might allow greyscale and pure B&W might not. end example]</i></p> <p><i>[Example: This shape renders in grayscale in a black-and-white environment:</i></p> <pre><v:shape ... o:bwmode="grayscale" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
bwnormal (Normal Black-and-White Mode) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the black-and-white mode for normal black-and-white output devices. Default is auto.</p> <p><i>[Example: This shape renders in a pale grayscale in a normal black-and-white environment:</i></p> <pre><v:shape ... o:bwmode="auto" o:bwnormal="lightgrayscale" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
bwpure (Pure Black-and-White Mode) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the black-and-white mode for pure black-and-white output devices. Default is auto.</p> <p><i>[Example: This shape renders in high contrast when in a pure black-and-white environment:</i></p> <pre><v:shape ... o:bwmode="auto" o:bwpure="highcontrast" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_BWMode simple type (§19.2.3.3).</p>
chromakey (Image Transparency Color)	<p>Specifies a color value that is transparent and show anything behind the shape. Default is no value.</p> <p><i>[Example:</i></p>

Attributes	Description
	<pre><v:image ... chromakey="white" ...> </v:image></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
class (CSS Reference)	<p>Specifies a reference to the definition of a CSS style. Default is no value.</p> <p>[<i>Example:</i> The snippets below are equivalent:</p> <pre>... .narrowstyle {width:50;height:100} ... <v:shape ... class="narrowstyle" style="top:1;left:1"> </v:shape></pre> <pre><v:shape ... style="top:1;left:1; width:50;height:100"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
clip (Clipping Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies that the clipping region is active. This is used in conjunction with the clippath (§19.2.2.3) element to create a clipping region.</p> <p>[<i>Example:</i></p> <pre><v:shape ... o:clip="true"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
cliptowrap (Clip to Wrapping Polygon) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies that the clipping region for the shape aligns with the wrapping polygon that tightly surrounds the entire shape (essentially, that the shape shall not be drawn beyond its wrapping polygon's extents – if it does, the shape shall be clipped). Default is false.</p> <p>[<i>Example:</i></p> <pre><v:shape ... o:cliptowrap="true"></pre>

Attributes	Description
	<p><code></v:shape></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>connectortype (Shape Connector Type)</p> <p>Namespace: urn:schemas- microsoft- com:office:office</p>	<p>Specifies the kind of connector used for joining shapes. Default is straight.</p> <p>[Example:</p> <pre><v:shape ... o:connectortype="elbow" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ConnectorType simple type (§19.2.3.7).</p>
<p>coordorigin (Coordinate Space Origin)</p>	<p>Specifies the coordinate of the top left corner of the shape's coordinate space. This determines the position of the (0,0) coordinate space origin within the shape's bounding box. Default is "0,0", which places the (0,0) origin at the top left corner of the bounding box.</p> <p>This affects shape properties that specify coordinate positions, such as the path attribute. Thus a path can be defined against a generic (0,0) origin and the coordorigin value translates the entire path within the shape's bounding space.</p> <p>[Example: The horizontal and vertical coordinate space ranges from -100 to +100 because the coordinate space (coordsize) is 200 by 200 and the top left coordinate is (-100,-100). The (0,0) origin lies at the center of the shape's bounding box, as evidenced by the position of the shape's path within the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>coordsize</p>	<p>Specifies the size of the shape's coordinate space in coordinate units. Default is</p>

Attributes	Description
<p>(Coordinate Space Size)</p>	<p>"1000,1000".</p> <p>The physical size of a coordinate unit length is determined by both the size of the coordinate space (coordsize) and the size of the shape (style width and height). The coordsize attribute defines the number of horizontal and vertical subdivisions into which the shape's bounding box is divided. The combination of coordsize and style width/height effective scales the shape anisotropically.</p> <p>[Example: The path is 50 units wide and tall, which is 25% of the size of the coordinate space:</p> <pre><v:shape ... coordsize="200,200" coordorigin="-100,-100" path="m 0,0 l 0,50, 50,50, 50,0 x e"> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>dgmlayout (Diagram Node Layout Identifier)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the kind of automatic layout to apply to the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element.</p> <p>[Example:</p> <pre><v:shape ... dgmlayout="1"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).</p>
<p>dgmlayoutmru (Diagram Node Recent Layout Identifier)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the kind of automatic layout most recently used on the child elements of the diagram node. This is only meaningful if the shape is a node in an organization chart, which is denoted by the orgchart value of the editas attribute of the group element.</p> <p>[Example:</p> <pre><v:shape ... dgmlayout="1"> </v:shape></pre>

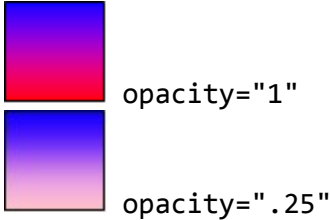
Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_DiagramLayout simple type (§19.2.3.10).</p>
<p>dgmnodekind (Diagram Node Identifier)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies an optional, application-defined parameter that is intended to be used by the application to tag different types of nodes in a diagram.</p> <p>[Example:</p> <pre><v:shape ... dgmnodekind="1"> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
<p>doubleclicknotify (Double-click Notification Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies that an event message is sent when a shape is double-clicked. Default is false.</p> <p>[Example:</p> <pre><v:shape ... o:doubleclicknotify="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>fillcolor (Fill Color)</p>	<p>Specifies the color to use for the fill. Default is white. If the fill element (§19.1.2.5) is present, its color attribute takes precedence. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example: This shape is red if its fill is visible:</p> <pre><v:shape ... fillcolor="red" ... > </v:shape></pre> <p>This is equivalent to:</p> <pre><v:shape ... fillcolor="#ff0000" ... > </v:shape></pre> <p><i>end example]</i></p>


Attributes	Description
	The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).
filled (Shape Fill Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the closed path is filled. Default is <code>true</code>. This attribute is overridden by the <code>fill on</code> attribute.</p> <p>[Example:</p> <pre><v:shape ... filled="f" fillcolor="red" ...> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
forcedash (Force Dashed Outline) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether a dashed outline is used to draw a shape when a shape has no line or fill. Default is <code>false</code>.</p> <p>Used by PresentationML placeholders to draw a dashed outline when there is no line and no fill for a shape.</p> <p>[Example:</p> <pre><v:shape ... o:forcedash="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
hr (Horizontal Rule Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies that a shape is a horizontal rule. Default is <code>false</code>.</p> <p>[Example:</p> <pre><v:shape ... o:hr="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>



Attributes	Description
hralign (Horizontal Rule Alignment) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the alignment of a horizontal rule. Default is <code>left</code>.</p> <p>[Example:</p> <pre><v:shape ... o:hralign="center" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the <code>ST_HrAlign</code> simple type (§19.2.3.16).</p>
href (Hyperlink Target)	<p>Specifies a hyperlink URL target for the shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... href="http://www.openxmlformats.org" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
hrnoshade (Horizontal Rule 3D Shading Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies that the horizontal rule does not have 3-D shading. Default is <code>false</code>.</p> <p>[Example:</p> <pre><v:shape ... o:hrnoshade="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the <code>ST_TrueFalse</code> simple type (§20.1.2.5).</p>
hrpct (Horizontal Rule Length Percentage) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies the length of a horizontal rule as a percentage of page width. Default is 0.</p> <p>[Example:</p> <pre><v:shape ... o:hrpct="85" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
hrstd (Horizontal Rule Standard)	<p>Specifies whether a shape is displayed as a standard horizontal rule. Only applies if <code>hr</code> is <code>true</code>. Default is <code>false</code>.</p>

Attributes	Description
<p>Display Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>[Example:</p> <pre><v:shape ... o:hrstd="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>id (Unique Identifier)</p>	<p>Specifies a unique identifier that can be used to reference a VML object.</p> <p>Default is no value.</p> <p>[Example:</p> <pre><v:shape ... id="myShape" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>insetmode (Text Inset Mode)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the application calculates the internal text margin instead of using the inset attribute. Default is custom. This attribute is only meaningful for text boxes.</p> <p>[Example:</p> <pre><v:shape ... o:insetmode="auto" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_InsetMode simple type (§19.2.3.17).</p>
<p>insetpen (Inset Border From Path)</p>	<p>Specifies that the border shall be displayed inside of the path defining the shape, rather than along the path (the default border placement), or outside of the path as might be done with an image.</p> <p>[Example:</p> <pre><v:shape ... insetpen="true" ... > </v:shape></pre> <p><i>end example]</i></p>

Attributes	Description
	The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).
master (Master Element Toggle) Namespace: urn:schemas-microsoft-com:office:office	Specifies whether the shapetype is a master element. If true, it is rendered by the rendering engine. Default is false. The possible values for this attribute are defined by the W3C XML Schema string datatype.
ole (Embedded Object Toggle) Namespace: urn:schemas-microsoft-com:office:office	Specifies whether the shape is an embedded object. Default is false. <i>[Example:</i> <pre><v:shape ... o:ole="true" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).
oleicon (Embedded Object Icon Toggle) Namespace: urn:schemas-microsoft-com:office:office	Specifies whether an embedded object is displayed as an icon. Default is false. <i>[Example:</i> <pre><v:shape ... o:oleicon="true" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).
oned (Shape Handle Toggle) Namespace: urn:schemas-microsoft-com:office:office	Specifies whether the extra handles of a shape are hidden. If true, hides all shape handles except the top left and bottom right; that is, the same handles that are used for a straight line segment. Default is false. <i>[Example:</i> <pre><v:shape ... o:oned="true" ... > </v:shape></pre> <i>end example]</i> The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).

Attributes	Description
opacity (Fill Color Opacity)	<p>Specifies the opacity of the primary fill color. Default is 1.0. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied. <i>[Example: A value of "52429f" represents 52429/65536 or 0.8. end example]</i></p> <p><i>[Example: The red color is 25% opaque:</i></p> <pre><v:fill type="gradient" color="red" color2="blue" opacity=".25"> </v:fill></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
path (Edge Path)	<p>Specifies the line that makes up the edges of a shape. See the v attribute of the path element (§19.1.2.14) for a full description.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
preferrelative (Relative Resize Toggle) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies whether the original size of an object is saved after reformatting. Default is false. If true, the original size of the object is stored and all resizing is based on a percentage of that original size. Otherwise, each resizing resets the scale to 100%.</p> <p><i>[Example:</i></p> <pre><v:shape ... o:preferrelative="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
print (Print Toggle)	<p>Specifies whether the shape is printed. Default is true.</p> <p><i>[Example:</i></p> <pre><v:shape ... print="false" ... > </v:shape></pre>

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>regroupid (Regroup ID)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies a previous group for a shape. An ID number is used to identify groups of shapes that are no longer grouped. This allows shapes to be regrouped programmatically.</p> <p>[Example: The shape was part of a group identified by the ID 040754:</p> <pre><v:shape ... o:regroupid="040754" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
<p>spid (Optional String)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies an optional string that an application can use to identify the particular shape. Default is no value.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>spt (Optional Number)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies an optional number that an application can use to associate the particular shape with a defined shape type. Default is 0.</p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
<p>strokecolor (Shape Stroke Color)</p>	<p>Specifies the primary color of the brush to use to stroke the path of the shape. Default is black. The color attribute of the stroke element (§19.1.2.21) overrides this. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p>[Example:</p> <pre><v:shape ... strokecolor="red" ...> </v:shape></pre> 

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
<p>stroked (Shape Stroke Toggle)</p>	<p>Specifies whether the path defining the shape is stroked with a solid line. The stroke element (§19.1.2.21) defines other strokes. The on attribute of the stroke element overrides this attribute. Default is true.</p> <p>[Example:</p> <pre><v:shape ... fillcolor="red" stroked="false" strokecolor="blue"...> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>strokeweight (Shape Stroke Weight)</p>	<p>Specifies the width of the brush to use to stroke the path. Default is 1 point. If a number is given without units, the emu is used. The weight attribute of the stroke element (§19.1.2.21) overrides this attribute.</p> <p>[Example:</p> <pre><v:shape ... strokeweight="3pt" ... > </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>style (Shape Styling Properties)</p>	<p>Specifies the CSS2 styling properties of the shape. The CSS2 (Cascading Style Sheets, Level 2) specification, a Recommendation of the World Wide Web Consortium, is available here: http://www.w3.org/TR/REC-CSS2.</p> <p>This attribute uses a semi-colon delimited list of “name:value” pairs, the syntax defined</p>

Attributes	Description										
	<p>by section 4.1.8 of the CSS2 specification for grouped declarations (without the surrounding braces). The following tables define the allowed properties and the VML treatment of each.</p> <p>[Example: <code><v:shape ... style='position:absolute;width:100pt;height:50pt' ...</code> <code>></code> <code></v:shape></code> <i>end example]</i></p> <table> <tr> <th>Property</th><th>Description</th></tr> <tr> <td>flip</td><td> <p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. </td></tr> <tr> <td>height</td><td> <p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. </td></tr> <tr> <td>left</td><td> <p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width. </td></tr> <tr> <td>margin-bottom</td><td> <p>Specifies the position of the bottom of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in</p> </td></tr> </table>	Property	Description	flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. 	height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. 	left	<p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width. 	margin-bottom	<p>Specifies the position of the bottom of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in</p>
Property	Description										
flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. 										
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Attributes	Description	
		<p>CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	margin-left	<p>Specifies the position of the left of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-right	<p>Specifies the position of the right of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-top	<p>Specifies the position of the top of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed.

Attributes	Description	
		<ul style="list-style-type: none"> • <percentage>- Value expressed as a percentage of the parent object's height.
	mso-position-horizontal	<p>Specifies the horizontal positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • left • center • right • inside • outside
	mso-position-horizontal-relative	<p>Specifies relative horizontal position data for objects in WordprocessingML documents. This modifies the mso-position-horizontal property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • char
	mso-position-vertical	<p>Specifies the vertical positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • top • center • bottom • inside • outside
	mso-position-vertical-relative	<p>Specifies relative vertical position data for objects in WordprocessingML documents. This modifies the mso-position-vertical property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • line
	mso-wrap-	Specifies the distance from the bottom of the shape to the text

Attributes	Description	
	distance-bottom	that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-distance-left	Specifies the distance from the left side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-distance-right	Specifies the distance from the right side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-distance-top	Specifies the distance from the top of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-edited	Specifies whether the wrap coordinates were customized by the user. If the wrap coordinates are generated by an editor, this property is true; otherwise they were customized by a user. Default is false.
	mso-wrap-style	<p>Specifies the wrapping mode for text in shapes in WordprocessingML documents. Default is square. Allowed values are:</p> <ul style="list-style-type: none"> • square - Wraps text inside the shape in a square. • none - Text does not wrap.
	position	<p>Specifies the kind of positioning used to place an element. Default is static. When the element is contained inside a group, this property shall be absolute. Allowed values are:</p> <ul style="list-style-type: none"> • static - The element is positioned according to the normal flow of the page. The top and left properties are ignored. If the object is anchored inline, this value is used. • absolute - The element is positioned relative to the parent, using the top and left properties. • relative - The element is positioned according to the normal flow of the page, but the top and left properties are used. The overlap of overlapping elements is governed by the z-index property.

Attributes	Description	
	rotation	Specifies the angle that a shape is rotated, in degrees. Default is 0. Positive angles are clockwise.
	top	<p>Specifies the position of the top of the containing block of the shape relative to the element above it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	visibility	<p>Specifies whether a shape is displayed. Only inherit and hidden are used; any other values are mapped to inherit. Default is inherit. Allowed values are:</p> <ul style="list-style-type: none"> • hidden - The shape is not visible, but is still part of the flow of the objects in the browser. Mouse events are not processed. • inherit - The visibility state is inherited from the parent of the shape.
	width	<p>Specifies the width of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	z-index	<p>Specifies the display order of overlapping shapes. Default is 0. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Uses the order that the shapes appear in the page, bottom to top. • <order>- A number that represents the stacking precedence. Shapes with higher numbers are placed on

Attributes	Description	
		top of those with lower numbers. Negative numbers are allowed.
	The following properties are only used by the textbox element (§19.1.2.22):	
	Property	Description
	direction	<p>Specifies the direction of the text in the textbox. Default is ltr. This property is superceded by the mso-direction-alt property if that is specified. Allowed values are:</p> <ul style="list-style-type: none"> ltr - Text is displayed left-to-right. rtl - Text is displayed right-to-left.
	layout-flow	<p>Determines the flow of the text layout in a textbox. Default is horizontal. Allowed values are:</p> <ul style="list-style-type: none"> horizontal - Text is displayed horizontally. vertical - Text is displayed vertically. vertical-ideographic - Ideographic text is displayed vertically. horizontal-ideographic - Ideographic text is displayed horizontally.
	mso-direction-alt	Specifies an alternate direction for text in textboxes. Overrides the direction property. The only allowed value is context.
	mso-fit-shape-to-text	Specifies whether the shape stretches to fit the text in the textbox. Default is false.
	mso-fit-text-to-shape	Specifies whether the text stretches to fit the textbox. Default is false.
	mso-layout-flow-alt	Specifies the alternate layout flow for text in textboxes. This property is used instead of layout-flow when the layout flow is from bottom to top for non-ideographic languages. Its only value is bottom-to-top.
	mso-next-textbox	Specifies the ID of the next textbox in a series. Used to keep track of a set of linked textboxes. Default is no value.
	mso-rotate	<p>Specifies a specific rotation value for text in a textbox. Default is 0. Allowed values are:</p> <ul style="list-style-type: none"> 0

Attributes	Description										
		<ul style="list-style-type: none">• 90• 180• -90									
	mso-text-scale	Specifies the scaling factor for fitting text to shapes. Default is 0. This property is only used if mso-fit-text-to-shape is true.									
	v-text-anchor	<p>Specifies the vertical anchoring of text in a textbox. Default is top. The alignment of a text anchor only becomes evident if mso-fit-text-to-shape is false. This property is different from the vertical-align CSS property, which is used for ideographic languages. Allowed values are:</p> <ul style="list-style-type: none">• top• middle• bottom• top-center• middle-center• bottom-center• top-baseline• bottom-baseline• top-center-baseline• bottom-center-baseline									
	<p>The following properties are only used by the textpath element (§19.1.2.23):</p> <table><tr><th>Property</th><th>Description</th></tr><tr><td>font</td><td>Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.</td></tr><tr><td>font-family</td><td>Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.</td></tr><tr><td>font-size</td><td>Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.</td></tr><tr><td>font-style</td><td><p>Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are:</p><ul style="list-style-type: none">• normal• italic• oblique - Treated the same as italic.</td></tr></table>		Property	Description	font	Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.	font-family	Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.	font-size	Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.	font-style
Property	Description										
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font-style	<p>Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are:</p> <ul style="list-style-type: none">• normal• italic• oblique - Treated the same as italic.										

Attributes	Description																		
	font-variant	<p>Specifies the variant style of a font. Default is normal. The values are the same as those of the CSS font-variant property. Allowed values are:</p> <ul style="list-style-type: none">normalsmall-caps																	
	font-weight	<p>Specifies the thickness of the letters of the font. Default is normal. The values are the same as those of the CSS font-weight property. Allowed values are:</p> <table><tr><th>Value</th><th>Description</th></tr><tr><td>normal</td><td rowspan="6">Treated as non-bold.</td></tr><tr><td>lighter</td></tr><tr><td>100</td></tr><tr><td>200</td></tr><tr><td>300</td></tr><tr><td>400</td></tr><tr><td>bold</td><td rowspan="7">Treated as bold.</td></tr><tr><td>bolder</td></tr><tr><td>500</td></tr><tr><td>600</td></tr><tr><td>700</td></tr><tr><td>800</td></tr><tr><td>900</td></tr></table>	Value	Description	normal	Treated as non-bold.	lighter	100	200	300	400	bold	Treated as bold.	bolder	500	600	700	800	900
	Value	Description																	
	normal	Treated as non-bold.																	
	lighter																		
100																			
200																			
300																			
400																			
bold	Treated as bold.																		
bolder																			
500																			
600																			
700																			
800																			
900																			
mso-text-shadow	<p>Specifies whether a shadow is applied to the text on a text path. Default is false.</p>																		
text-decoration	<p>Specifies the style of text decoration. Default is none. The values are the same as those of the CSS text-decoration property. Allowed values are:</p> <ul style="list-style-type: none">noneunderlineoverlineline-through																		

Attributes	Description	
		<ul style="list-style-type: none"> • blink
	v-rotate-letters	Specifies whether the letters of the text are rotated counterclockwise by 90 degrees. Default is false.
	v-same-letter-heights	Specifies whether all letters are the same height regardless of initial case. If true, the lowercase letters are stretched to the height of the uppercase letters. Default is false.
	v-text-align	Specifies the alignment of text. Default is left. Allowed values are: <ul style="list-style-type: none"> • left • right • center • justify • letter-justify - Distributes the extra space between the letters. • stretch-justify - Stretches the letters to fill in the space.
	v-text-kern	Specifies whether kerning is turned on. Default is false.
	v-text-reverse	Specifies whether the layout order of rows is reversed. Default is false. This is used for vertical text layout.
	v-text-spacing-mode	Specifies the mode for letter spacing. Default is tightening. This property determines whether space is removed between each letter (tightening) or added between each letter (tracking). The amount of letter spacing change is defined by the v-text-spacing property. Allowed values are: <ul style="list-style-type: none"> • tightening • tracking
	v-text-spacing	Specifies the amount of spacing for text in 100ths of single line spacing. Default is 100.
<p>The line (§19.1.2.12), polyline (§19.1.2.15) and curve (§19.1.2.3) elements ignore the following properties:</p> <ul style="list-style-type: none"> • top • left • width • height <p>The following properties are not inherited by an element that references a shapetype element (§19.1.2.20) via the id attribute:</p>		

Attributes	Description																
	<ul style="list-style-type: none"> • flip • height • left • margin-left • margin-top • position • rotation • top • visibility • width • z-index <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>																
target (Hyperlink Display Target)	<p>Specifies a frame or window that a URL is displayed in. Default is no value. Allowed values are:</p> <table border="1"> <thead> <tr> <th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td><targetname></td><td>String containing the name of the frame or window in which to load the document.</td></tr> <tr> <td>_blank</td><td>Specifies that the linked document is loaded into a new blank window. This window is not named.</td></tr> <tr> <td>_media</td><td>Specifies that the linked document is loaded into the browser's multimedia pane.</td></tr> <tr> <td>_parent</td><td>Specifies that the linked document is loaded into the immediate parent of the document containing the link.</td></tr> <tr> <td>_search</td><td>Specifies that the linked document is loaded into the browser's search pane.</td></tr> <tr> <td>_self</td><td>Specifies that the linked document is loaded into the window in which the link was clicked (the active window).</td></tr> <tr> <td>_top</td><td>Specifies that the linked document is loaded into the topmost window.</td></tr> </tbody> </table> <p>[Example:</p> <pre> <v:shape ... href="http://www.openxmlformats.org" target="_self" ... > </v:shape> </pre> <p>end example]</p>	Value	Description	<targetname>	String containing the name of the frame or window in which to load the document.	_blank	Specifies that the linked document is loaded into a new blank window. This window is not named.	_media	Specifies that the linked document is loaded into the browser's multimedia pane.	_parent	Specifies that the linked document is loaded into the immediate parent of the document containing the link.	_search	Specifies that the linked document is loaded into the browser's search pane.	_self	Specifies that the linked document is loaded into the window in which the link was clicked (the active window).	_top	Specifies that the linked document is loaded into the topmost window.
Value	Description																
<targetname>	String containing the name of the frame or window in which to load the document.																
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_top	Specifies that the linked document is loaded into the topmost window.																

Attributes	Description
	<p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>title (Shape Title)</p>	<p>Specifies the text displayed when the mouse pointer moves over the shape. Default is no value.</p> <p>[Example:</p> <pre><v:shape ... title="tooltip" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>userdrawn (Exists In Master Slide)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the user has added the shape to a master slide. Default is false. Used by PresentationML.</p> <p>[Example:</p> <pre><v:shape ... o:userdrawn="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>userhidden (Hide Script Anchors)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether a script anchor is hidden. Default is false. If true, script anchors stay hidden even if the shape is otherwise visible. A script anchor is the visual representation of a script that when displayed in an application.</p> <p>[Example:</p> <pre><v:shape ... o:userhidden="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>wrapcoords (Shape Bounding Polygon)</p>	<p>Specifies the bounding polygon that surrounds a shape. This is specified using a comma-delimited list of x and y coordinates: "x1,y1,x2,y2,x3,y3,..." This is used when text is tightly wrapped around a shape. Default is no value until the mso-wrap-mode style attribute is set to tight or through.</p>

Attributes	Description
	<p>[Example:</p> <pre><v:shape ... wrapcoords="0,0 0,200, 200,200, 200,0" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_Shapetype](#)) is located in §A.6.1. end note]

19.1.2.21 stroke (Line Stroke Settings)

This element describes how to draw the path if something beyond solid line with a solid color is desired. The attributes of the stroke element can be used to describe a powerful set of stroke properties. Extensions to the VML stroke definition are encoded as sub-elements of stroke.

[Example:

```
<v:polyline points="0pt,0pt,50pt,0pt,50pt,35pt,15pt,35pt,
  15pt,15pt,75pt,15pt">
  <v:stroke startarrow="classic" endarrow="classic"
    startarrowwidth="wide" endarrowwidth="wide" dashstyle="dashdot"
    weight="2pt" color="teal" linestyle="thinThin"/>
</v:polyline>
```



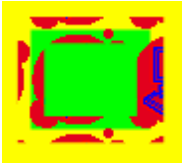

end example]



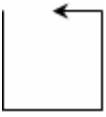
Parent Elements
arc (§19.1.2.1); background (Part 1, §17.2.1); curve (§19.1.2.3); group (§19.1.2.7); image (§19.1.2.10); line (§19.1.2.12); object (Part 1, §17.3.3.19); oval (§19.1.2.13); pict (§14.2.2.2); pict (§14.5.1); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapedefaults (§19.2.2.28); shapetype (§19.1.2.20)


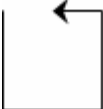
Child Elements	Subclause
bottom (Text Box Bottom Stroke)	§19.2.2.1



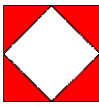
Child Elements	Subclause
column (Text Box Interior Stroke)	§19.2.2.6
left (Text Box Left Stroke)	§19.2.2.16
right (Text Box Right Stroke)	§19.2.2.26
top (Text Box Top Stroke)	§19.2.2.32

Attributes	Description
alhref (Alternate Image Reference) Namespace: urn:schemas-microsoft-com:office:office	<p>Specifies an alternate reference for an image in Macintosh PICT format.</p> <p><i>[Example:</i></p> <pre><v:stroke ... alhref="myimage.pcz" ... > </v:stroke></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
color (Stroke Color)	<p>Specifies the stroke color. Overrides the strokecolor attribute of a shape. Default is black. See the fillcolor attribute for a list of supported named colors.</p> <p><i>[Example: The shape stroke is blue:</i></p> <pre><v:shape ... strokecolor="red" ... > <v:stroke color="blue"/> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
color2 (Stroke Alternate Pattern Color)	<p>Specifies a second color for strokes, used when filltype is pattern. Default is no value.</p> <p>When a pattern fill is used for the stroke, the stroke color is used in colored parts of the source image. The color2 defines an alternate color to use in place of black in the source image.</p> <p><i>[Example: This unusual example is intended to demonstrate how the image and colors interact to create a patterned stroke. The yellow background shows transparency. The non-square shape and square image create an effective offset. The heavy stroke weight shows more of the image. The green shape fill shows how the stroke is overlaid on the shape.</i></p> <pre><v:background fillcolor="yellow"/></pre>



Attributes	Description
	<pre> <v:shape style="width:60;height:50" strokecolor="red" fillcolor="lime" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"> <v:stroke filltype="pattern" weight="10pt" src="myimage.gif" color2="blue"/> </v:shape> </pre>  <p>, where myimage.gif is: </p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
dashstyle (Stroke Dash Pattern)	<p>Specifies the dot and dash pattern for a stroke. Default is solid. Pre-defined values are:</p> <ul style="list-style-type: none"> • solid • shortdash • shortdot • shortdashdot • shortdashdotdot • dot • dash • longdash • dashdot • longdashdot • longdashdotdot <p>A custom-defined dash pattern can also be specified using a series of numbers. These define the length of the dash (the drawn part of the stroke) and the length of the space between the dashes. The lengths are relative to the line width: a length of 1 is equal to the line width. The endcap style is applied to each dash but the arrow style is not. The string defines the length of the dash then the length of the space. This can be repeated to form complex dash styles. The string should always contain a pair of numbers; if it contains an odd number of numbers the last is disregarded. 0 implies a dot that is fourfold symmetrical (with round end caps, this is a circle).</p> <p><i>[Example:</i></p> <pre> <v:stroke dashstyle="0 2" weight="3pt" endcap="round"> </v:stroke> </pre>


Attributes	Description
	 <pre><v:stroke dashstyle="longdashdotdot" weight="2pt"> </v:stroke></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>endarrow (Line End Arrowhead)</p>	<p>Specifies an arrowhead for the end of a line. Default is none. The path shall not be closed with the x command for the arrowhead to show. Allowed values are:</p> <ul style="list-style-type: none"> • none • block • classic • diamond • oval • open <p>[Example:</p> <pre><v:stroke endarrow="classic"/></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowType simple type (§19.1.3.8).</p>
<p>endarrowlength (Line End Arrowhead Length)</p>	<p>Specifies the length of the arrowhead at the end of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • short • medium


Attributes	Description
	<ul style="list-style-type: none"> • long <p>[Example:</p> <pre><v:stroke ... endarrowlength="long" ... /></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_StrokeArrowLength simple type (§19.1.3.7).</p>
endarrowwidth (Line End Arrowhead Width)	<p>Specifies the width of the arrowhead at the end of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • narrow • medium • wide <p>[Example:</p> <pre><v:stroke ... endarrowwidth="wide" ... /></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_StrokeArrowWidth simple type (§19.1.3.9).</p>
endcap (Line End Cap)	<p>Specifies the cap style for the end of a stroke. Default is flat. Allowed values are:</p> <ul style="list-style-type: none"> • flat • square • round <p>[Example:</p> <pre><v:stroke ... endcap="round" weight="10pt" ... /></pre>




Attributes	Description
	<div>  <div>endcap="flat"</div> <div>endcap="square"</div> <div>endcap="round"</div> </div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeEndCap simple type (§19.1.3.10).</p>
filltype (Stroke Image Style)	<p>Specifies the kind of fill used for the background of a stroke. Default is <i>solid</i>. Allowed values are:</p> <ul style="list-style-type: none"> • <i>solid</i> - The fill pattern is solid. • <i>tile</i> - The fill image is tiled. • <i>pattern</i> - The fill image is stretched to form a pattern. • <i>frame</i> - The fill image becomes a border for the shape. <p><i>[Example:</i></p> <pre> <v:shape style="width:50;height:50" strokecolor="red" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"> <v:stroke filltype="frame" weight="10pt" src="border.gif"/> </v:shape> </pre> <div>  , where border.gif is:  </div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_FillType simple type (§19.1.3.4).</p>
forcedash (Force Dashed Outline)	<p>Specifies whether a dashed outline is used to draw a shape when a shape has no line or fill. Default is <i>false</i>.</p>


Attributes	Description
<p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Used by PresentationML placeholders to draw a dashed outline when there is no line and no fill for a shape.</p> <p>[Example:</p> <pre><v:shape ... o:forcedash="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>href (Original Image Reference)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the URL to the original image file. Used only if the picture has been linked and embedded. Default is no value.</p> <p>[Example:</p> <pre><v:fill ... o:href="myimage.gif" ... > </v:fill></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>id (Relationship)</p> <p>Namespace: .../officeDocument/2006/relationships</p>	<p>Specifies the relationship ID of the relationship to the image used for the stroke. The specified relationship shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/image or the document shall be considered non-conformant.</p> <p>[Example: The markup specifies the associated relationship part with relationship ID rId10 contains the corresponding relationship information:</p> <pre>< ... r:id="rId10" /></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>
<p>id (Unique Identifier)</p>	<p>Specifies a unique identifier that can be used to reference a VML object.</p> <p>Default is no value.</p> <p>[Example:</p> <pre><v:shape ... id="myShape" ... ></pre>

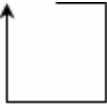
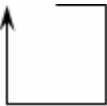
Attributes	Description								
	<div></v:shape></div> <div>end example]</div> <div>The possible values for this attribute are defined by the W3C XML Schema string datatype.</div>								
imagealignshape (Stoke Image Alignment)	<div>Specifies the alignment of the stroke image. If true, the image is aligned with the shape. Otherwise, it is aligned with the containing scope. Default is true.</div> <div>[Example: The top position offset shifts the image alignment relative to the containing window:</div> <div><div><v:shape fillcolor="silver" style="top:20;width:50;height:50" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"> <v:stroke imagealignshape="false" weight="20pt" filltype="tile" src="myimage.gif"/> </v:shape></div><div><div>imagealignshape="false"</div></div><div><div>imagealignshape="false"</div></div><div>end example]</div><div>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</div></div>								
imageaspect (Stroke Image Aspect Ratio)	<div>Specifies how the stroke image aspect ratio is preserved. Default is ignore. Allowed values are:</div> <table><tr><th>Value</th><th>Description</th></tr><tr><td>ignore</td><td>Ignore aspect issues.</td></tr><tr><td>atleast</td><td>Image is at least as big as imagesize.</td></tr><tr><td>atmost</td><td>Image is no bigger than imagesize.</td></tr></table>	Value	Description	ignore	Ignore aspect issues.	atleast	Image is at least as big as imagesize.	atmost	Image is no bigger than imagesize.
Value	Description								
ignore	Ignore aspect issues.								
atleast	Image is at least as big as imagesize.								
atmost	Image is no bigger than imagesize.								

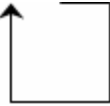
Attributes	Description
	<p>[Example:</p> <pre><v:stroke filltype="frame" weight="10pt" src="border.gif" imagealignshape="true" imageaspect="atleast"> </v:stroke></pre>  <p>imagealignshape="ignore"</p> <p>imagealignshape="atleast"</p> <p>imagealignshape="atmost"</p> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ImageAspect simple type (§19.1.3.5).</p>
imagesize (Stroke Image Size)	<p>Specifies the size of the image for the stroke. Default is the size of the image.</p> <p>[Example:</p> <pre><v:stroke ... imagesize="10pt,10pt" ... /></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
insetpen (Inset Border From Path)	<p>Specifies that the border shall be displayed inside of the path defining the shape, rather than along the path (the default border placement), or outside of the path as might be done with an image.</p> <p>[Example:</p> <pre><v:shape ... insetpen="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>

Attributes	Description
joinstyle (Line End Join Style)	<p>Specifies the join style for line ends. Default is round.</p> <ul style="list-style-type: none">• round• bevel• miter <p>[Example:</p> <pre><v:polyline strokeweight="10pt" strokecolor="navy" points="10pt,10pt,50pt,50pt,90pt,10pt"> <v:stroke joinstyle="bevel"/> </v:polyline></pre>  <p>joinstyle="round"</p> <p>joinstyle="bevel"</p> <p>joinstyle="miter"</p> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_StrokeJoinStyle simple type (§19.1.3.11).</p>
linestyle (Stroke Line Style)	<p>Specifies the line style of the stroke. Default is single.</p> <ul style="list-style-type: none">• single• thinThin• thinThick• thickThin• thickBetweenThin <p>[Example:</p> <pre><v:stroke linestyle="thickThin" weight="5pt"> </v:stroke></pre>

Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeLineStyle simple type (§19.1.3.12).</p>
miterlimit (Miter Joint Limit)	<p>Specifies the smoothness of the miter joint, or the maximum distance between the inner point and outer point of a joint. This number is a multiple of the thickness of the line. Default is 8.</p> <p>[Example:</p> <pre><v:stroke joinstyle="miter" weight="10pt" miterlimit="2"> </v:stroke></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema decimal datatype.</p>
on (Stroke Toggle)	<p>Specifies whether the stroke is displayed. Default is true. This attribute overrides the shape's stroke attribute.</p> <p>[Example:</p> <pre><v:rect style="width:50;height:50" stroked="true" fillcolor="lime" strokecolor="red"> <v:stroke on="false" weight="5pt"/> </v:rect></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
opacity (Stroke Opacity)	<p>Specifies the amount of transparency of a stroke. Default is 1.0.</p>

Attributes	Description
	<p>[Example:</p> <pre><v:rect style="width:50;height:50" fillcolor="lime" strokecolor="red"> <v:stroke weight="5pt" opacity="50%"/> </v:rect></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>relid (Relationship to Part)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies the relationship ID of the relationship to the image. The specified relationship shall be of type http://schemas.openxmlformats.org/officeDocument/2006/relationships/image or the document shall be considered non-conformant.</p> <p>[Example: The markup specifies the associated relationship part with relationship ID rId10 contains the corresponding relationship information:</p> <pre><v:stroke ... o:relid="rId10" ...> </v:stroke></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>
<p>src (Stroke Image Location)</p>	<p>Specifies the source image to load for a stroke fill. Default is no value.</p> <p>[Example:</p> <pre><v:stroke ... src="myimage.gif" ... > </v:stroke></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>startarrow (Line Start Arrowhead)</p>	<p>Specifies an arrowhead for the start of a line. Default is none. The path shall not be closed with the x command for the arrowhead to show. Allowed values are:</p> <ul style="list-style-type: none"> • none

Attributes	Description
	<ul style="list-style-type: none"> • block • classic • diamond • oval • open <p>[Example:</p> <pre><v:stroke startarrow="classic"/></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_StrokeArrowType simple type (§19.1.3.8).</p>
startarrowlength (Line Start Arrowhead Length)	<p>Specifies the length of the arrowhead at the start of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • short • medium • long <p>[Example:</p> <pre><v:stroke ... startarrowlength="long" ... /></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_StrokeArrowLength simple type (§19.1.3.7).</p>
startarrowwidth (Line Start Arrowhead Width)	<p>Specifies the width of the arrowhead at the start of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • narrow • medium • wide

Attributes	Description
	<p>[Example:</p> <pre><v:stroke ... startarrowwidth="wide" ... /></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_StrokeArrowWidth simple type (§19.1.3.9).</p>
<p>title (Stroke Title)</p> <p>Namespace: urn:schemas- microsoft- com:office:office</p>	<p>Specifies the title of an embedded stroke image. This is typically set to the comment property of the image, which is often blank.</p> <p>[Example:</p> <pre><v:fill ... o:title="alt text" ... > </v:fill></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>weight (Stroke Weight)</p>	<p>Specifies the thickness of a stroke. Default is 1. This attribute overrides the shape's strokeweight attribute.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_Stroke](#)) is located in §A.6.1. *end note*]

19.1.2.22 [textbox \(Text Box\)](#)

This element is used to define text that appears inside the shape. This text can contain rich formatting and is rendered to fit inside the textboxrect defined by the path element (§19.1.2.14).

[Example:

```
<v:shape style="width=200;height=200" coordsize="400,400"
  fillcolor="yellow" strokecolor="maroon"
  path="m 119,0 l 148,86 238,86 166,140 192,226 119,175 46,226
  72,140 0,86 90,86 x e">
```

```
<v:textbox inset="32pt,35pt,, ">VML</v:textbox>
</v:shape>
```




end example]

Parent Elements
arc (§19.1.2.1); background (Part 1, §17.2.1); curve (§19.1.2.3); group (§19.1.2.7); image (§19.1.2.10); line (§19.1.2.12); object (Part 1, §17.3.3.19); oval (§19.1.2.13); pict (§14.2.2.2); pict (§14.5.1); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapedefaults (§19.2.2.28); shapetype (§19.1.2.20)

Child Elements	Subclause
txbxContent (Rich Text Box Content Container)	§14.8.1.1

Attributes	Description
id (Unique Identifier)	<p>Specifies a unique identifier that can be used to reference a VML object.</p> <p>Default is no value.</p> <p>[Example:</p> <pre><v:shape ... id="myShape" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
inset (Text Box Inset)	<p>Specifies inner margin values for textbox text. Default is "0.1in, 0.05in, 0.1in, 0.05in". Missing values are set to the default. This is used if insetmode is custom.</p> <p>The internal text margin value is specified as a string containing four values, each separated by commas or spaces. The values measure inset from the left, top, right, and bottom edges of the box specified by the textboxrect attribute of the path element (§19.1.2.14).</p>

Attributes	Description
	<p>[Example: The text is set toward the lower right of a small square:</p> <pre><v:textbox inset="20pt,30pt,10pt,10pt"> VML</v:textbox></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>insetmode (Text Inset Mode)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether the application calculates the internal text margin instead of using the inset attribute. Default is custom.</p> <p>[Example:</p> <pre><v:textbox ... o:insetmode="auto" ... > </v:textbox></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_InsetMode simple type (§19.2.3.17).</p>
<p>singleclick (Text Box Single-Click Selection Toggle)</p> <p>Namespace: urn:schemas-microsoft-com:office:office</p>	<p>Specifies whether text is selectable with a single click. Default is false.</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>style (Shape Styling Properties)</p>	<p>Specifies the CSS2 styling properties of the shape. The CSS2 (Cascading Style Sheets, Level 2) specification, a Recommendation of the World Wide Web Consortium, is available here: http://www.w3.org/TR/REC-CSS2.</p> <p>This attribute uses a semi-colon delimited list of “name:value” pairs, the syntax defined by section 4.1.8 of the CSS2 specification for grouped declarations (without the surrounding braces). The following tables define the allowed properties and the VML treatment of each.</p> <p>[Example:</p> <pre><v:shape ... style='position:absolute;width:100pt;height:50pt' ...</pre>

Attributes	Description										
<pre>> </v:shape> end example]</pre>	<table border="1"> <thead> <tr> <th>Property</th><th>Description</th></tr> </thead> <tbody> <tr> <td>flip</td><td> <p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. </td></tr> <tr> <td>height</td><td> <p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. </td></tr> <tr> <td>left</td><td> <p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width. </td></tr> <tr> <td>margin-bottom</td><td> <p>Specifies the position of the bottom of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, </td></tr> </tbody> </table>	Property	Description	flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. 	height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. 	left	<p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width. 	margin-bottom	<p>Specifies the position of the bottom of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm,
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Attributes	Description	
		<p>mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed.</p> <ul style="list-style-type: none"> • <percentage>- Value expressed as a percentage of the parent object's height.
	margin-left	<p>Specifies the position of the left of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-right	<p>Specifies the position of the right of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-top	<p>Specifies the position of the top of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	mso-position-horizontal	<p>Specifies the horizontal positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p>

Attributes	Description	
		<ul style="list-style-type: none"> • absolute • left • center • right • inside • outside
	mso-position-horizontal-relative	<p>Specifies relative horizontal position data for objects in WordprocessingML documents. This modifies the mso-position-horizontal property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • char
	mso-position-vertical	<p>Specifies the vertical positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • top • center • bottom • inside • outside
	mso-position-vertical-relative	<p>Specifies relative vertical position data for objects in WordprocessingML documents. This modifies the mso-position-vertical property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • line
	mso-wrap-distance-bottom	<p>Specifies the distance from the bottom of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-	<p>Specifies the distance from the left side of the shape to the text that wraps around it. Default is 0 pt. This property is different</p>

Attributes	Description	
	distance-left	from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-distance-right	Specifies the distance from the right side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-distance-top	Specifies the distance from the top of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-edited	Specifies whether the wrap coordinates were customized by the user. If the wrap coordinates are generated by an editor, this property is true; otherwise they were customized by a user. Default is false.
	mso-wrap-style	<p>Specifies the wrapping mode for text in shapes in WordprocessingML documents. Default is square. Allowed values are:</p> <ul style="list-style-type: none"> square - Wraps text inside the shape in a square. none - Text does not wrap.
	position	<p>Specifies the kind of positioning used to place an element. Default is static. When the element is contained inside a group, this property shall be absolute. Allowed values are:</p> <ul style="list-style-type: none"> static - The element is positioned according to the normal flow of the page. The top and left properties are ignored. If the object is anchored inline, this value is used. absolute - The element is positioned relative to the parent, using the top and left properties. relative - The element is positioned according to the normal flow of the page, but the top and left properties are used. The overlap of overlapping elements is governed by the z-index property.
	rotation	Specifies the angle that a shape is rotated, in degrees. Default is 0. Positive angles are clockwise.
	top	Specifies the position of the top of the containing block of the shape relative to the element above it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property

Attributes	Description	
		<p>shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	visibility	<p>Specifies whether a shape is displayed. Only inherit and hidden are used; any other values are mapped to inherit. Default is inherit. Allowed values are:</p> <ul style="list-style-type: none"> • hidden - The shape is not visible, but is still part of the flow of the objects in the browser. Mouse events are not processed. • inherit - The visibility state is inherited from the parent of the shape.
	width	<p>Specifies the width of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	z-index	<p>Specifies the display order of overlapping shapes. Default is 0. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Uses the order that the shapes appear in the page, bottom to top. • <order>- A number that represents the stacking precedence. Shapes with higher numbers are placed on top of those with lower numbers. Negative numbers are allowed.
The following properties are only used by the textbox element (§19.1.2.22):		
	Property	Description

Attributes	Description	
	direction	<p>Specifies the direction of the text in the textbox. Default is ltr. This property is superceded by the mso-direction-alt property if that is specified. Allowed values are:</p> <ul style="list-style-type: none"> • ltr - Text is displayed left-to-right. • rtl - Text is displayed right-to-left.
	layout-flow	<p>Determines the flow of the text layout in a textbox. Default is horizontal. Allowed values are:</p> <ul style="list-style-type: none"> • horizontal - Text is displayed horizontally. • vertical - Text is displayed vertically. • vertical-ideographic - Ideographic text is displayed vertically. • horizontal-ideographic - Ideographic text is displayed horizontally.
	mso-direction-alt	<p>Specifies an alternate direction for text in textboxes. Overrides the direction property. The only allowed value is context.</p>
	mso-fit-shape-to-text	<p>Specifies whether the shape stretches to fit the text in the textbox. Default is false.</p>
	mso-fit-text-to-shape	<p>Specifies whether the text stretches to fit the textbox. Default is false.</p>
	mso-layout-flow-alt	<p>Specifies the alternate layout flow for text in textboxes. This property is used instead of layout-flow when the layout flow is from bottom to top for non-ideographic languages. Its only value is bottom-to-top.</p>
	mso-next-textbox	<p>Specifies the ID of the next textbox in a series. Used to keep track of a set of linked textboxes. Default is no value.</p>
	mso-rotate	<p>Specifies a specific rotation value for text in a textbox. Default is 0. Allowed values are:</p> <ul style="list-style-type: none"> • 0 • 90 • 180 • -90
	mso-text-scale	<p>Specifies the scaling factor for fitting text to shapes. Default is 0. This property is only used if mso-fit-text-to-shape is true.</p>

Attributes	Description	
	v-text-anchor	<p>Specifies the vertical anchoring of text in a textbox. Default is top. The alignment of a text anchor only becomes evident if mso-fit-text-to-shape is false. This property is different from the vertical-align CSS property, which is used for ideographic languages. Allowed values are:</p> <ul style="list-style-type: none">• top• middle• bottom• top-center• middle-center• bottom-center• top-baseline• bottom-baseline• top-center-baseline• bottom-center-baseline
	The following properties are only used by the textpath element (§19.1.2.23):	

Attributes	Description	
	font-weight	Specifies the thickness of the letters of the font. Default is normal. The values are the same as those of the CSS font-weight property. Allowed values are:

Attributes	Description	
		height of the uppercase letters. Default is false.
	v-text-align	<p>Specifies the alignment of text. Default is left. Allowed values are:</p> <ul style="list-style-type: none"> • left • right • center • justify • letter-justify - Distributes the extra space between the letters. • stretch-justify - Stretches the letters to fill in the space.
	v-text-kern	Specifies whether kerning is turned on. Default is false.
	v-text-reverse	Specifies whether the layout order of rows is reversed. Default is false. This is used for vertical text layout.
	v-text-spacing-mode	<p>Specifies the mode for letter spacing. Default is tightening. This property determines whether space is removed between each letter (tightening) or added between each letter (tracking). The amount of letter spacing change is defined by the v-text-spacing property. Allowed values are:</p> <ul style="list-style-type: none"> • tightening • tracking
	v-text-spacing	Specifies the amount of spacing for text in 100ths of single line spacing. Default is 100.
<p>The line (§19.1.2.12), polyline (§19.1.2.15) and curve (§19.1.2.3) elements ignore the following properties:</p> <ul style="list-style-type: none"> • top • left • width • height <p>The following properties are not inherited by an element that references a shapetype element (§19.1.2.20) via the id attribute:</p> <ul style="list-style-type: none"> • flip • height • left • margin-left • margin-top 		

Attributes	Description
	<ul style="list-style-type: none">• position• rotation• top• visibility• width• z-index <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element’s content model ([CT_Textbox](#)) is located in §A.6.1. *end note*]

19.1.2.23 [textpath](#) (Text Layout Path)

This element is used to define a vector path based on the text data, font and font styles supplied. The path which results is then mapped into the region defined by the v attribute of the shape's path (§19.1.2.14).








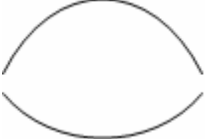
[Example:

```
<v:curve from="50,100" to="400,100"
  control1="200,200" control2="300,200">
  <v:stroke color="blue"/>
  <v:fill color="yellow" color2="green" type="gradient"/>
  <v:path textpathok="true"/>
  <v:textpath on="true" style="font:normal normal normal 36pt Arial"
    fitpath="true" string="Hello, VML!"/>
</v:curve>
```



end example]

Parent Elements
arc (§19.1.2.1); background (Part 1, §17.2.1); curve (§19.1.2.3); group (§19.1.2.7); image (§19.1.2.10); line (§19.1.2.12); object (Part 1, §17.3.3.19); oval (§19.1.2.13); pict (§14.2.2.2); pict (§14.5.1); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapetype (§19.1.2.20)

Attributes	Description				
fitpath (Path Fit Toggle)	<p>Specifies whether the text fits the path of a shape. If true, sizes the text to fill the path it lies out on. Default is false.</p> <p>[Example:</p> <pre><v:textpath on="true" fitpath="true" string="VML"> </v:textpath></pre> <table border="1"> <tr> <td></td><td>fitpath="true"</td></tr> <tr> <td></td><td>fitpath="false"</td></tr> </table> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>		fitpath="true"		fitpath="false"
	fitpath="true"				
	fitpath="false"				
fitshape (Shape Fit Toggle)	<p>Specifies whether the text fits the bounding box of a shape. If true, the text is stretched out to the edges of the box that defines the entire shape. Default is false.</p> <p>[Example: When fitshape is false, the text is drawn along the first part of the path. When true, the text is stretched to fit the entire enclosed area of the shape.</p> <pre><v:shape style="width:100;height:100" path="m 0,500 c 250,0 750,0 1000,500 e m 0,600 c 250,900 750,900 1000,600 e" fillcolor="yellow" strokecolor="maroon"> <v:path textpathok="t"/> <v:textpath on="t" fitshape="t" string="VML"/> </v:shape></pre>  <p>The raw path stroke is:</p>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>				

Attributes	Description
id (Unique Identifier)	<p>Specifies a unique identifier that can be used to reference a VML object.</p> <p>Default is no value.</p> <p>[Example:</p> <pre><v:shape ... id="myShape" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
on (Text Path Toggle)	<p>Specifies whether the text is displayed on the textpath. Default is false. The textpathok attribute of the path element (§19.1.2.14) overrides this.</p> <p>[Example:</p> <pre><v:line from="50,100" to="100,100"> <v:path textpathok="false"/> <v:textpath on="true" string="VML"/> </v:line></pre> <hr/> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
string (Text Path Text)	<p>Specifies the text of the text path. Default is no value.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
style (Shape Styling Properties)	<p>Specifies the CSS2 styling properties of the shape. The CSS2 (Cascading Style Sheets, Level 2) specification, a Recommendation of the World Wide Web Consortium, is available here: http://www.w3.org/TR/REC-CSS2.</p> <p>This attribute uses a semi-colon delimited list of “name:value” pairs, the syntax defined by section 4.1.8 of the CSS2 specification for grouped declarations (without the surrounding braces). The following tables define the allowed properties and the VML treatment of each.</p> <p>[Example:</p> <pre><v:shape ... style='position:absolute;width:100pt;height:50pt' ... ></pre>

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Property	Description										
flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. 										
height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. 										
left	<p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width. 										
margin-bottom	<p>Specifies the position of the bottom of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or 										

Attributes	Description	
		<p>ex). If no units are given, pixels (px) is assumed.</p> <ul style="list-style-type: none"> • <percentage>- Value expressed as a percentage of the parent object's height.
	margin-left	<p>Specifies the position of the left of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-right	<p>Specifies the position of the right of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-top	<p>Specifies the position of the top of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	mso-position-horizontal	<p>Specifies the horizontal positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute

Attributes	Description	
		<ul style="list-style-type: none"> • left • center • right • inside • outside
	mso-position-horizontal-relative	<p>Specifies relative horizontal position data for objects in WordprocessingML documents. This modifies the mso-position-horizontal property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • char
	mso-position-vertical	<p>Specifies the vertical positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • top • center • bottom • inside • outside
	mso-position-vertical-relative	<p>Specifies relative vertical position data for objects in WordprocessingML documents. This modifies the mso-position-vertical property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • line
	mso-wrap-distance-bottom	<p>Specifies the distance from the bottom of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>
	mso-wrap-distance-left	<p>Specifies the distance from the left side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the</p>

Attributes	Description	
		shape to include the margin areas. This property does not change the origin.
	mso-wrap-distance-right	Specifies the distance from the right side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-distance-top	Specifies the distance from the top of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-edited	Specifies whether the wrap coordinates were customized by the user. If the wrap coordinates are generated by an editor, this property is true; otherwise they were customized by a user. Default is false.
	mso-wrap-style	<p>Specifies the wrapping mode for text in shapes in WordprocessingML documents. Default is square. Allowed values are:</p> <ul style="list-style-type: none"> • square - Wraps text inside the shape in a square. • none - Text does not wrap.
	position	<p>Specifies the kind of positioning used to place an element. Default is static. When the element is contained inside a group, this property shall be absolute. Allowed values are:</p> <ul style="list-style-type: none"> • static - The element is positioned according to the normal flow of the page. The top and left properties are ignored. If the object is anchored inline, this value is used. • absolute - The element is positioned relative to the parent, using the top and left properties. • relative - The element is positioned according to the normal flow of the page, but the top and left properties are used. The overlap of overlapping elements is governed by the z-index property.
	rotation	Specifies the angle that a shape is rotated, in degrees. Default is 0. Positive angles are clockwise.
	top	Specifies the position of the top of the containing block of the shape relative to the element above it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:



Attributes	Description		
		<ul style="list-style-type: none">• auto - Default position of an element in the flow of the page.• <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed.• <percentage>- Value expressed as a percentage of the parent object's height.	
	visibility	<p>Specifies whether a shape is displayed. Only inherit and hidden are used; any other values are mapped to inherit. Default is inherit. Allowed values are:</p> <ul style="list-style-type: none">• hidden - The shape is not visible, but is still part of the flow of the objects in the browser. Mouse events are not processed.• inherit - The visibility state is inherited from the parent of the shape.	
	width	<p>Specifies the width of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none">• auto - Default position of an element in the flow of the page.• <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed.• <percentage>- Value expressed as a percentage of the parent object's width.	
	z-index	<p>Specifies the display order of overlapping shapes. Default is 0. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none">• auto - Uses the order that the shapes appear in the page, bottom to top.• <order>- A number that represents the stacking precedence. Shapes with higher numbers are placed on top of those with lower numbers. Negative numbers are allowed.	
	<p>The following properties are only used by the textbox element (§19.1.2.22):</p> <table><tr><th>Property</th><th>Description</th></tr></table>		Property
Property	Description		

Attributes	Description	
	direction	<p>Specifies the direction of the text in the textbox. Default is ltr. This property is superceded by the mso-direction-alt property if that is specified. Allowed values are:</p> <ul style="list-style-type: none"> • ltr - Text is displayed left-to-right. • rtl - Text is displayed right-to-left.
	layout-flow	<p>Determines the flow of the text layout in a textbox. Default is horizontal. Allowed values are:</p> <ul style="list-style-type: none"> • horizontal - Text is displayed horizontally. • vertical - Text is displayed vertically. • vertical-ideographic - Ideographic text is displayed vertically. • horizontal-ideographic - Ideographic text is displayed horizontally.
	mso-direction-alt	<p>Specifies an alternate direction for text in textboxes. Overrides the direction property. The only allowed value is context.</p>
	mso-fit-shape-to-text	<p>Specifies whether the shape stretches to fit the text in the textbox. Default is false.</p>
	mso-fit-text-to-shape	<p>Specifies whether the text stretches to fit the textbox. Default is false.</p>
	mso-layout-flow-alt	<p>Specifies the alternate layout flow for text in textboxes. This property is used instead of layout-flow when the layout flow is from bottom to top for non-ideographic languages. Its only value is bottom-to-top.</p>
	mso-next-textbox	<p>Specifies the ID of the next textbox in a series. Used to keep track of a set of linked textboxes. Default is no value.</p>
	mso-rotate	<p>Specifies a specific rotation value for text in a textbox. Default is 0. Allowed values are:</p> <ul style="list-style-type: none"> • 0 • 90 • 180 • -90
	mso-text-scale	<p>Specifies the scaling factor for fitting text to shapes. Default is 0. This property is only used if mso-fit-text-to-shape is true.</p>

Attributes	Description													
	v-text-anchor	<p>Specifies the vertical anchoring of text in a textbox. Default is top. The alignment of a text anchor only becomes evident if mso-fit-text-to-shape is false. This property is different from the vertical-align CSS property, which is used for ideographic languages. Allowed values are:</p> <ul style="list-style-type: none">• top• middle• bottom• top-center• middle-center• bottom-center• top-baseline• bottom-baseline• top-center-baseline• bottom-center-baseline												
	The following properties are only used by the textpath element (§19.1.2.23):													
	<table><tr><th>Property</th><th>Description</th></tr><tr><td>font</td><td>Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.</td></tr><tr><td>font-family</td><td>Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.</td></tr><tr><td>font-size</td><td>Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.</td></tr><tr><td>font-style</td><td>Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are:<ul style="list-style-type: none">• normal• italic• oblique - Treated the same as italic.</td></tr><tr><td>font-variant</td><td>Specifies the variant style of a font. Default is normal. The values are the same as those of the CSS font-variant property. Allowed values are:<ul style="list-style-type: none">• normal• small-caps</td></tr></table>		Property	Description	font	Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.	font-family	Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.	font-size	Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.	font-style	Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are: <ul style="list-style-type: none">• normal• italic• oblique - Treated the same as italic.	font-variant	Specifies the variant style of a font. Default is normal. The values are the same as those of the CSS font-variant property. Allowed values are: <ul style="list-style-type: none">• normal• small-caps
	Property	Description												
	font	Specifies a compound value of font settings. Default is no value. The values are the same as those of the CSS font property. The order of definitions in the string is: font-style, font-variant, font-weight, font-size, line-height, font-family.												
	font-family	Specifies the family of the font. Default is no value. The values are the same as those of the CSS font-family property.												
	font-size	Specifies the size of the font. Default is no value. The font size is defined in points. The values are the same as those of the CSS font-size property.												
font-style	Specifies the amount of slant for a font. Default is normal. The values are the same as those of the CSS font-style property. Allowed values are: <ul style="list-style-type: none">• normal• italic• oblique - Treated the same as italic.													
font-variant	Specifies the variant style of a font. Default is normal. The values are the same as those of the CSS font-variant property. Allowed values are: <ul style="list-style-type: none">• normal• small-caps													

Attributes	Description																		
	font-weight	Specifies the thickness of the letters of the font. Default is normal. The values are the same as those of the CSS font-weight property. Allowed values are:																	
		<table><tr><th>Value</th><th>Description</th></tr><tr><td>normal</td><td rowspan="6">Treated as non-bold.</td></tr><tr><td>lighter</td></tr><tr><td>100</td></tr><tr><td>200</td></tr><tr><td>300</td></tr><tr><td>400</td></tr><tr><td>bold</td><td rowspan="7">Treated as bold.</td></tr><tr><td>bolder</td></tr><tr><td>500</td></tr><tr><td>600</td></tr><tr><td>700</td></tr><tr><td>800</td></tr><tr><td>900</td></tr></table>	Value	Description	normal	Treated as non-bold.	lighter	100	200	300	400	bold	Treated as bold.	bolder	500	600	700	800	900
		Value	Description																
		normal	Treated as non-bold.																
		lighter																	
		100																	
		200																	
		300																	
		400																	
		bold	Treated as bold.																
bolder																			
500																			
600																			
700																			
800																			
900																			
mso-text-shadow	Specifies whether a shadow is applied to the text on a text path. Default is false.																		
text-decoration	Specifies the style of text decoration. Default is none. The values are the same as those of the CSS text-decoration property. Allowed values are: <ul style="list-style-type: none">• none• underline• overline• line-through• blink																		
v-rotate-letters	Specifies whether the letters of the text are rotated counterclockwise by 90 degrees. Default is false.																		
v-same-letter-heights	Specifies whether all letters are the same height regardless of initial case. If true, the lowercase letters are stretched to the																		

Attributes	Description	
		height of the uppercase letters. Default is false.
	v-text-align	<p>Specifies the alignment of text. Default is left. Allowed values are:</p> <ul style="list-style-type: none"> • left • right • center • justify • letter-justify - Distributes the extra space between the letters. • stretch-justify - Stretches the letters to fill in the space.
	v-text-kern	Specifies whether kerning is turned on. Default is false.
	v-text-reverse	Specifies whether the layout order of rows is reversed. Default is false. This is used for vertical text layout.
	v-text-spacing-mode	<p>Specifies the mode for letter spacing. Default is tightening. This property determines whether space is removed between each letter (tightening) or added between each letter (tracking). The amount of letter spacing change is defined by the v-text-spacing property. Allowed values are:</p> <ul style="list-style-type: none"> • tightening • tracking
	v-text-spacing	Specifies the amount of spacing for text in 100ths of single line spacing. Default is 100.
	<p>The line (§19.1.2.12), polyline (§19.1.2.15) and curve (§19.1.2.3) elements ignore the following properties:</p> <ul style="list-style-type: none"> • top • left • width • height <p>The following properties are not inherited by an element that references a shapetype element (§19.1.2.20) via the id attribute:</p> <ul style="list-style-type: none"> • flip • height • left • margin-left • margin-top 	

Attributes	Description
	<ul style="list-style-type: none"> • position • rotation • top • visibility • width • z-index <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
trim (Text Path Trim Toggle)	<p>Specifies whether extra space is removed above and below the text. If true, space reserved for ascenders and descenders is removed. Default is false.</p> <p>[Example: The shape path is duplicated as a second shape and overlaid on the textpath for illustrative purposes:</p> <pre> <v:shape style=" width:100;height:100" path="m 0,500 c 250,0 750,0 1000,500 e m 0,600 c 250,900 750,900 1000,600 e" fillcolor="yellow" strokecolor="maroon"> <v:path textpathok="true"/> <v:textpath on="true" fitshape="true" string="vml" trim="true"/> </v:shape> </pre> <div style="display: flex; align-items: center; justify-content: center;">  <div style="margin-left: 10px;">trim="true"</div> </div> <div style="display: flex; align-items: center; justify-content: center; margin-top: 10px;">  <div style="margin-left: 10px;">trim="false"</div> </div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
xscale (Text X-Scaling)	<p>Specifies whether a straight text path is used instead of the shape path. If true, the text runs along a path from left to right along the x value of the lower boundary of the shape. Default is false.</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>

[*Note:* The W3C XML Schema definition of this element's content model ([CT_TextPath](#)) is located in §A.6.1. *end note*]

19.1.3 Simple Types

The following additional simple type information in the urn:schemas-microsoft-com:vml namespace is used for documents of a transitional conformance class.

19.1.3.1 ST_EditAs (Shape Grouping Types)

This simple type specifies the different meanings of a group of shapes.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
bullseye (Bullseye Diagram)	Specifies that the group represents a bulls-eye diagram.
canvas (Shape Canvas)	Specifies that the group is a regular group and does not represent a diagram.
cycle (Cycle Diagram)	Specifies that the group represents a cycle diagram.
orgchart (Organization Chart Diagram)	Specifies that the group represents an organization chart.
radial (Radial Diagram)	Specifies that the group represents a radial diagram.
stacked (Pyramid Diagram)	Specifies that the group represents a pyramid diagram.
venn (Venn Diagram)	Specifies that the group represents a Venn diagram.

Referenced By
group@editas (§19.1.2.7)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST_EditAs](#)) is located in §A.6.1. *end note*]

19.1.3.2 ST_Ext (VML Extension Handling Behaviors)

This simple type specifies VML extension handling behaviors.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
backwardCompatible (Renderable)	Specifies that the VML entity may be rendered by ignoring the extension information. If edited, the extension information must be discarded.
edit (Editable)	Specifies that the VML entity may be safely rendered

Enumeration Value	Description
	and edited without invalidating the extension information.
view (Not renderable)	Specifies that the VML entity is not be renderable without understanding the extension information. If the extension information cannot be understood, the downlevel image should be used to render the object.




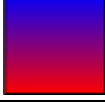

Referenced By
bottom@ext (§19.2.2.1); callout@ext (§19.2.2.2); colormenu@ext (§19.2.2.4); colormru@ext (§19.2.2.5); column@ext (§19.2.2.6); complex@ext (§19.2.2.7); diagram@ext (§19.2.2.8); extrusion@ext (§19.2.2.11); fill@ext (§19.2.2.13); idmap@ext (§19.2.2.14); left@ext (§19.2.2.16); lock@ext (§19.2.2.18); regrouptable@ext (§19.2.2.23); rel@ext (§19.2.2.24); relationtable@ext (§19.2.2.25); right@ext (§19.2.2.26); rules@ext (§19.2.2.27); shapedefaults@ext (§19.2.2.28); shapelayout@ext (§19.2.2.29); signatureline@ext (§19.2.2.30); skew@ext (§19.2.2.31); top@ext (§19.2.2.32)

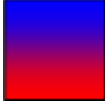
[Note: The W3C XML Schema definition of this simple type's content model ([ST_Ext](#)) is located in §A.6.1. *end note*]

19.1.3.3 ST_FillMethod (Gradient Fill Computation Type)

This simple type specifies ways in which a gradient fill is computed.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
any (Application Default Fill)	Default blend 
linear (Linear Fill)	Linear blend 
linear sigma (Linear Sigma Fill)	Linear sigma blend 
none (No Gradient Fill)	No blend 
sigma (Sigma Fill)	Sigma blend 

Enumeration Value	Description
	





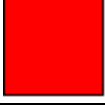

Referenced By
fill@method (§19.1.2.5)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST_FillMethod](#)) is located in §A.6.1.
end note]

19.1.3.4 ST_FillType (Shape Fill Type)

This simple type specifies the types for fills applied to a shape.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
frame (Stretch Image to Fit)	The image is stretched to fill the shape. 
gradient (Linear Gradient)	The fill colors blend together in a linear gradient from bottom to top. 
gradientRadial (Radial Gradient)	The fill colors blend together in a radial gradient. 
pattern (Image Pattern)	The image is used to create a pattern using the fill colors. 
solid (Solid Fill)	The fill pattern is a solid color. 
tile (Tiled Image)	The fill image is tiled. 




Referenced By
bottom@filltype (§19.2.2.1); column@filltype (§19.2.2.6); fill@type (§19.1.2.5); left@filltype (§19.2.2.16); right@filltype (§19.2.2.26); stroke@filltype (§19.1.2.21); top@filltype (§19.2.2.32)

[*Note*: The W3C XML Schema definition of this simple type’s content model ([ST_FillType](#)) is located in §A.6.1. *end note*]

19.1.3.5 [ST_ImageAspect \(Image Scaling Behavior\)](#)

This simple type specifies the scaling behaviors for an image applied to a stroke.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
atLeast (At Least)	Image is at least as big as imagesize. 
atMost (At Most)	Image is no bigger than imagesize. 
ignore (Ignore Aspect Ratio)	Ignore aspect issues. 

Referenced By
bottom@imageaspect (§19.2.2.1); column@imageaspect (§19.2.2.6); fill@aspect (§19.1.2.5); left@imageaspect (§19.2.2.16); right@imageaspect (§19.2.2.26); stroke@imageaspect (§19.1.2.21); top@imageaspect (§19.2.2.32)

[*Note*: The W3C XML Schema definition of this simple type’s content model ([ST_ImageAspect](#)) is located in §A.6.1. *end note*]

19.1.3.6 [ST_ShadowType \(Shadow Type\)](#)

This simple type specifies the types of shadows applied to a shape.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
double (Double Shadow)	Double shadow. color2 and offset2 are used for the second shadow's color and offset.
emboss (Embossed Shadow)	The shadow has an embossed look. Similar to double.
perspective (Perspective Shadow)	Perspective shadow.
single (Single Shadow)	Single shadow.




Referenced By
shadow@type (§19.1.2.18)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_ShadowType](#)) is located in §A.6.1. *end note*]

19.1.3.7 [ST_StrokeArrowLength \(Stroke Arrowhead Length\)](#)

This simple type specifies the lengths of a stroke arrowhead.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
long (Long Arrowhead)	Long length 
medium (Medium Arrowhead)	Medium length 
short (Short Arrowhead)	Short length 







Referenced By
bottom@endarrowlength (§19.2.2.1); bottom@startarrowlength (§19.2.2.1); column@endarrowlength (§19.2.2.6); column@startarrowlength (§19.2.2.6); left@endarrowlength (§19.2.2.16); left@startarrowlength (§19.2.2.16); right@endarrowlength (§19.2.2.26); right@startarrowlength (§19.2.2.26); stroke@endarrowlength (§19.1.2.21); stroke@startarrowlength (§19.1.2.21); top@endarrowlength (§19.2.2.32); top@startarrowlength (§19.2.2.32)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_StrokeArrowLength](#)) is located in §A.6.1. *end note*]

19.1.3.8 [ST_StrokeArrowType \(Stroke Arrowhead Type\)](#)

This simple type specifies the types of arrowhead for a stroke.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
block (Block Arrowhead)	Block arrowhead 
classic (Classic Arrowhead)	Classic curved arrowhead 
diamond (Diamond Arrowhead)	Diamond arrowhead 
none (No Arrowhead)	No arrowhead 
open (Open Arrowhead)	Open arrowhead 
oval (Oval Arrowhead)	Round arrowhead 




Referenced By
bottom@endarrow (§19.2.2.1); bottom@startarrow (§19.2.2.1); column@endarrow (§19.2.2.6); column@startarrow (§19.2.2.6); left@endarrow (§19.2.2.16); left@startarrow (§19.2.2.16); right@endarrow (§19.2.2.26); right@startarrow (§19.2.2.26); stroke@endarrow (§19.1.2.21); stroke@startarrow (§19.1.2.21); top@endarrow (§19.2.2.32); top@startarrow (§19.2.2.32)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST_StrokeArrowType](#)) is located in §A.6.1. *end note*]

19.1.3.9 ST_StrokeArrowWidth (Stroke Arrowhead Width)

This simple type specifies the widths of a stroke arrowhead.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
medium (Medium Arrowhead)	Medium width 
narrow (Narrow Arrowhead)	Narrow width 
wide (Wide Arrowhead)	Wide width 




Referenced By
bottom@endarrowwidth (§19.2.2.1); bottom@startarrowwidth (§19.2.2.1); column@endarrowwidth (§19.2.2.6); column@startarrowwidth (§19.2.2.6); left@endarrowwidth (§19.2.2.16); left@startarrowwidth (§19.2.2.16); right@endarrowwidth (§19.2.2.26); right@startarrowwidth (§19.2.2.26); stroke@endarrowwidth (§19.1.2.21); stroke@startarrowwidth (§19.1.2.21); top@endarrowwidth (§19.2.2.32); top@startarrowwidth (§19.2.2.32)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_StrokeArrowWidth](#)) is located in §A.6.1. *end note*]

19.1.3.10 ST_StrokeEndCap (Stroke End Cap Type)

This simple type specifies the styles for the end of a stroke.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
flat (Flat End)	Flat end 
round (Round End)	Round end 
square (Square End)	Square end 




Referenced By
bottom@endcap (§19.2.2.1); column@endcap (§19.2.2.6); left@endcap (§19.2.2.16); right@endcap (§19.2.2.26); stroke@endcap (§19.1.2.21); top@endcap (§19.2.2.32)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_StrokeEndCap](#)) is located in §A.6.1. *end note*]

19.1.3.11 ST_StrokeJoinStyle (Line Join Type)

This simple type specifies the join styles for a polyline (§19.1.2.15).

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
bevel (Bevel Joint)	Bevel joint 
miter (Miter Joint)	Miter joint 
round (Round Joint)	Round joint 




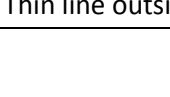
Referenced By
bottom@joinstyle (§19.2.2.1); column@joinstyle (§19.2.2.6); left@joinstyle (§19.2.2.16); right@joinstyle (§19.2.2.26); stroke@joinstyle (§19.1.2.21); top@joinstyle (§19.2.2.32)



[Note: The W3C XML Schema definition of this simple type's content model ([ST_StrokeJoinStyle](#)) is located in §A.6.1. *end note*]

19.1.3.12 ST_StrokeLineStyle (Stroke Line Style)

This simple type specifies the line styles for a stroke.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
single (Single Line)	Single line 
thickBetweenThin (Thck Line Between Thin Lines)	Thick line between thin lines 
thickThin (Thick Line Outside Thin Line)	Thick line outside thin line 
thinThick (Thin Line Outside Thick Line)	Thin line outside thick line 

Enumeration Value	Description
	
thinThin (Two Thin Lines)	Two thin lines 

Referenced By
bottom@linestyle (§19.2.2.1); column@linestyle (§19.2.2.6); left@linestyle (§19.2.2.16); right@linestyle (§19.2.2.26); stroke@linestyle (§19.1.2.21); top@linestyle (§19.2.2.32)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST StrokeLineStyle](#)) is located in §A.6.1. *end note*]

19.2 VML - Office Drawing

It is possible to include graphical VML objects in Office Open XML documents. The elements describing the core graphical objects are defined in the VML namespace. Additional elements that describe certain advanced shape effects, metadata and relationships are defined in this namespace.

[*Note:* The VML format is a legacy format originally introduced with Office 2000 and is included and fully defined in ECMA-376 for backwards compatibility reasons. The DrawingML format is a newer and richer format created with the goal of eventually replacing any uses of VML in the Office Open XML formats. VML should be considered a transitional format included in Office Open XML for legacy reasons only and new applications that need a file format for drawings are strongly encouraged to use preferentially DrawingML *end note*]

[*Example:* Assume the following shape exists in a document:



The basic speech bubble shape is defined using VML. The 3-D effect is defined using the extrusion element in this namespace. The specularity attribute defines the subtle sharp reflection on the edge of the shape. The color attribute sets the extrusion to a different color than the face of the shape. The rotationangle attribute sets the shape's rotation about the X- and Y-axes. The lightposition and lightposition2 attributes set the positions of the light sources that illuminate the shape.

```
<o:extrusion v:ext="view" specularity="80000f" color="#c4bc96 [2414]" on="t"
```

```
rotationangle="-5,15" lightposition="0,-50000" lightposition2="0,50000"
type="perspective"/>
```

This element is a child of the primary shape definition:

```
<v:shape id="_x0000_s1030" type="#_x0000_t62"
  style="position:absolute;left:0;text-align:left;margin-left:35.25pt;
  margin-top:60pt;width:69pt;height:57pt;z-index:251658240" adj="1675,27171"
  fillcolor="#ddd8c2 [2894]">
  <o:extrusion ... />
</v:shape>
```

end example]

Throughout VML, numeric values that are allowed to take units can be specified in: cm (centimeters), mm (millimeters), in (inches), pt (points), pc (picas), px (pixels).

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End of informative text.

19.2.2 Elements

The following elements comprise the contents of the urn:schemas-microsoft-com:office:office namespace:

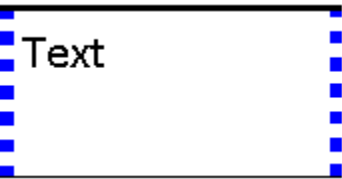
[*Note:* As the VML format is a format provided for backward compatibility, those VML elements defined in the same urn:schemas-microsoft-com:office:office namespace remain in that namespace as it is already used by millions of documents already using VML. *end note*]

19.2.2.1 bottom (Text Box Bottom Stroke)

This element specifies the stroke properties for the bottom border of a text box. It entirely supercedes its parent stroke element if its on attribute is true. Thus the default value of an unspecified attribute overrides a value specified in the parent. If the on attribute is false or not specified, the border is not shown.

[Example: The text box borders are set independently. Note that the bottom border does not inherit the weight from the parent stroke element.

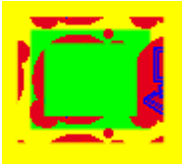

```
<v:stroke weight="2.25pt">
  <o:left v:ext="view" dashstyle="1 1" color="blue" weight="5pt" on="t"/>
  <o:top v:ext="view" color="black" weight="2.25pt" on="t"/>
  <o:right v:ext="view" dashstyle="1 1" color="blue" weight="5pt" on="t"/>
  <o:bottom v:ext="view" color="black" on="t"/>
  <o:column v:ext="view" color="#f60" on="t"/>
</v:stroke>
```





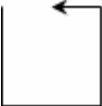

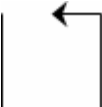
end example]


Parent Elements
background (Part 1, §17.2.1); hdrShapeDefaults (§14.7.2.1); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1); shapeDefaults (§14.7.2.2); stroke (§19.1.2.21)

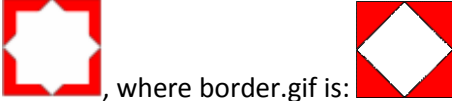
Attributes	Description
althref (Alternate Image Reference)	<p>Specifies an alternate reference for an image in Macintosh PICT format.</p> <p>[Example:</p> <pre><v:stroke ... althref="myimage.pcz" ... > </v:stroke></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
color (Stroke Color)	<p>Specifies the stroke color. Overrides the strokecolor attribute of a shape. Default is black. See the fillcolor attribute for a list of supported named colors.</p> <p>[Example: The shape stroke is blue:</p> <pre><v:shape ... strokecolor="red" ... > <v:stroke color="blue"/> </v:shape></pre> <p>end example]</p>




Attributes	Description
<p>color2 (Stroke Alternate Pattern Color)</p>	<p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p> <p>Specifies a second color for strokes, used when filltype is pattern. Default is no value.</p> <p>When a pattern fill is used for the stroke, the stroke color is used in colored parts of the source image. The color2 defines an alternate color to use in place of black in the source image.</p> <p>[<i>Example:</i> This unusual example is intended to demonstrate how the image and colors interact to create a patterned stroke. The yellow background shows transparency. The non-square shape and square image create an effective offset. The heavy stroke weight shows more of the image. The green shape fill shows how the stroke is overlaid on the shape.</p> <pre> <v:background fillcolor="yellow"/> <v:shape style="width:60;height:50" strokecolor="red" fillcolor="lime" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"> <v:stroke filltype="pattern" weight="10pt" src="myimage.gif" color2="blue"/> </v:shape> </pre>  <p>, where myimage.gif is: </p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
<p>dashstyle (Stroke Dash Pattern)</p>	<p>Specifies the dot and dash pattern for a stroke. Default is solid. Pre-defined values are:</p> <ul style="list-style-type: none"> • solid • shortdash • shortdot • shortdashdot • shortdashdotdot • dot • dash • longdash • dashdot • longdashdot • longdashdotdot

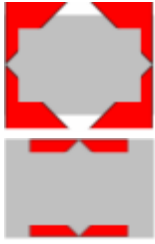
Attributes	Description
	<p>A custom-defined dash pattern can also be specified using a series of numbers. These define the length of the dash (the drawn part of the stroke) and the length of the space between the dashes. The lengths are relative to the line width: a length of 1 is equal to the line width. The endcap style is applied to each dash but the arrow style is not. The string defines the length of the dash then the length of the space. This can be repeated to form complex dash styles. The string should always contain a pair of numbers; if it contains an odd number of numbers the last is disregarded. 0 implies a dot that is fourfold symmetrical (with round end caps, this is a circle).</p> <p>[Example:</p> <pre><v:stroke dashstyle="0 2" weight="3pt" endcap="round"> </v:stroke></pre>  <pre><v:stroke dashstyle="longdashdotdot" weight="2pt"> </v:stroke></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
endarrow (Line End Arrowhead)	<p>Specifies an arrowhead for the end of a line. Default is none. The path shall not be closed with the x command for the arrowhead to show. Allowed values are:</p> <ul style="list-style-type: none"> • none • block • classic • diamond • oval • open <p>[Example:</p> <pre><v:stroke endarrow="classic"/></pre>



Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowType simple type (§19.1.3.8).</p>
endarrowlength (Line End Arrowhead Length)	<p>Specifies the length of the arrowhead at the end of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • short • medium • long <p>[Example:</p> <pre><v:stroke ... endarrowlength="long" ... /></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowLength simple type (§19.1.3.7).</p>
endarrowwidth (Line End Arrowhead Width)	<p>Specifies the width of the arrowhead at the end of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • narrow • medium • wide <p>[Example:</p> <pre><v:stroke ... endarrowwidth="wide" ... /></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowWidth simple</p>




Attributes	Description
<p>endcap (Line End Cap)</p>	<p>type (§19.1.3.9).</p> <p>Specifies the cap style for the end of a stroke. Default is <code>flat</code>. Allowed values are:</p> <ul style="list-style-type: none"> • <code>flat</code> • <code>square</code> • <code>round</code> <p>[Example:</p> <pre><v:stroke ... endcap="round" weight="10pt" ... /></pre>  <p>endcap="flat"</p> <p>endcap="square"</p> <p>endcap="round"</p> <p>end example]</p> <p>The possible values for this attribute are defined by the <code>ST_StrokeEndCap</code> simple type (§19.1.3.10).</p>
<p>ext (VML Extension Handling Behavior)</p> <p>Namespace: urn:schemas-microsoft-com:vml</p>	<p>Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.</p> <p>[<i>Rationale</i>: This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale</i>]</p> <p>The possible values for this attribute are defined by the <code>ST_Ext</code> simple type (§19.1.3.2).</p>
<p>filltype (Stroke Image Style)</p>	<p>Specifies the kind of fill used for the background of a stroke. Default is <code>solid</code>. Allowed values are:</p> <ul style="list-style-type: none"> • <code>solid</code> - The fill pattern is solid. • <code>tile</code> - The fill image is tiled. • <code>pattern</code> - The fill image is stretched to form a pattern. • <code>frame</code> - The fill image becomes a border for the shape. <p>[Example:</p>

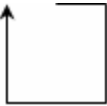
Attributes	Description
	<pre> <v:shape style="width:50;height:50" strokecolor="red" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"> <v:stroke filltype="frame" weight="10pt" src="border.gif"/> </v:shape> </pre>  <p>, where border.gif is:</p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_FillType simple type (§19.1.3.4).</p>
forcedash (Force Dashed Outline)	<p>Specifies whether a dashed outline is used to draw a shape when a shape has no line or fill. Default is false.</p> <p>Used by PresentationML placeholders to draw a dashed outline when there is no line and no fill for a shape.</p> <p>[Example:</p> <pre> <v:shape ... o:forcedash="true" ... > </v:shape> </pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
href (Original Image Reference)	<p>Specifies the URL to the original image file. Used only if the picture has been linked and embedded. Default is no value.</p> <p>[Example:</p> <pre> <v:fill ... o:href="myimage.gif" ... > </v:fill> </pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
imagealignshape (Stoke Image Alignment)	<p>Specifies the alignment of the stroke image. If true, the image is aligned with the shape. Otherwise, it is aligned with the containing scope. Default is true.</p>



Attributes	Description								
	<p>[<i>Example</i>: The top position offset shifts the image alignment relative to the containing window:</p> <pre><v:shape fillcolor="silver" style="top:20;width:50;height:50" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"> <v:stroke imagealignshape="false" weight="20pt" filltype="tile" src="myimage.gif"/> </v:shape></pre>  <p>imagealignshape="false"</p>  <p>imagealignshape="false"</p> <p><i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>								
imageaspect (Stroke Image Aspect Ratio)	<p>Specifies how the stroke image aspect ratio is preserved. Default is ignore. Allowed values are:</p> <table><tr><th>Value</th><th>Description</th></tr><tr><td>ignore</td><td>Ignore aspect issues.</td></tr><tr><td>atleast</td><td>Image is at least as big as imagesize.</td></tr><tr><td>atmost</td><td>Image is no bigger than imagesize.</td></tr></table> <p>[<i>Example</i>:</p> <pre><v:stroke filltype="frame" weight="10pt" src="border.gif" imagealignshape="true" imageaspect="atleast"> </v:stroke></pre>  <p>imagealignshape="ignore"</p>	Value	Description	ignore	Ignore aspect issues.	atleast	Image is at least as big as imagesize.	atmost	Image is no bigger than imagesize.
Value	Description								
ignore	Ignore aspect issues.								
atleast	Image is at least as big as imagesize.								
atmost	Image is no bigger than imagesize.								

Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ImageAspect simple type (§19.1.3.5).</p>
imagesize (Stroke Image Size)	<p>Specifies the size of the image for the stroke. Default is the size of the image.</p> <p>[Example:</p> <pre><v:stroke ... imagesize="10pt,10pt" ... /></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
insetpen (Inset Border From Path)	<p>Specifies that the border shall be displayed inside of the path defining the shape, rather than along the path (the default border placement), or outside of the path as might be done with an image.</p> <p>[Example:</p> <pre><v:shape ... insetpen="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
joinstyle (Line End Join Style))	<p>Specifies the join style for line ends. Default is round.</p> <ul style="list-style-type: none"> • round • bevel • miter <p>[Example:</p> <pre><v:polyline strokeweight="10pt" strokecolor="navy" points="10pt,10pt,50pt,50pt,90pt,10pt"></pre>

Attributes	Description
	<div><pre><v:stroke joinstyle="bevel"/> </v:polyline></pre><div><div><div>joinstyle="round"</div><div>joinstyle="bevel"</div><div>joinstyle="miter"</div></div></div><p><i>end example]</i></p><p>The possible values for this attribute are defined by the ST_StrokeJoinStyle simple type (§19.1.3.11).</p></div>
linestyle (Stroke Line Style)	<div><p>Specifies the line style of the stroke. Default is single.</p><ul style="list-style-type: none">• single• thinThin• thinThick• thickThin• thickBetweenThin<p>[Example:</p><div><pre><v:stroke linestyle="thickThin" weight="5pt"> </v:stroke></pre></div><p><i>end example]</i></p><p>The possible values for this attribute are defined by the ST_StrokeLineStyle simple type (§19.1.3.12).</p></div>
miterlimit (Miter Joint Limit)	<div><p>Specifies the smoothness of the miter joint, or the maximum distance between the inner point and outer point of a joint. This number is a multiple of the thickness of the line. Default is 8.</p><p>[Example:</p></div>

Attributes	Description
	<pre><v:stroke joinstyle="miter" weight="10pt" miterlimit="2"> </v:stroke></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema decimal datatype.</p>
on (Stroke Toggle)	<p>Specifies whether the stroke is displayed. Default is true. This attribute overrides the shape's stroke attribute.</p> <p>[Example:</p> <pre><v:rect style="width:50;height:50" stroked="true" fillcolor="lime" strokecolor="red"> <v:stroke on="false" weight="5pt"/> </v:rect></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
opacity (Stroke Opacity)	<p>Specifies the amount of transparency of a stroke. Default is 1.0.</p> <p>[Example:</p> <pre><v:rect style="width:50;height:50" fillcolor="lime" strokecolor="red"> <v:stroke weight="5pt" opacity="50%"/> </v:rect></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string</p>

Attributes	Description
src (Stroke Image Location)	<p>datatype.</p> <p>Specifies the source image to load for a stroke fill. Default is no value.</p> <p>[Example:</p> <pre><v:stroke ... src="myimage.gif" ... > </v:stroke></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
startarrow (Line Start Arrowhead)	<p>Specifies an arrowhead for the start of a line. Default is none. The path shall not be closed with the x command for the arrowhead to show. Allowed values are:</p> <ul style="list-style-type: none"> • none • block • classic • diamond • oval • open <p>[Example:</p> <pre><v:stroke startarrow="classic"/></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_StrokeArrowType simple type (§19.1.3.8).</p>
startarrowlength (Line Start Arrowhead Length)	<p>Specifies the length of the arrowhead at the start of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • short • medium • long <p>[Example:</p> <pre><v:stroke ... startarrowlength="long" ... /></pre>

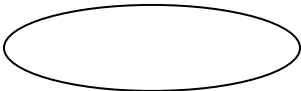
Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowLength simple type (§19.1.3.7).</p>
startarrowwidth (Line Start Arrowhead Width)	<p>Specifies the width of the arrowhead at the start of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • narrow • medium • wide <p>[Example:</p> <pre><v:stroke ... startarrowwidth="wide" ... /></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowWidth simple type (§19.1.3.9).</p>
title (Stroke Title)	<p>Specifies the title of an embedded stroke image. This is typically set to the comment property of the image, which is often blank.</p> <p>[Example:</p> <pre><v:fill ... o:title="alt text" ... > </v:fill></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
weight (Stroke Weight)	<p>Specifies the thickness of a stroke. Default is 1. This attribute overrides the shape's strokeweight attribute.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[*Note:* The W3C XML Schema definition of this element’s content model ([CT_StrokeChild](#)) is located in §A.6.2.
end note]

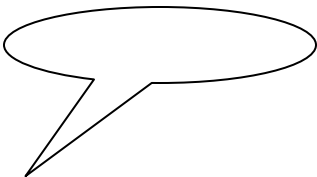
19.2.2.2 **callout (Callout)**

This element specifies the automatic behavior and layout parameters of callout shapes. Callout shapes are standard VML shapes that behave as callouts, providing an additional callout object which can be used to point at another location:

[*Example:* Consider the following VML shape:



If this shape is made a callout shape by adding the callout element to its shape definition, then the shape has a callout object, for example:



end example]

Parent Elements	
arc (§19.1.2.1); background (Part 1, §17.2.1); curve (§19.1.2.3); group (§19.1.2.7); hdrShapeDefaults (§14.7.2.1); image (§19.1.2.10); line (§19.1.2.12); object (Part 1, §17.3.3.19); oval (§19.1.2.13); pict (§14.2.2.2); pict (§14.5.1); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapeDefaults (§14.7.2.2); shapedefaults (§19.2.2.28); shapetype (§19.1.2.20)	

Attributes	Description
accentbar (Callout accent bar toggle)	Specifies whether an accent bar is used with the callout. Default is false. The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).
angle (Callout angle)	Specifies the angle that the callout makes with respect to the bounding box of the shape. Default is no value. The possible values for this attribute are defined by the ST_Angle simple type (§19.2.3.2).
distance (Callout drop distance)	Specifies the drop distance of a callout. The drop distance of a callout is measured from the edge of the shape where the pointer line starts and continues the absolute length of the distance value. If specified with no units, EMUs are assumed. Default is no value. The possible values for this attribute are defined by the W3C XML Schema string

Attributes	Description
	datatype.
drop (Callout drop position)	<p>Specifies where the drop of a callout is placed.</p> <p>The possible values for this attribute are defined by the ST_CalloutDrop simple type (§19.2.3.4).</p>
dropauto (Callout automatic drop toggle)	<p>Specifies whether the callout has an automatic drop.</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
ext (VML Extension Handling Behavior) Namespace: urn:schemas-microsoft-com:vml	<p>Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.</p> <p>[<i>Rationale</i>: This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale</i>]</p> <p>The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).</p>
gap (Callout gap)	<p>Specifies the distance of the callout line from the bounding rectangle of the callout. Default value is one-twelfth of an inch, in EMUs (76200).</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
length (Callout length)	<p>Specifies the length of the first part of a multi-segmented callout line. If specified with no units, EMUs are assumed. Default is 0.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
lengthspecified (Callout length toggle)	<p>Specifies whether the length attribute is used for the callout. Default is <code>false</code>. If <code>true</code>, the length attribute is used. If <code>false</code>, a best fit is used.</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
minusx (Callout flip x)	<p>Specifies whether the callout flips to the other side of the drop tip along the x-axis when moved or resized. Default is <code>false</code>.</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
minusy (Callout flip y)	<p>Specifies whether the callout flips to the other side of the drop tip along the y-axis when moved or resized. Default is <code>false</code>.</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
on (Callout toggle)	Specifies whether a shape is a callout. Default is <code>false</code> .

Attributes	Description
	The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).
textborder (Callout text border toggle)	Specifies whether a callout has a text border. Default is true. The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).
type (Callout type)	Specifies the type of callout. Default is rectangle. Allowed values are: <ul style="list-style-type: none"> rectangle roundedrectangle oval cloud The possible values for this attribute are defined by the W3C XML Schema string datatype.

[Note: The W3C XML Schema definition of this element's content model ([CT_Callout](#)) is located in §A.6.2. *end note*]

19.2.2.3 [clippath \(Shape Clipping Path\)](#)

This element specifies the path of the clipping polygon for the shape.

[Example:

```
<v:rect ... wrapcoords="-207 -433 -207 21925 21807 21925 21807 -433 -207 -433"
o:clip="t" o:cliptowrap="t">
  <o:clippath o:v="m-207,-433r,22358121807,21925r,-223581-207,-433xe"/>
</v:rect>
```

end example]

Parent Elements
arc (§19.1.2.1); background (Part 1, §17.2.1); curve (§19.1.2.3); group (§19.1.2.7); hdrShapeDefaults (§14.7.2.1); image (§19.1.2.10); line (§19.1.2.12); object (Part 1, §17.3.3.19); oval (§19.1.2.13); pict (§14.2.2.2); pict (§14.5.1); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapeDefaults (§14.7.2.2); shapetype (§19.1.2.20)

Attributes	Description
v (Path Definition)	Specifies a string containing the commands that define the shape's path. This value consists of commands followed by zero or more parameters. Default is no value.

Attributes	Description																																
	<p>The following rules apply to path strings:</p> <ul style="list-style-type: none">• Commas or spaces delimit parameters for each command. Both "m 0,0" and "m0 0" are acceptable.• A parameter that is omitted using commas is treated as having a value of zero. Thus, "c 10,10,0,0,25,13" and "c 10,10,,,25,13" are equivalent.• Parameterized paths are also allowed. In this case, the shape shall also have a formulas element (§19.1.2.6) with a list of formulas that are substituted into the path using the @ symbol followed by the number of the formula. The adj property of the shape contains the input parameters for these formulas. For example, "moveto @1@4". The evaluations of the formulas are substituted into the appropriate positions. @ also serves as a delimiter. <p>The allowed commands are given below. An asterisk (*) indicates that the command is allowed to be repeated. For the qb command, the controlpoint parameter is also allowed to be repeated.</p> <table><tr><th>Command</th><th>Name</th><th>Parameters</th><th>Description</th></tr><tr><td>m</td><td>moveto</td><td>2</td><td>Start a new sub-path at the given (x,y) coordinate.</td></tr><tr><td>l</td><td>lineto</td><td>2*</td><td>Draw a line from the current point to the given (x,y) coordinate which becomes the new current point. Specifying a number of coordinate pairs forms a polyline.</td></tr><tr><td>c</td><td>curveto</td><td>6*</td><td>Draw a cubic bézier curve from the current point to the coordinate given by the final two parameters. The control points are given by the first four parameters.</td></tr><tr><td>x</td><td>close</td><td>0</td><td>Close the current sub-path by drawing a straight line from the current point to the original moveto point.</td></tr><tr><td>e</td><td>end</td><td>0</td><td>End the current set of sub-paths. A given set of sub-paths (as delimited by end) is filled. Subsequent sets of sub-paths are filled independently and superimposed on existing ones.</td></tr><tr><td>t</td><td>rmoveto</td><td>2*</td><td>Start a new sub-path at a coordinate relative to the current point, cp (cpx+x, cpy+y).</td></tr><tr><td>r</td><td>rlineto</td><td>2*</td><td>Draw a line from the current point to the given relative coordinate (cpx+x,</td></tr></table>	Command	Name	Parameters	Description	m	moveto	2	Start a new sub-path at the given (x,y) coordinate.	l	lineto	2*	Draw a line from the current point to the given (x,y) coordinate which becomes the new current point. Specifying a number of coordinate pairs forms a polyline.	c	curveto	6*	Draw a cubic bézier curve from the current point to the coordinate given by the final two parameters. The control points are given by the first four parameters.	x	close	0	Close the current sub-path by drawing a straight line from the current point to the original moveto point.	e	end	0	End the current set of sub-paths. A given set of sub-paths (as delimited by end) is filled. Subsequent sets of sub-paths are filled independently and superimposed on existing ones.	t	rmoveto	2*	Start a new sub-path at a coordinate relative to the current point, cp (cpx+x, cpy+y).	r	rlineto	2*	Draw a line from the current point to the given relative coordinate (cpx+x,
Command	Name	Parameters	Description																														
m	moveto	2	Start a new sub-path at the given (x,y) coordinate.																														
l	lineto	2*	Draw a line from the current point to the given (x,y) coordinate which becomes the new current point. Specifying a number of coordinate pairs forms a polyline.																														
c	curveto	6*	Draw a cubic bézier curve from the current point to the coordinate given by the final two parameters. The control points are given by the first four parameters.																														
x	close	0	Close the current sub-path by drawing a straight line from the current point to the original moveto point.																														
e	end	0	End the current set of sub-paths. A given set of sub-paths (as delimited by end) is filled. Subsequent sets of sub-paths are filled independently and superimposed on existing ones.																														
t	rmoveto	2*	Start a new sub-path at a coordinate relative to the current point, cp (cpx+x, cpy+y).																														
r	rlineto	2*	Draw a line from the current point to the given relative coordinate (cpx+x,																														

Attributes	Description			
				cpy+y).
	v	rcurveto	6*	Cubic bézier curve using the given coordinate relative to the current point.
	nf	nofill	0	The current set of sub-paths (delimited by e) is not filled.
	ns	nostroke	0	The current set of sub-paths (delimited by e) is not stroked.
	ae	angleellipseto	6*	Draws a segment of an ellipse as described using these parameters. A straight line is drawn from the current point to the start point of the segment. The parameters are: center (x,y), size(w,h), start angle, end angle.
	al	angleellipse	6*	Same as angleellipseto except that there is an implied moveto the starting point of the segment.
	at	arcto	8*	A segment of the ellipse is drawn which starts at the angle defined by the start radius vector and ends at the angle defined by the end vector. A straight line is drawn from the current point to the start of the arc. The arc is always drawn in a counterclockwise direction. The parameters are: left, top, right, bottom, start(x,y), end(x,y). The first four values define the bounding box of an ellipse. The last four define two radial vectors.
	ar	arc	8*	Same as arcto except there is an implied moveto the start point of the arc.
	wa	clockwisearco	8*	Same as arcto but the arc is drawn in a clockwise direction.
	wr	clockwisearc	8*	Same as arc but the arc is drawn in a clockwise direction

Attributes	Description			
	qx	ellipticalquadrantx	2*	A quarter ellipse is drawn from the current point to the given end point. The elliptical segment is initially tangential to a line parallel to the x-axis. (i.e. the segment starts out horizontal). The parameters are: end(x,y).
	qy	ellipticalquadranty	2*	Same as ellipticalquadrantx except that the elliptical segment is initially tangential to a line parallel to the y-axis (i.e. the segment starts out vertical).
	qb	quadraticbezier	2+2*	Defines one or more quadratic bézier curves by means of control points and an end point. Intermediate (on-curve) points are obtained by interpolation between successive control points as in the OpenType font specification. The sub-path need not be started in which case the sub-path is closed. In this case the last point of the sub-path defines the start point of the quadratic bézier. The parameters are: controlpoint(x,y)*, end(x,y).
	The possible values for this attribute are defined by the W3C XML Schema string datatype.			

[Note: The W3C XML Schema definition of this element's content model ([CT_ClipPath](#)) is located in §A.6.2. *end note*]

19.2.2.4 colormenu (UI Default Colors)

This element determines the default colors for different types of colors that can be applied to VML shapes.

[*Rationale*: An application can choose to retain default colors or the last color choices a user made and present those in parts of its user interface. *end rationale*]

[Example:

```
<o:shapedefaults ... >
  <o:colormenu v:ext="edit" fillcolor="none" extrusioncolor="#36f"/>
</o:shapedefaults>
```

end example]

Parent Elements
shapedefaults (§19.2.2.28)

Attributes	Description
ext (VML Extension Handling Behavior) Namespace: urn:schemas-microsoft-com:VML	Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML. <i>[Rationale: This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. end rationale]</i> The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).
extrusioncolor (Default extrusion color)	The default color associated with the 3D extrusion of a VML shape. Default is "#000000". The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).
fillcolor (Default fill color)	The default color associated with the fill of a VML shape. Default is "#0000FF". The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).
shadowcolor (Default shadow color)	The default color associated with the shadow of a VML shape. Default is "#80800C". The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).
strokecolor (Default stroke color)	The default color associated with the stroke of a VML shape. Default is "#FFFF00". The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).

[Note: The W3C XML Schema definition of this element's content model ([CT_ColorMenu](#)) is located in §A.6.2. end note]

19.2.2.5 colormru (Most Recently Used Colors)

This element defines a list of up to eight colors which represent the colors most recently used by the user.

[Rationale: An application can choose to retain the last color choices a user made, regardless of where on VML shapes they are used, and present those in parts of its user interface. end rationale]

[Example:

```
<o:shapedefaults ... >
```



```
<o:colormru v:ext="edit" colors="#a01aae,#456b69,#06f,#a1ae24,#d57811"/>
</o:shapedefaults>
```

end example]

Parent Elements
shapedefaults (§19.2.2.28)

Attributes	Description
colors (Recent colors)	<p>A comma-separated list of up to eight most recently used colors. Default is no value. Colors should be defined using hexadecimal notation - see the ST_ColorType simple type (§20.1.2.3) for a full description.</p> <p><i>[Example:</i></p> <pre><o:colormru v:ext="edit" colors="#a01aae,#456b69,#06f,#a1ae24,#d57811"/></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
ext (VML Extension Handling Behavior) Namespace: urn:schemas-microsoft-com:vml	<p>Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.</p> <p><i>[Rationale:</i> This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale]</i></p> <p>The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).</p>

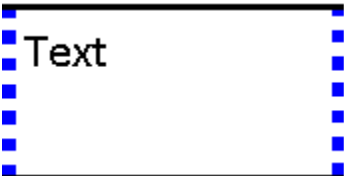
[Note: The W3C XML Schema definition of this element's content model ([CT_ColorMru](#)) is located in §A.6.2. *end note]*

19.2.2.6 column (Text Box Interior Stroke)

This element specifies the stroke properties for the interior border of a text box. It entirely supercedes its parent stroke element if its on attribute is true. Thus the default value of an unspecified attribute overrides a value specified in the parent. If the on attribute is false or not specified, the border is not shown. *[Note:* This element is ignored if an implementation does not support multi-column text boxes. *end note]*

[Example: The text box borders are set independently. Note that the bottom border does not inherit the weight from the parent stroke element.

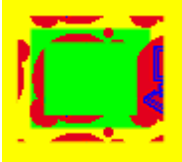

```
<v:stroke weight="2.25pt">
  <o:left v:ext="view" dashstyle="1 1" color="blue" weight="5pt" on="t"/>
  <o:top v:ext="view" color="black" weight="2.25pt" on="t"/>
  <o:right v:ext="view" dashstyle="1 1" color="blue" weight="5pt" on="t"/>
  <o:bottom v:ext="view" color="black" on="t"/>
  <o:column v:ext="view" color="#f60" on="t"/>
</v:stroke>
```





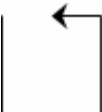
end example]


Parent Elements
background (Part 1, §17.2.1); hdrShapeDefaults (§14.7.2.1); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1); shapeDefaults (§14.7.2.2); stroke (§19.1.2.21)

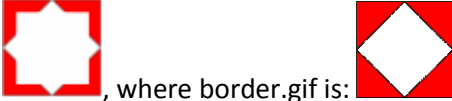
Attributes	Description
althref (Alternate Image Reference)	<p>Specifies an alternate reference for an image in Macintosh PICT format.</p> <p>[Example:</p> <pre><v:stroke ... althref="myimage.pcz" ... > </v:stroke></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
color (Stroke Color)	<p>Specifies the stroke color. Overrides the strokecolor attribute of a shape. Default is black. See the fillcolor attribute for a list of supported named colors.</p> <p>[Example: The shape stroke is blue:</p> <pre><v:shape ... strokecolor="red" ... > <v:stroke color="blue"/> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>





Attributes	Description
color2 (Stroke Alternate Pattern Color)	<p>Specifies a second color for strokes, used when filltype is pattern. Default is no value.</p> <p>When a pattern fill is used for the stroke, the stroke color is used in colored parts of the source image. The color2 defines an alternate color to use in place of black in the source image.</p> <p>[<i>Example:</i> This unusual example is intended to demonstrate how the image and colors interact to create a patterned stroke. The yellow background shows transparency. The non-square shape and square image create an effective offset. The heavy stroke weight shows more of the image. The green shape fill shows how the stroke is overlaid on the shape.</p> <pre><v:background fillcolor="yellow"/> <v:shape style="width:60;height:50" strokecolor="red" fillcolor="lime" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"> <v:stroke filltype="pattern" weight="10pt" src="myimage.gif" color2="blue"/> </v:shape></pre>  <p>, where myimage.gif is: </p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
dashstyle (Stroke Dash Pattern)	<p>Specifies the dot and dash pattern for a stroke. Default is solid. Pre-defined values are:</p> <ul style="list-style-type: none"> • solid • shortdash • shortdot • shortdashdot • shortdashdotdot • dot • dash • longdash • dashdot • longdashdot • longdashdotdot <p>A custom-defined dash pattern can also be specified using a series of numbers. These define the length of the dash (the drawn part of the stroke) and the length of the space between the dashes. The lengths are relative to the line width: a length of 1 is equal to</p>


Attributes	Description
	<p>the line width. The endcap style is applied to each dash but the arrow style is not. The string defines the length of the dash then the length of the space. This can be repeated to form complex dash styles. The string should always contain a pair of numbers; if it contains an odd number of numbers the last is disregarded. 0 implies a dot that is fourfold symmetrical (with round end caps, this is a circle).</p> <p>[Example:</p> <pre><v:stroke dashstyle="0 2" weight="3pt" endcap="round"> </v:stroke></pre>  <pre><v:stroke dashstyle="longdashdotdot" weight="2pt"> </v:stroke></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
endarrow (Line End Arrowhead)	<p>Specifies an arrowhead for the end of a line. Default is none. The path shall not be closed with the x command for the arrowhead to show. Allowed values are:</p> <ul style="list-style-type: none">• none• block• classic• diamond• oval• open <p>[Example:</p> <pre><v:stroke endarrow="classic"/></pre> 



Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowType simple type (§19.1.3.8).</p>
<p>endarrowlength (Line End Arrowhead Length)</p>	<p>Specifies the length of the arrowhead at the end of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • short • medium • long <p>[Example:</p> <pre><v:stroke ... endarrowlength="long" ... /></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowLength simple type (§19.1.3.7).</p>
<p>endarrowwidth (Line End Arrowhead Width)</p>	<p>Specifies the width of the arrowhead at the end of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • narrow • medium • wide <p>[Example:</p> <pre><v:stroke ... endarrowwidth="wide" ... /></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowWidth simple type (§19.1.3.9).</p>
<p>endcap (Line End Cap)</p>	<p>Specifies the cap style for the end of a stroke. Default is flat. Allowed values are:</p> <ul style="list-style-type: none"> • flat


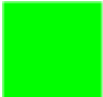

Attributes	Description
	<ul style="list-style-type: none"> • square • round <p>[Example:</p> <pre><v:stroke ... endcap="round" weight="10pt" ... /></pre>  <p>endcap="flat"</p> <p>endcap="square"</p> <p>endcap="round"</p> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_StrokeEndCap simple type (§19.1.3.10).</p>
<p>ext (VML Extension Handling Behavior)</p> <p>Namespace: urn:schemas-microsoft-com:vml</p>	<p>Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.</p> <p>[Rationale: This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale</i>]</p> <p>The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).</p>
<p>filltype (Stroke Image Style)</p>	<p>Specifies the kind of fill used for the background of a stroke. Default is solid. Allowed values are:</p> <ul style="list-style-type: none"> • solid - The fill pattern is solid. • tile - The fill image is tiled. • pattern - The fill image is stretched to form a pattern. • frame - The fill image becomes a border for the shape. <p>[Example:</p> <pre><v:shape style="width:50;height:50" strokecolor="red" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"> <v:stroke filltype="frame" weight="10pt"</pre>

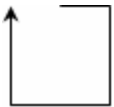
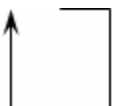
Attributes	Description
	<pre>src="border.gif"/> </v:shape></pre>  <p>, where border.gif is:</p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_FillType simple type (§19.1.3.4).</p>
forcedash (Force Dashed Outline)	<p>Specifies whether a dashed outline is used to draw a shape when a shape has no line or fill. Default is <code>false</code>.</p> <p>Used by PresentationML placeholders to draw a dashed outline when there is no line and no fill for a shape.</p> <p>[Example:</p> <pre><v:shape ... o:forcedash="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
href (Original Image Reference)	<p>Specifies the URL to the original image file. Used only if the picture has been linked and embedded. Default is no value.</p> <p>[Example:</p> <pre><v:fill ... o:href="myimage.gif" ... > </v:fill></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
imagealignshape (Stoke Image Alignment)	<p>Specifies the alignment of the stroke image. If <code>true</code>, the image is aligned with the shape. Otherwise, it is aligned with the containing scope. Default is <code>true</code>.</p> <p>[Example: The top position offset shifts the image alignment relative to the containing window:</p> <pre><v:shape fillcolor="silver"</pre>

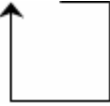
Attributes	Description								
	<pre>style="top:20;width:50;height:50" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"> <v:stroke imagealignshape="false" weight="20pt" filltype="tile" src="myimage.gif"/> </v:shape></pre> <div><p>imagealignshape="false"</p></div> <div><p>imagealignshape="false"</p></div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>								
imageaspect (Stroke Image Aspect Ratio)	<p>Specifies how the stroke image aspect ratio is preserved. Default is ignore. Allowed values are:</p> <table><tr><th>Value</th><th>Description</th></tr><tr><td>ignore</td><td>Ignore aspect issues.</td></tr><tr><td>atleast</td><td>Image is at least as big as imagesize.</td></tr><tr><td>atmost</td><td>Image is no bigger than imagesize.</td></tr></table> <p>[Example:</p> <pre><v:stroke filltype="frame" weight="10pt" src="border.gif" imagealignshape="true" imageaspect="atleast"> </v:stroke></pre> <div><p>imagealignshape="ignore"</p></div> <div><p>imagealignshape="atleast"</p></div>	Value	Description	ignore	Ignore aspect issues.	atleast	Image is at least as big as imagesize.	atmost	Image is no bigger than imagesize.
Value	Description								
ignore	Ignore aspect issues.								
atleast	Image is at least as big as imagesize.								
atmost	Image is no bigger than imagesize.								

Attributes	Description
	 <p><code>imagealignshape="atmost"</code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ImageAspect simple type (§19.1.3.5).</p>
imagesize (Stroke Image Size)	<p>Specifies the size of the image for the stroke. Default is the size of the image.</p> <p>[Example:</p> <pre><v:stroke ... imagesize="10pt,10pt" ... /></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
insetpen (Inset Border From Path)	<p>Specifies that the border shall be displayed inside of the path defining the shape, rather than along the path (the default border placement), or outside of the path as might be done with an image.</p> <p>[Example:</p> <pre><v:shape ... insetpen="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
joinstyle (Line End Join Style))	<p>Specifies the join style for line ends. Default is round.</p> <ul style="list-style-type: none"> • round • bevel • miter <p>[Example:</p> <pre><v:polyline strokeweight="10pt" strokecolor="navy" points="10pt,10pt,50pt,50pt,90pt,10pt"> <v:stroke joinstyle="bevel"/> </v:polyline></pre>

Attributes	Description
	 <p>joinstyle="round"</p> <p>joinstyle="bevel"</p> <p>joinstyle="miter"</p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeJoinStyle simple type (§19.1.3.11).</p>
linestyle (Stroke Line Style)	<p>Specifies the line style of the stroke. Default is single.</p> <ul style="list-style-type: none"> • single • thinThin • thinThick • thickThin • thickBetweenThin <p>[Example:</p> <pre><v:stroke linestyle="thickThin" weight="5pt"> </v:stroke></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeLineStyle simple type (§19.1.3.12).</p>
miterlimit (Miter Joint Limit)	<p>Specifies the smoothness of the miter joint, or the maximum distance between the inner point and outer point of a joint. This number is a multiple of the thickness of the line. Default is 8.</p> <p>[Example:</p> <pre><v:stroke joinstyle="miter" weight="10pt" miterlimit="2"> </v:stroke></pre>

Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema decimal datatype.</p>
on (Stroke Toggle)	<p>Specifies whether the stroke is displayed. Default is true. This attribute overrides the shape's stroke attribute.</p> <p>[Example:</p> <pre><v:rect style="width:50;height:50" stroked="true" fillcolor="lime" strokecolor="red"> <v:stroke on="false" weight="5pt"/> </v:rect></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
opacity (Stroke Opacity)	<p>Specifies the amount of transparency of a stroke. Default is 1.0.</p> <p>[Example:</p> <pre><v:rect style="width:50;height:50" fillcolor="lime" strokecolor="red"> <v:stroke weight="5pt" opacity="50%"/> </v:rect></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
src (Stroke Image Location)	<p>Specifies the source image to load for a stroke fill. Default is no value.</p>

Attributes	Description
	<p>[Example:</p> <pre><v:stroke ... src="myimage.gif" ... > </v:stroke></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>startarrow (Line Start Arrowhead)</p>	<p>Specifies an arrowhead for the start of a line. Default is none. The path shall not be closed with the x command for the arrowhead to show. Allowed values are:</p> <ul style="list-style-type: none"> • none • block • classic • diamond • oval • open <p>[Example:</p> <pre><v:stroke startarrow="classic"/></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_StrokeArrowType simple type (§19.1.3.8).</p>
<p>startarrowlength (Line Start Arrowhead Length)</p>	<p>Specifies the length of the arrowhead at the start of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • short • medium • long <p>[Example:</p> <pre><v:stroke ... startarrowlength="long" ... /></pre> 

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowLength simple type (§19.1.3.7).</p>
<p>startarrowwidth (Line Start Arrowhead Width)</p>	<p>Specifies the width of the arrowhead at the start of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • narrow • medium • wide <p>[Example:</p> <pre><v:stroke ... startarrowwidth="wide" ... /></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowWidth simple type (§19.1.3.9).</p>
<p>title (Stroke Title)</p>	<p>Specifies the title of an embedded stroke image. This is typically set to the comment property of the image, which is often blank.</p> <p>[Example:</p> <pre><v:fill ... o:title="alt text" ... > </v:fill></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>weight (Stroke Weight)</p>	<p>Specifies the thickness of a stroke. Default is 1. This attribute overrides the shape's strokeweight attribute.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_StrokeChild](#)) is located in §A.6.2.
end note]

19.2.2.7 complex (Complex)

This element specifies that a shapetype contains fragments.

Parent Elements
background (Part 1, §17.2.1); hdrShapeDefaults (§14.7.2.1); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1); shapeDefaults (§14.7.2.2); shapetype (§19.1.2.20)

Attributes	Description
ext (VML Extension Handling Behavior) Namespace: urn:schemas-microsoft-com:vml	<p>Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.</p> <p>[<i>Rationale</i>: This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale</i>]</p> <p>The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).</p>

[*Note*: The W3C XML Schema definition of this element’s content model (CT_Complex) is located in §A.6.2. *end note*]

19.2.2.8 diagram (VML Diagram)

This element specifies semantic information for a limited set of structured diagrams that have VML representations. Diagrams should be defined using DrawingML; this representation is included for compatibility with applications that rely on VML. The following diagram types have VML representations:

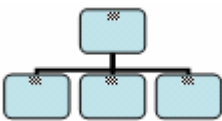
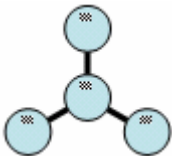



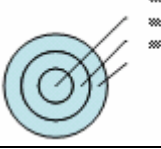
Diagram Type	Example (non-normative)
Organization chart	
Radial	
Cycle	

Diagram Type	Example (non-normative)
Pyramid	
Venn	
Bulls-eye	

Each of these types of diagrams contains shapes that are positioned relative to one another. Each shape also has optional associated text.

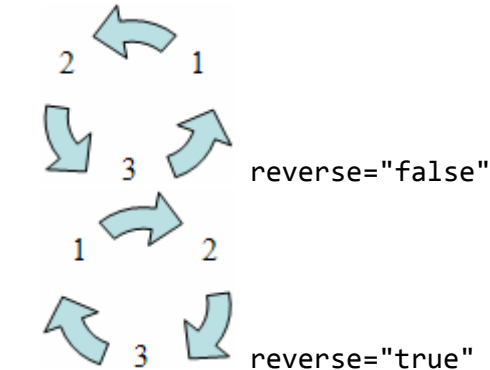
Parent Elements
background (Part 1, §17.2.1); group (§19.1.2.7); hdrShapeDefaults (§14.7.2.1); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1); shapeDefaults (§14.7.2.2)

Child Elements	Subclause
relationtable (Diagram Relationship Table)	§19.2.2.25

Attributes	Description
autoformat (Diagram Automatic Format)	<p>Specifies whether the diagram is formatted automatically by the application and user overrides are locked. Default is false.</p> <p>[Example:</p> <pre><o:diagram ... autoformat="true"> </o:diagram></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
autolayout (Diagram Automatic Layout)	<p>Specifies whether the diagram elements are laid out automatically by the application and user overrides are locked. Default is true.</p>

Attributes	Description
	<p>[Example:</p> <pre><o:diagram ... autolayout="false"> </o:diagram></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>constrainbounds (Diagram Layout Extents)</p>	<p>Specifies an optional, application-specific parameter related to the diagram's extents intended to be used by the application to assist laying out the diagram.</p> <p>[Example:</p> <pre><o:diagram ... constrainbounds="2910,2696,9773,9558"> </o:diagram></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>dgmbasetextscale (Diagram Base Font Size)</p>	<p>Specifies the diagram's original font size. This is used in subsequent font size recalculations. If the most recent diagram font size is used to calculate the font size after a rescale, the font size would be wrong after non-isometric diagram rescalings.</p> <p>[Example:</p> <pre><o:diagram ... dgmbasetextscale="12"> </o:diagram></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
<p>dgmfontsize (Diagram Font Size)</p>	<p>Specifies the font size for attached text when a new diagram node is added.</p> <p>[Example:</p> <pre><o:diagram ... dgmfontsize="12"> </o:diagram></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>

Attributes	Description
dgmscalex (Diagram Layout X Scale)	<p>Specifies an optional, application-specific parameter related to the horizontal scaling of the diagram that is intended to be used by the application to assist laying out the diagram.</p> <p>[Example:</p> <pre><o:diagram ... dgmscalex="50000"> </o:diagram></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
dgmscaley (Diagram Layout Y Scale)	<p>Specifies an optional, application-specific parameter related to the vertical scaling of the diagram that is intended to be used by the application to assist laying out the diagram.</p> <p>[Example:</p> <pre><o:diagram ... dgmscaley="75000"> </o:diagram></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
dgmstyle (Diagram Style Options)	<p>Specifies an optional, application-specific parameter related to the styling of the diagram that is intended to be used by the application to assist in formatting the diagram.</p> <p>[Example:</p> <pre><o:diagram ... dgmstyle="1"> </o:diagram></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p>
ext (VML Extension Handling Behavior) Namespace: urn:schemas-microsoft-com:vml	<p>Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.</p> <p>[Rationale: This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. end rationale]</p> <p>The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).</p>

Attributes	Description
reverse (Diagram Reverse Direction)	<p>Specifies whether the order of the diagram nodes is reversed. This is only relevant to diagrams that have linear ordering.</p> <p>[Example:</p> <pre><o:diagram ... reverse="true"> </o:diagram></pre>  <p>end example</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>

[Note: The W3C XML Schema definition of this element’s content model ([CT_Diagram](#)) is located in §A.6.2. end note]

19.2.2.9 entry (Regroup Entry)

This element specifies a single entry in a regrouptable (§19.2.2.23). Each entry is a pair mapping a current regroupid value to an old one. This is used to restore regrouping information on the regrouped object. A value of zero indicates no previous group.

[Example: The zero value of the old attribute indicates that if the shapes with regroupid 1 are regrouped, the restored group was not previously grouped with any other shapes:

```
<o:regrouptable v:ext="edit">
  <o:entry new="1" old="0"/>
</o:regrouptable>
```

end example]

Parent Elements
regrouptable (§19.2.2.23)

Attributes	Description
new (New Group ID)	Specifies the ID of the new group. Default is 0. The possible values for this attribute are defined by the W3C XML Schema int datatype.
old (Old Group ID)	Specifies the ID of the old group. Default is 0. The possible values for this attribute are defined by the W3C XML Schema int datatype.

[*Note:* The W3C XML Schema definition of this element's content model ([CT_Entry](#)) is located in §A.6.2. *end note*]

19.2.2.10 `equationxml` (Storage for Alternate Math Content)

This element specifies XML markup for mathematical text which can be used in place of the shape data. [*Note:* Applications are encouraged to use an open format, such as the Math format defined in ECMA-376-1, or the MathML format, a Recommendation from the World Wide Web Consortium, available at <http://www.w3.org/TR/MathML/>. *end note*]

[*Example:* Consider a VML object which specifies alternate math content using MathML. This object might contain the following XML markup:

```
<v:shape>
...
<o:equationXml contentType="mathml">
  <mrow>
    <mrow>
      <msup>
        <mi>x</mi>
        <mn>2</mn>
      </msup>
      <mo>+</mo>
      <mrow>
        <mn>4</mn>
        <mo>*</mo>
        <mi>x</mi>
      </mrow>
      <mo>+</mo>
      <mn>4</mn>
    </mrow>
    <mo>=</mo>
    <mn>0</mn>
  </mrow>
</o:equationXml>
</v:shape>
```

The embedded MathML markup is stored within the `equationxml` element. *end example*

If a producer that wants interoperability supports equations, it should use one of the following standard formats:

- Office Open XML Math (Part 1, §22.1)
- W3C MathML 2.0

Parent Elements
background (Part 1, §17.2.1); hdrShapeDefaults (§14.7.2.1); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1); shape (§19.1.2.19); shapeDefaults (§14.7.2.2)

Child Elements	Subclause
Any element in any namespace	n/a

Attributes	Description
contentType (Content Type of Alternate Math Content)	Specifies the syntax of the markup used for the alternate math content stored in the <code>equationxml</code> attribute. The possible values for this attribute are defined by the <code>ST_AlternateMathContentType</code> simple type (§19.2.3.1).

[Note: The W3C XML Schema definition of this element's content model ([CT_EquationXml](#)) is located in §A.6.2. *end note*]

19.2.2.11 extrusion (3D Extrusion)

This element specifies a parallel or perspective extrusion of a 2-D shape, creating the appearance of a 3-D shape. Lighting is controlled via two independent point light sources. Extrusions are defined as either perspective or parallel.


[Example:



```
<v:polyline points="0pt,75pt 20pt,45pt 10pt,50pt 30pt,10pt
  50pt,50pt 40pt,45pt 60pt,75pt 0pt,75pt" fillcolor="#00a000">
  <o:extrusion on="t" backdepth="20pt"
    lightposition="30000,10000,10000"/>
</v:polyline>
```


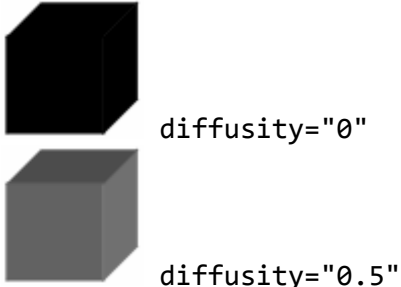




end example]




Parent Elements
arc (§19.1.2.1); background (Part 1, §17.2.1); curve (§19.1.2.3); group (§19.1.2.7); hdrShapeDefaults (§14.7.2.1); image (§19.1.2.10); line (§19.1.2.12); object (Part 1, §17.3.3.19); oval (§19.1.2.13); pict (§14.2.2.2); pict (§14.5.1); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapeDefaults (§14.7.2.2); shapedefaults (§19.2.2.28); shapetype (§19.1.2.20)




Attributes	Description
autorotationcenter (Center of Rotation Toggle)	<p>Specifies whether the center of rotation is the geometric center of the extrusion. Default is false. If true, the geometric center of an extruded shape is (0,0,0). If false, the center of rotation is determined by the rotationcenter attribute.</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
backdepth (Backward Extrusion Depth)	<p>Specifies the amount of backward extrusion. Default is 36 pt, default units are points.</p> <p>[Example:</p> <pre><o:extrusion on="true" backdepth="15pt"> </o:extrusion></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
brightness (Brightness)	<p>Specifies the overall brightness of a scene. Default is 0.3. This numeric value can also be specified in 1/65536ths if a trailing "f" is supplied (as "f" indicates the value is a fraction). For example, a value of "52429f" represents 52429/65536 or 0.8.</p> <p>This quantity is not specified using units. The numeric values are in the range 0 to 1 (0f to 65536f), where 0 implies darkness and 1 implies light saturation.</p> <p>[Example:</p>


Attributes	Description
	<div><pre><o:extrusion on="true" brightness="0.4"> </o:extrusion></pre></div> <div><div>brightness="0"</div><div>brightness="25000f"</div><div>brightness="0.4"</div><div>brightness="0.75"</div></div> <div><i>end example]</i></div> <div>The possible values for this attribute are defined by the W3C XML Schema string datatype.</div>
<div>color (Extrusion Color)</div>	<div>Specifies the color of the extrusion faces. This attribute is only used when colormode is custom. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</div> <div><i>[Example:</i></div> <div><pre><o:extrusion on="true" color="lime" colormode="custom"> </o:extrusion></pre></div> <div></div> <div><i>end example]</i></div> <div>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</div>


Attributes	Description
colormode (Extrusion Color Mode)	<p>Specifies whether the extrusion color is defined by the color attribute or is the same as the shape's fill color. Default is auto.</p> <p>[Example:</p> <pre><o:extrusion on="true" color="lime" colormode="auto"> </o:extrusion></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ColorMode simple type (§19.2.3.6).</p>
diffusivity (Diffuse Reflection)	<p>Specifies the amount of diffusion of reflected light from an extruded shape, defined as the ratio of incident light to diffused reflected light. Default is 1. Normal values are in the range 0 to 1. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied (as "f" indicates the value is a fraction). [Example: A value of "52429f" represents 52429/65536 or 0.8. end example]</p> <p>This quantity is not specified using units. The numeric values are in the range 0 to 1 (0f to 65536f), where 0 implies all reflected light is diffuse and 1 implies no reflected light is diffuse.</p> <p>Specularity and diffusivity should be considered together as it is possible, though physically incorrect, to define more reflected light than incident light. This is the case if the amount of specularly reflected light and diffusely reflected light add up to more than the amount of incident light.</p> <p>[Example:</p> <pre><o:extrusion on="true" diffusivity=".75"> </o:extrusion></pre>  <p>diffusivity="0"</p> <p>diffusivity="0.5"</p>




Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
edge (Simulated Bevel)	<p>Specifies the apparent bevel of the extrusion edges. Default is 1 point.</p> <p>[Example:</p> <pre><o:extrusion on="true" edge="2pt"> </o:extrusion></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
ext (VML Extension Handling Behavior) Namespace: urn:schemas-microsoft-com:VML	<p>Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.</p> <p>[Rationale: This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale]</i></p> <p>The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).</p>
facet (Faceting Quality)	<p>Specifies the quality with which the application approximates curved surfaces of an extrusion. A higher facet value produces shapes with smoother curves. A lower value reduces smoothing, resulting in curves with sharper, jagged edges. Default is 30000.</p> <p>Allowed values are in the range 1 to 65536, where 1 implies extremely low quality curve approximation and 65536 implies extremely high quality.</p> <p>[Example:</p>


Attributes	Description
	<pre><o:extrusion on="true" facet="65536"> </o:extrusion></pre> <div>  </div> <p>facet="65536"</p> <div>  </div> <p>facet="100"</p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
foredepth (Forward Extrusion)	<p>Specifies the amount of forward extrusion. Default is 0 pt, default units are points.</p> <p><i>[Example:</i></p> <pre><o:extrusion on="true" foredepth="25pt"> </o:extrusion></pre> <div>  </div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
lightface (Shape Face Lighting Toggle)	<p>Specifies whether the front face of the extrusion responds to changes in the lighting. If false, the front face does not respond when a lighting value changes. Default is true.</p> <p><i>[Example:</i> The front face is colored as if the shape were not extruded and lit by a 3-D light source:</p> <pre><o:extrusion on="true" lightface="false"> </o:extrusion></pre>

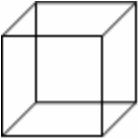

Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
lightharsh (Primary Light Harshness Toggle)	<p>Specifies whether the primary light source is harsh. If <code>false</code>, shadow boundaries are diffused. Default is <code>true</code>.</p> <p>[<i>Example:</i> The secondary light source is turned off so only the primary has an effect:</p> <pre><o:extrusion on="true" lightharsh="false" lightlevel2="0"> </o:extrusion></pre>  <p>lightharsh="false"</p>  <p>lightharsh="true"</p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
lightharsh2 (Secondary Light Harshness Toggle)	<p>Specifies whether the secondary light source is harsh. If <code>false</code>, shadow boundaries defined by the secondary light source are diffused. Default is <code>false</code>.</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
lightlevel (Primary Light Intensity)	<p>Specifies the intensity of the primary light source for the scene. Default is 0.6. This numeric value can also be specified in 1/65536ths if a trailing "f" is supplied (as "f" indicates the value is a fraction). [<i>Example:</i> A value of "52429f" represents 52429/65536 or 0.8. <i>end example]</i></p> <p>This quantity is not specified using units. The numeric values are in the range 0 to 1 (0f to 65536f), where 0 implies no direct light and 1 implies saturated direct light.</p> <p>[<i>Example:</i> The secondary light source is turned off so only the primary has an effect:</p>



Attributes	Description
	<pre><o:extrusion on="true" lightlevel=".5" lightlevel2="0"> </o:extrusion></pre> <div>  <div>lightlevel="1"</div> <div>lightlevel="0.5"</div> <div>lightlevel="0"</div> </div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
lightlevel2 (Secondary Light Intensity)	<p>Specifies the intensity of the secondary light source for the scene. Default is 0.6. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied (as "f" indicates the value is a fraction). <i>[Example: A value of "52429f" represents 52429/65536 or 0.8. end example]</i></p> <p>This quantity is not specified using units. The numeric values are in the range 0 to 1 (0f to 65536f), where 0 implies no direct light and 1 implies saturated direct light.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
lightposition (Primary Light Position)	<p>Specifies the normalized X,Y,Z position of the primary light in a scene in 1/65536-ths. Default is "50000,0,10000". The use of a normalized vector from the shape origin effectively establishes the direction of the light relative to the shape. The distance of the light from the shape is irrelevant as the light source is treated as a directional light.</p> <p>The position "0,0,0" is at the center of the shape. Positive numbers move the light to the right, down and toward the viewer, respectively.</p> <p><i>[Example: The secondary light source is turned off so only the primary has an effect:</i></p> <pre><o:extrusion on="true" lightlevel2="0" lightposition="7000,-13000,20000"> </o:extrusion></pre>



Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
lightposition2 (Secondary Light Position)	<p>Specifies the X,Y,Z position of the secondary light in a scene in 1/65536-ths. Default is "-50000,0,10000". The use of a normalized vector from the shape origin effectively establishes the direction of the light relative to the shape. The distance of the light from the shape is irrelevant as the light source is treated as a directional light.</p> <p>The position "0,0,0" is at the center of the shape. Positive numbers move the light to the right, down and toward the viewer, respectively.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
lockrotationcenter (Rotation Toggle)	<p>Specifies whether the rotation of the extruded object is specified by the rotationangle attribute. If false, the rotation is specified by the orientation attribute. Default is true.</p> <p>[Example: The following snippets are equivalent:</p> <pre><o:extrusion lockrotationcenter="false" orientationangle="45" orientation="0,1,0"> </o:extrusion></pre> <pre><o:extrusion lockrotationcenter=true rotationangle="45"/> </o:extrusion></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
metal (Metallic Surface Toggle)	<p>Specifies whether the surface of the extruded shape resembles metal. Default is false.</p> <p>If true, this attribute causes the specularly reflected light to be the material color instead of the light source color, making the object seem more metallic. To further approximate a metallic material requires that specularity be relatively high (about 1.2) and diffusivity be relatively low (about 0.6).</p> <p>[Example:</p>



Attributes	Description
	<pre> <o:extrusion on="true" metal="true" lightposition="10000,-10000,10000" lightlevel2="0" specular="1.2" diffusivity="0.6"> </o:extrusion> </pre>  <p>metal="true"</p>  <p>metal="false"</p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
on (Extrusion Toggle)	<p>Specifies whether an extrusion is displayed. Default is false.</p> <p>[Example:</p> <pre> <v:rect style="width=50;height=50"> <o:extrusion /> </v:rect> </pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
orientation (Rotation Axis)	<p>Specifies a vector in 3D space around which the shape is rotated, as given by the orientationangle attribute. Default is "100,0,0".</p> <p>The position "0,0,0" is at the center of the shape. Positive numbers are to the right, down and toward the viewer, respectively.</p> <p>[Example:</p> <pre> <o:extrusion ... orientation="200,0,0"> </o:extrusion> </pre>


Attributes	Description				
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>				
orientationangle (Rotation Around Axis)	<p>Specifies the angle, in degrees, that an extrusion rotates around the orientation. Default is 0.</p> <p>[Example:</p> <pre><o:extrusion ... orientationangle="30"> </o:extrusion></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>				
plane (Extrusion Direction)	<p>Specifies the plane that is at right angles to the extrusion. Default is xy. Allowed values are:</p> <ul style="list-style-type: none">• xy• zx• yz <p>[Example:</p> <pre><o:extrusion on="true" plane="yz" backdepth="100pt"> </o:extrusion></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ExtrusionPlane simple type (§19.2.3.11).</p>				
render (Extrusion Render Mode)	<p>Specifies the rendering mode of the extrusion. Default is solid. Allowed values are:</p> <table><tr><th>Value</th><th>Description</th></tr><tr><td>solid</td><td>Rendering displays a solid shape.</td></tr></table>	Value	Description	solid	Rendering displays a solid shape.
Value	Description				
solid	Rendering displays a solid shape.				

Attributes	Description				
	<table border="1"> <tr> <td>wireframe</td><td>Rendering displays a wireframe shape.</td></tr> <tr> <td>boundingcube</td><td>Rendering displays the bounding cube that contains the shape.</td></tr> </table> <p><i>[Example:</i></p> <pre style="margin-left: 40px;"> <o:extrusion on="true" render="wireframe"> </o:extrusion> </pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ExtrusionRender simple type (§19.2.3.12).</p>	wireframe	Rendering displays a wireframe shape.	boundingcube	Rendering displays the bounding cube that contains the shape.
wireframe	Rendering displays a wireframe shape.				
boundingcube	Rendering displays the bounding cube that contains the shape.				
rotationangle (X-Y Rotation Angle)	<p>Specifies the rotation of the object about the x- and y-axes, in degrees. Default is "0,0". Positive angles are measured clockwise around the axis (as if viewing from the positive axis).</p> <p>The rotation of the object is defined by a rotation angle about the y-axis followed by the rotation angle about the x-axis. The z-axis angle is controlled by the value of the CSS style attribute's rotation property.</p> <p><i>[Example:</i></p> <pre style="margin-left: 40px;"> <o:extrusion on="t" lockrotationcenter="true" rotationangle="10,20"> </o:extrusion> </pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>				
rotationcenter (Rotation Center)	<p>Specifies the center of rotation for a shape if autorotationcenter is false. The offset of the rotation is specified in terms of fractions of the shape's size. Default is "0,0,0".</p> <p>The position "0,0,0" is at the center of the shape. Positive numbers are to the right,</p>				

Attributes	Description
	<p>down and toward the viewer, respectively.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
shininess (Shininess)	<p>Specifies the concentration of the reflected light on an extrusion surface. Default is 5. The range of values should be constrained to 0-10. Reflection intensity typically grows exponentially with the shininess value.</p> <p>High values (8-10) approximate the shininess of a mirror and low values (2-3) approximate a speckled effect. Reflections do not mirror other objects; only pinpoint light sources are reflected.</p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>
skewamt (Extrusion Skew)	<p>Specifies the amount of skew, or length, of a parallel extrusion. Default is 50%. Applies only if the extrusion type is <code>parallel</code>. This attribute and <code>backdepth</code> interact to create the actual extrusion length. Allowed values are in the range 0 (0%) to 1 (100%).</p> <p>[Example:</p> <pre><o:extrusion on="true" skewamt="100%"> </o:extrusion></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
skewangle (Extrusion Skew Angle)	<p>Specifies the angle of the skew of a parallel extrusion. Default is 225 degrees. Angles are measured in degrees, counterclockwise from the negative x-axis. Applies only if the extrusion type is <code>parallel</code>.</p> <p>[Example:</p> <pre><o:extrusion on="true" skewangle="25"> </o:extrusion></pre> 

Attributes	Description						
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema float datatype.</p>						
<p>specularity (Specularity)</p>	<p>Specifies the specularity of an extruded shape, defined as the ratio of incident light to specularly reflected light. Default is 0. Normal values are in the range 0 to 1. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied (as "f" indicates the value is a fraction). [Example: A value of "52429f" represents 52429/65536 or 0.8. <i>end example]</i></p> <p>Specularity and diffusity should be considered together as it is possible, though physically incorrect, to define more reflected light than incident light. This is the case if the amount of specularly reflected light and diffusely reflected light add up to more than the amount of incident light.</p> <p>[Example: The secondary light source is turned off so only the primary has an effect. Although the effect is subtle, the first cylinder has a sharper specular reflection on its edge:</p> <pre><o:extrusion on="true" specularity="1" lightposition="10000, -10000,10000" lightlevel2="0"> </o:extrusion></pre> <div style="display: flex; align-items: center; justify-content: center;">  <div style="margin-left: 10px;">specularity="1"</div> </div> <div style="display: flex; align-items: center; justify-content: center; margin-top: 10px;">  <div style="margin-left: 10px;">specularity="0"</div> </div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>						
<p>type (Extrusion Type)</p>	<p>Specifies the way that the shape is extruded. Default is parallel. Allowed values are:</p> <table border="1"> <thead> <tr> <th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td>parallel</td><td>Extrusion is rendered so that the center of projection is infinitely far away; that is, the extrusion lines do not converge (unlike perspective projections).</td></tr> <tr> <td>perspective</td><td>Extrusion is rendered to a center of projection,</td></tr> </tbody> </table>	Value	Description	parallel	Extrusion is rendered so that the center of projection is infinitely far away; that is, the extrusion lines do not converge (unlike perspective projections).	perspective	Extrusion is rendered to a center of projection,
Value	Description						
parallel	Extrusion is rendered so that the center of projection is infinitely far away; that is, the extrusion lines do not converge (unlike perspective projections).						
perspective	Extrusion is rendered to a center of projection,						

Attributes	Description		
	<table border="1"><tr><td></td><td>which is the same as the vanishing point for unrotated objects.</td></tr></table> <p><i>[Example:</i></p> <pre><o:extrusion on="true" type="parallel" backdepth="100pt"> </o:extrusion></pre> <div><p>type="parallel"</p><p>type="perspective"</p></div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ExtrusionType simple type (§19.2.3.13).</p>		which is the same as the vanishing point for unrotated objects.
	which is the same as the vanishing point for unrotated objects.		
viewpoint (Extrusion Viewpoint)	<p>Specifies the viewpoint of the observer in EMUs. This is effectively the end of a vector extending from the viewpointorigin.</p> <p>The position "0,0,0" is at the center of the shape. Positive numbers are to the right, down and toward the viewer, respectively.</p> <p><i>[Example:</i></p> <pre><o:extrusion on="true" type="perspective" viewpoint="500000,-100000,100000"> </o:extrusion></pre> <div></div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>		
viewpointorigin	Specifies the origin of the viewpoint vector for perspective extrusions. This is the origin		

Attributes	Description
(Extrusion Viewpoint Origin)	<p>of the vector whose opposite end is given by the viewpoint attribute. This origin is always within the bounding box of the shape. Default is "0.5,-0.5".</p> <p>The viewpoint is specified in terms of the x and y values of the original shape. The x and y values are in the range 0.5 to -0.5 (50% to -50% of the shape's coordinate origin). Larger numbers move the viewpoint outside the bounding box.</p> <p>[Example:</p> <pre><o:extrusion on="true" type="perspective" viewpoint="500000,-100000,100000" viewpointorigin="0,1"> </o:extrusion></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_Extrusion](#)) is located in §A.6.2. *end note*]

19.2.2.12 FieldCodes (WordprocessingML Field Switches)

This element specifies the WordprocessingML field switches which shall be stored with an embedded object, using the set of field switches defined by the LINK field, as specified in Part 1, §17.16. This element shall only be used within a WordprocessingML document, and shall specify the exact field switches for the field which represents the object..

[*Rationale*: Legacy word processors used fields to represent embedded objects – this element stores the field switches not explicitly defined using individual Office VML Drawing elements for embeddings so as not to use the fidelity of their contents. *end rationale*]

[Example: The following example inserts an embedded object and specifies additional properties as defined by the LINK field.

```
<o:OLEObject ...>
  <o:FieldCodes>\f 0</o:FieldCodes>
</o:OLEObject>
```

This embedded object specifies additional LINK field code values of \f 0, which specifies that the embedded object shall retain its source formatting (as defined in Part 1, §17.16).

end example]

The possible values for this element are defined by the W3C XML Schema string datatype.

Parent Elements
OLEObject (§19.2.2.20)

19.2.2.13 fill (Shape Fill Extended Properties)

This element specifies additional properties for fills. It is used to identify additional types of gradient fills beyond those specified in the fill element (§19.1.2.5).

Parent Elements
background (Part 1, §17.2.1); fill (§19.1.2.5); hdrShapeDefaults (§14.7.2.1); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1); shapeDefaults (§14.7.2.2)

Attributes	Description
<p>ext (VML Extension Handling Behavior)</p> <p>Namespace: urn:schemas-microsoft-com:vml</p>	<p>Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.</p> <p>[<i>Rationale:</i> This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale</i>]</p> <p>The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).</p>
<p>type (Fill Type)</p>	<p>Specifies the type of fill. If specified, this overrides the value of the type attribute in the parent fill element.</p> <p>[<i>Example:</i> The gradientCenter value overrides gradientRadial:</p> <pre><v:fill color2="black" focus="100%" type="gradientRadial"> <o:fill v:ext="view" type="gradientCenter"/> </v:fill></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_FillType simple type (§19.2.3.14).</p>

[*Note:* The W3C XML Schema definition of this element’s content model (CT_Fill) is located in §A.6.2. *end note*]

19.2.2.14 idmap (Shape ID Map)

This element specifies how shape IDs in the document have been generated. This is an optional element included to allow applications a mechanism for storing information they need to persist related to generating shape IDs.

Parent Elements
shapelayout (§19.2.2.29)

Attributes	Description
data (Shape IDs)	<p>Specifies the data the application uses to generate shape IDs.</p> <p>[<i>Example:</i> An application might choose to reserve blocks of shape ID numbers for each part in the package. Each block of 1024 shape IDs could be referred to by index and this index stored in the data attribute. The data value for a given part might then be:</p> <pre><o:idmap v:ext="edit" data="1"/></pre> <p>indicating that all the IDs in block 1 are reserved by this part (meaning shape IDs from 1 to 1024 cannot be used). The application's internal constraint would be that each part reserve a different set of IDs. Another part, that contains more shapes, might use:</p> <pre><o:idmap v:ext="edit" data="2,3"/></pre> <p>In this case, shape IDs from 1025 to 3072 [3 x 1024] cannot be used).</p> <p>Another implementation might choose to store more verbose information in this attribute. Yet another implementation might ignore this element completely.</p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
ext (VML Extension Handling Behavior)	<p>Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.</p>
Namespace: urn:schemas-microsoft-com:vml	<p>[<i>Rationale:</i> This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale]</i></p> <p>The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).</p>

[*Note:* The W3C XML Schema definition of this element's content model ([CT_IdMap](#)) is located in §A.6.2. *end note]*

19.2.2.15 `ink` (Ink)

This element specifies the presence of an ink object. An ink object is a VML object which allows applications to store data for ink annotations. [Note: Applications are encouraged to use an open-ink format, such as the Ink Markup Language (InkML). *end note*]

[Example:

```
<v:shape ... >
  <o:ink i="..." annotation="t" contentType="application/inkml+xml"/>
</v:shape>
<v:shape ... >
  <o:ink i="AMgFHQSWC+YFASAAAwAAAAAAMA..." annotation="t"
    contentType="application/x-ms-ink"/>
</v:shape>
```

end example]

Parent Elements
background (Part 1, §17.2.1); hdrShapeDefaults (§14.7.2.1); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1); polyline (§19.1.2.15); shape (§19.1.2.19); shapeDefaults (§14.7.2.2)

Attributes	Description
annotation (Annotation Flag)	<p>Specifies whether the ink object was created as an annotation rather than through pen input. Default is false. [Rationale This allows an application to treat annotation ink objects as any other annotation. For example, if annotations are hidden, the application can hide the ink object. An ink object that represents primary user input through a pen can be left visible. <i>end rationale</i>]</p> <p>[Example:</p> <pre><o:ink ... annotation="true"> </o:ink></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
contentType (Content Type)	<p>Specifies the format of the ink content stored in the i attribute. The syntax is a content type as defined in IETF RFC 2616.</p> <p>If this attribute is omitted, the application should attempt to determine the content type by reading the contents of the i element.</p> <p>The possible values for this attribute are defined by the ST_ContentType simple type</p>

Attributes	Description
	(§19.2.3.9).
i (Ink Data)	<p>Specifies additional ink object information which shall be associated with the parent VML shape. The VML shape specifies the information necessary to render the ink, and this attribute can be used to store additional data about the VML shape(s) representing ink. This attribute's contents are formatted as specified by the contentType attribute, but are optional and can be ignored if not recognized.</p> <p>[Example:</p> <pre> <o:ink ... i="..."> </o:ink> </pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_Ink](#)) is located in §A.6.2. end note]

19.2.2.16 left (Text Box Left Stroke)

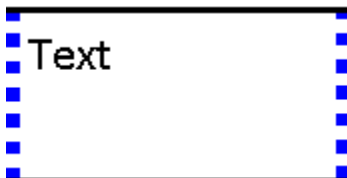
This element specifies the stroke properties for the left border of a text box. It entirely supercedes its parent stroke element if its on attribute is true. Thus the default value of an unspecified attribute overrides a value specified in the parent. If the on attribute is false or not specified, the border is not shown.

[Example: The text box borders are set independently. The bottom border does not inherit the weight from the parent stroke element.

```

<v:stroke weight="2.25pt">
  <o:left v:ext="view" dashstyle="1 1" color="blue" weight="5pt" on="t"/>
  <o:top v:ext="view" color="black" weight="2.25pt" on="t"/>
  <o:right v:ext="view" dashstyle="1 1" color="blue" weight="5pt" on="t"/>
  <o:bottom v:ext="view" color="black" on="t"/>
  <o:column v:ext="view" color="#f60" on="t"/>
</v:stroke>

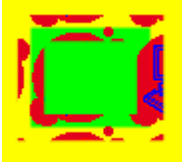


```


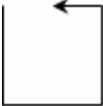



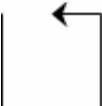

end example]




Parent Elements
background (Part 1, §17.2.1); hdrShapeDefaults (§14.7.2.1); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1); shapeDefaults (§14.7.2.2); stroke (§19.1.2.21)


Attributes	Description
althref (Alternate Image Reference)	<p>Specifies an alternate reference for an image in Macintosh PICT format.</p> <p>[Example:</p> <pre><v:stroke ... althref="myimage.pcz" ... > </v:stroke></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
color (Stroke Color)	<p>Specifies the stroke color. Overrides the strokecolor attribute of a shape. Default is black. See the fillcolor attribute for a list of supported named colors.</p> <p>[Example: The shape stroke is blue:</p> <pre><v:shape ... strokecolor="red" ... > <v:stroke color="blue"/> </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
color2 (Stroke Alternate Pattern Color)	<p>Specifies a second color for strokes, used when filltype is pattern. Default is no value.</p> <p>When a pattern fill is used for the stroke, the stroke color is used in colored parts of the source image. The color2 defines an alternate color to use in place of black in the source image.</p> <p>[Example: This unusual example is intended to demonstrate how the image and colors interact to create a patterned stroke. The yellow background shows transparency. The non-square shape and square image create an effective offset. The heavy stroke weight shows more of the image. The green shape fill shows how the stroke is overlaid on the shape.</p> <pre><v:background fillcolor="yellow"/> <v:shape style="width:60;height:50" strokecolor="red" fillcolor="lime" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"></pre>





Attributes	Description
	<pre><v:stroke filltype="pattern" weight="10pt" src="myimage.gif" color2="blue"/> </v:shape></pre>  <p>, where myimage.gif is: </p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
dashstyle (Stroke Dash Pattern)	<p>Specifies the dot and dash pattern for a stroke. Default is solid. Pre-defined values are:</p> <ul style="list-style-type: none"> • solid • shortdash • shortdot • shortdashdot • shortdashdotdot • dot • dash • longdash • dashdot • longdashdot • longdashdotdot <p>A custom-defined dash pattern can also be specified using a series of numbers. These define the length of the dash (the drawn part of the stroke) and the length of the space between the dashes. The lengths are relative to the line width: a length of 1 is equal to the line width. The endcap style is applied to each dash but the arrow style is not. The string defines the length of the dash then the length of the space. This can be repeated to form complex dash styles. The string should always contain a pair of numbers; if it contains an odd number of numbers the last is disregarded. 0 implies a dot that is fourfold symmetrical (with round end caps, this is a circle).</p> <p>[Example:</p> <pre><v:stroke dashstyle="0 2" weight="3pt" endcap="round"> </v:stroke></pre> 




Attributes	Description
	<pre><v:stroke dashstyle="longdashdotdot" weight="2pt"> </v:stroke></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>endarrow (Line End Arrowhead)</p>	<p>Specifies an arrowhead for the end of a line. Default is none. The path shall not be closed with the x command for the arrowhead to show. Allowed values are:</p> <ul style="list-style-type: none"> • none • block • classic • diamond • oval • open <p>[Example:</p> <pre><v:stroke endarrow="classic"/></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowType simple type (§19.1.3.8).</p>
<p>endarrowlength (Line End Arrowhead Length)</p>	<p>Specifies the length of the arrowhead at the end of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • short • medium • long <p>[Example:</p> <pre><v:stroke ... endarrowlength="long" ... /></pre>



Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowLength simple type (§19.1.3.7).</p>
endarrowwidth (Line End Arrowhead Width)	<p>Specifies the width of the arrowhead at the end of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • narrow • medium • wide <p>[Example:</p> <pre><v:stroke ... endarrowwidth="wide" ... /></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowWidth simple type (§19.1.3.9).</p>
endcap (Line End Cap)	<p>Specifies the cap style for the end of a stroke. Default is flat. Allowed values are:</p> <ul style="list-style-type: none"> • flat • square • round <p>[Example:</p> <pre><v:stroke ... endcap="round" weight="10pt" ... /></pre>  <p><i>end example]</i></p>

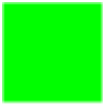

Attributes	Description
	 <p>endcap="round"</p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeEndCap simple type (§19.1.3.10).</p>
<p>ext (VML Extension Handling Behavior)</p> <p>Namespace: urn:schemas-microsoft-com:vm1</p>	<p>Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.</p> <p>[<i>Rationale</i>: This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale</i>]</p> <p>The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).</p>
<p>filltype (Stroke Image Style)</p>	<p>Specifies the kind of fill used for the background of a stroke. Default is <code>solid</code>. Allowed values are:</p> <ul style="list-style-type: none"> • <code>solid</code> - The fill pattern is solid. • <code>tile</code> - The fill image is tiled. • <code>pattern</code> - The fill image is stretched to form a pattern. • <code>frame</code> - The fill image becomes a border for the shape. <p>[<i>Example</i>:</p> <pre><v:shape style="width:50;height:50" strokecolor="red" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"> <v:stroke filltype="frame" weight="10pt" src="border.gif"/> </v:shape></pre> <div style="display: flex; align-items: center;">  , where border.gif is:  </div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_FillType simple type (§19.1.3.4).</p>
<p>forcedash (Force Dashed Outline)</p>	<p>Specifies whether a dashed outline is used to draw a shape when a shape has no line or fill. Default is <code>false</code>.</p>


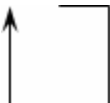
Attributes	Description
	<p>Used by PresentationML placeholders to draw a dashed outline when there is no line and no fill for a shape.</p> <p>[Example:</p> <pre><v:shape ... o:forcedash="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
href (Original Image Reference)	<p>Specifies the URL to the original image file. Used only if the picture has been linked and embedded. Default is no value.</p> <p>[Example:</p> <pre><v:fill ... o:href="myimage.gif" ... > </v:fill></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
imagealignshape (Stoke Image Alignment)	<p>Specifies the alignment of the stroke image. If true, the image is aligned with the shape. Otherwise, it is aligned with the containing scope. Default is true.</p> <p>[Example: The top position offset shifts the image alignment relative to the containing window:</p> <pre><v:shape fillcolor="silver" style="top:20;width:50;height:50" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"> <v:stroke imagealignshape="false" weight="20pt" filltype="tile" src="myimage.gif"/> </v:shape></pre>  <p>imagealignshape="false"</p>

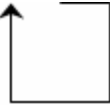
Attributes	Description								
	<div></div> <div>imagealignshape="false"</div> <div>end example]</div> <div>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</div>								
imageaspect (Stroke Image Aspect Ratio)	<div>Specifies how the stroke image aspect ratio is preserved. Default is ignore. Allowed values are:</div> <table><tr><th>Value</th><th>Description</th></tr><tr><td>ignore</td><td>Ignore aspect issues.</td></tr><tr><td>atleast</td><td>Image is at least as big as imagesize.</td></tr><tr><td>atmost</td><td>Image is no bigger than imagesize.</td></tr></table> <div>[Example:</div> <div><v:stroke filltype="frame" weight="10pt" src="border.gif" imagealignshape="true" imageaspect="atleast"> </v:stroke></div> <div><div></div><div>imagealignshape="ignore"</div><div></div><div>imagealignshape="atleast"</div><div></div><div>imagealignshape="atmost"</div></div> <div>end example]</div> <div>The possible values for this attribute are defined by the ST_ImageAspect simple type (§19.1.3.5).</div>	Value	Description	ignore	Ignore aspect issues.	atleast	Image is at least as big as imagesize.	atmost	Image is no bigger than imagesize.
Value	Description								
ignore	Ignore aspect issues.								
atleast	Image is at least as big as imagesize.								
atmost	Image is no bigger than imagesize.								
imagesize (Stroke Image Size)	<div>Specifies the size of the image for the stroke. Default is the size of the image.</div> <div>[Example:</div> <div><v:stroke ... imagesize="10pt,10pt" ... /></div>								

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
insetpen (Inset Border From Path)	<p>Specifies that the border shall be displayed inside of the path defining the shape, rather than along the path (the default border placement), or outside of the path as might be done with an image.</p> <p>[Example:</p> <pre><v:shape ... insetpen="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
joinstyle (Line End Join Style)	<p>Specifies the join style for line ends. Default is round.</p> <ul style="list-style-type: none"> • round • bevel • miter <p>[Example:</p> <pre><v:polyline strokeweight="10pt" strokecolor="navy" points="10pt,10pt,50pt,50pt,90pt,10pt"> <v:stroke joinstyle="bevel"/> </v:polyline></pre> <div>  </div> <p>joinstyle="round"</p> <div>  </div> <p>joinstyle="bevel"</p> <div>  </div> <p>joinstyle="miter"</p> <p><i>end example]</i></p>

Attributes	Description
	The possible values for this attribute are defined by the ST_StrokeJoinStyle simple type (§19.1.3.11).
linestyle (Stroke Line Style)	<p>Specifies the line style of the stroke. Default is single.</p> <ul style="list-style-type: none"> • single • thinThin • thinThick • thickThin • thickBetweenThin <p>[Example:</p> <pre><v:stroke linestyle="thickThin" weight="5pt"> </v:stroke></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_StrokeLineStyle simple type (§19.1.3.12).</p>
miterlimit (Miter Joint Limit)	<p>Specifies the smoothness of the miter joint, or the maximum distance between the inner point and outer point of a joint. This number is a multiple of the thickness of the line. Default is 8.</p> <p>[Example:</p> <pre><v:stroke joinstyle="miter" weight="10pt" miterlimit="2"> </v:stroke></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema decimal datatype.</p>
on (Stroke Toggle)	<p>Specifies whether the stroke is displayed. Default is true. This attribute overrides the shape's stroke attribute.</p> <p>[Example:</p>

Attributes	Description
	<pre><v:rect style="width:50;height:50" stroked="true" fillcolor="lime" strokecolor="red"> <v:stroke on="false" weight="5pt"/> </v:rect></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
opacity (Stroke Opacity)	<p>Specifies the amount of transparency of a stroke. Default is 1.0.</p> <p>[Example:</p> <pre><v:rect style="width:50;height:50" fillcolor="lime" strokecolor="red"> <v:stroke weight="5pt" opacity="50%"/> </v:rect></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
src (Stroke Image Location)	<p>Specifies the source image to load for a stroke fill. Default is no value.</p> <p>[Example:</p> <pre><v:stroke ... src="myimage.gif" ... > </v:stroke></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
startarrow (Line Start Arrowhead)	<p>Specifies an arrowhead for the start of a line. Default is none. The path shall not be closed with the x command for the arrowhead to show. Allowed values are:</p> <ul style="list-style-type: none"> • none

Attributes	Description
	<ul style="list-style-type: none"> • block • classic • diamond • oval • open <p>[Example:</p> <pre><v:stroke startarrow="classic"/></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_StrokeArrowType simple type (§19.1.3.8).</p>
startarrowlength (Line Start Arrowhead Length)	<p>Specifies the length of the arrowhead at the start of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • short • medium • long <p>[Example:</p> <pre><v:stroke ... startarrowlength="long" ... /></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_StrokeArrowLength simple type (§19.1.3.7).</p>
startarrowwidth (Line Start Arrowhead Width)	<p>Specifies the width of the arrowhead at the start of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • narrow • medium • wide <p>[Example:</p> <pre><v:stroke ... startarrowwidth="wide" ... /></pre>

Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowWidth simple type (§19.1.3.9).</p>
title (Stroke Title)	<p>Specifies the title of an embedded stroke image. This is typically set to the comment property of the image, which is often blank.</p> <p>[Example:</p> <pre><v:fill ... o:title="alt text" ... > </v:fill></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
weight (Stroke Weight)	<p>Specifies the thickness of a stroke. Default is 1. This attribute overrides the shape's strokeweight attribute.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_StrokeChild](#)) is located in §A.6.2.
end note]

19.2.2.17 LinkType (Embedded Object Alternate Image Request)

This element specifies the kind of image which shall be requested from an embedded object's host application when the contents of a linked image are updated within a document. When linked images are stored in documents, the only items stored in the document are an image representation and a link to the source. This element specifies the kind of image which shall be requested from the source on update.

[Note: The formats available can vary based on the kind of embedded object - this information is typically queried from the embedded object's application before it is stored. This setting can be omitted, and is usually stored for performance reasons, so it is not queried on each update of the linked object. *end note]*

The possible values for this element are defined by the ST_OLELinkType simple type (§19.2.3.19).

Parent Elements
OLEObject (§19.2.2.20)

[*Note:* The W3C XML Schema definition of this element's content model ([ST_OLELinkType](#)) is located in §A.6.2.
end note]

19.2.2.18 lock (Shape Protections)

This element specifies locks against actions that can be effected in the UI of an authoring application or programmatically through an object model.

[*Example:* The following snippet locks the shape's aspect ratio and text from user edits.

```
<v:shape ... >
  <o:lock v:ext="edit" aspectratio="t" text="t"/>
</v:shape>
```

end example]

Parent Elements
arc (§19.1.2.1); background (Part 1, §17.2.1); curve (§19.1.2.3); group (§19.1.2.7); hdrShapeDefaults (§14.7.2.1); image (§19.1.2.10); line (§19.1.2.12); object (Part 1, §17.3.3.19); oval (§19.1.2.13); pict (§14.2.2.2); pict (§14.5.1); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapeDefaults (§14.7.2.2); shapedefaults (§19.2.2.28); shapetype (§19.1.2.20)

Attributes	Description
adjusthandles (Handles Lock)	Specifies whether the handles of a shape are locked from being edited. Default is <code>false</code> . The possible values for this attribute are defined by the <code>ST_TrueFalse</code> simple type (§20.1.2.5).
aspectratio (Aspect Ratio Lock)	Specifies whether the aspect ratio of a shape is locked from being edited. Default is <code>false</code> . The possible values for this attribute are defined by the <code>ST_TrueFalse</code> simple type (§20.1.2.5).
cropping (Cropping Lock)	Specifies whether cropping of a shape is locked from being edited. Default is <code>false</code> . The possible values for this attribute are defined by the <code>ST_TrueFalse</code> simple type (§20.1.2.5).
ext (VML Extension Handling Behavior)	Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.
Namespace:	[<i>Rationale:</i> This part of the original VML specification is included to assist applications

Attributes	Description
urn:schemas-microsoft-com:VML	that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale</i> The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).
grouping (Grouping Lock)	Specifies whether a shape is locked from being grouped. Default is false. The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).
position (Position Lock)	Specifies whether the position of a shape is locked from being edited. Default is false. The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).
rotation (Rotation Lock)	Specifies whether the rotation of a shape is locked from being edited. Default is false. The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).
selection (Selection Lock)	Specifies whether the shape is locked from being selectable in an editor. Default is false. The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).
shapetype (AutoShape Type Lock)	Specifies whether the AutoShape type is locked from being edited. Default is false. If true, the type of an AutoShape cannot be changed in a graphical editor. The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).
text (Text Lock)	Specifies whether the text attached to a shape is locked from being edited. Default is false. The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).
ungrouping (Ungrouping Lock)	Specifies whether a grouped shape is locked from being ungrouped. Default is false. The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).
vertices (Vertices Lock)	Specifies whether the vertices of a path are locked from being edited. Default is false. The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).

[Note: The W3C XML Schema definition of this element's content model ([CT_Lock](#)) is located in §A.6.2. *end note*]

19.2.2.19 **LockedField (Embedded Object Cannot Be Refreshed)**

This element specifies that the embedded object's appearance is locked - that is, that the object's current representation shall be locked to prevent any user interaction or automatic application behavior from modifying its contents.

This element shall contain no content - its presence indicates that the embedded object is locked, and its omission allows the field to be updated.

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
OLEObject (§19.2.2.20)

[*Note:* The W3C XML Schema definition of this element's content model (ST_TrueFalseBlank) is located in §A.7.9. *end note*]

19.2.2.20 **OLEObject (Embedded OLE Object)**

This element specifies an embedded object.

[*Example:* The following markup defines a reference to an embedded object using Bonobo. The ProgId attribute contains the shared library that contains the widget. The content type of the referred part identifies the referenced Bonobo object.

```
<OLEObject r:id="rb1" ProgId="OAFIID:Bonobo_Sample_Calculator">
...
</OLEObject>
```

The target of the relationship with ID rb1, defines the Bonobo object itself. This example shows a link to a sample Bonobo widget taken from the article <http://www.ibm.com/developerworks/webservices/library/co-bnbo2.html>, which also provides an introduction to Bonobo. *end example*]

[*Example:* The following demonstrates a video file embedded in a WordprocessingML document:

```
<w:object ... >
  <v:shape id="_x0000_i1025" type="#_x0000_t75"
    style="width:1in;height:24pt" o:ole="">
    <v:imagedata r:id="rId4" o:title=""/>
  </v:shape>
  <o:OLEObject Type="Embed" ProgID="AVIFile" ShapeID="_x0000_i1025"
    DrawAspect="Content" ObjectID="_1219561732" r:id="rId5"/>
</w:object>
```

end example]

Parent Elements
background (Part 1, §17.2.1); hdrShapeDefaults (§14.7.2.1); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1); shapeDefaults (§14.7.2.2)

Child Elements	Subclause
FieldCodes (WordprocessingML Field Switches)	§19.2.2.12
LinkType (Embedded Object Alternate Image Request)	§19.2.2.17
LockedField (Embedded Object Cannot Be Refreshed)	§19.2.2.19

Attributes	Description
DrawAspect (Embedded Object Representation)	<p>Specifies how the embedded object is represented visually in the application.</p> <p>[Example:</p> <pre><o:OLEObject ... DrawAspect="Content"> </o:OLEObject></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_OLEDrawAspect simple type (§19.2.3.18).</p>
id (Relationship) Namespace: .../officeDocument /2006/relationships	<p>Specifies the actual OLE object using a standard part relationship lookup.</p> <p>[Example:</p> <pre><o:OLEObject ... r:id="rId5"> </o:OLEObject></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_RelationshipId simple type (Part 1, §22.8.2.1).</p>
ObjectID (Unique ID for Embedded Object)	<p>Specifies a unique ID identifying the embedded object.</p> <p>[Example: The following markup defines a reference to a linked object using KParts. The name attribute contains the shared library that contains the plugin. The item element contains the name of the plugin. The content type of the referred part would identifies the referenced KParts object.</p> <pre><oleLink r:id="rKp1" progId="libhtmlvalidatorplugin"> ... </oleLink></pre>

Attributes	Description
	<p>The following XML, contained in the target of the relationship with ID rKp1, defines the KPart object, and follows the kpartgui DTD:</p> <pre><!DOCTYPE kpartgui SYSTEM "kpartgui.dtd"> <kpartgui library="libhtmlvalidatorplugin" name="htmlvalidatorplugin" version="1" > <MenuBar> <Menu name="tools"><Text>&Tools</Text> <Action name="validatewebpage"/> </Menu> </MenuBar> </kpartgui></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
ProgID (Object Link Identifier)	<p>Specifies the embedded object server application associated with the embedded object.</p> <p>[Example:</p> <pre><o:OLEObject ... ProgID="AVIFile"> </o:OLEObject></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
ShapeID (Embedded Object Shape)	<p>Specifies the shape with which the embedded object is associated. A VML shape provides the visual placeholder for an embedded object and this attribute is set to the id of the placeholder shape.</p> <p>[Example:</p> <pre><o:OLEObject ... ShapeID="_x0000_i1025"> </o:OLEObject></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
Type (Embedded Object Type)	<p>Specifies the kind of embedded object connection.</p> <p>[Example:</p> <pre><o:OLEObject ... Type="Embed"></pre>

Attributes	Description
	<p><code></o:OLEObject></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_OLEType simple type (§19.2.3.20).</p>
UpdateMode (Update Mode for Embedded Object)	<p>Specifies how the object is updated with new data if the Type is Link - automatically or on-demand by the user.</p> <p>[Example:</p> <pre> <o:OLEObject ... UpdateMode="Always"> </o:OLEObject> </pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_OLEUpdateMode simple type (§19.2.3.21).</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_OLEObject](#)) is located in §A.6.2. *end note]*

19.2.2.21 proxy (Shape Reference)

This element specifies an entry in a `r` element rule that contains a reference to one or more shapes that are participating in the rule.

[Example: The following rule defines a connection between two shapes. The shape with id `_s1036` connects shape `_s1033` to `_s1032`:

```

<o:shapelayout v:ext="edit">
  <o:rules v:ext="edit">
    <o:r id="V:Rule1" type="connector" idref="#_s1036">
      <o:proxy start="" idref="#_s1033" connectloc="0"/>
      <o:proxy end="" idref="#_s1032" connectloc="2"/>
    </o:r>
  </o:rules>
</o:shapelayout>

```

end example]

Parent Elements
r (§19.2.2.22)

Attributes	Description
connectloc (Connection Location)	<p>Specifies the location on the shape where the connector is attached. The value is an index into the list of connection points defined in the shape - see the connectlocs attribute. Default is 0. Only used in a connector rule.</p> <p>The possible values for this attribute are defined by the W3C XML Schema int datatype.</p>
end (End Point Connection Flag)	<p>Specifies whether the connector's end point is connected to the shape. Default is false. Only used in a connector rule.</p> <p>The possible values for this attribute are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).</p>
idref (Proxy Shape Reference)	<p>Specifies a reference to a shape in the current document. Default is no value. A shape name is used as the reference mechanism; this is not a relationship ID.</p> <p>This attribute indicates that the referenced shape is part of this rule. Two or more proxy elements are used for an alignment rule. A connector rule uses one or two, indicating which shapes the connector is attached to.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
start (Start Point Connection Flag)	<p>Specifies whether the connector's start point is connected to the shape. Default is false. Only used in a connector rule. If both start and end are specified the later one takes precedence.</p> <p>The possible values for this attribute are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_Proxy](#)) is located in §A.6.2. *end note*]

19.2.2.22 r (Rule)

This element specifies a rule entry in a rules element rule set that describes how a certain shape or set of shapes behaves during editing.

[Example: The following rule defines a connection between two shapes. The shape with id _s1036 connects shape _s1033 to _s1032:

```
<o:shapelayout v:ext="edit">
  <o:rules v:ext="edit">
    <o:r id="V:Rule1" type="connector" idref="#_s1036">
      <o:proxy start="" idref="#_s1033" connectloc="0"/>
      <o:proxy end="" idref="#_s1032" connectloc="2"/>
    </o:r>
  </o:rules>
```

</o:shapelayout>

end example]

Parent Elements
rules (§19.2.2.27)

Child Elements	Subclause
proxy (Shape Reference)	§19.2.2.21

Attributes	Description
how (Alignment Rule Type)	<p>Specifies the kind of alignment for an alignment rule. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • top • middle • bottom • left • center • right <p>The possible values for this attribute are defined by the ST_How simple type (§19.2.3.15).</p>
id (Rule ID)	<p>Specifies an identifier for the rule. Default is no value.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
idref (Rule Shape Reference)	<p>Specifies a reference to a shape in the current document that is the primary shape in the rule. [<i>Example:</i> For a connector rule, the connector. <i>end example</i>]</p> <p>Default is no value. A shape name is used as the reference mechanism; this is not a relationship ID.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
type (Rule Type)	<p>Specifies the kind of the rule. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • arc • callout • connector • align

Attributes	Description
	The possible values for this attribute are defined by the ST_RType simple type (§19.2.3.22).

[Note: The W3C XML Schema definition of this element’s content model (CT_R) is located in §A.6.2. *end note*]

19.2.2.23 regroupable (Shape Grouping History)

This element specifies a list of entries which describe how shapes were previously grouped so they can be regrouped. The regroupid attribute of shapes indicates which shapes belong together when a regroup is performed. The regrouptable tracks the previous regroupid that should be assigned to all shapes with the given current regroupid.

[Example: Consider a document containing two rectangles and a circle. The rectangles are grouped together, then that group is grouped with the circle. This new group is then ungrouped, leaving the circle and grouped rectangles. The document might contain the following snippets:

```
<v:oval ... o:regroupid="1"/>
<v:group ... o:regroupid="1"/>
  <v:rect ... />
  <v:rect ... />
</v:group>

<o:regrouptable v:ext="edit">
  <o:entry new="1" old="0"/>
</o:regrouptable>
```

The regroupid attribute indicates that the shapes with regroupid 1 were previously grouped together. The entry indicates that if those shapes are regrouped, the new group formed should not have a regroupid value as it was not previously ungrouped.

If the two rectangles are ungrouped, the document reflects that the rectangles were previously grouped and that their old group was previously grouped:

```
<v:oval ... o:regroupid="1"/>
<v:rect ... o:regroupid="2"/>
<v:rect ... o:regroupid="2"/>

<o:regrouptable v:ext="edit">
  <o:entry new="1" old="0"/>
  <o:entry new="2" old="1"/>
</o:regrouptable>
```

end example]

Parent Elements
shapelayout (§19.2.2.29)

Child Elements	Subclause
entry (Regroup Entry)	§19.2.2.9

Attributes	Description
ext (VML Extension Handling Behavior)	Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.
Namespace: urn:schemas-microsoft-com:VML	<p>[<i>Rationale</i>: This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale</i>]</p> <p>The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).</p>

[*Note*: The W3C XML Schema definition of this element's content model ([CT_RegroupTable](#)) is located in §A.6.2. *end note*]

19.2.2.24 rel (Diagram Relationship)

This element specifies a relationship between two diagram nodes. An optional third node that exists between the primary two can also be included. The relationship has an implicit order since it describes the source and destination nodes.

[*Example*: In the cycle diagram below, shape 1036 (the shape that is the text box for the text "2") is the first node. A relationship exists between shape 1036 and shape 1044 (the text box containing "1"). In between those shapes is shape 1038 (the yellow arrow).

```
<o:relationtable v:ext="edit">
  <o:rel v:ext="edit" idsrc="#_s1036" iddest="#_s1036"/>
  <o:rel v:ext="edit" idsrc="#_s1042" iddest="#_s1036" idcntr="#_s1043"/>
  <o:rel v:ext="edit" idsrc="#_s1044" iddest="#_s1042" idcntr="#_s1045"/>
  <o:rel v:ext="edit" idsrc="#_s1036" iddest="#_s1044" idcntr="#_s1038"/>
</o:relationtable>

<v:rect id="_s1036" ... >
  <v:textbox ... ><...>2</...></v:textbox>
</v:rect>
```

```
<v:rect id="_s1044" ... >
  <v:textbox ... ><...>1</...></v:textbox>
</v:rect>

<v:shape id="_s1038" ... />
```



end example]

Parent Elements
relationtable (§19.2.2.25)

Attributes	Description
ext (VML Extension Handling Behavior) Namespace: urn:schemas-microsoft-com:vml	Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML. <i>[Rationale:</i> This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale]</i> The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).
idcntr (Diagram Relationship Center Shape)	Specifies the optional identifier of the shape that exists between the source and destination shapes. This is omitted if the relationship does not have a shape between the source and destination shapes. <i>[Example:</i> <pre><o:rel ... idcntr="#s_1038"> </o:rel></pre> <i>end example]</i> The possible values for this attribute are defined by the W3C XML Schema string datatype.
iddest (Diagram Relationship Destination Shape)	Specifies the identifier of the shape at the destination of the relationship. <i>[Example:</i> <pre><o:rel ... iddest="#s_1044"> </o:rel></pre>

Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
idsrc (Diagram Relationship Source Shape)	<p>Specifies the identifier of the shape at the source of the relationship.</p> <p>[Example:</p> <pre><o:rel ... idsrc="#s_1036"> </o:rel></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_Relation](#)) is located in §A.6.2. *end note]*

19.2.2.25 relationtable (Diagram Relationship Table)

This element specifies a list that describes the relationships among diagram nodes.

[Example: The following table describes the parent-child relationships for shapes in an organization chart. The first entry describes the top-level shape in the diagram. The next two rows describe that the shapes are subordinates to the first shape. Shape 1029 is a subordinate of shape 1028. Shape 1032, a connector in this case, is in between the two.

```
<o:relationtable v:ext="edit">
  <o:rel v:ext="edit" idsrc="#_s1028" iddest="#_s1028"/>
  <o:rel v:ext="edit" idsrc="#_s1029" iddest="#_s1028" idcntr="#_s1032"/>
  <o:rel v:ext="edit" idsrc="#_s1030" iddest="#_s1028" idcntr="#_s1033"/>
</o:relationtable>
```

end example]

Parent Elements
diagram (§19.2.2.8)

Child Elements	Subclause
rel (Diagram Relationship)	§19.2.2.24

Attributes	Description
ext (VML Extension Handling Behavior)	Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.
Namespace: urn:schemas-microsoft-com:vml	[<i>Rationale</i> : This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale</i>] The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).

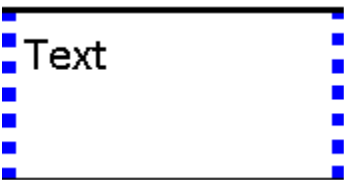
[*Note*: The W3C XML Schema definition of this element’s content model ([CT_RelationTable](#)) is located in §A.6.2. *end note*]

19.2.2.26 right (Text Box Right Stroke)

This element specifies the stroke properties for the right border of a text box. It entirely supercedes its parent stroke element if its on attribute is true. Thus the default value of an unspecified attribute overrides a value specified in the parent. If the on attribute is false or not specified, the border is not shown.

[*Example*: The text box borders are set independently. The bottom border does not inherit the weight from the parent stroke element.

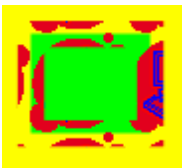


```
<v:stroke weight="2.25pt">
  <o:left v:ext="view" dashstyle="1 1" color="blue" weight="5pt" on="t"/>
  <o:top v:ext="view" color="black" weight="2.25pt" on="t"/>
  <o:right v:ext="view" dashstyle="1 1" color="blue" weight="5pt" on="t"/>
  <o:bottom v:ext="view" color="black" on="t"/>
  <o:column v:ext="view" color="#f60" on="t"/>
</v:stroke>
```


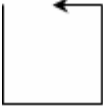



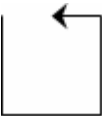

end example]

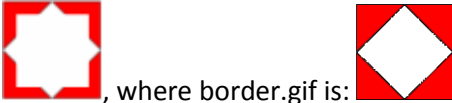
Parent Elements
background (Part 1, §17.2.1); hdrShapeDefaults (§14.7.2.1); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1); shapeDefaults (§14.7.2.2); stroke (§19.1.2.21)



Attributes	Description
althref (Alternate Image Reference)	<p>Specifies an alternate reference for an image in Macintosh PICT format.</p> <p><i>[Example:</i></p> <pre><v:stroke ... althref="myimage.pcz" ... > </v:stroke></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
color (Stroke Color)	<p>Specifies the stroke color. Overrides the strokecolor attribute of a shape. Default is black. See the fillcolor attribute for a list of supported named colors.</p> <p><i>[Example: The shape stroke is blue:</i></p> <pre><v:shape ... strokecolor="red" ... > <v:stroke color="blue"/> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
color2 (Stroke Alternate Pattern Color)	<p>Specifies a second color for strokes, used when filltype is pattern. Default is no value.</p> <p>When a pattern fill is used for the stroke, the stroke color is used in colored parts of the source image. The color2 defines an alternate color to use in place of black in the source image.</p> <p><i>[Example: This unusual example is intended to demonstrate how the image and colors interact to create a patterned stroke. The yellow background shows transparency. The non-square shape and square image create an effective offset. The heavy stroke weight shows more of the image. The green shape fill shows how the stroke is overlaid on the shape.</i></p> <pre><v:background fillcolor="yellow"/> <v:shape style="width:60;height:50" strokecolor="red" fillcolor="lime" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"> <v:stroke filltype="pattern" weight="10pt" src="myimage.gif" color2="blue"/> </v:shape></pre>


Attributes	Description
	<div></div> , where myimage.gif is: <div></div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
dashstyle (Stroke Dash Pattern)	<p>Specifies the dot and dash pattern for a stroke. Default is solid. Pre-defined values are:</p> <ul style="list-style-type: none">• solid• shortdash• shortdot• shortdashdot• shortdashdotdot• dot• dash• longdash• dashdot• longdashdot• longdashdotdot <p>A custom-defined dash pattern can also be specified using a series of numbers. These define the length of the dash (the drawn part of the stroke) and the length of the space between the dashes. The lengths are relative to the line width: a length of 1 is equal to the line width. The endcap style is applied to each dash but the arrow style is not. The string defines the length of the dash then the length of the space. This can be repeated to form complex dash styles. The string should always contain a pair of numbers; if it contains an odd number of numbers the last is disregarded. 0 implies a dot that is fourfold symmetrical (with round end caps, this is a circle).</p> <p><i>[Example:</i></p> <div><pre><v:stroke dashstyle="0 2" weight="3pt" endcap="round"> </v:stroke></pre></div> <div></div> <div><pre><v:stroke dashstyle="longdashdotdot" weight="2pt"> </v:stroke></pre></div>


Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
endarrow (Line End Arrowhead)	<p>Specifies an arrowhead for the end of a line. Default is none. The path shall not be closed with the x command for the arrowhead to show. Allowed values are:</p> <ul style="list-style-type: none"> • none • block • classic • diamond • oval • open <p>[Example:</p> <pre><v:stroke endarrow="classic"/></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowType simple type (§19.1.3.8).</p>
endarrowlength (Line End Arrowhead Length)	<p>Specifies the length of the arrowhead at the end of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • short • medium • long <p>[Example:</p> <pre><v:stroke ... endarrowlength="long" ... /></pre>  <p><i>end example]</i></p>




Attributes	Description
	<p>The possible values for this attribute are defined by the ST_StrokeArrowLength simple type (§19.1.3.7).</p>
endarrowwidth (Line End Arrowhead Width)	<p>Specifies the width of the arrowhead at the end of a line. Default is <code>medium</code>. Allowed values are:</p> <ul style="list-style-type: none">• <code>narrow</code>• <code>medium</code>• <code>wide</code> <p>[Example:</p> <pre><v:stroke ... endarrowwidth="wide" ... /></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowWidth simple type (§19.1.3.9).</p>
endcap (Line End Cap)	<p>Specifies the cap style for the end of a stroke. Default is <code>flat</code>. Allowed values are:</p> <ul style="list-style-type: none">• <code>flat</code>• <code>square</code>• <code>round</code> <p>[Example:</p> <pre><v:stroke ... endcap="round" weight="10pt" ... /></pre>  <p><code>endcap="flat"</code></p> <p><code>endcap="square"</code></p> <p><code>endcap="round"</code></p> <p><i>end example]</i></p>


Attributes	Description
	<p>The possible values for this attribute are defined by the ST_StrokeEndCap simple type (§19.1.3.10).</p>
<p>ext (VML Extension Handling Behavior)</p> <p>Namespace: urn:schemas-microsoft-com:vm1</p>	<p>Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.</p> <p>[<i>Rationale</i>: This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale</i>]</p> <p>The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).</p>
<p>filltype (Stroke Image Style)</p>	<p>Specifies the kind of fill used for the background of a stroke. Default is solid. Allowed values are:</p> <ul style="list-style-type: none"> • <code>solid</code> - The fill pattern is solid. • <code>tile</code> - The fill image is tiled. • <code>pattern</code> - The fill image is stretched to form a pattern. • <code>frame</code> - The fill image becomes a border for the shape. <p>[<i>Example</i>:</p> <pre><v:shape style="width:50;height:50" strokecolor="red" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"> <v:stroke filltype="frame" weight="10pt" src="border.gif"/> </v:shape></pre> <div> </div> <p>, where border.gif is: </p> <p><i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_FillType simple type (§19.1.3.4).</p>
<p>forcedash (Force Dashed Outline)</p>	<p>Specifies whether a dashed outline is used to draw a shape when a shape has no line or fill. Default is <code>false</code>.</p> <p>Used by PresentationML placeholders to draw a dashed outline when there is no line and no fill for a shape.</p> <p>[<i>Example</i>:</p> <pre><v:shape ... o:forcedash="true" ... ></pre>




Attributes	Description
	<p><code></v:shape></code></p> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
href (Original Image Reference)	<p>Specifies the URL to the original image file. Used only if the picture has been linked and embedded. Default is no value.</p> <p>[Example:</p> <pre><v:fill ... o:href="myimage.gif" ... > </v:fill></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
imagealignshape (Stoke Image Alignment)	<p>Specifies the alignment of the stroke image. If true, the image is aligned with the shape. Otherwise, it is aligned with the containing scope. Default is true.</p> <p>[Example: The top position offset shifts the image alignment relative to the containing window:</p> <pre><v:shape fillcolor="silver" style="top:20;width:50;height:50" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"> <v:stroke imagealignshape="false" weight="20pt" filltype="tile" src="myimage.gif"/> </v:shape></pre> <div><p>imagealignshape="false"</p></div> <div><p>imagealignshape="false"</p></div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>

Attributes	Description								
imageaspect (Stroke Image Aspect Ratio)	<p>Specifies how the stroke image aspect ratio is preserved. Default is ignore. Allowed values are:</p> <table> <tr> <th>Value</th><th>Description</th></tr> <tr> <td>ignore</td><td>Ignore aspect issues.</td></tr> <tr> <td>atleast</td><td>Image is at least as big as imagesize.</td></tr> <tr> <td>atmost</td><td>Image is no bigger than imagesize.</td></tr> </table> <p>[Example:</p> <pre><v:stroke filltype="frame" weight="10pt" src="border.gif" imagealignshape="true" imageaspect="atleast"> </v:stroke></pre> <div>  <div> <p>imagealignshape="ignore"</p> <p>imagealignshape="atleast"</p> <p>imagealignshape="atmost"</p> </div> </div> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ImageAspect simple type (§19.1.3.5).</p>	Value	Description	ignore	Ignore aspect issues.	atleast	Image is at least as big as imagesize.	atmost	Image is no bigger than imagesize.
Value	Description								
ignore	Ignore aspect issues.								
atleast	Image is at least as big as imagesize.								
atmost	Image is no bigger than imagesize.								
imagesize (Stroke Image Size)	<p>Specifies the size of the image for the stroke. Default is the size of the image.</p> <p>[Example:</p> <pre><v:stroke ... imagesize="10pt,10pt" ... /></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>								
insetpen (Inset Border From Path)	<p>Specifies that the border shall be displayed inside of the path defining the shape, rather than along the path (the default border placement), or outside of the path as might be done with an image.</p>								

Attributes	Description
	<p>[Example:</p> <pre><v:shape ... insetpen="true" ... > </v:shape></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>joinstyle (Line End Join Style))</p>	<p>Specifies the join style for line ends. Default is round.</p> <ul style="list-style-type: none"> • round • bevel • miter <p>[Example:</p> <pre><v:polyline strokeweight="10pt" strokecolor="navy" points="10pt,10pt,50pt,50pt,90pt,10pt"> <v:stroke joinstyle="bevel"/> </v:polyline></pre> <div style="display: flex; align-items: center; margin-top: 10px;">  <div style="margin-left: 10px;"> <p>joinstyle="round"</p> <p>joinstyle="bevel"</p> <p>joinstyle="miter"</p> </div> </div> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_StrokeJoinStyle simple type (§19.1.3.11).</p>
<p>linestyle (Stroke Line Style)</p>	<p>Specifies the line style of the stroke. Default is single.</p> <ul style="list-style-type: none"> • single • thinThin • thinThick • thickThin • thickBetweenThin

Attributes	Description
	<p>[Example:</p> <pre><v:stroke linestyle="thickThin" weight="5pt"> </v:stroke></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_StrokeLineStyle simple type (§19.1.3.12).</p>
<p>miterlimit (Miter Joint Limit)</p>	<p>Specifies the smoothness of the miter joint, or the maximum distance between the inner point and outer point of a joint. This number is a multiple of the thickness of the line. Default is 8.</p> <p>[Example:</p> <pre><v:stroke jointstyle="miter" weight="10pt" miterlimit="2"> </v:stroke></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema decimal datatype.</p>
<p>on (Stroke Toggle)</p>	<p>Specifies whether the stroke is displayed. Default is true. This attribute overrides the shape's stroke attribute.</p> <p>[Example:</p> <pre><v:rect style="width:50;height:50" stroked="true" fillcolor="lime" strokecolor="red"> <v:stroke on="false" weight="5pt"/> </v:rect></pre>  <p>end example]</p>

Attributes	Description
	<p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
<p>opacity (Stroke Opacity)</p>	<p>Specifies the amount of transparency of a stroke. Default is 1.0.</p> <p>[Example:</p> <pre><v:rect style="width:50;height:50" fillcolor="lime" strokecolor="red"> <v:stroke weight="5pt" opacity="50%"/> </v:rect></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>src (Stroke Image Location)</p>	<p>Specifies the source image to load for a stroke fill. Default is no value.</p> <p>[Example:</p> <pre><v:stroke ... src="myimage.gif" ... > </v:stroke></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
<p>startarrow (Line Start Arrowhead)</p>	<p>Specifies an arrowhead for the start of a line. Default is none. The path shall not be closed with the x command for the arrowhead to show. Allowed values are:</p> <ul style="list-style-type: none"> • none • block • classic • diamond • oval • open <p>[Example:</p> <pre><v:stroke startarrow="classic"/></pre>

Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowType simple type (§19.1.3.8).</p>
startarrowlength (Line Start Arrowhead Length)	<p>Specifies the length of the arrowhead at the start of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • short • medium • long <p>[Example:</p> <pre><v:stroke ... startarrowlength="long" ... /></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowLength simple type (§19.1.3.7).</p>
startarrowwidth (Line Start Arrowhead Width)	<p>Specifies the width of the arrowhead at the start of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • narrow • medium • wide <p>[Example:</p> <pre><v:stroke ... startarrowwidth="wide" ... /></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowWidth simple type (§19.1.3.9).</p>

Attributes	Description
title (Stroke Title)	<p>Specifies the title of an embedded stroke image. This is typically set to the comment property of the image, which is often blank.</p> <p>[Example:</p> <pre><v:fill ... o:title="alt text" ... > </v:fill></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
weight (Stroke Weight)	<p>Specifies the thickness of a stroke. Default is 1. This attribute overrides the shape's strokeweight attribute.</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element’s content model ([CT_StrokeChild](#)) is located in §A.6.2.
end note]

19.2.2.27 rules (Rule Set)

This element specifies a list of rule entries which describe how a certain shape or sets of shapes should behave during editing.

[Example: The following rule defines a connection between two shapes. The shape with id _s1036 connects shape _s1033 to _s1032:

```
<o:shapelayout v:ext="edit">
  <o:rules v:ext="edit">
    <o:r id="V:Rule1" type="connector" idref="#_s1036">
      <o:proxy start="" idref="#_s1033" connectloc="0"/>
      <o:proxy end="" idref="#_s1032" connectloc="2"/>
    </o:r>
  </o:rules>
</o:shapelayout>
```

end example]

Parent Elements
shapelayout (§19.2.2.29)

Child Elements	Subclause
r (Rule)	§19.2.2.22

Attributes	Description
ext (VML Extension Handling Behavior)	Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.
Namespace: urn:schemas-microsoft-com:vm	[<i>Rationale</i> : This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale</i>] The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).

[*Note*: The W3C XML Schema definition of this element's content model ([CT_Rules](#)) is located in §A.6.2. *end note*]

19.2.2.28 [shapedefaults](#) (New Shape Defaults)

This element specifies the defaults that are used when creating new shapes. These defaults are stored once per document.

[*Example*: Consider a case in which an application chooses to store the highest shape ID it has used in the document thus far. This could be used to support the generation of new shape IDs:


```
<o:shapedefaults v:ext="edit" spidmax="1029"/>
```



end example]

Parent Elements
background (Part 1, §17.2.1); hdrShapeDefaults (§14.7.2.1); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1); shapeDefaults (§14.7.2.2)

Child Elements	Subclause
callout (Callout)	§19.2.2.2
colormenu (UI Default Colors)	§19.2.2.4
colormru (Most Recently Used Colors)	§19.2.2.5
extrusion (3D Extrusion)	§19.2.2.11
fill (Shape Fill Properties)	§19.1.2.5
lock (Shape Protections)	§19.2.2.18
shadow (Shadow Effect)	§19.1.2.18

Child Elements	Subclause
skew (Skew Transform)	§19.2.2.31
stroke (Line Stroke Settings)	§19.1.2.21
textbox (Text Box)	§19.1.2.22

Attributes	Description
allowincell (Allow in Table Cell)	<p>Specifies whether the shape is allowed to be placed in a table cell. Default is <code>false</code>.</p> <p>The possible values for this attribute are defined by the <code>ST_TrueFalse</code> simple type (§20.1.2.5).</p>
ext (VML Extension Handling Behavior) Namespace: urn:schemas-microsoft-com:vml	<p>Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.</p> <p>[<i>Rationale</i>: This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale</i>]</p> <p>The possible values for this attribute are defined by the <code>ST_Ext</code> simple type (§19.1.3.2).</p>
fill (Shape Fill Toggle)	<p>Specifies whether the closed path is filled. Default is <code>true</code>. This attribute is overridden by the <code>fill on</code> attribute.</p> <p>[<i>Example</i>:</p> <pre><v:shape ... fill="f" fillcolor="red" ...> </v:shape></pre>  <p><i>end example</i>]</p> <p>The possible values for this attribute are defined by the <code>ST_TrueFalse</code> simple type (§20.1.2.5).</p>
fillcolor (Default Fill Color)	<p>Specifies the default shape fill color. Default is no value. Colors are typically specified as either a named color, such as <code>red</code>, or six hexadecimal digits representing the red, green and blue values of the color, such as <code>#00FF30</code>. Full details are specified in the simple type description.</p> <p>The possible values for this attribute are defined by the <code>ST_ColorType</code> simple type (§20.1.2.3).</p>
spidmax (Shape ID Optional Storage)	<p>Specifies an optional value that allows applications a mechanism for storing information they need to persist related to shape IDs. Default is 0.</p>

Attributes	Description
stroke (Shape Stroke Toggle)	<p>The possible values for this attribute are defined by the W3C XML Schema integer datatype.</p> <p>Specifies whether the path defining the shape is stroked with a solid line. The stroke element (§19.1.2.21) defines other strokes. The on attribute of the stroke element overrides this attribute. Default is true.</p> <p><i>[Example:</i></p> <pre><v:shape ... fillcolor="red" stroke="false" strokecolor="blue"...> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
strokecolor (Shape Stroke Color)	<p>Specifies the primary color of the brush to use to stroke the path of the shape. Default is black. The color attribute of the stroke element (§19.1.2.21) overrides this. Colors are typically specified as either a named color, such as red, or six hexadecimal digits representing the red, green and blue values of the color, such as #00FF30. Full details are specified in the simple type description.</p> <p><i>[Example:</i></p> <pre><v:shape ... strokecolor="red" ...> </v:shape></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
style (Shape Styling Properties)	<p>Specifies the CSS2 styling properties of the shape. The CSS2 (Cascading Style Sheets, Level 2) specification, a Recommendation of the World Wide Web Consortium, is available here: http://www.w3.org/TR/REC-CSS2.</p> <p>This attribute uses a semi-colon delimited list of “name:value” pairs, the syntax defined</p>

Attributes	Description									
	<p>by section 4.1.8 of the CSS2 specification for grouped declarations (without the surrounding braces). The following tables define the allowed properties and the VML treatment of each.</p> <p>[Example: <code><v:shape ... style='position:absolute;width:100pt;height:50pt' ...</code> <code>></code> <code></v:shape></code> <i>end example]</i></p>									
	<table> <tr> <th>Property</th><th>Description</th></tr> <tr> <td>flip</td><td> <p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. </td></tr> <tr> <td>height</td><td> <p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. </td></tr> <tr> <td>left</td><td> <p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width. </td></tr> <tr> <td>margin-bottom</td><td> <p>Specifies the position of the bottom of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of</p> </td></tr> </table>	Property	Description	flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. 	height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. 	left	<p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width. 	margin-bottom
Property	Description									
flip	<p>Specifies that the orientation of a shape is flipped. Default is no value. Allowed values are:</p> <ul style="list-style-type: none"> • x - Flip along the y-axis, reversing the x-coordinates. • y - Flip along the x-axis, reversing the y-coordinates. • xy - Flip along both the y- and x-axis. • yx - Flip along both the x- and y-axis. 									
height	<p>Specifies the height of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height. 									
left	<p>Specifies the position of the left of the containing block of the shape relative to the element left of it in the flow of the page. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width. 									
margin-bottom	<p>Specifies the position of the bottom of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of</p>									

Attributes	Description	
		<p>the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
	margin-left	<p>Specifies the position of the left of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-right	<p>Specifies the position of the right of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units> - A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
	margin-top	<p>Specifies the position of the top of the containing block of the shape relative to the shape anchor. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the

Attributes	Description	
		parent object's height.
	mso-position-horizontal	<p>Specifies the horizontal positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • left • center • right • inside • outside
	mso-position-horizontal-relative	<p>Specifies relative horizontal position data for objects in WordprocessingML documents. This modifies the mso-position-horizontal property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • char
	mso-position-vertical	<p>Specifies the vertical positioning data for objects in WordprocessingML documents. Default is absolute. Allowed values are:</p> <ul style="list-style-type: none"> • absolute • top • center • bottom • inside • outside
	mso-position-vertical-relative	<p>Specifies relative vertical position data for objects in WordprocessingML documents. This modifies the mso-position-vertical property. Default is text. Allowed values are:</p> <ul style="list-style-type: none"> • margin • page • text • line
	mso-wrap-distance-bottom	<p>Specifies the distance from the bottom of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.</p>

Attributes	Description	
	mso-wrap-distance-left	Specifies the distance from the left side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-distance-right	Specifies the distance from the right side of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-distance-top	Specifies the distance from the top of the shape to the text that wraps around it. Default is 0 pt. This property is different from the CSS margin property, which changes the origin of the shape to include the margin areas. This property does not change the origin.
	mso-wrap-edited	Specifies whether the wrap coordinates were customized by the user. If the wrap coordinates are generated by an editor, this property is true; otherwise they were customized by a user. Default is false.
	mso-wrap-style	<p>Specifies the wrapping mode for text in shapes in WordprocessingML documents. Default is square. Allowed values are:</p> <ul style="list-style-type: none"> • square - Wraps text inside the shape in a square. • none - Text does not wrap.
	position	<p>Specifies the kind of positioning used to place an element. Default is static. When the element is contained inside a group, this property shall be absolute. Allowed values are:</p> <ul style="list-style-type: none"> • static - The element is positioned according to the normal flow of the page. The top and left properties are ignored. If the object is anchored inline, this value is used. • absolute - The element is positioned relative to the parent, using the top and left properties. • relative - The element is positioned according to the normal flow of the page, but the top and left properties are used. The overlap of overlapping elements is governed by the z-index property.
	rotation	Specifies the angle that a shape is rotated, in degrees. Default is 0. Positive angles are clockwise.
	top	Specifies the position of the top of the containing block of the shape relative to the element above it in the flow of the page.

Attributes	Description
	<div></div> <p>Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's height.
visibility	<p>Specifies whether a shape is displayed. Only inherit and hidden are used; any other values are mapped to inherit. Default is inherit. Allowed values are:</p> <ul style="list-style-type: none"> • hidden - The shape is not visible, but is still part of the flow of the objects in the browser. Mouse events are not processed. • inherit - The visibility state is inherited from the parent of the shape.
width	<p>Specifies the width of the containing block of the shape. Default is 0. It is specified in CSS units or, for elements in a group, in the coordinate system of the parent element. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Default position of an element in the flow of the page. • <units>- A number with an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). If no units are given, pixels (px) is assumed. • <percentage>- Value expressed as a percentage of the parent object's width.
z-index	<p>Specifies the display order of overlapping shapes. Default is 0. This property shall not be used for shapes anchored inline. Allowed values are:</p> <ul style="list-style-type: none"> • auto - Uses the order that the shapes appear in the page, bottom to top. • <order>- A number that represents the stacking precedence. Shapes with higher numbers are placed on top of those with lower numbers. Negative numbers are allowed.
	<p>The following properties are only used by the textbox element (§19.1.2.22):</p>

Attributes	Description	
	Property	Description
	direction	<p>Specifies the direction of the text in the textbox. Default is ltr. This property is superceded by the mso-direction-alt property if that is specified. Allowed values are:</p> <ul style="list-style-type: none"> • ltr - Text is displayed left-to-right. • rtl - Text is displayed right-to-left.
	layout-flow	<p>Determines the flow of the text layout in a textbox. Default is horizontal. Allowed values are:</p> <ul style="list-style-type: none"> • horizontal - Text is displayed horizontally. • vertical - Text is displayed vertically. • vertical-ideographic - Ideographic text is displayed vertically. • horizontal-ideographic - Ideographic text is displayed horizontally.
	mso-direction-alt	<p>Specifies an alternate direction for text in textboxes. Overrides the direction property. The only allowed value is context.</p>
	mso-fit-shape-to-text	<p>Specifies whether the shape stretches to fit the text in the textbox. Default is false.</p>
	mso-fit-text-to-shape	<p>Specifies whether the text stretches to fit the textbox. Default is false.</p>
	mso-layout-flow-alt	<p>Specifies the alternate layout flow for text in textboxes. This property is used instead of layout-flow when the layout flow is from bottom to top for non-ideographic languages. Its only value is bottom-to-top.</p>
	mso-next-textbox	<p>Specifies the ID of the next textbox in a series. Used to keep track of a set of linked textboxes. Default is no value.</p>
	mso-rotate	<p>Specifies a specific rotation value for text in a textbox. Default is 0. Allowed values are:</p> <ul style="list-style-type: none"> • 0 • 90 • 180 • -90
	mso-text-scale	<p>Specifies the scaling factor for fitting text to shapes. Default is 0. This property is only used if mso-fit-text-to-shape is true.</p>
	v-text-anchor	<p>Specifies the vertical anchoring of text in a textbox. Default is top. The alignment of a text anchor only becomes evident if mso-fit-text-to-shape is false. This property is different from the</p>

Attributes	Description	
		<p>vertical-align CSS property, which is used for ideographic languages. Allowed values are:</p> <ul style="list-style-type: none">• top• middle• bottom• top-center• middle-center• bottom-center• top-baseline• bottom-baseline• top-center-baseline• bottom-center-baseline
	The following properties are only used by the textpath element (§19.1.2.23):	
	</	

Attributes	Description							
		<table><tr><th>Value</th><th>Description</th></tr><tr><td>normal lighter 100 200 300 400</td><td>Treated as non-bold.</td></tr><tr><td>bold bolder 500 600 700 800 900</td><td>Treated as bold.</td></tr></table>	Value	Description	normal lighter 100 200 300 400	Treated as non-bold.	bold bolder 500 600 700 800 900	Treated as bold.
	Value	Description						
	normal lighter 100 200 300 400	Treated as non-bold.						
	bold bolder 500 600 700 800 900	Treated as bold.						
	mso-text-shadow	Specifies whether a shadow is applied to the text on a text path. Default is false.						
	text-decoration	Specifies the style of text decoration. Default is none. The values are the same as those of the CSS text-decoration property. Allowed values are: <ul style="list-style-type: none">• none• underline• overline• line-through• blink						
	v-rotate-letters	Specifies whether the letters of the text are rotated counterclockwise by 90 degrees. Default is false.						
	v-same-letter-heights	Specifies whether all letters are the same height regardless of initial case. If true, the lowercase letters are stretched to the height of the uppercase letters. Default is false.						
	v-text-align	Specifies the alignment of text. Default is left. Allowed values are: <ul style="list-style-type: none">• left• right• center• justify• letter-justify - Distributes the extra space between the letters.• stretch-justify - Stretches the letters to fill in the space.						
v-text-kern	Specifies whether kerning is turned on. Default is false.							
v-text-reverse	Specifies whether the layout order of rows is reversed. Default is false. This is used for vertical text layout.							

Attributes	Description	
	v-text-spacing-mode	Specifies the mode for letter spacing. Default is tightening . This property determines whether space is removed between each letter (tightening) or added between each letter (tracking). The amount of letter spacing change is defined by the v-text-spacing property. Allowed values are: <ul style="list-style-type: none">• tightening• tracking
	v-text-spacing	Specifies the amount of spacing for text in 100ths of single line spacing. Default is 100.
	<p>The line (§19.1.2.12), polyline (§19.1.2.15) and curve (§19.1.2.3) elements ignore the following properties:</p> <ul style="list-style-type: none">• top• left• width• height <p>The following properties are not inherited by an element that references a shapetype element (§19.1.2.20) via the id attribute:</p> <ul style="list-style-type: none">• flip• height• left• margin-left• margin-top• position• rotation• top• visibility• width• z-index <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>	

[Note: The W3C XML Schema definition of this element’s content model ([CT_ShapeDefaults](#)) is located in §A.6.2. end note]

19.2.2.29 **shapelayout** (Shape Layout Properties)

This element contains child elements that store information used in the editing and layout of shapes.

Parent Elements
background (Part 1, §17.2.1); hdrShapeDefaults (§14.7.2.1); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1); shapeDefaults (§14.7.2.2)

Child Elements	Subclause
idmap (Shape ID Map)	§19.2.2.14
regrouptable (Shape Grouping History)	§19.2.2.23
rules (Rule Set)	§19.2.2.27

Attributes	Description
ext (VML Extension Handling Behavior)	Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.
Namespace: urn:schemas-microsoft-com:VML	<p>[<i>Rationale</i>: This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale</i>]</p> <p>The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).</p>

[*Note*: The W3C XML Schema definition of this element's content model ([CT_ShapeLayout](#)) is located in §A.6.2. *end note*]

19.2.2.30 signatureline (Digital Signature Line)

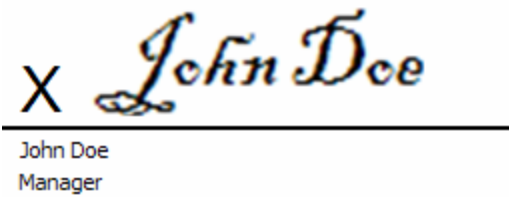
This element specifies a signature line in a document. A signature line provides a visual representation of a signature in a document that is digitally signed. The signature line element indicates that the VML shape in which it appears acts as that visual representation. Typically, the VML shape is an image.

[*Example*:

```
<v:shape ... >
  <v:imagedata ... />
  <o:signatureline v:ext="edit" id="{11979195-DE54-414B-ABD6-5F63607C648B}"
    provid="{00000000-0000-0000-0000-000000000000}" o:suggestedsigner="John Doe"
    o:suggestedsigner2="Manager" o:suggestedsigneremail=johndoe@example.com
    allowcomments="t" issignatureline="t"/>
</v:shape>
```

The signature line in the document might look like this:

9/7/2006



end example]

Parent Elements
arc (§19.1.2.1); background (Part 1, §17.2.1); curve (§19.1.2.3); group (§19.1.2.7); hdrShapeDefaults (§14.7.2.1); image (§19.1.2.10); line (§19.1.2.12); object (Part 1, §17.3.3.19); oval (§19.1.2.13); pict (§14.2.2.2); pict (§14.5.1); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapeDefaults (§14.7.2.2); shapetype (§19.1.2.20)

Attributes	Description
addlxml (Additional Signature Information)	<p>Specifies an optional string that is used to store additional information about the digital signature. Default is no value. [<i>Rationale</i>: Some digital signature software stores, for example, server and region information with the signature. <i>end rationale</i>]</p> <p>[<i>Example</i>:</p> <pre><o:signatureline ... o:addlxml="..."> </o:signatureline></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
allowcomments (User-specified Comments Flag)	<p>Specifies whether the user can attach comments to the signature line at signing time. Default is false.</p> <p>[<i>Example</i>:</p> <pre><o:signatureline ... allowcomments="true"> </o:signatureline></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
ext (VML Extension Handling Behavior)	<p>Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.</p>

Attributes	Description
Namespace: urn:schemas-microsoft-com:vm	<p>[<i>Rationale</i>: This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale</i>]</p> <p>The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).</p>
id (Unique ID)	<p>Specifies a unique ID for the signature line. Default is no value.</p> <p>[<i>Example</i>:</p> <pre><o:signatureline ... id="{11979195-DE54-414B-ABD6-5F63607C648B}"> </o:signatureline></pre> <p><i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_Guid simple type (Part 1, §22.9.2.4).</p>
issignatureline (Signature Line Flag)	<p>Specifies whether the image is a signature line. Default is true.</p> <p>[<i>Example</i>:</p> <pre><o:signatureline ... issignatureline="true"> </o:signatureline></pre> <p><i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
provid (Signature Provider ID)	<p>Specifies a unique ID identifying which signature provider created the signature line. Default is no value. [<i>Guidance</i> The GUID is typically the CLSID of the provider COM add-in. <i>end guidance</i>]</p> <p>[<i>Example</i>:</p> <pre><o:signatureline ... provid="{00000000-0000-0000-0000-000000000000}"> </o:signatureline></pre> <p><i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_Guid simple type (Part 1, §22.9.2.4).</p>
showsigndate (Show Signed Date Flag)	<p>Specifies whether the signed signature line image generated should include the date of signing. Default is true.</p>

Attributes	Description
	<p>[Example:</p> <pre><o:signatureline ... showsigndate="false"> </o:signatureline></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
signinginstructions (Instructions for Signing)	<p>Specifies text shown to the user at signing time. Default is no value.</p> <p>[Example:</p> <pre><o:signatureline ... o:signinginstructions="Sign here"> </o:signatureline></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
signinginstructions set (Use Signing Instructions Flag)	<p>Specifies whether there is data set in the signinginstructions attribute. Default is false.</p> <p>[Example:</p> <pre><o:signatureline ... signinginstructionsset="true"> </o:signatureline></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
sigprovurl (Signature Provider Download URL)	<p>Specifies the URL for downloading the signature provider. Default is no value.</p> <p>[Example:</p> <pre><o:signatureline ... o:sigprovurl="http://www.example.com"> </o:signatureline></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
suggestedsigner (Suggested Signer Line 1)	<p>Specifies the first line of information of who should sign the signature line. Default is no value.</p>

Attributes	Description
	<p>[Example:</p> <pre><o:signatureline ... o:suggestedsigner="John Doe"> </o:signatureline></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
suggestedsigner2 (Suggested Signer Line 2)	<p>Specifies the second line of information of who should sign the signature line. Default is no value.</p> <p>[Example:</p> <pre><o:signatureline ... o:suggestedsigner2="Title"> </o:signatureline></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
suggestedsigneremail (Suggested Signer E-mail Address)	<p>Specifies the e-mail address of who should sign the signature line. Default is no value.</p> <p>[Example:</p> <pre><o:signatureline ... o:suggestedsigneremail="johndoe@example.com"> </o:signatureline></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_SignatureLine](#)) is located in §A.6.2.
end note]

19.2.2.31 skew (Skew Transform)

This element specifies a perspective skew effect on a shape. The skew is applied to vector graphics, not image data on the shape in picture fills or image elements. The on attribute shall be true and a permitted value assigned to the matrix attribute.

Parent Elements
arc (§19.1.2.1); background (Part 1, §17.2.1); curve (§19.1.2.3); group (§19.1.2.7); hdrShapeDefaults (§14.7.2.1); image (§19.1.2.10); line (§19.1.2.12); object (Part 1, §17.3.3.19); oval (§19.1.2.13); pict (§14.2.2.2); pict (§14.5.1); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapeDefaults (§14.7.2.2); shapedefaults (§19.2.2.28); shapetype (§19.1.2.20)

Attributes	Description
ext (VML Extension Handling Behavior) Namespace: urn:schemas-microsoft-com:vm1	Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML. [<i>Rationale</i> : This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. <i>end rationale</i>] The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).
id (Skew ID)	Specifies a name that provides a unique identifier for a skew. Default is no value. The possible values for this attribute are defined by the W3C XML Schema string datatype.
matrix (Skew Perspective Matrix)	Specifies a perspective transform of a skew. Default is "1,0,0,1,0,0". The matrix is given in the form " $s_{xx}, s_{xy}, s_{yx}, s_{yy}, p_x, p_y$ " where s = scale and p = perspective. If the offset attribute is in absolute units then p_x, p_y are in 1/EMU units; otherwise they are an inverse fraction of the shape size. The possible values for this attribute are defined by the W3C XML Schema string datatype.
offset (Skew Offset)	Specifies the amount of x,y offset from the shape's location. Default is "2pt,2pt". Positive values are measured from the upper left of the face of the shape. Values are specified as either an absolute measurement or a fractional value of the shape's dimensions (−0.5 to +0.5). The possible values for this attribute are defined by the W3C XML Schema string datatype.
on (Skew Toggle)	Specifies whether a skew is displayed. Default is false. The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).
origin (Skew Origin)	Specifies the origin of the skew. Default is "0,0". Values are typically a percentage of the shape's size and range from -0.5 to +0.5. Larger values are allowed that give offsets as multiples of the shape's size.

Attributes	Description
	The possible values for this attribute are defined by the W3C XML Schema string datatype.

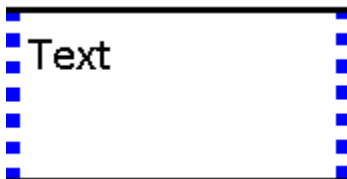
[Note: The W3C XML Schema definition of this element's content model ([CT_Skew](#)) is located in §A.6.2. *end note*]

19.2.2.32 top (Text Box Top Stroke)

This element specifies the stroke properties for the top border of a text box. It entirely supercedes its parent stroke element if its on attribute is true. Thus the default value of an unspecified attribute overrides a value specified in the parent. If the on attribute is false or not specified, the border is not shown.

[Example: The text box borders are set independently. Note that the bottom border does not inherit the weight from the parent stroke element.


```
<v:stroke weight="2.25pt">
  <o:left v:ext="view" dashstyle="1 1" color="blue" weight="5pt" on="t"/>
  <o:top v:ext="view" color="black" weight="2.25pt" on="t"/>
  <o:right v:ext="view" dashstyle="1 1" color="blue" weight="5pt" on="t"/>
  <o:bottom v:ext="view" color="black" on="t"/>
  <o:column v:ext="view" color="#f60" on="t"/>
</v:stroke>
```





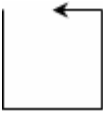

end example]

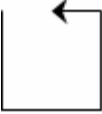

Parent Elements
background (Part 1, §17.2.1); hdrShapeDefaults (§14.7.2.1); object (Part 1, §17.3.3.19); pict (§14.2.2.2); pict (§14.5.1); shapeDefaults (§14.7.2.2); stroke (§19.1.2.21)

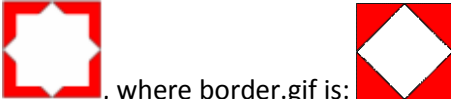
Attributes	Description
althref (Alternate Image Reference)	Specifies an alternate reference for an image in Macintosh PICT format. [Example: <pre><v:stroke ... althref="myimage.pcz" ... > </v:stroke></pre>



Attributes	Description
	<p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
color (Stroke Color)	<p>Specifies the stroke color. Overrides the strokecolor attribute of a shape. Default is black. See the fillcolor attribute for a list of supported named colors.</p> <p>[<i>Example:</i> The shape stroke is blue:</p> <pre><v:shape ... strokecolor="red" ... > <v:stroke color="blue"/> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).</p>
color2 (Stroke Alternate Pattern Color)	<p>Specifies a second color for strokes, used when filltype is pattern. Default is no value.</p> <p>When a pattern fill is used for the stroke, the stroke color is used in colored parts of the source image. The color2 defines an alternate color to use in place of black in the source image.</p> <p>[<i>Example:</i> This unusual example is intended to demonstrate how the image and colors interact to create a patterned stroke. The yellow background shows transparency. The non-square shape and square image create an effective offset. The heavy stroke weight shows more of the image. The green shape fill shows how the stroke is overlaid on the shape.</p> <pre><v:background fillcolor="yellow"/> <v:shape style="width:60;height:50" strokecolor="red" fillcolor="lime" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"> <v:stroke filltype="pattern" weight="10pt" src="myimage.gif" color2="blue"/> </v:shape></pre> <div> </div> <p>, where myimage.gif is: </p> <p><i>end example]</i></p>


Attributes	Description
	The possible values for this attribute are defined by the ST_ColorType simple type (§20.1.2.3).
dashstyle (Stroke Dash Pattern)	<p>Specifies the dot and dash pattern for a stroke. Default is solid. Pre-defined values are:</p> <ul style="list-style-type: none"> • solid • shortdash • shortdot • shortdashdot • shortdashdotdot • dot • dash • longdash • dashdot • longdashdot • longdashdotdot <p>A custom-defined dash pattern can also be specified using a series of numbers. These define the length of the dash (the drawn part of the stroke) and the length of the space between the dashes. The lengths are relative to the line width: a length of 1 is equal to the line width. The endcap style is applied to each dash but the arrow style is not. The string defines the length of the dash then the length of the space. This can be repeated to form complex dash styles. The string should always contain a pair of numbers; if it contains an odd number of numbers the last is disregarded. 0 implies a dot that is fourfold symmetrical (with round end caps, this is a circle).</p> <p>[Example:</p> <pre><v:stroke dashstyle="0 2" weight="3pt" endcap="round"> </v:stroke></pre>  <pre><v:stroke dashstyle="longdashdotdot" weight="2pt"> </v:stroke></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>


Attributes	Description
endarrow (Line End Arrowhead)	<p>Specifies an arrowhead for the end of a line. Default is none. The path shall not be closed with the x command for the arrowhead to show. Allowed values are:</p> <ul style="list-style-type: none"> • none • block • classic • diamond • oval • open <p>[Example:</p> <pre><v:stroke endarrow="classic"/></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowType simple type (§19.1.3.8).</p>
endarrowlength (Line End Arrowhead Length)	<p>Specifies the length of the arrowhead at the end of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • short • medium • long <p>[Example:</p> <pre><v:stroke ... endarrowlength="long" ... /></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowLength simple type (§19.1.3.7).</p>
endarrowwidth (Line End Arrowhead Width)	<p>Specifies the width of the arrowhead at the end of a line. Default is medium. Allowed values are:</p> <ul style="list-style-type: none"> • narrow • medium




Attributes	Description
	<ul style="list-style-type: none"> • wide <p>[Example:</p> <pre><v:stroke ... endarrowwidth="wide" ... /></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the ST_StrokeArrowWidth simple type (§19.1.3.9).</p>
endcap (Line End Cap)	<p>Specifies the cap style for the end of a stroke. Default is flat. Allowed values are:</p> <ul style="list-style-type: none"> • flat • square • round <p>[Example:</p> <pre><v:stroke ... endcap="round" weight="10pt" ... /></pre>  <p>endcap="flat"</p> <p>endcap="square"</p> <p>endcap="round"</p> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_StrokeEndCap simple type (§19.1.3.10).</p>
ext (VML Extension Handling Behavior)	<p>Specifies an optional value that indicates how applications that implement VML should interpret extensions not defined as part of the original specification of core VML.</p> <p>Namespace: urn:schemas-</p> <p>[Rationale: This part of the original VML specification is included to assist applications that leverage existing VML support in implementing the Office Open XML Format. end</p>


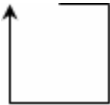
Attributes	Description
microsoft-com:VML	<p><i>rationale</i>]</p> <p>The possible values for this attribute are defined by the ST_Ext simple type (§19.1.3.2).</p>
filltype (Stroke Image Style)	<p>Specifies the kind of fill used for the background of a stroke. Default is <i>solid</i>. Allowed values are:</p> <ul style="list-style-type: none"> • <i>solid</i> - The fill pattern is solid. • <i>tile</i> - The fill image is tiled. • <i>pattern</i> - The fill image is stretched to form a pattern. • <i>frame</i> - The fill image becomes a border for the shape. <p>[Example:</p> <pre><v:shape style="width:50;height:50" strokecolor="red" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"> <v:stroke filltype="frame" weight="10pt" src="border.gif"/> </v:shape></pre> <div>  <p>, where border.gif is:</p> </div> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_FillType simple type (§19.1.3.4).</p>
forcedash (Force Dashed Outline)	<p>Specifies whether a dashed outline is used to draw a shape when a shape has no line or fill. Default is <i>false</i>.</p> <p>Used by PresentationML placeholders to draw a dashed outline when there is no line and no fill for a shape.</p> <p>[Example:</p> <pre><v:shape ... o:forcedash="true" ... > </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
href (Original Image Reference)	<p>Specifies the URL to the original image file. Used only if the picture has been linked and embedded. Default is no value.</p>

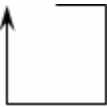
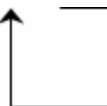
Attributes	Description						
	<p>[Example:</p> <pre><v:fill ... o:href="myimage.gif" ... > </v:fill></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>						
<p>imagealignshape (Stoke Image Alignment)</p>	<p>Specifies the alignment of the stroke image. If true, the image is aligned with the shape. Otherwise, it is aligned with the containing scope. Default is true.</p> <p>[Example: The top position offset shifts the image alignment relative to the containing window:</p> <pre><v:shape fillcolor="silver" style="top:20;width:50;height:50" path="m 0,0 l 0,1000 1000,1000 1000,0 x e"> <v:stroke imagealignshape="false" weight="20pt" filltype="tile" src="myimage.gif"/> </v:shape></pre> <div>  </div> <p>imagealignshape="false"</p> <div>  </div> <p>imagealignshape="false"</p> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>						
<p>imageaspect (Stroke Image Aspect Ratio)</p>	<p>Specifies how the stroke image aspect ratio is preserved. Default is ignore. Allowed values are:</p> <table border="1"> <thead> <tr> <th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td>ignore</td><td>Ignore aspect issues.</td></tr> <tr> <td>atleast</td><td>Image is at least as big as imagesize.</td></tr> </tbody> </table>	Value	Description	ignore	Ignore aspect issues.	atleast	Image is at least as big as imagesize.
Value	Description						
ignore	Ignore aspect issues.						
atleast	Image is at least as big as imagesize.						

Attributes	Description		
	<table border="1"> <tr> <td>atmost</td><td>Image is no bigger than imagesize.</td></tr> </table> <p>[Example:</p> <pre><v:stroke filltype="frame" weight="10pt" src="border.gif" imagealignshape="true" imageaspect="atleast"> </v:stroke></pre> <div>  </div> <p>imagealignshape="ignore"</p> <p>imagealignshape="atleast"</p> <p>imagealignshape="atmost"</p> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_ImageAspect simple type (§19.1.3.5).</p>	atmost	Image is no bigger than imagesize.
atmost	Image is no bigger than imagesize.		
imagesize (Stroke Image Size)	<p>Specifies the size of the image for the stroke. Default is the size of the image.</p> <p>[Example:</p> <pre><v:stroke ... imagesize="10pt,10pt" ... /></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>		
insetpen (Inset Border From Path)	<p>Specifies that the border shall be displayed inside of the path defining the shape, rather than along the path (the default border placement), or outside of the path as might be done with an image.</p> <p>[Example:</p> <pre><v:shape ... insetpen="true" ... > </v:shape></pre> <p>end example]</p>		

Attributes	Description
	The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).
joinstyle (Line End Join Style)	<p>Specifies the join style for line ends. Default is round.</p> <ul style="list-style-type: none"> • round • bevel • miter <p>[Example:</p> <pre><v:polyline strokeweight="10pt" strokecolor="navy" points="10pt,10pt,50pt,50pt,90pt,10pt"> <v:stroke joinstyle="bevel"/> </v:polyline></pre>  <p style="margin-left: 350px;">joinstyle="round"</p> <p style="margin-left: 350px;">joinstyle="bevel"</p> <p style="margin-left: 350px;">joinstyle="miter"</p> <p>end example]</p> <p>The possible values for this attribute are defined by the ST_StrokeJoinStyle simple type (§19.1.3.11).</p>
linestyle (Stroke Line Style)	<p>Specifies the line style of the stroke. Default is single.</p> <ul style="list-style-type: none"> • single • thinThin • thinThick • thickThin • thickBetweenThin <p>[Example:</p> <pre><v:stroke linestyle="thickThin" weight="5pt"> </v:stroke></pre>

Attributes	Description
	 <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeLineStyle simple type (§19.1.3.12).</p>
miterlimit (Miter Joint Limit)	<p>Specifies the smoothness of the miter joint, or the maximum distance between the inner point and outer point of a joint. This number is a multiple of the thickness of the line. Default is 8.</p> <p>[Example:</p> <pre><v:stroke jointstyle="miter" weight="10pt" miterlimit="2"> </v:stroke></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema decimal datatype.</p>
on (Stroke Toggle)	<p>Specifies whether the stroke is displayed. Default is true. This attribute overrides the shape's stroke attribute.</p> <p>[Example:</p> <pre><v:rect style="width:50;height:50" stroked="true" fillcolor="lime" strokecolor="red"> <v:stroke on="false" weight="5pt"/> </v:rect></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_TrueFalse simple type (§20.1.2.5).</p>
opacity (Stroke Opacity)	<p>Specifies the amount of transparency of a stroke. Default is 1.0.</p>

Attributes	Description
	<p>[Example:</p> <pre><v:rect style="width:50;height:50" fillcolor="lime" strokecolor="red"> <v:stroke weight="5pt" opacity="50%"/> </v:rect></pre>  <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
src (Stroke Image Location)	<p>Specifies the source image to load for a stroke fill. Default is no value.</p> <p>[Example:</p> <pre><v:stroke ... src="myimage.gif" ... > </v:stroke></pre> <p>end example]</p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>
startarrow (Line Start Arrowhead)	<p>Specifies an arrowhead for the start of a line. Default is none. The path shall not be closed with the x command for the arrowhead to show. Allowed values are:</p> <ul style="list-style-type: none"> • none • block • classic • diamond • oval • open <p>[Example:</p> <pre><v:stroke startarrow="classic"/></pre>  <p>end example]</p>

Attributes	Description
<p>startarrowlength (Line Start Arrowhead Length)</p>	<p>The possible values for this attribute are defined by the ST_StrokeArrowType simple type (§19.1.3.8).</p> <p>Specifies the length of the arrowhead at the start of a line. Default is <i>medium</i>. Allowed values are:</p> <ul style="list-style-type: none"> • <i>short</i> • <i>medium</i> • <i>long</i> <p>[Example:</p> <pre><v:stroke ... startarrowlength="long" ... /></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowLength simple type (§19.1.3.7).</p>
<p>startarrowwidth (Line Start Arrowhead Width)</p>	<p>Specifies the width of the arrowhead at the start of a line. Default is <i>medium</i>. Allowed values are:</p> <ul style="list-style-type: none"> • <i>narrow</i> • <i>medium</i> • <i>wide</i> <p>[Example:</p> <pre><v:stroke ... startarrowwidth="wide" ... /></pre>  <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_StrokeArrowWidth simple type (§19.1.3.9).</p>
<p>title (Stroke Title)</p>	<p>Specifies the title of an embedded stroke image. This is typically set to the comment property of the image, which is often blank.</p> <p>[Example:</p> <pre><v:fill ... o:title="alt text" ... ></pre>

Attributes	Description
	</v:fill> <i>end example]</i> The possible values for this attribute are defined by the W3C XML Schema string datatype.
weight (Stroke Weight)	Specifies the thickness of a stroke. Default is 1. This attribute overrides the shape's strokeweight attribute. The possible values for this attribute are defined by the W3C XML Schema string datatype.

[Note: The W3C XML Schema definition of this element's content model ([CT_StrokeChild](#)) is located in §A.6.2. *end note*]

19.2.3 Simple Types

The following additional simple type information in the urn:schemas-microsoft-com:office:office namespace is used for documents of a transitional conformance class.

19.2.3.1 ST_AlternateMathContentType (Alternate Math Content Type)

This simple type specifies the content type of the XML markup stored within the equationxml element.

The following values are reserved:

Value	Meaning
officeopenxmlmath	Specifies that the data has been stored using the Office Open XML Math syntax defined in Part 1, §22.1.
mathml	Specifies that the data has been stored using the MathML syntax.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Referenced By
equationxml@contentType (§19.2.2.10)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_AlternateMathContentType](#)) is located in §A.6.2. *end note*]

19.2.3.2 ST_Angle (Callout Angles)

This simple type specifies values for the angle attribute of the callout element (§19.2.2.2).

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
30 (30 degrees)	30 degrees.
45 (45 degrees)	45 degrees.
60 (60 degrees)	60 degrees.
90 (90 degrees)	90 degrees.
any (Any Angle)	Unconstrained angle.
auto (Automatic Angle)	The application chooses an appropriate angle.

Referenced By
callout@angle (§19.2.2.2)

[Note: The W3C XML Schema definition of this simple type's content model (ST_Angle) is located in §A.6.2. *end note*]

19.2.3.3 ST_BWMode (Black And White Modes)

This simple type specifies the ways in which a shape renders in a black and white context.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
auto (Automatic)	Use the bwpure or bwnormal attributes based on the type of output being generated.
black (Black)	Use black only.
blackTextAndLines (Black Text And Lines)	Use shades of gray, except for text and lines, which are black.
color (Color)	Do not use grayscale or black and white.
grayOutline (Gray Outlines)	Use gray and white only.
grayScale (Grayscale)	Use shades of gray only.
hide (Hide Object When Displayed in Black and White)	Do not display the object when rendering in only black and white.
highContrast (Black And White)	Use black and white only, no grays.
inverseGray (Inverse Grayscale)	Use shades of gray only, but invert light and dark grays.
lightGrayscale (Light grayscale)	Use light shades of gray only.
undrawn (Do Not Show)	Do not show the object.
white (White)	Use white only.

Referenced By
arc@bwmode (§19.1.2.1); arc@bwnormal (§19.1.2.1); arc@bwpure (§19.1.2.1); background@bwmode (§19.1.2.2); background@bwnormal (§19.1.2.2); background@bwpure (§19.1.2.2); curve@bwmode (§19.1.2.3); curve@bwnormal (§19.1.2.3); curve@bwpure (§19.1.2.3); image@bwmode (§19.1.2.10); image@bwnormal (§19.1.2.10); image@bwpure (§19.1.2.10); line@bwmode (§19.1.2.12); line@bwnormal (§19.1.2.12); line@bwpure (§19.1.2.12); oval@bwmode (§19.1.2.13); oval@bwnormal (§19.1.2.13); oval@bwpure (§19.1.2.13); polyline@bwmode (§19.1.2.15); polyline@bwnormal (§19.1.2.15); polyline@bwpure (§19.1.2.15); rect@bwmode (§19.1.2.16); rect@bwnormal (§19.1.2.16); rect@bwpure (§19.1.2.16); roundrect@bwmode (§19.1.2.17); roundrect@bwnormal (§19.1.2.17); roundrect@bwpure (§19.1.2.17); shape@bwmode (§19.1.2.19); shape@bwnormal (§19.1.2.19); shape@bwpure (§19.1.2.19); shapetype@bwmode (§19.1.2.20); shapetype@bwnormal (§19.1.2.20); shapetype@bwpure (§19.1.2.20)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_BWMode](#)) is located in §A.6.2. *end note*]

19.2.3.4 [ST_CalloutDrop \(Callout Drop Location\)](#)

This simple type specifies location values for the drop attribute of the callout element (§19.2.2.2).

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Referenced By
callout@drop (§19.2.2.2)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_CalloutDrop](#)) is located in §A.6.2. *end note*]

19.2.3.5 [ST_CalloutPlacement \(Callout Placement\)](#)

This type defines location values used by the drop attribute of the callout element (§19.2.2.2).

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
bottom (Bottom placement)	Bottom of the shape.
center (Center placement)	Vertical center of the shape.
top (Top placement)	Top of the shape.
user (User-defined placement)	User-defined placement.

[*Note: The W3C XML Schema definition of this simple type's content model ([ST_CalloutPlacement](#)) is located in §A.6.2. end note*]

19.2.3.6 [ST_ColorMode](#) (Extrusion Color Types)

This simple type specifies ways that the extrusion color is defined.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
auto (Use Shape Fill Color)	Specifies that the color of the extrusion is the same as the fill color of the shape.
custom (Use Custom Color)	Specifies that the extrusion is the color of the color attribute.

Referenced By
extrusion@colormode (§19.2.2.11)

[*Note: The W3C XML Schema definition of this simple type's content model ([ST_ColorMode](#)) is located in §A.6.2. end note*]

19.2.3.7 [ST_ConnectorType](#) (Connector Type)

This simple type specifies types of connectors.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
curved (Curved Connector)	A curved connector.
elbow (Elbow Connector)	An elbow-shaped connector.
none (No Connector)	No connector.
straight (Straight Connector)	A straight connector.

Referenced By
arc@connectortype (§19.1.2.1); curve@connectortype (§19.1.2.3); image@connectortype (§19.1.2.10); line@connectortype (§19.1.2.12); oval@connectortype (§19.1.2.13); polyline@connectortype (§19.1.2.15); rect@connectortype (§19.1.2.16); roundrect@connectortype (§19.1.2.17); shape@connectortype (§19.1.2.19); shapetype@connectortype (§19.1.2.20)

[*Note: The W3C XML Schema definition of this simple type's content model ([ST_ConnectorType](#)) is located in §A.6.2. end note*]

19.2.3.8 ST_ConnectType (Connection Locations Type)

This simple type specifies types of connection locations.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
custom (Custom Connections)	A custom array of connection locations.
none (No)	No connection locations.
rect (Four Connections)	Standard four connection points at midpoints of top, bottom, left, and right sides.
segments (Edit Point Connections)	The edit points of the shape are used. Edit points are the black dots in a graphical editor that are used to select parts of a shape.

Referenced By
path@connecttype (§19.1.2.14)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_ConnectType](#)) is located in §A.6.2. *end note*]

19.2.3.9 ST_ContentType (Content Type)

This simple type specifies a content type.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Referenced By
ink@contentType (§19.2.2.15)

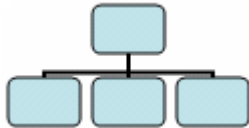
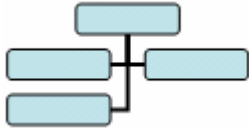
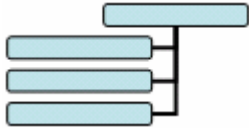
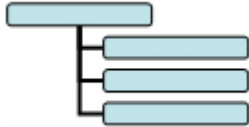
[Note: The W3C XML Schema definition of this simple type's content model ([ST_ContentType](#)) is located in §A.6.2. *end note*]

19.2.3.10 ST_DiagramLayout (Diagram Layout Type)

This simple type specifies the style of automatic layout to apply to a node in a diagram.

This simple type's contents are a restriction of the W3C XML Schema integer datatype.

Enumeration Value	Description
0 (Top-down Centered)	Top-down, centered layout.

Enumeration Value	Description
	
1 (Hanging Both Sides)	<p>Hanging, both sides layout.</p> 
2 (Hanging Right Side)	<p>Hanging, right side layout.</p> 
3 (Hanging Left Side)	<p>Hanging, left side layout.</p> 

Referenced By
<p>arc@dgmlayout (§19.1.2.1); arc@dgmlayoutmru (§19.1.2.1); curve@dgmlayout (§19.1.2.3); curve@dgmlayoutmru (§19.1.2.3); group@dgmlayout (§19.1.2.7); group@dgmlayoutmru (§19.1.2.7); image@dgmlayout (§19.1.2.10); image@dgmlayoutmru (§19.1.2.10); line@dgmlayout (§19.1.2.12); line@dgmlayoutmru (§19.1.2.12); oval@dgmlayout (§19.1.2.13); oval@dgmlayoutmru (§19.1.2.13); polyline@dgmlayout (§19.1.2.15); polyline@dgmlayoutmru (§19.1.2.15); rect@dgmlayout (§19.1.2.16); rect@dgmlayoutmru (§19.1.2.16); roundrect@dgmlayout (§19.1.2.17); roundrect@dgmlayoutmru (§19.1.2.17); shape@dgmlayout (§19.1.2.19); shape@dgmlayoutmru (§19.1.2.19); shapetype@dgmlayout (§19.1.2.20); shapetype@dgmlayoutmru (§19.1.2.20)</p>

[Note: The W3C XML Schema definition of this simple type’s content model ([ST_DiagramLayout](#)) is located in §A.6.2. *end note*]

19.2.3.11 ST_ExtrusionPlane (Extrusion Planes)

This simple type specifies three axis-aligned planes.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
XY (XY Plane)	The xy plane.
YZ (YZ Plane)	The yz plane.
ZX (ZX Plane)	The zx plane.

Referenced By
extrusion@plane (§19.2.2.11)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST_ExtrusionPlane](#)) is located in §A.6.2. *end note*]

19.2.3.12 ST_ExtrusionRender (Extrusion Rendering Types)

This simple type specifies different rendering modes.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
boundingCube (Bounding Cube)	Rendering displays the bounding cube that contains the shape.
solid (Solid)	Rendering displays a solid shape.
wireFrame (Wireframe)	Rendering displays a wireframe shape.

Referenced By
extrusion@render (§19.2.2.11)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST_ExtrusionRender](#)) is located in §A.6.2. *end note*]

19.2.3.13 ST_ExtrusionType (Extrusion Type)

This simple type specifies types of extrusions.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
parallel (Parallel Projection)	Extrusion is rendered so that the center of projection is infinitely far away; the extrusion lines do not converge.
perspective (Perspective Projection)	Extrusion is rendered to a center of projection, which is the same as the vanishing point for unrotated objects.




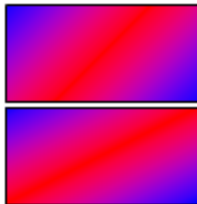
Referenced By
extrusion@type (§19.2.2.11)


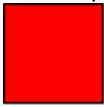

[*Note:* The W3C XML Schema definition of this simple type’s content model ([ST_ExtrusionType](#)) is located in §A.6.2. *end note*]

19.2.3.14 ST_FillType (Shape Fill Type)

This simple type specifies the types for fills applied to a shape.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
background (Use Background Fill)	Use the fill properties of the background of the object on which the shape exists, such as the page.
frame (Stretch Image to Fit)	The image is stretched to fill the shape. 
gradient (Linear Gradient)	The fill colors blend together in a linear gradient from bottom to top. 
gradientCenter (Centered Radial Gradient)	This indicates that the gradient runs across the center of the shape for a gradient that is defined as gradientRadial in the parent fill element (§19.1.2.5) that is defined in the VML namespace.
gradientRadial (Radial Gradient)	The fill colors blend together in a radial gradient. 
gradientUnscaled (Unscaled Gradient)	The gradient angle is not scaled relative to the aspect ratio of the shape. [<i>Example:</i> The shapes below are twice as wide as they are tall. The first shape uses an unscaled gradient and the second uses a regular scaled gradient:  <i>end example</i>]

Enumeration Value	Description
pattern (Image Pattern)	The image is used to create a pattern using the fill colors. 
solid (Solid Fill)	The fill pattern is a solid color. 
tile (Tiled Image)	The fill image is tiled. 

Referenced By
fill@type (§19.2.2.13)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_FillType](#)) is located in §A.6.2. *end note*]

19.2.3.15 [ST_How \(Alignment Type\)](#)

This simple type specifies types of alignment.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
bottom (Bottom Alignment)	Bottom vertical alignment.
center (Center Alignment)	Center horizontal alignment.
left (Left Alignment)	Left horizontal alignment.
middle (Middle Alignment)	Middle vertical alignment.
right (Right Alignment)	Right horizontal alignment.
top (Top Alignment)	Top vertical alignment.

Referenced By
r@how (§19.2.2.22)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_How](#)) is located in §A.6.2. *end note*]

19.2.3.16 ST_HrAlign (Alignment Type)

This simple type specifies alignments for horizontal rules.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
center (Center Alignment)	Center aligned.
left (Left Alignment)	Left aligned.
right (Right Alignment)	Right aligned.

Referenced By
arc@hralign (§19.1.2.1); curve@hralign (§19.1.2.3); group@hralign (§19.1.2.7); image@hralign (§19.1.2.10); line@hralign (§19.1.2.12); oval@hralign (§19.1.2.13); polyline@hralign (§19.1.2.15); rect@hralign (§19.1.2.16); roundrect@hralign (§19.1.2.17); shape@hralign (§19.1.2.19); shapetype@hralign (§19.1.2.20)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_HrAlign](#)) is located in §A.6.2. *end note*]

19.2.3.17 ST_InsetMode (Inset Margin Type)

This simple type specifies how inner text margins are obtained.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
auto (Automatic Margins)	Inner text margins are calculated by the application.
custom (Custom Margins)	Inner text margins are specified by the shape.

Referenced By
arc@insetmode (§19.1.2.1); curve@insetmode (§19.1.2.3); group@insetmode (§19.1.2.7); image@insetmode (§19.1.2.10); line@insetmode (§19.1.2.12); oval@insetmode (§19.1.2.13); polyline@insetmode (§19.1.2.15); rect@insetmode (§19.1.2.16); roundrect@insetmode (§19.1.2.17); shape@insetmode (§19.1.2.19); shapetype@insetmode (§19.1.2.20); textbox@insetmode (§19.1.2.22)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_InsetMode](#)) is located in §A.6.2. *end note*]

19.2.3.18 ST_OLEDrawAspect (Embedded Object Representations)

This simple type specifies the ways in which embedded objects are displayed in the application.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
Content (Snapshot)	The object's presentation is a picture of the contained document (provided by the embedded object server technology).
Icon (Icon)	The object's presentation is an icon.

Referenced By
OLEObject@DrawAspect (§19.2.2.20)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST_OLEDrawAspect](#)) is located in §A.6.2. *end note*]

19.2.3.19 ST_OLELinkType (Embedded Object Alternate Image Request Types)

This simple type specifies the kind of image that shall be requested from the application which hosts embedded object data for a linked object. This simple type allows any image format to be specified; however, the following values are reserved:

Enumeration Value	Description
Bitmap	Specifies that a bitmap should be requested.
EnhancedMetaFile	Specifies that a metafile (non-raster) image should be requested.
Jpeg	Specifies an image which should use the JPEG format.
Picture	Specifies that any image format can be requested. [<i>Example:</i> PNG or CGM (ISO/IEC 8632). <i>end example</i>]
Png	Specifies an image which should use the Portable Network Graphics format.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Referenced By
LinkType (§19.2.2.17)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST_OLELinkType](#)) is located in §A.6.2. *end note*]

19.2.3.20 ST_OLEType (Embedded Connection Type)

This simple type specifies whether the embedded object is included in the package (that is, embedded) or is stored outside the package (that is, linked).

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
Embed (Embedded Object)	Embedded object.
Link (Linked Object)	Linked object.

Referenced By
OLEObject@Type (§19.2.2.20)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST_OLEType](#)) is located in §A.6.2. *end note*]

19.2.3.21 ST_OLEUpdateMode (Embedded Object Update Method Type)

This simple type specifies how an embedded object is updated.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
Always (Server Application Update)	The object is updated whenever the server application using the embedded object indicates there is new data available.
OnCall (User Update)	The object is updated when the user chooses to update it.

Referenced By
OLEObject@UpdateMode (§19.2.2.20)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST_OLEUpdateMode](#)) is located in §A.6.2. *end note*]

19.2.3.22 ST_RType (Rule Type)

This simple type specifies types of rules.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
align (Alignment Rule)	Alignment rule.
arc (Arc Rule)	Arc rule.
callout (Callout Rule)	Callout rule.
connector (Connector Rule)	Connector rule.

Referenced By
r@type (§19.2.2.22)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST_RType](#)) is located in §A.6.2. *end note*]

19.2.3.23 ST_ScreenSize (Screen Sizes Type)

This simple type specifies screen sizes.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
1024,768 (1024x768 pixels)	1024x768 pixels.
1152,862 (1152x862 pixels)	1152x862 pixels.
544,376 (544x376 pixels)	544x376 pixels.
640,480 (640x480 pixels)	640x480 pixels.
720,512 (720x512 pixels)	720x512 pixels.
800,600 (800x600 pixels)	800x600 pixels.

Referenced By
background@targetscreensize (§19.1.2.2)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST_ScreenSize](#)) is located in §A.6.2. *end note*]

19.3 VML - WordprocessingML Drawing

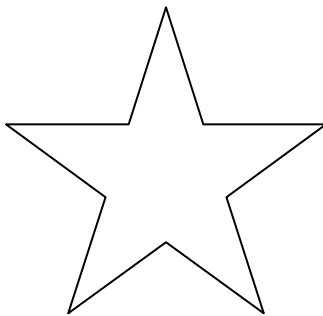
Within a WordprocessingML document, it is possible to include graphical VML objects. When these objects are present in a word processing document, it is necessary to include information about the object which is specific to their presence in a word processing document.

[*Note*: The VML format is a legacy format originally introduced with Office 2000 and is included and fully defined in ECMA-376 for backwards compatibility reasons. The DrawingML format is a newer and richer format created with the goal of eventually replacing any uses of VML in the Office Open XML formats. VML should be considered a transitional format included in Office Open XML for legacy reasons only and new applications that need a file format for drawings are strongly encouraged to use preferentially DrawingML. *end note*]

The VML WordprocessingML Drawing namespace acts in this capacity, specifying all information necessary to anchor and display VML objects within a word processing document.

All elements defined in this subclause shall only appear in a WordprocessingML document.

[*Example*: Consider a 5-point star added to a WordprocessingML document, for example:



This object allows surrounding text to wrap around its top and bottom, but not to either side, so this interaction with the surrounding document text (which is specific to a word processing document) is stored in the WordprocessingML Drawing namespace as follows:

```
<v:shape ... >
...
  <wd:wrap wd:type="topAndBottom" />
</v:shape>
```

The wrap element specifies how surrounding WordprocessingML document content must wrap around the floating VML object - in this case, by wrapping to its top and bottom extents via the type attribute value of topAndBottom. *end example*]

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End of informative text.

19.3.2 Elements

The following elements comprise the contents of the urn:schemas-microsoft-com:office:word namespace:

[*Note*: As the VML format is a format provided for backward compatibility, those VML elements defined in the same urn:schemas-microsoft-com:office:word namespace remain in that namespace as it is already used by millions of documents already using VML. *end note*]

19.3.2.1 anchorlock (Anchor Location Is Locked)

This element specifies that the anchor location for this object shall not be modified at runtime when an application edits the contents of this document. [*Guidance*: An application might have automatic behaviors which reposition the anchor for a VML object based on user interaction - for example, moving it from one page to another as needed. This element must tell applications not to perform any such behaviors. *end guidance*]

If this element is omitted, then the anchor shall not be locked for the parent VML object.

[*Example*: Consider a floating VML object which must have its anchor locked at the current location. This setting is specified as follows:

```
<wd:anchorLock/>
```

The anchorLock element's presence specifies that the VML object's current anchor location must not be changed by applications editing this content. *end example*].

Parent Elements
arc (§19.1.2.1); curve (§19.1.2.3); group (§19.1.2.7); image (§19.1.2.10); line (§19.1.2.12); oval (§19.1.2.13); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapetype (§19.1.2.20)

[*Note*: The W3C XML Schema definition of this element's content model ([CT_AnchorLock](#)) is located in §A.6.3. *end note*]

19.3.2.2 borderbottom (Bottom Border)

This element specifies the properties for the bottom border of a VML object.

Parent Elements
arc (§19.1.2.1); curve (§19.1.2.3); group (§19.1.2.7); image (§19.1.2.10); line (§19.1.2.12); oval (§19.1.2.13); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapetype (§19.1.2.20)

Attributes	Description
shadow (Border shadow)	<p>Specifies whether this border should be modified to create the appearance of a shadow.</p> <p>For the right and bottom borders, this is accomplished by duplicating the border below and right of the normal border location. For the left and top borders, this is accomplished by moving the border down and to the right of its original location.</p> <p>If this attribute is omitted, then the border is not given the shadow effect.</p> <p>[<i>Example:</i> Consider a top border which must appear with a shadow effect, resulting in the following content:</p> <pre><wd:bordertop wd:shadow="true" ... /></pre> <p>This element's shadow attribute is <code>true</code>, indicating that the shadow effect must be applied to the border. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_BorderShadow simple type (§19.3.3.1).</p>
type (Border Style)	<p>Specifies the style of border used on this object.</p> <p>See the simple type definition for a description of each border style.</p> <p>[<i>Example:</i> Consider a left border resulting in the following WordprocessingML:</p> <pre><wd:borderleft wd:type="single" .../></pre> <p>This border's type is <code>single</code>, indicating that the border style is a single line. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_BorderType simple type (§19.3.3.2).</p>
width (Border Width)	<p>Specifies the width of the current border.</p> <p>The width of this border is specified in measurements of eighths of a point, with a minimum value of two (one-fourth of a point) and a maximum value of 96 (twelve points). Any values outside this range can be reassigned to a more appropriate value.</p> <p>[<i>Example:</i> Consider a document with a three point wide dashed line border on all sides, resulting in the following WordprocessingML markup:</p> <pre><wd:bordertop wd:type="dashed" wd:width="24" .../></pre>

Attributes	Description
	<pre><wd:borderleft wd:type="dashed" wd:width="24" .../> <wd:borderbottom wd:type="dashed" wd:width="24" .../> <wd:borderright wd:type="dashed" wd:width="24" .../></pre> <p>The width attribute specifies the size in eighths of a point (24 eighths of a point = 3 points). <i>end example</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema <code>positiveInteger</code> datatype.</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_Border](#)) is located in §A.6.3. *end note*]

19.3.2.3 `borderleft` (Left Border)

This element represents the properties for the left border of a VML object.

Parent Elements
arc (§19.1.2.1); curve (§19.1.2.3); group (§19.1.2.7); image (§19.1.2.10); line (§19.1.2.12); oval (§19.1.2.13); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapetype (§19.1.2.20)

Attributes	Description
shadow (Border shadow)	<p>Specifies whether this border should be modified to create the appearance of a shadow.</p> <p>For the right and bottom borders, this is accomplished by duplicating the border below and right of the normal border location. For the left and top borders, this is accomplished by moving the border down and to the right of its original location.</p> <p>If this attribute is omitted, then the border is not given the shadow effect.</p> <p>[Example: Consider a top border which must appear with a shadow effect, resulting in the following content:</p> <pre><wd:bordertop wd:shadow="true" ... /></pre> <p>This element's shadow attribute is <code>true</code>, indicating that the shadow effect must be applied to the border. <i>end example</i></p> <p>The possible values for this attribute are defined by the <code>ST_BorderShadow</code> simple type (§19.3.3.1).</p>
type (Border Style)	<p>Specifies the style of border used on this object.</p> <p>See the simple type definition for a description of each border style.</p>

Attributes	Description
	<p>[<i>Example:</i> Consider a left border resulting in the following WordprocessingML:</p> <pre><wd:borderleft wd:type="single" .../></pre> <p>This border's type is single, indicating that the border style is a single line. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_BorderType simple type (§19.3.3.2).</p>
width (Border Width)	<p>Specifies the width of the current border.</p> <p>The width of this border is specified in measurements of eighths of a point, with a minimum value of two (one-fourth of a point) and a maximum value of 96 (twelve points). Any values outside this range can be reassigned to a more appropriate value.</p> <p>[<i>Example:</i> Consider a document with a three point wide dashed line border on all sides, resulting in the following WordprocessingML markup:</p> <pre><wd:bordertop wd:type="dashed" wd:width="24" .../> <wd:borderleft wd:type="dashed" wd:width="24" .../> <wd:borderbottom wd:type="dashed" wd:width="24" .../> <wd:boarderright wd:type="dashed" wd:width="24" .../></pre> <p>The width attribute specifies the size in eighths of a point (24 eighths of a point = 3 points). <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema positiveInteger datatype.</p>

[*Note:* The W3C XML Schema definition of this element's content model (CT_Border) is located in §A.6.3. *end note*]

19.3.2.4 **borderright (Right Border)**

This element specifies the properties for the right border of a VML object.

Parent Elements
arc (§19.1.2.1); curve (§19.1.2.3); group (§19.1.2.7); image (§19.1.2.10); line (§19.1.2.12); oval (§19.1.2.13); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapetype (§19.1.2.20)

Attributes	Description
shadow (Border shadow)	Specifies whether this border should be modified to create the appearance of a shadow.

Attributes	Description
	<p>For the right and bottom borders, this is accomplished by duplicating the border below and right of the normal border location. For the left and top borders, this is accomplished by moving the border down and to the right of its original location.</p> <p>If this attribute is omitted, then the border is not given the shadow effect.</p> <p>[<i>Example</i>: Consider a top border which must appear with a shadow effect, resulting in the following content:</p> <pre><wd:bordertop wd:shadow="true" ... /></pre> <p>This element's shadow attribute is <code>true</code>, indicating that the shadow effect must be applied to the border. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_BorderShadow simple type (§19.3.3.1).</p>
type (Border Style)	<p>Specifies the style of border used on this object.</p> <p>See the simple type definition for a description of each border style.</p> <p>[<i>Example</i>: Consider a left border resulting in the following WordprocessingML:</p> <pre><wd:borderleft wd:type="single" .../></pre> <p>This border's type is <code>single</code>, indicating that the border style is a single line. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_BorderType simple type (§19.3.3.2).</p>
width (Border Width)	<p>Specifies the width of the current border.</p> <p>The width of this border is specified in measurements of eighths of a point, with a minimum value of two (one-fourth of a point) and a maximum value of 96 (twelve points). Any values outside this range can be reassigned to a more appropriate value.</p> <p>[<i>Example</i>: Consider a document with a three point wide dashed line border on all sides, resulting in the following WordprocessingML markup:</p> <pre><wd:bordertop wd:type="dashed" wd:width="24" .../> <wd:borderleft wd:type="dashed" wd:width="24" .../> <wd:borderbottom wd:type="dashed" wd:width="24" .../> <wd:boarderright wd:type="dashed" wd:width="24" .../></pre> <p>The width attribute specifies the size in eighths of a point (24 eighths of a point = 3 points). <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema</p>

Attributes	Description
	positiveInteger datatype.

[Note: The W3C XML Schema definition of this element’s content model ([CT_Border](#)) is located in §A.6.3. *end note*]

19.3.2.5 **bordertop (Top Border)**

This element specifies the properties for the top border of a VML object.

Parent Elements
arc (§19.1.2.1); curve (§19.1.2.3); group (§19.1.2.7); image (§19.1.2.10); line (§19.1.2.12); oval (§19.1.2.13); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapetype (§19.1.2.20)

Attributes	Description
shadow (Border shadow)	<p>Specifies whether this border should be modified to create the appearance of a shadow.</p> <p>For the right and bottom borders, this is accomplished by duplicating the border below and right of the normal border location. For the left and top borders, this is accomplished by moving the border down and to the right of its original location.</p> <p>If this attribute is omitted, then the border is not given the shadow effect.</p> <p>[Example: Consider a top border which must appear with a shadow effect, resulting in the following content:</p> <div><wd:bordertop wd:shadow="true" ... /></div> <p>This element's shadow attribute is true, indicating that the shadow effect must be applied to the border. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_BorderShadow simple type (§19.3.3.1).</p>
type (Border Style)	<p>Specifies the style of border used on this object.</p> <p>See the simple type definition for a description of each border style.</p> <p>[Example: Consider a left border resulting in the following WordprocessingML:</p> <div><wd:borderleft wd:type="single" .../></div> <p>This border's type is single, indicating that the border style is a single line. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_BorderType simple type</p>

Attributes	Description
	(§19.3.3.2).
width (Border Width)	<p>Specifies the width of the current border.</p> <p>The width of this border is specified in measurements of eighths of a point, with a minimum value of two (one-fourth of a point) and a maximum value of 96 (twelve points). Any values outside this range can be reassigned to a more appropriate value.</p> <p>[<i>Example</i>: Consider a document with a three point wide dashed line border on all sides, resulting in the following WordprocessingML markup:</p> <pre><wd:bartop wd:type="dashed" wd:width="24" .../> <wd:bartleft wd:type="dashed" wd:width="24" .../> <wd:bartbottom wd:type="dashed" wd:width="24" .../> <wd:barterright wd:type="dashed" wd:width="24" .../></pre> <p>The width attribute specifies the size in eighths of a point (24 eighths of a point = 3 points). <i>end example</i>]</p> <p>The possible values for this attribute are defined by the W3C XML Schema <code>positiveInteger</code> datatype.</p>

[*Note*: The W3C XML Schema definition of this element's content model ([CT_Border](#)) is located in §A.6.3. *end note*]

19.3.2.6 wrap (Text Wrapping)

This element specifies the type of text wrapping which should be allowed around the contents of this VML object.

If this element is omitted, then no text wrapping shall be performed (i.e. the object shall be presented in line with text).

[*Example*: Consider the following VML object:

```
<v:shape ... >
...
  <wd:wrap wd:type="square" />
</v:shape>
```

The wrap element specifies how surrounding WordprocessingML document content must wrap around the floating VML object - in this case, by wrapping around its extents in a square via the type attribute value of square. *end example*].

Parent Elements
arc (§19.1.2.1); curve (§19.1.2.3); group (§19.1.2.7); image (§19.1.2.10); line (§19.1.2.12); oval (§19.1.2.13); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapetype (§19.1.2.20)

Attributes	Description
anchorx (Horizontal Positioning Base)	<p>Specifies the base object from which the horizontal positioning of the object should be calculated.</p> <p>A VML object can be horizontally positioned relative to:</p> <ul style="list-style-type: none"> • The vertical edge of the page before any runs of text (the left edge for left-to-right paragraphs, the right edge for right-to-left paragraphs) • The vertical edge of the text margin before any runs of text (the left edge for left-to-right paragraphs, the right edge for right-to-left paragraphs) • The vertical edge of the text in the paragraph containing the VML object • The position of anchor for the floating VML object in the text. <p>If this attribute is omitted, then its value shall be assumed to be page.</p> <p>[<i>Example:</i> Consider a VML object which should be positioned relative to the page edges, which is specified as follows:</p> <pre><wd:wrap wd:anchorx="page" wd:anchory="page" /></pre> <p>The anchorx attribute specifies that horizontal anchoring is relative to the edge of the page. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_HorizontalAnchor simple type (§19.3.3.3).</p>
anchory (Vertical Positioning Base)	<p>Specifies the base object from which the vertical positioning of the object should be calculated.</p> <p>A VML object can be vertically positioned relative to:</p> <ul style="list-style-type: none"> • The horizontal top edge of the page • The horizontal edge of the top text margin before any runs of text • The horizontal top edge of line containing the VML object • The horizontal top edge of the paragraph containing the text. <p>If this attribute is omitted, then its value shall be assumed to be page.</p> <p>[<i>Example:</i> Consider a VML object which should be positioned relative to the page edges, which is specified as follows:</p> <pre><wd:wrap wd:anchorx="page" wd:anchory="page" /></pre> <p>The anchory attribute specifies that horizontal anchoring is relative to the edge of the</p>

Attributes	Description
	<p>page. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_VerticalAnchor simple type (§19.3.3.4).</p>
side (Wrapping side)	<p>Specifies how text shall wrap around the object's left and right sides.</p> <p>[<i>Example</i>: Consider a floating DrawingML object which must allow text to wrap around its left side only. This setting is specified as follows:</p> <pre><wd:wrap side="left" ... /></pre> <p>The side attribute value of left specifies that text must only wrap around the left side of the object. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_WrapSide simple type (§19.3.3.5).</p>
type (Wrapping type)	<p>Specifies the type of wrapping - see the simple type definition for a description of each type.</p> <p>[<i>Example</i>: Consider the following VML object:</p> <pre><v:shape ... > ... <wd:wrap wd:type="topAndBottom" /> </v:shape></pre> <p>The wrap element specifies how surrounding WordprocessingML document content must wrap around the floating VML object - in this case, by wrapping around its top and bottom extents via the type attribute value of topAndBottom. <i>end example</i>]</p> <p>The possible values for this attribute are defined by the ST_WrapType simple type (§19.3.3.6).</p>

[*Note*: The W3C XML Schema definition of this element's content model ([CT_Wrap](#)) is located in §A.6.3. *end note*]

19.3.3 Simple Types

The following additional simple type information in the urn:schemas-microsoft-com:office:word namespace is used for documents of a transitional conformance class.

19.3.3.1 ST_BorderShadow (Border Shadow Type)

This simple type specifies logical true and false values.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
f (False)	Logical false.
false (False)	Logical false.
t (True)	Logical true.
true (True)	Logical true.

Referenced By
borderbottom@shadow (§19.3.2.2); borderleft@shadow (§19.3.2.3); borderright@shadow (§19.3.2.4); bordertop@shadow (§19.3.2.5)



[Note: The W3C XML Schema definition of this simple type's content model ([ST_BorderShadow](#)) is located in §A.6.3. *end note*]




19.3.3.2 ST_BorderType (Border Type)

This type defines which types of borders are supported.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
dash (pecifies a line border consisting of a dashed line around the parent object.)	Specifies a line border consisting of a dashed line around the parent object.
dashDotDot (Dash Dot Dot Border)	Specifies a line border consisting of a alternating dotted, dotted, dashed line around the parent object.
dashDotStroked (Stroked Dash Dot Border)	Specifies a line border consisting of a line with a series of alternating thin and thick strokes around the parent object.
dashedSmall (Small Dash Border)	Specifies a line border consisting of a dashed line with small gaps around the parent object.
dot (Dotted Border)	Specifies a line border consisting of a dotted line around the parent object.
dotDash (Dot Dash Border)	Specifies a line border consisting of a alternating dotted and dashed line around the parent object.
double (Double Line Border)	Specifies a line border consisting of a double line around the parent object.
doubleWave (Double Wavy Lines Border)	Specifies a line border consisting of a double wavy line around the parent object.
hairline (Hairline Border)	Specifies a line border consisting of a very thin line.
HTMLInset (Inset Border)	Specifies a line border consisting of an inset set of lines around the parent object.

Enumeration Value	Description
	<p>[Example:</p>  <p>end example]</p>
HTMLOutset (Outset Border)	<p>Specifies a line border consisting of an outset set of lines around the parent object.</p> <p>[Example:</p>  <p>end example]</p>
none (No Border)	Specifies that no border shall be applied to the current item.
single (Single Line Border)	Specifies a line border consisting of a single line around the parent object.
thick (Thick Line Border)	Specifies a line border consisting of a single line around the parent object.
thickBetweenThin (Thin-thick-thin Border)	Specifies a line border consisting of a thick line contained within a thin line with a medium sized intermediate gap around the parent object.
thickBetweenThinLarge (Large thin-thick-thin Border)	Specifies a line border consisting of a thin line contained within a thick line, contained within a thin line with a medium sized intermediate gap around the parent object.
thickBetweenThinSmall (Small thin-thick-thin Lines Border)	Specifies a line border consisting of a thin line contained within a thick line, contained within a thin line with a small intermediate gap around the parent object.
thickThin (Thick Thin Line Border)	Specifies a line border consisting of a thick line contained within a thin line with a medium sized intermediate gap around the parent object.
thickThinLarge (Thick Thin Large Gap Border)	Specifies a line border consisting of a thick line contained within a thin line with a large sized intermediate gap around the parent object.
thickThinSmall (Small thick-thin lines border)	Specifies a line border consisting of a thick line contained within a thin line with a small intermediate gap around the parent object.
thinThick (Thin Thick Line Border)	Specifies a line border consisting of a thin line contained within a thick line contained within a thick

Enumeration Value	Description
	thin with a medium sized intermediate gap between each around the parent object.
thinThickLarge (Thin Thick Large Gap Border)	Specifies a line border consisting of a thin line contained within a thick line contained within a thick thin with a large sized intermediate gap between each around the parent object.
thinThickSmall (Thin Thick Small Gap Border)	Specifies a line border consisting of a thin line contained within a thick line contained within a thick thin with a small intermediate gap between each around the parent object.
threeDEmboss (3D Embossed Border)	<p>Specifies a line border consisting of three staged gradient lines around the parent object, getting darker towards the object.</p> <p>[Example:</p>  <p>end example]</p>
threeDEngrave (3D Engraved Border)	<p>Specifies a line border consisting of three staged gradient lines around the parent object, getting darker away from the object.</p> <p>[Example:</p>  <p>end example]</p>
triple (Triple Line Border)	Specifies a line border consisting of a triple line around the parent object.
wave (Wavy Border)	<p>Specifies a line border consisting of a wavy line around the parent object.</p> <p>[Example:</p>  <p>end example]</p>

Referenced By
borderbottom@type (§19.3.2.2); borderleft@type (§19.3.2.3); borderright@type (§19.3.2.4); bordertop@type (§19.3.2.5)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST_BorderType](#)) is located in §A.6.3. *end note*]

19.3.3.3 ST_HorizontalAnchor (Horizontal Anchor Type)

This simple type specifies the horizontal position to which the parent object has been anchored in the document. This anchor position shall be used as the base location to determine the final horizontal position of the object in the document.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
char (Character)	Specifies that the parent object shall be horizontally anchored based on the position of the anchor within the text flow.
margin (Margin)	Specifies that the parent object shall be horizontally anchored to the text margins. This shall be used to specify that any horizontal positioning values shall be calculated with respect to the location of the text margin.
page (Page)	Specifies that the parent object shall be horizontally anchored to the page edge. This shall be used to specify that any horizontal positioning values shall be calculated with respect to the location of the edge of the page.
text (Text)	Specifies that the parent object shall be horizontally anchored to the text extents. This shall be used to specify that any horizontal positioning values shall be calculated with respect to the location of the edge of the text in the anchor paragraph (including text indentations on that paragraph within the text margins).

Referenced By
wrap@anchorx (§19.3.2.6)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST_HorizontalAnchor](#)) is located in §A.6.3. *end note*]

19.3.3.4 ST_VerticalAnchor (Vertical Anchor Type)

This simple type specifies the vertical position to which the parent object has been anchored in the document. This anchor position shall be used as the base location to determine the final vertical position of the object in the document.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
line (Line)	<p>Specifies that the parent object shall be vertically anchored to the line on which its anchor appears.</p> <p>This shall be used to specify that any vertical positioning values shall be calculated with respect to the location of the top edge of the anchor's line in the anchor paragraph.</p>
margin (Margin)	<p>Specifies that the parent object shall be vertically anchored to the text margins.</p> <p>This shall be used to specify that any vertical positioning values shall be calculated with respect to the location of the text margin.</p>
page (Page)	<p>Specifies that the parent object shall be vertically anchored to the page edge.</p> <p>This shall be used to specify that any vertical positioning values shall be calculated with respect to the location of the edge of the page.</p>
text (Text)	<p>Specifies that the parent object shall be vertically anchored to the text extents.</p> <p>This shall be used to specify that any vertical positioning values shall be calculated with respect to the location of the top edge of the text in the anchor paragraph.</p>

Referenced By
wrap@anchory (§19.3.2.6)

[Note: The W3C XML Schema definition of this simple type's content model (ST_VerticalAnchor) is located in §A.6.3. *end note*]

19.3.3.5 ST_WrapSide (Text Wrapping Side)

This simple type defines which sides text can wrap around a VML object.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
both (Both sides)	Wrap text on both sides.
largest (Largest side)	Wrap text on largest side.
left (Left side)	Wrap text on left side.
right (Right side)	Wrap text on right side.

Referenced By
wrap@side (§19.3.2.6)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_WrapSide](#)) is located in §A.6.3. *end note*]

19.3.3.6 ST_WrapType (Text Wrapping Type)

This simple type specifies the type of text wrapping which shall be allowed around a VML object within a document.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
none (No wrapping)	Specifies that text shall not be allowed to wrap around the remaining space on each lines around this VML object.
square (Square wrapping)	Specifies that text shall be allowed to wrap around the remaining space on each line around this text frame in the document using a rectangle touching each of the object's furthest edges.
through (Through wrapping)	Specifies that text shall be allowed to wrap around the remaining space on each line around this text frame in the document, including any holes in the object.
tight (Tight wrapping)	Specifies that text shall be allowed to tightly wrap around the remaining space on each line around this text frame in the document.
topAndBottom (Top and bottom wrapping)	Specifies that text shall not be allowed to wrap around the remaining space on each lines around the VML object.

Enumeration Value	Description
	Any text content shall therefore be placed on the next line following the object which does not intersect with the object's extents.

Referenced By
wrap@type (§19.3.2.6)

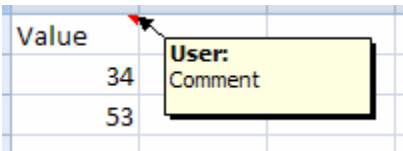
[*Note*: The W3C XML Schema definition of this simple type’s content model ([ST_WrapType](#)) is located in §A.6.3. *end note*]

19.4 VML - SpreadsheetML Drawing

It is possible to attach user interface controls, such as comments, combo boxes (dropdowns) and embedded controls, to a SpreadsheetML document. VML is used to define certain aspects of the control, such as size and visual appearance. Additional information describing the control shall also be included. The VML SpreadsheetML Drawing namespace provides the additional information necessary to define the object type, settings and behavior for the control.

[*Note*: The VML format is a legacy format originally introduced with Office 2000 and is included and fully defined in ECMA-376 for backwards compatibility reasons. The DrawingML format is a newer and richer format created with the goal of eventually replacing any uses of VML in the Office Open XML formats. VML should be considered a transitional format included in Office Open XML for legacy reasons only and new applications that need a file format for drawings are strongly encouraged to use preferentially DrawingML. *end note*]

[*Example*: Assume the comment below exists on a spreadsheet:



The following defines the additional information necessary to describe the comment. The ObjectType attribute describes the object as a comment. The Anchor element defines that its edges are anchored to the first and fourth rows and the second and fourth columns. The Row and Column elements indicate that it points to the cell in the first row, first column.


```

<x:ClientData ObjectType="Note">
  <x:MoveWithCells/>
  <x:SizeWithCells/>
  <x:Anchor>1, 13, 0, 12, 2, 52, 2, 10</x:Anchor>
  <x:AutoFill>False</x:AutoFill>
  <x:Row>0</x:Row>
  <x:Column>0</x:Column>
  <x:Visible/>
</x:ClientData>

```

This additional comment data exists inside the VML shape that defines the comment object:

```

<v:shape id="_x0000_s1025" type="#_x0000_t202" style='position:absolute;margin
left:57.75pt;margin-top:9pt;width:77.25pt;height:28.5pt;z-index:1;mso-wrap-
style:tight' fillcolor="#ffffe1" o:insetmode="auto">
  <v:fill color2="#ffffe1"/>
  <v:shadow on="t" color="black" obscured="t"/>
  <v:path o:connecttype="none"/>
  <v:textbox style='mso-direction-alt:auto'>
    <div style='text-align:left'></div>
  </v:textbox>
  <x:ClientData ObjectType="Note"> ... </x:ClientData>
</v:shape>

```

end example]

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End of informative text.

19.4.2 Elements

The following elements comprise the contents of the urn:schemas-microsoft-com:office:excel namespace:

[*Note:* As the VML format is a format provided for backward compatibility, those VML elements defined in the same urn:schemas-microsoft-com:office:excel namespace remain in that namespace as it is already used by millions of documents already using VML. *end note*]

19.4.2.1 Accel (Primary Keyboard Accelerator)

This element specifies the primary keyboard accelerator for an object. The value is the decimal value of the Unicode character corresponding to the accelerator key. This element is used for buttons, checkboxes, radio buttons and group boxes.

[*Example:* The primary accelerator key is 'A' (65 is the decimal value for 'A' (U+0041))]:

```
<x:ClientData ... >
  <x:Accel>65</x:Accel>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema integer datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.2 Accel2 (Secondary Keyboard Accelerator)

This element specifies the secondary keyboard accelerator for an object. The value is the decimal value of the Unicode character corresponding to the accelerator key. This element is used for buttons, checkboxes, radio buttons and group boxes.

[*Example:* The secondary accelerator key is 'A' (65 is the decimal value for 'A' (U+0041))]:

```
<x:ClientData>
  <x:Accel2>65</x:Accel2>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema integer datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.3 **Anchor (Anchor)**

This element specifies the anchor location for the object. This is a general-use element.

The value is a comma-separated list of data written out as: LeftColumn, LeftOffset, TopRow, TopOffset, RightColumn, RightOffset, BottomRow, BottomOffset.

Value	Description
LeftColumn	The left anchor column of the object (left-most column is 0). [<i>Example:</i> An object whose left anchor was off of the third column has a LeftColumn value of 2. <i>end example</i>]
LeftOffset	The offset of the object's left edge from the left edge of the left anchor column. This value is measured in pixels.
TopRow	The top anchor row of the object (top-most column is 0). [<i>Example:</i> An object whose top anchor was off of the fifth row has a TopRow value of 4. <i>end example</i>]
TopOffset	The offset of the object's top edge from the top edge of the top anchor row. This value is measured in pixels.
RightColumn	The right anchor column of the object (left-most column is 0). [<i>Example:</i> An object whose right anchor was off of the tenth column has a RightColumn value of 9. <i>end example</i>]
RightOffset	The offset of the object's right edge from the left edge of the right anchor column. This value is measured in pixels.
BottomRow	The bottom anchor row of the object (top-most column is 0). [<i>Example:</i> An object whose bottom anchor was off of the tenth row has a BottomRow value of 9. <i>end example</i>]
BottomOffset	The offset of the object's bottom edge from the bottom edge of the bottom anchor row. This value is measured in pixels.

[*Example:* The left side of the object is 15 pixels to the right of the left edge of the second column. The top edge is 2 pixels below the upper edge of the first row. The right side is 15 pixels to the right of the left edge of the fourth column. The bottom edge is 16 pixels below the top of the fourth row.

```
<x:ClientData>
  <x:Anchor>1, 15, 0, 2, 3, 15, 3, 16</x:Anchor>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema string datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.4 AutoFill (AutoFill)

This element specifies that the object's fill properties are automatically provided by the application and are not overridden with a specific fill color or style. [*Rationale*: An application can choose to display objects with certain visual properties that are appropriate to the application environment. *end rationale*] If this element is specified without a value, it is assumed to be true. This is a general-use element.

[*Example*:

```
<x:ClientData> ...
  <x:AutoFill>False</x:AutoFill>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[*Note*: The W3C XML Schema definition of this element's content model ([ST_TrueFalseBlank](#)) is located in §A.7.9. *end note*]

19.4.2.5 AutoLine (AutoLine)

This element specifies that the object's line properties are automatically provided by the application and are not overridden with a specific line color, style, or width. [*Rationale*: An application can choose to display objects with certain visual properties that are appropriate to the application environment. *end rationale*] If this element is specified without a value, it is assumed to be true. This is a general-use element.

[*Example*:

```
<x:ClientData> ...
  <x:AutoLine>False</x:AutoLine>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[*Note:* The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.6 AutoPict (Automatically Size)

This element specifies whether the object's aspect ratio is locked when rendered in different views by the application. If this element is specified without a value, it is assumed to be true. This is a general-use element for objects that use an image representation, denoted by the Pict value of ST_ObjectType. These objects are: embedded objects, embedded controls, cameras and signature lines.

[*Example:*

```
<x:ClientData> ...  
  <x:AutoPict>True</x:AutoPict>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[*Note:* The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.7 AutoScale (Font AutoScale)

This element specifies whether the object's font is automatically scaled by the application when the object is resized. If this element is specified without a value, it is assumed to be true. This element is used for attached text. Attached text refers to a class of objects that have text associated with them. The following values defined by the ST_ObjectType simple type are attached text objects: Button, Checkbox, Dialog, Edit, GBox, Label, Note and Radio.

[*Example:*

```
<x:ClientData> ...
  <x:AutoScale>True</x:AutoScale>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[*Note:* The W3C XML Schema definition of this element's content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

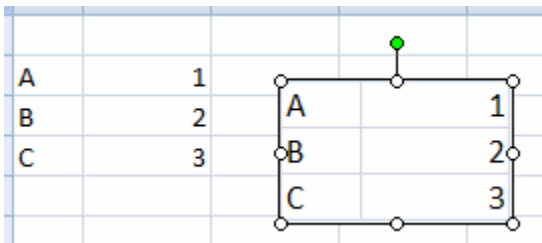
19.4.2.8 Camera (Camera Tool)

This element specifies that the object is a camera object. A camera object is a shape that is filled with a live view of a cell range in the same spreadsheet, including all applied styles. The cell range is defined by the `fmlaPict` element (§19.4.2.28), which shall be present. Shape properties such as the position and size of the camera object are defined by the shape. The shape shall be a rectangle. The view of the cell range is scaled vertically and horizontally to fill the rectangle exactly.

If this element is specified without a value, it is assumed to be true.

[*Example:*

```
<x:ClientData> ...
  <x:FmlaPict>$A$2:$B$4</x:FmlaPict>
  <x:Camera>True</x:Camera>
</x:ClientData>
```



end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[*Note:* The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9. *end note*]

19.4.2.9 **Cancel (Cancel Button)**

This element specifies that the object is a cancel button. If this element is specified without a value, it is assumed to be true. This element is used for buttons.

[*Example:*

```
<x:ClientData> ...  
  <x:Cancel/>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[*Note:* The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9. *end note*]

19.4.2.10 **CF (Clipboard Format)**

This element specifies the clipboard format used to render the object. This is a general-use element for objects that use an image representation, such as embedded objects, embedded controls, cameras and signature lines.

[*Example:*

```
<x:ClientData> ...  
  <x:CF>Pict</x:CF>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_CF simple type (§19.4.3.1).

Parent Elements
ClientData (§19.4.2.12)

[*Note:* The W3C XML Schema definition of this element’s content model ([ST_CF](#)) is located in §A.6.4. *end note*]

19.4.2.11 Checked (Checked)

This element specifies that the checkbox is checked or the radio button is selected. This element is used for checkboxes and radio buttons. Permitted values are:

Value	Description
0	Unchecked / unselected
1	Checked / selected
2	Mixed selection

[Example:

```
<x:ClientData> ...
  <x:Checked>2</x:Checked>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema integer datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.12 ClientData (Attached Object Data)

This element specifies data associated with objects attached to a spreadsheet. While this element might contain any of the child elements below, only certain combinations are meaningful. The ObjectType attribute determines the kind of object the element represents and which subset of child elements is appropriate. Relevant groups are identified for each child element.

[Example: The following defines additional information for a comment. Its edges are anchored to the first and fourth rows and the second and fourth columns. It points to the cell in the first row, first column.

```
<x:ClientData ObjectType="Note">
  <x:MoveWithCells/>
  <x:SizeWithCells/>
  <x:Anchor>1, 15, 0, 2, 3, 15, 3, 16</x:Anchor>
  <x:AutoFill>False</x:AutoFill>
  <x:Row>0</x:Row>
  <x:Column>0</x:Column>
  <x:Visible/>
</x:ClientData>
```

end example]

[*Example:* The following defines additional information for a radio button. It is the first in a series of radio buttons and selected by default. The accelerator key is 'A' (65 is the decimal value for 'A' (U+0041)) and it is linked to the cell at column A, row 1 of the first sheet.

```
<x:ClientData ObjectType=3D"Radio">
  <x:SizeWithCells/>
  <x:AutoFill>False</x:AutoFill>
  <x:AutoLine>False</x:AutoLine>
  <x:TextVAlign>Center</x:TextVAlign>
  <x:Checked>1</x:Checked>
  <x:Accel>65</x:Accel>
  <x:FmlaLink>Sheet1!$A$1</x:FmlaLink>
  <x:FirstButton/>
</x:ClientData>
```

end example]

Parent Elements
arc (§19.1.2.1); curve (§19.1.2.3); group (§19.1.2.7); image (§19.1.2.10); line (§19.1.2.12); oval (§19.1.2.13); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapetype (§19.1.2.20)

Child Elements	Subclause
Accel (Primary Keyboard Accelerator)	§19.4.2.1
Accel2 (Secondary Keyboard Accelerator)	§19.4.2.2
Anchor (Anchor)	§19.4.2.3
AutoFill (AutoFill)	§19.4.2.4
AutoLine (AutoLine)	§19.4.2.5
AutoPict (Automatically Size)	§19.4.2.6
AutoScale (Font AutoScale)	§19.4.2.7
Camera (Camera Tool)	§19.4.2.8
Cancel (Cancel Button)	§19.4.2.9
CF (Clipboard Format)	§19.4.2.10
Checked (Checked)	§19.4.2.11
ColHidden (Comment's Column is Hidden)	§19.4.2.13
Colored (Dropdown Color Toggle)	§19.4.2.14
Column (Comment Column Target)	§19.4.2.15
DDE (Dynamic Data Exchange)	§19.4.2.16
Default (Default Button)	§19.4.2.17
DefaultSize (Default Size Toggle)	§19.4.2.18

Child Elements	Subclause
Disabled (Macro Disable Toggle)	§19.4.2.19
Dismiss (Dismiss Button)	§19.4.2.20
DropLines (Dropdown Maximum Lines)	§19.4.2.21
DropStyle (Dropdown Style)	§19.4.2.22
Dx (Scroll Bar Width)	§19.4.2.23
FirstButton (First Radio Button)	§19.4.2.24
FmlaGroup (Linked Formula - Group Box)	§19.4.2.25
FmlaLink (Linked Formula)	§19.4.2.26
FmlaMacro (Reference to Custom Function)	§19.4.2.27
FmlaPict (Camera Source Range)	§19.4.2.28
FmlaRange (List Items Source Range)	§19.4.2.29
FmlaTxbx (Text Formula)	§19.4.2.30
Help (Help Button)	§19.4.2.31
Horiz (Scroll Bar Orientation)	§19.4.2.32
Inc (Scroll Bar Increment)	§19.4.2.33
JustLastX (Far East Alignment Toggle)	§19.4.2.34
LCT (Callback Type)	§19.4.2.35
ListItem (Non-linked List Item)	§19.4.2.36
Locked (Lock Toggle)	§19.4.2.37
LockText (Text Lock)	§19.4.2.38
MapOCX (Embedded Control)	§19.4.2.39
Max (Scroll Bar Maximum)	§19.4.2.40
Min (Scroll Bar Minimum)	§19.4.2.41
MoveWithCells (Move with Cells)	§19.4.2.42
MultiLine (Multi-line)	§19.4.2.43
MultiSel (Multiple Selections)	§19.4.2.44
NoThreeD (Disable 3D)	§19.4.2.45
NoThreeD2 (Disable 3D)	§19.4.2.46
Page (Scroll Bar Page Increment)	§19.4.2.47
PrintObject (Print Toggle)	§19.4.2.48
RecalcAlways (Recalculation Toggle)	§19.4.2.49
Row (Comment Row Target)	§19.4.2.50
RowHidden (Comment's Row is Hidden)	§19.4.2.51
ScriptExtended (HTML Script Attributes)	§19.4.2.52

Child Elements	Subclause
ScriptLanguage (HTML Script Language)	§19.4.2.53
ScriptLocation (HTML Script Location)	§19.4.2.54
ScriptText (HTML Script Text)	§19.4.2.55
SecretEdit (Password Edit)	§19.4.2.56
Sel (Selected Entry)	§19.4.2.57
SelType (Selection Type)	§19.4.2.58
SizeWithCells (Resize with Cells)	§19.4.2.59
TextHAlign (Horizontal Text Alignment)	§19.4.2.60
TextVAlign (Vertical Text Alignment)	§19.4.2.61
UIObj (UI Object Toggle)	§19.4.2.62
Val (Scroll bar position)	§19.4.2.63
ValidIds (Valid ID)	§19.4.2.64
Visible (Comment Visibility Toggle)	§19.4.2.65
VScroll (Vertical Scroll)	§19.4.2.66
VTEdit (Validation Type)	§19.4.2.67
WidthMin (Minimum Width)	§19.4.2.68

Attributes	Description
ObjectType (Object type)	<ul style="list-style-type: none"> Specifies the kind of the object. Different sets of child elements are appropriate for different types of objects. <p>The possible values for this attribute are defined by the ST_ObjectType simple type (§19.4.3.2).</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_ClientData](#)) is located in §A.6.4. *end note*]

19.4.2.13 ColHidden (Comment's Column is Hidden)

This element specifies that the column of the cell to which this comment points is hidden. If this element is specified without a value, it is assumed to be true. This element is used for comments.

[Example:

```
<x:ClientData> ...
  <x:ColHidden>True</x:ColHidden>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[*Note:* The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.14 Colored (Dropdown Color Toggle)

This element specifies that the dropdown is colored. If this element is specified without a value, it is assumed to be true. This element is used for dropdowns.

[*Example:*

```
<x:ClientData> ...
  <x:Colored>True</x:Colored>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[*Note:* The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.15 Column (Comment Column Target)

This element specifies the column a comment points to. The column index is 0-based. This element is used for comments.

[*Example:*

```
<x:ClientData> ...
  <x:Column>0</x:Column>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema integer datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.16 DDE (Dynamic Data Exchange)

This element specifies that the object is a DDE (Dynamic Data Exchange) link. If this element is specified without a value, it is assumed to be true. This is a general-use element.

[Example:

```
<x:ClientData> ...  
  <x:DDE>True</x:DDE>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[Note: The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.17 Default (Default Button)

This element specifies that the object is a default (OK) button . If this element is specified without a value, it is assumed to be true. This element is used for buttons.

[Example:

```
<x:ClientData> ...  
  <x:Default>True</x:Default>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[Note: The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.18 DefaultSize (Default Size Toggle)

This element specifies that the object is at its default size. If this element is specified without a value, it is assumed to be true. This is a general-use element.

[Example:

```
<x:ClientData> ...
  <x:DefaultSize>True</x:DefaultSize>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[Note: The W3C XML Schema definition of this element's content model ([ST_TrueFalseBlank](#)) is located in §A.7.9. end note]

19.4.2.19 Disabled (Macro Disable Toggle)

This element specifies that the object cannot run an attached macro. If this element is specified without a value, it is assumed to be true. This is a general-use element.

[Example:

```
<x:ClientData> ...
  <x:Disabled>True</x:Disabled>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[Note: The W3C XML Schema definition of this element's content model ([ST_TrueFalseBlank](#)) is located in §A.7.9. end note]

19.4.2.20 Dismiss (Dismiss Button)

This element specifies that the object is a dismiss button. If this element is specified without a value, it is assumed to be true. This element is used for buttons.

[Example:

```
<x:ClientData> ...  
  <x:Dismiss>True</x:Dismiss>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[Note: The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.21 DropLines (Dropdown Maximum Lines)

This element specifies the maximum number of lines in the dropdown before scrollbars are added. This element is used for dropdowns.

If this element is omitted, one line is shown.

[Example:

```
<x:ClientData> ...  
  <x:DropLines>8</x:DropLines>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema integer datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.22 DropStyle (Dropdown Style)

This element specifies the style of the dropdown. Allowed values are:

Value	Description
Combo	Standard combo box
ComboEdit	Editable combo box
Simple	Standard combo box with only the dropdown button visible when the box is not expanded

This element is used for dropdowns.

[Example:

```
<x:ClientData> ...
  <x:DropStyle>Combo</x:DropStyle>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema string datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.23 Dx (Scroll Bar Width)

This element specifies the width of the scroll bar in screen pixels. This element is used for scroll bars and spinners. [Note: It is possible for other controls, such as combo boxes and list boxes, to use scroll bars and this element is permitted for those controls. end note]

[Example:

```
<x:ClientData> ...
  <x:Dx>16</x:Dx>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema integer datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.24 FirstButton (First Radio Button)

This element specifies that the object is the first radio button in a set of radio buttons. If this element is specified without a value, it is assumed to be true. This element is used for radio buttons.

[Example:

```
<x:ClientData> ...
  <x:FirstButton>True</x:FirstButton>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[*Note:* The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.25 FmlaGroup (Linked Formula - Group Box)

This element specifies the cell the object is linked to, using standard cell reference syntax. This element is used for group boxes. This overrides the FmlaLink for any radio buttons enclosed in the group box. The value in the linked cell and the index of the selected radio button are linked together. The formula syntax is described in Part 1, §18.17 of the SpreadsheetML reference.

[*Example:*

```
<x:ClientData> ...  
  <x:FmlaGroup>$A$1</x:FmlaGroup>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema string datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.26 FmlaLink (Linked Formula)

This element specifies the cell the object is linked to, using standard cell reference syntax. This element is used for checkboxes, radio buttons, scroll bars, spinners, dropdowns and list boxes. The value in the linked cell and the index of the selected item in the object are linked together. This link is ignored if the control allows multiple selections. The formula syntax is described in Part 1, §18.17 of the SpreadsheetML reference.

[*Example:*

```
<x:ClientData> ...  
  <x:FmlaLink>$A$4</x:FmlaLink>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema string datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.27 FmlaMacro (Reference to Custom Function)

This element specifies the custom function associated with the object. [*Example*: A macro script, add-in function, and so on. *end example*]

This element applies to objects defined by all values of the ST_ObjectType simple type, except: LineA, Note, RectA.

The format of this string shall be application-defined, and should be ignored if not understood.

[*Example*:

```
<x:ClientData> ...
  <x:FmlaMacro>Button1_Click()</x:FmlaMacro>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema string datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.28 FmlaPict (Camera Source Range)

This element specifies the range of source data cells visible in the camera object (§19.4.2.8). This element is used for cameras. The formula syntax is described in Part 1, §18.17 of the SpreadsheetML reference.

This element is ignored if the Camera element is absent.

The possible values for this element are defined by the W3C XML Schema string datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.29 FmlaRange (List Items Source Range)

This element specifies the range of source data cells used to populate the list box, using standard cell reference syntax. This element is used for list boxes. The formula syntax is described in Part 1, §18.17 of the SpreadsheetML reference.

[*Example*:

```
<x:ClientData> ...
  <x:FmlaRange>$A$1:$A$15</x:FmlaRange>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema string datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.30 FmlaTxbx (Text Formula)

This element defines the formula associated with the object's text. This element is used for attached text.

[Example:

```
<x:ClientData> ...  
  <x:FmlaTxbx>$D$9</x:FmlaTxbx>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema string datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.31 Help (Help Button)

This element specifies that the object is a help button. If this element is specified without a value, it is assumed to be true. This element is used for buttons.

[Example:

```
<x:ClientData> ...  
  <x:Help>True</x:Help>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[Note: The W3C XML Schema definition of this element's content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.32 Horiz (Scroll Bar Orientation)

This element specifies that the scroll bar is horizontal. If omitted, the scroll bar is vertical. If this element is specified without a value, it is assumed to be true. This element is used for scroll bars and spinners.

[Example:

```
<x:ClientData> ...
  <x:Horiz>True</x:Horiz>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[Note: The W3C XML Schema definition of this element's content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.33 Inc (Scroll Bar Increment)

This element specifies the number of lines to move the scroll bar on an increment click. If omitted, the increment is 0. This element is used for scroll bars and spinners.

[Example:

```
<x:ClientData> ...
  <x:Inc>1</x:Inc>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema integer datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.34 JustLastX (Far East Alignment Toggle)

This element specifies that Far East alignment is set for the last line in the text. Typically, justified text in Far East environments leaves the last line unjustified. Specifying this element also justifies the last line. If this element is specified without a value, it is assumed to be true. This element is used for attached text.

[Example:

```
<x:ClientData> ...
  <x:JustLastX>True</x:JustLastX>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[*Note*: The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9. *end note*]

19.4.2.35 LCT (Callback Type)

This element specifies the kind of list box callback. The application should use the callback to determine how to handle user actions on the list box. The only allowed value is Normal. This element is used for list boxes.

[*Example*:

```
<x:ClientData> ...  
  <x:LCT>Normal</x:LCT>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema string datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.36 ListItem (Non-linked List Item)

This element specifies a non-linked list item that shall be persisted with the list. This element is used for list boxes. [*Rationale*: This is a place for applications to store optional information associated with the list box. For example, an item to be shown in the list box that is not linked from another set of data. *end rationale*]

[*Example*:

```
<x:ClientData> ...  
  <x:ListItem>TheItem</x:ListItem>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema string datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.37 Locked (Lock Toggle)

This element specifies that the object is locked when the sheet is protected. If omitted, the object is assumed to be locked. If this element is specified without a value, it is assumed to be true. This is a general-use element.

[Example:

```
<x:ClientData> ...
  <x:Locked>False</x:Locked>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[Note: The W3C XML Schema definition of this element's content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.38 LockText (Text Lock)

This element specifies that the object's text is locked. If omitted, the object's text is assumed to be locked. If this element is specified without a value, it is assumed to be true. This element is used for attached text.

[Example:

```
<x:ClientData> ...
  <x:LockText>False</x:LockText>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[Note: The W3C XML Schema definition of this element's content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.39 MapOCX (Embedded Control)

This element specifies that the object is an embedded control. If this element is specified without a value, it is assumed to be true. This element is used for all embedded controls.

[Example:

```
<x:ClientData>...
  <x:MapOCX>True</x:MapOCX>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[Note: The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.40 Max (Scroll Bar Maximum)

This element specifies the maximum scroll bar position as the index of the list item just above the item at the top of the view when the control is scrolled all the way down. The list indexes are 1-based. If omitted, the value is assumed to be that which allows the last item to be viewed when the control is scrolled all the way down. This element is used for scroll bars and spinners.

[Example: Item 21 is the first item visible in the list when the object is scrolled all the way down.

```
<x:ClientData> ...
  <x:Max>20</x:Max>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema integer datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.41 Min (Scroll Bar Minimum)

This element specifies the minimum scroll bar position as the index of the list item just above the item at the top of the view when the control is scrolled all the way up, typically 0. The list indexes are 1-based. If omitted, the value is assumed to be 0. This element is used for scroll bars and spinners.

[Example: The first item in the list is visible when the object is scrolled all the way up:

```
<x:ClientData> ...
  <x:Min>0</x:Min>
</x:ClientData>
```


end example]

The possible values for this element are defined by the W3C XML Schema integer datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.42 MoveWithCells (Move with Cells)

This element specifies that the object moves with its underlying cells. If this element is specified without a value, it is assumed to be true. This is a general-use element.

[Example:

```
<x:ClientData> ...
  <x:MoveWithCells>True</x:MoveWithCells>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[Note: The W3C XML Schema definition of this element's content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.43 MultiLine (Multi-line)

This element specifies that the control is multiline. If this element is specified without a value, it is assumed to be true. This element is used for edit controls.

[Example:

```
<x:ClientData> ...
  <x:Multiline>True</x:Multiline>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[*Note: The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]*

19.4.2.44 **MultiSel (Multiple Selections)**

This element specifies a comma-delimited list of selected items. This element overrides the Sel element (§19.4.2.57). This element is used for list boxes that allow multiple selections. See also the SelType element (§19.4.2.58).

[*Example:*

```
<x:ClientData> ...  
  <x:MultiSel>3, 5, 6</x:MultiSel>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema string datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.45 **NoThreeD (Disable 3D)**

This element specifies that 3D effects are disabled. If this element is specified without a value, it is assumed to be true. This element is used for checkboxes, radio buttons, group boxes and scroll bars.

[*Example:*

```
<x:ClientData> ...  
  <x>NoThreeD>True</x>NoThreeD>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[*Note: The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]*

19.4.2.46 **NoThreeD2 (Disable 3D)**

This element specifies that 3D effects are disabled. If this element is specified without a value, it is assumed to be true. This element is used for dropdowns and list boxes.

[Example:

```
<x:ClientData> ...
  <x:NoThreeD2>True</x:NoThreeD2>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[Note: The W3C XML Schema definition of this element's content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.47 Page (Scroll Bar Page Increment)

This element specifies the number of lines to move the scroll bar on a page click. This element is used for scroll bars and spinners.

[Example:

```
<x:ClientData> ...
  <x:Page>9</x:Page>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema integer datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.48 PrintObject (Print Toggle)

This element specifies that the object is printed when the document is printed. If omitted, it is assumed the object prints when the document is printed. If this element is specified without a value, it is assumed to be true. This is a general-use element.

[Example:

```
<x:ClientData> ...
  <x:PrintObject>False</x:PrintObject>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[*Note*: The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.49 RecalcAlways (Recalculation Toggle)

This element defines whether the object is always included in recalculation. If this element is specified without a value, it is assumed to be true. This is used by controls that reference cells in the spreadsheet to update themselves when the spreadsheet changes.

[*Example*:

```
<x:ClientData> ...  
  <x:RecalcAlways>True</x:RecalcAlways>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[*Note*: The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.50 Row (Comment Row Target)

This element specifies the row a comment points to. The row index is 0-based. This element is used for comments.

[*Example*:

```
<x:ClientData> ...  
  <x:Row>0</x:Row>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema integer datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.51 RowHidden (Comment's Row is Hidden)

This element specifies that the row of the cell to which this comment points is hidden. If this element is specified without a value, it is assumed to be true. This element is used for comments.

[Example:

```
<x:ClientData> ...
  <x:RowHidden>True</x:RowHidden>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[Note: The W3C XML Schema definition of this element's content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.52 ScriptExtended (HTML Script Attributes)

This element specifies custom extended attributes associated with the HTML script tag. The language and id are not included in the extended attributes. If the document contains no HTML script, this element should be ignored.

[Example: The extended script attribute is " src="file.js"":

```
<x:ClientData> ...
  <x:ScriptExtended>src=&quot;file.js&quot;</x:ScriptExtended>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema string datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.53 ScriptLanguage (HTML Script Language)

This element specifies the language of the custom function. If the document contains no HTML script, this element should be ignored. Allowed values are:

Value	Description
1	Java
2	Visual Basic
3	ASP
4	Other

[Example:

```
<x:ClientData> ...
  <x:ScriptLanguage>1</x:ScriptLanguage>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema nonNegativeInteger datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.54 ScriptLocation (HTML Script Location)

This element specifies the location of the custom function. If the document contains no HTML script, this element should be ignored. Allowed values are:

Value	Description
1	Head
2	Body

[Example:

```
<x:ClientData> ...
  <x:ScriptLocation>2</x:ScriptLocation>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema nonNegativeInteger datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.55 ScriptText (HTML Script Text)

This element specifies the script text (comment) associated with a block of HTML script in the document. If the document contains no HTML script, this element should be ignored.

[Example: The script text reads: "<!-- Comment -->":

```
<x:ClientData> ...
  <x:ScriptText>&lt;!-- Comment -->&gt;</x:ScriptText>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema string datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.56 SecretEdit (Password Edit)

This element specifies that the object represents a password edit field. If this element is specified without a value, it is assumed to be true. This element is used for attached text.

[Example:

```
<x:ClientData> ...
  <x:SecretEdit>True</x:SecretEdit>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[Note: The W3C XML Schema definition of this element's content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.57 Sel (Selected Entry)

This element specifies the index of the selected item. The list indexes are 1-based. If omitted or set to a value of 0, no items are selected. This element is used for list boxes.

[Example:

```
<x:ClientData>...
  <x:Sel>1</x:Sel>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema integer datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.58 SelType (Selection Type)

This element specifies the kind of selection for the list box. If omitted, the control is assumed to be Single. Allowed values are:

Value	Description
Single	The listbox shall only have one selected item.
Multi	The listbox can have multiple items selected by clicking on each item.
Extend	The listbox can have multiple items selected by holding a control key and clicking on each item.

This element is used for list boxes.

[Example:

```
<x:ClientData> ...
  <x:SelType>Single</x:SelType>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema string datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.59 SizeWithCells (Resize with Cells)

This element specifies that the object resizes with its underlying cells. If this element is specified without a value, it is assumed to be true. This is a general-use element.

[Example:


```
<x:ClientData> ...
  <x:SizeWithCells>True</x:SizeWithCells>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[*Note:* The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.60 TextHAlign (Horizontal Text Alignment)

This element specifies the horizontal text alignment for the object. Permitted values are Left, Justify, Center, Right and Distributed. If omitted, the alignment is assumed to be Left. This element is used for attached text.

[*Example:*

```
<x:ClientData> ...
  <x:TextHAlign>Right</x:TextHAlign>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema string datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.61 TextVAlign (Vertical Text Alignment)

This element specifies the horizontal text alignment for the object. Permitted values are Top, Justify, Center, Bottom and Distributed. If omitted, the alignment is assumed to be Top. This element is used for attached text.

[*Example:*

```
<x:ClientData> ...
  <x:TextVAlign>Center</x:TextVAlign>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema string datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.62 UIObj (UI Object Toggle)

This element defines whether the object is a UI object. If this element is specified without a value, it is assumed to be true. This is a general-use element.

[Example:

```
<x:ClientData> ...  
  <x:UIObj>True</x:UIObj>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[Note: The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.63 Val (Scroll bar position)

This element specifies the scroll bar position as the index of the list item just above the item at the top of the view, given the current scroll position. The list indexes are 1-based. If omitted, the value is assumed to be 0. This element is used for scroll bars and spinners.

[Example: The first list item (item 1) is just off the top of the view. The second list item is at the top of the view.

```
<x:ClientData> ...  
  <x:Val>1</x:Val>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema integer datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.64 ValidIds (Valid ID)

This element specifies that the ID of a linked object is correct. This is a general-use element.

[Example:

```
<x:ClientData> ...
  <x:ValidIds>True</x:ValidIds>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[Note: The W3C XML Schema definition of this element's content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.65 Visible (Comment Visibility Toggle)

This element specifies that a comment is visible. If omitted, the comment is assumed to be invisible. If this element is specified without a value, it is assumed to be true. This element is used for comments.

[Example:

```
<x:ClientData> ...
  <x:Visible>True</x:Visible>
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[Note: The W3C XML Schema definition of this element's content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.66 VScroll (Vertical Scroll)

This element specifies that the object has a vertical scroll. If omitted, a vertical scroll is not used. If this element is specified without a value, it is assumed to be true. This element is used for edit controls.

[Example:

```
<x:ClientData> ...  
  <x:VScroll>True</x:VScroll>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the ST_TrueFalseBlank simple type (§20.1.2.6).

Parent Elements
ClientData (§19.4.2.12)

[Note: The W3C XML Schema definition of this element’s content model ([ST_TrueFalseBlank](#)) is located in §A.7.9.
end note]

19.4.2.67 VTEdit (Validation Type)

This element specifies the kind of semantic validation to use for data input to the control. If omitted, the value is assumed to be Text. Permitted values are:

Value	Description
0	Text
1	Integer
2	Number
3	Reference
4	Formula

This element is used for edit controls.

[Example:

```
<x:ClientData> ...  
  <x:VTEdit>True</x:VTEdit>  
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema integer datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.2.68 WidthMin (Minimum Width)

This element specifies the smallest width allowed for the dropdown window in screen pixels. This element is used for list boxes and dropdowns.

[Example:

```
<x:ClientData ... > ...
  <x:WidthMin>78</x:WidthMin>
</x:ClientData>
```

end example]

The possible values for this element are defined by the W3C XML Schema integer datatype.

Parent Elements
ClientData (§19.4.2.12)

19.4.3 Simple Types

The following additional simple type information in the urn:schemas-microsoft-com:office:excel namespace is used for documents of a transitional conformance class.

19.4.3.1 ST_CF (Clipboard Format Type)

This simple type specifies the allowed clipboard formats. This simple type allows any image format to be specified; however, the following values are reserved:

Value	Description
Bitmap	Bitmap.
Jpeg	An image which should use the JPEG format.
Pict	Any picture format. [Example: SVG or JPEG. end example]
PictOld	Any picture format, but preferably one that is more likely to be supported by legacy applications.
PictPrint	An image rendered using the default printer's settings. This is typically of higher resolution and scaled differently compared to a picture created for on-screen rendering.
PictScreen	An image rendered using screen settings. This is typically lower resolution than an image created for printing.
Png	An image which should use the Portable Network Graphics format.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Referenced By
CF (§19.4.2.10)

[*Note:* The W3C XML Schema definition of this simple type's content model ([ST_CF](#)) is located in §A.6.4. *end note*]

19.4.3.2 ST_ObjectType (Object Type)

This simple type specifies the objects that a ClientData element can represent.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
Button (Pushbutton)	A pushbutton control.
Checkbox (Checkbox)	A checkbox control.
Dialog (Dialog)	A dialog.
Drop (Dropdown Box)	A dropdown (combo box) control.
Edit (Editable Text Field)	An editable text field control.
GBox (Group Box)	A group box control.
Group (Group)	A group of objects, such as a group of checkboxes.
Label (Label)	A label control.
LineA (Auditing Line)	A formula auditing arrow.
List (List Box)	A list control.
Movie (Movie)	A movie object in Mac format.
Note (Comment)	A comment.
Pict (Image)	A placeholder image.
Radio (Radio Button)	A radio button control.
Rect (Plain Rectangle)	A rectangle shape that is not a control.
RectA (Auditing Rectangle)	A formula auditing rectangle.
Scroll (Scroll Bar)	A scroll bar.
Shape (Plain Shape)	A general shape that is not a control.
Spin (Spin Button)	A spin button (spinner) control.

Referenced By
ClientData@ObjectType (§19.4.2.12)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_ObjectType](#)) is located in §A.6.4. *end note*]

19.5 VML - PresentationML Drawing

This section describes additional information attached to VML shapes that is specific to usage with PresentationML.

[Note: The VML format is a legacy format originally introduced with Office 2000 and is included and fully defined in ECMA-376 for backwards compatibility reasons. The DrawingML format is a newer and richer format created with the goal of eventually replacing any uses of VML in the Office Open XML formats. VML should be considered a transitional format included in Office Open XML for legacy reasons only and new applications that need a file format for drawings are strongly encouraged to use preferentially DrawingML. *end note*]

[Example: Assume the following annotation was drawn on a slide during a presentation and saved into the presentation:

- Bullet point

The red circle annotation is stored as a VML shape that is an ink annotation. For brevity, the specific path and ink data are omitted.

```
<v:shape id="_x0000_s1029" style='position:absolute;left:126pt;
top:327.375pt;width:27.625pt;height:24.75pt' coordorigin="4445,11549"
coordsize="973,874" path="..." filled="f" strokecolor="red"
strokeweight="1.5pt">
  <v:stroke endcap="round"/>
  <v:path shadowok="f" o:extrusionok="f" fillok="f" insetpenok="f"/>
  <o:lock v:ext="edit" rotation="t" aspectratio="t" verticies="t" text="t"
    shapetype="t"/>
  <o:ink i="..." annotation="t"/>
  <pvm1:iscomment/>
</v:shape>
```

end example

19.5.1 Table of Contents

This subclause is informative.

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End of informative text.

19.5.2 Elements

The following elements comprise the contents of the urn:schemas-microsoft-com:office:powerpoint namespace:

[*Note*: As the VML format is a format provided for backward compatibility, those VML elements defined in the same urn:schemas-microsoft-com:office:powerpoint namespace remain in that namespace as it is already used by millions of documents already using VML. *end note*]

19.5.2.1 iscomment (Ink Annotation Flag)

Specifies that the object was created as an ink annotation. Default is false. If this element is specified without a value, it is assumed to be true. This element is only used with PresentationML. [*Rationale* This allows an application to treat annotation ink objects as any other annotation. For example, if annotations are hidden, the application can hide the ink object. *end rationale*]

[*Example*:

```
<v:shape ... >
  <o:ink ... annotation="true"/>
  <pvm1:iscomment/>
</v:shape>
```

• Bullet piont

end example]

Parent Elements
shape (§19.1.2.19)

[*Note*: The W3C XML Schema definition of this element’s content model (CT_Empty) is located in §A.6.5. *end note*]

19.5.2.2 textdata (VML Diagram Text)

This element specifies optional supplementary text information associated with a legacy VML shape that is a node in a VML diagram when it cannot otherwise be stored within the DrawingML framework.

[*Note*: An application could use this to preserve a specific diagram format for backward compatibility, but it is strongly recommended to upgrade all VML shapes to DrawingML shapes. *end note*]

Parent Elements
arc (§19.1.2.1); curve (§19.1.2.3); group (§19.1.2.7); image (§19.1.2.10); line (§19.1.2.12); oval (§19.1.2.13); polyline (§19.1.2.15); rect (§19.1.2.16); roundrect (§19.1.2.17); shape (§19.1.2.19); shapetype (§19.1.2.20)

Attributes	Description
id (Text Reference)	<p>Specifies the identifier that is used in conjunction with a corresponding relationship file to resolve the location of the diagram shape text.</p> <p><i>[Example:</i></p> <pre><v:shape ... o:dgmnodekind="0" > <v:textbox inset="0,0,0,0"/> <pvm1:textdata id="rId1"/> </v:shape></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the W3C XML Schema string datatype.</p>

[Note: The W3C XML Schema definition of this element's content model ([CT_Rel](#)) is located in §A.6.5. *end note*]

20. Shared MLs Reference Material

20.1 Shared Simple Types

20.1.1 Table of Contents

This subclause is informative.

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20.4.1 Changed attribute for sources element (Part 1, §22.6.2.60) 904

End of informative text.

20.1.2 Simple Types

The following additional simple type information in the <http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes> namespace is used for documents of a transitional conformance class.

20.1.2.1 ST_AlgClass (Cryptographic Algorithm Classes)

This simple type specifies the possible classes of cryptographic algorithm used by protection. [*Note: The initial version of ECMA-376 only supports a single version - hash - but future versions may expand this as necessary. end note*]

[*Note: Omitting this attribute is logically equivalent to assigning it the value custom. end note*]

[*Example: Consider a WordprocessingML document with the following information stored in one of its protection elements:*

```
<... w:cryptAlgorithmClass="hash"
      w:cryptAlgorithmType="typeAny"
      w:cryptAlgorithmSid="1"
      w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" />
```

The cryptAlgorithmClass attribute value of hash specifies that the algorithm used for the password is a hashing algorithm. *end example*]

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
custom (Custom Algorithm)	Specifies that a custom algorithm class, specified within the parent element's <code>algIdExt</code> attribute, generated the hash value.
hash (Hashing)	Specifies that the algorithm is a hashing function, which creates a hash value for user-supplied input that is very difficult to reverse-engineer.

Referenced By
documentProtection@cryptAlgorithmClass (§14.7.2.3); modifyVerifier@cryptAlgorithmClass (§16.2.1.3); writeProtection@cryptAlgorithmClass (§14.7.2.5)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_AlgClass](#)) is located in §A.7.9. *end note*]

20.1.2.2 ST_AlgType (Cryptographic Algorithm Types)

This simple type specifies the possible values for the type of cryptographic algorithm used by protection. [Note: The initial version of ECMA-376 only supports a single type - `typeAny` - but future versions may expand this as necessary. *end note*]

[Note: Omitting this attribute is logically equivalent to assigning it the value `custom`. *end note*]

[Example: Consider a WordprocessingML document with the following information stored in one of its protection elements:

```
<... w:cryptAlgorithmClass="hash"
      w:cryptAlgorithmType="typeAny"
      w:cryptAlgorithmSid="1"
      w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" />
```

The `cryptAlgorithmType` attribute value of `typeAny` specifies that any type of algorithm may have been used for the password. *end example*]

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
custom (Custom Algorithm)	Specifies that a custom algorithm type, specified within the parent element's <code>algIdExt</code> attribute, generated the hash value.
typeAny (Any Predefined Type)	Specifies that one of the predefined cryptographic

Enumeration Value	Description
	algorithms, specified by the parent element's cryptAlgorithmSid attribute, generated the hash value.


Referenced By
documentProtection@cryptAlgorithmType (§14.7.2.3); modifyVerifier@cryptAlgorithmType (§16.2.1.3); writeProtection@cryptAlgorithmType (§14.7.2.5)

[Note: The W3C XML Schema definition of this simple type’s content model ([ST_AlgType](#)) is located in §A.7.9. end note]

20.1.2.3 [ST_ColorType \(Color Type\)](#)

This simple type specifies a color. Colors are specified in one of three ways - named color, hexadecimal RGB or color palette entry. An optional index can be stored in square brackets following the color and a space.
[Rationale: An application might store the color's index in a system color palette using this means. end rationale]

A named color is specified using the name of the color. The following named colors are supported:

- Black (#000000) 
- Silver (#C0C0C0) 
- Gray (#808080) 
- White (#FFFFFF) 
- Maroon (#800000) 
- Red (#FF0000) 
- Purple (#800080) 
- Fuchsia (#FF00FF) 
- Green (#008000) 
- Lime (#00FF00) 
- Olive (#808000) 
- Yellow (#FFFF00) 
- Navy (#000080) 
- Blue (#0000FF) 
- Teal (#008080) 
- Aqua (#00FFFF) 

[Example:

 <... color="red" ... >

end example]

Hexadecimal RGB is specified using a hash symbol (#) followed by six hexadecimal characters, where each pair represents the red, green and blue component of the color.

[Example:

```
< ... color="#5f2726" ... >
```

end example]

A color palette entry is specified using the name of the color in the palette.

[Example:

```
<... color="buttonFace [67]" ... >
```

end example]

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Referenced By
arc@chromakey (§19.1.2.1); arc@fillcolor (§19.1.2.1); arc@strokecolor (§19.1.2.1); background@fillcolor (§19.1.2.2); bottom@color (§19.2.2.1); bottom@color2 (§19.2.2.1); colormenu@extrusioncolor (§19.2.2.4); colormenu@fillcolor (§19.2.2.4); colormenu@shadowcolor (§19.2.2.4); colormenu@strokecolor (§19.2.2.4); column@color (§19.2.2.6); column@color2 (§19.2.2.6); curve@chromakey (§19.1.2.3); curve@fillcolor (§19.1.2.3); curve@strokecolor (§19.1.2.3); extrusion@color (§19.2.2.11); fill@color (§19.1.2.5); fill@color2 (§19.1.2.5); group@fillcolor (§19.1.2.7); image@chromakey (§19.1.2.10); image@fillcolor (§19.1.2.10); image@strokecolor (§19.1.2.10); imagedata@chromakey (§19.1.2.11); imagedata@embosscolor (§19.1.2.11); imagedata@recolortarget (§19.1.2.11); left@color (§19.2.2.16); left@color2 (§19.2.2.16); line@chromakey (§19.1.2.12); line@fillcolor (§19.1.2.12); line@strokecolor (§19.1.2.12); oval@chromakey (§19.1.2.13); oval@fillcolor (§19.1.2.13); oval@strokecolor (§19.1.2.13); polyline@chromakey (§19.1.2.15); polyline@fillcolor (§19.1.2.15); polyline@strokecolor (§19.1.2.15); rect@chromakey (§19.1.2.16); rect@fillcolor (§19.1.2.16); rect@strokecolor (§19.1.2.16); right@color (§19.2.2.26); right@color2 (§19.2.2.26); roundrect@chromakey (§19.1.2.17); roundrect@fillcolor (§19.1.2.17); roundrect@strokecolor (§19.1.2.17); shadow@color (§19.1.2.18); shadow@color2 (§19.1.2.18); shape@chromakey (§19.1.2.19); shape@fillcolor (§19.1.2.19); shape@strokecolor (§19.1.2.19); shapedefaults@fillcolor (§19.2.2.28); shapedefaults@strokecolor (§19.2.2.28); shapetype@chromakey (§19.1.2.20); shapetype@fillcolor (§19.1.2.20); shapetype@strokecolor (§19.1.2.20); stroke@color (§19.1.2.21); stroke@color2 (§19.1.2.21); top@color (§19.2.2.32); top@color2 (§19.2.2.32)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_ColorType](#)) is located in §A.7.9.

end note]

20.1.2.4 ST_CryptProv (Cryptographic Provider Types)

This simple type specifies the possible types of cryptographic providers which may be used.

[Note: Omitting this attribute is logically equivalent to assigning it the value custom. end note]

[*Example*: Consider a WordprocessingML document with the following information stored in one of its protection elements:

```
<... w:cryptProviderType="rsaAES"
      w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" />
```

The cryptProviderType attribute value of rsaAES specifies that the cryptographic provider type shall be an Advanced Encryption Standard provider. *end example*

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
custom (Custom Provider)	Specifies that a custom algorithm type, specified within the parent element's algIdExt attribute, generated the hash value.
rsaAES (AES Provider)	Specifies that the provider shall support the Advanced Encryption Algorithm standard.
rsaFull (Any Provider)	Specifies that any suitable provider shall be used.

Referenced By
documentProtection@cryptProviderType (§14.7.2.3); modifyVerifier@cryptProviderType (§16.2.1.3); writeProtection@cryptProviderType (§14.7.2.5)

[*Note*: The W3C XML Schema definition of this simple type's content model ([ST_CryptProv](#)) is located in §A.7.9. *end note*]

20.1.2.5 ST_TrueFalse (Boolean Value)

This type specifies logical true and false.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
f (False)	Logical false.
false (False)	Logical false.
t (True)	Logical true.
true (True)	Logical true.

Referenced By
arc@allowincell (§19.1.2.1); arc@allowoverlap (§19.1.2.1); arc@bullet (§19.1.2.1); arc@button (§19.1.2.1); arc@clip (§19.1.2.1); arc@cliptowrap (§19.1.2.1); arc@doubleclicknotify (§19.1.2.1); arc@filled (§19.1.2.1);

Referenced By
<p>arc@forcedash (§19.1.2.1); arc@hr (§19.1.2.1); arc@hrnoshade (§19.1.2.1); arc@hrstd (§19.1.2.1); arc@insetpen (§19.1.2.1); arc@oleicon (§19.1.2.1); arc@oned (§19.1.2.1); arc@preferrelative (§19.1.2.1); arc@print (§19.1.2.1); arc@stroked (§19.1.2.1); arc@userdrawn (§19.1.2.1); arc@userhidden (§19.1.2.1); background@filled (§19.1.2.2); bottom@forcedash (§19.2.2.1); bottom@imagealignshape (§19.2.2.1); bottom@insetpen (§19.2.2.1); bottom@on (§19.2.2.1); callout@accentbar (§19.2.2.2); callout@dropauto (§19.2.2.2); callout@lengthspecified (§19.2.2.2); callout@minusx (§19.2.2.2); callout@minusy (§19.2.2.2); callout@on (§19.2.2.2); callout@textborder (§19.2.2.2); column@forcedash (§19.2.2.6); column@imagealignshape (§19.2.2.6); column@insetpen (§19.2.2.6); column@on (§19.2.2.6); curve@allowincell (§19.1.2.3); curve@allowoverlap (§19.1.2.3); curve@bullet (§19.1.2.3); curve@button (§19.1.2.3); curve@clip (§19.1.2.3); curve@cliptowrap (§19.1.2.3); curve@doubleclicknotify (§19.1.2.3); curve@filled (§19.1.2.3); curve@forcedash (§19.1.2.3); curve@hr (§19.1.2.3); curve@hrnoshade (§19.1.2.3); curve@hrstd (§19.1.2.3); curve@insetpen (§19.1.2.3); curve@oleicon (§19.1.2.3); curve@oned (§19.1.2.3); curve@preferrelative (§19.1.2.3); curve@print (§19.1.2.3); curve@stroked (§19.1.2.3); curve@userdrawn (§19.1.2.3); curve@userhidden (§19.1.2.3); diagram@autoformat (§19.2.2.8); diagram@autolayout (§19.2.2.8); diagram@reverse (§19.2.2.8); extrusion@autorotationcenter (§19.2.2.11); extrusion@lightface (§19.2.2.11); extrusion@lightharsh (§19.2.2.11); extrusion@lightharsh2 (§19.2.2.11); extrusion@lockrotationcenter (§19.2.2.11); extrusion@metal (§19.2.2.11); extrusion@on (§19.2.2.11); fill@alignshape (§19.1.2.5); fill@detectmouseclick (§19.1.2.5); fill@on (§19.1.2.5); fill@recolor (§19.1.2.5); fill@rotate (§19.1.2.5); group@allowincell (§19.1.2.7); group@allowoverlap (§19.1.2.7); group@bullet (§19.1.2.7); group@button (§19.1.2.7); group@doubleclicknotify (§19.1.2.7); group@filled (§19.1.2.7); group@hr (§19.1.2.7); group@hrnoshade (§19.1.2.7); group@hrstd (§19.1.2.7); group@oned (§19.1.2.7); group@print (§19.1.2.7); group@userdrawn (§19.1.2.7); group@userhidden (§19.1.2.7); h@invx (§19.1.2.8); h@invy (§19.1.2.8); image@allowincell (§19.1.2.10); image@allowoverlap (§19.1.2.10); image@bilevel (§19.1.2.10); image@bullet (§19.1.2.10); image@button (§19.1.2.10); image@clip (§19.1.2.10); image@cliptowrap (§19.1.2.10); image@doubleclicknotify (§19.1.2.10); image@filled (§19.1.2.10); image@forcedash (§19.1.2.10); image@grayscale (§19.1.2.10); image@hr (§19.1.2.10); image@hrnoshade (§19.1.2.10); image@hrstd (§19.1.2.10); image@insetpen (§19.1.2.10); image@oleicon (§19.1.2.10); image@oned (§19.1.2.10); image@preferrelative (§19.1.2.10); image@print (§19.1.2.10); image@stroked (§19.1.2.10); image@userdrawn (§19.1.2.10); image@userhidden (§19.1.2.10); imagedata@bilevel (§19.1.2.11); imagedata@detectmouseclick (§19.1.2.11); imagedata@grayscale (§19.1.2.11); ink@annotation (§19.2.2.15); left@forcedash (§19.2.2.16); left@imagealignshape (§19.2.2.16); left@insetpen (§19.2.2.16); left@on (§19.2.2.16); line@allowincell (§19.1.2.12); line@allowoverlap (§19.1.2.12); line@bullet (§19.1.2.12); line@button (§19.1.2.12); line@clip (§19.1.2.12); line@cliptowrap (§19.1.2.12); line@doubleclicknotify (§19.1.2.12); line@filled (§19.1.2.12); line@forcedash (§19.1.2.12); line@hr (§19.1.2.12); line@hrnoshade (§19.1.2.12); line@hrstd (§19.1.2.12); line@insetpen (§19.1.2.12); line@oleicon (§19.1.2.12); line@oned (§19.1.2.12); line@preferrelative (§19.1.2.12); line@print (§19.1.2.12); line@stroked (§19.1.2.12); line@userdrawn (§19.1.2.12); line@userhidden (§19.1.2.12); lock@adjusthandles (§19.2.2.18); lock@aspectratio (§19.2.2.18); lock@cropping (§19.2.2.18); lock@grouping (§19.2.2.18); lock@position (§19.2.2.18); lock@rotation (§19.2.2.18); lock@selection (§19.2.2.18); lock@shapetype (§19.2.2.18); lock@text (§19.2.2.18); lock@ungrouping (§19.2.2.18); lock@verticies (§19.2.2.18); oval@allowincell (§19.1.2.13); oval@allowoverlap (§19.1.2.13); oval@bullet (§19.1.2.13); oval@button (§19.1.2.13); oval@clip (§19.1.2.13); oval@cliptowrap (§19.1.2.13); oval@doubleclicknotify (§19.1.2.13); oval@filled (§19.1.2.13); oval@forcedash (§19.1.2.13); oval@hr (§19.1.2.13); oval@hrnoshade (§19.1.2.13); oval@hrstd (§19.1.2.13); oval@insetpen (§19.1.2.13); oval@oleicon (§19.1.2.13); oval@oned (§19.1.2.13); oval@preferrelative (§19.1.2.13); oval@print (§19.1.2.13); oval@stroked (§19.1.2.13); oval@userdrawn (§19.1.2.13); oval@userhidden (§19.1.2.13); path@arrowok (§19.1.2.14); path@extrusionok (§19.1.2.14); path@fillok</p>

Referenced By
(\$19.1.2.14); path@gradientshapeok (\$19.1.2.14); path@insetpenok (\$19.1.2.14); path@shadowok (\$19.1.2.14); path@strokeok (\$19.1.2.14); path@textpathok (\$19.1.2.14); polyline@allowincell (\$19.1.2.15); polyline@allowoverlap (\$19.1.2.15); polyline@bullet (\$19.1.2.15); polyline@button (\$19.1.2.15); polyline@clip (\$19.1.2.15); polyline@cliptowrap (\$19.1.2.15); polyline@doubleclicknotify (\$19.1.2.15); polyline@filled (\$19.1.2.15); polyline@forcedash (\$19.1.2.15); polyline@hr (\$19.1.2.15); polyline@hrnoshade (\$19.1.2.15); polyline@hrstd (\$19.1.2.15); polyline@insetpen (\$19.1.2.15); polyline@oleicon (\$19.1.2.15); polyline@oned (\$19.1.2.15); polyline@preferrelative (\$19.1.2.15); polyline@print (\$19.1.2.15); polyline@stroked (\$19.1.2.15); polyline@userdrawn (\$19.1.2.15); polyline@userhidden (\$19.1.2.15); rect@allowincell (\$19.1.2.16); rect@allowoverlap (\$19.1.2.16); rect@bullet (\$19.1.2.16); rect@button (\$19.1.2.16); rect@clip (\$19.1.2.16); rect@cliptowrap (\$19.1.2.16); rect@doubleclicknotify (\$19.1.2.16); rect@filled (\$19.1.2.16); rect@forcedash (\$19.1.2.16); rect@hr (\$19.1.2.16); rect@hrnoshade (\$19.1.2.16); rect@hrstd (\$19.1.2.16); rect@insetpen (\$19.1.2.16); rect@oleicon (\$19.1.2.16); rect@oned (\$19.1.2.16); rect@preferrelative (\$19.1.2.16); rect@print (\$19.1.2.16); rect@stroked (\$19.1.2.16); rect@userdrawn (\$19.1.2.16); rect@userhidden (\$19.1.2.16); right@forcedash (\$19.2.2.26); right@imagealignshape (\$19.2.2.26); right@insetpen (\$19.2.2.26); right@on (\$19.2.2.26); roundrect@allowincell (\$19.1.2.17); roundrect@allowoverlap (\$19.1.2.17); roundrect@bullet (\$19.1.2.17); roundrect@button (\$19.1.2.17); roundrect@clip (\$19.1.2.17); roundrect@cliptowrap (\$19.1.2.17); roundrect@doubleclicknotify (\$19.1.2.17); roundrect@filled (\$19.1.2.17); roundrect@forcedash (\$19.1.2.17); roundrect@hr (\$19.1.2.17); roundrect@hrnoshade (\$19.1.2.17); roundrect@hrstd (\$19.1.2.17); roundrect@insetpen (\$19.1.2.17); roundrect@oleicon (\$19.1.2.17); roundrect@oned (\$19.1.2.17); roundrect@preferrelative (\$19.1.2.17); roundrect@print (\$19.1.2.17); roundrect@stroked (\$19.1.2.17); roundrect@userdrawn (\$19.1.2.17); roundrect@userhidden (\$19.1.2.17); shadow@obscured (\$19.1.2.18); shadow@on (\$19.1.2.18); shape@allowincell (\$19.1.2.19); shape@allowoverlap (\$19.1.2.19); shape@bullet (\$19.1.2.19); shape@button (\$19.1.2.19); shape@clip (\$19.1.2.19); shape@cliptowrap (\$19.1.2.19); shape@doubleclicknotify (\$19.1.2.19); shape@filled (\$19.1.2.19); shape@forcedash (\$19.1.2.19); shape@hr (\$19.1.2.19); shape@hrnoshade (\$19.1.2.19); shape@hrstd (\$19.1.2.19); shape@insetpen (\$19.1.2.19); shape@oleicon (\$19.1.2.19); shape@oned (\$19.1.2.19); shape@preferrelative (\$19.1.2.19); shape@print (\$19.1.2.19); shape@stroked (\$19.1.2.19); shape@userdrawn (\$19.1.2.19); shape@userhidden (\$19.1.2.19); shapedefaults@allowincell (\$19.2.2.28); shapedefaults@fill (\$19.2.2.28); shapedefaults@stroke (\$19.2.2.28); shapetype@allowincell (\$19.1.2.20); shapetype@allowoverlap (\$19.1.2.20); shapetype@bullet (\$19.1.2.20); shapetype@button (\$19.1.2.20); shapetype@clip (\$19.1.2.20); shapetype@cliptowrap (\$19.1.2.20); shapetype@doubleclicknotify (\$19.1.2.20); shapetype@filled (\$19.1.2.20); shapetype@forcedash (\$19.1.2.20); shapetype@hr (\$19.1.2.20); shapetype@hrnoshade (\$19.1.2.20); shapetype@hrstd (\$19.1.2.20); shapetype@insetpen (\$19.1.2.20); shapetype@oleicon (\$19.1.2.20); shapetype@oned (\$19.1.2.20); shapetype@preferrelative (\$19.1.2.20); shapetype@print (\$19.1.2.20); shapetype@stroked (\$19.1.2.20); shapetype@userdrawn (\$19.1.2.20); shapetype@userhidden (\$19.1.2.20); signatureline@allowcomments (\$19.2.2.30); signatureline@issignatureline (\$19.2.2.30); signatureline@showsigndate (\$19.2.2.30); signatureline@signinginstructionsset (\$19.2.2.30); skew@on (\$19.2.2.31); stroke@forcedash (\$19.1.2.21); stroke@imagealignshape (\$19.1.2.21); stroke@insetpen (\$19.1.2.21); stroke@on (\$19.1.2.21); textbox@singleclick (\$19.1.2.22); textpath@fitpath (\$19.1.2.23); textpath@fitshape (\$19.1.2.23); textpath@on (\$19.1.2.23); textpath@trim (\$19.1.2.23); textpath@xscale (\$19.1.2.23); top@forcedash (\$19.2.2.32); top@imagealignshape (\$19.2.2.32); top@insetpen (\$19.2.2.32); top@on (\$19.2.2.32)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_TrueFalse](#)) is located in §A.7.9. *end note*]

20.1.2.6 ST_TrueFalseBlank (Boolean Value with Blank [False] State)

This simple type specifies a boolean value with a third state, using a blank attribute, which specifies that the value be false.

This simple type's contents are a restriction of the W3C XML Schema string datatype.

Enumeration Value	Description
(Blank – Logical False)	Logical false.
f (Logical False)	Logical false.
false (Logical False)	Logical false.
t (Logical True)	Logical true.
true (Logical True)	Logical true.

Referenced By
arc@ole (§19.1.2.1); AutoFill (§19.4.2.4); AutoLine (§19.4.2.5); AutoPict (§19.4.2.6); AutoScale (§19.4.2.7); Camera (§19.4.2.8); Cancel (§19.4.2.9); ColHidden (§19.4.2.13); Colored (§19.4.2.14); curve@ole (§19.1.2.3); DDE (§19.4.2.16); Default (§19.4.2.17); DefaultSize (§19.4.2.18); Disabled (§19.4.2.19); Dismiss (§19.4.2.20); FirstButton (§19.4.2.24); h@switch (§19.1.2.8); Help (§19.4.2.31); Horiz (§19.4.2.32); image@ole (§19.1.2.10); JustLastX (§19.4.2.34); line@ole (§19.1.2.12); Locked (§19.4.2.37); LockedField (§19.2.2.19); LockText (§19.4.2.38); MapOCX (§19.4.2.39); MoveWithCells (§19.4.2.42); MultiLine (§19.4.2.43); NoThreeD (§19.4.2.45); NoThreeD2 (§19.4.2.46); oval@ole (§19.1.2.13); polyline@ole (§19.1.2.15); PrintObject (§19.4.2.48); proxy@end (§19.2.2.21); proxy@start (§19.2.2.21); RecalcAlways (§19.4.2.49); rect@ole (§19.1.2.16); roundrect@ole (§19.1.2.17); RowHidden (§19.4.2.51); SecretEdit (§19.4.2.56); shape@ole (§19.1.2.19); shapetype@ole (§19.1.2.20); SizeWithCells (§19.4.2.59); UIObj (§19.4.2.62); ValidIds (§19.4.2.64); Visible (§19.4.2.65); VScroll (§19.4.2.66)

[Note: The W3C XML Schema definition of this simple type's content model ([ST_TrueFalseBlank](#)) is located in §A.7.9. *end note*]

20.2 Extended Properties (Part 1, §22.2)

When used in a document of the Transitional conformance class, extended properties are stored within an Extended File Properties part with a source relationship of <http://schemas.openxmlformats.org/officeDocument/2006/relationships/extended-properties>.

20.3 Custom Properties (Part 1, §22.3)

When used in a document of the Transitional conformance class, custom properties are stored within a Custom File Properties part with a source relationship of <http://schemas.openxmlformats.org/officeDocument/2006/relationships/custom-properties>.

20.4 Changed attributes

The following attributes, which are defined in subclauses within Part 1, §22, “Shared MLs Reference Material”, have different source relationships when used in documents of the Transitional conformance class:

20.4.1 Changed attribute for sources element (Part 1, §22.6.2.60)

Attributes	Description
SelectedStyle (Selected Style)	<p>Specifies the filename of a file which can be used to format the bibliographies and citations within this document.</p> <p>If this file is of an unknown form or cannot be located, then the other attributes on this element can be used to determine the format to use.</p> <p><i>[Example:</i></p> <pre><b:Sources SelectedStyle="\APA.XSL" StyleName="APA" URI="http://schemas.openxmlformats.org/bibliographicStyle/APA"></pre> <p><i>end example]</i></p> <p>The possible values for this attribute are defined by the ST_String simple type (Part 1, §22.9.2.13).</p>

Annex A.

(normative)

Schemas – W3C XML Schema

This Office Open XML specification includes a family of schemas defined using the W3C XML Schema 1.0 syntax. The normative definitions of these schemas follow below, and they also reside in an accompanying file named OfficeOpenXML-XMLSchema-Transitional.zip, which is distributed in electronic form.

A.1 WordprocessingML

This schema is available in the file wml.xsd.

```

1 <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
2   xmlns:m="http://schemas.openxmlformats.org/officeDocument/2006/math"
3   xmlns:r="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
4   xmlns:sl="http://schemas.openxmlformats.org/schemaLibrary/2006/main"
5   xmlns:wp="http://schemas.openxmlformats.org/drawingml/2006/wordprocessingDrawing"
6   xmlns="http://schemas.openxmlformats.org/wordprocessingml/2006/main"
7   xmlns:s="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
8   elementFormDefault="qualified" attributeFormDefault="qualified" blockDefault="#all"
9   targetNamespace="http://schemas.openxmlformats.org/wordprocessingml/2006/main">
10   <xsd:import namespace="http://schemas.openxmlformats.org/drawingml/2006/wordprocessingDrawing"
11     schemaLocation="dml-wordprocessingDrawing.xsd"/>
12   <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/math"
13     schemaLocation="shared-math.xsd"/>
14   <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
15     schemaLocation="shared-relationshipReference.xsd"/>
16   <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
17     schemaLocation="shared-commonSimpleTypes.xsd"/>
18   <xsd:import namespace="http://schemas.openxmlformats.org/schemaLibrary/2006/main"
19     schemaLocation="shared-customXmlSchemaProperties.xsd"/>
20   <xsd:import namespace="http://www.w3.org/XML/1998/namespace"/>
21   <xsd:complexType name="CT_Empty"/>
22   <xsd:complexType name="CT_OnOff">
23     <xsd:attribute name="val" type="s:ST_OnOff"/>
24   </xsd:complexType>
25   <xsd:simpleType name="ST_LongHexNumber">
26     <xsd:restriction base="xsd:hexBinary">
27       <xsd:length value="4"/>
28     </xsd:restriction>
29   </xsd:simpleType>
30   <xsd:complexType name="CT_LongHexNumber">
31     <xsd:attribute name="val" type="ST_LongHexNumber" use="required"/>
32   </xsd:complexType>
33   <xsd:simpleType name="ST_ShortHexNumber">

```

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34     <xsd:restriction base="xsd:hexBinary">
35         <xsd:length value="2"/>
36     </xsd:restriction>
37 </xsd:simpleType>
38 <xsd:simpleType name="ST_UcharHexNumber">
39     <xsd:restriction base="xsd:hexBinary">
40         <xsd:length value="1"/>
41     </xsd:restriction>
42 </xsd:simpleType>
43 <xsd:complexType name="CT_Charset">
44     <xsd:attribute name="val" type="ST_UcharHexNumber" use="required"/>
45     <xsd:attribute name="characterSet" type="s:ST_String" use="optional"/>
46 </xsd:complexType>
47 <xsd:simpleType name="ST_DecimalNumberOrPercent">
48     <xsd:union memberTypes="ST_UnqualifiedPercentage s:ST_Percentage"/>
49 </xsd:simpleType>
50 <xsd:simpleType name="ST_UnqualifiedPercentage">
51     <xsd:restriction base="xsd:integer"/>
52 </xsd:simpleType>
53 <xsd:simpleType name="ST_DecimalNumber">
54     <xsd:restriction base="xsd:integer"/>
55 </xsd:simpleType>
56 <xsd:complexType name="CT_DecimalNumber">
57     <xsd:attribute name="val" type="ST_DecimalNumber" use="required"/>
58 </xsd:complexType>
59 <xsd:complexType name="CT_UnsignedDecimalNumber">
60     <xsd:attribute name="val" type="s:ST_UnsignedDecimalNumber" use="required"/>
61 </xsd:complexType>
62 <xsd:complexType name="CT_DecimalNumberOrPrecent">
63     <xsd:attribute name="val" type="ST_DecimalNumberOrPercent" use="required"/>
64 </xsd:complexType>
65 <xsd:complexType name="CT_TwipsMeasure">
66     <xsd:attribute name="val" type="s:ST_TwipsMeasure" use="required"/>
67 </xsd:complexType>
68 <xsd:simpleType name="ST_SignedTwipsMeasure">
69     <xsd:union memberTypes="xsd:integer s:ST_UniversalMeasure"/>
70 </xsd:simpleType>
71 <xsd:complexType name="CT_SignedTwipsMeasure">
72     <xsd:attribute name="val" type="ST_SignedTwipsMeasure" use="required"/>
73 </xsd:complexType>
74 <xsd:simpleType name="ST_PixelsMeasure">
75     <xsd:restriction base="s:ST_UnsignedDecimalNumber"/>
76 </xsd:simpleType>
77 <xsd:complexType name="CT_PixelsMeasure">
78     <xsd:attribute name="val" type="ST_PixelsMeasure" use="required"/>
79 </xsd:complexType>
80 <xsd:simpleType name="ST_HpsMeasure">
81     <xsd:union memberTypes="s:ST_UnsignedDecimalNumber s:ST_PositiveUniversalMeasure"/>
82 </xsd:simpleType>
83 <xsd:complexType name="CT_HpsMeasure">
84     <xsd:attribute name="val" type="ST_HpsMeasure" use="required"/>
85 </xsd:complexType>
86 <xsd:simpleType name="ST_SignedHpsMeasure">

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87     <xsd:union memberTypes="xsd:integer s:ST_UniversalMeasure"/>
88 </xsd:simpleType>
89 <xsd:complexType name="CT_SignedHpsMeasure">
90     <xsd:attribute name="val" type="ST_SignedHpsMeasure" use="required"/>
91 </xsd:complexType>
92 <xsd:simpleType name="ST_DateTime">
93     <xsd:restriction base="xsd:dateTime"/>
94 </xsd:simpleType>
95 <xsd:simpleType name="ST_MacroName">
96     <xsd:restriction base="xsd:string">
97         <xsd:maxLength value="33"/>
98     </xsd:restriction>
99 </xsd:simpleType>
100 <xsd:complexType name="CT_MacroName">
101     <xsd:attribute name="val" use="required" type="ST_MacroName"/>
102 </xsd:complexType>
103 <xsd:simpleType name="ST_EighthPointMeasure">
104     <xsd:restriction base="s:ST_UnsignedDecimalNumber"/>
105 </xsd:simpleType>
106 <xsd:simpleType name="ST_PointMeasure">
107     <xsd:restriction base="s:ST_UnsignedDecimalNumber"/>
108 </xsd:simpleType>
109 <xsd:complexType name="CT_String">
110     <xsd:attribute name="val" type="s:ST_String" use="required"/>
111 </xsd:complexType>
112 <xsd:simpleType name="ST_TextScale">
113     <xsd:union memberTypes="ST_TextScalePercent ST_TextScaleDecimal"/>
114 </xsd:simpleType>
115 <xsd:simpleType name="ST_TextScalePercent">
116     <xsd:restriction base="xsd:string">
117         <xsd:pattern value="0*(600|([0-5]?[0-9]?[0-9]))%"/>
118     </xsd:restriction>
119 </xsd:simpleType>
120 <xsd:simpleType name="ST_TextScaleDecimal">
121     <xsd:restriction base="xsd:integer">
122         <xsd:minInclusive value="0"/>
123         <xsd:maxInclusive value="600"/>
124     </xsd:restriction>
125 </xsd:simpleType>
126 <xsd:complexType name="CT_TextScale">
127     <xsd:attribute name="val" type="ST_TextScale"/>
128 </xsd:complexType>
129 <xsd:simpleType name="ST_HighlightColor">
130     <xsd:restriction base="xsd:string">
131         <xsd:enumeration value="black"/>
132         <xsd:enumeration value="blue"/>
133         <xsd:enumeration value="cyan"/>
134         <xsd:enumeration value="green"/>
135         <xsd:enumeration value="magenta"/>
136         <xsd:enumeration value="red"/>
137         <xsd:enumeration value="yellow"/>
138         <xsd:enumeration value="white"/>
139         <xsd:enumeration value="darkBlue"/>

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140      <xsd:enumeration value="darkCyan"/>
141      <xsd:enumeration value="darkGreen"/>
142      <xsd:enumeration value="darkMagenta"/>
143      <xsd:enumeration value="darkRed"/>
144      <xsd:enumeration value="darkYellow"/>
145      <xsd:enumeration value="darkGray"/>
146      <xsd:enumeration value="lightGray"/>
147      <xsd:enumeration value="none"/>
148    </xsd:restriction>
149  </xsd:simpleType>
150  <xsd:complexType name="CT_Highlight">
151    <xsd:attribute name="val" type="ST_HighlightColor" use="required"/>
152  </xsd:complexType>
153  <xsd:simpleType name="ST_HexColorAuto">
154    <xsd:restriction base="xsd:string">
155      <xsd:enumeration value="auto"/>
156    </xsd:restriction>
157  </xsd:simpleType>
158  <xsd:simpleType name="ST_HexColor">
159    <xsd:union memberTypes="ST_HexColorAuto s:ST_HexColorRGB"/>
160  </xsd:simpleType>
161  <xsd:complexType name="CT_Color">
162    <xsd:attribute name="val" type="ST_HexColor" use="required"/>
163    <xsd:attribute name="themeColor" type="ST_ThemeColor" use="optional"/>
164    <xsd:attribute name="themeTint" type="ST_UcharHexNumber" use="optional"/>
165    <xsd:attribute name="themeShade" type="ST_UcharHexNumber" use="optional"/>
166  </xsd:complexType>
167  <xsd:complexType name="CT_Lang">
168    <xsd:attribute name="val" type="s:ST_Lang" use="required"/>
169  </xsd:complexType>
170  <xsd:complexType name="CT_Guid">
171    <xsd:attribute name="val" type="s:ST_Guid"/>
172  </xsd:complexType>
173  <xsd:simpleType name="ST_Underline">
174    <xsd:restriction base="xsd:string">
175      <xsd:enumeration value="single"/>
176      <xsd:enumeration value="words"/>
177      <xsd:enumeration value="double"/>
178      <xsd:enumeration value="thick"/>
179      <xsd:enumeration value="dotted"/>
180      <xsd:enumeration value="dottedHeavy"/>
181      <xsd:enumeration value="dash"/>
182      <xsd:enumeration value="dashedHeavy"/>
183      <xsd:enumeration value="dashLong"/>
184      <xsd:enumeration value="dashLongHeavy"/>
185      <xsd:enumeration value="dotDash"/>
186      <xsd:enumeration value="dashDotHeavy"/>
187      <xsd:enumeration value="dotDotDash"/>
188      <xsd:enumeration value="dashDotDotHeavy"/>
189      <xsd:enumeration value="wave"/>
190      <xsd:enumeration value="wavyHeavy"/>
191      <xsd:enumeration value="wavyDouble"/>
192      <xsd:enumeration value="none"/>

```

```

193     </xsd:restriction>
194 </xsd:simpleType>
195 <xsd:complexType name="CT_Underline">
196     <xsd:attribute name="val" type="ST_Underline" use="optional"/>
197     <xsd:attribute name="color" type="ST_HexColor" use="optional"/>
198     <xsd:attribute name="themeColor" type="ST_ThemeColor" use="optional"/>
199     <xsd:attribute name="themeTint" type="ST_UcharHexNumber" use="optional"/>
200     <xsd:attribute name="themeShade" type="ST_UcharHexNumber" use="optional"/>
201 </xsd:complexType>
202 <xsd:simpleType name="ST_TextEffect">
203     <xsd:restriction base="xsd:string">
204         <xsd:enumeration value="blinkBackground"/>
205         <xsd:enumeration value="lights"/>
206         <xsd:enumeration value="antsBlack"/>
207         <xsd:enumeration value="antsRed"/>
208         <xsd:enumeration value="shimmer"/>
209         <xsd:enumeration value="sparkle"/>
210         <xsd:enumeration value="none"/>
211     </xsd:restriction>
212 </xsd:simpleType>
213 <xsd:complexType name="CT_TextEffect">
214     <xsd:attribute name="val" type="ST_TextEffect" use="required"/>
215 </xsd:complexType>
216 <xsd:simpleType name="ST_Border">
217     <xsd:restriction base="xsd:string">
218         <xsd:enumeration value="nil"/>
219         <xsd:enumeration value="none"/>
220         <xsd:enumeration value="single"/>
221         <xsd:enumeration value="thick"/>
222         <xsd:enumeration value="double"/>
223         <xsd:enumeration value="dotted"/>
224         <xsd:enumeration value="dashed"/>
225         <xsd:enumeration value="dotDash"/>
226         <xsd:enumeration value="dotDotDash"/>
227         <xsd:enumeration value="triple"/>
228         <xsd:enumeration value="thinThickSmallGap"/>
229         <xsd:enumeration value="thickThinSmallGap"/>
230         <xsd:enumeration value="thinThickThinSmallGap"/>
231         <xsd:enumeration value="thinThickMediumGap"/>
232         <xsd:enumeration value="thickThinMediumGap"/>
233         <xsd:enumeration value="thinThickThinMediumGap"/>
234         <xsd:enumeration value="thinThickLargeGap"/>
235         <xsd:enumeration value="thickThinLargeGap"/>
236         <xsd:enumeration value="thinThickThinLargeGap"/>
237         <xsd:enumeration value="wave"/>
238         <xsd:enumeration value="doubleWave"/>
239         <xsd:enumeration value="dashSmallGap"/>
240         <xsd:enumeration value="dashDotStroked"/>
241         <xsd:enumeration value="threeDEmboss"/>
242         <xsd:enumeration value="threeDEngrave"/>
243         <xsd:enumeration value="outset"/>
244         <xsd:enumeration value="inset"/>
245         <xsd:enumeration value="apples"/>

```

```

246      <xsd:enumeration value="archedScallops"/>
247      <xsd:enumeration value="babyPacifier"/>
248      <xsd:enumeration value="babyRattle"/>
249      <xsd:enumeration value="balloons3Colors"/>
250      <xsd:enumeration value="balloonsHotAir"/>
251      <xsd:enumeration value="basicBlackDashes"/>
252      <xsd:enumeration value="basicBlackDots"/>
253      <xsd:enumeration value="basicBlackSquares"/>
254      <xsd:enumeration value="basicThinLines"/>
255      <xsd:enumeration value="basicWhiteDashes"/>
256      <xsd:enumeration value="basicWhiteDots"/>
257      <xsd:enumeration value="basicWhiteSquares"/>
258      <xsd:enumeration value="basicWideInline"/>
259      <xsd:enumeration value="basicWideMidline"/>
260      <xsd:enumeration value="basicWideOutline"/>
261      <xsd:enumeration value="bats"/>
262      <xsd:enumeration value="birds"/>
263      <xsd:enumeration value="birdsFlight"/>
264      <xsd:enumeration value="cabins"/>
265      <xsd:enumeration value="cakeSlice"/>
266      <xsd:enumeration value="candyCorn"/>
267      <xsd:enumeration value="celticKnotwork"/>
268      <xsd:enumeration value="certificateBanner"/>
269      <xsd:enumeration value="chainLink"/>
270      <xsd:enumeration value="champagneBottle"/>
271      <xsd:enumeration value="checkedBarBlack"/>
272      <xsd:enumeration value="checkedBarColor"/>
273      <xsd:enumeration value="checkered"/>
274      <xsd:enumeration value="christmasTree"/>
275      <xsd:enumeration value="circlesLines"/>
276      <xsd:enumeration value="circlesRectangles"/>
277      <xsd:enumeration value="classicalWave"/>
278      <xsd:enumeration value="clocks"/>
279      <xsd:enumeration value="compass"/>
280      <xsd:enumeration value="confetti"/>
281      <xsd:enumeration value="confettiGrays"/>
282      <xsd:enumeration value="confettiOutline"/>
283      <xsd:enumeration value="confettiStreamers"/>
284      <xsd:enumeration value="confettiWhite"/>
285      <xsd:enumeration value="cornerTriangles"/>
286      <xsd:enumeration value="couponCutoutDashes"/>
287      <xsd:enumeration value="couponCutoutDots"/>
288      <xsd:enumeration value="crazyMaze"/>
289      <xsd:enumeration value="creaturesButterfly"/>
290      <xsd:enumeration value="creaturesFish"/>
291      <xsd:enumeration value="creaturesInsects"/>
292      <xsd:enumeration value="creaturesLadyBug"/>
293      <xsd:enumeration value="crossStitch"/>
294      <xsd:enumeration value="cup"/>
295      <xsd:enumeration value="decoArch"/>
296      <xsd:enumeration value="decoArchColor"/>
297      <xsd:enumeration value="decoBlocks"/>
298      <xsd:enumeration value="diamondsGray"/>

```



```

299     <xsd:enumeration value="doubleD"/>
300     <xsd:enumeration value="doubleDiamonds"/>
301     <xsd:enumeration value="earth1"/>
302     <xsd:enumeration value="earth2"/>
303     <xsd:enumeration value="earth3"/>
304     <xsd:enumeration value="eclipsingSquares1"/>
305     <xsd:enumeration value="eclipsingSquares2"/>
306     <xsd:enumeration value="eggsBlack"/>
307     <xsd:enumeration value="fans"/>
308     <xsd:enumeration value="film"/>
309     <xsd:enumeration value="firecrackers"/>
310     <xsd:enumeration value="flowersBlockPrint"/>
311     <xsd:enumeration value="flowersDaisies"/>
312     <xsd:enumeration value="flowersModern1"/>
313     <xsd:enumeration value="flowersModern2"/>
314     <xsd:enumeration value="flowersPansy"/>
315     <xsd:enumeration value="flowersRedRose"/>
316     <xsd:enumeration value="flowersRoses"/>
317     <xsd:enumeration value="flowersTeacup"/>
318     <xsd:enumeration value="flowersTiny"/>
319     <xsd:enumeration value="gems"/>
320     <xsd:enumeration value="gingerbreadMan"/>
321     <xsd:enumeration value="gradient"/>
322     <xsd:enumeration value="handmade1"/>
323     <xsd:enumeration value="handmade2"/>
324     <xsd:enumeration value="heartBalloon"/>
325     <xsd:enumeration value="heartGray"/>
326     <xsd:enumeration value="hearts"/>
327     <xsd:enumeration value="heebieJeebies"/>
328     <xsd:enumeration value="holly"/>
329     <xsd:enumeration value="houseFunky"/>
330     <xsd:enumeration value="hypnotic"/>
331     <xsd:enumeration value="iceCreamCones"/>
332     <xsd:enumeration value="lightBulb"/>
333     <xsd:enumeration value="lightning1"/>
334     <xsd:enumeration value="lightning2"/>
335     <xsd:enumeration value="mapPins"/>
336     <xsd:enumeration value="mapleLeaf"/>
337     <xsd:enumeration value="mapleMuffins"/>
338     <xsd:enumeration value="marquee"/>
339     <xsd:enumeration value="marqueeToothed"/>
340     <xsd:enumeration value="moons"/>
341     <xsd:enumeration value="mosaic"/>
342     <xsd:enumeration value="musicNotes"/>
343     <xsd:enumeration value="northwest"/>
344     <xsd:enumeration value="ovals"/>
345     <xsd:enumeration value="packages"/>
346     <xsd:enumeration value="palmsBlack"/>
347     <xsd:enumeration value="palmsColor"/>
348     <xsd:enumeration value="paperClips"/>
349     <xsd:enumeration value="papyrus"/>
350     <xsd:enumeration value="partyFavor"/>
351     <xsd:enumeration value="partyGlass"/>

```

```

352     <xsd:enumeration value="pencils"/>
353     <xsd:enumeration value="people"/>
354     <xsd:enumeration value="peopleWaving"/>
355     <xsd:enumeration value="peopleHats"/>
356     <xsd:enumeration value="poinsettias"/>
357     <xsd:enumeration value="postageStamp"/>
358     <xsd:enumeration value="pumpkin1"/>
359     <xsd:enumeration value="pushPinNote2"/>
360     <xsd:enumeration value="pushPinNote1"/>
361     <xsd:enumeration value="pyramids"/>
362     <xsd:enumeration value="pyramidsAbove"/>
363     <xsd:enumeration value="quadrants"/>
364     <xsd:enumeration value="rings"/>
365     <xsd:enumeration value="safari"/>
366     <xsd:enumeration value="sawtooth"/>
367     <xsd:enumeration value="sawtoothGray"/>
368     <xsd:enumeration value="scaredCat"/>
369     <xsd:enumeration value="seattle"/>
370     <xsd:enumeration value="shadowedSquares"/>
371     <xsd:enumeration value="sharksTeeth"/>
372     <xsd:enumeration value="shorebirdTracks"/>
373     <xsd:enumeration value="skyrocket"/>
374     <xsd:enumeration value="snowflakeFancy"/>
375     <xsd:enumeration value="snowflakes"/>
376     <xsd:enumeration value="sombbrero"/>
377     <xsd:enumeration value="southwest"/>
378     <xsd:enumeration value="stars"/>
379     <xsd:enumeration value="starsTop"/>
380     <xsd:enumeration value="stars3d"/>
381     <xsd:enumeration value="starsBlack"/>
382     <xsd:enumeration value="starsShadowed"/>
383     <xsd:enumeration value="sun"/>
384     <xsd:enumeration value="swirligig"/>
385     <xsd:enumeration value="tornPaper"/>
386     <xsd:enumeration value="tornPaperBlack"/>
387     <xsd:enumeration value="trees"/>
388     <xsd:enumeration value="triangleParty"/>
389     <xsd:enumeration value="triangles"/>
390     <xsd:enumeration value="triangle1"/>
391     <xsd:enumeration value="triangle2"/>
392     <xsd:enumeration value="triangleCircle1"/>
393     <xsd:enumeration value="triangleCircle2"/>
394     <xsd:enumeration value="shapes1"/>
395     <xsd:enumeration value="shapes2"/>
396     <xsd:enumeration value="twistedLines1"/>
397     <xsd:enumeration value="twistedLines2"/>
398     <xsd:enumeration value="vine"/>
399     <xsd:enumeration value="waveline"/>
400     <xsd:enumeration value="weavingAngles"/>
401     <xsd:enumeration value="weavingBraid"/>
402     <xsd:enumeration value="weavingRibbon"/>
403     <xsd:enumeration value="weavingStrips"/>
404     <xsd:enumeration value="whiteFlowers"/>

```

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405     <xsd:enumeration value="woodwork"/>
406     <xsd:enumeration value="xIllusions"/>
407     <xsd:enumeration value="zanyTriangles"/>
408     <xsd:enumeration value="zigZag"/>
409     <xsd:enumeration value="zigZagStitch"/>
410     <xsd:enumeration value="custom"/>
411 </xsd:restriction>
412 </xsd:simpleType>
413 <xsd:complexType name="CT_Border">
414     <xsd:attribute name="val" type="ST_Border" use="required"/>
415     <xsd:attribute name="color" type="ST_HexColor" use="optional"/>
416     <xsd:attribute name="themeColor" type="ST_ThemeColor" use="optional"/>
417     <xsd:attribute name="themeTint" type="ST_UcharHexNumber" use="optional"/>
418     <xsd:attribute name="themeShade" type="ST_UcharHexNumber" use="optional"/>
419     <xsd:attribute name="sz" type="ST_EighthPointMeasure" use="optional"/>
420     <xsd:attribute name="space" type="ST_PointMeasure" use="optional"/>
421     <xsd:attribute name="shadow" type="s:ST_OnOff" use="optional"/>
422     <xsd:attribute name="frame" type="s:ST_OnOff" use="optional"/>
423 </xsd:complexType>
424 <xsd:simpleType name="ST_Shd">
425     <xsd:restriction base="xsd:string">
426         <xsd:enumeration value="nil"/>
427         <xsd:enumeration value="clear"/>
428         <xsd:enumeration value="solid"/>
429         <xsd:enumeration value="horzStripe"/>
430         <xsd:enumeration value="vertStripe"/>
431         <xsd:enumeration value="reverseDiagStripe"/>
432         <xsd:enumeration value="diagStripe"/>
433         <xsd:enumeration value="horzCross"/>
434         <xsd:enumeration value="diagCross"/>
435         <xsd:enumeration value="thinHorzStripe"/>
436         <xsd:enumeration value="thinVertStripe"/>
437         <xsd:enumeration value="thinReverseDiagStripe"/>
438         <xsd:enumeration value="thinDiagStripe"/>
439         <xsd:enumeration value="thinHorzCross"/>
440         <xsd:enumeration value="thinDiagCross"/>
441         <xsd:enumeration value="pct5"/>
442         <xsd:enumeration value="pct10"/>
443         <xsd:enumeration value="pct12"/>
444         <xsd:enumeration value="pct15"/>
445         <xsd:enumeration value="pct20"/>
446         <xsd:enumeration value="pct25"/>
447         <xsd:enumeration value="pct30"/>
448         <xsd:enumeration value="pct35"/>
449         <xsd:enumeration value="pct37"/>
450         <xsd:enumeration value="pct40"/>
451         <xsd:enumeration value="pct45"/>
452         <xsd:enumeration value="pct50"/>
453         <xsd:enumeration value="pct55"/>
454         <xsd:enumeration value="pct60"/>
455         <xsd:enumeration value="pct62"/>
456         <xsd:enumeration value="pct65"/>
457         <xsd:enumeration value="pct70"/>

```

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458         <xsd:enumeration value="pct75"/>
459         <xsd:enumeration value="pct80"/>
460         <xsd:enumeration value="pct85"/>
461         <xsd:enumeration value="pct87"/>
462         <xsd:enumeration value="pct90"/>
463         <xsd:enumeration value="pct95"/>
464     </xsd:restriction>
465 </xsd:simpleType>
466 <xsd:complexType name="CT_Shdt">
467     <xsd:attribute name="val" type="ST_Shdt" use="required"/>
468     <xsd:attribute name="color" type="ST_HexColor" use="optional"/>
469     <xsd:attribute name="themeColor" type="ST_ThemeColor" use="optional"/>
470     <xsd:attribute name="themeTint" type="ST_UcharHexNumber" use="optional"/>
471     <xsd:attribute name="themeShade" type="ST_UcharHexNumber" use="optional"/>
472     <xsd:attribute name="fill" type="ST_HexColor" use="optional"/>
473     <xsd:attribute name="themeFill" type="ST_ThemeColor" use="optional"/>
474     <xsd:attribute name="themeFillTint" type="ST_UcharHexNumber" use="optional"/>
475     <xsd:attribute name="themeFillShade" type="ST_UcharHexNumber" use="optional"/>
476 </xsd:complexType>
477 <xsd:complexType name="CT_VerticalAlignRun">
478     <xsd:attribute name="val" type="s:ST_VerticalAlignRun" use="required"/>
479 </xsd:complexType>
480 <xsd:complexType name="CT_FitText">
481     <xsd:attribute name="val" type="s:ST_TwipsMeasure" use="required"/>
482     <xsd:attribute name="id" type="ST_DecimalNumber" use="optional"/>
483 </xsd:complexType>
484 <xsd:simpleType name="ST_Em">
485     <xsd:restriction base="xsd:string">
486         <xsd:enumeration value="none"/>
487         <xsd:enumeration value="dot"/>
488         <xsd:enumeration value="comma"/>
489         <xsd:enumeration value="circle"/>
490         <xsd:enumeration value="underDot"/>
491     </xsd:restriction>
492 </xsd:simpleType>
493 <xsd:complexType name="CT_Em">
494     <xsd:attribute name="val" type="ST_Em" use="required"/>
495 </xsd:complexType>
496 <xsd:complexType name="CT_Language">
497     <xsd:attribute name="val" type="s:ST_Lang" use="optional"/>
498     <xsd:attribute name="eastAsia" type="s:ST_Lang" use="optional"/>
499     <xsd:attribute name="bidi" type="s:ST_Lang" use="optional"/>
500 </xsd:complexType>
501 <xsd:simpleType name="ST_CombineBrackets">
502     <xsd:restriction base="xsd:string">
503         <xsd:enumeration value="none"/>
504         <xsd:enumeration value="round"/>
505         <xsd:enumeration value="square"/>
506         <xsd:enumeration value="angle"/>
507         <xsd:enumeration value="curly"/>
508     </xsd:restriction>
509 </xsd:simpleType>
510 <xsd:complexType name="CT_EastAsianLayout">

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511     <xsd:attribute name="id" type="ST_DecimalNumber" use="optional"/>
512     <xsd:attribute name="combine" type="s:ST_OnOff" use="optional"/>
513     <xsd:attribute name="combineBrackets" type="ST_CombineBrackets" use="optional"/>
514     <xsd:attribute name="vert" type="s:ST_OnOff" use="optional"/>
515     <xsd:attribute name="vertCompress" type="s:ST_OnOff" use="optional"/>
516 </xsd:complexType>
517 <xsd:simpleType name="ST_HeightRule">
518     <xsd:restriction base="xsd:string">
519         <xsd:enumeration value="auto"/>
520         <xsd:enumeration value="exact"/>
521         <xsd:enumeration value="atLeast"/>
522     </xsd:restriction>
523 </xsd:simpleType>
524 <xsd:simpleType name="ST_Wrap">
525     <xsd:restriction base="xsd:string">
526         <xsd:enumeration value="auto"/>
527         <xsd:enumeration value="notBeside"/>
528         <xsd:enumeration value="around"/>
529         <xsd:enumeration value="tight"/>
530         <xsd:enumeration value="through"/>
531         <xsd:enumeration value="none"/>
532     </xsd:restriction>
533 </xsd:simpleType>
534 <xsd:simpleType name="ST_VAnchor">
535     <xsd:restriction base="xsd:string">
536         <xsd:enumeration value="text"/>
537         <xsd:enumeration value="margin"/>
538         <xsd:enumeration value="page"/>
539     </xsd:restriction>
540 </xsd:simpleType>
541 <xsd:simpleType name="ST_HAnchor">
542     <xsd:restriction base="xsd:string">
543         <xsd:enumeration value="text"/>
544         <xsd:enumeration value="margin"/>
545         <xsd:enumeration value="page"/>
546     </xsd:restriction>
547 </xsd:simpleType>
548 <xsd:simpleType name="ST_DropCap">
549     <xsd:restriction base="xsd:string">
550         <xsd:enumeration value="none"/>
551         <xsd:enumeration value="drop"/>
552         <xsd:enumeration value="margin"/>
553     </xsd:restriction>
554 </xsd:simpleType>
555 <xsd:complexType name="CT_FramePr">
556     <xsd:attribute name="dropCap" type="ST_DropCap" use="optional"/>
557     <xsd:attribute name="lines" type="ST_DecimalNumber" use="optional"/>
558     <xsd:attribute name="w" type="s:ST_TwipsMeasure" use="optional"/>
559     <xsd:attribute name="h" type="s:ST_TwipsMeasure" use="optional"/>
560     <xsd:attribute name="vSpace" type="s:ST_TwipsMeasure" use="optional"/>
561     <xsd:attribute name="hSpace" type="s:ST_TwipsMeasure" use="optional"/>
562     <xsd:attribute name="wrap" type="ST_Wrap" use="optional"/>
563     <xsd:attribute name="hAnchor" type="ST_HAnchor" use="optional"/>

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564     <xsd:attribute name="vAnchor" type="ST_VAnchor" use="optional"/>
565     <xsd:attribute name="x" type="ST_SignedTwipsMeasure" use="optional"/>
566     <xsd:attribute name="xAlign" type="s:ST_XAlign" use="optional"/>
567     <xsd:attribute name="y" type="ST_SignedTwipsMeasure" use="optional"/>
568     <xsd:attribute name="yAlign" type="s:ST_YAlign" use="optional"/>
569     <xsd:attribute name="hRule" type="ST_HeightRule" use="optional"/>
570     <xsd:attribute name="anchorLock" type="s:ST_OnOff" use="optional"/>
571 </xsd:complexType>
572 <xsd:simpleType name="ST_TabJc">
573     <xsd:restriction base="xsd:string">
574         <xsd:enumeration value="clear"/>
575         <xsd:enumeration value="start"/>
576         <xsd:enumeration value="center"/>
577         <xsd:enumeration value="end"/>
578         <xsd:enumeration value="decimal"/>
579         <xsd:enumeration value="bar"/>
580         <xsd:enumeration value="num"/>
581         <xsd:enumeration value="left"/>
582         <xsd:enumeration value="right"/>
583     </xsd:restriction>
584 </xsd:simpleType>
585 <xsd:simpleType name="ST_TabTlc">
586     <xsd:restriction base="xsd:string">
587         <xsd:enumeration value="none"/>
588         <xsd:enumeration value="dot"/>
589         <xsd:enumeration value="hyphen"/>
590         <xsd:enumeration value="underscore"/>
591         <xsd:enumeration value="heavy"/>
592         <xsd:enumeration value="middleDot"/>
593     </xsd:restriction>
594 </xsd:simpleType>
595 <xsd:complexType name="CT_TabStop">
596     <xsd:attribute name="val" type="ST_TabJc" use="required"/>
597     <xsd:attribute name="leader" type="ST_TabTlc" use="optional"/>
598     <xsd:attribute name="pos" type="ST_SignedTwipsMeasure" use="required"/>
599 </xsd:complexType>
600 <xsd:simpleType name="ST_LineSpacingRule">
601     <xsd:restriction base="xsd:string">
602         <xsd:enumeration value="auto"/>
603         <xsd:enumeration value="exact"/>
604         <xsd:enumeration value="atLeast"/>
605     </xsd:restriction>
606 </xsd:simpleType>
607 <xsd:complexType name="CT_Spacing">
608     <xsd:attribute name="before" type="s:ST_TwipsMeasure" use="optional"/>
609     <xsd:attribute name="beforeLines" type="ST_DecimalNumber" use="optional"/>
610     <xsd:attribute name="beforeAutospacing" type="s:ST_OnOff" use="optional"/>
611     <xsd:attribute name="after" type="s:ST_TwipsMeasure" use="optional"/>
612     <xsd:attribute name="afterLines" type="ST_DecimalNumber" use="optional"/>
613     <xsd:attribute name="afterAutospacing" type="s:ST_OnOff" use="optional"/>
614     <xsd:attribute name="line" type="ST_SignedTwipsMeasure" use="optional"/>
615     <xsd:attribute name="lineRule" type="ST_LineSpacingRule" use="optional"/>
616 </xsd:complexType>

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617 <xsd:complexType name="CT_Ind">
618   <xsd:attribute name="start" type="ST_SignedTwipsMeasure" use="optional"/>
619   <xsd:attribute name="startChars" type="ST_DecimalNumber" use="optional"/>
620   <xsd:attribute name="end" type="ST_SignedTwipsMeasure" use="optional"/>
621   <xsd:attribute name="endChars" type="ST_DecimalNumber" use="optional"/>
622   <xsd:attribute name="left" type="ST_SignedTwipsMeasure" use="optional"/>
623   <xsd:attribute name="leftChars" type="ST_DecimalNumber" use="optional"/>
624   <xsd:attribute name="right" type="ST_SignedTwipsMeasure" use="optional"/>
625   <xsd:attribute name="rightChars" type="ST_DecimalNumber" use="optional"/>
626   <xsd:attribute name="hanging" type="s:ST_TwipsMeasure" use="optional"/>
627   <xsd:attribute name="hangingChars" type="ST_DecimalNumber" use="optional"/>
628   <xsd:attribute name="firstLine" type="s:ST_TwipsMeasure" use="optional"/>
629   <xsd:attribute name="firstLineChars" type="ST_DecimalNumber" use="optional"/>
630 </xsd:complexType>
631 <xsd:simpleType name="ST_Jc">
632   <xsd:restriction base="xsd:string">
633     <xsd:enumeration value="start"/>
634     <xsd:enumeration value="center"/>
635     <xsd:enumeration value="end"/>
636     <xsd:enumeration value="both"/>
637     <xsd:enumeration value="mediumKashida"/>
638     <xsd:enumeration value="distribute"/>
639     <xsd:enumeration value="numTab"/>
640     <xsd:enumeration value="highKashida"/>
641     <xsd:enumeration value="lowKashida"/>
642     <xsd:enumeration value="thaiDistribute"/>
643     <xsd:enumeration value="left"/>
644     <xsd:enumeration value="right"/>
645   </xsd:restriction>
646 </xsd:simpleType>
647 <xsd:simpleType name="ST_JcTable">
648   <xsd:restriction base="xsd:string">
649     <xsd:enumeration value="center"/>
650     <xsd:enumeration value="end"/>
651     <xsd:enumeration value="left"/>
652     <xsd:enumeration value="right"/>
653     <xsd:enumeration value="start"/>
654   </xsd:restriction>
655 </xsd:simpleType>
656 <xsd:complexType name="CT_Jc">
657   <xsd:attribute name="val" type="ST_Jc" use="required"/>
658 </xsd:complexType>
659 <xsd:complexType name="CT_JcTable">
660   <xsd:attribute name="val" type="ST_JcTable" use="required"/>
661 </xsd:complexType>
662 <xsd:simpleType name="ST_View">
663   <xsd:restriction base="xsd:string">
664     <xsd:enumeration value="none"/>
665     <xsd:enumeration value="print"/>
666     <xsd:enumeration value="outline"/>
667     <xsd:enumeration value="masterPages"/>
668     <xsd:enumeration value="normal"/>
669     <xsd:enumeration value="web"/>

```

```

670     </xsd:restriction>
671 </xsd:simpleType>
672 <xsd:complexType name="CT_View">
673     <xsd:attribute name="val" type="ST_View" use="required"/>
674 </xsd:complexType>
675 <xsd:simpleType name="ST_Zoom">
676     <xsd:restriction base="xsd:string">
677         <xsd:enumeration value="none"/>
678         <xsd:enumeration value="fullPage"/>
679         <xsd:enumeration value="bestFit"/>
680         <xsd:enumeration value="textFit"/>
681     </xsd:restriction>
682 </xsd:simpleType>
683 <xsd:complexType name="CT_Zoom">
684     <xsd:attribute name="val" type="ST_Zoom" use="optional"/>
685     <xsd:attribute name="percent" type="ST_DecimalNumberOrPercent" use="required"/>
686 </xsd:complexType>
687 <xsd:complexType name="CT_WritingStyle">
688     <xsd:attribute name="lang" type="s:ST_Lang" use="required"/>
689     <xsd:attribute name="vendorID" type="s:ST_String" use="required"/>
690     <xsd:attribute name="dllVersion" type="s:ST_String" use="required"/>
691     <xsd:attribute name="nlCheck" type="s:ST_OnOff" use="optional"/>
692     <xsd:attribute name="checkStyle" type="s:ST_OnOff" use="required"/>
693     <xsd:attribute name="appName" type="s:ST_String" use="required"/>
694 </xsd:complexType>
695 <xsd:simpleType name="ST_Proof">
696     <xsd:restriction base="xsd:string">
697         <xsd:enumeration value="clean"/>
698         <xsd:enumeration value="dirty"/>
699     </xsd:restriction>
700 </xsd:simpleType>
701 <xsd:complexType name="CT_Proof">
702     <xsd:attribute name="spelling" type="ST_Proof" use="optional"/>
703     <xsd:attribute name="grammar" type="ST_Proof" use="optional"/>
704 </xsd:complexType>
705 <xsd:simpleType name="ST_DocType">
706     <xsd:restriction base="xsd:string"/>
707 </xsd:simpleType>
708 <xsd:complexType name="CT_DocType">
709     <xsd:attribute name="val" type="ST_DocType" use="required"/>
710 </xsd:complexType>
711 <xsd:simpleType name="ST_DocProtect">
712     <xsd:restriction base="xsd:string">
713         <xsd:enumeration value="none"/>
714         <xsd:enumeration value="readOnly"/>
715         <xsd:enumeration value="comments"/>
716         <xsd:enumeration value="trackedChanges"/>
717         <xsd:enumeration value="forms"/>
718     </xsd:restriction>
719 </xsd:simpleType>
720 <xsd:attributeGroup name="AG_Password">
721     <xsd:attribute name="algorithmName" type="s:ST_String" use="optional"/>
722     <xsd:attribute name="hashValue" type="xsd:base64Binary" use="optional"/>

```



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723     <xsd:attribute name="saltValue" type="xsd:base64Binary" use="optional"/>
724     <xsd:attribute name="spinCount" type="ST_DecimalNumber" use="optional"/>
725 </xsd:attributeGroup>
726 <xsd:attributeGroup name="AG_TransitionalPassword">
727     <xsd:attribute name="cryptProviderType" type="s:ST_CryptProv"/>
728     <xsd:attribute name="cryptAlgorithmClass" type="s:ST_AlgorithmClass"/>
729     <xsd:attribute name="cryptAlgorithmType" type="s:ST_AlgorithmType"/>
730     <xsd:attribute name="cryptAlgorithmSid" type="ST_DecimalNumber"/>
731     <xsd:attribute name="cryptSpinCount" type="ST_DecimalNumber"/>
732     <xsd:attribute name="cryptProvider" type="s:ST_String"/>
733     <xsd:attribute name="algIdExt" type="ST_LongHexNumber"/>
734     <xsd:attribute name="algIdExtSource" type="s:ST_String"/>
735     <xsd:attribute name="cryptProviderTypeExt" type="ST_LongHexNumber"/>
736     <xsd:attribute name="cryptProviderTypeExtSource" type="s:ST_String"/>
737     <xsd:attribute name="hash" type="xsd:base64Binary"/>
738     <xsd:attribute name="salt" type="xsd:base64Binary"/>
739 </xsd:attributeGroup>
740 <xsd:complexType name="CT_DocProtect">
741     <xsd:attribute name="edit" type="ST_DocProtect" use="optional"/>
742     <xsd:attribute name="formatting" type="s:ST_OnOff" use="optional"/>
743     <xsd:attribute name="enforcement" type="s:ST_OnOff"/>
744     <xsd:attributeGroup ref="AG_Password"/>
745     <xsd:attributeGroup ref="AG_TransitionalPassword"/>
746 </xsd:complexType>
747 <xsd:simpleType name="ST_MailMergeDocType">
748     <xsd:restriction base="xsd:string">
749         <xsd:enumeration value="catalog"/>
750         <xsd:enumeration value="envelopes"/>
751         <xsd:enumeration value="mailingLabels"/>
752         <xsd:enumeration value="formLetters"/>
753         <xsd:enumeration value="email"/>
754         <xsd:enumeration value="fax"/>
755     </xsd:restriction>
756 </xsd:simpleType>
757 <xsd:complexType name="CT_MailMergeDocType">
758     <xsd:attribute name="val" type="ST_MailMergeDocType" use="required"/>
759 </xsd:complexType>
760 <xsd:simpleType name="ST_MailMergeDataType">
761     <xsd:restriction base="xsd:string"/>
762 </xsd:simpleType>
763 <xsd:complexType name="CT_MailMergeDataType">
764     <xsd:attribute name="val" type="ST_MailMergeDataType" use="required"/>
765 </xsd:complexType>
766 <xsd:simpleType name="ST_MailMergeDest">
767     <xsd:restriction base="xsd:string">
768         <xsd:enumeration value="newDocument"/>
769         <xsd:enumeration value="printer"/>
770         <xsd:enumeration value="email"/>
771         <xsd:enumeration value="fax"/>
772     </xsd:restriction>
773 </xsd:simpleType>
774 <xsd:complexType name="CT_MailMergeDest">
775     <xsd:attribute name="val" type="ST_MailMergeDest" use="required"/>

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```

776 </xsd:complexType>
777 <xsd:simpleType name="ST_MailMergeOdsoFMDFieldType">
778   <xsd:restriction base="xsd:string">
779     <xsd:enumeration value="null"/>
780     <xsd:enumeration value="dbColumn"/>
781   </xsd:restriction>
782 </xsd:simpleType>
783 <xsd:complexType name="CT_MailMergeOdsoFMDFieldType">
784   <xsd:attribute name="val" type="ST_MailMergeOdsoFMDFieldType" use="required"/>
785 </xsd:complexType>
786 <xsd:complexType name="CT_TrackChangesView">
787   <xsd:attribute name="markup" type="s:ST_OnOff" use="optional"/>
788   <xsd:attribute name="comments" type="s:ST_OnOff" use="optional"/>
789   <xsd:attribute name="insDel" type="s:ST_OnOff" use="optional"/>
790   <xsd:attribute name="formatting" type="s:ST_OnOff" use="optional"/>
791   <xsd:attribute name="inkAnnotations" type="s:ST_OnOff" use="optional"/>
792 </xsd:complexType>
793 <xsd:complexType name="CT_Kinsoku">
794   <xsd:attribute name="lang" type="s:ST_Lang" use="required"/>
795   <xsd:attribute name="val" type="s:ST_String" use="required"/>
796 </xsd:complexType>
797 <xsd:simpleType name="ST_TextDirection">
798   <xsd:restriction base="xsd:string">
799     <xsd:enumeration value="tb"/>
800     <xsd:enumeration value="rl"/>
801     <xsd:enumeration value="lr"/>
802     <xsd:enumeration value="tbV"/>
803     <xsd:enumeration value="rlV"/>
804     <xsd:enumeration value="lrV"/>
805     <xsd:enumeration value="btLr"/>
806     <xsd:enumeration value="lrTb"/>
807     <xsd:enumeration value="lrTbV"/>
808     <xsd:enumeration value="tbLrV"/>
809     <xsd:enumeration value="tbRl"/>
810     <xsd:enumeration value="tbRlV"/>
811   </xsd:restriction>
812 </xsd:simpleType>
813 <xsd:complexType name="CT_TextDirection">
814   <xsd:attribute name="val" type="ST_TextDirection" use="required"/>
815 </xsd:complexType>
816 <xsd:simpleType name="ST_TextAlignment">
817   <xsd:restriction base="xsd:string">
818     <xsd:enumeration value="top"/>
819     <xsd:enumeration value="center"/>
820     <xsd:enumeration value="baseline"/>
821     <xsd:enumeration value="bottom"/>
822     <xsd:enumeration value="auto"/>
823   </xsd:restriction>
824 </xsd:simpleType>
825 <xsd:complexType name="CT_TextAlignment">
826   <xsd:attribute name="val" type="ST_TextAlignment" use="required"/>
827 </xsd:complexType>
828 <xsd:simpleType name="ST_DisplacedByCustomXml">

```

```

829     <xsd:restriction base="xsd:string">
830         <xsd:enumeration value="next"/>
831         <xsd:enumeration value="prev"/>
832     </xsd:restriction>
833 </xsd:simpleType>
834 <xsd:simpleType name="ST_AnnotationVMerge">
835     <xsd:restriction base="xsd:string">
836         <xsd:enumeration value="cont"/>
837         <xsd:enumeration value="rest"/>
838     </xsd:restriction>
839 </xsd:simpleType>
840 <xsd:complexType name="CT_Markup">
841     <xsd:attribute name="id" type="ST_DecimalNumber" use="required"/>
842 </xsd:complexType>
843 <xsd:complexType name="CT_TrackChange">
844     <xsd:complexContent>
845         <xsd:extension base="CT_Markup">
846             <xsd:attribute name="author" type="s:ST_String" use="required"/>
847             <xsd:attribute name="date" type="ST_DateTime" use="optional"/>
848         </xsd:extension>
849     </xsd:complexContent>
850 </xsd:complexType>
851 <xsd:complexType name="CT_CellMergeTrackChange">
852     <xsd:complexContent>
853         <xsd:extension base="CT_TrackChange">
854             <xsd:attribute name="vMerge" type="ST_AnnotationVMerge" use="optional"/>
855             <xsd:attribute name="vMergeOrig" type="ST_AnnotationVMerge" use="optional"/>
856         </xsd:extension>
857     </xsd:complexContent>
858 </xsd:complexType>
859 <xsd:complexType name="CT_TrackChangeRange">
860     <xsd:complexContent>
861         <xsd:extension base="CT_TrackChange">
862             <xsd:attribute name="displacedByCustomXml" type="ST_DisplacedByCustomXml"
863                 use="optional"/>
864         </xsd:extension>
865     </xsd:complexContent>
866 </xsd:complexType>
867 <xsd:complexType name="CT_MarkupRange">
868     <xsd:complexContent>
869         <xsd:extension base="CT_Markup">
870             <xsd:attribute name="displacedByCustomXml" type="ST_DisplacedByCustomXml"
871                 use="optional"/>
872         </xsd:extension>
873     </xsd:complexContent>
874 </xsd:complexType>
875 <xsd:complexType name="CT_BookmarkRange">
876     <xsd:complexContent>
877         <xsd:extension base="CT_MarkupRange">
878             <xsd:attribute name="colFirst" type="ST_DecimalNumber" use="optional"/>
879             <xsd:attribute name="colLast" type="ST_DecimalNumber" use="optional"/>
880         </xsd:extension>
881     </xsd:complexContent>

```

```

882 </xsd:complexType>
883 <xsd:complexType name="CT_Bookmark">
884   <xsd:complexContent>
885     <xsd:extension base="CT_BookmarkRange">
886       <xsd:attribute name="name" type="s:ST_String" use="required"/>
887     </xsd:extension>
888   </xsd:complexContent>
889 </xsd:complexType>
890 <xsd:complexType name="CT_MoveBookmark">
891   <xsd:complexContent>
892     <xsd:extension base="CT_Bookmark">
893       <xsd:attribute name="author" type="s:ST_String" use="required"/>
894       <xsd:attribute name="date" type="ST_DateTime" use="required"/>
895     </xsd:extension>
896   </xsd:complexContent>
897 </xsd:complexType>
898 <xsd:complexType name="CT_Comment">
899   <xsd:complexContent>
900     <xsd:extension base="CT_TrackChange">
901       <xsd:sequence>
902         <xsd:group ref="EG_BlockLevelElts" minOccurs="0" maxOccurs="unbounded"/>
903       </xsd:sequence>
904       <xsd:attribute name="initials" type="s:ST_String" use="optional"/>
905     </xsd:extension>
906   </xsd:complexContent>
907 </xsd:complexType>
908 <xsd:complexType name="CT_TrackChangeNumbering">
909   <xsd:complexContent>
910     <xsd:extension base="CT_TrackChange">
911       <xsd:attribute name="original" type="s:ST_String" use="optional"/>
912     </xsd:extension>
913   </xsd:complexContent>
914 </xsd:complexType>
915 <xsd:complexType name="CT_TblPrExChange">
916   <xsd:complexContent>
917     <xsd:extension base="CT_TrackChange">
918       <xsd:sequence>
919         <xsd:element name="tblPrEx" type="CT_TblPrExBase" minOccurs="1"/>
920       </xsd:sequence>
921     </xsd:extension>
922   </xsd:complexContent>
923 </xsd:complexType>
924 <xsd:complexType name="CT_TcPrChange">
925   <xsd:complexContent>
926     <xsd:extension base="CT_TrackChange">
927       <xsd:sequence>
928         <xsd:element name="tcPr" type="CT_TcPrInner" minOccurs="1"/>
929       </xsd:sequence>
930     </xsd:extension>
931   </xsd:complexContent>
932 </xsd:complexType>
933 <xsd:complexType name="CT_TrPrChange">
934   <xsd:complexContent>

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```

935     <xsd:extension base="CT_TrackChange">
936         <xsd:sequence>
937             <xsd:element name="trPr" type="CT_TrPrBase" minOccurs="1"/>
938         </xsd:sequence>
939     </xsd:extension>
940 </xsd:complexContent>
941 </xsd:complexType>
942 <xsd:complexType name="CT_TblGridChange">
943     <xsd:complexContent>
944         <xsd:extension base="CT_Markup">
945             <xsd:sequence>
946                 <xsd:element name="tblGrid" type="CT_TblGridBase"/>
947             </xsd:sequence>
948         </xsd:extension>
949     </xsd:complexContent>
950 </xsd:complexType>
951 <xsd:complexType name="CT_TblPrChange">
952     <xsd:complexContent>
953         <xsd:extension base="CT_TrackChange">
954             <xsd:sequence>
955                 <xsd:element name="tblPr" type="CT_TblPrBase"/>
956             </xsd:sequence>
957         </xsd:extension>
958     </xsd:complexContent>
959 </xsd:complexType>
960 <xsd:complexType name="CT_SectPrChange">
961     <xsd:complexContent>
962         <xsd:extension base="CT_TrackChange">
963             <xsd:sequence>
964                 <xsd:element name="sectPr" type="CT_SectPrBase" minOccurs="0"/>
965             </xsd:sequence>
966         </xsd:extension>
967     </xsd:complexContent>
968 </xsd:complexType>
969 <xsd:complexType name="CT_PPrChange">
970     <xsd:complexContent>
971         <xsd:extension base="CT_TrackChange">
972             <xsd:sequence>
973                 <xsd:element name="pPr" type="CT_PPrBase" minOccurs="1"/>
974             </xsd:sequence>
975         </xsd:extension>
976     </xsd:complexContent>
977 </xsd:complexType>
978 <xsd:complexType name="CT_RPrChange">
979     <xsd:complexContent>
980         <xsd:extension base="CT_TrackChange">
981             <xsd:sequence>
982                 <xsd:element name="rPr" type="CT_RPrOriginal" minOccurs="1"/>
983             </xsd:sequence>
984         </xsd:extension>
985     </xsd:complexContent>
986 </xsd:complexType>
987 <xsd:complexType name="CT_ParaRPrChange">

```

```

988     <xsd:complexContent>
989         <xsd:extension base="CT_TrackChange">
990             <xsd:sequence>
991                 <xsd:element name="rPr" type="CT_ParaRPrOriginal" minOccurs="1"/>
992             </xsd:sequence>
993         </xsd:extension>
994     </xsd:complexContent>
995 </xsd:complexType>
996 <xsd:complexType name="CT_RunTrackChange">
997     <xsd:complexContent>
998         <xsd:extension base="CT_TrackChange">
999             <xsd:choice minOccurs="0" maxOccurs="unbounded">
1000                 <xsd:group ref="EG_ContentRunContent"/>
1001                 <xsd:group ref="m:EG_OMathMathElements"/>
1002             </xsd:choice>
1003         </xsd:extension>
1004     </xsd:complexContent>
1005 </xsd:complexType>
1006 <xsd:group name="EG_PContentMath">
1007     <xsd:choice>
1008         <xsd:group ref="EG_PContentBase" minOccurs="0" maxOccurs="unbounded" />
1009         <xsd:group ref="EG_ContentRunContentBase" minOccurs="0"
1010             maxOccurs="unbounded" />
1011     </xsd:choice>
1012 </xsd:group>
1013 <xsd:group name="EG_PContentBase">
1014     <xsd:choice>
1015         <xsd:element name="customXml" type="CT_CustomXmlRun"/>
1016         <xsd:element name="fldSimple" type="CT_SimpleField" minOccurs="0"
1017             maxOccurs="unbounded"/>
1018         <xsd:element name="hyperlink" type="CT_Hyperlink"/>
1019     </xsd:choice>
1020 </xsd:group>
1021 <xsd:group name="EG_ContentRunContentBase">
1022     <xsd:choice>
1023         <xsd:element name="smartTag" type="CT_SmartTagRun"/>
1024         <xsd:element name="sdt" type="CT_SdtRun"/>
1025         <xsd:group ref="EG_RunLevelElts" minOccurs="0" maxOccurs="unbounded" />
1026     </xsd:choice>
1027 </xsd:group>
1028 <xsd:group name="EG_CellMarkupElements">
1029     <xsd:choice>
1030         <xsd:element name="cellIns" type="CT_TrackChange" minOccurs="0"/>
1031         <xsd:element name="cellDel" type="CT_TrackChange" minOccurs="0"/>
1032         <xsd:element name="cellMerge" type="CT_CellMergeTrackChange" minOccurs="0"/>
1033     </xsd:choice>
1034 </xsd:group>
1035 <xsd:group name="EG_RangeMarkupElements">
1036     <xsd:choice>
1037         <xsd:element name="bookmarkStart" type="CT_Bookmark"/>
1038         <xsd:element name="bookmarkEnd" type="CT_MarkupRange"/>
1039         <xsd:element name="moveFromRangeStart" type="CT_MoveBookmark"/>
1040         <xsd:element name="moveFromRangeEnd" type="CT_MarkupRange"/>

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1041     <xsd:element name="moveToRangeStart" type="CT_MoveBookmark"/>
1042     <xsd:element name="moveToRangeEnd" type="CT_MarkupRange"/>
1043     <xsd:element name="commentRangeStart" type="CT_MarkupRange"/>
1044     <xsd:element name="commentRangeEnd" type="CT_MarkupRange"/>
1045     <xsd:element name="customXmlInsRangeStart" type="CT_TrackChange"/>
1046     <xsd:element name="customXmlInsRangeEnd" type="CT_Markup"/>
1047     <xsd:element name="customXmlDelRangeStart" type="CT_TrackChange"/>
1048     <xsd:element name="customXmlDelRangeEnd" type="CT_Markup"/>
1049     <xsd:element name="customXmlMoveFromRangeStart" type="CT_TrackChange"/>
1050     <xsd:element name="customXmlMoveFromRangeEnd" type="CT_Markup"/>
1051     <xsd:element name="customXmlMoveToRangeStart" type="CT_TrackChange"/>
1052     <xsd:element name="customXmlMoveToRangeEnd" type="CT_Markup"/>
1053   </xsd:choice>
1054 </xsd:group>
1055 <xsd:complexType name="CT_NumPr">
1056   <xsd:sequence>
1057     <xsd:element name="ilvl" type="CT_DecimalNumber" minOccurs="0"/>
1058     <xsd:element name="numId" type="CT_DecimalNumber" minOccurs="0"/>
1059     <xsd:element name="numberingChange" type="CT_TrackChangeNumbering" minOccurs="0"/>
1060     <xsd:element name="ins" type="CT_TrackChange" minOccurs="0"/>
1061   </xsd:sequence>
1062 </xsd:complexType>
1063 <xsd:complexType name="CT_PBdr">
1064   <xsd:sequence>
1065     <xsd:element name="top" type="CT_Border" minOccurs="0"/>
1066     <xsd:element name="left" type="CT_Border" minOccurs="0"/>
1067     <xsd:element name="bottom" type="CT_Border" minOccurs="0"/>
1068     <xsd:element name="right" type="CT_Border" minOccurs="0"/>
1069     <xsd:element name="between" type="CT_Border" minOccurs="0"/>
1070     <xsd:element name="bar" type="CT_Border" minOccurs="0"/>
1071   </xsd:sequence>
1072 </xsd:complexType>
1073 <xsd:complexType name="CT_Tabs">
1074   <xsd:sequence>
1075     <xsd:element name="tab" type="CT_TabStop" minOccurs="1" maxOccurs="unbounded"/>
1076   </xsd:sequence>
1077 </xsd:complexType>
1078 <xsd:simpleType name="ST_TextboxTightWrap">
1079   <xsd:restriction base="xsd:string">
1080     <xsd:enumeration value="none"/>
1081     <xsd:enumeration value="allLines"/>
1082     <xsd:enumeration value="firstAndLastLine"/>
1083     <xsd:enumeration value="firstLineOnly"/>
1084     <xsd:enumeration value="lastLineOnly"/>
1085   </xsd:restriction>
1086 </xsd:simpleType>
1087 <xsd:complexType name="CT_TextboxTightWrap">
1088   <xsd:attribute name="val" type="ST_TextboxTightWrap" use="required"/>
1089 </xsd:complexType>
1090 <xsd:complexType name="CT_PPr">
1091   <xsd:complexContent>
1092     <xsd:extension base="CT_PPrBase">
1093       <xsd:sequence>

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1094         <xsd:element name="rPr" type="CT_ParaRPr" minOccurs="0"/>
1095         <xsd:element name="sectPr" type="CT_SectPr" minOccurs="0"/>
1096         <xsd:element name="pPrChange" type="CT_PPrChange" minOccurs="0"/>
1097     </xsd:sequence>
1098 </xsd:extension>
1099 </xsd:complexContent>
1100 </xsd:complexType>
1101 <xsd:complexType name="CT_PPrBase">
1102     <xsd:sequence>
1103         <xsd:element name="pStyle" type="CT_String" minOccurs="0"/>
1104         <xsd:element name="keepNext" type="CT_OnOff" minOccurs="0"/>
1105         <xsd:element name="keepLines" type="CT_OnOff" minOccurs="0"/>
1106         <xsd:element name="pageBreakBefore" type="CT_OnOff" minOccurs="0"/>
1107         <xsd:element name="framePr" type="CT_FramePr" minOccurs="0"/>
1108         <xsd:element name="widowControl" type="CT_OnOff" minOccurs="0"/>
1109         <xsd:element name="numPr" type="CT_NumPr" minOccurs="0"/>
1110         <xsd:element name="suppressLineNumbers" type="CT_OnOff" minOccurs="0"/>
1111         <xsd:element name="pBdr" type="CT_PBdr" minOccurs="0"/>
1112         <xsd:element name="shd" type="CT_Shdt" minOccurs="0"/>
1113         <xsd:element name="tabs" type="CT_Tabs" minOccurs="0"/>
1114         <xsd:element name="suppressAutoHyphens" type="CT_OnOff" minOccurs="0"/>
1115         <xsd:element name="kinsoku" type="CT_OnOff" minOccurs="0"/>
1116         <xsd:element name="wordWrap" type="CT_OnOff" minOccurs="0"/>
1117         <xsd:element name="overflowPunct" type="CT_OnOff" minOccurs="0"/>
1118         <xsd:element name="topLinePunct" type="CT_OnOff" minOccurs="0"/>
1119         <xsd:element name="autoSpaceDE" type="CT_OnOff" minOccurs="0"/>
1120         <xsd:element name="autoSpaceDN" type="CT_OnOff" minOccurs="0"/>
1121         <xsd:element name="bidi" type="CT_OnOff" minOccurs="0"/>
1122         <xsd:element name="adjustRightInd" type="CT_OnOff" minOccurs="0"/>
1123         <xsd:element name="snapToGrid" type="CT_OnOff" minOccurs="0"/>
1124         <xsd:element name="spacing" type="CT_Spacing" minOccurs="0"/>
1125         <xsd:element name="ind" type="CT_Ind" minOccurs="0"/>
1126         <xsd:element name="contextualSpacing" type="CT_OnOff" minOccurs="0"/>
1127         <xsd:element name="mirrorIndents" type="CT_OnOff" minOccurs="0"/>
1128         <xsd:element name="suppressOverlap" type="CT_OnOff" minOccurs="0"/>
1129         <xsd:element name="jc" type="CT_Jc" minOccurs="0"/>
1130         <xsd:element name="textDirection" type="CT_TextDirection" minOccurs="0"/>
1131         <xsd:element name="textAlignment" type="CT_TextAlignment" minOccurs="0"/>
1132         <xsd:element name="textboxTightWrap" type="CT_TextboxTightWrap" minOccurs="0"/>
1133         <xsd:element name="outlineLvl" type="CT_DecimalNumber" minOccurs="0"/>
1134         <xsd:element name="divId" type="CT_DecimalNumber" minOccurs="0"/>
1135         <xsd:element name="cnfStyle" type="CT_Cnf" minOccurs="0" maxOccurs="1"/>
1136     </xsd:sequence>
1137 </xsd:complexType>
1138 <xsd:complexType name="CT_PPrGeneral">
1139     <xsd:complexContent>
1140         <xsd:extension base="CT_PPrBase">
1141             <xsd:sequence>
1142                 <xsd:element name="pPrChange" type="CT_PPrChange" minOccurs="0"/>
1143             </xsd:sequence>
1144         </xsd:extension>
1145     </xsd:complexContent>
1146 </xsd:complexType>

```



```

1147 <xsd:complexType name="CT_Control">
1148   <xsd:attribute name="name" type="s:ST String" use="optional"/>
1149   <xsd:attribute name="shapeid" type="s:ST String" use="optional"/>
1150   <xsd:attribute ref="r:id" use="optional"/>
1151 </xsd:complexType>
1152 <xsd:complexType name="CT_Background">
1153   <xsd:sequence>
1154     <xsd:sequence maxOccurs="unbounded">
1155       <xsd:any processContents="lax" namespace="urn:schemas-microsoft-com:vm1" minOccurs="0"
1156         maxOccurs="unbounded"/>
1157       <xsd:any processContents="lax" namespace="urn:schemas-microsoft-com:office:office"
1158         minOccurs="0" maxOccurs="unbounded"/>
1159     </xsd:sequence>
1160     <xsd:element name="drawing" type="CT_Drawing" minOccurs="0"/>
1161   </xsd:sequence>
1162   <xsd:attribute name="color" type="ST HexColor" use="optional"/>
1163   <xsd:attribute name="themeColor" type="ST ThemeColor" use="optional"/>
1164   <xsd:attribute name="themeTint" type="ST UcharHexNumber" use="optional"/>
1165   <xsd:attribute name="themeShade" type="ST UcharHexNumber" use="optional"/>
1166 </xsd:complexType>
1167 <xsd:complexType name="CT_Rel">
1168   <xsd:attribute ref="r:id" use="required"/>
1169 </xsd:complexType>
1170 <xsd:complexType name="CT_Object">
1171   <xsd:sequence>
1172     <xsd:sequence maxOccurs="unbounded">
1173       <xsd:any processContents="lax" namespace="urn:schemas-microsoft-com:vm1" minOccurs="0"
1174         maxOccurs="unbounded"/>
1175       <xsd:any processContents="lax" namespace="urn:schemas-microsoft-com:office:office"
1176         minOccurs="0" maxOccurs="unbounded"/>
1177     </xsd:sequence>
1178     <xsd:element name="drawing" type="CT_Drawing" minOccurs="0"/>
1179     <xsd:choice minOccurs="0">
1180       <xsd:element name="control" type="CT_Control"/>
1181       <xsd:element name="objectLink" type="CT_ObjectLink"/>
1182       <xsd:element name="objectEmbed" type="CT_ObjectEmbed"/>
1183       <xsd:element name="movie" type="CT_Rel"/>
1184     </xsd:choice>
1185   </xsd:sequence>
1186   <xsd:attribute name="dxaOrig" type="s:ST TwipsMeasure" use="optional"/>
1187   <xsd:attribute name="dyaOrig" type="s:ST TwipsMeasure" use="optional"/>
1188 </xsd:complexType>
1189 <xsd:complexType name="CT_Picture">
1190   <xsd:sequence>
1191     <xsd:sequence maxOccurs="unbounded">
1192       <xsd:any processContents="lax" namespace="urn:schemas-microsoft-com:vm1" minOccurs="0"
1193         maxOccurs="unbounded"/>
1194       <xsd:any processContents="lax" namespace="urn:schemas-microsoft-com:office:office"
1195         minOccurs="0" maxOccurs="unbounded"/>
1196     </xsd:sequence>
1197     <xsd:element name="movie" type="CT_Rel" minOccurs="0"/>
1198     <xsd:element name="control" type="CT_Control" minOccurs="0"/>
1199   </xsd:sequence>

```

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1200 </xsd:complexType>
1201 <xsd:complexType name="CT_ObjectEmbed">
1202   <xsd:attribute name="drawAspect" type="ST_ObjectDrawAspect" use="optional"/>
1203   <xsd:attribute ref="r:id" use="required"/>
1204   <xsd:attribute name="progId" type="s:ST_String" use="optional"/>
1205   <xsd:attribute name="shapeId" type="s:ST_String" use="optional"/>
1206   <xsd:attribute name="fieldCodes" type="s:ST_String" use="optional"/>
1207 </xsd:complexType>
1208 <xsd:simpleType name="ST_ObjectDrawAspect">
1209   <xsd:restriction base="xsd:string">
1210     <xsd:enumeration value="content"/>
1211     <xsd:enumeration value="icon"/>
1212   </xsd:restriction>
1213 </xsd:simpleType>
1214 <xsd:complexType name="CT_ObjectLink">
1215   <xsd:complexContent>
1216     <xsd:extension base="CT_ObjectEmbed">
1217       <xsd:attribute name="updateMode" type="ST_ObjectUpdateMode" use="required"/>
1218       <xsd:attribute name="lockedField" type="s:ST_OnOff" use="optional"/>
1219     </xsd:extension>
1220   </xsd:complexContent>
1221 </xsd:complexType>
1222 <xsd:simpleType name="ST_ObjectUpdateMode">
1223   <xsd:restriction base="xsd:string">
1224     <xsd:enumeration value="always"/>
1225     <xsd:enumeration value="onCall"/>
1226   </xsd:restriction>
1227 </xsd:simpleType>
1228 <xsd:complexType name="CT_Drawing">
1229   <xsd:choice minOccurs="1" maxOccurs="unbounded">
1230     <xsd:element ref="wp:anchor" minOccurs="0"/>
1231     <xsd:element ref="wp:inline" minOccurs="0"/>
1232   </xsd:choice>
1233 </xsd:complexType>
1234 <xsd:complexType name="CT_SimpleField">
1235   <xsd:sequence>
1236     <xsd:element name="fldData" type="CT_Text" minOccurs="0" maxOccurs="1"/>
1237     <xsd:group ref="EG_PContent" minOccurs="0" maxOccurs="unbounded"/>
1238   </xsd:sequence>
1239   <xsd:attribute name="instr" type="s:ST_String" use="required"/>
1240   <xsd:attribute name="fldLock" type="s:ST_OnOff"/>
1241   <xsd:attribute name="dirty" type="s:ST_OnOff"/>
1242 </xsd:complexType>
1243 <xsd:simpleType name="ST_FldCharType">
1244   <xsd:restriction base="xsd:string">
1245     <xsd:enumeration value="begin"/>
1246     <xsd:enumeration value="separate"/>
1247     <xsd:enumeration value="end"/>
1248   </xsd:restriction>
1249 </xsd:simpleType>
1250 <xsd:simpleType name="ST_InfoTextType">
1251   <xsd:restriction base="xsd:string">
1252     <xsd:enumeration value="text"/>

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1253     <xsd:enumeration value="autoText"/>
1254   </xsd:restriction>
1255 </xsd:simpleType>
1256 <xsd:simpleType name="ST_FFHelpTextVal">
1257   <xsd:restriction base="xsd:string">
1258     <xsd:maxLength value="256"/>
1259   </xsd:restriction>
1260 </xsd:simpleType>
1261 <xsd:simpleType name="ST_FFStatusTextVal">
1262   <xsd:restriction base="xsd:string">
1263     <xsd:maxLength value="140"/>
1264   </xsd:restriction>
1265 </xsd:simpleType>
1266 <xsd:simpleType name="ST_FFName">
1267   <xsd:restriction base="xsd:string">
1268     <xsd:maxLength value="65"/>
1269   </xsd:restriction>
1270 </xsd:simpleType>
1271 <xsd:simpleType name="ST_FFTextType">
1272   <xsd:restriction base="xsd:string">
1273     <xsd:enumeration value="regular"/>
1274     <xsd:enumeration value="number"/>
1275     <xsd:enumeration value="date"/>
1276     <xsd:enumeration value="currentTime"/>
1277     <xsd:enumeration value="currentDate"/>
1278     <xsd:enumeration value="calculated"/>
1279   </xsd:restriction>
1280 </xsd:simpleType>
1281 <xsd:complexType name="CT_FFTextType">
1282   <xsd:attribute name="val" type="ST_FFTextType" use="required"/>
1283 </xsd:complexType>
1284 <xsd:complexType name="CT_FFName">
1285   <xsd:attribute name="val" type="ST_FFName"/>
1286 </xsd:complexType>
1287 <xsd:complexType name="CT_FldChar">
1288   <xsd:choice>
1289     <xsd:element name="fldData" type="CT_Text" minOccurs="0" maxOccurs="1"/>
1290     <xsd:element name="ffData" type="CT_FFData" minOccurs="0" maxOccurs="1"/>
1291     <xsd:element name="numberingChange" type="CT_TrackChangeNumbering" minOccurs="0"/>
1292   </xsd:choice>
1293   <xsd:attribute name="fldCharType" type="ST_FldCharType" use="required"/>
1294   <xsd:attribute name="fldLock" type="s:ST_OnOff"/>
1295   <xsd:attribute name="dirty" type="s:ST_OnOff"/>
1296 </xsd:complexType>
1297 <xsd:complexType name="CT_Hyperlink">
1298   <xsd:group ref="EG_PContent" minOccurs="0" maxOccurs="unbounded"/>
1299   <xsd:attribute name="tgtFrame" type="s:ST_String" use="optional"/>
1300   <xsd:attribute name="tooltip" type="s:ST_String" use="optional"/>
1301   <xsd:attribute name="docLocation" type="s:ST_String" use="optional"/>
1302   <xsd:attribute name="history" type="s:ST_OnOff" use="optional"/>
1303   <xsd:attribute name="anchor" type="s:ST_String" use="optional"/>
1304   <xsd:attribute ref="r:id"/>
1305 </xsd:complexType>

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1306 <xsd:complexType name="CT_FFData">
1307   <xsd:choice maxOccurs="unbounded">
1308     <xsd:element name="name" type="CT_FFName"/>
1309     <xsd:element name="label" type="CT_DecimalNumber" minOccurs="0"/>
1310     <xsd:element name="tabIndex" type="CT_UnsignedDecimalNumber" minOccurs="0"/>
1311     <xsd:element name="enabled" type="CT_OnOff"/>
1312     <xsd:element name="calcOnExit" type="CT_OnOff"/>
1313     <xsd:element name="entryMacro" type="CT_MacroName" minOccurs="0" maxOccurs="1"/>
1314     <xsd:element name="exitMacro" type="CT_MacroName" minOccurs="0" maxOccurs="1"/>
1315     <xsd:element name="helpText" type="CT_FFHelpText" minOccurs="0" maxOccurs="1"/>
1316     <xsd:element name="statusText" type="CT_FFStatusText" minOccurs="0" maxOccurs="1"/>
1317     <xsd:choice>
1318       <xsd:element name="checkBox" type="CT_FFCheckBox"/>
1319       <xsd:element name="ddList" type="CT_FFDDList"/>
1320       <xsd:element name="textInput" type="CT_FFTextInput"/>
1321     </xsd:choice>
1322   </xsd:choice>
1323 </xsd:complexType>
1324 <xsd:complexType name="CT_FFHelpText">
1325   <xsd:attribute name="type" type="ST_InfoTextType"/>
1326   <xsd:attribute name="val" type="ST_FFHelpTextVal"/>
1327 </xsd:complexType>
1328 <xsd:complexType name="CT_FFStatusText">
1329   <xsd:attribute name="type" type="ST_InfoTextType"/>
1330   <xsd:attribute name="val" type="ST_FFStatusTextVal"/>
1331 </xsd:complexType>
1332 <xsd:complexType name="CT_FFCheckBox">
1333   <xsd:sequence>
1334     <xsd:choice>
1335       <xsd:element name="size" type="CT_HpsMeasure"/>
1336       <xsd:element name="sizeAuto" type="CT_OnOff"/>
1337     </xsd:choice>
1338     <xsd:element name="default" type="CT_OnOff" minOccurs="0"/>
1339     <xsd:element name="checked" type="CT_OnOff" minOccurs="0"/>
1340   </xsd:sequence>
1341 </xsd:complexType>
1342 <xsd:complexType name="CT_FFDDList">
1343   <xsd:sequence>
1344     <xsd:element name="result" type="CT_DecimalNumber" minOccurs="0"/>
1345     <xsd:element name="default" type="CT_DecimalNumber" minOccurs="0"/>
1346     <xsd:element name="listEntry" type="CT_String" minOccurs="0" maxOccurs="unbounded"/>
1347   </xsd:sequence>
1348 </xsd:complexType>
1349 <xsd:complexType name="CT_FFTextInput">
1350   <xsd:sequence>
1351     <xsd:element name="type" type="CT_FFTextType" minOccurs="0"/>
1352     <xsd:element name="default" type="CT_String" minOccurs="0"/>
1353     <xsd:element name="maxLength" type="CT_DecimalNumber" minOccurs="0"/>
1354     <xsd:element name="format" type="CT_String" minOccurs="0"/>
1355   </xsd:sequence>
1356 </xsd:complexType>
1357 <xsd:simpleType name="ST_SectionMark">
1358   <xsd:restriction base="xsd:string">

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1359         <xsd:enumeration value="nextPage"/>
1360         <xsd:enumeration value="nextColumn"/>
1361         <xsd:enumeration value="continuous"/>
1362         <xsd:enumeration value="evenPage"/>
1363         <xsd:enumeration value="oddPage"/>
1364     </xsd:restriction>
1365 </xsd:simpleType>
1366 <xsd:complexType name="CT_SectType">
1367     <xsd:attribute name="val" type="ST_SectionMark"/>
1368 </xsd:complexType>
1369 <xsd:complexType name="CT_PaperSource">
1370     <xsd:attribute name="first" type="ST_DecimalNumber"/>
1371     <xsd:attribute name="other" type="ST_DecimalNumber"/>
1372 </xsd:complexType>
1373 <xsd:simpleType name="ST_NumberFormat">
1374     <xsd:restriction base="xsd:string">
1375         <xsd:enumeration value="decimal"/>
1376         <xsd:enumeration value="upperRoman"/>
1377         <xsd:enumeration value="lowerRoman"/>
1378         <xsd:enumeration value="upperLetter"/>
1379         <xsd:enumeration value="lowerLetter"/>
1380         <xsd:enumeration value="ordinal"/>
1381         <xsd:enumeration value="cardinalText"/>
1382         <xsd:enumeration value="ordinalText"/>
1383         <xsd:enumeration value="hex"/>
1384         <xsd:enumeration value="chicago"/>
1385         <xsd:enumeration value="ideographDigital"/>
1386         <xsd:enumeration value="japaneseCounting"/>
1387         <xsd:enumeration value="aiueo"/>
1388         <xsd:enumeration value="iroha"/>
1389         <xsd:enumeration value="decimalFullWidth"/>
1390         <xsd:enumeration value="decimalHalfWidth"/>
1391         <xsd:enumeration value="japaneseLegal"/>
1392         <xsd:enumeration value="japaneseDigitalTenThousand"/>
1393         <xsd:enumeration value="decimalEnclosedCircle"/>
1394         <xsd:enumeration value="decimalFullWidth2"/>
1395         <xsd:enumeration value="aiueoFullWidth"/>
1396         <xsd:enumeration value="irohaFullWidth"/>
1397         <xsd:enumeration value="decimalZero"/>
1398         <xsd:enumeration value="bullet"/>
1399         <xsd:enumeration value="ganada"/>
1400         <xsd:enumeration value="chosung"/>
1401         <xsd:enumeration value="decimalEnclosedFullstop"/>
1402         <xsd:enumeration value="decimalEnclosedParen"/>
1403         <xsd:enumeration value="decimalEnclosedCircleChinese"/>
1404         <xsd:enumeration value="ideographEnclosedCircle"/>
1405         <xsd:enumeration value="ideographTraditional"/>
1406         <xsd:enumeration value="ideographZodiac"/>
1407         <xsd:enumeration value="ideographZodiacTraditional"/>
1408         <xsd:enumeration value="taiwaneseCounting"/>
1409         <xsd:enumeration value="ideographLegalTraditional"/>
1410         <xsd:enumeration value="taiwaneseCountingThousand"/>
1411         <xsd:enumeration value="taiwaneseDigital"/>

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1412     <xsd:enumeration value="chineseCounting"/>
1413     <xsd:enumeration value="chineseLegalSimplified"/>
1414     <xsd:enumeration value="chineseCountingThousand"/>
1415     <xsd:enumeration value="koreanDigital"/>
1416     <xsd:enumeration value="koreanCounting"/>
1417     <xsd:enumeration value="koreanLegal"/>
1418     <xsd:enumeration value="koreanDigital2"/>
1419     <xsd:enumeration value="vietnameseCounting"/>
1420     <xsd:enumeration value="russianLower"/>
1421     <xsd:enumeration value="russianUpper"/>
1422     <xsd:enumeration value="none"/>
1423     <xsd:enumeration value="numberInDash"/>
1424     <xsd:enumeration value="hebrew1"/>
1425     <xsd:enumeration value="hebrew2"/>
1426     <xsd:enumeration value="arabicAlpha"/>
1427     <xsd:enumeration value="arabicAbjad"/>
1428     <xsd:enumeration value="hindiVowels"/>
1429     <xsd:enumeration value="hindiConsonants"/>
1430     <xsd:enumeration value="hindiNumbers"/>
1431     <xsd:enumeration value="hindiCounting"/>
1432     <xsd:enumeration value="thaiLetters"/>
1433     <xsd:enumeration value="thaiNumbers"/>
1434     <xsd:enumeration value="thaiCounting"/>
1435     <xsd:enumeration value="bahtText"/>
1436     <xsd:enumeration value="dollarText"/>
1437     <xsd:enumeration value="custom"/>
1438   </xsd:restriction>
1439 </xsd:simpleType>
1440 <xsd:simpleType name="ST_PageOrientation">
1441   <xsd:restriction base="xsd:string">
1442     <xsd:enumeration value="portrait"/>
1443     <xsd:enumeration value="landscape"/>
1444   </xsd:restriction>
1445 </xsd:simpleType>
1446 <xsd:complexType name="CT_PageSz">
1447   <xsd:attribute name="w" type="s:ST_TwipsMeasure"/>
1448   <xsd:attribute name="h" type="s:ST_TwipsMeasure"/>
1449   <xsd:attribute name="orient" type="ST_PageOrientation" use="optional"/>
1450   <xsd:attribute name="code" type="ST_DecimalNumber" use="optional"/>
1451 </xsd:complexType>
1452 <xsd:complexType name="CT_PageMar">
1453   <xsd:attribute name="top" type="ST_SignedTwipsMeasure" use="required"/>
1454   <xsd:attribute name="right" type="s:ST_TwipsMeasure" use="required"/>
1455   <xsd:attribute name="bottom" type="ST_SignedTwipsMeasure" use="required"/>
1456   <xsd:attribute name="left" type="s:ST_TwipsMeasure" use="required"/>
1457   <xsd:attribute name="header" type="s:ST_TwipsMeasure" use="required"/>
1458   <xsd:attribute name="footer" type="s:ST_TwipsMeasure" use="required"/>
1459   <xsd:attribute name="gutter" type="s:ST_TwipsMeasure" use="required"/>
1460 </xsd:complexType>
1461 <xsd:simpleType name="ST_PageBorderZOrder">
1462   <xsd:restriction base="xsd:string">
1463     <xsd:enumeration value="front"/>
1464     <xsd:enumeration value="back"/>

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1465     </xsd:restriction>
1466 </xsd:simpleType>
1467 <xsd:simpleType name="ST_PageBorderDisplay">
1468     <xsd:restriction base="xsd:string">
1469         <xsd:enumeration value="allPages"/>
1470         <xsd:enumeration value="firstPage"/>
1471         <xsd:enumeration value="notFirstPage"/>
1472     </xsd:restriction>
1473 </xsd:simpleType>
1474 <xsd:simpleType name="ST_PageBorderOffset">
1475     <xsd:restriction base="xsd:string">
1476         <xsd:enumeration value="page"/>
1477         <xsd:enumeration value="text"/>
1478     </xsd:restriction>
1479 </xsd:simpleType>
1480 <xsd:complexType name="CT_PageBorders">
1481     <xsd:sequence>
1482         <xsd:element name="top" type="CT_TopPageBorder" minOccurs="0"/>
1483         <xsd:element name="left" type="CT_PageBorder" minOccurs="0"/>
1484         <xsd:element name="bottom" type="CT_BottomPageBorder" minOccurs="0"/>
1485         <xsd:element name="right" type="CT_PageBorder" minOccurs="0"/>
1486     </xsd:sequence>
1487     <xsd:attribute name="zOrder" type="ST_PageBorderZOrder" use="optional"/>
1488     <xsd:attribute name="display" type="ST_PageBorderDisplay" use="optional"/>
1489     <xsd:attribute name="offsetFrom" type="ST_PageBorderOffset" use="optional"/>
1490 </xsd:complexType>
1491 <xsd:complexType name="CT_PageBorder">
1492     <xsd:complexContent>
1493         <xsd:extension base="CT_Border">
1494             <xsd:attribute ref="r:id" use="optional"/>
1495         </xsd:extension>
1496     </xsd:complexContent>
1497 </xsd:complexType>
1498 <xsd:complexType name="CT_BottomPageBorder">
1499     <xsd:complexContent>
1500         <xsd:extension base="CT_PageBorder">
1501             <xsd:attribute ref="r:bottomLeft" use="optional"/>
1502             <xsd:attribute ref="r:bottomRight" use="optional"/>
1503         </xsd:extension>
1504     </xsd:complexContent>
1505 </xsd:complexType>
1506 <xsd:complexType name="CT_TopPageBorder">
1507     <xsd:complexContent>
1508         <xsd:extension base="CT_PageBorder">
1509             <xsd:attribute ref="r:topLeft" use="optional"/>
1510             <xsd:attribute ref="r:topRight" use="optional"/>
1511         </xsd:extension>
1512     </xsd:complexContent>
1513 </xsd:complexType>
1514 <xsd:simpleType name="ST_ChapterSep">
1515     <xsd:restriction base="xsd:string">
1516         <xsd:enumeration value="hyphen"/>
1517         <xsd:enumeration value="period"/>

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1518         <xsd:enumeration value="colon"/>
1519         <xsd:enumeration value="emDash"/>
1520         <xsd:enumeration value="enDash"/>
1521     </xsd:restriction>
1522 </xsd:simpleType>
1523 <xsd:simpleType name="ST_LineNumberRestart">
1524     <xsd:restriction base="xsd:string">
1525         <xsd:enumeration value="newPage"/>
1526         <xsd:enumeration value="newSection"/>
1527         <xsd:enumeration value="continuous"/>
1528     </xsd:restriction>
1529 </xsd:simpleType>
1530 <xsd:complexType name="CT_LineNumber">
1531     <xsd:attribute name="countBy" type="ST_DecimalNumber" use="optional"/>
1532     <xsd:attribute name="start" type="ST_DecimalNumber" use="optional"/>
1533     <xsd:attribute name="distance" type="s:ST_TwipsMeasure" use="optional"/>
1534     <xsd:attribute name="restart" type="ST_LineNumberRestart" use="optional"/>
1535 </xsd:complexType>
1536 <xsd:complexType name="CT_PageNumber">
1537     <xsd:attribute name="fmt" type="ST_NumberFormat" use="optional"/>
1538     <xsd:attribute name="start" type="ST_DecimalNumber" use="optional"/>
1539     <xsd:attribute name="chapStyle" type="ST_DecimalNumber" use="optional"/>
1540     <xsd:attribute name="chapSep" type="ST_ChapterSep" use="optional"/>
1541 </xsd:complexType>
1542 <xsd:complexType name="CT_Column">
1543     <xsd:attribute name="w" type="s:ST_TwipsMeasure" use="optional"/>
1544     <xsd:attribute name="space" type="s:ST_TwipsMeasure" use="optional"/>
1545 </xsd:complexType>
1546 <xsd:complexType name="CT_Columns">
1547     <xsd:sequence minOccurs="0">
1548         <xsd:element name="col" type="CT_Column" maxOccurs="45"/>
1549     </xsd:sequence>
1550     <xsd:attribute name="equalWidth" type="s:ST_OnOff" use="optional"/>
1551     <xsd:attribute name="space" type="s:ST_TwipsMeasure" use="optional"/>
1552     <xsd:attribute name="num" type="ST_DecimalNumber" use="optional"/>
1553     <xsd:attribute name="sep" type="s:ST_OnOff" use="optional"/>
1554 </xsd:complexType>
1555 <xsd:simpleType name="ST_VerticalJc">
1556     <xsd:restriction base="xsd:string">
1557         <xsd:enumeration value="top"/>
1558         <xsd:enumeration value="center"/>
1559         <xsd:enumeration value="both"/>
1560         <xsd:enumeration value="bottom"/>
1561     </xsd:restriction>
1562 </xsd:simpleType>
1563 <xsd:complexType name="CT_VerticalJc">
1564     <xsd:attribute name="val" type="ST_VerticalJc" use="required"/>
1565 </xsd:complexType>
1566 <xsd:simpleType name="ST_DocGrid">
1567     <xsd:restriction base="xsd:string">
1568         <xsd:enumeration value="default"/>
1569         <xsd:enumeration value="lines"/>
1570         <xsd:enumeration value="linesAndChars"/>

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1571     <xsd:enumeration value="snapToChars"/>
1572   </xsd:restriction>
1573 </xsd:simpleType>
1574 <xsd:complexType name="CT_DocGrid">
1575   <xsd:attribute name="type" type="ST_DocGrid"/>
1576   <xsd:attribute name="linePitch" type="ST_DecimalNumber"/>
1577   <xsd:attribute name="charSpace" type="ST_DecimalNumber"/>
1578 </xsd:complexType>
1579 <xsd:simpleType name="ST_HdrFtr">
1580   <xsd:restriction base="xsd:string">
1581     <xsd:enumeration value="even"/>
1582     <xsd:enumeration value="default"/>
1583     <xsd:enumeration value="first"/>
1584   </xsd:restriction>
1585 </xsd:simpleType>
1586 <xsd:simpleType name="ST_FtnEdn">
1587   <xsd:restriction base="xsd:string">
1588     <xsd:enumeration value="normal"/>
1589     <xsd:enumeration value="separator"/>
1590     <xsd:enumeration value="continuationSeparator"/>
1591     <xsd:enumeration value="continuationNotice"/>
1592   </xsd:restriction>
1593 </xsd:simpleType>
1594 <xsd:complexType name="CT_HdrFtrRef">
1595   <xsd:complexContent>
1596     <xsd:extension base="CT_Rel">
1597       <xsd:attribute name="type" type="ST_HdrFtr" use="required"/>
1598     </xsd:extension>
1599   </xsd:complexContent>
1600 </xsd:complexType>
1601 <xsd:group name="EG_HdrFtrReferences">
1602   <xsd:choice>
1603     <xsd:element name="headerReference" type="CT_HdrFtrRef" minOccurs="0"/>
1604     <xsd:element name="footerReference" type="CT_HdrFtrRef" minOccurs="0"/>
1605   </xsd:choice>
1606 </xsd:group>
1607 <xsd:complexType name="CT_HdrFtr">
1608   <xsd:group ref="EG_BlockLevelElts" minOccurs="1" maxOccurs="unbounded"/>
1609 </xsd:complexType>
1610 <xsd:group name="EG_SectPrContents">
1611   <xsd:sequence>
1612     <xsd:element name="footnotePr" type="CT_FtnProps" minOccurs="0"/>
1613     <xsd:element name="endnotePr" type="CT_EdnProps" minOccurs="0"/>
1614     <xsd:element name="type" type="CT_SectType" minOccurs="0"/>
1615     <xsd:element name="pgSz" type="CT_PageSz" minOccurs="0"/>
1616     <xsd:element name="pgMar" type="CT_PageMar" minOccurs="0"/>
1617     <xsd:element name="paperSrc" type="CT_PaperSource" minOccurs="0"/>
1618     <xsd:element name="pgBorders" type="CT_PageBorders" minOccurs="0"/>
1619     <xsd:element name="lnNumType" type="CT_LineNumber" minOccurs="0"/>
1620     <xsd:element name="pgNumType" type="CT_PageNumber" minOccurs="0"/>
1621     <xsd:element name="cols" type="CT_Columns" minOccurs="0"/>
1622     <xsd:element name="formProt" type="CT_OnOff" minOccurs="0"/>
1623     <xsd:element name="vAlign" type="CT_VerticalJc" minOccurs="0"/>

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1624     <xsd:element name="noEndnote" type="CT_OnOff" minOccurs="0"/>
1625     <xsd:element name="titlePg" type="CT_OnOff" minOccurs="0"/>
1626     <xsd:element name="textDirection" type="CT_TextDirection" minOccurs="0"/>
1627     <xsd:element name="bidi" type="CT_OnOff" minOccurs="0"/>
1628     <xsd:element name="rtlGutter" type="CT_OnOff" minOccurs="0"/>
1629     <xsd:element name="docGrid" type="CT_DocGrid" minOccurs="0"/>
1630     <xsd:element name="printerSettings" type="CT_Rel" minOccurs="0"/>
1631   </xsd:sequence>
1632 </xsd:group>
1633 <xsd:attributeGroup name="AG_SectPrAttributes">
1634   <xsd:attribute name="rsidRPr" type="ST_LongHexNumber"/>
1635   <xsd:attribute name="rsidDel" type="ST_LongHexNumber"/>
1636   <xsd:attribute name="rsidR" type="ST_LongHexNumber"/>
1637   <xsd:attribute name="rsidSect" type="ST_LongHexNumber"/>
1638 </xsd:attributeGroup>
1639 <xsd:complexType name="CT_SectPrBase">
1640   <xsd:sequence>
1641     <xsd:group ref="EG_SectPrContents" minOccurs="0"/>
1642   </xsd:sequence>
1643   <xsd:attributeGroup ref="AG_SectPrAttributes"/>
1644 </xsd:complexType>
1645 <xsd:complexType name="CT_SectPr">
1646   <xsd:sequence>
1647     <xsd:group ref="EG_HdrFtrReferences" minOccurs="0" maxOccurs="6"/>
1648     <xsd:group ref="EG_SectPrContents" minOccurs="0"/>
1649     <xsd:element name="sectPrChange" type="CT_SectPrChange" minOccurs="0"/>
1650   </xsd:sequence>
1651   <xsd:attributeGroup ref="AG_SectPrAttributes"/>
1652 </xsd:complexType>
1653 <xsd:simpleType name="ST_BrType">
1654   <xsd:restriction base="xsd:string">
1655     <xsd:enumeration value="page"/>
1656     <xsd:enumeration value="column"/>
1657     <xsd:enumeration value="textWrapping"/>
1658   </xsd:restriction>
1659 </xsd:simpleType>
1660 <xsd:simpleType name="ST_BrClear">
1661   <xsd:restriction base="xsd:string">
1662     <xsd:enumeration value="none"/>
1663     <xsd:enumeration value="left"/>
1664     <xsd:enumeration value="right"/>
1665     <xsd:enumeration value="all"/>
1666   </xsd:restriction>
1667 </xsd:simpleType>
1668 <xsd:complexType name="CT_Br">
1669   <xsd:attribute name="type" type="ST_BrType" use="optional"/>
1670   <xsd:attribute name="clear" type="ST_BrClear" use="optional"/>
1671 </xsd:complexType>
1672 <xsd:simpleType name="ST_PTabAlignment">
1673   <xsd:restriction base="xsd:string">
1674     <xsd:enumeration value="left"/>
1675     <xsd:enumeration value="center"/>
1676     <xsd:enumeration value="right"/>

```

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1677     </xsd:restriction>
1678 </xsd:simpleType>
1679 <xsd:simpleType name="ST_PTabRelativeTo">
1680     <xsd:restriction base="xsd:string">
1681         <xsd:enumeration value="margin"/>
1682         <xsd:enumeration value="indent"/>
1683     </xsd:restriction>
1684 </xsd:simpleType>
1685 <xsd:simpleType name="ST_PTabLeader">
1686     <xsd:restriction base="xsd:string">
1687         <xsd:enumeration value="none"/>
1688         <xsd:enumeration value="dot"/>
1689         <xsd:enumeration value="hyphen"/>
1690         <xsd:enumeration value="underscore"/>
1691         <xsd:enumeration value="middleDot"/>
1692     </xsd:restriction>
1693 </xsd:simpleType>
1694 <xsd:complexType name="CT_PTab">
1695     <xsd:attribute name="alignment" type="ST_PTabAlignment" use="required"/>
1696     <xsd:attribute name="relativeTo" type="ST_PTabRelativeTo" use="required"/>
1697     <xsd:attribute name="leader" type="ST_PTabLeader" use="required"/>
1698 </xsd:complexType>
1699 <xsd:complexType name="CT_Sym">
1700     <xsd:attribute name="font" type="s:ST_String"/>
1701     <xsd:attribute name="char" type="ST_ShortHexNumber"/>
1702 </xsd:complexType>
1703 <xsd:simpleType name="ST_ProofErr">
1704     <xsd:restriction base="xsd:string">
1705         <xsd:enumeration value="spellStart"/>
1706         <xsd:enumeration value="spellEnd"/>
1707         <xsd:enumeration value="gramStart"/>
1708         <xsd:enumeration value="gramEnd"/>
1709     </xsd:restriction>
1710 </xsd:simpleType>
1711 <xsd:complexType name="CT_ProofErr">
1712     <xsd:attribute name="type" type="ST_ProofErr" use="required"/>
1713 </xsd:complexType>
1714 <xsd:simpleType name="ST_EdGrp">
1715     <xsd:restriction base="xsd:string">
1716         <xsd:enumeration value="none"/>
1717         <xsd:enumeration value="everyone"/>
1718         <xsd:enumeration value="administrators"/>
1719         <xsd:enumeration value="contributors"/>
1720         <xsd:enumeration value="editors"/>
1721         <xsd:enumeration value="owners"/>
1722         <xsd:enumeration value="current"/>
1723     </xsd:restriction>
1724 </xsd:simpleType>
1725 <xsd:complexType name="CT_Perm">
1726     <xsd:attribute name="id" type="s:ST_String" use="required"/>
1727     <xsd:attribute name="displacedByCustomXml" type="ST_DisplacedByCustomXml" use="optional"/>
1728 </xsd:complexType>
1729 <xsd:complexType name="CT_PermStart">

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1730     <xsd:complexContent>
1731       <xsd:extension base="CT_Perm">
1732         <xsd:attribute name="edGrp" type="ST_EdGrp" use="optional"/>
1733         <xsd:attribute name="ed" type="s:ST_String" use="optional"/>
1734         <xsd:attribute name="colFirst" type="ST_DecimalNumber" use="optional"/>
1735         <xsd:attribute name="colLast" type="ST_DecimalNumber" use="optional"/>
1736       </xsd:extension>
1737     </xsd:complexContent>
1738   </xsd:complexType>
1739   <xsd:complexType name="CT_Text">
1740     <xsd:simpleContent>
1741       <xsd:extension base="s:ST_String">
1742         <xsd:attribute ref="xml:space" use="optional"/>
1743       </xsd:extension>
1744     </xsd:simpleContent>
1745   </xsd:complexType>
1746   <xsd:group name="EG_RunInnerContent">
1747     <xsd:choice>
1748       <xsd:element name="br" type="CT_Br"/>
1749       <xsd:element name="t" type="CT_Text"/>
1750       <xsd:element name="contentPart" type="CT_Rel"/>
1751       <xsd:element name="delText" type="CT_Text"/>
1752       <xsd:element name="instrText" type="CT_Text"/>
1753       <xsd:element name="delInstrText" type="CT_Text"/>
1754       <xsd:element name="noBreakHyphen" type="CT_Empty"/>
1755       <xsd:element name="softHyphen" type="CT_Empty" minOccurs="0"/>
1756       <xsd:element name="dayShort" type="CT_Empty" minOccurs="0"/>
1757       <xsd:element name="monthShort" type="CT_Empty" minOccurs="0"/>
1758       <xsd:element name="yearShort" type="CT_Empty" minOccurs="0"/>
1759       <xsd:element name="dayLong" type="CT_Empty" minOccurs="0"/>
1760       <xsd:element name="monthLong" type="CT_Empty" minOccurs="0"/>
1761       <xsd:element name="yearLong" type="CT_Empty" minOccurs="0"/>
1762       <xsd:element name="annotationRef" type="CT_Empty" minOccurs="0"/>
1763       <xsd:element name="footnoteRef" type="CT_Empty" minOccurs="0"/>
1764       <xsd:element name="endnoteRef" type="CT_Empty" minOccurs="0"/>
1765       <xsd:element name="separator" type="CT_Empty" minOccurs="0"/>
1766       <xsd:element name="continuationSeparator" type="CT_Empty" minOccurs="0"/>
1767       <xsd:element name="sym" type="CT_Sym" minOccurs="0"/>
1768       <xsd:element name="pgNum" type="CT_Empty" minOccurs="0"/>
1769       <xsd:element name="cr" type="CT_Empty" minOccurs="0"/>
1770       <xsd:element name="tab" type="CT_Empty" minOccurs="0"/>
1771       <xsd:element name="object" type="CT_Object"/>
1772       <xsd:element name="pict" type="CT_Picture"/>
1773       <xsd:element name="fldChar" type="CT_FldChar"/>
1774       <xsd:element name="ruby" type="CT_Ruby"/>
1775       <xsd:element name="footnoteReference" type="CT_FtnEdnRef"/>
1776       <xsd:element name="endnoteReference" type="CT_FtnEdnRef"/>
1777       <xsd:element name="commentReference" type="CT_Markup"/>
1778       <xsd:element name="drawing" type="CT_Drawing"/>
1779       <xsd:element name="ptab" type="CT_PTab" minOccurs="0"/>
1780       <xsd:element name="lastRenderedPageBreak" type="CT_Empty" minOccurs="0" maxOccurs="1"/>
1781     </xsd:choice>
1782   </xsd:group>

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1783 <xsd:complexType name="CT_R">
1784   <xsd:sequence>
1785     <xsd:group ref="EG_RPr" minOccurs="0"/>
1786     <xsd:group ref="EG_RunInnerContent" minOccurs="0" maxOccurs="unbounded"/>
1787   </xsd:sequence>
1788   <xsd:attribute name="rsidRPr" type="ST_LongHexNumber"/>
1789   <xsd:attribute name="rsidDel" type="ST_LongHexNumber"/>
1790   <xsd:attribute name="rsidR" type="ST_LongHexNumber"/>
1791 </xsd:complexType>
1792 <xsd:simpleType name="ST_Hint">
1793   <xsd:restriction base="xsd:string">
1794     <xsd:enumeration value="default"/>
1795     <xsd:enumeration value="eastAsia"/>
1796     <xsd:enumeration value="cs"/>
1797   </xsd:restriction>
1798 </xsd:simpleType>
1799 <xsd:simpleType name="ST_Theme">
1800   <xsd:restriction base="xsd:string">
1801     <xsd:enumeration value="majorEastAsia"/>
1802     <xsd:enumeration value="majorBidi"/>
1803     <xsd:enumeration value="majorAscii"/>
1804     <xsd:enumeration value="majorHAnsi"/>
1805     <xsd:enumeration value="minorEastAsia"/>
1806     <xsd:enumeration value="minorBidi"/>
1807     <xsd:enumeration value="minorAscii"/>
1808     <xsd:enumeration value="minorHAnsi"/>
1809   </xsd:restriction>
1810 </xsd:simpleType>
1811 <xsd:complexType name="CT_Fonts">
1812   <xsd:attribute name="hint" type="ST_Hint"/>
1813   <xsd:attribute name="ascii" type="s:ST_String"/>
1814   <xsd:attribute name="hAnsi" type="s:ST_String"/>
1815   <xsd:attribute name="eastAsia" type="s:ST_String"/>
1816   <xsd:attribute name="cs" type="s:ST_String"/>
1817   <xsd:attribute name="asciiTheme" type="ST_Theme"/>
1818   <xsd:attribute name="hAnsiTheme" type="ST_Theme"/>
1819   <xsd:attribute name="eastAsiaTheme" type="ST_Theme"/>
1820   <xsd:attribute name="cstheme" type="ST_Theme"/>
1821 </xsd:complexType>
1822 <xsd:group name="EG_RPrBase">
1823   <xsd:sequence>
1824     <xsd:element name="rStyle" type="CT_String" minOccurs="0"/>
1825     <xsd:element name="rFonts" type="CT_Fonts" minOccurs="0"/>
1826     <xsd:element name="b" type="CT_OnOff" minOccurs="0"/>
1827     <xsd:element name="bCs" type="CT_OnOff" minOccurs="0"/>
1828     <xsd:element name="i" type="CT_OnOff" minOccurs="0"/>
1829     <xsd:element name="iCs" type="CT_OnOff" minOccurs="0"/>
1830     <xsd:element name="caps" type="CT_OnOff" minOccurs="0"/>
1831     <xsd:element name="smallCaps" type="CT_OnOff" minOccurs="0"/>
1832     <xsd:element name="strike" type="CT_OnOff" minOccurs="0"/>
1833     <xsd:element name="dstrike" type="CT_OnOff" minOccurs="0"/>
1834     <xsd:element name="outline" type="CT_OnOff" minOccurs="0"/>
1835     <xsd:element name="shadow" type="CT_OnOff" minOccurs="0"/>

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1836     <xsd:element name="emboss" type="CT_OnOff" minOccurs="0"/>
1837     <xsd:element name="imprint" type="CT_OnOff" minOccurs="0"/>
1838     <xsd:element name="noProof" type="CT_OnOff" minOccurs="0"/>
1839     <xsd:element name="snapToGrid" type="CT_OnOff" minOccurs="0"/>
1840     <xsd:element name="vanish" type="CT_OnOff" minOccurs="0"/>
1841     <xsd:element name="webHidden" type="CT_OnOff" minOccurs="0"/>
1842     <xsd:element name="color" type="CT_Color" minOccurs="0"/>
1843     <xsd:element name="spacing" type="CT_SignedTwipsMeasure" minOccurs="0"/>
1844     <xsd:element name="w" type="CT_TextScale" minOccurs="0"/>
1845     <xsd:element name="kern" type="CT_HpsMeasure" minOccurs="0"/>
1846     <xsd:element name="position" type="CT_SignedHpsMeasure" minOccurs="0"/>
1847     <xsd:element name="sz" type="CT_HpsMeasure" minOccurs="0"/>
1848     <xsd:element name="szCs" type="CT_HpsMeasure" minOccurs="0"/>
1849     <xsd:element name="highlight" type="CT_Highlight" minOccurs="0"/>
1850     <xsd:element name="u" type="CT_Underline" minOccurs="0"/>
1851     <xsd:element name="effect" type="CT_TextEffect" minOccurs="0"/>
1852     <xsd:element name="bdr" type="CT_Border" minOccurs="0"/>
1853     <xsd:element name="shd" type="CT_Shadow" minOccurs="0"/>
1854     <xsd:element name="fitText" type="CT_FitText" minOccurs="0"/>
1855     <xsd:element name="vertAlign" type="CT_VerticalAlignRun" minOccurs="0"/>
1856     <xsd:element name="rtl" type="CT_OnOff" minOccurs="0"/>
1857     <xsd:element name="cs" type="CT_OnOff" minOccurs="0"/>
1858     <xsd:element name="em" type="CT_Em" minOccurs="0"/>
1859     <xsd:element name="lang" type="CT_Language" minOccurs="0"/>
1860     <xsd:element name="eastAsianLayout" type="CT_EastAsianLayout" minOccurs="0"/>
1861     <xsd:element name="specVanish" type="CT_OnOff" minOccurs="0"/>
1862     <xsd:element name="oMath" type="CT_OnOff" minOccurs="0"/>
1863   </xsd:sequence>
1864 </xsd:group>
1865 <xsd:group name="EG_RPrContent">
1866   <xsd:sequence>
1867     <xsd:group ref="EG_RPrBase" minOccurs="0"/>
1868     <xsd:element name="rPrChange" type="CT_RPrChange" minOccurs="0"/>
1869   </xsd:sequence>
1870 </xsd:group>
1871 <xsd:complexType name="CT_RPr">
1872   <xsd:sequence>
1873     <xsd:group ref="EG_RPrContent" minOccurs="0"/>
1874   </xsd:sequence>
1875 </xsd:complexType>
1876 <xsd:group name="EG_RPr">
1877   <xsd:sequence>
1878     <xsd:element name="rPr" type="CT_RPr" minOccurs="0"/>
1879   </xsd:sequence>
1880 </xsd:group>
1881 <xsd:group name="EG_RPrMath">
1882   <xsd:choice>
1883     <xsd:group ref="EG_RPr"/>
1884     <xsd:element name="ins" type="CT_MathCtrlIns"/>
1885     <xsd:element name="del" type="CT_MathCtrlDel"/>
1886   </xsd:choice>
1887 </xsd:group>
1888 <xsd:complexType name="CT_MathCtrlIns">

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1889 <xsd:complexContent>
1890 <xsd:extension base="CT_TrackChange">
1891 <xsd:choice minOccurs="0">
1892 <xsd:element name="del" type="CT_RPrChange" minOccurs="1"/>
1893 <xsd:element name="rPr" type="CT_RPr" minOccurs="1"/>
1894 </xsd:choice>
1895 </xsd:extension>
1896 </xsd:complexContent>
1897 </xsd:complexType>
1898 <xsd:complexType name="CT_MathCtrlDel">
1899 <xsd:complexContent>
1900 <xsd:extension base="CT_TrackChange">
1901 <xsd:choice minOccurs="0">
1902 <xsd:element name="rPr" type="CT_RPr" minOccurs="1"/>
1903 </xsd:choice>
1904 </xsd:extension>
1905 </xsd:complexContent>
1906 </xsd:complexType>
1907 <xsd:complexType name="CT_RPrOriginal">
1908 <xsd:sequence>
1909 <xsd:group ref="EG_RPrBase" minOccurs="0" maxOccurs="unbounded"/>
1910 </xsd:sequence>
1911 </xsd:complexType>
1912 <xsd:complexType name="CT_ParaRPrOriginal">
1913 <xsd:sequence>
1914 <xsd:group ref="EG_ParaRPrTrackChanges" minOccurs="0"/>
1915 <xsd:group ref="EG_RPrBase" minOccurs="0" maxOccurs="unbounded"/>
1916 </xsd:sequence>
1917 </xsd:complexType>
1918 <xsd:complexType name="CT_ParaRPr">
1919 <xsd:sequence>
1920 <xsd:group ref="EG_ParaRPrTrackChanges" minOccurs="0"/>
1921 <xsd:group ref="EG_RPrBase" minOccurs="0"/>
1922 <xsd:element name="rPrChange" type="CT_ParaRPrChange" minOccurs="0"/>
1923 </xsd:sequence>
1924 </xsd:complexType>
1925 <xsd:group name="EG_ParaRPrTrackChanges">
1926 <xsd:sequence>
1927 <xsd:element name="ins" type="CT_TrackChange" minOccurs="0"/>
1928 <xsd:element name="del" type="CT_TrackChange" minOccurs="0"/>
1929 <xsd:element name="moveFrom" type="CT_TrackChange" minOccurs="0"/>
1930 <xsd:element name="moveTo" type="CT_TrackChange" minOccurs="0"/>
1931 </xsd:sequence>
1932 </xsd:group>
1933 <xsd:complexType name="CT_AltChunk">
1934 <xsd:sequence>
1935 <xsd:element name="altChunkPr" type="CT_AltChunkPr" minOccurs="0" maxOccurs="1"/>
1936 </xsd:sequence>
1937 <xsd:attribute ref="r:id" use="optional"/>
1938 </xsd:complexType>
1939 <xsd:complexType name="CT_AltChunkPr">
1940 <xsd:sequence>
1941 <xsd:element name="matchSrc" type="CT_OnOff" minOccurs="0" maxOccurs="1"/>

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1942     </xsd:sequence>
1943 </xsd:complexType>
1944 <xsd:simpleType name="ST_RubyAlign">
1945     <xsd:restriction base="xsd:string">
1946         <xsd:enumeration value="center"/>
1947         <xsd:enumeration value="distributeLetter"/>
1948         <xsd:enumeration value="distributeSpace"/>
1949         <xsd:enumeration value="left"/>
1950         <xsd:enumeration value="right"/>
1951         <xsd:enumeration value="rightVertical"/>
1952     </xsd:restriction>
1953 </xsd:simpleType>
1954 <xsd:complexType name="CT_RubyAlign">
1955     <xsd:attribute name="val" type="ST_RubyAlign" use="required"/>
1956 </xsd:complexType>
1957 <xsd:complexType name="CT_RubyPr">
1958     <xsd:sequence>
1959         <xsd:element name="rubyAlign" type="CT_RubyAlign"/>
1960         <xsd:element name="hps" type="CT_HpsMeasure"/>
1961         <xsd:element name="hpsRaise" type="CT_HpsMeasure"/>
1962         <xsd:element name="hpsBaseText" type="CT_HpsMeasure"/>
1963         <xsd:element name="lid" type="CT_Lang"/>
1964         <xsd:element name="dirty" type="CT_OnOff" minOccurs="0"/>
1965     </xsd:sequence>
1966 </xsd:complexType>
1967 <xsd:group name="EG_RubyContent">
1968     <xsd:choice>
1969         <xsd:element name="r" type="CT_R"/>
1970         <xsd:group ref="EG_RunLevelElts" minOccurs="0" maxOccurs="unbounded"/>
1971     </xsd:choice>
1972 </xsd:group>
1973 <xsd:complexType name="CT_RubyContent">
1974     <xsd:group ref="EG_RubyContent" minOccurs="0" maxOccurs="unbounded"/>
1975 </xsd:complexType>
1976 <xsd:complexType name="CT_Ruby">
1977     <xsd:sequence>
1978         <xsd:element name="rubyPr" type="CT_RubyPr"/>
1979         <xsd:element name="rt" type="CT_RubyContent"/>
1980         <xsd:element name="rubyBase" type="CT_RubyContent"/>
1981     </xsd:sequence>
1982 </xsd:complexType>
1983 <xsd:simpleType name="ST_Lock">
1984     <xsd:restriction base="xsd:string">
1985         <xsd:enumeration value="sdtLocked"/>
1986         <xsd:enumeration value="contentLocked"/>
1987         <xsd:enumeration value="unlocked"/>
1988         <xsd:enumeration value="sdtContentLocked"/>
1989     </xsd:restriction>
1990 </xsd:simpleType>
1991 <xsd:complexType name="CT_Lock">
1992     <xsd:attribute name="val" type="ST_Lock"/>
1993 </xsd:complexType>
1994 <xsd:complexType name="CT_SdtListItem">

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1995     <xsd:attribute name="displayText" type="s:ST String"/>
1996     <xsd:attribute name="value" type="s:ST String"/>
1997 </xsd:complexType>
1998 <xsd:simpleType name="ST_SdtDateMappingType">
1999     <xsd:restriction base="xsd:string">
2000         <xsd:enumeration value="text"/>
2001         <xsd:enumeration value="date"/>
2002         <xsd:enumeration value="dateTime"/>
2003     </xsd:restriction>
2004 </xsd:simpleType>
2005 <xsd:complexType name="CT_SdtDateMappingType">
2006     <xsd:attribute name="val" type="ST_SdtDateMappingType"/>
2007 </xsd:complexType>
2008 <xsd:complexType name="CT_CalendarType">
2009     <xsd:attribute name="val" type="s:ST_CalendarType"/>
2010 </xsd:complexType>
2011 <xsd:complexType name="CT_SdtDate">
2012     <xsd:sequence>
2013         <xsd:element name="dateFormat" type="CT String" minOccurs="0"/>
2014         <xsd:element name="lid" type="CT Lang" minOccurs="0"/>
2015         <xsd:element name="storeMappedDataAs" type="CT_SdtDateMappingType" minOccurs="0"/>
2016         <xsd:element name="calendar" type="CT_CalendarType" minOccurs="0"/>
2017     </xsd:sequence>
2018     <xsd:attribute name="fullDate" type="ST DateTime" use="optional"/>
2019 </xsd:complexType>
2020 <xsd:complexType name="CT_SdtComboBox">
2021     <xsd:sequence>
2022         <xsd:element name="listItem" type="CT_SdtListItem" minOccurs="0" maxOccurs="unbounded"/>
2023     </xsd:sequence>
2024     <xsd:attribute name="lastValue" type="s:ST String" use="optional"/>
2025 </xsd:complexType>
2026 <xsd:complexType name="CT_SdtDocPart">
2027     <xsd:sequence>
2028         <xsd:element name="docPartGallery" type="CT String" minOccurs="0"/>
2029         <xsd:element name="docPartCategory" type="CT String" minOccurs="0"/>
2030         <xsd:element name="docPartUnique" type="CT OnOff" minOccurs="0"/>
2031     </xsd:sequence>
2032 </xsd:complexType>
2033 <xsd:complexType name="CT_SdtDropDownList">
2034     <xsd:sequence>
2035         <xsd:element name="listItem" type="CT_SdtListItem" minOccurs="0" maxOccurs="unbounded"/>
2036     </xsd:sequence>
2037     <xsd:attribute name="lastValue" type="s:ST String" use="optional"/>
2038 </xsd:complexType>
2039 <xsd:complexType name="CT_Placeholder">
2040     <xsd:sequence>
2041         <xsd:element name="docPart" type="CT String"/>
2042     </xsd:sequence>
2043 </xsd:complexType>
2044 <xsd:complexType name="CT_SdtText">
2045     <xsd:attribute name="multiLine" type="s:ST OnOff"/>
2046 </xsd:complexType>
2047 <xsd:complexType name="CT_DataBinding">

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2048     <xsd:attribute name="prefixMappings" type="s:ST_String"/>
2049     <xsd:attribute name="xpath" type="s:ST_String" use="required"/>
2050     <xsd:attribute name="storeItemID" type="s:ST_String" use="required"/>
2051 </xsd:complexType>
2052 <xsd:complexType name="CT_SdtPr">
2053     <xsd:choice maxOccurs="unbounded">
2054         <xsd:element name="rPr" type="CT_RPr" minOccurs="0"/>
2055         <xsd:element name="alias" type="CT_String" minOccurs="0"/>
2056         <xsd:element name="label" type="CT_DecimalNumber" minOccurs="0"/>
2057         <xsd:element name="tabIndex" type="CT_UnsignedDecimalNumber" minOccurs="0"/>
2058         <xsd:element name="lock" type="CT_Lock" minOccurs="0"/>
2059         <xsd:element name="placeholder" type="CT_Placeholder" minOccurs="0"/>
2060         <xsd:element name="showingPlcHdr" type="CT_OnOff" minOccurs="0"/>
2061         <xsd:element name="dataBinding" type="CT_DataBinding" minOccurs="0"/>
2062         <xsd:element name="temporary" type="CT_OnOff" minOccurs="0"/>
2063         <xsd:element name="id" type="CT_DecimalNumber" minOccurs="0"/>
2064         <xsd:element name="tag" type="CT_String" minOccurs="0"/>
2065         <xsd:choice minOccurs="0" maxOccurs="1">
2066             <xsd:element name="equation" type="CT_Empty"/>
2067             <xsd:element name="comboBox" type="CT_SdtComboBox"/>
2068             <xsd:element name="date" type="CT_SdtDate"/>
2069             <xsd:element name="docPartObj" type="CT_SdtDocPart"/>
2070             <xsd:element name="docPartList" type="CT_SdtDocPart"/>
2071             <xsd:element name="dropDownList" type="CT_SdtDropDownList"/>
2072             <xsd:element name="picture" type="CT_Empty"/>
2073             <xsd:element name="richText" type="CT_Empty"/>
2074             <xsd:element name="text" type="CT_SdtText"/>
2075             <xsd:element name="citation" type="CT_Empty"/>
2076             <xsd:element name="group" type="CT_Empty"/>
2077             <xsd:element name="bibliography" type="CT_Empty"/>
2078         </xsd:choice>
2079     </xsd:choice>
2080 </xsd:complexType>
2081 <xsd:complexType name="CT_SdtEndPr">
2082     <xsd:choice maxOccurs="unbounded">
2083         <xsd:element name="rPr" type="CT_RPr" minOccurs="0"/>
2084     </xsd:choice>
2085 </xsd:complexType>
2086 <xsd:group name="EG_ContentRunContent">
2087     <xsd:choice>
2088         <xsd:element name="customXml" type="CT_CustomXmlRun"/>
2089         <xsd:element name="smartTag" type="CT_SmartTagRun"/>
2090         <xsd:element name="sdt" type="CT_SdtRun"/>
2091         <xsd:element name="dir" type="CT_DirContentRun"/>
2092         <xsd:element name="bdo" type="CT_BdoContentRun"/>
2093         <xsd:element name="r" type="CT_R"/>
2094         <xsd:group ref="EG_RunLevelElts" minOccurs="0" maxOccurs="unbounded"/>
2095     </xsd:choice>
2096 </xsd:group>
2097 <xsd:complexType name="CT_DirContentRun">
2098     <xsd:group ref="EG_PContent" minOccurs="0" maxOccurs="unbounded"/>
2099     <xsd:attribute name="val" type="ST_Direction" use="optional"/>
2100 </xsd:complexType>

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2101 <xsd:complexType name="CT_BdoContentRun">
2102   <xsd:group ref="EG_PContent" minOccurs="0" maxOccurs="unbounded"/>
2103   <xsd:attribute name="val" type="ST_Direction" use="optional"/>
2104 </xsd:complexType>
2105 <xsd:simpleType name="ST_Direction">
2106   <xsd:restriction base="xsd:string">
2107     <xsd:enumeration value="ltr"/>
2108     <xsd:enumeration value="rtl"/>
2109   </xsd:restriction>
2110 </xsd:simpleType>
2111 <xsd:complexType name="CT_SdtContentRun">
2112   <xsd:group ref="EG_PContent" minOccurs="0" maxOccurs="unbounded"/>
2113 </xsd:complexType>
2114 <xsd:group name="EG_ContentBlockContent">
2115   <xsd:choice>
2116     <xsd:element name="customXml" type="CT_CustomXmlBlock"/>
2117     <xsd:element name="sdt" type="CT_SdtBlock"/>
2118     <xsd:element name="p" type="CT_P" minOccurs="0" maxOccurs="unbounded"/>
2119     <xsd:element name="tbl" type="CT_Tbl" minOccurs="0" maxOccurs="unbounded"/>
2120     <xsd:group ref="EG_RunLevelElts" minOccurs="0" maxOccurs="unbounded"/>
2121   </xsd:choice>
2122 </xsd:group>
2123 <xsd:complexType name="CT_SdtContentBlock">
2124   <xsd:group ref="EG_ContentBlockContent" minOccurs="0" maxOccurs="unbounded"/>
2125 </xsd:complexType>
2126 <xsd:group name="EG_ContentRowContent">
2127   <xsd:choice>
2128     <xsd:element name="tr" type="CT_Row" minOccurs="0" maxOccurs="unbounded"/>
2129     <xsd:element name="customXml" type="CT_CustomXmlRow"/>
2130     <xsd:element name="sdt" type="CT_SdtRow"/>
2131     <xsd:group ref="EG_RunLevelElts" minOccurs="0" maxOccurs="unbounded"/>
2132   </xsd:choice>
2133 </xsd:group>
2134 <xsd:complexType name="CT_SdtContentRow">
2135   <xsd:group ref="EG_ContentRowContent" minOccurs="0" maxOccurs="unbounded"/>
2136 </xsd:complexType>
2137 <xsd:group name="EG_ContentCellContent">
2138   <xsd:choice>
2139     <xsd:element name="tc" type="CT_Tc" minOccurs="0" maxOccurs="unbounded"/>
2140     <xsd:element name="customXml" type="CT_CustomXmlCell"/>
2141     <xsd:element name="sdt" type="CT_SdtCell"/>
2142     <xsd:group ref="EG_RunLevelElts" minOccurs="0" maxOccurs="unbounded"/>
2143   </xsd:choice>
2144 </xsd:group>
2145 <xsd:complexType name="CT_SdtContentCell">
2146   <xsd:group ref="EG_ContentCellContent" minOccurs="0" maxOccurs="unbounded"/>
2147 </xsd:complexType>
2148 <xsd:complexType name="CT_SdtBlock">
2149   <xsd:sequence>
2150     <xsd:element name="sdtPr" type="CT_SdtPr" minOccurs="0" maxOccurs="1"/>
2151     <xsd:element name="sdtEndPr" type="CT_SdtEndPr" minOccurs="0" maxOccurs="1"/>
2152     <xsd:element name="sdtContent" type="CT_SdtContentBlock" minOccurs="0" maxOccurs="1"/>
2153   </xsd:sequence>

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2154 </xsd:complexType>
2155 <xsd:complexType name="CT_SdtRun">
2156   <xsd:sequence>
2157     <xsd:element name="sdtPr" type="CT_SdtPr" minOccurs="0" maxOccurs="1"/>
2158     <xsd:element name="sdtEndPr" type="CT_SdtEndPr" minOccurs="0" maxOccurs="1"/>
2159     <xsd:element name="sdtContent" type="CT_SdtContentRun" minOccurs="0" maxOccurs="1"/>
2160   </xsd:sequence>
2161 </xsd:complexType>
2162 <xsd:complexType name="CT_SdtCell">
2163   <xsd:sequence>
2164     <xsd:element name="sdtPr" type="CT_SdtPr" minOccurs="0" maxOccurs="1"/>
2165     <xsd:element name="sdtEndPr" type="CT_SdtEndPr" minOccurs="0" maxOccurs="1"/>
2166     <xsd:element name="sdtContent" type="CT_SdtContentCell" minOccurs="0" maxOccurs="1"/>
2167   </xsd:sequence>
2168 </xsd:complexType>
2169 <xsd:complexType name="CT_SdtRow">
2170   <xsd:sequence>
2171     <xsd:element name="sdtPr" type="CT_SdtPr" minOccurs="0" maxOccurs="1"/>
2172     <xsd:element name="sdtEndPr" type="CT_SdtEndPr" minOccurs="0" maxOccurs="1"/>
2173     <xsd:element name="sdtContent" type="CT_SdtContentRow" minOccurs="0" maxOccurs="1"/>
2174   </xsd:sequence>
2175 </xsd:complexType>
2176 <xsd:complexType name="CT_Attr">
2177   <xsd:attribute name="uri" type="s:ST String"/>
2178   <xsd:attribute name="name" type="s:ST String" use="required"/>
2179   <xsd:attribute name="val" type="s:ST String" use="required"/>
2180 </xsd:complexType>
2181 <xsd:complexType name="CT_CustomXmlRun">
2182   <xsd:sequence>
2183     <xsd:element name="customXmlPr" type="CT_CustomXmlPr" minOccurs="0" maxOccurs="1"/>
2184     <xsd:group ref="EG_PContent" minOccurs="0" maxOccurs="unbounded"/>
2185   </xsd:sequence>
2186   <xsd:attribute name="uri" type="s:ST String"/>
2187   <xsd:attribute name="element" type="s:ST String" use="required"/>
2188 </xsd:complexType>
2189 <xsd:complexType name="CT_SmartTagRun">
2190   <xsd:sequence>
2191     <xsd:element name="smartTagPr" type="CT_SmartTagPr" minOccurs="0" maxOccurs="1"/>
2192     <xsd:group ref="EG_PContent" minOccurs="0" maxOccurs="unbounded"/>
2193   </xsd:sequence>
2194   <xsd:attribute name="uri" type="s:ST String"/>
2195   <xsd:attribute name="element" type="s:ST String" use="required"/>
2196 </xsd:complexType>
2197 <xsd:complexType name="CT_CustomXmlBlock">
2198   <xsd:sequence>
2199     <xsd:element name="customXmlPr" type="CT_CustomXmlPr" minOccurs="0" maxOccurs="1"/>
2200     <xsd:group ref="EG_ContentBlockContent" minOccurs="0" maxOccurs="unbounded"/>
2201   </xsd:sequence>
2202   <xsd:attribute name="uri" type="s:ST String"/>
2203   <xsd:attribute name="element" type="s:ST String" use="required"/>
2204 </xsd:complexType>
2205 <xsd:complexType name="CT_CustomXmlPr">
2206   <xsd:sequence>

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2207     <xsd:element name="placeholder" type="CT_String" minOccurs="0"/>
2208     <xsd:element name="attr" type="CT_Attr" minOccurs="0" maxOccurs="unbounded"/>
2209   </xsd:sequence>
2210 </xsd:complexType>
2211 <xsd:complexType name="CT_CustomXmlRow">
2212   <xsd:sequence>
2213     <xsd:element name="customXmlPr" type="CT_CustomXmlPr" minOccurs="0" maxOccurs="1"/>
2214     <xsd:group ref="EG_ContentRowContent" minOccurs="0" maxOccurs="unbounded"/>
2215   </xsd:sequence>
2216   <xsd:attribute name="uri" type="s:ST_String"/>
2217   <xsd:attribute name="element" type="s:ST_String" use="required"/>
2218 </xsd:complexType>
2219 <xsd:complexType name="CT_CustomXmlCell">
2220   <xsd:sequence>
2221     <xsd:element name="customXmlPr" type="CT_CustomXmlPr" minOccurs="0" maxOccurs="1"/>
2222     <xsd:group ref="EG_ContentCellContent" minOccurs="0" maxOccurs="unbounded"/>
2223   </xsd:sequence>
2224   <xsd:attribute name="uri" type="s:ST_String"/>
2225   <xsd:attribute name="element" type="s:ST_String" use="required"/>
2226 </xsd:complexType>
2227 <xsd:complexType name="CT_SmartTagPr">
2228   <xsd:sequence>
2229     <xsd:element name="attr" type="CT_Attr" minOccurs="0" maxOccurs="unbounded"/>
2230   </xsd:sequence>
2231 </xsd:complexType>
2232 <xsd:group name="EG_PContent">
2233   <xsd:choice>
2234     <xsd:group ref="EG_ContentRunContent" minOccurs="0" maxOccurs="unbounded"/>
2235     <xsd:element name="fldSimple" type="CT_SimpleField" minOccurs="0" maxOccurs="unbounded"/>
2236     <xsd:element name="hyperlink" type="CT_Hyperlink"/>
2237     <xsd:element name="subDoc" type="CT_Rel"/>
2238   </xsd:choice>
2239 </xsd:group>
2240 <xsd:complexType name="CT_P">
2241   <xsd:sequence>
2242     <xsd:element name="pPr" type="CT_PPr" minOccurs="0"/>
2243     <xsd:group ref="EG_PContent" minOccurs="0" maxOccurs="unbounded"/>
2244   </xsd:sequence>
2245   <xsd:attribute name="rsidRPr" type="ST_LongHexNumber"/>
2246   <xsd:attribute name="rsidR" type="ST_LongHexNumber"/>
2247   <xsd:attribute name="rsidDel" type="ST_LongHexNumber"/>
2248   <xsd:attribute name="rsidP" type="ST_LongHexNumber"/>
2249   <xsd:attribute name="rsidRDefault" type="ST_LongHexNumber"/>
2250 </xsd:complexType>
2251 <xsd:simpleType name="ST_TblWidth">
2252   <xsd:restriction base="xsd:string">
2253     <xsd:enumeration value="nil"/>
2254     <xsd:enumeration value="pct"/>
2255     <xsd:enumeration value="dxa"/>
2256     <xsd:enumeration value="auto"/>
2257   </xsd:restriction>
2258 </xsd:simpleType>
2259 <xsd:complexType name="CT_Height">

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2260     <xsd:attribute name="val" type="s:ST_TwipsMeasure"/>
2261     <xsd:attribute name="hRule" type="ST_HeightRule"/>
2262 </xsd:complexType>
2263 <xsd:simpleType name="ST_MeasurementOrPercent">
2264     <xsd:union memberTypes="ST_DecimalNumberOrPercent s:ST_UniversalMeasure"/>
2265 </xsd:simpleType>
2266 <xsd:complexType name="CT_TblWidth">
2267     <xsd:attribute name="w" type="ST_MeasurementOrPercent"/>
2268     <xsd:attribute name="type" type="ST_TblWidth"/>
2269 </xsd:complexType>
2270 <xsd:complexType name="CT_TblGridCol">
2271     <xsd:attribute name="w" type="s:ST_TwipsMeasure"/>
2272 </xsd:complexType>
2273 <xsd:complexType name="CT_TblGridBase">
2274     <xsd:sequence>
2275         <xsd:element name="gridCol" type="CT_TblGridCol" minOccurs="0" maxOccurs="unbounded"/>
2276     </xsd:sequence>
2277 </xsd:complexType>
2278 <xsd:complexType name="CT_TblGrid">
2279     <xsd:complexContent>
2280         <xsd:extension base="CT_TblGridBase">
2281             <xsd:sequence>
2282                 <xsd:element name="tblGridChange" type="CT_TblGridChange" minOccurs="0"/>
2283             </xsd:sequence>
2284         </xsd:extension>
2285     </xsd:complexContent>
2286 </xsd:complexType>
2287 <xsd:complexType name="CT_TcBorders">
2288     <xsd:sequence>
2289         <xsd:element name="top" type="CT_Border" minOccurs="0"/>
2290         <xsd:element name="start" type="CT_Border" minOccurs="0"/>
2291         <xsd:element name="left" type="CT_Border" minOccurs="0"/>
2292         <xsd:element name="bottom" type="CT_Border" minOccurs="0"/>
2293         <xsd:element name="end" type="CT_Border" minOccurs="0"/>
2294         <xsd:element name="right" type="CT_Border" minOccurs="0"/>
2295         <xsd:element name="insideH" type="CT_Border" minOccurs="0"/>
2296         <xsd:element name="insideV" type="CT_Border" minOccurs="0"/>
2297         <xsd:element name="tl2br" type="CT_Border" minOccurs="0"/>
2298         <xsd:element name="tr2bl" type="CT_Border" minOccurs="0"/>
2299     </xsd:sequence>
2300 </xsd:complexType>
2301 <xsd:complexType name="CT_TcMar">
2302     <xsd:sequence>
2303         <xsd:element name="top" type="CT_TblWidth" minOccurs="0" maxOccurs="1"/>
2304         <xsd:element name="start" type="CT_TblWidth" minOccurs="0" maxOccurs="1"/>
2305         <xsd:element name="left" type="CT_TblWidth" minOccurs="0"/>
2306         <xsd:element name="bottom" type="CT_TblWidth" minOccurs="0" maxOccurs="1"/>
2307         <xsd:element name="end" type="CT_TblWidth" minOccurs="0" maxOccurs="1"/>
2308         <xsd:element name="right" type="CT_TblWidth" minOccurs="0"/>
2309     </xsd:sequence>
2310 </xsd:complexType>
2311 <xsd:simpleType name="ST_Merge">
2312     <xsd:restriction base="xsd:string">

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2313         <xsd:enumeration value="continue"/>
2314         <xsd:enumeration value="restart"/>
2315     </xsd:restriction>
2316 </xsd:simpleType>
2317 <xsd:complexType name="CT_VMerge">
2318     <xsd:attribute name="val" type="ST_Merge"/>
2319 </xsd:complexType>
2320 <xsd:complexType name="CT_HMerge">
2321     <xsd:attribute name="val" type="ST_Merge"/>
2322 </xsd:complexType>
2323 <xsd:complexType name="CT_TcPrBase">
2324     <xsd:sequence>
2325         <xsd:element name="cnfStyle" type="CT_Cnf" minOccurs="0" maxOccurs="1"/>
2326         <xsd:element name="tcW" type="CT_TblWidth" minOccurs="0" maxOccurs="1"/>
2327         <xsd:element name="gridSpan" type="CT_DecimalNumber" minOccurs="0"/>
2328         <xsd:element name="hMerge" type="CT_HMerge" minOccurs="0"/>
2329         <xsd:element name="vMerge" type="CT_VMerge" minOccurs="0"/>
2330         <xsd:element name="tcBorders" type="CT_TcBorders" minOccurs="0" maxOccurs="1"/>
2331         <xsd:element name="shd" type="CT_Shdt" minOccurs="0"/>
2332         <xsd:element name="noWrap" type="CT_OnOff" minOccurs="0"/>
2333         <xsd:element name="tcMar" type="CT_TcMar" minOccurs="0" maxOccurs="1"/>
2334         <xsd:element name="textDirection" type="CT_TextDirection" minOccurs="0" maxOccurs="1"/>
2335         <xsd:element name="tcFitText" type="CT_OnOff" minOccurs="0" maxOccurs="1"/>
2336         <xsd:element name="vAlign" type="CT_VerticalJc" minOccurs="0"/>
2337         <xsd:element name="hideMark" type="CT_OnOff" minOccurs="0"/>
2338         <xsd:element name="headers" type="CT_Headers" minOccurs="0"/>
2339     </xsd:sequence>
2340 </xsd:complexType>
2341 <xsd:complexType name="CT_TcPr">
2342     <xsd:complexContent>
2343         <xsd:extension base="CT_TcPrInner">
2344             <xsd:sequence>
2345                 <xsd:element name="tcPrChange" type="CT_TcPrChange" minOccurs="0"/>
2346             </xsd:sequence>
2347         </xsd:extension>
2348     </xsd:complexContent>
2349 </xsd:complexType>
2350 <xsd:complexType name="CT_TcPrInner">
2351     <xsd:complexContent>
2352         <xsd:extension base="CT_TcPrBase">
2353             <xsd:sequence>
2354                 <xsd:group ref="EG_CellMarkupElements" minOccurs="0" maxOccurs="1"/>
2355             </xsd:sequence>
2356         </xsd:extension>
2357     </xsd:complexContent>
2358 </xsd:complexType>
2359 <xsd:complexType name="CT_Tc">
2360     <xsd:sequence>
2361         <xsd:element name="tcPr" type="CT_TcPr" minOccurs="0" maxOccurs="1"/>
2362         <xsd:group ref="EG_BlockLevelElts" minOccurs="1" maxOccurs="unbounded"/>
2363     </xsd:sequence>
2364     <xsd:attribute name="id" type="s:ST_String" use="optional"/>
2365 </xsd:complexType>

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2366 <xsd:simpleType name="ST_Cnf">
2367   <xsd:restriction base="xsd:string">
2368     <xsd:length value="12"/>
2369     <xsd:pattern value="[01]*"/>
2370   </xsd:restriction>
2371 </xsd:simpleType>
2372 <xsd:complexType name="CT_Cnf">
2373   <xsd:attribute name="val" type="ST_Cnf"/>
2374   <xsd:attribute name="firstRow" type="s:ST_OnOff"/>
2375   <xsd:attribute name="lastRow" type="s:ST_OnOff"/>
2376   <xsd:attribute name="firstColumn" type="s:ST_OnOff"/>
2377   <xsd:attribute name="lastColumn" type="s:ST_OnOff"/>
2378   <xsd:attribute name="oddVBand" type="s:ST_OnOff"/>
2379   <xsd:attribute name="evenVBand" type="s:ST_OnOff"/>
2380   <xsd:attribute name="oddHBand" type="s:ST_OnOff"/>
2381   <xsd:attribute name="evenHBand" type="s:ST_OnOff"/>
2382   <xsd:attribute name="firstRowFirstColumn" type="s:ST_OnOff"/>
2383   <xsd:attribute name="firstRowLastColumn" type="s:ST_OnOff"/>
2384   <xsd:attribute name="lastRowFirstColumn" type="s:ST_OnOff"/>
2385   <xsd:attribute name="lastRowLastColumn" type="s:ST_OnOff"/>
2386 </xsd:complexType>
2387 <xsd:complexType name="CT_Headers">
2388   <xsd:sequence minOccurs="0" maxOccurs="unbounded">
2389     <xsd:element name="header" type="CT_String"/>
2390   </xsd:sequence>
2391 </xsd:complexType>
2392 <xsd:complexType name="CT_TrPrBase">
2393   <xsd:choice maxOccurs="unbounded">
2394     <xsd:element name="cnfStyle" type="CT_Cnf" minOccurs="0" maxOccurs="1"/>
2395     <xsd:element name="divId" type="CT_DecimalNumber" minOccurs="0"/>
2396     <xsd:element name="gridBefore" type="CT_DecimalNumber" minOccurs="0"/>
2397     <xsd:element name="gridAfter" type="CT_DecimalNumber" minOccurs="0"/>
2398     <xsd:element name="wBefore" type="CT_TblWidth" minOccurs="0" maxOccurs="1"/>
2399     <xsd:element name="wAfter" type="CT_TblWidth" minOccurs="0" maxOccurs="1"/>
2400     <xsd:element name="cantSplit" type="CT_OnOff" minOccurs="0"/>
2401     <xsd:element name="trHeight" type="CT_Height" minOccurs="0"/>
2402     <xsd:element name="tblHeader" type="CT_OnOff" minOccurs="0"/>
2403     <xsd:element name="tblCellSpacing" type="CT_TblWidth" minOccurs="0" maxOccurs="1"/>
2404     <xsd:element name="jc" type="CT_JcTable" minOccurs="0" maxOccurs="1"/>
2405     <xsd:element name="hidden" type="CT_OnOff" minOccurs="0"/>
2406   </xsd:choice>
2407 </xsd:complexType>
2408 <xsd:complexType name="CT_TrPr">
2409   <xsd:complexContent>
2410     <xsd:extension base="CT_TrPrBase">
2411       <xsd:sequence>
2412         <xsd:element name="ins" type="CT_TrackChange" minOccurs="0"/>
2413         <xsd:element name="del" type="CT_TrackChange" minOccurs="0"/>
2414         <xsd:element name="trPrChange" type="CT_TrPrChange" minOccurs="0"/>
2415       </xsd:sequence>
2416     </xsd:extension>
2417   </xsd:complexContent>
2418 </xsd:complexType>

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2419 <xsd:complexType name="CT_Row">
2420   <xsd:sequence>
2421     <xsd:element name="tblPrEx" type="CT_TblPrEx" minOccurs="0" maxOccurs="1"/>
2422     <xsd:element name="trPr" type="CT_TrPr" minOccurs="0" maxOccurs="1"/>
2423     <xsd:group ref="EG_ContentCellContent" minOccurs="0" maxOccurs="unbounded"/>
2424   </xsd:sequence>
2425   <xsd:attribute name="rsidRPr" type="ST_LongHexNumber"/>
2426   <xsd:attribute name="rsidR" type="ST_LongHexNumber"/>
2427   <xsd:attribute name="rsidDel" type="ST_LongHexNumber"/>
2428   <xsd:attribute name="rsidTr" type="ST_LongHexNumber"/>
2429 </xsd:complexType>
2430 <xsd:simpleType name="ST_TblLayoutType">
2431   <xsd:restriction base="xsd:string">
2432     <xsd:enumeration value="fixed"/>
2433     <xsd:enumeration value="autofit"/>
2434   </xsd:restriction>
2435 </xsd:simpleType>
2436 <xsd:complexType name="CT_TblLayoutType">
2437   <xsd:attribute name="type" type="ST_TblLayoutType"/>
2438 </xsd:complexType>
2439 <xsd:simpleType name="ST_TblOverlap">
2440   <xsd:restriction base="xsd:string">
2441     <xsd:enumeration value="never"/>
2442     <xsd:enumeration value="overlap"/>
2443   </xsd:restriction>
2444 </xsd:simpleType>
2445 <xsd:complexType name="CT_TblOverlap">
2446   <xsd:attribute name="val" type="ST_TblOverlap" use="required"/>
2447 </xsd:complexType>
2448 <xsd:complexType name="CT_TblPPr">
2449   <xsd:attribute name="leftFromText" type="s:ST_TwipsMeasure"/>
2450   <xsd:attribute name="rightFromText" type="s:ST_TwipsMeasure"/>
2451   <xsd:attribute name="topFromText" type="s:ST_TwipsMeasure"/>
2452   <xsd:attribute name="bottomFromText" type="s:ST_TwipsMeasure"/>
2453   <xsd:attribute name="vertAnchor" type="ST_VAnchor"/>
2454   <xsd:attribute name="horzAnchor" type="ST_HAnchor"/>
2455   <xsd:attribute name="tblpXSpec" type="s:ST_XAlign"/>
2456   <xsd:attribute name="tblpX" type="ST_SignedTwipsMeasure"/>
2457   <xsd:attribute name="tblpYSpec" type="s:ST_YAlign"/>
2458   <xsd:attribute name="tblpY" type="ST_SignedTwipsMeasure"/>
2459 </xsd:complexType>
2460 <xsd:complexType name="CT_TblCellMar">
2461   <xsd:sequence>
2462     <xsd:element name="top" type="CT_TblWidth" minOccurs="0" maxOccurs="1"/>
2463     <xsd:element name="start" type="CT_TblWidth" minOccurs="0" maxOccurs="1"/>
2464     <xsd:element name="left" type="CT_TblWidth" minOccurs="0"/>
2465     <xsd:element name="bottom" type="CT_TblWidth" minOccurs="0" maxOccurs="1"/>
2466     <xsd:element name="end" type="CT_TblWidth" minOccurs="0" maxOccurs="1"/>
2467     <xsd:element name="right" type="CT_TblWidth" minOccurs="0"/>
2468   </xsd:sequence>
2469 </xsd:complexType>
2470 <xsd:complexType name="CT_TblBorders">
2471   <xsd:sequence>

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2472     <xsd:element name="top" type="CT_Border" minOccurs="0"/>
2473     <xsd:element name="start" type="CT_Border" minOccurs="0"/>
2474     <xsd:element name="left" type="CT_Border" minOccurs="0"/>
2475     <xsd:element name="bottom" type="CT_Border" minOccurs="0"/>
2476     <xsd:element name="end" type="CT_Border" minOccurs="0"/>
2477     <xsd:element name="right" type="CT_Border" minOccurs="0"/>
2478     <xsd:element name="insideH" type="CT_Border" minOccurs="0"/>
2479     <xsd:element name="insideV" type="CT_Border" minOccurs="0"/>
2480   </xsd:sequence>
2481 </xsd:complexType>
2482 <xsd:complexType name="CT_TblPrBase">
2483   <xsd:sequence>
2484     <xsd:element name="tblStyle" type="CT_String" minOccurs="0"/>
2485     <xsd:element name="tblPr" type="CT_TblPr" minOccurs="0" maxOccurs="1"/>
2486     <xsd:element name="tblOverlap" type="CT_TblOverlap" minOccurs="0" maxOccurs="1"/>
2487     <xsd:element name="bidiVisual" type="CT_OnOff" minOccurs="0" maxOccurs="1"/>
2488     <xsd:element name="tblStyleRowBandSize" type="CT_DecimalNumber" minOccurs="0"
2489       maxOccurs="1"/>
2490     <xsd:element name="tblStyleColBandSize" type="CT_DecimalNumber" minOccurs="0"
2491       maxOccurs="1"/>
2492     <xsd:element name="tblW" type="CT_TblWidth" minOccurs="0" maxOccurs="1"/>
2493     <xsd:element name="jc" type="CT_JcTable" minOccurs="0" maxOccurs="1"/>
2494     <xsd:element name="tblCellSpacing" type="CT_TblWidth" minOccurs="0" maxOccurs="1"/>
2495     <xsd:element name="tblInd" type="CT_TblWidth" minOccurs="0" maxOccurs="1"/>
2496     <xsd:element name="tblBorders" type="CT_TblBorders" minOccurs="0" maxOccurs="1"/>
2497     <xsd:element name="shd" type="CT_Shd" minOccurs="0" maxOccurs="1"/>
2498     <xsd:element name="tblLayout" type="CT_TblLayoutType" minOccurs="0" maxOccurs="1"/>
2499     <xsd:element name="tblCellMar" type="CT_TblCellMar" minOccurs="0" maxOccurs="1"/>
2500     <xsd:element name="tblLook" type="CT_TblLook" minOccurs="0" maxOccurs="1"/>
2501     <xsd:element name="tblCaption" type="CT_String" minOccurs="0" maxOccurs="1"/>
2502     <xsd:element name="tblDescription" type="CT_String" minOccurs="0" maxOccurs="1"/>
2503   </xsd:sequence>
2504 </xsd:complexType>
2505 <xsd:complexType name="CT_TblPr">
2506   <xsd:complexContent>
2507     <xsd:extension base="CT_TblPrBase">
2508       <xsd:sequence>
2509         <xsd:element name="tblPrChange" type="CT_TblPrChange" minOccurs="0"/>
2510       </xsd:sequence>
2511     </xsd:extension>
2512   </xsd:complexContent>
2513 </xsd:complexType>
2514 <xsd:complexType name="CT_TblPrExBase">
2515   <xsd:sequence>
2516     <xsd:element name="tblW" type="CT_TblWidth" minOccurs="0" maxOccurs="1"/>
2517     <xsd:element name="jc" type="CT_JcTable" minOccurs="0" maxOccurs="1"/>
2518     <xsd:element name="tblCellSpacing" type="CT_TblWidth" minOccurs="0" maxOccurs="1"/>
2519     <xsd:element name="tblInd" type="CT_TblWidth" minOccurs="0" maxOccurs="1"/>
2520     <xsd:element name="tblBorders" type="CT_TblBorders" minOccurs="0" maxOccurs="1"/>
2521     <xsd:element name="shd" type="CT_Shd" minOccurs="0" maxOccurs="1"/>
2522     <xsd:element name="tblLayout" type="CT_TblLayoutType" minOccurs="0" maxOccurs="1"/>
2523     <xsd:element name="tblCellMar" type="CT_TblCellMar" minOccurs="0" maxOccurs="1"/>
2524     <xsd:element name="tblLook" type="CT_TblLook" minOccurs="0" maxOccurs="1"/>

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2525     </xsd:sequence>
2526 </xsd:complexType>
2527 <xsd:complexType name="CT_TblPrEx">
2528     <xsd:complexContent>
2529         <xsd:extension base="CT_TblPrExBase">
2530             <xsd:sequence>
2531                 <xsd:element name="tblPrExChange" type="CT_TblPrExChange" minOccurs="0"/>
2532             </xsd:sequence>
2533         </xsd:extension>
2534     </xsd:complexContent>
2535 </xsd:complexType>
2536 <xsd:complexType name="CT_Tbl">
2537     <xsd:sequence>
2538         <xsd:group ref="EG_RangeMarkupElements" minOccurs="0" maxOccurs="unbounded"/>
2539         <xsd:element name="tblPr" type="CT_TblPr"/>
2540         <xsd:element name="tblGrid" type="CT_TblGrid"/>
2541         <xsd:group ref="EG_ContentRowContent" minOccurs="0" maxOccurs="unbounded"/>
2542     </xsd:sequence>
2543 </xsd:complexType>
2544 <xsd:complexType name="CT_TblLook">
2545     <xsd:attribute name="firstRow" type="s:ST_OnOff"/>
2546     <xsd:attribute name="lastRow" type="s:ST_OnOff"/>
2547     <xsd:attribute name="firstColumn" type="s:ST_OnOff"/>
2548     <xsd:attribute name="lastColumn" type="s:ST_OnOff"/>
2549     <xsd:attribute name="noHBand" type="s:ST_OnOff"/>
2550     <xsd:attribute name="noVBand" type="s:ST_OnOff"/>
2551     <xsd:attribute name="val" type="ST_ShortHexNumber"/>
2552 </xsd:complexType>
2553 <xsd:simpleType name="ST_FtnPos">
2554     <xsd:restriction base="xsd:string">
2555         <xsd:enumeration value="pageBottom"/>
2556         <xsd:enumeration value="beneathText"/>
2557         <xsd:enumeration value="sectEnd"/>
2558         <xsd:enumeration value="docEnd"/>
2559     </xsd:restriction>
2560 </xsd:simpleType>
2561 <xsd:complexType name="CT_FtnPos">
2562     <xsd:attribute name="val" type="ST_FtnPos" use="required"/>
2563 </xsd:complexType>
2564 <xsd:simpleType name="ST_EdnPos">
2565     <xsd:restriction base="xsd:string">
2566         <xsd:enumeration value="sectEnd"/>
2567         <xsd:enumeration value="docEnd"/>
2568     </xsd:restriction>
2569 </xsd:simpleType>
2570 <xsd:complexType name="CT_EdnPos">
2571     <xsd:attribute name="val" type="ST_EdnPos" use="required"/>
2572 </xsd:complexType>
2573 <xsd:complexType name="CT_NumFmt">
2574     <xsd:attribute name="val" type="ST_NumberFormat" use="required"/>
2575     <xsd:attribute name="format" type="s:ST_String" use="optional"/>
2576 </xsd:complexType>
2577 <xsd:simpleType name="ST_RestartNumber">

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2578     <xsd:restriction base="xsd:string">
2579         <xsd:enumeration value="continuous"/>
2580         <xsd:enumeration value="eachSect"/>
2581         <xsd:enumeration value="eachPage"/>
2582     </xsd:restriction>
2583 </xsd:simpleType>
2584 <xsd:complexType name="CT_NumRestart">
2585     <xsd:attribute name="val" type="ST_RestartNumber" use="required"/>
2586 </xsd:complexType>
2587 <xsd:complexType name="CT_FtnEdnRef">
2588     <xsd:attribute name="customMarkFollows" type="s:ST_OnOff" use="optional"/>
2589     <xsd:attribute name="id" use="required" type="ST_DecimalNumber"/>
2590 </xsd:complexType>
2591 <xsd:complexType name="CT_FtnEdnSepRef">
2592     <xsd:attribute name="id" type="ST_DecimalNumber" use="required"/>
2593 </xsd:complexType>
2594 <xsd:complexType name="CT_FtnEdn">
2595     <xsd:sequence>
2596         <xsd:group ref="EG_BlockLevelElts" minOccurs="1" maxOccurs="unbounded"/>
2597     </xsd:sequence>
2598     <xsd:attribute name="type" type="ST_FtnEdn" use="optional"/>
2599     <xsd:attribute name="id" type="ST_DecimalNumber" use="required"/>
2600 </xsd:complexType>
2601 <xsd:group name="EG_FtnEdnNumProps">
2602     <xsd:sequence>
2603         <xsd:element name="numStart" type="CT_DecimalNumber" minOccurs="0"/>
2604         <xsd:element name="numRestart" type="CT_NumRestart" minOccurs="0"/>
2605     </xsd:sequence>
2606 </xsd:group>
2607 <xsd:complexType name="CT_FtnProps">
2608     <xsd:sequence>
2609         <xsd:element name="pos" type="CT_FtnPos" minOccurs="0"/>
2610         <xsd:element name="numFmt" type="CT_NumFmt" minOccurs="0"/>
2611         <xsd:group ref="EG_FtnEdnNumProps" minOccurs="0"/>
2612     </xsd:sequence>
2613 </xsd:complexType>
2614 <xsd:complexType name="CT_EdnProps">
2615     <xsd:sequence>
2616         <xsd:element name="pos" type="CT_EdnPos" minOccurs="0"/>
2617         <xsd:element name="numFmt" type="CT_NumFmt" minOccurs="0"/>
2618         <xsd:group ref="EG_FtnEdnNumProps" minOccurs="0"/>
2619     </xsd:sequence>
2620 </xsd:complexType>
2621 <xsd:complexType name="CT_FtnDocProps">
2622     <xsd:complexContent>
2623         <xsd:extension base="CT_FtnProps">
2624             <xsd:sequence>
2625                 <xsd:element name="footnote" type="CT_FtnEdnSepRef" minOccurs="0" maxOccurs="3"/>
2626             </xsd:sequence>
2627         </xsd:extension>
2628     </xsd:complexContent>
2629 </xsd:complexType>
2630 <xsd:complexType name="CT_EdnDocProps">

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2631     <xsd:complexContent>
2632         <xsd:extension base="CT_EdnProps">
2633             <xsd:sequence>
2634                 <xsd:element name="endnote" type="CT_FtnEdnSepRef" minOccurs="0" maxOccurs="3"/>
2635             </xsd:sequence>
2636         </xsd:extension>
2637     </xsd:complexContent>
2638 </xsd:complexType>
2639 <xsd:complexType name="CT_RecipientData">
2640     <xsd:sequence>
2641         <xsd:element name="active" type="CT_OnOff" minOccurs="0"/>
2642         <xsd:element name="column" type="CT_DecimalNumber" minOccurs="1"/>
2643         <xsd:element name="uniqueTag" type="CT_Base64Binary" minOccurs="1"/>
2644     </xsd:sequence>
2645 </xsd:complexType>
2646 <xsd:complexType name="CT_Base64Binary">
2647     <xsd:attribute name="val" type="xsd:base64Binary" use="required">
2648     </xsd:attribute>
2649 </xsd:complexType>
2650 <xsd:complexType name="CT_Recipients">
2651     <xsd:sequence>
2652         <xsd:element name="recipientData" type="CT_RecipientData" minOccurs="1"
2653             maxOccurs="unbounded"/>
2654     </xsd:sequence>
2655 </xsd:complexType>
2656 <xsd:element name="recipients" type="CT_Recipients"/>
2657 <xsd:complexType name="CT_OdsoFieldMapData">
2658     <xsd:sequence>
2659         <xsd:element name="type" type="CT_MailMergeOdsoFMDFieldType" minOccurs="0"/>
2660         <xsd:element name="name" type="CT_String" minOccurs="0"/>
2661         <xsd:element name="mappedName" type="CT_String" minOccurs="0"/>
2662         <xsd:element name="column" type="CT_DecimalNumber" minOccurs="0"/>
2663         <xsd:element name="lid" type="CT_Lang" minOccurs="0"/>
2664         <xsd:element name="dynamicAddress" type="CT_OnOff" minOccurs="0"/>
2665     </xsd:sequence>
2666 </xsd:complexType>
2667 <xsd:simpleType name="ST_MailMergeSourceType">
2668     <xsd:restriction base="xsd:string">
2669         <xsd:enumeration value="database"/>
2670         <xsd:enumeration value="addressBook"/>
2671         <xsd:enumeration value="document1"/>
2672         <xsd:enumeration value="document2"/>
2673         <xsd:enumeration value="text"/>
2674         <xsd:enumeration value="email"/>
2675         <xsd:enumeration value="native"/>
2676         <xsd:enumeration value="legacy"/>
2677         <xsd:enumeration value="master"/>
2678     </xsd:restriction>
2679 </xsd:simpleType>
2680 <xsd:complexType name="CT_MailMergeSourceType">
2681     <xsd:attribute name="val" use="required" type="ST_MailMergeSourceType"/>
2682 </xsd:complexType>
2683 <xsd:complexType name="CT_Odso">

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2684     <xsd:sequence>
2685         <xsd:element name="udl" type="CT_String" minOccurs="0"/>
2686         <xsd:element name="table" type="CT_String" minOccurs="0"/>
2687         <xsd:element name="src" type="CT_Rel" minOccurs="0"/>
2688         <xsd:element name="colDelim" type="CT_DecimalNumber" minOccurs="0"/>
2689         <xsd:element name="type" type="CT_MailMergeSourceType" minOccurs="0"/>
2690         <xsd:element name="fHdr" type="CT_OnOff" minOccurs="0"/>
2691         <xsd:element name="fieldMapData" type="CT_OdsoFieldMapData" minOccurs="0"
2692             maxOccurs="unbounded"/>
2693         <xsd:element name="recipientData" type="CT_Rel" minOccurs="0" maxOccurs="unbounded"/>
2694     </xsd:sequence>
2695 </xsd:complexType>
2696 <xsd:complexType name="CT_MailMerge">
2697     <xsd:sequence>
2698         <xsd:element name="mainDocumentType" type="CT_MailMergeDocType" minOccurs="1"/>
2699         <xsd:element name="linkToQuery" type="CT_OnOff" minOccurs="0"/>
2700         <xsd:element name="dataType" type="CT_MailMergeDataType" minOccurs="1"/>
2701         <xsd:element name="connectString" type="CT_String" minOccurs="0"/>
2702         <xsd:element name="query" type="CT_String" minOccurs="0"/>
2703         <xsd:element name="dataSource" type="CT_Rel" minOccurs="0"/>
2704         <xsd:element name="headerSource" type="CT_Rel" minOccurs="0"/>
2705         <xsd:element name="doNotSuppressBlankLines" type="CT_OnOff" minOccurs="0"/>
2706         <xsd:element name="destination" type="CT_MailMergeDest" minOccurs="0"/>
2707         <xsd:element name="addressFieldName" type="CT_String" minOccurs="0"/>
2708         <xsd:element name="mailSubject" type="CT_String" minOccurs="0"/>
2709         <xsd:element name="mailAsAttachment" type="CT_OnOff" minOccurs="0"/>
2710         <xsd:element name="viewMergedData" type="CT_OnOff" minOccurs="0"/>
2711         <xsd:element name="activeRecord" type="CT_DecimalNumber" minOccurs="0"/>
2712         <xsd:element name="checkErrors" type="CT_DecimalNumber" minOccurs="0"/>
2713         <xsd:element name="odso" type="CT_Odso" minOccurs="0"/>
2714     </xsd:sequence>
2715 </xsd:complexType>
2716 <xsd:simpleType name="ST_TargetScreenSz">
2717     <xsd:restriction base="xsd:string">
2718         <xsd:enumeration value="544x376"/>
2719         <xsd:enumeration value="640x480"/>
2720         <xsd:enumeration value="720x512"/>
2721         <xsd:enumeration value="800x600"/>
2722         <xsd:enumeration value="1024x768"/>
2723         <xsd:enumeration value="1152x882"/>
2724         <xsd:enumeration value="1152x900"/>
2725         <xsd:enumeration value="1280x1024"/>
2726         <xsd:enumeration value="1600x1200"/>
2727         <xsd:enumeration value="1800x1440"/>
2728         <xsd:enumeration value="1920x1200"/>
2729     </xsd:restriction>
2730 </xsd:simpleType>
2731 <xsd:complexType name="CT_TargetScreenSz">
2732     <xsd:attribute name="val" type="ST_TargetScreenSz" use="required"/>
2733 </xsd:complexType>
2734 <xsd:complexType name="CT_Compat">
2735     <xsd:sequence>
2736         <xsd:element name="useSingleBorderforContiguousCells" type="CT_OnOff" minOccurs="0"/>

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2737 <xsd:element name="wpJustification" type="CT_OnOff" minOccurs="0"/>
2738 <xsd:element name="noTabHangInd" type="CT_OnOff" minOccurs="0"/>
2739 <xsd:element name="noLeading" type="CT_OnOff" minOccurs="0"/>
2740 <xsd:element name="spaceForUL" type="CT_OnOff" minOccurs="0"/>
2741 <xsd:element name="noColumnBalance" type="CT_OnOff" minOccurs="0"/>
2742 <xsd:element name="balanceSingleByteDoubleByteWidth" type="CT_OnOff" minOccurs="0"/>
2743 <xsd:element name="noExtraLineSpacing" type="CT_OnOff" minOccurs="0"/>
2744 <xsd:element name="doNotLeaveBackslashAlone" type="CT_OnOff" minOccurs="0"/>
2745 <xsd:element name="ulTrailSpace" type="CT_OnOff" minOccurs="0"/>
2746 <xsd:element name="doNotExpandShiftReturn" type="CT_OnOff" minOccurs="0"/>
2747 <xsd:element name="spacingInWholePoints" type="CT_OnOff" minOccurs="0"/>
2748 <xsd:element name="lineWrapLikeWord6" type="CT_OnOff" minOccurs="0"/>
2749 <xsd:element name="printBodyTextBeforeHeader" type="CT_OnOff" minOccurs="0"/>
2750 <xsd:element name="printColBlack" type="CT_OnOff" minOccurs="0"/>
2751 <xsd:element name="wpSpaceWidth" type="CT_OnOff" minOccurs="0"/>
2752 <xsd:element name="showBreaksInFrames" type="CT_OnOff" minOccurs="0"/>
2753 <xsd:element name="subFontBySize" type="CT_OnOff" minOccurs="0"/>
2754 <xsd:element name="suppressBottomSpacing" type="CT_OnOff" minOccurs="0"/>
2755 <xsd:element name="suppressTopSpacing" type="CT_OnOff" minOccurs="0"/>
2756 <xsd:element name="suppressSpacingAtTopOfPage" type="CT_OnOff" minOccurs="0"/>
2757 <xsd:element name="suppressTopSpacingWP" type="CT_OnOff" minOccurs="0"/>
2758 <xsd:element name="suppressSpBfAAfterPgBrk" type="CT_OnOff" minOccurs="0"/>
2759 <xsd:element name="swapBordersFacingPages" type="CT_OnOff" minOccurs="0"/>
2760 <xsd:element name="convMailMergeEsc" type="CT_OnOff" minOccurs="0"/>
2761 <xsd:element name="truncateFontHeightsLikeWP6" type="CT_OnOff" minOccurs="0"/>
2762 <xsd:element name="mwSmallCaps" type="CT_OnOff" minOccurs="0"/>
2763 <xsd:element name="usePrinterMetrics" type="CT_OnOff" minOccurs="0"/>
2764 <xsd:element name="doNotSuppressParagraphBorders" type="CT_OnOff" minOccurs="0"/>
2765 <xsd:element name="wrapTrailSpaces" type="CT_OnOff" minOccurs="0"/>
2766 <xsd:element name="footnoteLayoutLikeWW8" type="CT_OnOff" minOccurs="0"/>
2767 <xsd:element name="shapeLayoutLikeWW8" type="CT_OnOff" minOccurs="0"/>
2768 <xsd:element name="alignTablesRowByRow" type="CT_OnOff" minOccurs="0"/>
2769 <xsd:element name="forgetLastTabAlignment" type="CT_OnOff" minOccurs="0"/>
2770 <xsd:element name="adjustLineHeightInTable" type="CT_OnOff" minOccurs="0"/>
2771 <xsd:element name="autoSpaceLikeWord95" type="CT_OnOff" minOccurs="0"/>
2772 <xsd:element name="noSpaceRaiseLower" type="CT_OnOff" minOccurs="0"/>
2773 <xsd:element name="doNotUseHTMLParagraphAutoSpacing" type="CT_OnOff" minOccurs="0"/>
2774 <xsd:element name="layoutRawTableWidth" type="CT_OnOff" minOccurs="0"/>
2775 <xsd:element name="layoutTableRowsApart" type="CT_OnOff" minOccurs="0"/>
2776 <xsd:element name="useWord97LineBreakRules" type="CT_OnOff" minOccurs="0"/>
2777 <xsd:element name="doNotBreakWrappedTables" type="CT_OnOff" minOccurs="0"/>
2778 <xsd:element name="doNotSnapToGridInCell" type="CT_OnOff" minOccurs="0"/>
2779 <xsd:element name="selectFldWithFirstOrLastChar" type="CT_OnOff" minOccurs="0"/>
2780 <xsd:element name="applyBreakingRules" type="CT_OnOff" minOccurs="0"/>
2781 <xsd:element name="doNotWrapTextWithPunct" type="CT_OnOff" minOccurs="0"/>
2782 <xsd:element name="doNotUseEastAsianBreakRules" type="CT_OnOff" minOccurs="0"/>
2783 <xsd:element name="useWord2002TableStyleRules" type="CT_OnOff" minOccurs="0"/>
2784 <xsd:element name="growAutofit" type="CT_OnOff" minOccurs="0"/>
2785 <xsd:element name="useFELayout" type="CT_OnOff" minOccurs="0"/>
2786 <xsd:element name="useNormalStyleForList" type="CT_OnOff" minOccurs="0"/>
2787 <xsd:element name="doNotUseIndentAsNumberingTabStop" type="CT_OnOff" minOccurs="0"/>
2788 <xsd:element name="useAltKinsokuLineBreakRules" type="CT_OnOff" minOccurs="0"/>
2789 <xsd:element name="allowSpaceOfSameStyleInTable" type="CT_OnOff" minOccurs="0"/>

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2790     <xsd:element name="doNotSuppressIndentation" type="CT_OnOff" minOccurs="0"/>
2791     <xsd:element name="doNotAutofitConstrainedTables" type="CT_OnOff" minOccurs="0"/>
2792     <xsd:element name="autofitToFirstFixedWidthCell" type="CT_OnOff" minOccurs="0"/>
2793     <xsd:element name="underlineTabInNumList" type="CT_OnOff" minOccurs="0"/>
2794     <xsd:element name="displayHangulFixedWidth" type="CT_OnOff" minOccurs="0"/>
2795     <xsd:element name="splitPgBreakAndParaMark" type="CT_OnOff" minOccurs="0"/>
2796     <xsd:element name="doNotVertAlignCellWithSp" type="CT_OnOff" minOccurs="0"/>
2797     <xsd:element name="doNotBreakConstrainedForcedTable" type="CT_OnOff" minOccurs="0"/>
2798     <xsd:element name="doNotVertAlignInTxbx" type="CT_OnOff" minOccurs="0"/>
2799     <xsd:element name="useAnsiKerningPairs" type="CT_OnOff" minOccurs="0"/>
2800     <xsd:element name="cachedColBalance" type="CT_OnOff" minOccurs="0"/>
2801     <xsd:element name="compatSetting" type="CT_CompatSetting" minOccurs="0"
2802         maxOccurs="unbounded"/>
2803 </xsd:sequence>
2804 </xsd:complexType>
2805 <xsd:complexType name="CT_CompatSetting">
2806     <xsd:attribute name="name" type="s:ST_String"/>
2807     <xsd:attribute name="uri" type="s:ST_String"/>
2808     <xsd:attribute name="val" type="s:ST_String"/>
2809 </xsd:complexType>
2810 <xsd:complexType name="CT_DocVar">
2811     <xsd:attribute name="name" type="s:ST_String" use="required"/>
2812     <xsd:attribute name="val" type="s:ST_String" use="required"/>
2813 </xsd:complexType>
2814 <xsd:complexType name="CT_DocVars">
2815     <xsd:sequence>
2816         <xsd:element name="docVar" type="CT_DocVar" minOccurs="0" maxOccurs="unbounded"/>
2817     </xsd:sequence>
2818 </xsd:complexType>
2819 <xsd:complexType name="CT_DocRsids">
2820     <xsd:sequence>
2821         <xsd:element name="rsidRoot" type="CT_LongHexNumber" minOccurs="0" maxOccurs="1"/>
2822         <xsd:element name="rsid" type="CT_LongHexNumber" minOccurs="0" maxOccurs="unbounded"/>
2823     </xsd:sequence>
2824 </xsd:complexType>
2825 <xsd:simpleType name="ST_CharacterSpacing">
2826     <xsd:restriction base="xsd:string">
2827         <xsd:enumeration value="doNotCompress"/>
2828         <xsd:enumeration value="compressPunctuation"/>
2829         <xsd:enumeration value="compressPunctuationAndJapaneseKana"/>
2830     </xsd:restriction>
2831 </xsd:simpleType>
2832 <xsd:complexType name="CT_CharacterSpacing">
2833     <xsd:attribute name="val" type="ST_CharacterSpacing" use="required"/>
2834 </xsd:complexType>
2835 <xsd:complexType name="CT_SaveThroughXslt">
2836     <xsd:attribute ref="r:id" use="optional"/>
2837     <xsd:attribute name="solutionID" type="s:ST_String" use="optional"/>
2838 </xsd:complexType>
2839 <xsd:complexType name="CT_RPrDefault">
2840     <xsd:sequence>
2841         <xsd:element name="rPr" type="CT_RPr" minOccurs="0"/>
2842     </xsd:sequence>

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2843 </xsd:complexType>
2844 <xsd:complexType name="CT_PPrDefault">
2845   <xsd:sequence>
2846     <xsd:element name="pPr" type="CT_PPrGeneral" minOccurs="0"/>
2847   </xsd:sequence>
2848 </xsd:complexType>
2849 <xsd:complexType name="CT_DocDefaults">
2850   <xsd:sequence>
2851     <xsd:element name="rPrDefault" type="CT_RPrDefault" minOccurs="0"/>
2852     <xsd:element name="pPrDefault" type="CT_PPrDefault" minOccurs="0"/>
2853   </xsd:sequence>
2854 </xsd:complexType>
2855 <xsd:simpleType name="ST_WmlColorSchemeIndex">
2856   <xsd:restriction base="xsd:string">
2857     <xsd:enumeration value="dark1"/>
2858     <xsd:enumeration value="light1"/>
2859     <xsd:enumeration value="dark2"/>
2860     <xsd:enumeration value="light2"/>
2861     <xsd:enumeration value="accent1"/>
2862     <xsd:enumeration value="accent2"/>
2863     <xsd:enumeration value="accent3"/>
2864     <xsd:enumeration value="accent4"/>
2865     <xsd:enumeration value="accent5"/>
2866     <xsd:enumeration value="accent6"/>
2867     <xsd:enumeration value="hyperlink"/>
2868     <xsd:enumeration value="followedHyperlink"/>
2869   </xsd:restriction>
2870 </xsd:simpleType>
2871 <xsd:complexType name="CT_ColorSchemeMapping">
2872   <xsd:attribute name="bg1" type="ST_WmlColorSchemeIndex"/>
2873   <xsd:attribute name="t1" type="ST_WmlColorSchemeIndex"/>
2874   <xsd:attribute name="bg2" type="ST_WmlColorSchemeIndex"/>
2875   <xsd:attribute name="t2" type="ST_WmlColorSchemeIndex"/>
2876   <xsd:attribute name="accent1" type="ST_WmlColorSchemeIndex"/>
2877   <xsd:attribute name="accent2" type="ST_WmlColorSchemeIndex"/>
2878   <xsd:attribute name="accent3" type="ST_WmlColorSchemeIndex"/>
2879   <xsd:attribute name="accent4" type="ST_WmlColorSchemeIndex"/>
2880   <xsd:attribute name="accent5" type="ST_WmlColorSchemeIndex"/>
2881   <xsd:attribute name="accent6" type="ST_WmlColorSchemeIndex"/>
2882   <xsd:attribute name="hyperlink" type="ST_WmlColorSchemeIndex"/>
2883   <xsd:attribute name="followedHyperlink" type="ST_WmlColorSchemeIndex"/>
2884 </xsd:complexType>
2885 <xsd:complexType name="CT_ReadingModeInkLockDown">
2886   <xsd:attribute name="actualPg" type="s:ST_OnOff" use="required"/>
2887   <xsd:attribute name="w" type="ST_PixelsMeasure" use="required"/>
2888   <xsd:attribute name="h" type="ST_PixelsMeasure" use="required"/>
2889   <xsd:attribute name="fontSz" type="ST_DecimalNumberOrPercent" use="required"/>
2890 </xsd:complexType>
2891 <xsd:complexType name="CT_WriteProtection">
2892   <xsd:attribute name="recommended" type="s:ST_OnOff" use="optional"/>
2893   <xsd:attributeGroup ref="AG_Password"/>
2894   <xsd:attributeGroup ref="AG_TransitionalPassword"/>
2895 </xsd:complexType>

```

```

2896 <xsd:complexType name="CT_Settings">
2897   <xsd:sequence>
2898     <xsd:element name="writeProtection" type="CT_WriteProtection" minOccurs="0"/>
2899     <xsd:element name="view" type="CT_View" minOccurs="0"/>
2900     <xsd:element name="zoom" type="CT_Zoom" minOccurs="0"/>
2901     <xsd:element name="removePersonalInformation" type="CT_OnOff" minOccurs="0"/>
2902     <xsd:element name="removeDateAndTime" type="CT_OnOff" minOccurs="0"/>
2903     <xsd:element name="doNotDisplayPageBoundaries" type="CT_OnOff" minOccurs="0"/>
2904     <xsd:element name="displayBackgroundShape" type="CT_OnOff" minOccurs="0"/>
2905     <xsd:element name="printPostScriptOverText" type="CT_OnOff" minOccurs="0"/>
2906     <xsd:element name="printFractionalCharacterWidth" type="CT_OnOff" minOccurs="0"/>
2907     <xsd:element name="printFormsData" type="CT_OnOff" minOccurs="0"/>
2908     <xsd:element name="embedTrueTypeFonts" type="CT_OnOff" minOccurs="0"/>
2909     <xsd:element name="embedSystemFonts" type="CT_OnOff" minOccurs="0"/>
2910     <xsd:element name="saveSubsetFonts" type="CT_OnOff" minOccurs="0"/>
2911     <xsd:element name="saveFormsData" type="CT_OnOff" minOccurs="0"/>
2912     <xsd:element name="mirrorMargins" type="CT_OnOff" minOccurs="0"/>
2913     <xsd:element name="alignBordersAndEdges" type="CT_OnOff" minOccurs="0"/>
2914     <xsd:element name="bordersDoNotSurroundHeader" type="CT_OnOff" minOccurs="0"/>
2915     <xsd:element name="bordersDoNotSurroundFooter" type="CT_OnOff" minOccurs="0"/>
2916     <xsd:element name="gutterAtTop" type="CT_OnOff" minOccurs="0"/>
2917     <xsd:element name="hideSpellingErrors" type="CT_OnOff" minOccurs="0"/>
2918     <xsd:element name="hideGrammaticalErrors" type="CT_OnOff" minOccurs="0"/>
2919     <xsd:element name="activeWritingStyle" type="CT_WritingStyle" minOccurs="0"
2920       maxOccurs="unbounded"/>
2921     <xsd:element name="proofState" type="CT_Proof" minOccurs="0"/>
2922     <xsd:element name="formsDesign" type="CT_OnOff" minOccurs="0"/>
2923     <xsd:element name="attachedTemplate" type="CT_Rel" minOccurs="0"/>
2924     <xsd:element name="linkStyles" type="CT_OnOff" minOccurs="0"/>
2925     <xsd:element name="stylePaneFormatFilter" type="CT_StylePaneFilter" minOccurs="0"/>
2926     <xsd:element name="stylePaneSortMethod" type="CT_StyleSort" minOccurs="0"/>
2927     <xsd:element name="documentType" type="CT_DocType" minOccurs="0"/>
2928     <xsd:element name="mailMerge" type="CT_MailMerge" minOccurs="0"/>
2929     <xsd:element name="revisionView" type="CT_TrackChangesView" minOccurs="0"/>
2930     <xsd:element name="trackRevisions" type="CT_OnOff" minOccurs="0"/>
2931     <xsd:element name="doNotTrackMoves" type="CT_OnOff" minOccurs="0"/>
2932     <xsd:element name="doNotTrackFormatting" type="CT_OnOff" minOccurs="0"/>
2933     <xsd:element name="documentProtection" type="CT_DocProtect" minOccurs="0"/>
2934     <xsd:element name="autoFormatOverride" type="CT_OnOff" minOccurs="0"/>
2935     <xsd:element name="styleLockTheme" type="CT_OnOff" minOccurs="0"/>
2936     <xsd:element name="styleLockQFSet" type="CT_OnOff" minOccurs="0"/>
2937     <xsd:element name="defaultTabStop" type="CT_TwipsMeasure" minOccurs="0"/>
2938     <xsd:element name="autoHyphenation" type="CT_OnOff" minOccurs="0"/>
2939     <xsd:element name="consecutiveHyphenLimit" type="CT_DecimalNumber" minOccurs="0"/>
2940     <xsd:element name="hyphenationZone" type="CT_TwipsMeasure" minOccurs="0"/>
2941     <xsd:element name="doNotHyphenateCaps" type="CT_OnOff" minOccurs="0"/>
2942     <xsd:element name="showEnvelope" type="CT_OnOff" minOccurs="0"/>
2943     <xsd:element name="summaryLength" type="CT_DecimalNumberOrPrecent" minOccurs="0"/>
2944     <xsd:element name="clickAndTypeStyle" type="CT_String" minOccurs="0"/>
2945     <xsd:element name="defaultTableStyle" type="CT_String" minOccurs="0"/>
2946     <xsd:element name="evenAndOddHeaders" type="CT_OnOff" minOccurs="0"/>
2947     <xsd:element name="bookFoldRevPrinting" type="CT_OnOff" minOccurs="0"/>
2948     <xsd:element name="bookFoldPrinting" type="CT_OnOff" minOccurs="0"/>

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2949 <xsd:element name="bookFoldPrintingSheets" type="CT DecimalNumber" minOccurs="0"/>
2950 <xsd:element name="drawingGridHorizontalSpacing" type="CT TwipsMeasure" minOccurs="0"/>
2951 <xsd:element name="drawingGridVerticalSpacing" type="CT TwipsMeasure" minOccurs="0"/>
2952 <xsd:element name="displayHorizontalDrawingGridEvery" type="CT DecimalNumber"
2953     minOccurs="0"/>
2954 <xsd:element name="displayVerticalDrawingGridEvery" type="CT DecimalNumber"
2955     minOccurs="0"/>
2956 <xsd:element name="doNotUseMarginsForDrawingGridOrigin" type="CT OnOff" minOccurs="0"/>
2957 <xsd:element name="drawingGridHorizontalOrigin" type="CT TwipsMeasure" minOccurs="0"/>
2958 <xsd:element name="drawingGridVerticalOrigin" type="CT TwipsMeasure" minOccurs="0"/>
2959 <xsd:element name="doNotShadeFormData" type="CT OnOff" minOccurs="0"/>
2960 <xsd:element name="noPunctuationKerning" type="CT OnOff" minOccurs="0"/>
2961 <xsd:element name="characterSpacingControl" type="CT CharacterSpacing" minOccurs="0"/>
2962 <xsd:element name="printTwoOnOne" type="CT OnOff" minOccurs="0"/>
2963 <xsd:element name="strictFirstAndLastChars" type="CT OnOff" minOccurs="0"/>
2964 <xsd:element name="noLineBreaksAfter" type="CT Kinsoku" minOccurs="0"/>
2965 <xsd:element name="noLineBreaksBefore" type="CT Kinsoku" minOccurs="0"/>
2966 <xsd:element name="savePreviewPicture" type="CT OnOff" minOccurs="0"/>
2967 <xsd:element name="doNotValidateAgainstSchema" type="CT OnOff" minOccurs="0"/>
2968 <xsd:element name="saveInvalidXml" type="CT OnOff" minOccurs="0"/>
2969 <xsd:element name="ignoreMixedContent" type="CT OnOff" minOccurs="0"/>
2970 <xsd:element name="alwaysShowPlaceholderText" type="CT OnOff" minOccurs="0"/>
2971 <xsd:element name="doNotDemarcateInvalidXml" type="CT OnOff" minOccurs="0"/>
2972 <xsd:element name="saveXmlDataOnly" type="CT OnOff" minOccurs="0"/>
2973 <xsd:element name="useXSLTWhenSaving" type="CT OnOff" minOccurs="0"/>
2974 <xsd:element name="saveThroughXslt" type="CT SaveThroughXslt" minOccurs="0"/>
2975 <xsd:element name="showXMLTags" type="CT OnOff" minOccurs="0"/>
2976 <xsd:element name="alwaysMergeEmptyNamespaces" type="CT OnOff" minOccurs="0"/>
2977 <xsd:element name="updateFields" type="CT OnOff" minOccurs="0"/>
2978 <xsd:element name="hdrShapeDefaults" type="CT ShapeDefaults" minOccurs="0"/>
2979 <xsd:element name="footnotePr" type="CT FtnDocProps" minOccurs="0"/>
2980 <xsd:element name="endnotePr" type="CT EdnDocProps" minOccurs="0"/>
2981 <xsd:element name="compat" type="CT Compat" minOccurs="0"/>
2982 <xsd:element name="docVars" type="CT DocVars" minOccurs="0"/>
2983 <xsd:element name="rsids" type="CT DocRsids" minOccurs="0"/>
2984 <xsd:element ref="m:mathPr" minOccurs="0" maxOccurs="1"/>
2985 <xsd:element name="attachedSchema" type="CT String" minOccurs="0" maxOccurs="unbounded"/>
2986 <xsd:element name="themeFontLang" type="CT Language" minOccurs="0" maxOccurs="1"/>
2987 <xsd:element name="clrSchemeMapping" type="CT ColorSchemeMapping" minOccurs="0"/>
2988 <xsd:element name="doNotIncludeSubdocsInStats" type="CT OnOff" minOccurs="0"/>
2989 <xsd:element name="doNotAutoCompressPictures" type="CT OnOff" minOccurs="0"/>
2990 <xsd:element name="forceUpgrade" type="CT Empty" minOccurs="0" maxOccurs="1"/>
2991 <xsd:element name="captions" type="CT Captions" minOccurs="0" maxOccurs="1"/>
2992 <xsd:element name="readModeInkLockDown" type="CT ReadingModeInkLockDown" minOccurs="0"/>
2993 <xsd:element name="smartTagType" type="CT SmartTagType" minOccurs="0"
2994     maxOccurs="unbounded"/>
2995 <xsd:element ref="sl:schemaLibrary" minOccurs="0" maxOccurs="1"/>
2996 <xsd:element name="shapeDefaults" type="CT ShapeDefaults" minOccurs="0"/>
2997 <xsd:element name="doNotEmbedSmartTags" type="CT OnOff" minOccurs="0"/>
2998 <xsd:element name="decimalSymbol" type="CT String" minOccurs="0" maxOccurs="1"/>
2999 <xsd:element name="listSeparator" type="CT String" minOccurs="0" maxOccurs="1"/>
3000 </xsd:sequence>
3001 </xsd:complexType>

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3002 <xsd:complexType name="CT_StyleSort">
3003   <xsd:attribute name="val" type="ST_StyleSort" use="required"/>
3004 </xsd:complexType>
3005 <xsd:complexType name="CT_StylePaneFilter">
3006   <xsd:attribute name="allStyles" type="s:ST_OnOff"/>
3007   <xsd:attribute name="customStyles" type="s:ST_OnOff"/>
3008   <xsd:attribute name="latentStyles" type="s:ST_OnOff"/>
3009   <xsd:attribute name="stylesInUse" type="s:ST_OnOff"/>
3010   <xsd:attribute name="headingStyles" type="s:ST_OnOff"/>
3011   <xsd:attribute name="numberingStyles" type="s:ST_OnOff"/>
3012   <xsd:attribute name="tableStyles" type="s:ST_OnOff"/>
3013   <xsd:attribute name="directFormattingOnRuns" type="s:ST_OnOff"/>
3014   <xsd:attribute name="directFormattingOnParagraphs" type="s:ST_OnOff"/>
3015   <xsd:attribute name="directFormattingOnNumbering" type="s:ST_OnOff"/>
3016   <xsd:attribute name="directFormattingOnTables" type="s:ST_OnOff"/>
3017   <xsd:attribute name="clearFormatting" type="s:ST_OnOff"/>
3018   <xsd:attribute name="top3HeadingStyles" type="s:ST_OnOff"/>
3019   <xsd:attribute name="visibleStyles" type="s:ST_OnOff"/>
3020   <xsd:attribute name="alternateStyleNames" type="s:ST_OnOff"/>
3021   <xsd:attribute name="val" type="ST_ShortHexNumber"/>
3022 </xsd:complexType>
3023 <xsd:simpleType name="ST_StyleSort">
3024   <xsd:restriction base="xsd:string">
3025     <xsd:enumeration value="name"/>
3026     <xsd:enumeration value="priority"/>
3027     <xsd:enumeration value="default"/>
3028     <xsd:enumeration value="font"/>
3029     <xsd:enumeration value="basedOn"/>
3030     <xsd:enumeration value="type"/>
3031     <xsd:enumeration value="0000"/>
3032     <xsd:enumeration value="0001"/>
3033     <xsd:enumeration value="0002"/>
3034     <xsd:enumeration value="0003"/>
3035     <xsd:enumeration value="0004"/>
3036     <xsd:enumeration value="0005"/>
3037   </xsd:restriction>
3038 </xsd:simpleType>
3039 <xsd:complexType name="CT_WebSettings">
3040   <xsd:sequence>
3041     <xsd:element name="frameset" type="CT_Frameset" minOccurs="0"/>
3042     <xsd:element name="divs" type="CT_Divs" minOccurs="0"/>
3043     <xsd:element name="encoding" type="CT_String" minOccurs="0"/>
3044     <xsd:element name="optimizeForBrowser" type="CT_OptimizeForBrowser" minOccurs="0"/>
3045     <xsd:element name="relyOnVML" type="CT_OnOff" minOccurs="0"/>
3046     <xsd:element name="allowPNG" type="CT_OnOff" minOccurs="0"/>
3047     <xsd:element name="doNotRelyOnCSS" type="CT_OnOff" minOccurs="0"/>
3048     <xsd:element name="doNotSaveAsSingleFile" type="CT_OnOff" minOccurs="0"/>
3049     <xsd:element name="doNotOrganizeInFolder" type="CT_OnOff" minOccurs="0"/>
3050     <xsd:element name="doNotUseLongFileNames" type="CT_OnOff" minOccurs="0"/>
3051     <xsd:element name="pixelsPerInch" type="CT_DecimalNumber" minOccurs="0"/>
3052     <xsd:element name="targetScreenSz" type="CT_TargetScreenSz" minOccurs="0"/>
3053     <xsd:element name="saveSmartTagsAsXml" type="CT_OnOff" minOccurs="0"/>
3054   </xsd:sequence>

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3055 </xsd:complexType>
3056 <xsd:simpleType name="ST_FrameScrollbar">
3057   <xsd:restriction base="xsd:string">
3058     <xsd:enumeration value="on"/>
3059     <xsd:enumeration value="off"/>
3060     <xsd:enumeration value="auto"/>
3061   </xsd:restriction>
3062 </xsd:simpleType>
3063 <xsd:complexType name="CT_FrameScrollbar">
3064   <xsd:attribute name="val" type="ST_FrameScrollbar" use="required"/>
3065 </xsd:complexType>
3066 <xsd:complexType name="CT_OptimizeForBrowser">
3067   <xsd:complexContent>
3068     <xsd:extension base="CT_OnOff">
3069       <xsd:attribute name="target" type="s:ST_String" use="optional"/>
3070     </xsd:extension>
3071   </xsd:complexContent>
3072 </xsd:complexType>
3073 <xsd:complexType name="CT_Frame">
3074   <xsd:sequence>
3075     <xsd:element name="sz" type="CT_String" minOccurs="0"/>
3076     <xsd:element name="name" type="CT_String" minOccurs="0"/>
3077     <xsd:element name="title" type="CT_String" minOccurs="0"/>
3078     <xsd:element name="longDesc" type="CT_Rel" minOccurs="0"/>
3079     <xsd:element name="sourceFileName" type="CT_Rel" minOccurs="0"/>
3080     <xsd:element name="marW" type="CT_PixelsMeasure" minOccurs="0"/>
3081     <xsd:element name="marH" type="CT_PixelsMeasure" minOccurs="0"/>
3082     <xsd:element name="scrollbar" type="CT_FrameScrollbar" minOccurs="0"/>
3083     <xsd:element name="noResizeAllowed" type="CT_OnOff" minOccurs="0"/>
3084     <xsd:element name="linkedToFile" type="CT_OnOff" minOccurs="0"/>
3085   </xsd:sequence>
3086 </xsd:complexType>
3087 <xsd:simpleType name="ST_FrameLayout">
3088   <xsd:restriction base="xsd:string">
3089     <xsd:enumeration value="rows"/>
3090     <xsd:enumeration value="cols"/>
3091     <xsd:enumeration value="none"/>
3092   </xsd:restriction>
3093 </xsd:simpleType>
3094 <xsd:complexType name="CT_FrameLayout">
3095   <xsd:attribute name="val" type="ST_FrameLayout" use="required"/>
3096 </xsd:complexType>
3097 <xsd:complexType name="CT_FramesetSplitbar">
3098   <xsd:sequence>
3099     <xsd:element name="w" type="CT_TwipsMeasure" minOccurs="0"/>
3100     <xsd:element name="color" type="CT_Color" minOccurs="0"/>
3101     <xsd:element name="noBorder" type="CT_OnOff" minOccurs="0"/>
3102     <xsd:element name="flatBorders" type="CT_OnOff" minOccurs="0"/>
3103   </xsd:sequence>
3104 </xsd:complexType>
3105 <xsd:complexType name="CT_Frameset">
3106   <xsd:sequence>
3107     <xsd:element name="sz" type="CT_String" minOccurs="0"/>

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3108     <xsd:element name="framesetSplitbar" type="CT FramesetSplitbar" minOccurs="0"/>
3109     <xsd:element name="frameLayout" type="CT FrameLayout" minOccurs="0"/>
3110     <xsd:element name="title" type="CT String" minOccurs="0"/>
3111     <xsd:choice minOccurs="0" maxOccurs="unbounded">
3112         <xsd:element name="frameset" type="CT Frameset" minOccurs="0" maxOccurs="unbounded"/>
3113         <xsd:element name="frame" type="CT Frame" minOccurs="0" maxOccurs="unbounded"/>
3114     </xsd:choice>
3115 </xsd:sequence>
3116 </xsd:complexType>
3117 <xsd:complexType name="CT_NumPicBullet">
3118     <xsd:choice>
3119         <xsd:element name="pict" type="CT Picture"/>
3120         <xsd:element name="drawing" type="CT Drawing"/>
3121     </xsd:choice>
3122     <xsd:attribute name="numPicBulletId" type="ST DecimalNumber" use="required"/>
3123 </xsd:complexType>
3124 <xsd:simpleType name="ST_LevelSuffix">
3125     <xsd:restriction base="xsd:string">
3126         <xsd:enumeration value="tab"/>
3127         <xsd:enumeration value="space"/>
3128         <xsd:enumeration value="nothing"/>
3129     </xsd:restriction>
3130 </xsd:simpleType>
3131 <xsd:complexType name="CT_LevelSuffix">
3132     <xsd:attribute name="val" type="ST LevelSuffix" use="required"/>
3133 </xsd:complexType>
3134 <xsd:complexType name="CT_LevelText">
3135     <xsd:attribute name="val" type="s:ST String" use="optional"/>
3136     <xsd:attribute name="null" type="s:ST OnOff" use="optional"/>
3137 </xsd:complexType>
3138 <xsd:complexType name="CT_LvlLegacy">
3139     <xsd:attribute name="legacy" type="s:ST OnOff" use="optional"/>
3140     <xsd:attribute name="legacySpace" type="s:ST TwipsMeasure" use="optional"/>
3141     <xsd:attribute name="legacyIndent" type="ST SignedTwipsMeasure" use="optional"/>
3142 </xsd:complexType>
3143 <xsd:complexType name="CT_Lvl">
3144     <xsd:sequence>
3145         <xsd:element name="start" type="CT DecimalNumber" minOccurs="0"/>
3146         <xsd:element name="numFmt" type="CT NumFmt" minOccurs="0"/>
3147         <xsd:element name="lvlRestart" type="CT DecimalNumber" minOccurs="0"/>
3148         <xsd:element name="pStyle" type="CT String" minOccurs="0"/>
3149         <xsd:element name="isLgl" type="CT OnOff" minOccurs="0"/>
3150         <xsd:element name="suff" type="CT LevelSuffix" minOccurs="0"/>
3151         <xsd:element name="lvlText" type="CT LevelText" minOccurs="0"/>
3152         <xsd:element name="lvlPicBulletId" type="CT DecimalNumber" minOccurs="0"/>
3153         <xsd:element name="legacy" type="CT LvlLegacy" minOccurs="0"/>
3154         <xsd:element name="lvlJc" type="CT Jc" minOccurs="0"/>
3155         <xsd:element name="pPr" type="CT PPrGeneral" minOccurs="0"/>
3156         <xsd:element name="rPr" type="CT RPr" minOccurs="0"/>
3157     </xsd:sequence>
3158     <xsd:attribute name="ilvl" type="ST DecimalNumber" use="required"/>
3159     <xsd:attribute name="tplc" type="ST LongHexNumber" use="optional"/>
3160     <xsd:attribute name="tentative" type="s:ST OnOff" use="optional"/>

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3161 </xsd:complexType>
3162 <xsd:simpleType name="ST_MultiLevelType">
3163   <xsd:restriction base="xsd:string">
3164     <xsd:enumeration value="singleLevel"/>
3165     <xsd:enumeration value="multilevel"/>
3166     <xsd:enumeration value="hybridMultilevel"/>
3167   </xsd:restriction>
3168 </xsd:simpleType>
3169 <xsd:complexType name="CT_MultiLevelType">
3170   <xsd:attribute name="val" type="ST_MultiLevelType" use="required"/>
3171 </xsd:complexType>
3172 <xsd:complexType name="CT_AbstractNum">
3173   <xsd:sequence>
3174     <xsd:element name="nsid" type="CT_LongHexNumber" minOccurs="0"/>
3175     <xsd:element name="multiLevelType" type="CT_MultiLevelType" minOccurs="0"/>
3176     <xsd:element name="tmpl" type="CT_LongHexNumber" minOccurs="0"/>
3177     <xsd:element name="name" type="CT_String" minOccurs="0"/>
3178     <xsd:element name="styleLink" type="CT_String" minOccurs="0"/>
3179     <xsd:element name="numStyleLink" type="CT_String" minOccurs="0"/>
3180     <xsd:element name="lvl" type="CT_Lvl" minOccurs="0" maxOccurs="9"/>
3181   </xsd:sequence>
3182   <xsd:attribute name="abstractNumId" type="ST_DecimalNumber" use="required"/>
3183 </xsd:complexType>
3184 <xsd:complexType name="CT_NumLvl">
3185   <xsd:sequence>
3186     <xsd:element name="startOverride" type="CT_DecimalNumber" minOccurs="0"/>
3187     <xsd:element name="lvl" type="CT_Lvl" minOccurs="0" maxOccurs="1"/>
3188   </xsd:sequence>
3189   <xsd:attribute name="ilvl" type="ST_DecimalNumber" use="required"/>
3190 </xsd:complexType>
3191 <xsd:complexType name="CT_Num">
3192   <xsd:sequence>
3193     <xsd:element name="abstractNumId" type="CT_DecimalNumber" minOccurs="1"/>
3194     <xsd:element name="lvlOverride" type="CT_NumLvl" minOccurs="0" maxOccurs="9"/>
3195   </xsd:sequence>
3196   <xsd:attribute name="numId" type="ST_DecimalNumber" use="required"/>
3197 </xsd:complexType>
3198 <xsd:complexType name="CT_Numbering">
3199   <xsd:sequence>
3200     <xsd:element name="numPicBullet" type="CT_NumPicBullet" minOccurs="0"
3201       maxOccurs="unbounded"/>
3202     <xsd:element name="abstractNum" type="CT_AbstractNum" minOccurs="0"
3203       maxOccurs="unbounded"/>
3204     <xsd:element name="num" type="CT_Num" minOccurs="0" maxOccurs="unbounded"/>
3205     <xsd:element name="numIdMacAtCleanup" type="CT_DecimalNumber" minOccurs="0"/>
3206   </xsd:sequence>
3207 </xsd:complexType>
3208 <xsd:simpleType name="ST_TblStyleOverrideType">
3209   <xsd:restriction base="xsd:string">
3210     <xsd:enumeration value="wholeTable"/>
3211     <xsd:enumeration value="firstRow"/>
3212     <xsd:enumeration value="lastRow"/>
3213     <xsd:enumeration value="firstCol"/>

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3214     <xsd:enumeration value="lastCol"/>
3215     <xsd:enumeration value="band1Vert"/>
3216     <xsd:enumeration value="band2Vert"/>
3217     <xsd:enumeration value="band1Horz"/>
3218     <xsd:enumeration value="band2Horz"/>
3219     <xsd:enumeration value="neCell"/>
3220     <xsd:enumeration value="nwCell"/>
3221     <xsd:enumeration value="seCell"/>
3222     <xsd:enumeration value="swCell"/>
3223   </xsd:restriction>
3224 </xsd:simpleType>
3225 <xsd:complexType name="CT_TblStylePr">
3226   <xsd:sequence>
3227     <xsd:element name="pPr" type="CT_PPrGeneral" minOccurs="0"/>
3228     <xsd:element name="rPr" type="CT_RPr" minOccurs="0"/>
3229     <xsd:element name="tblPr" type="CT_TblPrBase" minOccurs="0"/>
3230     <xsd:element name="trPr" type="CT_TrPr" minOccurs="0" maxOccurs="1"/>
3231     <xsd:element name="tcPr" type="CT_TcPr" minOccurs="0" maxOccurs="1"/>
3232   </xsd:sequence>
3233   <xsd:attribute name="type" type="ST_TblStyleOverrideType" use="required"/>
3234 </xsd:complexType>
3235 <xsd:simpleType name="ST_StyleType">
3236   <xsd:restriction base="xsd:string">
3237     <xsd:enumeration value="paragraph"/>
3238     <xsd:enumeration value="character"/>
3239     <xsd:enumeration value="table"/>
3240     <xsd:enumeration value="numbering"/>
3241   </xsd:restriction>
3242 </xsd:simpleType>
3243 <xsd:complexType name="CT_Style">
3244   <xsd:sequence>
3245     <xsd:element name="name" type="CT_String" minOccurs="0" maxOccurs="1"/>
3246     <xsd:element name="aliases" type="CT_String" minOccurs="0"/>
3247     <xsd:element name="basedOn" type="CT_String" minOccurs="0"/>
3248     <xsd:element name="next" type="CT_String" minOccurs="0"/>
3249     <xsd:element name="link" type="CT_String" minOccurs="0"/>
3250     <xsd:element name="autoRedefine" type="CT_OnOff" minOccurs="0"/>
3251     <xsd:element name="hidden" type="CT_OnOff" minOccurs="0"/>
3252     <xsd:element name="uiPriority" type="CT_DecimalNumber" minOccurs="0"/>
3253     <xsd:element name="semiHidden" type="CT_OnOff" minOccurs="0"/>
3254     <xsd:element name="unhideWhenUsed" type="CT_OnOff" minOccurs="0"/>
3255     <xsd:element name="qFormat" type="CT_OnOff" minOccurs="0"/>
3256     <xsd:element name="locked" type="CT_OnOff" minOccurs="0"/>
3257     <xsd:element name="personal" type="CT_OnOff" minOccurs="0"/>
3258     <xsd:element name="personalCompose" type="CT_OnOff" minOccurs="0"/>
3259     <xsd:element name="personalReply" type="CT_OnOff" minOccurs="0"/>
3260     <xsd:element name="rsid" type="CT_LongHexNumber" minOccurs="0"/>
3261     <xsd:element name="pPr" type="CT_PPrGeneral" minOccurs="0" maxOccurs="1"/>
3262     <xsd:element name="rPr" type="CT_RPr" minOccurs="0" maxOccurs="1"/>
3263     <xsd:element name="tblPr" type="CT_TblPrBase" minOccurs="0" maxOccurs="1"/>
3264     <xsd:element name="trPr" type="CT_TrPr" minOccurs="0" maxOccurs="1"/>
3265     <xsd:element name="tcPr" type="CT_TcPr" minOccurs="0" maxOccurs="1"/>
3266     <xsd:element name="tblStylePr" type="CT_TblStylePr" minOccurs="0" maxOccurs="unbounded"/>

```



```

3267     </xsd:sequence>
3268     <xsd:attribute name="type" type="ST_StyleType" use="optional"/>
3269     <xsd:attribute name="styleId" type="s:ST_String" use="optional"/>
3270     <xsd:attribute name="default" type="s:ST_OnOff" use="optional"/>
3271     <xsd:attribute name="customStyle" type="s:ST_OnOff" use="optional"/>
3272 </xsd:complexType>
3273 <xsd:complexType name="CT_LsdException">
3274     <xsd:attribute name="name" type="s:ST_String" use="required"/>
3275     <xsd:attribute name="locked" type="s:ST_OnOff"/>
3276     <xsd:attribute name="uiPriority" type="ST_DecimalNumber"/>
3277     <xsd:attribute name="semiHidden" type="s:ST_OnOff"/>
3278     <xsd:attribute name="unhideWhenUsed" type="s:ST_OnOff"/>
3279     <xsd:attribute name="qFormat" type="s:ST_OnOff"/>
3280 </xsd:complexType>
3281 <xsd:complexType name="CT_LatentStyles">
3282     <xsd:sequence>
3283         <xsd:element name="lsdException" type="CT_LsdException" minOccurs="0"
3284             maxOccurs="unbounded"/>
3285     </xsd:sequence>
3286     <xsd:attribute name="defLockedState" type="s:ST_OnOff"/>
3287     <xsd:attribute name="defUIPriority" type="ST_DecimalNumber"/>
3288     <xsd:attribute name="defSemiHidden" type="s:ST_OnOff"/>
3289     <xsd:attribute name="defUnhideWhenUsed" type="s:ST_OnOff"/>
3290     <xsd:attribute name="defQFormat" type="s:ST_OnOff"/>
3291     <xsd:attribute name="count" type="ST_DecimalNumber"/>
3292 </xsd:complexType>
3293 <xsd:complexType name="CT_Styles">
3294     <xsd:sequence>
3295         <xsd:element name="docDefaults" type="CT_DocDefaults" minOccurs="0"/>
3296         <xsd:element name="latentStyles" type="CT_LatentStyles" minOccurs="0" maxOccurs="1"/>
3297         <xsd:element name="style" type="CT_Style" minOccurs="0" maxOccurs="unbounded"/>
3298     </xsd:sequence>
3299 </xsd:complexType>
3300 <xsd:complexType name="CT_Panose">
3301     <xsd:attribute name="val" type="s:ST_Panose" use="required"/>
3302 </xsd:complexType>
3303 <xsd:simpleType name="ST_FontFamily">
3304     <xsd:restriction base="xsd:string">
3305         <xsd:enumeration value="decorative"/>
3306         <xsd:enumeration value="modern"/>
3307         <xsd:enumeration value="roman"/>
3308         <xsd:enumeration value="script"/>
3309         <xsd:enumeration value="swiss"/>
3310         <xsd:enumeration value="auto"/>
3311     </xsd:restriction>
3312 </xsd:simpleType>
3313 <xsd:complexType name="CT_FontFamily">
3314     <xsd:attribute name="val" type="ST_FontFamily" use="required"/>
3315 </xsd:complexType>
3316 <xsd:simpleType name="ST_Pitch">
3317     <xsd:restriction base="xsd:string">
3318         <xsd:enumeration value="fixed"/>
3319         <xsd:enumeration value="variable"/>

```

```

3320     <xsd:enumeration value="default"/>
3321   </xsd:restriction>
3322 </xsd:simpleType>
3323 <xsd:complexType name="CT_Pitch">
3324   <xsd:attribute name="val" type="ST_Pitch" use="required"/>
3325 </xsd:complexType>
3326 <xsd:complexType name="CT_FontSig">
3327   <xsd:attribute name="usb0" use="required" type="ST_LongHexNumber"/>
3328   <xsd:attribute name="usb1" use="required" type="ST_LongHexNumber"/>
3329   <xsd:attribute name="usb2" use="required" type="ST_LongHexNumber"/>
3330   <xsd:attribute name="usb3" use="required" type="ST_LongHexNumber"/>
3331   <xsd:attribute name="csb0" use="required" type="ST_LongHexNumber"/>
3332   <xsd:attribute name="csb1" use="required" type="ST_LongHexNumber"/>
3333 </xsd:complexType>
3334 <xsd:complexType name="CT_FontRel">
3335   <xsd:complexContent>
3336     <xsd:extension base="CT_Rel">
3337       <xsd:attribute name="fontKey" type="s:ST_Guid"/>
3338       <xsd:attribute name="subsetting" type="s:ST_OnOff"/>
3339     </xsd:extension>
3340   </xsd:complexContent>
3341 </xsd:complexType>
3342 <xsd:complexType name="CT_Font">
3343   <xsd:sequence>
3344     <xsd:element name="altName" type="CT_String" minOccurs="0" maxOccurs="1"/>
3345     <xsd:element name="panose1" type="CT_Panose" minOccurs="0" maxOccurs="1"/>
3346     <xsd:element name="charset" type="CT_Charset" minOccurs="0" maxOccurs="1"/>
3347     <xsd:element name="family" type="CT_FontFamily" minOccurs="0" maxOccurs="1"/>
3348     <xsd:element name="notTrueType" type="CT_OnOff" minOccurs="0" maxOccurs="1"/>
3349     <xsd:element name="pitch" type="CT_Pitch" minOccurs="0" maxOccurs="1"/>
3350     <xsd:element name="sig" type="CT_FontSig" minOccurs="0" maxOccurs="1"/>
3351     <xsd:element name="embedRegular" type="CT_FontRel" minOccurs="0" maxOccurs="1"/>
3352     <xsd:element name="embedBold" type="CT_FontRel" minOccurs="0" maxOccurs="1"/>
3353     <xsd:element name="embedItalic" type="CT_FontRel" minOccurs="0" maxOccurs="1"/>
3354     <xsd:element name="embedBoldItalic" type="CT_FontRel" minOccurs="0" maxOccurs="1"/>
3355   </xsd:sequence>
3356   <xsd:attribute name="name" type="s:ST_String" use="required"/>
3357 </xsd:complexType>
3358 <xsd:complexType name="CT_FontsList">
3359   <xsd:sequence>
3360     <xsd:element name="font" type="CT_Font" minOccurs="0" maxOccurs="unbounded"/>
3361   </xsd:sequence>
3362 </xsd:complexType>
3363 <xsd:complexType name="CT_DivBdr">
3364   <xsd:sequence>
3365     <xsd:element name="top" type="CT_Border" minOccurs="0"/>
3366     <xsd:element name="left" type="CT_Border" minOccurs="0"/>
3367     <xsd:element name="bottom" type="CT_Border" minOccurs="0"/>
3368     <xsd:element name="right" type="CT_Border" minOccurs="0"/>
3369   </xsd:sequence>
3370 </xsd:complexType>
3371 <xsd:complexType name="CT_Div">
3372   <xsd:sequence>

```

```

3373     <xsd:element name="blockquote" type="CT_OnOff" minOccurs="0"/>
3374     <xsd:element name="bodyDiv" type="CT_OnOff" minOccurs="0"/>
3375     <xsd:element name="marLeft" type="CT_SignedTwipsMeasure"/>
3376     <xsd:element name="marRight" type="CT_SignedTwipsMeasure"/>
3377     <xsd:element name="marTop" type="CT_SignedTwipsMeasure"/>
3378     <xsd:element name="marBottom" type="CT_SignedTwipsMeasure"/>
3379     <xsd:element name="divBdr" type="CT_DivBdr" minOccurs="0"/>
3380     <xsd:element name="divsChild" type="CT_Divs" minOccurs="0" maxOccurs="unbounded"/>
3381   </xsd:sequence>
3382   <xsd:attribute name="id" type="ST_DecimalNumber" use="required"/>
3383 </xsd:complexType>
3384 <xsd:complexType name="CT_Divs">
3385   <xsd:sequence minOccurs="1" maxOccurs="unbounded">
3386     <xsd:element name="div" type="CT_Div"/>
3387   </xsd:sequence>
3388 </xsd:complexType>
3389 <xsd:complexType name="CT_TxbxContent">
3390   <xsd:group ref="EG_BlockLevelElts" minOccurs="1" maxOccurs="unbounded"/>
3391 </xsd:complexType>
3392 <xsd:element name="txbxContent" type="CT_TxbxContent"/>
3393 <xsd:group name="EG_MathContent">
3394   <xsd:choice>
3395     <xsd:element ref="m:oMathPara"/>
3396     <xsd:element ref="m:oMath"/>
3397   </xsd:choice>
3398 </xsd:group>
3399 <xsd:group name="EG_BlockLevelChunkElts">
3400   <xsd:choice>
3401     <xsd:group ref="EG_ContentBlockContent" minOccurs="0" maxOccurs="unbounded"/>
3402   </xsd:choice>
3403 </xsd:group>
3404 <xsd:group name="EG_BlockLevelElts">
3405   <xsd:choice>
3406     <xsd:group ref="EG_BlockLevelChunkElts" minOccurs="0" maxOccurs="unbounded"/>
3407     <xsd:element name="altChunk" type="CT_AltChunk" minOccurs="0" maxOccurs="unbounded"/>
3408   </xsd:choice>
3409 </xsd:group>
3410 <xsd:group name="EG_RunLevelElts">
3411   <xsd:choice>
3412     <xsd:element name="proofErr" minOccurs="0" type="CT_ProofErr"/>
3413     <xsd:element name="permStart" minOccurs="0" type="CT_PermStart"/>
3414     <xsd:element name="permEnd" minOccurs="0" type="CT_Perm"/>
3415     <xsd:group ref="EG_RangeMarkupElements" minOccurs="0" maxOccurs="unbounded"/>
3416     <xsd:element name="ins" type="CT_RunTrackChange" minOccurs="0"/>
3417     <xsd:element name="del" type="CT_RunTrackChange" minOccurs="0"/>
3418     <xsd:element name="moveFrom" type="CT_RunTrackChange"/>
3419     <xsd:element name="moveTo" type="CT_RunTrackChange"/>
3420     <xsd:group ref="EG_MathContent" minOccurs="0" maxOccurs="unbounded"/>
3421   </xsd:choice>
3422 </xsd:group>
3423 <xsd:complexType name="CT_Body">
3424   <xsd:sequence>
3425     <xsd:group ref="EG_BlockLevelElts" minOccurs="0" maxOccurs="unbounded"/>

```

```

3426     <xsd:element name="sectPr" minOccurs="0" maxOccurs="1" type="CT_SectPr"/>
3427   </xsd:sequence>
3428 </xsd:complexType>
3429 <xsd:complexType name="CT_ShapeDefaults">
3430   <xsd:choice maxOccurs="unbounded">
3431     <xsd:any processContents="lax" namespace="urn:schemas-microsoft-com:office:office"
3432       minOccurs="0" maxOccurs="unbounded"/>
3433   </xsd:choice>
3434 </xsd:complexType>
3435 <xsd:complexType name="CT_Comments">
3436   <xsd:sequence>
3437     <xsd:element name="comment" type="CT_Comment" minOccurs="0" maxOccurs="unbounded"/>
3438   </xsd:sequence>
3439 </xsd:complexType>
3440 <xsd:element name="comments" type="CT_Comments"/>
3441 <xsd:complexType name="CT_Footnotes">
3442   <xsd:sequence maxOccurs="unbounded">
3443     <xsd:element name="footnote" type="CT_FtnEdn" minOccurs="0"/>
3444   </xsd:sequence>
3445 </xsd:complexType>
3446 <xsd:element name="footnotes" type="CT_Footnotes"/>
3447 <xsd:complexType name="CT_Endnotes">
3448   <xsd:sequence maxOccurs="unbounded">
3449     <xsd:element name="endnote" type="CT_FtnEdn" minOccurs="0"/>
3450   </xsd:sequence>
3451 </xsd:complexType>
3452 <xsd:element name="endnotes" type="CT_Endnotes"/>
3453 <xsd:element name="hdr" type="CT_HdrFtr"/>
3454 <xsd:element name="ftr" type="CT_HdrFtr"/>
3455 <xsd:complexType name="CT_SmartTagType">
3456   <xsd:attribute name="namespaceuri" type="s:ST_String"/>
3457   <xsd:attribute name="name" type="s:ST_String"/>
3458   <xsd:attribute name="url" type="s:ST_String"/>
3459 </xsd:complexType>
3460 <xsd:simpleType name="ST_ThemeColor">
3461   <xsd:restriction base="xsd:string">
3462     <xsd:enumeration value="dark1"/>
3463     <xsd:enumeration value="light1"/>
3464     <xsd:enumeration value="dark2"/>
3465     <xsd:enumeration value="light2"/>
3466     <xsd:enumeration value="accent1"/>
3467     <xsd:enumeration value="accent2"/>
3468     <xsd:enumeration value="accent3"/>
3469     <xsd:enumeration value="accent4"/>
3470     <xsd:enumeration value="accent5"/>
3471     <xsd:enumeration value="accent6"/>
3472     <xsd:enumeration value="hyperlink"/>
3473     <xsd:enumeration value="followedHyperlink"/>
3474     <xsd:enumeration value="none"/>
3475     <xsd:enumeration value="background1"/>
3476     <xsd:enumeration value="text1"/>
3477     <xsd:enumeration value="background2"/>
3478     <xsd:enumeration value="text2"/>

```

```

3479     </xsd:restriction>
3480 </xsd:simpleType>
3481 <xsd:simpleType name="ST_DocPartBehavior">
3482     <xsd:restriction base="xsd:string">
3483         <xsd:enumeration value="content"/>
3484         <xsd:enumeration value="p"/>
3485         <xsd:enumeration value="pg"/>
3486     </xsd:restriction>
3487 </xsd:simpleType>
3488 <xsd:complexType name="CT_DocPartBehavior">
3489     <xsd:attribute name="val" use="required" type="ST_DocPartBehavior"/>
3490 </xsd:complexType>
3491 <xsd:complexType name="CT_DocPartBehaviors">
3492     <xsd:choice>
3493         <xsd:element name="behavior" type="CT_DocPartBehavior" maxOccurs="unbounded"/>
3494     </xsd:choice>
3495 </xsd:complexType>
3496 <xsd:simpleType name="ST_DocPartType">
3497     <xsd:restriction base="xsd:string">
3498         <xsd:enumeration value="none"/>
3499         <xsd:enumeration value="normal"/>
3500         <xsd:enumeration value="autoExp"/>
3501         <xsd:enumeration value="toolbar"/>
3502         <xsd:enumeration value="speller"/>
3503         <xsd:enumeration value="formFld"/>
3504         <xsd:enumeration value="bbPlcHdr"/>
3505     </xsd:restriction>
3506 </xsd:simpleType>
3507 <xsd:complexType name="CT_DocPartType">
3508     <xsd:attribute name="val" use="required" type="ST_DocPartType"/>
3509 </xsd:complexType>
3510 <xsd:complexType name="CT_DocPartTypes">
3511     <xsd:choice>
3512         <xsd:element name="type" type="CT_DocPartType" maxOccurs="unbounded"/>
3513     </xsd:choice>
3514     <xsd:attribute name="all" type="s:ST_OnOff" use="optional"/>
3515 </xsd:complexType>
3516 <xsd:simpleType name="ST_DocPartGallery">
3517     <xsd:restriction base="xsd:string">
3518         <xsd:enumeration value="placeholder"/>
3519         <xsd:enumeration value="any"/>
3520         <xsd:enumeration value="default"/>
3521         <xsd:enumeration value="docParts"/>
3522         <xsd:enumeration value="coverPg"/>
3523         <xsd:enumeration value="eq"/>
3524         <xsd:enumeration value="ftrs"/>
3525         <xsd:enumeration value="hdrs"/>
3526         <xsd:enumeration value="pgNum"/>
3527         <xsd:enumeration value="tbls"/>
3528         <xsd:enumeration value="watermarks"/>
3529         <xsd:enumeration value="autoTxt"/>
3530         <xsd:enumeration value="txtBox"/>
3531         <xsd:enumeration value="pgNumT"/>

```

```

3532         <xsd:enumeration value="pgNumB"/>
3533         <xsd:enumeration value="pgNumMargins"/>
3534         <xsd:enumeration value="tblOfContents"/>
3535         <xsd:enumeration value="bib"/>
3536         <xsd:enumeration value="custQuickParts"/>
3537         <xsd:enumeration value="custCoverPg"/>
3538         <xsd:enumeration value="custEq"/>
3539         <xsd:enumeration value="custFtrs"/>
3540         <xsd:enumeration value="custHdrs"/>
3541         <xsd:enumeration value="custPgNum"/>
3542         <xsd:enumeration value="custTbIs"/>
3543         <xsd:enumeration value="custWatermarks"/>
3544         <xsd:enumeration value="custAutoTxt"/>
3545         <xsd:enumeration value="custTxtBox"/>
3546         <xsd:enumeration value="custPgNumT"/>
3547         <xsd:enumeration value="custPgNumB"/>
3548         <xsd:enumeration value="custPgNumMargins"/>
3549         <xsd:enumeration value="custTblOfContents"/>
3550         <xsd:enumeration value="custBib"/>
3551         <xsd:enumeration value="custom1"/>
3552         <xsd:enumeration value="custom2"/>
3553         <xsd:enumeration value="custom3"/>
3554         <xsd:enumeration value="custom4"/>
3555         <xsd:enumeration value="custom5"/>
3556     </xsd:restriction>
3557 </xsd:simpleType>
3558 <xsd:complexType name="CT_DocPartGallery">
3559     <xsd:attribute name="val" type="ST_DocPartGallery" use="required"/>
3560 </xsd:complexType>
3561 <xsd:complexType name="CT_DocPartCategory">
3562     <xsd:sequence>
3563         <xsd:element name="name" type="CT_String" minOccurs="1" maxOccurs="1"/>
3564         <xsd:element name="gallery" type="CT_DocPartGallery" minOccurs="1" maxOccurs="1"/>
3565     </xsd:sequence>
3566 </xsd:complexType>
3567 <xsd:complexType name="CT_DocPartName">
3568     <xsd:attribute name="val" type="s:ST_String" use="required"/>
3569     <xsd:attribute name="decorated" type="s:ST_OnOff" use="optional"/>
3570 </xsd:complexType>
3571 <xsd:complexType name="CT_DocPartPr">
3572     <xsd:choice maxOccurs="unbounded">
3573         <xsd:element name="name" type="CT_DocPartName" minOccurs="1"/>
3574         <xsd:element name="style" type="CT_String"/>
3575         <xsd:element name="category" type="CT_DocPartCategory"/>
3576         <xsd:element name="types" type="CT_DocPartTypes"/>
3577         <xsd:element name="behaviors" type="CT_DocPartBehaviors"/>
3578         <xsd:element name="description" type="CT_String"/>
3579         <xsd:element name="guid" type="CT_Guid"/>
3580     </xsd:choice>
3581 </xsd:complexType>
3582 <xsd:complexType name="CT_DocPart">
3583     <xsd:sequence>
3584         <xsd:element name="docPartPr" type="CT_DocPartPr" minOccurs="0"/>

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3585     <xsd:element name="docPartBody" type="CT_Body" minOccurs="0"/>
3586   </xsd:sequence>
3587 </xsd:complexType>
3588 <xsd:complexType name="CT_DocParts">
3589   <xsd:choice>
3590     <xsd:element name="docPart" type="CT_DocPart" minOccurs="1" maxOccurs="unbounded"/>
3591   </xsd:choice>
3592 </xsd:complexType>
3593 <xsd:element name="settings" type="CT_Settings"/>
3594 <xsd:element name="webSettings" type="CT_WebSettings"/>
3595 <xsd:element name="fonts" type="CT_FontsList"/>
3596 <xsd:element name="numbering" type="CT_Numbering"/>
3597 <xsd:element name="styles" type="CT_Styles"/>
3598 <xsd:simpleType name="ST_CaptionPos">
3599   <xsd:restriction base="xsd:string">
3600     <xsd:enumeration value="above"/>
3601     <xsd:enumeration value="below"/>
3602     <xsd:enumeration value="left"/>
3603     <xsd:enumeration value="right"/>
3604   </xsd:restriction>
3605 </xsd:simpleType>
3606 <xsd:complexType name="CT_Caption">
3607   <xsd:attribute name="name" type="s:ST_String" use="required"/>
3608   <xsd:attribute name="pos" type="ST_CaptionPos" use="optional"/>
3609   <xsd:attribute name="chapNum" type="s:ST_OnOff" use="optional"/>
3610   <xsd:attribute name="heading" type="ST_DecimalNumber" use="optional"/>
3611   <xsd:attribute name="noLabel" type="s:ST_OnOff" use="optional"/>
3612   <xsd:attribute name="numFmt" type="ST_NumberFormat" use="optional"/>
3613   <xsd:attribute name="sep" type="ST_ChapterSep" use="optional"/>
3614 </xsd:complexType>
3615 <xsd:complexType name="CT_AutoCaption">
3616   <xsd:attribute name="name" type="s:ST_String" use="required"/>
3617   <xsd:attribute name="caption" type="s:ST_String" use="required"/>
3618 </xsd:complexType>
3619 <xsd:complexType name="CT_AutoCaptions">
3620   <xsd:sequence>
3621     <xsd:element name="autoCaption" type="CT_AutoCaption" minOccurs="1"
3622       maxOccurs="unbounded"/>
3623   </xsd:sequence>
3624 </xsd:complexType>
3625 <xsd:complexType name="CT_Captions">
3626   <xsd:sequence>
3627     <xsd:element name="caption" type="CT_Caption" minOccurs="1" maxOccurs="unbounded"/>
3628     <xsd:element name="autoCaptions" type="CT_AutoCaptions" minOccurs="0" maxOccurs="1"/>
3629   </xsd:sequence>
3630 </xsd:complexType>
3631 <xsd:complexType name="CT_DocumentBase">
3632   <xsd:sequence>
3633     <xsd:element name="background" type="CT_Background" minOccurs="0"/>
3634   </xsd:sequence>
3635 </xsd:complexType>
3636 <xsd:complexType name="CT_Document">
3637   <xsd:complexContent>

```

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3638     <xsd:extension base="CT_DocumentBase">
3639         <xsd:sequence>
3640             <xsd:element name="body" type="CT_Body" minOccurs="0" maxOccurs="1"/>
3641         </xsd:sequence>
3642         <xsd:attribute name="conformance" type="s:ST_ConformanceClass"/>
3643     </xsd:extension>
3644 </xsd:complexContent>
3645 </xsd:complexType>
3646 <xsd:complexType name="CT_GlossaryDocument">
3647     <xsd:complexContent>
3648         <xsd:extension base="CT_DocumentBase">
3649             <xsd:sequence>
3650                 <xsd:element name="docParts" type="CT_DocParts" minOccurs="0"/>
3651             </xsd:sequence>
3652         </xsd:extension>
3653     </xsd:complexContent>
3654 </xsd:complexType>
3655 <xsd:element name="document" type="CT_Document"/>
3656 <xsd:element name="glossaryDocument" type="CT_GlossaryDocument"/>
3657 </xsd:schema>

```

A.2 SpreadsheetML

This schema is available in the file sml.xsd.

```

1 <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
2   xmlns="http://schemas.openxmlformats.org/spreadsheetml/2006/main"
3   xmlns:r="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
4   xmlns:xdr="http://schemas.openxmlformats.org/drawingml/2006/spreadsheetDrawing"
5   xmlns:s="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
6   targetNamespace="http://schemas.openxmlformats.org/spreadsheetml/2006/main"
7   elementFormDefault="qualified">
8     <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
9       schemaLocation="shared-relationshipReference.xsd"/>
10    <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
11      schemaLocation="shared-commonSimpleTypes.xsd"/>
12    <xsd:import namespace="http://schemas.openxmlformats.org/drawingml/2006/spreadsheetDrawing"
13      schemaLocation="dml-spreadsheetDrawing.xsd"/>
14    <xsd:complexType name="CT_AutoFilter">
15      <xsd:sequence>
16        <xsd:element name="filterColumn" minOccurs="0" maxOccurs="unbounded"
17          type="CT_FilterColumn"/>
18        <xsd:element name="sortState" minOccurs="0" maxOccurs="1" type="CT_SortState"/>
19        <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
20      </xsd:sequence>
21      <xsd:attribute name="ref" type="ST_Ref"/>
22    </xsd:complexType>
23    <xsd:complexType name="CT_FilterColumn">
24      <xsd:choice minOccurs="0" maxOccurs="1">
25        <xsd:element name="filters" type="CT_Filters" minOccurs="0" maxOccurs="1"/>
26        <xsd:element name="top10" type="CT_Top10" minOccurs="0" maxOccurs="1"/>
27        <xsd:element name="customFilters" type="CT_CustomFilters" minOccurs="0" maxOccurs="1"/>
28        <xsd:element name="dynamicFilter" type="CT_DynamicFilter" minOccurs="0" maxOccurs="1"/>

```



```

29     <xsd:element name="colorFilter" type="CT_ColorFilter" minOccurs="0" maxOccurs="1"/>
30     <xsd:element name="iconFilter" minOccurs="0" maxOccurs="1" type="CT_IconFilter"/>
31     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
32 </xsd:choice>
33 <xsd:attribute name="colId" type="xsd:unsignedInt" use="required"/>
34 <xsd:attribute name="hiddenButton" type="xsd:boolean" use="optional" default="false"/>
35 <xsd:attribute name="showButton" type="xsd:boolean" use="optional" default="true"/>
36 </xsd:complexType>
37 <xsd:complexType name="CT_Filters">
38     <xsd:sequence>
39         <xsd:element name="filter" type="CT_Filter" minOccurs="0" maxOccurs="unbounded"/>
40         <xsd:element name="dateGroupItem" type="CT_DateGroupItem" minOccurs="0"
41             maxOccurs="unbounded"/>
42     </xsd:sequence>
43     <xsd:attribute name="blank" type="xsd:boolean" use="optional" default="false"/>
44     <xsd:attribute name="calendarType" type="s:ST_CalendarType" use="optional" default="none"/>
45 </xsd:complexType>
46 <xsd:complexType name="CT_Filter">
47     <xsd:attribute name="val" type="s:ST_Xstring"/>
48 </xsd:complexType>
49 <xsd:complexType name="CT_CustomFilters">
50     <xsd:sequence>
51         <xsd:element name="customFilter" type="CT_CustomFilter" minOccurs="1" maxOccurs="2"/>
52     </xsd:sequence>
53     <xsd:attribute name="and" type="xsd:boolean" use="optional" default="false"/>
54 </xsd:complexType>
55 <xsd:complexType name="CT_CustomFilter">
56     <xsd:attribute name="operator" type="ST_FilterOperator" default="equal" use="optional"/>
57     <xsd:attribute name="val" type="s:ST_Xstring"/>
58 </xsd:complexType>
59 <xsd:complexType name="CT_Top10">
60     <xsd:attribute name="top" type="xsd:boolean" use="optional" default="true"/>
61     <xsd:attribute name="percent" type="xsd:boolean" use="optional" default="false"/>
62     <xsd:attribute name="val" type="xsd:double" use="required"/>
63     <xsd:attribute name="filterVal" type="xsd:double" use="optional"/>
64 </xsd:complexType>
65 <xsd:complexType name="CT_ColorFilter">
66     <xsd:attribute name="dxId" type="ST_DxfId" use="optional"/>
67     <xsd:attribute name="cellColor" type="xsd:boolean" use="optional" default="true"/>
68 </xsd:complexType>
69 <xsd:complexType name="CT_IconFilter">
70     <xsd:attribute name="iconSet" type="ST_IconSetType" use="required"/>
71     <xsd:attribute name="iconId" type="xsd:unsignedInt" use="optional"/>
72 </xsd:complexType>
73 <xsd:simpleType name="ST_FilterOperator">
74     <xsd:restriction base="xsd:string">
75         <xsd:enumeration value="equal"/>
76         <xsd:enumeration value="lessThan"/>
77         <xsd:enumeration value="lessThanOrEqual"/>
78         <xsd:enumeration value="notEqual"/>
79         <xsd:enumeration value="greaterThanOrEqual"/>
80         <xsd:enumeration value="greaterThan"/>
81     </xsd:restriction>

```

```

82 </xsd:simpleType>
83 <xsd:complexType name="CT_DynamicFilter">
84   <xsd:attribute name="type" type="ST_DynamicFilterType" use="required"/>
85   <xsd:attribute name="val" type="xsd:double" use="optional"/>
86   <xsd:attribute name="valIso" type="xsd:dateTime" use="optional"/>
87   <xsd:attribute name="maxVal" type="xsd:double" use="optional"/>
88   <xsd:attribute name="maxValIso" type="xsd:dateTime" use="optional"/>
89 </xsd:complexType>
90 <xsd:simpleType name="ST_DynamicFilterType">
91   <xsd:restriction base="xsd:string">
92     <xsd:enumeration value="null"/>
93     <xsd:enumeration value="aboveAverage"/>
94     <xsd:enumeration value="belowAverage"/>
95     <xsd:enumeration value="tomorrow"/>
96     <xsd:enumeration value="today"/>
97     <xsd:enumeration value="yesterday"/>
98     <xsd:enumeration value="nextWeek"/>
99     <xsd:enumeration value="thisWeek"/>
100    <xsd:enumeration value="lastWeek"/>
101    <xsd:enumeration value="nextMonth"/>
102    <xsd:enumeration value="thisMonth"/>
103    <xsd:enumeration value="lastMonth"/>
104    <xsd:enumeration value="nextQuarter"/>
105    <xsd:enumeration value="thisQuarter"/>
106    <xsd:enumeration value="lastQuarter"/>
107    <xsd:enumeration value="nextYear"/>
108    <xsd:enumeration value="thisYear"/>
109    <xsd:enumeration value="lastYear"/>
110    <xsd:enumeration value="yearToDate"/>
111    <xsd:enumeration value="Q1"/>
112    <xsd:enumeration value="Q2"/>
113    <xsd:enumeration value="Q3"/>
114    <xsd:enumeration value="Q4"/>
115    <xsd:enumeration value="M1"/>
116    <xsd:enumeration value="M2"/>
117    <xsd:enumeration value="M3"/>
118    <xsd:enumeration value="M4"/>
119    <xsd:enumeration value="M5"/>
120    <xsd:enumeration value="M6"/>
121    <xsd:enumeration value="M7"/>
122    <xsd:enumeration value="M8"/>
123    <xsd:enumeration value="M9"/>
124    <xsd:enumeration value="M10"/>
125    <xsd:enumeration value="M11"/>
126    <xsd:enumeration value="M12"/>
127   </xsd:restriction>
128 </xsd:simpleType>
129 <xsd:simpleType name="ST_IconSetType">
130   <xsd:restriction base="xsd:string">
131     <xsd:enumeration value="3Arrows"/>
132     <xsd:enumeration value="3ArrowsGray"/>
133     <xsd:enumeration value="3Flags"/>
134     <xsd:enumeration value="3TrafficLights1"/>

```

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135     <xsd:enumeration value="3TrafficLights2"/>
136     <xsd:enumeration value="3Signs"/>
137     <xsd:enumeration value="3Symbols"/>
138     <xsd:enumeration value="3Symbols2"/>
139     <xsd:enumeration value="4Arrows"/>
140     <xsd:enumeration value="4ArrowsGray"/>
141     <xsd:enumeration value="4RedToBlack"/>
142     <xsd:enumeration value="4Rating"/>
143     <xsd:enumeration value="4TrafficLights"/>
144     <xsd:enumeration value="5Arrows"/>
145     <xsd:enumeration value="5ArrowsGray"/>
146     <xsd:enumeration value="5Rating"/>
147     <xsd:enumeration value="5Quarters"/>
148   </xsd:restriction>
149 </xsd:simpleType>
150 <xsd:complexType name="CT_SortState">
151   <xsd:sequence>
152     <xsd:element name="sortCondition" minOccurs="0" maxOccurs="64" type="CT_SortCondition"/>
153     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
154   </xsd:sequence>
155   <xsd:attribute name="columnSort" type="xsd:boolean" use="optional" default="false"/>
156   <xsd:attribute name="caseSensitive" type="xsd:boolean" use="optional" default="false"/>
157   <xsd:attribute name="sortMethod" type="ST_SortMethod" use="optional" default="none"/>
158   <xsd:attribute name="ref" type="ST_Ref" use="required"/>
159 </xsd:complexType>
160 <xsd:complexType name="CT_SortCondition">
161   <xsd:attribute name="descending" type="xsd:boolean" use="optional" default="false"/>
162   <xsd:attribute name="sortBy" type="ST_SortBy" use="optional" default="value"/>
163   <xsd:attribute name="ref" type="ST_Ref" use="required"/>
164   <xsd:attribute name="customList" type="s:ST_Xstring" use="optional"/>
165   <xsd:attribute name="dxId" type="ST_DxfId" use="optional"/>
166   <xsd:attribute name="iconSet" type="ST_IconSetType" use="optional" default="3Arrows"/>
167   <xsd:attribute name="iconId" type="xsd:unsignedInt" use="optional"/>
168 </xsd:complexType>
169 <xsd:simpleType name="ST_SortBy">
170   <xsd:restriction base="xsd:string">
171     <xsd:enumeration value="value"/>
172     <xsd:enumeration value="cellColor"/>
173     <xsd:enumeration value="fontColor"/>
174     <xsd:enumeration value="icon"/>
175   </xsd:restriction>
176 </xsd:simpleType>
177 <xsd:simpleType name="ST_SortMethod">
178   <xsd:restriction base="xsd:string">
179     <xsd:enumeration value="stroke"/>
180     <xsd:enumeration value="pinYin"/>
181     <xsd:enumeration value="none"/>
182   </xsd:restriction>
183 </xsd:simpleType>
184 <xsd:complexType name="CT_DateGroupItem">
185   <xsd:attribute name="year" type="xsd:unsignedShort" use="required"/>
186   <xsd:attribute name="month" type="xsd:unsignedShort" use="optional"/>
187   <xsd:attribute name="day" type="xsd:unsignedShort" use="optional"/>

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188     <xsd:attribute name="hour" type="xsd:unsignedShort" use="optional"/>
189     <xsd:attribute name="minute" type="xsd:unsignedShort" use="optional"/>
190     <xsd:attribute name="second" type="xsd:unsignedShort" use="optional"/>
191     <xsd:attribute name="dateTimeGrouping" type="ST_DateTimeGrouping" use="required"/>
192 </xsd:complexType>
193 <xsd:simpleType name="ST_DateTimeGrouping">
194     <xsd:restriction base="xsd:string">
195         <xsd:enumeration value="year"/>
196         <xsd:enumeration value="month"/>
197         <xsd:enumeration value="day"/>
198         <xsd:enumeration value="hour"/>
199         <xsd:enumeration value="minute"/>
200         <xsd:enumeration value="second"/>
201     </xsd:restriction>
202 </xsd:simpleType>
203 <xsd:simpleType name="ST_CellRef">
204     <xsd:restriction base="xsd:string"/>
205 </xsd:simpleType>
206 <xsd:simpleType name="ST_Ref">
207     <xsd:restriction base="xsd:string"/>
208 </xsd:simpleType>
209 <xsd:simpleType name="ST_RefA">
210     <xsd:restriction base="xsd:string"/>
211 </xsd:simpleType>
212 <xsd:simpleType name="ST_Sqref">
213     <xsd:list itemType="ST_Ref"/>
214 </xsd:simpleType>
215 <xsd:simpleType name="ST_Formula">
216     <xsd:restriction base="s:ST_Xstring"/>
217 </xsd:simpleType>
218 <xsd:simpleType name="ST_UnsignedIntHex">
219     <xsd:restriction base="xsd:hexBinary">
220         <xsd:length value="4"/>
221     </xsd:restriction>
222 </xsd:simpleType>
223 <xsd:simpleType name="ST_UnsignedShortHex">
224     <xsd:restriction base="xsd:hexBinary">
225         <xsd:length value="2"/>
226     </xsd:restriction>
227 </xsd:simpleType>
228 <xsd:complexType name="CT_XStringElement">
229     <xsd:attribute name="v" type="s:ST_Xstring" use="required"/>
230 </xsd:complexType>
231 <xsd:complexType name="CT_Extension">
232     <xsd:sequence>
233         <xsd:any processContents="lax"/>
234     </xsd:sequence>
235     <xsd:attribute name="uri" type="xsd:token"/>
236 </xsd:complexType>
237 <xsd:complexType name="CT_ObjectAnchor">
238     <xsd:sequence>
239         <xsd:element ref="xdr:from" minOccurs="1" maxOccurs="1"/>
240         <xsd:element ref="xdr:to" minOccurs="1" maxOccurs="1"/>

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241     </xsd:sequence>
242     <xsd:attribute name="moveWithCells" type="xsd:boolean" use="optional" default="false"/>
243     <xsd:attribute name="sizeWithCells" type="xsd:boolean" use="optional" default="false"/>
244     <xsd:attribute name="z-order" type="xsd:unsignedInt" use="optional"/>
245 </xsd:complexType>
246 <xsd:group name="EG_ExtensionList">
247     <xsd:sequence>
248         <xsd:element name="ext" type="CT_Extension" minOccurs="0" maxOccurs="unbounded"/>
249     </xsd:sequence>
250 </xsd:group>
251 <xsd:complexType name="CT_ExtensionList">
252     <xsd:sequence>
253         <xsd:group ref="EG_ExtensionList" minOccurs="0"/>
254     </xsd:sequence>
255 </xsd:complexType>
256 <xsd:element name="calcChain" type="CT_CalcChain"/>
257 <xsd:complexType name="CT_CalcChain">
258     <xsd:sequence>
259         <xsd:element name="c" type="CT_CalcCell" minOccurs="1" maxOccurs="unbounded"/>
260         <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
261     </xsd:sequence>
262 </xsd:complexType>
263 <xsd:complexType name="CT_CalcCell">
264     <xsd:attribute name="r" type="ST_CellRef" use="optional"/>
265     <xsd:attribute name="ref" type="ST_CellRef" use="optional"/>
266     <xsd:attribute name="i" type="xsd:int" use="optional" default="0"/>
267     <xsd:attribute name="s" type="xsd:boolean" use="optional" default="false"/>
268     <xsd:attribute name="l" type="xsd:boolean" use="optional" default="false"/>
269     <xsd:attribute name="t" type="xsd:boolean" use="optional" default="false"/>
270     <xsd:attribute name="a" type="xsd:boolean" use="optional" default="false"/>
271 </xsd:complexType>
272 <xsd:element name="comments" type="CT_Comments"/>
273 <xsd:complexType name="CT_Comments">
274     <xsd:sequence>
275         <xsd:element name="authors" type="CT_Authors" minOccurs="1" maxOccurs="1"/>
276         <xsd:element name="commentList" type="CT_CommentList" minOccurs="1" maxOccurs="1"/>
277         <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
278     </xsd:sequence>
279 </xsd:complexType>
280 <xsd:complexType name="CT_Authors">
281     <xsd:sequence>
282         <xsd:element name="author" type="s:ST_Xstring" minOccurs="0" maxOccurs="unbounded"/>
283     </xsd:sequence>
284 </xsd:complexType>
285 <xsd:complexType name="CT_CommentList">
286     <xsd:sequence>
287         <xsd:element name="comment" type="CT_Comment" minOccurs="0" maxOccurs="unbounded"/>
288     </xsd:sequence>
289 </xsd:complexType>
290 <xsd:complexType name="CT_Comment">
291     <xsd:sequence>
292         <xsd:element name="text" type="CT_Rst" minOccurs="1" maxOccurs="1"/>
293         <xsd:element name="commentPr" type="CT_CommentPr" minOccurs="0" maxOccurs="1"/>

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294     </xsd:sequence>
295     <xsd:attribute name="ref" type="ST_Ref" use="required"/>
296     <xsd:attribute name="authorId" type="xsd:unsignedInt" use="required"/>
297     <xsd:attribute name="guid" type="s:ST_Guid" use="optional"/>
298     <xsd:attribute name="shapeId" type="xsd:unsignedInt" use="optional"/>
299 </xsd:complexType>
300 <xsd:complexType name="CT_CommentPr">
301     <xsd:sequence>
302         <xsd:element name="anchor" type="CT_ObjectAnchor" minOccurs="1" maxOccurs="1"/>
303     </xsd:sequence>
304     <xsd:attribute name="locked" type="xsd:boolean" use="optional" default="true"/>
305     <xsd:attribute name="defaultSize" type="xsd:boolean" use="optional" default="true"/>
306     <xsd:attribute name="print" type="xsd:boolean" use="optional" default="true"/>
307     <xsd:attribute name="disabled" type="xsd:boolean" use="optional" default="false"/>
308     <xsd:attribute name="uiObject" type="xsd:boolean" use="optional" default="false"/>
309     <xsd:attribute name="autoFill" type="xsd:boolean" use="optional" default="true"/>
310     <xsd:attribute name="autoLine" type="xsd:boolean" use="optional" default="true"/>
311     <xsd:attribute name="altText" type="s:ST_Xstring" use="optional"/>
312     <xsd:attribute name="textHAlign" type="ST_TextHAlign" use="optional" default="left"/>
313     <xsd:attribute name="textVAlign" type="ST_TextVAlign" use="optional" default="top"/>
314     <xsd:attribute name="lockText" type="xsd:boolean" use="optional" default="true"/>
315     <xsd:attribute name="justLastX" type="xsd:boolean" use="optional" default="false"/>
316     <xsd:attribute name="autoScale" type="xsd:boolean" use="optional" default="false"/>
317     <xsd:attribute name="rowHidden" type="xsd:boolean" use="optional" default="false"/>
318     <xsd:attribute name="colHidden" type="xsd:boolean" use="optional" default="false"/>
319 </xsd:complexType>
320 <xsd:simpleType name="ST_TextHAlign">
321     <xsd:restriction base="xsd:string">
322         <xsd:enumeration value="left"/>
323         <xsd:enumeration value="center"/>
324         <xsd:enumeration value="right"/>
325         <xsd:enumeration value="justify"/>
326         <xsd:enumeration value="distributed"/>
327     </xsd:restriction>
328 </xsd:simpleType>
329 <xsd:simpleType name="ST_TextVAlign">
330     <xsd:restriction base="xsd:string">
331         <xsd:enumeration value="top"/>
332         <xsd:enumeration value="center"/>
333         <xsd:enumeration value="bottom"/>
334         <xsd:enumeration value="justify"/>
335         <xsd:enumeration value="distributed"/>
336     </xsd:restriction>
337 </xsd:simpleType>
338 <xsd:element name="MapInfo" type="CT_MapInfo"/>
339 <xsd:complexType name="CT_MapInfo">
340     <xsd:sequence>
341         <xsd:element name="Schema" type="CT_Schema" minOccurs="1" maxOccurs="unbounded"/>
342         <xsd:element name="Map" type="CT_Map" minOccurs="1" maxOccurs="unbounded"/>
343     </xsd:sequence>
344     <xsd:attribute name="SelectionNamespaces" type="xsd:string" use="required"/>
345 </xsd:complexType>
346 <xsd:complexType name="CT_Schema" mixed="true">

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347     <xsd:sequence>
348         <xsd:any/>
349     </xsd:sequence>
350     <xsd:attribute name="ID" type="xsd:string" use="required"/>
351     <xsd:attribute name="SchemaRef" type="xsd:string" use="optional"/>
352     <xsd:attribute name="Namespace" type="xsd:string" use="optional"/>
353     <xsd:attribute name="SchemaLanguage" type="xsd:token" use="optional"/>
354 </xsd:complexType>
355 <xsd:complexType name="CT_Map">
356     <xsd:sequence>
357         <xsd:element name="DataBinding" type="CT_DataBinding" minOccurs="0" maxOccurs="1"/>
358     </xsd:sequence>
359     <xsd:attribute name="ID" type="xsd:unsignedInt" use="required"/>
360     <xsd:attribute name="Name" type="xsd:string" use="required"/>
361     <xsd:attribute name="RootElement" type="xsd:string" use="required"/>
362     <xsd:attribute name="SchemaID" type="xsd:string" use="required"/>
363     <xsd:attribute name="ShowImportExportValidationErrors" type="xsd:boolean" use="required"/>
364     <xsd:attribute name="AutoFit" type="xsd:boolean" use="required"/>
365     <xsd:attribute name="Append" type="xsd:boolean" use="required"/>
366     <xsd:attribute name="PreserveSortAFLayout" type="xsd:boolean" use="required"/>
367     <xsd:attribute name="PreserveFormat" type="xsd:boolean" use="required"/>
368 </xsd:complexType>
369 <xsd:complexType name="CT_DataBinding">
370     <xsd:sequence>
371         <xsd:any/>
372     </xsd:sequence>
373     <xsd:attribute name="DataBindingName" type="xsd:string" use="optional"/>
374     <xsd:attribute name="FileBinding" type="xsd:boolean" use="optional"/>
375     <xsd:attribute name="ConnectionID" type="xsd:unsignedInt" use="optional"/>
376     <xsd:attribute name="FileBindingName" type="xsd:string" use="optional"/>
377     <xsd:attribute name="DataBindingLoadMode" type="xsd:unsignedInt" use="required"/>
378 </xsd:complexType>
379 <xsd:element name="connections" type="CT_Connections"/>
380 <xsd:complexType name="CT_Connections">
381     <xsd:sequence>
382         <xsd:element name="connection" minOccurs="1" maxOccurs="unbounded" type="CT_Connection"/>
383     </xsd:sequence>
384 </xsd:complexType>
385 <xsd:complexType name="CT_Connection">
386     <xsd:sequence>
387         <xsd:element name="dbPr" minOccurs="0" maxOccurs="1" type="CT_DbPr"/>
388         <xsd:element name="olapPr" minOccurs="0" maxOccurs="1" type="CT_OlapPr"/>
389         <xsd:element name="webPr" minOccurs="0" maxOccurs="1" type="CT_WebPr"/>
390         <xsd:element name="textPr" minOccurs="0" maxOccurs="1" type="CT_TextPr"/>
391         <xsd:element name="parameters" minOccurs="0" maxOccurs="1" type="CT_Parameters"/>
392         <xsd:element name="extLst" minOccurs="0" maxOccurs="1" type="CT_ExtensionList"/>
393     </xsd:sequence>
394     <xsd:attribute name="id" use="required" type="xsd:unsignedInt"/>
395     <xsd:attribute name="sourceFile" use="optional" type="s:ST_Xstring"/>
396     <xsd:attribute name="odcFile" use="optional" type="s:ST_Xstring"/>
397     <xsd:attribute name="keepAlive" use="optional" type="xsd:boolean" default="false"/>
398     <xsd:attribute name="interval" use="optional" type="xsd:unsignedInt" default="0"/>
399     <xsd:attribute name="name" use="optional" type="s:ST_Xstring"/>

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400     <xsd:attribute name="description" use="optional" type="s:ST_Xstring"/>
401     <xsd:attribute name="type" use="optional" type="xsd:unsignedInt"/>
402     <xsd:attribute name="reconnectionMethod" use="optional" type="xsd:unsignedInt" default="1"/>
403     <xsd:attribute name="refreshedVersion" use="required" type="xsd:unsignedByte"/>
404     <xsd:attribute name="minRefreshableVersion" use="optional" type="xsd:unsignedByte"
405         default="0"/>
406     <xsd:attribute name="savePassword" use="optional" type="xsd:boolean" default="false"/>
407     <xsd:attribute name="new" use="optional" type="xsd:boolean" default="false"/>
408     <xsd:attribute name="deleted" use="optional" type="xsd:boolean" default="false"/>
409     <xsd:attribute name="onlyUseConnectionFile" use="optional" type="xsd:boolean"
410         default="false"/>
411     <xsd:attribute name="background" use="optional" type="xsd:boolean" default="false"/>
412     <xsd:attribute name="refreshOnLoad" use="optional" type="xsd:boolean" default="false"/>
413     <xsd:attribute name="saveData" use="optional" type="xsd:boolean" default="false"/>
414     <xsd:attribute name="credentials" use="optional" type="ST_CredMethod" default="integrated"/>
415     <xsd:attribute name="singleSignOnId" use="optional" type="s:ST_Xstring"/>
416 </xsd:complexType>
417 <xsd:simpleType name="ST_CredMethod">
418     <xsd:restriction base="xsd:string">
419         <xsd:enumeration value="integrated"/>
420         <xsd:enumeration value="none"/>
421         <xsd:enumeration value="stored"/>
422         <xsd:enumeration value="prompt"/>
423     </xsd:restriction>
424 </xsd:simpleType>
425 <xsd:complexType name="CT_DbPr">
426     <xsd:attribute name="connection" use="required" type="s:ST_Xstring"/>
427     <xsd:attribute name="command" use="optional" type="s:ST_Xstring"/>
428     <xsd:attribute name="serverCommand" use="optional" type="s:ST_Xstring"/>
429     <xsd:attribute name="commandType" use="optional" type="xsd:unsignedInt" default="2"/>
430 </xsd:complexType>
431 <xsd:complexType name="CT_OlapPr">
432     <xsd:attribute name="local" use="optional" type="xsd:boolean" default="false"/>
433     <xsd:attribute name="localConnection" use="optional" type="s:ST_Xstring"/>
434     <xsd:attribute name="localRefresh" use="optional" type="xsd:boolean" default="true"/>
435     <xsd:attribute name="sendLocale" use="optional" type="xsd:boolean" default="false"/>
436     <xsd:attribute name="rowDrillCount" use="optional" type="xsd:unsignedInt"/>
437     <xsd:attribute name="serverFill" use="optional" type="xsd:boolean" default="true"/>
438     <xsd:attribute name="serverNumberFormat" use="optional" type="xsd:boolean" default="true"/>
439     <xsd:attribute name="serverFont" use="optional" type="xsd:boolean" default="true"/>
440     <xsd:attribute name="serverFontColor" use="optional" type="xsd:boolean" default="true"/>
441 </xsd:complexType>
442 <xsd:complexType name="CT_WebPr">
443     <xsd:sequence>
444         <xsd:element name="tables" minOccurs="0" maxOccurs="1" type="CT_Tables"/>
445     </xsd:sequence>
446     <xsd:attribute name="xml" use="optional" type="xsd:boolean" default="false"/>
447     <xsd:attribute name="sourceData" use="optional" type="xsd:boolean" default="false"/>
448     <xsd:attribute name="parsePre" use="optional" type="xsd:boolean" default="false"/>
449     <xsd:attribute name="consecutive" use="optional" type="xsd:boolean" default="false"/>
450     <xsd:attribute name="firstRow" use="optional" type="xsd:boolean" default="false"/>
451     <xsd:attribute name="xl97" use="optional" type="xsd:boolean" default="false"/>
452     <xsd:attribute name="textDates" use="optional" type="xsd:boolean" default="false"/>

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453     <xsd:attribute name="xl2000" use="optional" type="xsd:boolean" default="false"/>
454     <xsd:attribute name="url" use="optional" type="s:ST_Xstring"/>
455     <xsd:attribute name="post" use="optional" type="s:ST_Xstring"/>
456     <xsd:attribute name="htmlTables" use="optional" type="xsd:boolean" default="false"/>
457     <xsd:attribute name="htmlFormat" use="optional" type="ST_HtmlFmt" default="none"/>
458     <xsd:attribute name="editPage" use="optional" type="s:ST_Xstring"/>
459 </xsd:complexType>
460 <xsd:simpleType name="ST_HtmlFmt">
461     <xsd:restriction base="xsd:string">
462         <xsd:enumeration value="none"/>
463         <xsd:enumeration value="rtf"/>
464         <xsd:enumeration value="all"/>
465     </xsd:restriction>
466 </xsd:simpleType>
467 <xsd:complexType name="CT_Parameters">
468     <xsd:sequence>
469         <xsd:element name="parameter" minOccurs="1" maxOccurs="unbounded" type="CT_Parameter"/>
470     </xsd:sequence>
471     <xsd:attribute name="count" use="optional" type="xsd:unsignedInt"/>
472 </xsd:complexType>
473 <xsd:complexType name="CT_Parameter">
474     <xsd:attribute name="name" use="optional" type="s:ST_Xstring"/>
475     <xsd:attribute name="sqlType" use="optional" type="xsd:int" default="0"/>
476     <xsd:attribute name="parameterType" use="optional" type="ST_ParameterType" default="prompt"/>
477     <xsd:attribute name="refreshOnChange" use="optional" type="xsd:boolean" default="false"/>
478     <xsd:attribute name="prompt" use="optional" type="s:ST_Xstring"/>
479     <xsd:attribute name="boolean" use="optional" type="xsd:boolean"/>
480     <xsd:attribute name="double" use="optional" type="xsd:double"/>
481     <xsd:attribute name="integer" use="optional" type="xsd:int"/>
482     <xsd:attribute name="string" use="optional" type="s:ST_Xstring"/>
483     <xsd:attribute name="cell" use="optional" type="s:ST_Xstring"/>
484 </xsd:complexType>
485 <xsd:simpleType name="ST_ParameterType">
486     <xsd:restriction base="xsd:string">
487         <xsd:enumeration value="prompt"/>
488         <xsd:enumeration value="value"/>
489         <xsd:enumeration value="cell"/>
490     </xsd:restriction>
491 </xsd:simpleType>
492 <xsd:complexType name="CT_Tables">
493     <xsd:choice minOccurs="1" maxOccurs="unbounded">
494         <xsd:element name="m" type="CT_TableMissing"/>
495         <xsd:element name="s" type="CT_XStringElement"/>
496         <xsd:element name="x" type="CT_Index"/>
497     </xsd:choice>
498     <xsd:attribute name="count" use="optional" type="xsd:unsignedInt"/>
499 </xsd:complexType>
500 <xsd:complexType name="CT_TableMissing"/>
501 <xsd:complexType name="CT_TextPr">
502     <xsd:sequence>
503         <xsd:element name="textFields" minOccurs="0" maxOccurs="1" type="CT_TextFields"/>
504     </xsd:sequence>
505     <xsd:attribute name="prompt" use="optional" type="xsd:boolean" default="true"/>

```

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506     <xsd:attribute name="fileType" use="optional" type="ST_FileType" default="win"/>
507     <xsd:attribute name="codePage" use="optional" type="xsd:unsignedInt" default="1252"/>
508     <xsd:attribute name="characterSet" use="optional" type="xsd:string"/>
509     <xsd:attribute name="firstRow" use="optional" type="xsd:unsignedInt" default="1"/>
510     <xsd:attribute name="sourceFile" use="optional" type="s:ST_Xstring" default=""/>
511     <xsd:attribute name="delimited" use="optional" type="xsd:boolean" default="true"/>
512     <xsd:attribute name="decimal" use="optional" type="s:ST_Xstring" default="."/>
513     <xsd:attribute name="thousands" use="optional" type="s:ST_Xstring" default=","/>
514     <xsd:attribute name="tab" use="optional" type="xsd:boolean" default="true"/>
515     <xsd:attribute name="space" use="optional" type="xsd:boolean" default="false"/>
516     <xsd:attribute name="comma" use="optional" type="xsd:boolean" default="false"/>
517     <xsd:attribute name="semicolon" use="optional" type="xsd:boolean" default="false"/>
518     <xsd:attribute name="consecutive" use="optional" type="xsd:boolean" default="false"/>
519     <xsd:attribute name="qualifier" use="optional" type="ST_Qualifier" default="doubleQuote"/>
520     <xsd:attribute name="delimiter" use="optional" type="s:ST_Xstring"/>
521 </xsd:complexType>
522 <xsd:simpleType name="ST_FileType">
523     <xsd:restriction base="xsd:string">
524         <xsd:enumeration value="mac"/>
525         <xsd:enumeration value="win"/>
526         <xsd:enumeration value="dos"/>
527         <xsd:enumeration value="lin"/>
528         <xsd:enumeration value="other"/>
529     </xsd:restriction>
530 </xsd:simpleType>
531 <xsd:simpleType name="ST_Qualifier">
532     <xsd:restriction base="xsd:string">
533         <xsd:enumeration value="doubleQuote"/>
534         <xsd:enumeration value="singleQuote"/>
535         <xsd:enumeration value="none"/>
536     </xsd:restriction>
537 </xsd:simpleType>
538 <xsd:complexType name="CT_TextFields">
539     <xsd:sequence>
540         <xsd:element name="textField" minOccurs="1" maxOccurs="unbounded" type="CT_TextField"/>
541     </xsd:sequence>
542     <xsd:attribute name="count" use="optional" type="xsd:unsignedInt" default="1"/>
543 </xsd:complexType>
544 <xsd:complexType name="CT_TextField">
545     <xsd:attribute name="type" use="optional" type="ST_ExternalConnectionType" default="general"/>
546     <xsd:attribute name="position" use="optional" type="xsd:unsignedInt" default="0"/>
547 </xsd:complexType>
548 <xsd:simpleType name="ST_ExternalConnectionType">
549     <xsd:restriction base="xsd:string">
550         <xsd:enumeration value="general"/>
551         <xsd:enumeration value="text"/>
552         <xsd:enumeration value="MDY"/>
553         <xsd:enumeration value="DMY"/>
554         <xsd:enumeration value="YMD"/>
555         <xsd:enumeration value="MYD"/>
556         <xsd:enumeration value="DYM"/>
557         <xsd:enumeration value="YDM"/>
558         <xsd:enumeration value="skip"/>

```

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559     <xsd:enumeration value="EMD"/>
560   </xsd:restriction>
561 </xsd:simpleType>
562 <xsd:element name="pivotCacheDefinition" type="CT_PivotCacheDefinition"/>
563 <xsd:element name="pivotCacheRecords" type="CT_PivotCacheRecords"/>
564 <xsd:element name="pivotTableDefinition" type="CT_pivotTableDefinition"/>
565 <xsd:complexType name="CT_PivotCacheDefinition">
566   <xsd:sequence>
567     <xsd:element name="cacheSource" type="CT_CacheSource" minOccurs="1" maxOccurs="1"/>
568     <xsd:element name="cacheFields" type="CT_CacheFields" minOccurs="1" maxOccurs="1"/>
569     <xsd:element name="cacheHierarchies" minOccurs="0" type="CT_CacheHierarchies"/>
570     <xsd:element name="kpis" minOccurs="0" type="CT_PCDKPIs"/>
571     <xsd:element name="tupleCache" minOccurs="0" type="CT_TupleCache"/>
572     <xsd:element name="calculatedItems" minOccurs="0" type="CT_CalculatedItems"/>
573     <xsd:element name="calculatedMembers" type="CT_CalculatedMembers" minOccurs="0"/>
574     <xsd:element name="dimensions" type="CT_Dimensions" minOccurs="0"/>
575     <xsd:element name="measureGroups" type="CT_MeasureGroups" minOccurs="0"/>
576     <xsd:element name="maps" type="CT_MeasureDimensionMaps" minOccurs="0"/>
577     <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
578   </xsd:sequence>
579   <xsd:attribute ref="r:id" use="optional"/>
580   <xsd:attribute name="invalid" type="xsd:boolean" use="optional" default="false"/>
581   <xsd:attribute name="saveData" type="xsd:boolean" use="optional" default="true"/>
582   <xsd:attribute name="refreshOnLoad" type="xsd:boolean" use="optional" default="false"/>
583   <xsd:attribute name="optimizeMemory" type="xsd:boolean" use="optional" default="false"/>
584   <xsd:attribute name="enableRefresh" type="xsd:boolean" use="optional" default="true"/>
585   <xsd:attribute name="refreshedBy" type="s:ST_Xstring" use="optional"/>
586   <xsd:attribute name="refreshedDate" type="xsd:double" use="optional"/>
587   <xsd:attribute name="refreshedDateIso" type="xsd:dateTime" use="optional"/>
588   <xsd:attribute name="backgroundQuery" type="xsd:boolean" default="false"/>
589   <xsd:attribute name="missingItemsLimit" type="xsd:unsignedInt" use="optional"/>
590   <xsd:attribute name="createdVersion" type="xsd:unsignedByte" use="optional" default="0"/>
591   <xsd:attribute name="refreshedVersion" type="xsd:unsignedByte" use="optional" default="0"/>
592   <xsd:attribute name="minRefreshableVersion" type="xsd:unsignedByte" use="optional"
593     default="0"/>
594   <xsd:attribute name="recordCount" type="xsd:unsignedInt" use="optional"/>
595   <xsd:attribute name="upgradeOnRefresh" type="xsd:boolean" use="optional" default="false"/>
596   <xsd:attribute name="tupleCache" type="xsd:boolean" use="optional" default="false"/>
597   <xsd:attribute name="supportSubquery" type="xsd:boolean" use="optional" default="false"/>
598   <xsd:attribute name="supportAdvancedDrill" type="xsd:boolean" use="optional" default="false"/>
599 </xsd:complexType>
600 <xsd:complexType name="CT_CacheFields">
601   <xsd:sequence>
602     <xsd:element name="cacheField" type="CT_CacheField" minOccurs="0" maxOccurs="unbounded"/>
603   </xsd:sequence>
604   <xsd:attribute name="count" type="xsd:unsignedInt"/>
605 </xsd:complexType>
606 <xsd:complexType name="CT_CacheField">
607   <xsd:sequence>
608     <xsd:element name="sharedItems" type="CT_SharedItems" minOccurs="0" maxOccurs="1"/>
609     <xsd:element name="fieldGroup" minOccurs="0" type="CT_FieldGroup"/>
610     <xsd:element name="mpMap" minOccurs="0" maxOccurs="unbounded" type="CT_X"/>
611     <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>

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612     </xsd:sequence>
613     <xsd:attribute name="name" type="s:ST Xstring" use="required"/>
614     <xsd:attribute name="caption" type="s:ST Xstring" use="optional"/>
615     <xsd:attribute name="propertyName" type="s:ST Xstring" use="optional"/>
616     <xsd:attribute name="serverField" type="xsd:boolean" use="optional" default="false"/>
617     <xsd:attribute name="uniqueList" type="xsd:boolean" use="optional" default="true"/>
618     <xsd:attribute name="numFmtId" type="ST NumFmtId" use="optional"/>
619     <xsd:attribute name="formula" type="s:ST Xstring" use="optional"/>
620     <xsd:attribute name="sqlType" type="xsd:int" use="optional" default="0"/>
621     <xsd:attribute name="hierarchy" type="xsd:int" use="optional" default="0"/>
622     <xsd:attribute name="level" type="xsd:unsignedInt" use="optional" default="0"/>
623     <xsd:attribute name="databaseField" type="xsd:boolean" default="true"/>
624     <xsd:attribute name="mappingCount" type="xsd:unsignedInt" use="optional"/>
625     <xsd:attribute name="memberPropertyField" type="xsd:boolean" use="optional" default="false"/>
626 </xsd:complexType>
627 <xsd:complexType name="CT_CacheSource">
628     <xsd:choice minOccurs="0" maxOccurs="1">
629         <xsd:element name="worksheetSource" type="CT WorksheetSource" minOccurs="1"
630             maxOccurs="1"/>
631         <xsd:element name="consolidation" type="CT Consolidation" minOccurs="1" maxOccurs="1"/>
632         <xsd:element name="extLst" type="CT ExtensionList" minOccurs="0"/>
633     </xsd:choice>
634     <xsd:attribute name="type" type="ST SourceType" use="required"/>
635     <xsd:attribute name="connectionId" type="xsd:unsignedInt" default="0" use="optional"/>
636 </xsd:complexType>
637 <xsd:simpleType name="ST_SourceType">
638     <xsd:restriction base="xsd:string">
639         <xsd:enumeration value="worksheet"/>
640         <xsd:enumeration value="external"/>
641         <xsd:enumeration value="consolidation"/>
642         <xsd:enumeration value="scenario"/>
643     </xsd:restriction>
644 </xsd:simpleType>
645 <xsd:complexType name="CT_WorksheetSource">
646     <xsd:attribute name="ref" type="ST Ref" use="optional"/>
647     <xsd:attribute name="name" type="s:ST Xstring" use="optional"/>
648     <xsd:attribute name="sheet" type="s:ST Xstring" use="optional"/>
649     <xsd:attribute ref="r:id" use="optional"/>
650 </xsd:complexType>
651 <xsd:complexType name="CT_Consolidation">
652     <xsd:sequence>
653         <xsd:element name="pages" type="CT Pages" minOccurs="0" maxOccurs="1"/>
654         <xsd:element name="rangeSets" type="CT RangeSets" minOccurs="1" maxOccurs="1"/>
655     </xsd:sequence>
656     <xsd:attribute name="autoPage" type="xsd:boolean" default="true" use="optional"/>
657 </xsd:complexType>
658 <xsd:complexType name="CT_Pages">
659     <xsd:sequence>
660         <xsd:element name="page" type="CT PCDSPage" minOccurs="1" maxOccurs="4"/>
661     </xsd:sequence>
662     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
663 </xsd:complexType>
664 <xsd:complexType name="CT_PCDSPage">

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665     <xsd:sequence>
666         <xsd:element name="pageItem" type="CT_PageItem" minOccurs="0" maxOccurs="unbounded"/>
667     </xsd:sequence>
668     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
669 </xsd:complexType>
670 <xsd:complexType name="CT_PageItem">
671     <xsd:attribute name="name" type="s:ST_Xstring" use="required"/>
672 </xsd:complexType>
673 <xsd:complexType name="CT_RangeSets">
674     <xsd:sequence>
675         <xsd:element name="rangeSet" type="CT_RangeSet" minOccurs="1" maxOccurs="unbounded"/>
676     </xsd:sequence>
677     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
678 </xsd:complexType>
679 <xsd:complexType name="CT_RangeSet">
680     <xsd:attribute name="i1" type="xsd:unsignedInt" use="optional"/>
681     <xsd:attribute name="i2" type="xsd:unsignedInt" use="optional"/>
682     <xsd:attribute name="i3" type="xsd:unsignedInt" use="optional"/>
683     <xsd:attribute name="i4" type="xsd:unsignedInt" use="optional"/>
684     <xsd:attribute name="ref" type="ST_Ref" use="optional"/>
685     <xsd:attribute name="name" type="s:ST_Xstring" use="optional"/>
686     <xsd:attribute name="sheet" type="s:ST_Xstring" use="optional"/>
687     <xsd:attribute ref="r:id" use="optional"/>
688 </xsd:complexType>
689 <xsd:complexType name="CT_SharedItems">
690     <xsd:choice minOccurs="0" maxOccurs="unbounded">
691         <xsd:element name="m" type="CT_Missing" minOccurs="1" maxOccurs="1"/>
692         <xsd:element name="n" type="CT_Number" minOccurs="1" maxOccurs="1"/>
693         <xsd:element name="b" type="CT_Boolean" minOccurs="1" maxOccurs="1"/>
694         <xsd:element name="e" type="CT_Error" minOccurs="1" maxOccurs="1"/>
695         <xsd:element name="s" type="CT_String" minOccurs="1" maxOccurs="1"/>
696         <xsd:element name="d" type="CT_DateTime" minOccurs="1" maxOccurs="1"/>
697     </xsd:choice>
698     <xsd:attribute name="containsSemiMixedTypes" type="xsd:boolean" use="optional"
699         default="true"/>
700     <xsd:attribute name="containsNonDate" type="xsd:boolean" use="optional" default="true"/>
701     <xsd:attribute name="containsDate" type="xsd:boolean" use="optional" default="false"/>
702     <xsd:attribute name="containsString" type="xsd:boolean" use="optional" default="true"/>
703     <xsd:attribute name="containsBlank" type="xsd:boolean" use="optional" default="false"/>
704     <xsd:attribute name="containsMixedTypes" type="xsd:boolean" use="optional" default="false"/>
705     <xsd:attribute name="containsNumber" type="xsd:boolean" use="optional" default="false"/>
706     <xsd:attribute name="containsInteger" type="xsd:boolean" use="optional" default="false"/>
707     <xsd:attribute name="minValue" type="xsd:double" use="optional"/>
708     <xsd:attribute name="maxValue" type="xsd:double" use="optional"/>
709     <xsd:attribute name="minDate" type="xsd:dateTime" use="optional"/>
710     <xsd:attribute name="maxDate" type="xsd:dateTime" use="optional"/>
711     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
712     <xsd:attribute name="longText" type="xsd:boolean" use="optional" default="false"/>
713 </xsd:complexType>
714 <xsd:complexType name="CT_Missing">
715     <xsd:sequence>
716         <xsd:element name="tpls" minOccurs="0" maxOccurs="unbounded" type="CT_Tuples"/>
717         <xsd:element name="x" minOccurs="0" maxOccurs="unbounded" type="CT_X"/>

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718     </xsd:sequence>
719     <xsd:attribute name="u" type="xsd:boolean"/>
720     <xsd:attribute name="f" type="xsd:boolean"/>
721     <xsd:attribute name="c" type="s:ST_Xstring"/>
722     <xsd:attribute name="cp" type="xsd:unsignedInt"/>
723     <xsd:attribute name="in" type="xsd:unsignedInt" use="optional"/>
724     <xsd:attribute name="bc" type="ST UnsignedIntHex" use="optional"/>
725     <xsd:attribute name="fc" type="ST UnsignedIntHex" use="optional"/>
726     <xsd:attribute name="i" type="xsd:boolean" use="optional" default="false"/>
727     <xsd:attribute name="un" type="xsd:boolean" use="optional" default="false"/>
728     <xsd:attribute name="st" type="xsd:boolean" use="optional" default="false"/>
729     <xsd:attribute name="b" type="xsd:boolean" use="optional" default="false"/>
730 </xsd:complexType>
731 <xsd:complexType name="CT_Number">
732     <xsd:sequence>
733         <xsd:element name="tpls" minOccurs="0" maxOccurs="unbounded" type="CT_Tuples"/>
734         <xsd:element name="x" minOccurs="0" maxOccurs="unbounded" type="CT_X"/>
735     </xsd:sequence>
736     <xsd:attribute name="v" use="required" type="xsd:double"/>
737     <xsd:attribute name="u" type="xsd:boolean"/>
738     <xsd:attribute name="f" type="xsd:boolean"/>
739     <xsd:attribute name="c" type="s:ST_Xstring"/>
740     <xsd:attribute name="cp" type="xsd:unsignedInt"/>
741     <xsd:attribute name="in" type="xsd:unsignedInt" use="optional"/>
742     <xsd:attribute name="bc" type="ST UnsignedIntHex" use="optional"/>
743     <xsd:attribute name="fc" type="ST UnsignedIntHex" use="optional"/>
744     <xsd:attribute name="i" type="xsd:boolean" use="optional" default="false"/>
745     <xsd:attribute name="un" type="xsd:boolean" use="optional" default="false"/>
746     <xsd:attribute name="st" type="xsd:boolean" use="optional" default="false"/>
747     <xsd:attribute name="b" type="xsd:boolean" use="optional" default="false"/>
748 </xsd:complexType>
749 <xsd:complexType name="CT_Boolean">
750     <xsd:sequence>
751         <xsd:element name="x" minOccurs="0" maxOccurs="unbounded" type="CT_X"/>
752     </xsd:sequence>
753     <xsd:attribute name="v" use="required" type="xsd:boolean"/>
754     <xsd:attribute name="u" type="xsd:boolean"/>
755     <xsd:attribute name="f" type="xsd:boolean"/>
756     <xsd:attribute name="c" type="s:ST_Xstring"/>
757     <xsd:attribute name="cp" type="xsd:unsignedInt"/>
758 </xsd:complexType>
759 <xsd:complexType name="CT_Error">
760     <xsd:sequence>
761         <xsd:element name="tpls" minOccurs="0" type="CT_Tuples"/>
762         <xsd:element name="x" minOccurs="0" maxOccurs="unbounded" type="CT_X"/>
763     </xsd:sequence>
764     <xsd:attribute name="v" use="required" type="s:ST_Xstring"/>
765     <xsd:attribute name="u" type="xsd:boolean"/>
766     <xsd:attribute name="f" type="xsd:boolean"/>
767     <xsd:attribute name="c" type="s:ST_Xstring"/>
768     <xsd:attribute name="cp" type="xsd:unsignedInt"/>
769     <xsd:attribute name="in" type="xsd:unsignedInt" use="optional"/>
770     <xsd:attribute name="bc" type="ST UnsignedIntHex" use="optional"/>

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771     <xsd:attribute name="fc" type="ST UnsignedIntHex" use="optional"/>
772     <xsd:attribute name="i" type="xsd:boolean" use="optional" default="false"/>
773     <xsd:attribute name="un" type="xsd:boolean" use="optional" default="false"/>
774     <xsd:attribute name="st" type="xsd:boolean" use="optional" default="false"/>
775     <xsd:attribute name="b" type="xsd:boolean" use="optional" default="false"/>
776 </xsd:complexType>
777 <xsd:complexType name="CT_String">
778     <xsd:sequence>
779         <xsd:element name="tpls" minOccurs="0" maxOccurs="unbounded" type="CT_Tuples"/>
780         <xsd:element name="x" minOccurs="0" maxOccurs="unbounded" type="CT_X"/>
781     </xsd:sequence>
782     <xsd:attribute name="v" use="required" type="s:ST Xstring"/>
783     <xsd:attribute name="u" type="xsd:boolean"/>
784     <xsd:attribute name="f" type="xsd:boolean"/>
785     <xsd:attribute name="c" type="s:ST Xstring"/>
786     <xsd:attribute name="cp" type="xsd:unsignedInt"/>
787     <xsd:attribute name="in" type="xsd:unsignedInt" use="optional"/>
788     <xsd:attribute name="bc" type="ST UnsignedIntHex" use="optional"/>
789     <xsd:attribute name="fc" type="ST UnsignedIntHex" use="optional"/>
790     <xsd:attribute name="i" type="xsd:boolean" use="optional" default="false"/>
791     <xsd:attribute name="un" type="xsd:boolean" use="optional" default="false"/>
792     <xsd:attribute name="st" type="xsd:boolean" use="optional" default="false"/>
793     <xsd:attribute name="b" type="xsd:boolean" use="optional" default="false"/>
794 </xsd:complexType>
795 <xsd:complexType name="CT_DateTime">
796     <xsd:sequence>
797         <xsd:element name="x" minOccurs="0" maxOccurs="unbounded" type="CT_X"/>
798     </xsd:sequence>
799     <xsd:attribute name="v" use="required" type="xsd:dateTime"/>
800     <xsd:attribute name="u" type="xsd:boolean"/>
801     <xsd:attribute name="f" type="xsd:boolean"/>
802     <xsd:attribute name="c" type="s:ST Xstring"/>
803     <xsd:attribute name="cp" type="xsd:unsignedInt"/>
804 </xsd:complexType>
805 <xsd:complexType name="CT_FieldGroup">
806     <xsd:sequence>
807         <xsd:element name="rangePr" minOccurs="0" type="CT_RangePr"/>
808         <xsd:element name="discretePr" minOccurs="0" type="CT_DiscretePr"/>
809         <xsd:element name="groupItems" minOccurs="0" type="CT_GroupItems"/>
810     </xsd:sequence>
811     <xsd:attribute name="par" type="xsd:unsignedInt" use="optional"/>
812     <xsd:attribute name="base" type="xsd:unsignedInt" use="optional"/>
813 </xsd:complexType>
814 <xsd:complexType name="CT_RangePr">
815     <xsd:attribute name="autoStart" type="xsd:boolean" default="true"/>
816     <xsd:attribute name="autoEnd" type="xsd:boolean" default="true"/>
817     <xsd:attribute name="groupBy" type="ST GroupBy" default="range"/>
818     <xsd:attribute name="startNum" type="xsd:double"/>
819     <xsd:attribute name="endNum" type="xsd:double"/>
820     <xsd:attribute name="startDate" type="xsd:dateTime"/>
821     <xsd:attribute name="endDate" type="xsd:dateTime"/>
822     <xsd:attribute name="groupInterval" type="xsd:double" default="1"/>
823 </xsd:complexType>

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824 <xsd:simpleType name="ST_GroupBy">
825   <xsd:restriction base="xsd:string">
826     <xsd:enumeration value="range"/>
827     <xsd:enumeration value="seconds"/>
828     <xsd:enumeration value="minutes"/>
829     <xsd:enumeration value="hours"/>
830     <xsd:enumeration value="days"/>
831     <xsd:enumeration value="months"/>
832     <xsd:enumeration value="quarters"/>
833     <xsd:enumeration value="years"/>
834   </xsd:restriction>
835 </xsd:simpleType>
836 <xsd:complexType name="CT_DiscretePr">
837   <xsd:sequence>
838     <xsd:element name="x" maxOccurs="unbounded" type="CT_Index"/>
839   </xsd:sequence>
840   <xsd:attribute name="count" type="xsd:unsignedInt"/>
841 </xsd:complexType>
842 <xsd:complexType name="CT_GroupItems">
843   <xsd:choice maxOccurs="unbounded">
844     <xsd:element name="m" type="CT_Missing"/>
845     <xsd:element name="n" type="CT_Number"/>
846     <xsd:element name="b" type="CT_Boolean"/>
847     <xsd:element name="e" type="CT_Error"/>
848     <xsd:element name="s" type="CT_String"/>
849     <xsd:element name="d" type="CT_DateTime"/>
850   </xsd:choice>
851   <xsd:attribute name="count" type="xsd:unsignedInt"/>
852 </xsd:complexType>
853 <xsd:complexType name="CT_PivotCacheRecords">
854   <xsd:sequence>
855     <xsd:element name="r" minOccurs="0" maxOccurs="unbounded" type="CT_Record"/>
856     <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
857   </xsd:sequence>
858   <xsd:attribute name="count" type="xsd:unsignedInt"/>
859 </xsd:complexType>
860 <xsd:complexType name="CT_Record">
861   <xsd:choice maxOccurs="unbounded">
862     <xsd:element name="m" type="CT_Missing"/>
863     <xsd:element name="n" type="CT_Number"/>
864     <xsd:element name="b" type="CT_Boolean"/>
865     <xsd:element name="e" type="CT_Error"/>
866     <xsd:element name="s" type="CT_String"/>
867     <xsd:element name="d" type="CT_DateTime"/>
868     <xsd:element name="x" type="CT_Index"/>
869   </xsd:choice>
870 </xsd:complexType>
871 <xsd:complexType name="CT_PCDKPIs">
872   <xsd:sequence>
873     <xsd:element name="kpi" minOccurs="0" maxOccurs="unbounded" type="CT_PCDKPI"/>
874   </xsd:sequence>
875   <xsd:attribute name="count" type="xsd:unsignedInt"/>
876 </xsd:complexType>

```



```

877 <xsd:complexType name="CT_PCDKPI">
878   <xsd:attribute name="uniqueName" use="required" type="s:ST Xstring"/>
879   <xsd:attribute name="caption" use="optional" type="s:ST Xstring"/>
880   <xsd:attribute name="displayFolder" type="s:ST Xstring"/>
881   <xsd:attribute name="measureGroup" type="s:ST Xstring"/>
882   <xsd:attribute name="parent" type="s:ST Xstring"/>
883   <xsd:attribute name="value" use="required" type="s:ST Xstring"/>
884   <xsd:attribute name="goal" type="s:ST Xstring"/>
885   <xsd:attribute name="status" type="s:ST Xstring"/>
886   <xsd:attribute name="trend" type="s:ST Xstring"/>
887   <xsd:attribute name="weight" type="s:ST Xstring"/>
888   <xsd:attribute name="time" type="s:ST Xstring"/>
889 </xsd:complexType>
890 <xsd:complexType name="CT_CacheHierarchies">
891   <xsd:sequence>
892     <xsd:element name="cacheHierarchy" minOccurs="0" maxOccurs="unbounded"
893       type="CT_CacheHierarchy"/>
894   </xsd:sequence>
895   <xsd:attribute name="count" type="xsd:unsignedInt"/>
896 </xsd:complexType>
897 <xsd:complexType name="CT_CacheHierarchy">
898   <xsd:sequence>
899     <xsd:element name="fieldsUsage" minOccurs="0" type="CT_FieldsUsage"/>
900     <xsd:element name="groupLevels" minOccurs="0" type="CT_GroupLevels"/>
901     <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
902   </xsd:sequence>
903   <xsd:attribute name="uniqueName" use="required" type="s:ST Xstring"/>
904   <xsd:attribute name="caption" use="optional" type="s:ST Xstring"/>
905   <xsd:attribute name="measure" type="xsd:boolean" default="false"/>
906   <xsd:attribute name="set" type="xsd:boolean" default="false"/>
907   <xsd:attribute name="parentSet" type="xsd:unsignedInt" use="optional"/>
908   <xsd:attribute name="iconSet" type="xsd:int" default="0"/>
909   <xsd:attribute name="attribute" type="xsd:boolean" default="false"/>
910   <xsd:attribute name="time" type="xsd:boolean" default="false"/>
911   <xsd:attribute name="keyAttribute" type="xsd:boolean" default="false"/>
912   <xsd:attribute name="defaultMemberUniqueName" type="s:ST Xstring"/>
913   <xsd:attribute name="allUniqueName" type="s:ST Xstring"/>
914   <xsd:attribute name="allCaption" type="s:ST Xstring"/>
915   <xsd:attribute name="dimensionUniqueName" type="s:ST Xstring"/>
916   <xsd:attribute name="displayFolder" type="s:ST Xstring"/>
917   <xsd:attribute name="measureGroup" type="s:ST Xstring"/>
918   <xsd:attribute name="measures" type="xsd:boolean" default="false"/>
919   <xsd:attribute name="count" use="required" type="xsd:unsignedInt"/>
920   <xsd:attribute name="oneField" type="xsd:boolean" default="false"/>
921   <xsd:attribute name="memberValueDatatype" use="optional" type="xsd:unsignedShort"/>
922   <xsd:attribute name="unbalanced" use="optional" type="xsd:boolean"/>
923   <xsd:attribute name="unbalancedGroup" use="optional" type="xsd:boolean"/>
924   <xsd:attribute name="hidden" type="xsd:boolean" default="false"/>
925 </xsd:complexType>
926 <xsd:complexType name="CT_FieldsUsage">
927   <xsd:sequence>
928     <xsd:element name="fieldUsage" minOccurs="0" maxOccurs="unbounded" type="CT_FieldUsage"/>
929   </xsd:sequence>

```

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930     <xsd:attribute name="count" type="xsd:unsignedInt"/>
931   </xsd:complexType>
932   <xsd:complexType name="CT_FieldUsage">
933     <xsd:attribute name="x" use="required" type="xsd:int"/>
934   </xsd:complexType>
935   <xsd:complexType name="CT_GroupLevels">
936     <xsd:sequence>
937       <xsd:element name="groupLevel" maxOccurs="unbounded" type="CT_GroupLevel"/>
938     </xsd:sequence>
939     <xsd:attribute name="count" type="xsd:unsignedInt"/>
940   </xsd:complexType>
941   <xsd:complexType name="CT_GroupLevel">
942     <xsd:sequence>
943       <xsd:element name="groups" minOccurs="0" type="CT_Groups"/>
944       <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
945     </xsd:sequence>
946     <xsd:attribute name="uniqueName" use="required" type="s:ST_Xstring"/>
947     <xsd:attribute name="caption" use="required" type="s:ST_Xstring"/>
948     <xsd:attribute name="user" type="xsd:boolean" default="false"/>
949     <xsd:attribute name="customRollUp" type="xsd:boolean" default="false"/>
950   </xsd:complexType>
951   <xsd:complexType name="CT_Groups">
952     <xsd:sequence>
953       <xsd:element name="group" maxOccurs="unbounded" type="CT_LevelGroup"/>
954     </xsd:sequence>
955     <xsd:attribute name="count" type="xsd:unsignedInt"/>
956   </xsd:complexType>
957   <xsd:complexType name="CT_LevelGroup">
958     <xsd:sequence>
959       <xsd:element name="groupMembers" type="CT_GroupMembers"/>
960     </xsd:sequence>
961     <xsd:attribute name="name" use="required" type="s:ST_Xstring"/>
962     <xsd:attribute name="uniqueName" use="required" type="s:ST_Xstring"/>
963     <xsd:attribute name="caption" use="required" type="s:ST_Xstring"/>
964     <xsd:attribute name="uniqueParent" type="s:ST_Xstring"/>
965     <xsd:attribute name="id" type="xsd:int"/>
966   </xsd:complexType>
967   <xsd:complexType name="CT_GroupMembers">
968     <xsd:sequence>
969       <xsd:element name="groupMember" maxOccurs="unbounded" type="CT_GroupMember"/>
970     </xsd:sequence>
971     <xsd:attribute name="count" type="xsd:unsignedInt"/>
972   </xsd:complexType>
973   <xsd:complexType name="CT_GroupMember">
974     <xsd:attribute name="uniqueName" use="required" type="s:ST_Xstring"/>
975     <xsd:attribute name="group" type="xsd:boolean" default="false"/>
976   </xsd:complexType>
977   <xsd:complexType name="CT_TupleCache">
978     <xsd:sequence>
979       <xsd:element name="entries" minOccurs="0" type="CT_PCDSDTCEntries"/>
980       <xsd:element name="sets" minOccurs="0" type="CT_Sets"/>
981       <xsd:element name="queryCache" minOccurs="0" type="CT_QueryCache"/>
982       <xsd:element name="serverFormats" minOccurs="0" maxOccurs="1" type="CT_ServerFormats"/>

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983     <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
984   </xsd:sequence>
985 </xsd:complexType>
986 <xsd:complexType name="CT_ServerFormat">
987   <xsd:attribute name="culture" use="optional" type="s:ST_Xstring"/>
988   <xsd:attribute name="format" use="optional" type="s:ST_Xstring"/>
989 </xsd:complexType>
990 <xsd:complexType name="CT_ServerFormats">
991   <xsd:sequence>
992     <xsd:element name="serverFormat" type="CT_ServerFormat" minOccurs="0"
993       maxOccurs="unbounded"/>
994   </xsd:sequence>
995   <xsd:attribute name="count" type="xsd:unsignedInt"/>
996 </xsd:complexType>
997 <xsd:complexType name="CT_PCSDTCEntries">
998   <xsd:choice maxOccurs="unbounded">
999     <xsd:element name="m" type="CT_Missing"/>
1000    <xsd:element name="n" type="CT_Number"/>
1001    <xsd:element name="e" type="CT_Error"/>
1002    <xsd:element name="s" type="CT_String"/>
1003  </xsd:choice>
1004  <xsd:attribute name="count" type="xsd:unsignedInt"/>
1005 </xsd:complexType>
1006 <xsd:complexType name="CT_Tuples">
1007   <xsd:sequence>
1008     <xsd:element name="tpl" type="CT_Tuple" minOccurs="1" maxOccurs="unbounded"/>
1009   </xsd:sequence>
1010   <xsd:attribute name="c" type="xsd:unsignedInt" use="optional"/>
1011 </xsd:complexType>
1012 <xsd:complexType name="CT_Tuple">
1013   <xsd:attribute name="fld" type="xsd:unsignedInt"/>
1014   <xsd:attribute name="hier" type="xsd:unsignedInt"/>
1015   <xsd:attribute name="item" type="xsd:unsignedInt" use="required"/>
1016 </xsd:complexType>
1017 <xsd:complexType name="CT_Sets">
1018   <xsd:sequence>
1019     <xsd:element name="set" maxOccurs="unbounded" type="CT_Set"/>
1020   </xsd:sequence>
1021   <xsd:attribute name="count" type="xsd:unsignedInt"/>
1022 </xsd:complexType>
1023 <xsd:complexType name="CT_Set">
1024   <xsd:sequence>
1025     <xsd:element name="tpls" minOccurs="0" maxOccurs="unbounded" type="CT_Tuples"/>
1026     <xsd:element name="sortByTuple" minOccurs="0" type="CT_Tuples"/>
1027   </xsd:sequence>
1028   <xsd:attribute name="count" type="xsd:unsignedInt"/>
1029   <xsd:attribute name="maxRank" use="required" type="xsd:int"/>
1030   <xsd:attribute name="setDefinition" use="required" type="s:ST_Xstring"/>
1031   <xsd:attribute name="sortType" type="ST_SortType" default="none"/>
1032   <xsd:attribute name="queryFailed" type="xsd:boolean" default="false"/>
1033 </xsd:complexType>
1034 <xsd:simpleType name="ST_SortType">
1035   <xsd:restriction base="xsd:string">

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1036     <xsd:enumeration value="none"/>
1037     <xsd:enumeration value="ascending"/>
1038     <xsd:enumeration value="descending"/>
1039     <xsd:enumeration value="ascendingAlpha"/>
1040     <xsd:enumeration value="descendingAlpha"/>
1041     <xsd:enumeration value="ascendingNatural"/>
1042     <xsd:enumeration value="descendingNatural"/>
1043   </xsd:restriction>
1044 </xsd:simpleType>
1045 <xsd:complexType name="CT_QueryCache">
1046   <xsd:sequence>
1047     <xsd:element name="query" maxOccurs="unbounded" type="CT_Query"/>
1048   </xsd:sequence>
1049   <xsd:attribute name="count" type="xsd:unsignedInt"/>
1050 </xsd:complexType>
1051 <xsd:complexType name="CT_Query">
1052   <xsd:sequence>
1053     <xsd:element name="tpls" minOccurs="0" type="CT_Tuples"/>
1054   </xsd:sequence>
1055   <xsd:attribute name="mdx" use="required" type="s:ST_Xstring"/>
1056 </xsd:complexType>
1057 <xsd:complexType name="CT_CalculatedItems">
1058   <xsd:sequence>
1059     <xsd:element name="calculatedItem" maxOccurs="unbounded" type="CT_CalculatedItem"/>
1060   </xsd:sequence>
1061   <xsd:attribute name="count" type="xsd:unsignedInt"/>
1062 </xsd:complexType>
1063 <xsd:complexType name="CT_CalculatedItem">
1064   <xsd:sequence>
1065     <xsd:element name="pivotArea" type="CT_PivotArea"/>
1066     <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
1067   </xsd:sequence>
1068   <xsd:attribute name="field" type="xsd:unsignedInt" use="optional"/>
1069   <xsd:attribute name="formula" type="s:ST_Xstring"/>
1070 </xsd:complexType>
1071 <xsd:complexType name="CT_CalculatedMembers">
1072   <xsd:sequence>
1073     <xsd:element name="calculatedMember" maxOccurs="unbounded" type="CT_CalculatedMember"/>
1074   </xsd:sequence>
1075   <xsd:attribute name="count" type="xsd:unsignedInt"/>
1076 </xsd:complexType>
1077 <xsd:complexType name="CT_CalculatedMember">
1078   <xsd:sequence minOccurs="0">
1079     <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
1080   </xsd:sequence>
1081   <xsd:attribute name="name" use="required" type="s:ST_Xstring"/>
1082   <xsd:attribute name="mdx" use="required" type="s:ST_Xstring"/>
1083   <xsd:attribute name="memberName" type="s:ST_Xstring"/>
1084   <xsd:attribute name="hierarchy" type="s:ST_Xstring"/>
1085   <xsd:attribute name="parent" type="s:ST_Xstring"/>
1086   <xsd:attribute name="solveOrder" type="xsd:int" default="0"/>
1087   <xsd:attribute name="set" type="xsd:boolean" default="false"/>
1088 </xsd:complexType>

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1089 <xsd:complexType name="CT_pivotTableDefinition">
1090   <xsd:sequence>
1091     <xsd:element name="location" type="CT_Location"/>
1092     <xsd:element name="pivotFields" type="CT_PivotFields" minOccurs="0"/>
1093     <xsd:element name="rowFields" type="CT_RowFields" minOccurs="0"/>
1094     <xsd:element name="rowItems" type="CT_rowItems" minOccurs="0"/>
1095     <xsd:element name="colFields" type="CT_ColFields" minOccurs="0"/>
1096     <xsd:element name="colItems" type="CT_colItems" minOccurs="0"/>
1097     <xsd:element name="pageFields" type="CT_PageFields" minOccurs="0"/>
1098     <xsd:element name="dataFields" type="CT_DataFields" minOccurs="0"/>
1099     <xsd:element name="formats" type="CT_Formats" minOccurs="0"/>
1100     <xsd:element name="conditionalFormats" type="CT_ConditionalFormats" minOccurs="0"/>
1101     <xsd:element name="chartFormats" type="CT_ChartFormats" minOccurs="0"/>
1102     <xsd:element name="pivotHierarchies" type="CT_PivotHierarchies" minOccurs="0"/>
1103     <xsd:element name="pivotTableStyleInfo" minOccurs="0" maxOccurs="1"
1104       type="CT_PivotTableStyle"/>
1105     <xsd:element name="filters" minOccurs="0" maxOccurs="1" type="CT_PivotFilters"/>
1106     <xsd:element name="rowHierarchiesUsage" type="CT_RowHierarchiesUsage" minOccurs="0"
1107       maxOccurs="1"/>
1108     <xsd:element name="colHierarchiesUsage" type="CT_ColHierarchiesUsage" minOccurs="0"
1109       maxOccurs="1"/>
1110     <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
1111   </xsd:sequence>
1112   <xsd:attribute name="name" use="required" type="s:ST_Xstring"/>
1113   <xsd:attribute name="cacheId" use="required" type="xsd:unsignedInt"/>
1114   <xsd:attribute name="dataOnRows" type="xsd:boolean" default="false"/>
1115   <xsd:attribute name="dataPosition" type="xsd:unsignedInt" use="optional"/>
1116   <xsd:attributeGroup ref="AG_AutoFormat"/>
1117   <xsd:attribute name="dataCaption" use="required" type="s:ST_Xstring"/>
1118   <xsd:attribute name="grandTotalCaption" type="s:ST_Xstring"/>
1119   <xsd:attribute name="errorCaption" type="s:ST_Xstring"/>
1120   <xsd:attribute name="showError" type="xsd:boolean" default="false"/>
1121   <xsd:attribute name="missingCaption" type="s:ST_Xstring"/>
1122   <xsd:attribute name="showMissing" type="xsd:boolean" default="true"/>
1123   <xsd:attribute name="pageStyle" type="s:ST_Xstring"/>
1124   <xsd:attribute name="pivotTableStyle" type="s:ST_Xstring"/>
1125   <xsd:attribute name="vacatedStyle" type="s:ST_Xstring"/>
1126   <xsd:attribute name="tag" type="s:ST_Xstring"/>
1127   <xsd:attribute name="updatedVersion" type="xsd:unsignedByte" default="0"/>
1128   <xsd:attribute name="minRefreshableVersion" type="xsd:unsignedByte" default="0"/>
1129   <xsd:attribute name="asteriskTotals" type="xsd:boolean" default="false"/>
1130   <xsd:attribute name="showItems" type="xsd:boolean" default="true"/>
1131   <xsd:attribute name="editData" type="xsd:boolean" default="false"/>
1132   <xsd:attribute name="disableFieldList" type="xsd:boolean" default="false"/>
1133   <xsd:attribute name="showCalcMbrs" type="xsd:boolean" default="true"/>
1134   <xsd:attribute name="visualTotals" type="xsd:boolean" default="true"/>
1135   <xsd:attribute name="showMultipleLabel" type="xsd:boolean" default="true"/>
1136   <xsd:attribute name="showDataDropDown" type="xsd:boolean" default="true"/>
1137   <xsd:attribute name="showDrill" type="xsd:boolean" default="true"/>
1138   <xsd:attribute name="printDrill" type="xsd:boolean" default="false"/>
1139   <xsd:attribute name="showMemberPropertyTips" type="xsd:boolean" default="true"/>
1140   <xsd:attribute name="showDataTips" type="xsd:boolean" default="true"/>
1141   <xsd:attribute name="enableWizard" type="xsd:boolean" default="true"/>

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1142 <xsd:attribute name="enableDrill" type="xsd:boolean" default="true"/>
1143 <xsd:attribute name="enableFieldProperties" type="xsd:boolean" default="true"/>
1144 <xsd:attribute name="preserveFormatting" type="xsd:boolean" default="true"/>
1145 <xsd:attribute name="useAutoFormatting" type="xsd:boolean" default="false"/>
1146 <xsd:attribute name="pageWrap" type="xsd:unsignedInt" default="0"/>
1147 <xsd:attribute name="pageOverThenDown" type="xsd:boolean" default="false"/>
1148 <xsd:attribute name="subtotalHiddenItems" type="xsd:boolean" default="false"/>
1149 <xsd:attribute name="rowGrandTotals" type="xsd:boolean" default="true"/>
1150 <xsd:attribute name="colGrandTotals" type="xsd:boolean" default="true"/>
1151 <xsd:attribute name="fieldPrintTitles" type="xsd:boolean" default="false"/>
1152 <xsd:attribute name="itemPrintTitles" type="xsd:boolean" default="false"/>
1153 <xsd:attribute name="mergeItem" type="xsd:boolean" default="false"/>
1154 <xsd:attribute name="showDropZones" type="xsd:boolean" default="true"/>
1155 <xsd:attribute name="createdVersion" type="xsd:unsignedByte" default="0"/>
1156 <xsd:attribute name="indent" type="xsd:unsignedInt" default="1"/>
1157 <xsd:attribute name="showEmptyRow" type="xsd:boolean" default="false"/>
1158 <xsd:attribute name="showEmptyCol" type="xsd:boolean" default="false"/>
1159 <xsd:attribute name="showHeaders" type="xsd:boolean" default="true"/>
1160 <xsd:attribute name="compact" type="xsd:boolean" default="true"/>
1161 <xsd:attribute name="outline" type="xsd:boolean" default="false"/>
1162 <xsd:attribute name="outlineData" type="xsd:boolean" default="false"/>
1163 <xsd:attribute name="compactData" type="xsd:boolean" default="true"/>
1164 <xsd:attribute name="published" type="xsd:boolean" default="false"/>
1165 <xsd:attribute name="gridDropZones" type="xsd:boolean" default="false"/>
1166 <xsd:attribute name="immersive" type="xsd:boolean" default="true"/>
1167 <xsd:attribute name="multipleFieldFilters" type="xsd:boolean" default="true"/>
1168 <xsd:attribute name="chartFormat" type="xsd:unsignedInt" default="0"/>
1169 <xsd:attribute name="rowHeaderCaption" type="s:ST Xstring"/>
1170 <xsd:attribute name="colHeaderCaption" type="s:ST Xstring"/>
1171 <xsd:attribute name="fieldListSortAscending" type="xsd:boolean" default="false"/>
1172 <xsd:attribute name="mdxSubqueries" type="xsd:boolean" default="false"/>
1173 <xsd:attribute name="customListSort" type="xsd:boolean" use="optional" default="true"/>
1174 </xsd:complexType>
1175 <xsd:complexType name="CT_Location">
1176 <xsd:attribute name="ref" use="required" type="ST Ref"/>
1177 <xsd:attribute name="firstHeaderRow" use="required" type="xsd:unsignedInt"/>
1178 <xsd:attribute name="firstDataRow" use="required" type="xsd:unsignedInt"/>
1179 <xsd:attribute name="firstDataCol" use="required" type="xsd:unsignedInt"/>
1180 <xsd:attribute name="rowPageCount" type="xsd:unsignedInt" default="0"/>
1181 <xsd:attribute name="colPageCount" type="xsd:unsignedInt" default="0"/>
1182 </xsd:complexType>
1183 <xsd:complexType name="CT_PivotFields">
1184 <xsd:sequence>
1185 <xsd:element name="pivotField" maxOccurs="unbounded" type="CT_PivotField"/>
1186 </xsd:sequence>
1187 <xsd:attribute name="count" type="xsd:unsignedInt"/>
1188 </xsd:complexType>
1189 <xsd:complexType name="CT_PivotField">
1190 <xsd:sequence>
1191 <xsd:element name="items" minOccurs="0" type="CT_Items"/>
1192 <xsd:element name="autoSortScope" minOccurs="0" type="CT_AutoSortScope"/>
1193 <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
1194 </xsd:sequence>

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1195 <xsd:attribute name="name" type="s:ST Xstring"/>
1196 <xsd:attribute name="axis" use="optional" type="ST Axis"/>
1197 <xsd:attribute name="dataField" type="xsd:boolean" default="false"/>
1198 <xsd:attribute name="subtotalCaption" type="s:ST Xstring"/>
1199 <xsd:attribute name="showDropDowns" type="xsd:boolean" default="true"/>
1200 <xsd:attribute name="hiddenLevel" type="xsd:boolean" default="false"/>
1201 <xsd:attribute name="uniqueMemberProperty" type="s:ST Xstring"/>
1202 <xsd:attribute name="compact" type="xsd:boolean" default="true"/>
1203 <xsd:attribute name="allDrilled" type="xsd:boolean" default="false"/>
1204 <xsd:attribute name="numFmtId" type="ST NumFmtId" use="optional"/>
1205 <xsd:attribute name="outline" type="xsd:boolean" default="true"/>
1206 <xsd:attribute name="subtotalTop" type="xsd:boolean" default="true"/>
1207 <xsd:attribute name="dragToRow" type="xsd:boolean" default="true"/>
1208 <xsd:attribute name="dragToCol" type="xsd:boolean" default="true"/>
1209 <xsd:attribute name="multipleItemSelectionAllowed" type="xsd:boolean" default="false"/>
1210 <xsd:attribute name="dragToPage" type="xsd:boolean" default="true"/>
1211 <xsd:attribute name="dragToData" type="xsd:boolean" default="true"/>
1212 <xsd:attribute name="dragOff" type="xsd:boolean" default="true"/>
1213 <xsd:attribute name="showAll" type="xsd:boolean" default="true"/>
1214 <xsd:attribute name="insertBlankRow" type="xsd:boolean" default="false"/>
1215 <xsd:attribute name="serverField" type="xsd:boolean" default="false"/>
1216 <xsd:attribute name="insertPageBreak" type="xsd:boolean" default="false"/>
1217 <xsd:attribute name="autoShow" type="xsd:boolean" default="false"/>
1218 <xsd:attribute name="topAutoShow" type="xsd:boolean" default="true"/>
1219 <xsd:attribute name="hideNewItem" type="xsd:boolean" default="false"/>
1220 <xsd:attribute name="measureFilter" type="xsd:boolean" default="false"/>
1221 <xsd:attribute name="includeNewItemInFilter" type="xsd:boolean" default="false"/>
1222 <xsd:attribute name="itemPageCount" type="xsd:unsignedInt" default="10"/>
1223 <xsd:attribute name="sortType" type="ST FieldSortType" default="manual"/>
1224 <xsd:attribute name="dataSourceSort" type="xsd:boolean" use="optional"/>
1225 <xsd:attribute name="nonAutoSortDefault" type="xsd:boolean" default="false"/>
1226 <xsd:attribute name="rankBy" type="xsd:unsignedInt" use="optional"/>
1227 <xsd:attribute name="defaultSubtotal" type="xsd:boolean" default="true"/>
1228 <xsd:attribute name="sumSubtotal" type="xsd:boolean" default="false"/>
1229 <xsd:attribute name="countASubtotal" type="xsd:boolean" default="false"/>
1230 <xsd:attribute name="avgSubtotal" type="xsd:boolean" default="false"/>
1231 <xsd:attribute name="maxSubtotal" type="xsd:boolean" default="false"/>
1232 <xsd:attribute name="minSubtotal" type="xsd:boolean" default="false"/>
1233 <xsd:attribute name="productSubtotal" type="xsd:boolean" default="false"/>
1234 <xsd:attribute name="countSubtotal" type="xsd:boolean" default="false"/>
1235 <xsd:attribute name="stdDevSubtotal" type="xsd:boolean" default="false"/>
1236 <xsd:attribute name="stdDevPSubtotal" type="xsd:boolean" default="false"/>
1237 <xsd:attribute name="varSubtotal" type="xsd:boolean" default="false"/>
1238 <xsd:attribute name="varPSubtotal" type="xsd:boolean" default="false"/>
1239 <xsd:attribute name="showPropCell" type="xsd:boolean" use="optional" default="false"/>
1240 <xsd:attribute name="showPropTip" type="xsd:boolean" use="optional" default="false"/>
1241 <xsd:attribute name="showPropAsCaption" type="xsd:boolean" use="optional" default="false"/>
1242 <xsd:attribute name="defaultAttributeDrillState" type="xsd:boolean" use="optional"
1243     default="false"/>
1244 </xsd:complexType>
1245 <xsd:complexType name="CT_AutoSortScope">
1246     <xsd:sequence>
1247         <xsd:element name="pivotArea" type="CT PivotArea"/>

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1248     </xsd:sequence>
1249 </xsd:complexType>
1250 <xsd:complexType name="CT_Items">
1251     <xsd:sequence>
1252         <xsd:element name="item" maxOccurs="unbounded" type="CT_Item"/>
1253     </xsd:sequence>
1254     <xsd:attribute name="count" type="xsd:unsignedInt"/>
1255 </xsd:complexType>
1256 <xsd:complexType name="CT_Item">
1257     <xsd:attribute name="n" type="s:ST_Xstring"/>
1258     <xsd:attribute name="t" type="ST_ItemType" default="data"/>
1259     <xsd:attribute name="h" type="xsd:boolean" default="false"/>
1260     <xsd:attribute name="s" type="xsd:boolean" default="false"/>
1261     <xsd:attribute name="sd" type="xsd:boolean" default="true"/>
1262     <xsd:attribute name="f" type="xsd:boolean" default="false"/>
1263     <xsd:attribute name="m" type="xsd:boolean" default="false"/>
1264     <xsd:attribute name="c" type="xsd:boolean" default="false"/>
1265     <xsd:attribute name="x" type="xsd:unsignedInt" use="optional"/>
1266     <xsd:attribute name="d" type="xsd:boolean" default="false"/>
1267     <xsd:attribute name="e" type="xsd:boolean" default="true"/>
1268 </xsd:complexType>
1269 <xsd:complexType name="CT_PageFields">
1270     <xsd:sequence>
1271         <xsd:element name="pageField" maxOccurs="unbounded" type="CT_PageField"/>
1272     </xsd:sequence>
1273     <xsd:attribute name="count" type="xsd:unsignedInt"/>
1274 </xsd:complexType>
1275 <xsd:complexType name="CT_PageField">
1276     <xsd:sequence minOccurs="0">
1277         <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
1278     </xsd:sequence>
1279     <xsd:attribute name="fld" use="required" type="xsd:int"/>
1280     <xsd:attribute name="item" use="optional" type="xsd:unsignedInt"/>
1281     <xsd:attribute name="hier" type="xsd:int"/>
1282     <xsd:attribute name="name" type="s:ST_Xstring"/>
1283     <xsd:attribute name="cap" type="s:ST_Xstring"/>
1284 </xsd:complexType>
1285 <xsd:complexType name="CT_DataFields">
1286     <xsd:sequence>
1287         <xsd:element name="dataField" maxOccurs="unbounded" type="CT_DataField"/>
1288     </xsd:sequence>
1289     <xsd:attribute name="count" type="xsd:unsignedInt"/>
1290 </xsd:complexType>
1291 <xsd:complexType name="CT_DataField">
1292     <xsd:sequence>
1293         <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
1294     </xsd:sequence>
1295     <xsd:attribute name="name" use="optional" type="s:ST_Xstring"/>
1296     <xsd:attribute name="fld" type="xsd:unsignedInt" use="required"/>
1297     <xsd:attribute name="subtotal" type="ST_DataConsolidateFunction" default="sum"/>
1298     <xsd:attribute name="showDataAs" type="ST_ShowDataAs" default="normal"/>
1299     <xsd:attribute name="baseField" type="xsd:int" default="-1"/>
1300     <xsd:attribute name="baseItem" type="xsd:unsignedInt" default="1048832"/>

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1301     <xsd:attribute name="numFmtId" type="ST_NumFmtId" use="optional"/>
1302 </xsd:complexType>
1303 <xsd:complexType name="CT_rowItems">
1304     <xsd:sequence>
1305         <xsd:element name="i" maxOccurs="unbounded" type="CT_I"/>
1306     </xsd:sequence>
1307     <xsd:attribute name="count" type="xsd:unsignedInt"/>
1308 </xsd:complexType>
1309 <xsd:complexType name="CT_colItems">
1310     <xsd:sequence>
1311         <xsd:element name="i" maxOccurs="unbounded" type="CT_I"/>
1312     </xsd:sequence>
1313     <xsd:attribute name="count" type="xsd:unsignedInt"/>
1314 </xsd:complexType>
1315 <xsd:complexType name="CT_I">
1316     <xsd:sequence>
1317         <xsd:element name="x" minOccurs="0" maxOccurs="unbounded" type="CT_X"/>
1318     </xsd:sequence>
1319     <xsd:attribute name="t" type="ST_ItemType" default="data"/>
1320     <xsd:attribute name="r" type="xsd:unsignedInt" default="0"/>
1321     <xsd:attribute name="i" type="xsd:unsignedInt" default="0"/>
1322 </xsd:complexType>
1323 <xsd:complexType name="CT_X">
1324     <xsd:attribute name="v" type="xsd:int" default="0"/>
1325 </xsd:complexType>
1326 <xsd:complexType name="CT_RowFields">
1327     <xsd:sequence>
1328         <xsd:element name="field" maxOccurs="unbounded" type="CT_Field"/>
1329     </xsd:sequence>
1330     <xsd:attribute name="count" type="xsd:unsignedInt" default="0"/>
1331 </xsd:complexType>
1332 <xsd:complexType name="CT_ColFields">
1333     <xsd:sequence>
1334         <xsd:element name="field" maxOccurs="unbounded" type="CT_Field"/>
1335     </xsd:sequence>
1336     <xsd:attribute name="count" type="xsd:unsignedInt" default="0"/>
1337 </xsd:complexType>
1338 <xsd:complexType name="CT_Field">
1339     <xsd:attribute name="x" type="xsd:int" use="required"/>
1340 </xsd:complexType>
1341 <xsd:complexType name="CT_Formats">
1342     <xsd:sequence>
1343         <xsd:element name="format" maxOccurs="unbounded" type="CT_Format"/>
1344     </xsd:sequence>
1345     <xsd:attribute name="count" type="xsd:unsignedInt" default="0"/>
1346 </xsd:complexType>
1347 <xsd:complexType name="CT_Format">
1348     <xsd:sequence>
1349         <xsd:element name="pivotArea" type="CT_PivotArea"/>
1350         <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
1351     </xsd:sequence>
1352     <xsd:attribute name="action" type="ST_FormatAction" default="formatting"/>
1353     <xsd:attribute name="dxfid" type="ST_DxfId" use="optional"/>

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1354 </xsd:complexType>
1355 <xsd:complexType name="CT_ConditionalFormats">
1356   <xsd:sequence>
1357     <xsd:element name="conditionalFormat" maxOccurs="unbounded" type="CT_ConditionalFormat"/>
1358   </xsd:sequence>
1359   <xsd:attribute name="count" type="xsd:unsignedInt" default="0"/>
1360 </xsd:complexType>
1361 <xsd:complexType name="CT_ConditionalFormat">
1362   <xsd:sequence>
1363     <xsd:element name="pivotAreas" type="CT_PivotAreas"/>
1364     <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
1365   </xsd:sequence>
1366   <xsd:attribute name="scope" type="ST_Scope" default="selection"/>
1367   <xsd:attribute name="type" type="ST_Type" default="none"/>
1368   <xsd:attribute name="priority" use="required" type="xsd:unsignedInt"/>
1369 </xsd:complexType>
1370 <xsd:complexType name="CT_PivotAreas">
1371   <xsd:sequence>
1372     <xsd:element name="pivotArea" minOccurs="0" maxOccurs="unbounded" type="CT_PivotArea"/>
1373   </xsd:sequence>
1374   <xsd:attribute name="count" type="xsd:unsignedInt"/>
1375 </xsd:complexType>
1376 <xsd:simpleType name="ST_Scope">
1377   <xsd:restriction base="xsd:string">
1378     <xsd:enumeration value="selection"/>
1379     <xsd:enumeration value="data"/>
1380     <xsd:enumeration value="field"/>
1381   </xsd:restriction>
1382 </xsd:simpleType>
1383 <xsd:simpleType name="ST_Type">
1384   <xsd:restriction base="xsd:string">
1385     <xsd:enumeration value="none"/>
1386     <xsd:enumeration value="all"/>
1387     <xsd:enumeration value="row"/>
1388     <xsd:enumeration value="column"/>
1389   </xsd:restriction>
1390 </xsd:simpleType>
1391 <xsd:complexType name="CT_ChartFormats">
1392   <xsd:sequence>
1393     <xsd:element name="chartFormat" maxOccurs="unbounded" type="CT_ChartFormat"/>
1394   </xsd:sequence>
1395   <xsd:attribute name="count" type="xsd:unsignedInt" default="0"/>
1396 </xsd:complexType>
1397 <xsd:complexType name="CT_ChartFormat">
1398   <xsd:sequence>
1399     <xsd:element name="pivotArea" type="CT_PivotArea"/>
1400   </xsd:sequence>
1401   <xsd:attribute name="chart" use="required" type="xsd:unsignedInt"/>
1402   <xsd:attribute name="format" use="required" type="xsd:unsignedInt"/>
1403   <xsd:attribute name="series" type="xsd:boolean" default="false"/>
1404 </xsd:complexType>
1405 <xsd:complexType name="CT_PivotHierarchies">
1406   <xsd:sequence>

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1407     <xsd:element name="pivotHierarchy" maxOccurs="unbounded" type="CT_PivotHierarchy"/>
1408   </xsd:sequence>
1409   <xsd:attribute name="count" type="xsd:unsignedInt"/>
1410 </xsd:complexType>
1411 <xsd:complexType name="CT_PivotHierarchy">
1412   <xsd:sequence>
1413     <xsd:element name="mps" minOccurs="0" type="CT_MemberProperties"/>
1414     <xsd:element name="members" minOccurs="0" maxOccurs="unbounded" type="CT_Members"/>
1415     <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
1416   </xsd:sequence>
1417   <xsd:attribute name="outline" type="xsd:boolean" default="false"/>
1418   <xsd:attribute name="multipleItemSelectionAllowed" type="xsd:boolean" default="false"/>
1419   <xsd:attribute name="subtotalTop" type="xsd:boolean" default="false"/>
1420   <xsd:attribute name="showInFieldList" type="xsd:boolean" default="true"/>
1421   <xsd:attribute name="dragToRow" type="xsd:boolean" default="true"/>
1422   <xsd:attribute name="dragToCol" type="xsd:boolean" default="true"/>
1423   <xsd:attribute name="dragToPage" type="xsd:boolean" default="true"/>
1424   <xsd:attribute name="dragToData" type="xsd:boolean" default="false"/>
1425   <xsd:attribute name="dragOff" type="xsd:boolean" default="true"/>
1426   <xsd:attribute name="includeNewItemInFilter" type="xsd:boolean" default="false"/>
1427   <xsd:attribute name="caption" type="s:ST_Xstring" use="optional"/>
1428 </xsd:complexType>
1429 <xsd:complexType name="CT_RowHierarchiesUsage">
1430   <xsd:sequence>
1431     <xsd:element name="rowHierarchyUsage" minOccurs="1" maxOccurs="unbounded"
1432       type="CT_HierarchyUsage"/>
1433   </xsd:sequence>
1434   <xsd:attribute name="count" type="xsd:unsignedInt"/>
1435 </xsd:complexType>
1436 <xsd:complexType name="CT_ColHierarchiesUsage">
1437   <xsd:sequence>
1438     <xsd:element name="colHierarchyUsage" minOccurs="1" maxOccurs="unbounded"
1439       type="CT_HierarchyUsage"/>
1440   </xsd:sequence>
1441   <xsd:attribute name="count" type="xsd:unsignedInt"/>
1442 </xsd:complexType>
1443 <xsd:complexType name="CT_HierarchyUsage">
1444   <xsd:attribute name="hierarchyUsage" type="xsd:int" use="required"/>
1445 </xsd:complexType>
1446 <xsd:complexType name="CT_MemberProperties">
1447   <xsd:sequence>
1448     <xsd:element name="mp" maxOccurs="unbounded" type="CT_MemberProperty"/>
1449   </xsd:sequence>
1450   <xsd:attribute name="count" type="xsd:unsignedInt"/>
1451 </xsd:complexType>
1452 <xsd:complexType name="CT_MemberProperty">
1453   <xsd:attribute name="name" type="s:ST_Xstring" use="optional"/>
1454   <xsd:attribute name="showCell" type="xsd:boolean" use="optional" default="false"/>
1455   <xsd:attribute name="showTip" type="xsd:boolean" use="optional" default="false"/>
1456   <xsd:attribute name="showAsCaption" type="xsd:boolean" use="optional" default="false"/>
1457   <xsd:attribute name="nameLen" type="xsd:unsignedInt" use="optional"/>
1458   <xsd:attribute name="pPos" type="xsd:unsignedInt" use="optional"/>
1459   <xsd:attribute name="pLen" type="xsd:unsignedInt" use="optional"/>

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1460     <xsd:attribute name="level" type="xsd:unsignedInt" use="optional"/>
1461     <xsd:attribute name="field" use="required" type="xsd:unsignedInt"/>
1462 </xsd:complexType>
1463 <xsd:complexType name="CT_Members">
1464     <xsd:sequence>
1465         <xsd:element name="member" maxOccurs="unbounded" type="CT_Member"/>
1466     </xsd:sequence>
1467     <xsd:attribute name="count" type="xsd:unsignedInt"/>
1468     <xsd:attribute name="level" use="optional" type="xsd:unsignedInt"/>
1469 </xsd:complexType>
1470 <xsd:complexType name="CT_Member">
1471     <xsd:attribute name="name" use="required" type="s:ST_Xstring"/>
1472 </xsd:complexType>
1473 <xsd:complexType name="CT_Dimensions">
1474     <xsd:sequence>
1475         <xsd:element name="dimension" minOccurs="0" maxOccurs="unbounded"
1476             type="CT_PivotDimension"/>
1477     </xsd:sequence>
1478     <xsd:attribute name="count" type="xsd:unsignedInt"/>
1479 </xsd:complexType>
1480 <xsd:complexType name="CT_PivotDimension">
1481     <xsd:attribute name="measure" type="xsd:boolean" default="false"/>
1482     <xsd:attribute name="name" use="required" type="s:ST_Xstring"/>
1483     <xsd:attribute name="uniqueName" use="required" type="s:ST_Xstring"/>
1484     <xsd:attribute name="caption" use="required" type="s:ST_Xstring"/>
1485 </xsd:complexType>
1486 <xsd:complexType name="CT_MeasureGroups">
1487     <xsd:sequence>
1488         <xsd:element name="measureGroup" minOccurs="0" maxOccurs="unbounded"
1489             type="CT_MeasureGroup"/>
1490     </xsd:sequence>
1491     <xsd:attribute name="count" type="xsd:unsignedInt"/>
1492 </xsd:complexType>
1493 <xsd:complexType name="CT_MeasureDimensionMaps">
1494     <xsd:sequence>
1495         <xsd:element name="map" minOccurs="0" maxOccurs="unbounded"
1496             type="CT_MeasureDimensionMap"/>
1497     </xsd:sequence>
1498     <xsd:attribute name="count" type="xsd:unsignedInt"/>
1499 </xsd:complexType>
1500 <xsd:complexType name="CT_MeasureGroup">
1501     <xsd:attribute name="name" use="required" type="s:ST_Xstring"/>
1502     <xsd:attribute name="caption" use="required" type="s:ST_Xstring"/>
1503 </xsd:complexType>
1504 <xsd:complexType name="CT_MeasureDimensionMap">
1505     <xsd:attribute name="measureGroup" use="optional" type="xsd:unsignedInt"/>
1506     <xsd:attribute name="dimension" use="optional" type="xsd:unsignedInt"/>
1507 </xsd:complexType>
1508 <xsd:complexType name="CT_PivotTableStyle">
1509     <xsd:attribute name="name" type="xsd:string"/>
1510     <xsd:attribute name="showRowHeaders" type="xsd:boolean"/>
1511     <xsd:attribute name="showColHeaders" type="xsd:boolean"/>
1512     <xsd:attribute name="showRowStripes" type="xsd:boolean"/>

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1513     <xsd:attribute name="showColStripes" type="xsd:boolean"/>
1514     <xsd:attribute name="showLastColumn" type="xsd:boolean" use="optional"/>
1515 </xsd:complexType>
1516 <xsd:complexType name="CT_PivotFilters">
1517     <xsd:sequence>
1518         <xsd:element name="filter" minOccurs="0" maxOccurs="unbounded" type="CT_PivotFilter"/>
1519     </xsd:sequence>
1520     <xsd:attribute name="count" type="xsd:unsignedInt" default="0"/>
1521 </xsd:complexType>
1522 <xsd:complexType name="CT_PivotFilter">
1523     <xsd:sequence>
1524         <xsd:element name="autoFilter" minOccurs="1" maxOccurs="1" type="CT_AutoFilter"/>
1525         <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
1526     </xsd:sequence>
1527     <xsd:attribute name="fld" use="required" type="xsd:unsignedInt"/>
1528     <xsd:attribute name="mpFld" type="xsd:unsignedInt" use="optional"/>
1529     <xsd:attribute name="type" use="required" type="ST_PivotFilterType"/>
1530     <xsd:attribute name="evalOrder" use="optional" type="xsd:int" default="0"/>
1531     <xsd:attribute name="id" use="required" type="xsd:unsignedInt"/>
1532     <xsd:attribute name="iMeasureHier" use="optional" type="xsd:unsignedInt"/>
1533     <xsd:attribute name="iMeasureFld" use="optional" type="xsd:unsignedInt"/>
1534     <xsd:attribute name="name" type="s:ST_Xstring"/>
1535     <xsd:attribute name="description" type="s:ST_Xstring"/>
1536     <xsd:attribute name="stringValue1" type="s:ST_Xstring"/>
1537     <xsd:attribute name="stringValue2" type="s:ST_Xstring"/>
1538 </xsd:complexType>
1539 <xsd:simpleType name="ST_ShowDataAs">
1540     <xsd:restriction base="xsd:string">
1541         <xsd:enumeration value="normal"/>
1542         <xsd:enumeration value="difference"/>
1543         <xsd:enumeration value="percent"/>
1544         <xsd:enumeration value="percentDiff"/>
1545         <xsd:enumeration value="runTotal"/>
1546         <xsd:enumeration value="percentOfRow"/>
1547         <xsd:enumeration value="percentOfCol"/>
1548         <xsd:enumeration value="percentOfTotal"/>
1549         <xsd:enumeration value="index"/>
1550     </xsd:restriction>
1551 </xsd:simpleType>
1552 <xsd:simpleType name="ST_ItemType">
1553     <xsd:restriction base="xsd:string">
1554         <xsd:enumeration value="data"/>
1555         <xsd:enumeration value="default"/>
1556         <xsd:enumeration value="sum"/>
1557         <xsd:enumeration value="countA"/>
1558         <xsd:enumeration value="avg"/>
1559         <xsd:enumeration value="max"/>
1560         <xsd:enumeration value="min"/>
1561         <xsd:enumeration value="product"/>
1562         <xsd:enumeration value="count"/>
1563         <xsd:enumeration value="stdDev"/>
1564         <xsd:enumeration value="stdDevP"/>
1565         <xsd:enumeration value="var"/>

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1566         <xsd:enumeration value="varP"/>
1567         <xsd:enumeration value="grand"/>
1568         <xsd:enumeration value="blank"/>
1569     </xsd:restriction>
1570 </xsd:simpleType>
1571 <xsd:simpleType name="ST_FormatAction">
1572     <xsd:restriction base="xsd:string">
1573         <xsd:enumeration value="blank"/>
1574         <xsd:enumeration value="formatting"/>
1575         <xsd:enumeration value="drill"/>
1576         <xsd:enumeration value="formula"/>
1577     </xsd:restriction>
1578 </xsd:simpleType>
1579 <xsd:simpleType name="ST_FieldSortType">
1580     <xsd:restriction base="xsd:string">
1581         <xsd:enumeration value="manual"/>
1582         <xsd:enumeration value="ascending"/>
1583         <xsd:enumeration value="descending"/>
1584     </xsd:restriction>
1585 </xsd:simpleType>
1586 <xsd:simpleType name="ST_PivotFilterType">
1587     <xsd:restriction base="xsd:string">
1588         <xsd:enumeration value="unknown"/>
1589         <xsd:enumeration value="count"/>
1590         <xsd:enumeration value="percent"/>
1591         <xsd:enumeration value="sum"/>
1592         <xsd:enumeration value="captionEqual"/>
1593         <xsd:enumeration value="captionNotEqual"/>
1594         <xsd:enumeration value="captionBeginsWith"/>
1595         <xsd:enumeration value="captionNotBeginsWith"/>
1596         <xsd:enumeration value="captionEndsWith"/>
1597         <xsd:enumeration value="captionNotEndsWith"/>
1598         <xsd:enumeration value="captionContains"/>
1599         <xsd:enumeration value="captionNotContains"/>
1600         <xsd:enumeration value="captionGreaterThan"/>
1601         <xsd:enumeration value="captionGreaterThanOrEqual"/>
1602         <xsd:enumeration value="captionLessThan"/>
1603         <xsd:enumeration value="captionLessThanOrEqual"/>
1604         <xsd:enumeration value="captionBetween"/>
1605         <xsd:enumeration value="captionNotBetween"/>
1606         <xsd:enumeration value="valueEqual"/>
1607         <xsd:enumeration value="valueNotEqual"/>
1608         <xsd:enumeration value="valueGreaterThan"/>
1609         <xsd:enumeration value="valueGreaterThanOrEqual"/>
1610         <xsd:enumeration value="valueLessThan"/>
1611         <xsd:enumeration value="valueLessThanOrEqual"/>
1612         <xsd:enumeration value="valueBetween"/>
1613         <xsd:enumeration value="valueNotBetween"/>
1614         <xsd:enumeration value="dateEqual"/>
1615         <xsd:enumeration value="dateNotEqual"/>
1616         <xsd:enumeration value="dateOlderThan"/>
1617         <xsd:enumeration value="dateOlderThanOrEqual"/>
1618         <xsd:enumeration value="dateNewerThan"/>

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1619     <xsd:enumeration value="dateNewerThanOrEqual"/>
1620     <xsd:enumeration value="dateBetween"/>
1621     <xsd:enumeration value="dateNotBetween"/>
1622     <xsd:enumeration value="tomorrow"/>
1623     <xsd:enumeration value="today"/>
1624     <xsd:enumeration value="yesterday"/>
1625     <xsd:enumeration value="nextWeek"/>
1626     <xsd:enumeration value="thisWeek"/>
1627     <xsd:enumeration value="lastWeek"/>
1628     <xsd:enumeration value="nextMonth"/>
1629     <xsd:enumeration value="thisMonth"/>
1630     <xsd:enumeration value="lastMonth"/>
1631     <xsd:enumeration value="nextQuarter"/>
1632     <xsd:enumeration value="thisQuarter"/>
1633     <xsd:enumeration value="lastQuarter"/>
1634     <xsd:enumeration value="nextYear"/>
1635     <xsd:enumeration value="thisYear"/>
1636     <xsd:enumeration value="lastYear"/>
1637     <xsd:enumeration value="yearToDate"/>
1638     <xsd:enumeration value="Q1"/>
1639     <xsd:enumeration value="Q2"/>
1640     <xsd:enumeration value="Q3"/>
1641     <xsd:enumeration value="Q4"/>
1642     <xsd:enumeration value="M1"/>
1643     <xsd:enumeration value="M2"/>
1644     <xsd:enumeration value="M3"/>
1645     <xsd:enumeration value="M4"/>
1646     <xsd:enumeration value="M5"/>
1647     <xsd:enumeration value="M6"/>
1648     <xsd:enumeration value="M7"/>
1649     <xsd:enumeration value="M8"/>
1650     <xsd:enumeration value="M9"/>
1651     <xsd:enumeration value="M10"/>
1652     <xsd:enumeration value="M11"/>
1653     <xsd:enumeration value="M12"/>
1654   </xsd:restriction>
1655 </xsd:simpleType>
1656 <xsd:complexType name="CT_PivotArea">
1657   <xsd:sequence>
1658     <xsd:element name="references" minOccurs="0" type="CT_PivotAreaReferences"/>
1659     <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
1660   </xsd:sequence>
1661   <xsd:attribute name="field" use="optional" type="xsd:int"/>
1662   <xsd:attribute name="type" type="ST_PivotAreaType" default="normal"/>
1663   <xsd:attribute name="dataOnly" type="xsd:boolean" default="true"/>
1664   <xsd:attribute name="labelOnly" type="xsd:boolean" default="false"/>
1665   <xsd:attribute name="grandRow" type="xsd:boolean" default="false"/>
1666   <xsd:attribute name="grandCol" type="xsd:boolean" default="false"/>
1667   <xsd:attribute name="cacheIndex" type="xsd:boolean" default="false"/>
1668   <xsd:attribute name="outline" type="xsd:boolean" default="true"/>
1669   <xsd:attribute name="offset" type="ST_Ref"/>
1670   <xsd:attribute name="collapsedLevelsAreSubtotals" type="xsd:boolean" default="false"/>
1671   <xsd:attribute name="axis" type="ST_Axis" use="optional"/>

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1672     <xsd:attribute name="fieldPosition" type="xsd:unsignedInt" use="optional"/>
1673 </xsd:complexType>
1674 <xsd:simpleType name="ST_PivotAreaType">
1675     <xsd:restriction base="xsd:string">
1676         <xsd:enumeration value="none"/>
1677         <xsd:enumeration value="normal"/>
1678         <xsd:enumeration value="data"/>
1679         <xsd:enumeration value="all"/>
1680         <xsd:enumeration value="origin"/>
1681         <xsd:enumeration value="button"/>
1682         <xsd:enumeration value="topEnd"/>
1683         <xsd:enumeration value="topRight"/>
1684     </xsd:restriction>
1685 </xsd:simpleType>
1686 <xsd:complexType name="CT_PivotAreaReferences">
1687     <xsd:sequence>
1688         <xsd:element name="reference" maxOccurs="unbounded" type="CT_PivotAreaReference"/>
1689     </xsd:sequence>
1690     <xsd:attribute name="count" type="xsd:unsignedInt"/>
1691 </xsd:complexType>
1692 <xsd:complexType name="CT_PivotAreaReference">
1693     <xsd:sequence>
1694         <xsd:element name="x" minOccurs="0" maxOccurs="unbounded" type="CT_Index"/>
1695         <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
1696     </xsd:sequence>
1697     <xsd:attribute name="field" use="optional" type="xsd:unsignedInt"/>
1698     <xsd:attribute name="count" type="xsd:unsignedInt"/>
1699     <xsd:attribute name="selected" type="xsd:boolean" default="true"/>
1700     <xsd:attribute name="byPosition" type="xsd:boolean" default="false"/>
1701     <xsd:attribute name="relative" type="xsd:boolean" default="false"/>
1702     <xsd:attribute name="defaultSubtotal" type="xsd:boolean" default="false"/>
1703     <xsd:attribute name="sumSubtotal" type="xsd:boolean" default="false"/>
1704     <xsd:attribute name="countASubtotal" type="xsd:boolean" default="false"/>
1705     <xsd:attribute name="avgSubtotal" type="xsd:boolean" default="false"/>
1706     <xsd:attribute name="maxSubtotal" type="xsd:boolean" default="false"/>
1707     <xsd:attribute name="minSubtotal" type="xsd:boolean" default="false"/>
1708     <xsd:attribute name="productSubtotal" type="xsd:boolean" default="false"/>
1709     <xsd:attribute name="countSubtotal" type="xsd:boolean" default="false"/>
1710     <xsd:attribute name="stdDevSubtotal" type="xsd:boolean" default="false"/>
1711     <xsd:attribute name="stdDevPSubtotal" type="xsd:boolean" default="false"/>
1712     <xsd:attribute name="varSubtotal" type="xsd:boolean" default="false"/>
1713     <xsd:attribute name="varPSubtotal" type="xsd:boolean" default="false"/>
1714 </xsd:complexType>
1715 <xsd:complexType name="CT_Index">
1716     <xsd:attribute name="v" use="required" type="xsd:unsignedInt"/>
1717 </xsd:complexType>
1718 <xsd:simpleType name="ST_Axis">
1719     <xsd:restriction base="xsd:string">
1720         <xsd:enumeration value="axisRow"/>
1721         <xsd:enumeration value="axisCol"/>
1722         <xsd:enumeration value="axisPage"/>
1723         <xsd:enumeration value="axisValues"/>
1724     </xsd:restriction>

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1725 </xsd:simpleType>
1726 <xsd:element name="queryTable" type="CT_QueryTable"/>
1727 <xsd:complexType name="CT_QueryTable">
1728     <xsd:sequence>
1729         <xsd:element name="queryTableRefresh" type="CT_QueryTableRefresh" minOccurs="0"
1730             maxOccurs="1"/>
1731         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1732     </xsd:sequence>
1733     <xsd:attribute name="name" type="s:ST_Xstring" use="required"/>
1734     <xsd:attribute name="headers" type="xsd:boolean" use="optional" default="true"/>
1735     <xsd:attribute name="rowNumbers" type="xsd:boolean" use="optional" default="false"/>
1736     <xsd:attribute name="disableRefresh" type="xsd:boolean" use="optional" default="false"/>
1737     <xsd:attribute name="backgroundRefresh" type="xsd:boolean" use="optional" default="true"/>
1738     <xsd:attribute name="firstBackgroundRefresh" type="xsd:boolean" use="optional"
1739         default="false"/>
1740     <xsd:attribute name="refreshOnLoad" type="xsd:boolean" use="optional" default="false"/>
1741     <xsd:attribute name="growShrinkType" type="ST_GrowShrinkType" use="optional"
1742         default="insertDelete"/>
1743     <xsd:attribute name="fillFormulas" type="xsd:boolean" use="optional" default="false"/>
1744     <xsd:attribute name="removeDataOnSave" type="xsd:boolean" use="optional" default="false"/>
1745     <xsd:attribute name="disableEdit" type="xsd:boolean" use="optional" default="false"/>
1746     <xsd:attribute name="preserveFormatting" type="xsd:boolean" use="optional" default="true"/>
1747     <xsd:attribute name="adjustColumnWidth" type="xsd:boolean" use="optional" default="true"/>
1748     <xsd:attribute name="intermediate" type="xsd:boolean" use="optional" default="false"/>
1749     <xsd:attribute name="connectionId" type="xsd:unsignedInt" use="required"/>
1750     <xsd:attributeGroup ref="AG_AutoFormat"/>
1751 </xsd:complexType>
1752 <xsd:complexType name="CT_QueryTableRefresh">
1753     <xsd:sequence>
1754         <xsd:element name="queryTableFields" type="CT_QueryTableFields" minOccurs="1"
1755             maxOccurs="1"/>
1756         <xsd:element name="queryTableDeletedFields" type="CT_QueryTableDeletedFields"
1757             minOccurs="0" maxOccurs="1"/>
1758         <xsd:element name="sortState" minOccurs="0" maxOccurs="1" type="CT_SortState"/>
1759         <xsd:element name="extLst" minOccurs="0" maxOccurs="1" type="CT_ExtensionList"/>
1760     </xsd:sequence>
1761     <xsd:attribute name="preserveSortFilterLayout" type="xsd:boolean" use="optional"
1762         default="true"/>
1763     <xsd:attribute name="fieldIdWrapped" type="xsd:boolean" use="optional" default="false"/>
1764     <xsd:attribute name="headersInLastRefresh" type="xsd:boolean" use="optional" default="true"/>
1765     <xsd:attribute name="minimumVersion" type="xsd:unsignedByte" use="optional" default="0"/>
1766     <xsd:attribute name="nextId" type="xsd:unsignedInt" use="optional" default="1"/>
1767     <xsd:attribute name="unboundColumnsLeft" type="xsd:unsignedInt" use="optional" default="0"/>
1768     <xsd:attribute name="unboundColumnsRight" type="xsd:unsignedInt" use="optional" default="0"/>
1769 </xsd:complexType>
1770 <xsd:complexType name="CT_QueryTableDeletedFields">
1771     <xsd:sequence>
1772         <xsd:element name="deletedField" type="CT_DeletedField" minOccurs="1"
1773             maxOccurs="unbounded"/>
1774     </xsd:sequence>
1775     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
1776 </xsd:complexType>
1777 <xsd:complexType name="CT_DeletedField">

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1778     <xsd:attribute name="name" type="s:ST_Xstring" use="required"/>
1779 </xsd:complexType>
1780 <xsd:complexType name="CT_QueryTableFields">
1781     <xsd:sequence>
1782         <xsd:element name="queryTableField" type="CT_QueryTableField" minOccurs="0"
1783             maxOccurs="unbounded"/>
1784     </xsd:sequence>
1785     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional" default="0"/>
1786 </xsd:complexType>
1787 <xsd:complexType name="CT_QueryTableField">
1788     <xsd:sequence minOccurs="0">
1789         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1790     </xsd:sequence>
1791     <xsd:attribute name="id" type="xsd:unsignedInt" use="required"/>
1792     <xsd:attribute name="name" type="s:ST_Xstring" use="optional"/>
1793     <xsd:attribute name="dataBound" type="xsd:boolean" use="optional" default="true"/>
1794     <xsd:attribute name="rowNumbers" type="xsd:boolean" use="optional" default="false"/>
1795     <xsd:attribute name="fillFormulas" type="xsd:boolean" use="optional" default="false"/>
1796     <xsd:attribute name="clipped" type="xsd:boolean" use="optional" default="false"/>
1797     <xsd:attribute name="tableColumnId" type="xsd:unsignedInt" default="0"/>
1798 </xsd:complexType>
1799 <xsd:simpleType name="ST_GrowShrinkType">
1800     <xsd:restriction base="xsd:string">
1801         <xsd:enumeration value="insertDelete"/>
1802         <xsd:enumeration value="insertClear"/>
1803         <xsd:enumeration value="overwriteClear"/>
1804     </xsd:restriction>
1805 </xsd:simpleType>
1806 <xsd:element name="sst" type="CT_Sst"/>
1807 <xsd:complexType name="CT_Sst">
1808     <xsd:sequence>
1809         <xsd:element name="si" type="CT_Rst" minOccurs="0" maxOccurs="unbounded"/>
1810         <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
1811     </xsd:sequence>
1812     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
1813     <xsd:attribute name="uniqueCount" type="xsd:unsignedInt" use="optional"/>
1814 </xsd:complexType>
1815 <xsd:simpleType name="ST_PhoneticType">
1816     <xsd:restriction base="xsd:string">
1817         <xsd:enumeration value="halfwidthKatakana"/>
1818         <xsd:enumeration value="fullwidthKatakana"/>
1819         <xsd:enumeration value="Hiragana"/>
1820         <xsd:enumeration value="noConversion"/>
1821     </xsd:restriction>
1822 </xsd:simpleType>
1823 <xsd:simpleType name="ST_PhoneticAlignment">
1824     <xsd:restriction base="xsd:string">
1825         <xsd:enumeration value="noControl"/>
1826         <xsd:enumeration value="left"/>
1827         <xsd:enumeration value="center"/>
1828         <xsd:enumeration value="distributed"/>
1829     </xsd:restriction>
1830 </xsd:simpleType>

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1831 <xsd:complexType name="CT_PhoneticRun">
1832   <xsd:sequence>
1833     <xsd:element name="t" type="s:ST Xstring" minOccurs="1" maxOccurs="1"/>
1834   </xsd:sequence>
1835   <xsd:attribute name="sb" type="xsd:unsignedInt" use="required"/>
1836   <xsd:attribute name="eb" type="xsd:unsignedInt" use="required"/>
1837 </xsd:complexType>
1838 <xsd:complexType name="CT_RElt">
1839   <xsd:sequence>
1840     <xsd:element name="rPr" type="CT RPrElt" minOccurs="0" maxOccurs="1"/>
1841     <xsd:element name="t" type="s:ST Xstring" minOccurs="1" maxOccurs="1"/>
1842   </xsd:sequence>
1843 </xsd:complexType>
1844 <xsd:complexType name="CT_RPrElt">
1845   <xsd:choice maxOccurs="unbounded">
1846     <xsd:element name="rFont" type="CT FontName" minOccurs="0" maxOccurs="1"/>
1847     <xsd:element name="charset" type="CT IntProperty" minOccurs="0" maxOccurs="1"/>
1848     <xsd:element name="family" type="CT IntProperty" minOccurs="0" maxOccurs="1"/>
1849     <xsd:element name="b" type="CT BooleanProperty" minOccurs="0" maxOccurs="1"/>
1850     <xsd:element name="i" type="CT BooleanProperty" minOccurs="0" maxOccurs="1"/>
1851     <xsd:element name="strike" type="CT BooleanProperty" minOccurs="0" maxOccurs="1"/>
1852     <xsd:element name="outline" type="CT BooleanProperty" minOccurs="0" maxOccurs="1"/>
1853     <xsd:element name="shadow" type="CT BooleanProperty" minOccurs="0" maxOccurs="1"/>
1854     <xsd:element name="condense" type="CT BooleanProperty" minOccurs="0" maxOccurs="1"/>
1855     <xsd:element name="extend" type="CT BooleanProperty" minOccurs="0" maxOccurs="1"/>
1856     <xsd:element name="color" type="CT Color" minOccurs="0" maxOccurs="1"/>
1857     <xsd:element name="sz" type="CT FontSize" minOccurs="0" maxOccurs="1"/>
1858     <xsd:element name="u" type="CT UnderlineProperty" minOccurs="0" maxOccurs="1"/>
1859     <xsd:element name="vertAlign" type="CT VerticalAlignFontProperty" minOccurs="0"
1860       maxOccurs="1"/>
1861     <xsd:element name="scheme" type="CT FontScheme" minOccurs="0" maxOccurs="1"/>
1862   </xsd:choice>
1863 </xsd:complexType>
1864 <xsd:complexType name="CT_Rst">
1865   <xsd:sequence>
1866     <xsd:element name="t" type="s:ST Xstring" minOccurs="0" maxOccurs="1"/>
1867     <xsd:element name="r" type="CT RElt" minOccurs="0" maxOccurs="unbounded"/>
1868     <xsd:element name="rPh" type="CT PhoneticRun" minOccurs="0" maxOccurs="unbounded"/>
1869     <xsd:element name="phoneticPr" minOccurs="0" maxOccurs="1" type="CT PhoneticPr"/>
1870   </xsd:sequence>
1871 </xsd:complexType>
1872 <xsd:complexType name="CT_PhoneticPr">
1873   <xsd:attribute name="fontId" type="ST FontId" use="required"/>
1874   <xsd:attribute name="type" type="ST PhoneticType" use="optional" default="fullwidthKatakana"/>
1875   <xsd:attribute name="alignment" type="ST PhoneticAlignment" use="optional" default="left"/>
1876 </xsd:complexType>
1877 <xsd:element name="headers" type="CT RevisionHeaders"/>
1878 <xsd:element name="revisions" type="CT Revisions"/>
1879 <xsd:complexType name="CT_RevisionHeaders">
1880   <xsd:sequence>
1881     <xsd:element name="header" type="CT RevisionHeader" minOccurs="1" maxOccurs="unbounded"/>
1882   </xsd:sequence>
1883   <xsd:attribute name="guid" type="s:ST Guid" use="required"/>

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1884 <xsd:attribute name="lastGuid" type="s:ST_Guid" use="optional"/>
1885 <xsd:attribute name="shared" type="xsd:boolean" default="true"/>
1886 <xsd:attribute name="diskRevisions" type="xsd:boolean" default="false"/>
1887 <xsd:attribute name="history" type="xsd:boolean" default="true"/>
1888 <xsd:attribute name="trackRevisions" type="xsd:boolean" default="true"/>
1889 <xsd:attribute name="exclusive" type="xsd:boolean" default="false"/>
1890 <xsd:attribute name="revisionId" type="xsd:unsignedInt" default="0"/>
1891 <xsd:attribute name="version" type="xsd:int" default="1"/>
1892 <xsd:attribute name="keepChangeHistory" type="xsd:boolean" use="optional" default="true"/>
1893 <xsd:attribute name="protected" type="xsd:boolean" use="optional" default="false"/>
1894 <xsd:attribute name="preserveHistory" type="xsd:unsignedInt" default="30"/>
1895 </xsd:complexType>
1896 <xsd:complexType name="CT_Revisions">
1897   <xsd:choice maxOccurs="unbounded">
1898     <xsd:element name="rrc" type="CT_RevisionRowColumn" minOccurs="0" maxOccurs="unbounded"/>
1899     <xsd:element name="rm" type="CT_RevisionMove" minOccurs="0" maxOccurs="unbounded"/>
1900     <xsd:element name="rcv" type="CT_RevisionCustomView" minOccurs="0" maxOccurs="unbounded"/>
1901     <xsd:element name="rsnm" type="CT_RevisionSheetRename" minOccurs="0"
1902       maxOccurs="unbounded"/>
1903     <xsd:element name="ris" type="CT_RevisionInsertSheet" minOccurs="0"
1904       maxOccurs="unbounded"/>
1905     <xsd:element name="rcc" type="CT_RevisionCellChange" minOccurs="0" maxOccurs="unbounded"/>
1906     <xsd:element name="rfmt" type="CT_RevisionFormatting" minOccurs="0"
1907       maxOccurs="unbounded"/>
1908     <xsd:element name="raf" type="CT_RevisionAutoFormatting" minOccurs="0"
1909       maxOccurs="unbounded"/>
1910     <xsd:element name="rdn" type="CT_RevisionDefinedName" minOccurs="0"
1911       maxOccurs="unbounded"/>
1912     <xsd:element name="rcmt" type="CT_RevisionComment" minOccurs="0" maxOccurs="unbounded"/>
1913     <xsd:element name="rqt" type="CT_RevisionQueryTableField" minOccurs="0"
1914       maxOccurs="unbounded"/>
1915     <xsd:element name="rcft" type="CT_RevisionConflict" minOccurs="0" maxOccurs="unbounded"/>
1916   </xsd:choice>
1917 </xsd:complexType>
1918 <xsd:attributeGroup name="AG_RevData">
1919   <xsd:attribute name="rId" type="xsd:unsignedInt" use="required"/>
1920   <xsd:attribute name="ua" type="xsd:boolean" use="optional" default="false"/>
1921   <xsd:attribute name="ra" type="xsd:boolean" use="optional" default="false"/>
1922 </xsd:attributeGroup>
1923 <xsd:complexType name="CT_RevisionHeader">
1924   <xsd:sequence>
1925     <xsd:element name="sheetIdMap" minOccurs="1" maxOccurs="1" type="CT_SheetIdMap"/>
1926     <xsd:element name="reviewedList" minOccurs="0" maxOccurs="1" type="CT_ReviewedRevisions"/>
1927     <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
1928   </xsd:sequence>
1929   <xsd:attribute name="guid" type="s:ST_Guid" use="required"/>
1930   <xsd:attribute name="dateTime" type="xsd:dateTime" use="required"/>
1931   <xsd:attribute name="maxSheetId" type="xsd:unsignedInt" use="required"/>
1932   <xsd:attribute name="userName" type="s:ST_Xstring" use="required"/>
1933   <xsd:attribute ref="r:id" use="required"/>
1934   <xsd:attribute name="minRId" type="xsd:unsignedInt" use="optional"/>
1935   <xsd:attribute name="maxRId" type="xsd:unsignedInt" use="optional"/>
1936 </xsd:complexType>

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1937 <xsd:complexType name="CT_SheetIdMap">
1938   <xsd:sequence>
1939     <xsd:element name="sheetId" type="CT_SheetId" minOccurs="1" maxOccurs="unbounded"/>
1940   </xsd:sequence>
1941   <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
1942 </xsd:complexType>
1943 <xsd:complexType name="CT_SheetId">
1944   <xsd:attribute name="val" type="xsd:unsignedInt" use="required"/>
1945 </xsd:complexType>
1946 <xsd:complexType name="CT_ReviewedRevisions">
1947   <xsd:sequence>
1948     <xsd:element name="reviewed" type="CT_Reviewed" minOccurs="1" maxOccurs="unbounded"/>
1949   </xsd:sequence>
1950   <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
1951 </xsd:complexType>
1952 <xsd:complexType name="CT_Reviewed">
1953   <xsd:attribute name="rId" type="xsd:unsignedInt" use="required"/>
1954 </xsd:complexType>
1955 <xsd:complexType name="CT_UndoInfo">
1956   <xsd:attribute name="index" type="xsd:unsignedInt" use="required"/>
1957   <xsd:attribute name="exp" type="ST_FormulaExpression" use="required"/>
1958   <xsd:attribute name="ref3D" type="xsd:boolean" use="optional" default="false"/>
1959   <xsd:attribute name="array" type="xsd:boolean" use="optional" default="false"/>
1960   <xsd:attribute name="v" type="xsd:boolean" use="optional" default="false"/>
1961   <xsd:attribute name="nf" type="xsd:boolean" use="optional" default="false"/>
1962   <xsd:attribute name="cs" type="xsd:boolean" use="optional" default="false"/>
1963   <xsd:attribute name="dr" type="ST_RefA" use="required"/>
1964   <xsd:attribute name="dn" type="s:ST_Xstring" use="optional"/>
1965   <xsd:attribute name="r" type="ST_CellRef" use="optional"/>
1966   <xsd:attribute name="sId" type="xsd:unsignedInt" use="optional"/>
1967 </xsd:complexType>
1968 <xsd:complexType name="CT_RevisionRowColumn">
1969   <xsd:choice minOccurs="0" maxOccurs="unbounded">
1970     <xsd:element name="undo" type="CT_UndoInfo" minOccurs="0" maxOccurs="unbounded"/>
1971     <xsd:element name="rcc" type="CT_RevisionCellChange" minOccurs="0" maxOccurs="unbounded"/>
1972     <xsd:element name="rfmt" type="CT_RevisionFormatting" minOccurs="0"
1973       maxOccurs="unbounded"/>
1974   </xsd:choice>
1975   <xsd:attributeGroup ref="AG_RevData"/>
1976   <xsd:attribute name="sId" type="xsd:unsignedInt" use="required"/>
1977   <xsd:attribute name="eol" type="xsd:boolean" use="optional" default="false"/>
1978   <xsd:attribute name="ref" type="ST_Ref" use="required"/>
1979   <xsd:attribute name="action" type="ST_rwColActionType" use="required"/>
1980   <xsd:attribute name="edge" type="xsd:boolean" use="optional" default="false"/>
1981 </xsd:complexType>
1982 <xsd:complexType name="CT_RevisionMove">
1983   <xsd:choice minOccurs="0" maxOccurs="unbounded">
1984     <xsd:element name="undo" type="CT_UndoInfo" minOccurs="0" maxOccurs="unbounded"/>
1985     <xsd:element name="rcc" type="CT_RevisionCellChange" minOccurs="0" maxOccurs="unbounded"/>
1986     <xsd:element name="rfmt" type="CT_RevisionFormatting" minOccurs="0"
1987       maxOccurs="unbounded"/>
1988   </xsd:choice>
1989   <xsd:attributeGroup ref="AG_RevData"/>

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1990     <xsd:attribute name="sheetId" type="xsd:unsignedInt" use="required"/>
1991     <xsd:attribute name="source" type="ST Ref" use="required"/>
1992     <xsd:attribute name="destination" type="ST Ref" use="required"/>
1993     <xsd:attribute name="sourceSheetId" type="xsd:unsignedInt" use="optional" default="0"/>
1994 </xsd:complexType>
1995 <xsd:complexType name="CT_RevisionCustomView">
1996     <xsd:attribute name="guid" type="s:ST Guid" use="required"/>
1997     <xsd:attribute name="action" type="ST RevisionAction" use="required"/>
1998 </xsd:complexType>
1999 <xsd:complexType name="CT_RevisionSheetRename">
2000     <xsd:sequence>
2001         <xsd:element name="extLst" minOccurs="0" type="CT ExtensionList"/>
2002     </xsd:sequence>
2003     <xsd:attributeGroup ref="AG RevData"/>
2004     <xsd:attribute name="sheetId" type="xsd:unsignedInt" use="required"/>
2005     <xsd:attribute name="oldName" type="s:ST Xstring" use="required"/>
2006     <xsd:attribute name="newName" type="s:ST Xstring" use="required"/>
2007 </xsd:complexType>
2008 <xsd:complexType name="CT_RevisionInsertSheet">
2009     <xsd:attributeGroup ref="AG RevData"/>
2010     <xsd:attribute name="sheetId" type="xsd:unsignedInt" use="required"/>
2011     <xsd:attribute name="name" type="s:ST Xstring" use="required"/>
2012     <xsd:attribute name="sheetPosition" type="xsd:unsignedInt" use="required"/>
2013 </xsd:complexType>
2014 <xsd:complexType name="CT_RevisionCellChange">
2015     <xsd:sequence>
2016         <xsd:element name="oc" type="CT Cell" minOccurs="0" maxOccurs="1"/>
2017         <xsd:element name="nc" type="CT Cell" minOccurs="1" maxOccurs="1"/>
2018         <xsd:element name="odxf" type="CT Dxf" minOccurs="0" maxOccurs="1"/>
2019         <xsd:element name="ndxf" type="CT Dxf" minOccurs="0" maxOccurs="1"/>
2020         <xsd:element name="extLst" minOccurs="0" type="CT ExtensionList"/>
2021     </xsd:sequence>
2022     <xsd:attributeGroup ref="AG RevData"/>
2023     <xsd:attribute name="sId" type="xsd:unsignedInt" use="required"/>
2024     <xsd:attribute name="odxf" type="xsd:boolean" default="false"/>
2025     <xsd:attribute name="xfDxf" type="xsd:boolean" use="optional" default="false"/>
2026     <xsd:attribute name="s" type="xsd:boolean" use="optional" default="false"/>
2027     <xsd:attribute name="dxf" type="xsd:boolean" default="false"/>
2028     <xsd:attribute name="numFmtId" type="ST NumFmtId" use="optional"/>
2029     <xsd:attribute name="quotePrefix" type="xsd:boolean" use="optional" default="false"/>
2030     <xsd:attribute name="oldQuotePrefix" type="xsd:boolean" use="optional" default="false"/>
2031     <xsd:attribute name="ph" type="xsd:boolean" default="false"/>
2032     <xsd:attribute name="oldPh" type="xsd:boolean" default="false"/>
2033     <xsd:attribute name="endOfListFormulaUpdate" type="xsd:boolean" default="false"/>
2034 </xsd:complexType>
2035 <xsd:complexType name="CT_RevisionFormatting">
2036     <xsd:sequence>
2037         <xsd:element name="dxf" type="CT Dxf" minOccurs="0" maxOccurs="1"/>
2038         <xsd:element name="extLst" minOccurs="0" type="CT ExtensionList"/>
2039     </xsd:sequence>
2040     <xsd:attribute name="sheetId" type="xsd:unsignedInt" use="required"/>
2041     <xsd:attribute name="xfDxf" type="xsd:boolean" use="optional" default="false"/>
2042     <xsd:attribute name="s" type="xsd:boolean" use="optional" default="false"/>

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2043     <xsd:attribute name="sqref" type="ST Sqref" use="required"/>
2044     <xsd:attribute name="start" type="xsd:unsignedInt" use="optional"/>
2045     <xsd:attribute name="length" type="xsd:unsignedInt" use="optional"/>
2046 </xsd:complexType>
2047 <xsd:complexType name="CT_RevisionAutoFormatting">
2048     <xsd:attribute name="sheetId" type="xsd:unsignedInt" use="required"/>
2049     <xsd:attributeGroup ref="AG AutoFormat"/>
2050     <xsd:attribute name="ref" type="ST Ref" use="required"/>
2051 </xsd:complexType>
2052 <xsd:complexType name="CT_RevisionComment">
2053     <xsd:attribute name="sheetId" type="xsd:unsignedInt" use="required"/>
2054     <xsd:attribute name="cell" type="ST CellRef" use="required"/>
2055     <xsd:attribute name="guid" type="s:ST Guid" use="required"/>
2056     <xsd:attribute name="action" type="ST RevisionAction" default="add"/>
2057     <xsd:attribute name="alwaysShow" type="xsd:boolean" use="optional" default="false"/>
2058     <xsd:attribute name="old" type="xsd:boolean" use="optional" default="false"/>
2059     <xsd:attribute name="hiddenRow" type="xsd:boolean" use="optional" default="false"/>
2060     <xsd:attribute name="hiddenColumn" type="xsd:boolean" use="optional" default="false"/>
2061     <xsd:attribute name="author" type="s:ST Xstring" use="required"/>
2062     <xsd:attribute name="oldLength" type="xsd:unsignedInt" default="0"/>
2063     <xsd:attribute name="newLength" type="xsd:unsignedInt" default="0"/>
2064 </xsd:complexType>
2065 <xsd:complexType name="CT_RevisionDefinedName">
2066     <xsd:sequence>
2067         <xsd:element name="formula" type="ST Formula" minOccurs="0" maxOccurs="1"/>
2068         <xsd:element name="oldFormula" type="ST Formula" minOccurs="0" maxOccurs="1"/>
2069         <xsd:element name="extLst" minOccurs="0" type="CT ExtensionList"/>
2070     </xsd:sequence>
2071     <xsd:attributeGroup ref="AG RevData"/>
2072     <xsd:attribute name="localSheetId" type="xsd:unsignedInt" use="optional"/>
2073     <xsd:attribute name="customView" type="xsd:boolean" use="optional" default="false"/>
2074     <xsd:attribute name="name" type="s:ST Xstring" use="required"/>
2075     <xsd:attribute name="function" type="xsd:boolean" use="optional" default="false"/>
2076     <xsd:attribute name="oldFunction" type="xsd:boolean" default="false"/>
2077     <xsd:attribute name="functionGroupId" type="xsd:unsignedByte" use="optional"/>
2078     <xsd:attribute name="oldFunctionGroupId" type="xsd:unsignedByte" use="optional"/>
2079     <xsd:attribute name="shortcutKey" type="xsd:unsignedByte" use="optional"/>
2080     <xsd:attribute name="oldShortcutKey" type="xsd:unsignedByte" use="optional"/>
2081     <xsd:attribute name="hidden" type="xsd:boolean" use="optional" default="false"/>
2082     <xsd:attribute name="oldHidden" type="xsd:boolean" use="optional" default="false"/>
2083     <xsd:attribute name="customMenu" type="s:ST Xstring" use="optional"/>
2084     <xsd:attribute name="oldCustomMenu" type="s:ST Xstring" use="optional"/>
2085     <xsd:attribute name="description" type="s:ST Xstring" use="optional"/>
2086     <xsd:attribute name="oldDescription" type="s:ST Xstring" use="optional"/>
2087     <xsd:attribute name="help" type="s:ST Xstring" use="optional"/>
2088     <xsd:attribute name="oldHelp" type="s:ST Xstring" use="optional"/>
2089     <xsd:attribute name="statusBar" type="s:ST Xstring" use="optional"/>
2090     <xsd:attribute name="oldStatusBar" type="s:ST Xstring" use="optional"/>
2091     <xsd:attribute name="comment" type="s:ST Xstring" use="optional"/>
2092     <xsd:attribute name="oldComment" type="s:ST Xstring" use="optional"/>
2093 </xsd:complexType>
2094 <xsd:complexType name="CT_RevisionConflict">
2095     <xsd:attributeGroup ref="AG RevData"/>

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2096     <xsd:attribute name="sheetId" type="xsd:unsignedInt" use="optional"/>
2097 </xsd:complexType>
2098 <xsd:complexType name="CT_RevisionQueryTableField">
2099     <xsd:attribute name="sheetId" type="xsd:unsignedInt" use="required"/>
2100     <xsd:attribute name="ref" type="ST_Ref" use="required"/>
2101     <xsd:attribute name="fieldId" type="xsd:unsignedInt" use="required"/>
2102 </xsd:complexType>
2103 <xsd:simpleType name="ST_rwColActionType">
2104     <xsd:restriction base="xsd:string">
2105         <xsd:enumeration value="insertRow"/>
2106         <xsd:enumeration value="deleteRow"/>
2107         <xsd:enumeration value="insertCol"/>
2108         <xsd:enumeration value="deleteCol"/>
2109     </xsd:restriction>
2110 </xsd:simpleType>
2111 <xsd:simpleType name="ST_RevisionAction">
2112     <xsd:restriction base="xsd:string">
2113         <xsd:enumeration value="add"/>
2114         <xsd:enumeration value="delete"/>
2115     </xsd:restriction>
2116 </xsd:simpleType>
2117 <xsd:simpleType name="ST_FormulaExpression">
2118     <xsd:restriction base="xsd:string">
2119         <xsd:enumeration value="ref"/>
2120         <xsd:enumeration value="refError"/>
2121         <xsd:enumeration value="area"/>
2122         <xsd:enumeration value="areaError"/>
2123         <xsd:enumeration value="computedArea"/>
2124     </xsd:restriction>
2125 </xsd:simpleType>
2126 <xsd:element name="users" type="CT_Users"/>
2127 <xsd:complexType name="CT_Users">
2128     <xsd:sequence>
2129         <xsd:element name="userInfo" minOccurs="0" maxOccurs="256" type="CT_SharedUser"/>
2130     </xsd:sequence>
2131     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
2132 </xsd:complexType>
2133 <xsd:complexType name="CT_SharedUser">
2134     <xsd:sequence>
2135         <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
2136     </xsd:sequence>
2137     <xsd:attribute name="guid" type="s:ST_Guid" use="required"/>
2138     <xsd:attribute name="name" type="s:ST_Xstring" use="required"/>
2139     <xsd:attribute name="id" type="xsd:int" use="required"/>
2140     <xsd:attribute name="dateTime" type="xsd:dateTime" use="required"/>
2141 </xsd:complexType>
2142 <xsd:element name="worksheet" type="CT_Worksheet"/>
2143 <xsd:element name="chartsheet" type="CT_Chartsheet"/>
2144 <xsd:element name="dialogsheet" type="CT_Dialogsheet"/>
2145 <xsd:complexType name="CT_Macrosheet">
2146     <xsd:sequence>
2147         <xsd:element name="sheetPr" type="CT_SheetPr" minOccurs="0" maxOccurs="1"/>
2148         <xsd:element name="dimension" type="CT_SheetDimension" minOccurs="0" maxOccurs="1"/>

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2149 <xsd:element name="sheetViews" type="CT_SheetViews" minOccurs="0" maxOccurs="1"/>
2150 <xsd:element name="sheetFormatPr" type="CT_SheetFormatPr" minOccurs="0" maxOccurs="1"/>
2151 <xsd:element name="cols" type="CT_Cols" minOccurs="0" maxOccurs="unbounded"/>
2152 <xsd:element name="sheetData" type="CT_SheetData" minOccurs="1" maxOccurs="1"/>
2153 <xsd:element name="sheetProtection" type="CT_SheetProtection" minOccurs="0"
2154     maxOccurs="1"/>
2155 <xsd:element name="autoFilter" type="CT_AutoFilter" minOccurs="0" maxOccurs="1"/>
2156 <xsd:element name="sortState" type="CT_SortState" minOccurs="0" maxOccurs="1"/>
2157 <xsd:element name="dataConsolidate" type="CT_DataConsolidate" minOccurs="0"
2158     maxOccurs="1"/>
2159 <xsd:element name="customSheetViews" type="CT_CustomSheetViews" minOccurs="0"
2160     maxOccurs="1"/>
2161 <xsd:element name="phoneticPr" type="CT_PhoneticPr" minOccurs="0" maxOccurs="1"/>
2162 <xsd:element name="conditionalFormatting" type="CT_ConditionalFormatting" minOccurs="0"
2163     maxOccurs="unbounded"/>
2164 <xsd:element name="printOptions" type="CT_PrintOptions" minOccurs="0" maxOccurs="1"/>
2165 <xsd:element name="pageMargins" type="CT_PageMargins" minOccurs="0" maxOccurs="1"/>
2166 <xsd:element name="pageSetup" type="CT_PageSetup" minOccurs="0" maxOccurs="1"/>
2167 <xsd:element name="headerFooter" type="CT_HeaderFooter" minOccurs="0" maxOccurs="1"/>
2168 <xsd:element name="rowBreaks" type="CT_PageBreak" minOccurs="0" maxOccurs="1"/>
2169 <xsd:element name="colBreaks" type="CT_PageBreak" minOccurs="0" maxOccurs="1"/>
2170 <xsd:element name="customProperties" type="CT_CustomProperties" minOccurs="0"
2171     maxOccurs="1"/>
2172 <xsd:element name="drawing" type="CT_Drawing" minOccurs="0" maxOccurs="1"/>
2173 <xsd:element name="legacyDrawing" type="CT_LegacyDrawing" minOccurs="0" maxOccurs="1"/>
2174 <xsd:element name="legacyDrawingHF" type="CT_LegacyDrawing" minOccurs="0" maxOccurs="1"/>
2175 <xsd:element name="drawingHF" type="CT_DrawingHF" minOccurs="0" maxOccurs="1"/>
2176 <xsd:element name="picture" type="CT_SheetBackgroundPicture" minOccurs="0" maxOccurs="1"/>
2177 <xsd:element name="oleObjects" type="CT_OleObjects" minOccurs="0" maxOccurs="1"/>
2178 <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
2179 </xsd:sequence>
2180 </xsd:complexType>
2181 <xsd:complexType name="CT_Dialogsheet">
2182     <xsd:sequence>
2183         <xsd:element name="sheetPr" minOccurs="0" type="CT_SheetPr"/>
2184         <xsd:element name="sheetViews" minOccurs="0" type="CT_SheetViews"/>
2185         <xsd:element name="sheetFormatPr" minOccurs="0" type="CT_SheetFormatPr"/>
2186         <xsd:element name="sheetProtection" type="CT_SheetProtection" minOccurs="0"
2187             maxOccurs="1"/>
2188         <xsd:element name="customSheetViews" minOccurs="0" type="CT_CustomSheetViews"/>
2189         <xsd:element name="printOptions" minOccurs="0" type="CT_PrintOptions"/>
2190         <xsd:element name="pageMargins" minOccurs="0" type="CT_PageMargins"/>
2191         <xsd:element name="pageSetup" minOccurs="0" type="CT_PageSetup"/>
2192         <xsd:element name="headerFooter" minOccurs="0" type="CT_HeaderFooter"/>
2193         <xsd:element name="drawing" minOccurs="0" type="CT_Drawing"/>
2194         <xsd:element name="legacyDrawing" minOccurs="0" type="CT_LegacyDrawing"/>
2195         <xsd:element name="legacyDrawingHF" type="CT_LegacyDrawing" minOccurs="0" maxOccurs="1"/>
2196         <xsd:element name="drawingHF" type="CT_DrawingHF" minOccurs="0" maxOccurs="1"/>
2197         <xsd:element name="oleObjects" type="CT_OleObjects" minOccurs="0" maxOccurs="1"/>
2198         <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
2199     </xsd:sequence>
2200 </xsd:complexType>
2201 <xsd:complexType name="CT_Worksheet">

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2202     <xsd:sequence>
2203         <xsd:element name="sheetPr" type="CT_SheetPr" minOccurs="0" maxOccurs="1"/>
2204         <xsd:element name="dimension" type="CT_SheetDimension" minOccurs="0" maxOccurs="1"/>
2205         <xsd:element name="sheetViews" type="CT_SheetViews" minOccurs="0" maxOccurs="1"/>
2206         <xsd:element name="sheetFormatPr" type="CT_SheetFormatPr" minOccurs="0" maxOccurs="1"/>
2207         <xsd:element name="cols" type="CT_Cols" minOccurs="0" maxOccurs="unbounded"/>
2208         <xsd:element name="sheetData" type="CT_SheetData" minOccurs="1" maxOccurs="1"/>
2209         <xsd:element name="sheetCalcPr" type="CT_SheetCalcPr" minOccurs="0" maxOccurs="1"/>
2210         <xsd:element name="sheetProtection" type="CT_SheetProtection" minOccurs="0"
2211             maxOccurs="1"/>
2212         <xsd:element name="protectedRanges" type="CT_ProtectedRanges" minOccurs="0"
2213             maxOccurs="1"/>
2214         <xsd:element name="scenarios" type="CT_Scenarios" minOccurs="0" maxOccurs="1"/>
2215         <xsd:element name="autoFilter" type="CT_AutoFilter" minOccurs="0" maxOccurs="1"/>
2216         <xsd:element name="sortState" type="CT_SortState" minOccurs="0" maxOccurs="1"/>
2217         <xsd:element name="dataConsolidate" type="CT_DataConsolidate" minOccurs="0"
2218             maxOccurs="1"/>
2219         <xsd:element name="customSheetViews" type="CT_CustomSheetViews" minOccurs="0"
2220             maxOccurs="1"/>
2221         <xsd:element name="mergeCells" type="CT_MergeCells" minOccurs="0" maxOccurs="1"/>
2222         <xsd:element name="phoneticPr" type="CT_PhoneticPr" minOccurs="0" maxOccurs="1"/>
2223         <xsd:element name="conditionalFormatting" type="CT_ConditionalFormatting" minOccurs="0"
2224             maxOccurs="unbounded"/>
2225         <xsd:element name="dataValidations" type="CT_DataValidations" minOccurs="0"
2226             maxOccurs="1"/>
2227         <xsd:element name="hyperlinks" type="CT_Hyperlinks" minOccurs="0" maxOccurs="1"/>
2228         <xsd:element name="printOptions" type="CT_PrintOptions" minOccurs="0" maxOccurs="1"/>
2229         <xsd:element name="pageMargins" type="CT_PageMargins" minOccurs="0" maxOccurs="1"/>
2230         <xsd:element name="pageSetup" type="CT_PageSetup" minOccurs="0" maxOccurs="1"/>
2231         <xsd:element name="headerFooter" type="CT_HeaderFooter" minOccurs="0" maxOccurs="1"/>
2232         <xsd:element name="rowBreaks" type="CT_PageBreak" minOccurs="0" maxOccurs="1"/>
2233         <xsd:element name="colBreaks" type="CT_PageBreak" minOccurs="0" maxOccurs="1"/>
2234         <xsd:element name="customProperties" type="CT_CustomProperties" minOccurs="0"
2235             maxOccurs="1"/>
2236         <xsd:element name="cellWatches" type="CT_CellWatches" minOccurs="0" maxOccurs="1"/>
2237         <xsd:element name="ignoredErrors" type="CT_IgnoredErrors" minOccurs="0" maxOccurs="1"/>
2238         <xsd:element name="smartTags" type="CT_SmartTags" minOccurs="0" maxOccurs="1"/>
2239         <xsd:element name="drawing" type="CT_Drawing" minOccurs="0" maxOccurs="1"/>
2240         <xsd:element name="legacyDrawing" type="CT_LegacyDrawing" minOccurs="0" maxOccurs="1"/>
2241         <xsd:element name="legacyDrawingHF" type="CT_LegacyDrawing" minOccurs="0" maxOccurs="1"/>
2242         <xsd:element name="drawingHF" type="CT_DrawingHF" minOccurs="0" maxOccurs="1"/>
2243         <xsd:element name="picture" type="CT_SheetBackgroundPicture" minOccurs="0" maxOccurs="1"/>
2244         <xsd:element name="oleObjects" type="CT_OleObjects" minOccurs="0" maxOccurs="1"/>
2245         <xsd:element name="controls" type="CT_Controls" minOccurs="0" maxOccurs="1"/>
2246         <xsd:element name="webPublishItems" type="CT_WebPublishItems" minOccurs="0"
2247             maxOccurs="1"/>
2248         <xsd:element name="tableParts" type="CT_TableParts" minOccurs="0" maxOccurs="1"/>
2249         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
2250     </xsd:sequence>
2251 </xsd:complexType>
2252 <xsd:complexType name="CT_SheetData">
2253     <xsd:sequence>
2254         <xsd:element name="row" type="CT_Row" minOccurs="0" maxOccurs="unbounded"/>

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2255     </xsd:sequence>
2256 </xsd:complexType>
2257 <xsd:complexType name="CT_SheetCalcPr">
2258     <xsd:attribute name="fullCalcOnLoad" type="xsd:boolean" use="optional" default="false"/>
2259 </xsd:complexType>
2260 <xsd:complexType name="CT_SheetFormatPr">
2261     <xsd:attribute name="baseColWidth" type="xsd:unsignedInt" use="optional" default="8"/>
2262     <xsd:attribute name="defaultColWidth" type="xsd:double" use="optional"/>
2263     <xsd:attribute name="defaultRowHeight" type="xsd:double" use="required"/>
2264     <xsd:attribute name="customHeight" type="xsd:boolean" use="optional" default="false"/>
2265     <xsd:attribute name="zeroHeight" type="xsd:boolean" use="optional" default="false"/>
2266     <xsd:attribute name="thickTop" type="xsd:boolean" use="optional" default="false"/>
2267     <xsd:attribute name="thickBottom" type="xsd:boolean" use="optional" default="false"/>
2268     <xsd:attribute name="outlineLevelRow" type="xsd:unsignedByte" use="optional" default="0"/>
2269     <xsd:attribute name="outlineLevelCol" type="xsd:unsignedByte" use="optional" default="0"/>
2270 </xsd:complexType>
2271 <xsd:complexType name="CT_Cols">
2272     <xsd:sequence>
2273         <xsd:element name="col" type="CT_Col" minOccurs="1" maxOccurs="unbounded"/>
2274     </xsd:sequence>
2275 </xsd:complexType>
2276 <xsd:complexType name="CT_Col">
2277     <xsd:attribute name="min" type="xsd:unsignedInt" use="required"/>
2278     <xsd:attribute name="max" type="xsd:unsignedInt" use="required"/>
2279     <xsd:attribute name="width" type="xsd:double" use="optional"/>
2280     <xsd:attribute name="style" type="xsd:unsignedInt" use="optional" default="0"/>
2281     <xsd:attribute name="hidden" type="xsd:boolean" use="optional" default="false"/>
2282     <xsd:attribute name="bestFit" type="xsd:boolean" use="optional" default="false"/>
2283     <xsd:attribute name="customWidth" type="xsd:boolean" use="optional" default="false"/>
2284     <xsd:attribute name="phonetic" type="xsd:boolean" use="optional" default="false"/>
2285     <xsd:attribute name="outlineLevel" type="xsd:unsignedByte" use="optional" default="0"/>
2286     <xsd:attribute name="collapsed" type="xsd:boolean" use="optional" default="false"/>
2287 </xsd:complexType>
2288 <xsd:simpleType name="ST_CellSpan">
2289     <xsd:restriction base="xsd:string"/>
2290 </xsd:simpleType>
2291 <xsd:simpleType name="ST_CellSpans">
2292     <xsd:list itemType="ST_CellSpan"/>
2293 </xsd:simpleType>
2294 <xsd:complexType name="CT_Row">
2295     <xsd:sequence>
2296         <xsd:element name="c" type="CT_Cell" minOccurs="0" maxOccurs="unbounded"/>
2297         <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
2298     </xsd:sequence>
2299     <xsd:attribute name="r" type="xsd:unsignedInt" use="optional"/>
2300     <xsd:attribute name="spans" type="ST_CellSpans" use="optional"/>
2301     <xsd:attribute name="s" type="xsd:unsignedInt" use="optional" default="0"/>
2302     <xsd:attribute name="customFormat" type="xsd:boolean" use="optional" default="false"/>
2303     <xsd:attribute name="ht" type="xsd:double" use="optional"/>
2304     <xsd:attribute name="hidden" type="xsd:boolean" use="optional" default="false"/>
2305     <xsd:attribute name="customHeight" type="xsd:boolean" use="optional" default="false"/>
2306     <xsd:attribute name="outlineLevel" type="xsd:unsignedByte" use="optional" default="0"/>
2307     <xsd:attribute name="collapsed" type="xsd:boolean" use="optional" default="false"/>

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2308     <xsd:attribute name="thickTop" type="xsd:boolean" use="optional" default="false"/>
2309     <xsd:attribute name="thickBot" type="xsd:boolean" use="optional" default="false"/>
2310     <xsd:attribute name="ph" type="xsd:boolean" use="optional" default="false"/>
2311 </xsd:complexType>
2312 <xsd:complexType name="CT_Cell">
2313     <xsd:sequence>
2314         <xsd:element name="f" type="CT_CellFormula" minOccurs="0" maxOccurs="1"/>
2315         <xsd:element name="v" type="s:ST_Xstring" minOccurs="0" maxOccurs="1"/>
2316         <xsd:element name="is" type="CT_Rst" minOccurs="0" maxOccurs="1"/>
2317         <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
2318     </xsd:sequence>
2319     <xsd:attribute name="r" type="ST_CellRef" use="optional"/>
2320     <xsd:attribute name="s" type="xsd:unsignedInt" use="optional" default="0"/>
2321     <xsd:attribute name="t" type="ST_CellType" use="optional" default="n"/>
2322     <xsd:attribute name="cm" type="xsd:unsignedInt" use="optional" default="0"/>
2323     <xsd:attribute name="vm" type="xsd:unsignedInt" use="optional" default="0"/>
2324     <xsd:attribute name="ph" type="xsd:boolean" use="optional" default="false"/>
2325 </xsd:complexType>
2326 <xsd:simpleType name="ST_CellType">
2327     <xsd:restriction base="xsd:string">
2328         <xsd:enumeration value="b"/>
2329         <xsd:enumeration value="d"/>
2330         <xsd:enumeration value="n"/>
2331         <xsd:enumeration value="e"/>
2332         <xsd:enumeration value="s"/>
2333         <xsd:enumeration value="str"/>
2334         <xsd:enumeration value="inlineStr"/>
2335     </xsd:restriction>
2336 </xsd:simpleType>
2337 <xsd:simpleType name="ST_CellFormulaType">
2338     <xsd:restriction base="xsd:string">
2339         <xsd:enumeration value="normal"/>
2340         <xsd:enumeration value="array"/>
2341         <xsd:enumeration value="dataTable"/>
2342         <xsd:enumeration value="shared"/>
2343     </xsd:restriction>
2344 </xsd:simpleType>
2345 <xsd:complexType name="CT_SheetPr">
2346     <xsd:sequence>
2347         <xsd:element name="tabColor" type="CT_Color" minOccurs="0" maxOccurs="1"/>
2348         <xsd:element name="outlinePr" type="CT_OutlinePr" minOccurs="0" maxOccurs="1"/>
2349         <xsd:element name="pageSetUpPr" type="CT_PageSetUpPr" minOccurs="0" maxOccurs="1"/>
2350     </xsd:sequence>
2351     <xsd:attribute name="syncHorizontal" type="xsd:boolean" use="optional" default="false"/>
2352     <xsd:attribute name="syncVertical" type="xsd:boolean" use="optional" default="false"/>
2353     <xsd:attribute name="syncRef" type="ST_Ref" use="optional"/>
2354     <xsd:attribute name="transitionEvaluation" type="xsd:boolean" use="optional" default="false"/>
2355     <xsd:attribute name="transitionEntry" type="xsd:boolean" use="optional" default="false"/>
2356     <xsd:attribute name="published" type="xsd:boolean" use="optional" default="true"/>
2357     <xsd:attribute name="codeName" type="xsd:string" use="optional"/>
2358     <xsd:attribute name="filterMode" type="xsd:boolean" use="optional" default="false"/>
2359     <xsd:attribute name="enableFormatConditionsCalculation" type="xsd:boolean" use="optional"
2360         default="true"/>

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2361 </xsd:complexType>
2362 <xsd:complexType name="CT_SheetDimension">
2363   <xsd:attribute name="ref" type="ST_Ref" use="required"/>
2364 </xsd:complexType>
2365 <xsd:complexType name="CT_SheetViews">
2366   <xsd:sequence>
2367     <xsd:element name="sheetView" type="CT_SheetView" minOccurs="1" maxOccurs="unbounded"/>
2368     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
2369   </xsd:sequence>
2370 </xsd:complexType>
2371 <xsd:complexType name="CT_SheetView">
2372   <xsd:sequence>
2373     <xsd:element name="pane" type="CT_Pane" minOccurs="0" maxOccurs="1"/>
2374     <xsd:element name="selection" type="CT_Selection" minOccurs="0" maxOccurs="4"/>
2375     <xsd:element name="pivotSelection" type="CT_PivotSelection" minOccurs="0" maxOccurs="4"/>
2376     <xsd:element name="extLst" minOccurs="0" maxOccurs="1" type="CT_ExtensionList"/>
2377   </xsd:sequence>
2378   <xsd:attribute name="windowProtection" type="xsd:boolean" use="optional" default="false"/>
2379   <xsd:attribute name="showFormulas" type="xsd:boolean" use="optional" default="false"/>
2380   <xsd:attribute name="showGridLines" type="xsd:boolean" use="optional" default="true"/>
2381   <xsd:attribute name="showRowColHeaders" type="xsd:boolean" use="optional" default="true"/>
2382   <xsd:attribute name="showZeros" type="xsd:boolean" use="optional" default="true"/>
2383   <xsd:attribute name="rightToLeft" type="xsd:boolean" use="optional" default="false"/>
2384   <xsd:attribute name="tabSelected" type="xsd:boolean" use="optional" default="false"/>
2385   <xsd:attribute name="showRuler" type="xsd:boolean" use="optional" default="true"/>
2386   <xsd:attribute name="showOutlineSymbols" type="xsd:boolean" use="optional" default="true"/>
2387   <xsd:attribute name="defaultGridColor" type="xsd:boolean" use="optional" default="true"/>
2388   <xsd:attribute name="showWhiteSpace" type="xsd:boolean" use="optional" default="true"/>
2389   <xsd:attribute name="view" type="ST_SheetViewType" use="optional" default="normal"/>
2390   <xsd:attribute name="topLeftCell" type="ST_CellRef" use="optional"/>
2391   <xsd:attribute name="colorId" type="xsd:unsignedInt" use="optional" default="64"/>
2392   <xsd:attribute name="zoomScale" type="xsd:unsignedInt" use="optional" default="100"/>
2393   <xsd:attribute name="zoomScaleNormal" type="xsd:unsignedInt" use="optional" default="0"/>
2394   <xsd:attribute name="zoomScaleSheetLayoutView" type="xsd:unsignedInt" use="optional"
2395     default="0"/>
2396   <xsd:attribute name="zoomScalePageLayoutView" type="xsd:unsignedInt" use="optional"
2397     default="0"/>
2398   <xsd:attribute name="workbookViewId" type="xsd:unsignedInt" use="required"/>
2399 </xsd:complexType>
2400 <xsd:complexType name="CT_Pane">
2401   <xsd:attribute name="xSplit" type="xsd:double" use="optional" default="0"/>
2402   <xsd:attribute name="ySplit" type="xsd:double" use="optional" default="0"/>
2403   <xsd:attribute name="topLeftCell" type="ST_CellRef" use="optional"/>
2404   <xsd:attribute name="activePane" type="ST_Pane" use="optional" default="topLeft"/>
2405   <xsd:attribute name="state" type="ST_PaneState" use="optional" default="split"/>
2406 </xsd:complexType>
2407 <xsd:complexType name="CT_PivotSelection">
2408   <xsd:sequence>
2409     <xsd:element name="pivotArea" type="CT_PivotArea"/>
2410   </xsd:sequence>
2411   <xsd:attribute name="pane" type="ST_Pane" use="optional" default="topLeft"/>
2412   <xsd:attribute name="showHeader" type="xsd:boolean" default="false"/>
2413   <xsd:attribute name="label" type="xsd:boolean" default="false"/>

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2414     <xsd:attribute name="data" type="xsd:boolean" default="false"/>
2415     <xsd:attribute name="extendable" type="xsd:boolean" default="false"/>
2416     <xsd:attribute name="count" type="xsd:unsignedInt" default="0"/>
2417     <xsd:attribute name="axis" type="ST Axis" use="optional"/>
2418     <xsd:attribute name="dimension" type="xsd:unsignedInt" default="0"/>
2419     <xsd:attribute name="start" type="xsd:unsignedInt" default="0"/>
2420     <xsd:attribute name="min" type="xsd:unsignedInt" default="0"/>
2421     <xsd:attribute name="max" type="xsd:unsignedInt" default="0"/>
2422     <xsd:attribute name="activeRow" type="xsd:unsignedInt" default="0"/>
2423     <xsd:attribute name="activeCol" type="xsd:unsignedInt" default="0"/>
2424     <xsd:attribute name="previousRow" type="xsd:unsignedInt" default="0"/>
2425     <xsd:attribute name="previousCol" type="xsd:unsignedInt" default="0"/>
2426     <xsd:attribute name="click" type="xsd:unsignedInt" default="0"/>
2427     <xsd:attribute ref="r:id" use="optional"/>
2428 </xsd:complexType>
2429 <xsd:complexType name="CT_Selection">
2430     <xsd:attribute name="pane" type="ST Pane" use="optional" default="topLeft"/>
2431     <xsd:attribute name="activeCell" type="ST CellRef" use="optional"/>
2432     <xsd:attribute name="activeCellId" type="xsd:unsignedInt" use="optional" default="0"/>
2433     <xsd:attribute name="sqref" type="ST Sqref" use="optional" default="A1"/>
2434 </xsd:complexType>
2435 <xsd:simpleType name="ST_Pane">
2436     <xsd:restriction base="xsd:string">
2437         <xsd:enumeration value="bottomRight"/>
2438         <xsd:enumeration value="topRight"/>
2439         <xsd:enumeration value="bottomLeft"/>
2440         <xsd:enumeration value="topLeft"/>
2441     </xsd:restriction>
2442 </xsd:simpleType>
2443 <xsd:complexType name="CT_PageBreak">
2444     <xsd:sequence>
2445         <xsd:element name="brk" type="CT_Break" minOccurs="0" maxOccurs="unbounded"/>
2446     </xsd:sequence>
2447     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional" default="0"/>
2448     <xsd:attribute name="manualBreakCount" type="xsd:unsignedInt" use="optional" default="0"/>
2449 </xsd:complexType>
2450 <xsd:complexType name="CT_Break">
2451     <xsd:attribute name="id" type="xsd:unsignedInt" use="optional" default="0"/>
2452     <xsd:attribute name="min" type="xsd:unsignedInt" use="optional" default="0"/>
2453     <xsd:attribute name="max" type="xsd:unsignedInt" use="optional" default="0"/>
2454     <xsd:attribute name="man" type="xsd:boolean" use="optional" default="false"/>
2455     <xsd:attribute name="pt" type="xsd:boolean" use="optional" default="false"/>
2456 </xsd:complexType>
2457 <xsd:simpleType name="ST_SheetViewType">
2458     <xsd:restriction base="xsd:string">
2459         <xsd:enumeration value="normal"/>
2460         <xsd:enumeration value="pageBreakPreview"/>
2461         <xsd:enumeration value="pageLayout"/>
2462     </xsd:restriction>
2463 </xsd:simpleType>
2464 <xsd:complexType name="CT_OutlinePr">
2465     <xsd:attribute name="applyStyles" type="xsd:boolean" use="optional" default="false"/>
2466     <xsd:attribute name="summaryBelow" type="xsd:boolean" use="optional" default="true"/>

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2467     <xsd:attribute name="summaryRight" type="xsd:boolean" use="optional" default="true"/>
2468     <xsd:attribute name="showOutlineSymbols" type="xsd:boolean" use="optional" default="true"/>
2469 </xsd:complexType>
2470 <xsd:complexType name="CT_PageSetUpPr">
2471     <xsd:attribute name="autoPageBreaks" type="xsd:boolean" use="optional" default="true"/>
2472     <xsd:attribute name="fitToPage" type="xsd:boolean" use="optional" default="false"/>
2473 </xsd:complexType>
2474 <xsd:complexType name="CT_DataConsolidate">
2475     <xsd:sequence>
2476         <xsd:element name="dataRefs" type="CT_DataRefs" minOccurs="0" maxOccurs="1"/>
2477     </xsd:sequence>
2478     <xsd:attribute name="function" type="ST_DataConsolidateFunction" use="optional"
2479         default="sum"/>
2480     <xsd:attribute name="startLabels" type="xsd:boolean" use="optional" default="false"/>
2481     <xsd:attribute name="leftLabels" type="xsd:boolean" use="optional" default="false"/>
2482     <xsd:attribute name="topLabels" type="xsd:boolean" use="optional" default="false"/>
2483     <xsd:attribute name="link" type="xsd:boolean" use="optional" default="false"/>
2484 </xsd:complexType>
2485 <xsd:simpleType name="ST_DataConsolidateFunction">
2486     <xsd:restriction base="xsd:string">
2487         <xsd:enumeration value="average"/>
2488         <xsd:enumeration value="count"/>
2489         <xsd:enumeration value="countNums"/>
2490         <xsd:enumeration value="max"/>
2491         <xsd:enumeration value="min"/>
2492         <xsd:enumeration value="product"/>
2493         <xsd:enumeration value="stdDev"/>
2494         <xsd:enumeration value="stdDevp"/>
2495         <xsd:enumeration value="sum"/>
2496         <xsd:enumeration value="var"/>
2497         <xsd:enumeration value="varp"/>
2498     </xsd:restriction>
2499 </xsd:simpleType>
2500 <xsd:complexType name="CT_DataRefs">
2501     <xsd:sequence>
2502         <xsd:element name="dataRef" type="CT_DataRef" minOccurs="0" maxOccurs="unbounded"/>
2503     </xsd:sequence>
2504     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
2505 </xsd:complexType>
2506 <xsd:complexType name="CT_DataRef">
2507     <xsd:attribute name="ref" type="ST_Ref" use="optional"/>
2508     <xsd:attribute name="name" type="s:ST_Xstring" use="optional"/>
2509     <xsd:attribute name="sheet" type="s:ST_Xstring" use="optional"/>
2510     <xsd:attribute ref="r:id" use="optional"/>
2511 </xsd:complexType>
2512 <xsd:complexType name="CT_MergeCells">
2513     <xsd:sequence>
2514         <xsd:element name="mergeCell" type="CT_MergeCell" minOccurs="1" maxOccurs="unbounded"/>
2515     </xsd:sequence>
2516     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
2517 </xsd:complexType>
2518 <xsd:complexType name="CT_MergeCell">
2519     <xsd:attribute name="ref" type="ST_Ref" use="required"/>

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2520 </xsd:complexType>
2521 <xsd:complexType name="CT_SmartTags">
2522   <xsd:sequence>
2523     <xsd:element name="cellSmartTags" type="CT_CellSmartTags" minOccurs="1"
2524       maxOccurs="unbounded"/>
2525   </xsd:sequence>
2526 </xsd:complexType>
2527 <xsd:complexType name="CT_CellSmartTags">
2528   <xsd:sequence>
2529     <xsd:element name="cellSmartTag" type="CT_CellSmartTag" minOccurs="1"
2530       maxOccurs="unbounded"/>
2531   </xsd:sequence>
2532   <xsd:attribute name="r" type="ST_CellRef" use="required"/>
2533 </xsd:complexType>
2534 <xsd:complexType name="CT_CellSmartTag">
2535   <xsd:sequence>
2536     <xsd:element name="cellSmartTagPr" minOccurs="0" maxOccurs="unbounded"
2537       type="CT_CellSmartTagPr"/>
2538   </xsd:sequence>
2539   <xsd:attribute name="type" type="xsd:unsignedInt" use="required"/>
2540   <xsd:attribute name="deleted" type="xsd:boolean" use="optional" default="false"/>
2541   <xsd:attribute name="xmlBased" type="xsd:boolean" use="optional" default="false"/>
2542 </xsd:complexType>
2543 <xsd:complexType name="CT_CellSmartTagPr">
2544   <xsd:attribute name="key" type="s:ST_Xstring" use="required"/>
2545   <xsd:attribute name="val" type="s:ST_Xstring" use="required"/>
2546 </xsd:complexType>
2547 <xsd:complexType name="CT_Drawing">
2548   <xsd:attribute ref="r:id" use="required"/>
2549 </xsd:complexType>
2550 <xsd:complexType name="CT_LegacyDrawing">
2551   <xsd:attribute ref="r:id" use="required"/>
2552 </xsd:complexType>
2553 <xsd:complexType name="CT_DrawingHF">
2554   <xsd:attribute ref="r:id" use="required"/>
2555   <xsd:attribute name="lho" type="xsd:unsignedInt" use="optional"/>
2556   <xsd:attribute name="lhe" type="xsd:unsignedInt" use="optional"/>
2557   <xsd:attribute name="lhf" type="xsd:unsignedInt" use="optional"/>
2558   <xsd:attribute name="cho" type="xsd:unsignedInt" use="optional"/>
2559   <xsd:attribute name="che" type="xsd:unsignedInt" use="optional"/>
2560   <xsd:attribute name="chf" type="xsd:unsignedInt" use="optional"/>
2561   <xsd:attribute name="rho" type="xsd:unsignedInt" use="optional"/>
2562   <xsd:attribute name="rhe" type="xsd:unsignedInt" use="optional"/>
2563   <xsd:attribute name="rhf" type="xsd:unsignedInt" use="optional"/>
2564   <xsd:attribute name="lfo" type="xsd:unsignedInt" use="optional"/>
2565   <xsd:attribute name="lfe" type="xsd:unsignedInt" use="optional"/>
2566   <xsd:attribute name="lff" type="xsd:unsignedInt" use="optional"/>
2567   <xsd:attribute name="cfo" type="xsd:unsignedInt" use="optional"/>
2568   <xsd:attribute name="cfe" type="xsd:unsignedInt" use="optional"/>
2569   <xsd:attribute name="cff" type="xsd:unsignedInt" use="optional"/>
2570   <xsd:attribute name="rfo" type="xsd:unsignedInt" use="optional"/>
2571   <xsd:attribute name="rfe" type="xsd:unsignedInt" use="optional"/>
2572   <xsd:attribute name="rff" type="xsd:unsignedInt" use="optional"/>

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2573 </xsd:complexType>
2574 <xsd:complexType name="CT_CustomSheetViews">
2575     <xsd:sequence>
2576         <xsd:element name="customSheetView" minOccurs="1" maxOccurs="unbounded"
2577             type="CT_CustomSheetView"/>
2578     </xsd:sequence>
2579 </xsd:complexType>
2580 <xsd:complexType name="CT_CustomSheetView">
2581     <xsd:sequence>
2582         <xsd:element name="pane" type="CT_Pane" minOccurs="0" maxOccurs="1"/>
2583         <xsd:element name="selection" type="CT_Selection" minOccurs="0" maxOccurs="1"/>
2584         <xsd:element name="rowBreaks" type="CT_PageBreak" minOccurs="0" maxOccurs="1"/>
2585         <xsd:element name="colBreaks" type="CT_PageBreak" minOccurs="0" maxOccurs="1"/>
2586         <xsd:element name="pageMargins" type="CT_PageMargins" minOccurs="0" maxOccurs="1"/>
2587         <xsd:element name="printOptions" type="CT_PrintOptions" minOccurs="0" maxOccurs="1"/>
2588         <xsd:element name="pageSetup" type="CT_PageSetup" minOccurs="0" maxOccurs="1"/>
2589         <xsd:element name="headerFooter" type="CT_HeaderFooter" minOccurs="0" maxOccurs="1"/>
2590         <xsd:element name="autoFilter" type="CT_AutoFilter" minOccurs="0" maxOccurs="1"/>
2591         <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
2592     </xsd:sequence>
2593     <xsd:attribute name="guid" type="s:ST_Guid" use="required"/>
2594     <xsd:attribute name="scale" type="xsd:unsignedInt" default="100"/>
2595     <xsd:attribute name="colorId" type="xsd:unsignedInt" default="64"/>
2596     <xsd:attribute name="showPageBreaks" type="xsd:boolean" use="optional" default="false"/>
2597     <xsd:attribute name="showFormulas" type="xsd:boolean" use="optional" default="false"/>
2598     <xsd:attribute name="showGridLines" type="xsd:boolean" use="optional" default="true"/>
2599     <xsd:attribute name="showRowCol" type="xsd:boolean" use="optional" default="true"/>
2600     <xsd:attribute name="outlineSymbols" type="xsd:boolean" use="optional" default="true"/>
2601     <xsd:attribute name="zeroValues" type="xsd:boolean" use="optional" default="true"/>
2602     <xsd:attribute name="fitToPage" type="xsd:boolean" use="optional" default="false"/>
2603     <xsd:attribute name="printArea" type="xsd:boolean" use="optional" default="false"/>
2604     <xsd:attribute name="filter" type="xsd:boolean" use="optional" default="false"/>
2605     <xsd:attribute name="showAutoFilter" type="xsd:boolean" use="optional" default="false"/>
2606     <xsd:attribute name="hiddenRows" type="xsd:boolean" use="optional" default="false"/>
2607     <xsd:attribute name="hiddenColumns" type="xsd:boolean" use="optional" default="false"/>
2608     <xsd:attribute name="state" type="ST_SheetState" default="visible"/>
2609     <xsd:attribute name="filterUnique" type="xsd:boolean" use="optional" default="false"/>
2610     <xsd:attribute name="view" type="ST_SheetViewType" default="normal"/>
2611     <xsd:attribute name="showRuler" type="xsd:boolean" use="optional" default="true"/>
2612     <xsd:attribute name="topLeftCell" type="ST_CellRef" use="optional"/>
2613 </xsd:complexType>
2614 <xsd:complexType name="CT_DataValidations">
2615     <xsd:sequence>
2616         <xsd:element name="dataValidation" type="CT_DataValidation" minOccurs="1"
2617             maxOccurs="unbounded"/>
2618     </xsd:sequence>
2619     <xsd:attribute name="disablePrompts" type="xsd:boolean" use="optional" default="false"/>
2620     <xsd:attribute name="xWindow" type="xsd:unsignedInt" use="optional"/>
2621     <xsd:attribute name="yWindow" type="xsd:unsignedInt" use="optional"/>
2622     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
2623 </xsd:complexType>
2624 <xsd:complexType name="CT_DataValidation">
2625     <xsd:sequence>

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2626     <xsd:element name="formula1" type="ST_Formula" minOccurs="0" maxOccurs="1"/>
2627     <xsd:element name="formula2" type="ST_Formula" minOccurs="0" maxOccurs="1"/>
2628 </xsd:sequence>
2629 <xsd:attribute name="type" type="ST_DataValidationType" use="optional" default="none"/>
2630 <xsd:attribute name="errorStyle" type="ST_DataValidationErrorStyle" use="optional"
2631     default="stop"/>
2632 <xsd:attribute name="imeMode" type="ST_DataValidationImeMode" use="optional"
2633     default="noControl"/>
2634 <xsd:attribute name="operator" type="ST_DataValidationOperator" use="optional"
2635     default="between"/>
2636 <xsd:attribute name="allowBlank" type="xsd:boolean" use="optional" default="false"/>
2637 <xsd:attribute name="showDropDown" type="xsd:boolean" use="optional" default="false"/>
2638 <xsd:attribute name="showInputMessage" type="xsd:boolean" use="optional" default="false"/>
2639 <xsd:attribute name="showErrorMessage" type="xsd:boolean" use="optional" default="false"/>
2640 <xsd:attribute name="errorTitle" type="s:ST_Xstring" use="optional"/>
2641 <xsd:attribute name="error" type="s:ST_Xstring" use="optional"/>
2642 <xsd:attribute name="promptTitle" type="s:ST_Xstring" use="optional"/>
2643 <xsd:attribute name="prompt" type="s:ST_Xstring" use="optional"/>
2644 <xsd:attribute name="sqref" type="ST_Sqref" use="required"/>
2645 </xsd:complexType>
2646 <xsd:simpleType name="ST_DataValidationType">
2647     <xsd:restriction base="xsd:string">
2648         <xsd:enumeration value="none"/>
2649         <xsd:enumeration value="whole"/>
2650         <xsd:enumeration value="decimal"/>
2651         <xsd:enumeration value="list"/>
2652         <xsd:enumeration value="date"/>
2653         <xsd:enumeration value="time"/>
2654         <xsd:enumeration value="textLength"/>
2655         <xsd:enumeration value="custom"/>
2656     </xsd:restriction>
2657 </xsd:simpleType>
2658 <xsd:simpleType name="ST_DataValidationOperator">
2659     <xsd:restriction base="xsd:string">
2660         <xsd:enumeration value="between"/>
2661         <xsd:enumeration value="notBetween"/>
2662         <xsd:enumeration value="equal"/>
2663         <xsd:enumeration value="notEqual"/>
2664         <xsd:enumeration value="lessThan"/>
2665         <xsd:enumeration value="lessThanOrEqual"/>
2666         <xsd:enumeration value="greaterThan"/>
2667         <xsd:enumeration value="greaterThanOrEqual"/>
2668     </xsd:restriction>
2669 </xsd:simpleType>
2670 <xsd:simpleType name="ST_DataValidationErrorStyle">
2671     <xsd:restriction base="xsd:string">
2672         <xsd:enumeration value="stop"/>
2673         <xsd:enumeration value="warning"/>
2674         <xsd:enumeration value="information"/>
2675     </xsd:restriction>
2676 </xsd:simpleType>
2677 <xsd:simpleType name="ST_DataValidationImeMode">
2678     <xsd:restriction base="xsd:string">

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2679         <xsd:enumeration value="noControl"/>
2680         <xsd:enumeration value="off"/>
2681         <xsd:enumeration value="on"/>
2682         <xsd:enumeration value="disabled"/>
2683         <xsd:enumeration value="hiragana"/>
2684         <xsd:enumeration value="fullKatakana"/>
2685         <xsd:enumeration value="halfKatakana"/>
2686         <xsd:enumeration value="fullAlpha"/>
2687         <xsd:enumeration value="halfAlpha"/>
2688         <xsd:enumeration value="fullHangul"/>
2689         <xsd:enumeration value="halfHangul"/>
2690     </xsd:restriction>
2691 </xsd:simpleType>
2692 <xsd:simpleType name="ST_CfType">
2693     <xsd:restriction base="xsd:string">
2694         <xsd:enumeration value="expression"/>
2695         <xsd:enumeration value="cellIs"/>
2696         <xsd:enumeration value="colorScale"/>
2697         <xsd:enumeration value="dataBar"/>
2698         <xsd:enumeration value="iconSet"/>
2699         <xsd:enumeration value="top10"/>
2700         <xsd:enumeration value="uniqueValues"/>
2701         <xsd:enumeration value="duplicateValues"/>
2702         <xsd:enumeration value="containsText"/>
2703         <xsd:enumeration value="notContainsText"/>
2704         <xsd:enumeration value="beginsWith"/>
2705         <xsd:enumeration value="endsWith"/>
2706         <xsd:enumeration value="containsBlanks"/>
2707         <xsd:enumeration value="notContainsBlanks"/>
2708         <xsd:enumeration value="containsErrors"/>
2709         <xsd:enumeration value="notContainsErrors"/>
2710         <xsd:enumeration value="timePeriod"/>
2711         <xsd:enumeration value="aboveAverage"/>
2712     </xsd:restriction>
2713 </xsd:simpleType>
2714 <xsd:simpleType name="ST_TimePeriod">
2715     <xsd:restriction base="xsd:string">
2716         <xsd:enumeration value="today"/>
2717         <xsd:enumeration value="yesterday"/>
2718         <xsd:enumeration value="tomorrow"/>
2719         <xsd:enumeration value="last7Days"/>
2720         <xsd:enumeration value="thisMonth"/>
2721         <xsd:enumeration value="lastMonth"/>
2722         <xsd:enumeration value="nextMonth"/>
2723         <xsd:enumeration value="thisWeek"/>
2724         <xsd:enumeration value="lastWeek"/>
2725         <xsd:enumeration value="nextWeek"/>
2726     </xsd:restriction>
2727 </xsd:simpleType>
2728 <xsd:simpleType name="ST_ConditionalFormattingOperator">
2729     <xsd:restriction base="xsd:string">
2730         <xsd:enumeration value="lessThan"/>
2731         <xsd:enumeration value="lessThanOrEqual"/>

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2732     <xsd:enumeration value="equal"/>
2733     <xsd:enumeration value="notEqual"/>
2734     <xsd:enumeration value="greaterThanOrEqual"/>
2735     <xsd:enumeration value="greaterThan"/>
2736     <xsd:enumeration value="between"/>
2737     <xsd:enumeration value="notBetween"/>
2738     <xsd:enumeration value="containsText"/>
2739     <xsd:enumeration value="notContains"/>
2740     <xsd:enumeration value="beginsWith"/>
2741     <xsd:enumeration value="endsWith"/>
2742   </xsd:restriction>
2743 </xsd:simpleType>
2744 <xsd:simpleType name="ST_CfvoType">
2745   <xsd:restriction base="xsd:string">
2746     <xsd:enumeration value="num"/>
2747     <xsd:enumeration value="percent"/>
2748     <xsd:enumeration value="max"/>
2749     <xsd:enumeration value="min"/>
2750     <xsd:enumeration value="formula"/>
2751     <xsd:enumeration value="percentile"/>
2752   </xsd:restriction>
2753 </xsd:simpleType>
2754 <xsd:complexType name="CT_ConditionalFormatting">
2755   <xsd:sequence>
2756     <xsd:element name="cfRule" type="CT_CfRule" minOccurs="1" maxOccurs="unbounded"/>
2757     <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
2758   </xsd:sequence>
2759   <xsd:attribute name="pivot" type="xsd:boolean" default="false"/>
2760   <xsd:attribute name="sqref" type="ST_Sqref"/>
2761 </xsd:complexType>
2762 <xsd:complexType name="CT_CfRule">
2763   <xsd:sequence>
2764     <xsd:element name="formula" type="ST_Formula" minOccurs="0" maxOccurs="3"/>
2765     <xsd:element name="colorScale" type="CT_ColorScale" minOccurs="0" maxOccurs="1"/>
2766     <xsd:element name="dataBar" type="CT_DataBar" minOccurs="0" maxOccurs="1"/>
2767     <xsd:element name="iconSet" type="CT_IconSet" minOccurs="0" maxOccurs="1"/>
2768     <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
2769   </xsd:sequence>
2770   <xsd:attribute name="type" type="ST_CfType"/>
2771   <xsd:attribute name="dxfId" type="ST_DxfId" use="optional"/>
2772   <xsd:attribute name="priority" type="xsd:int" use="required"/>
2773   <xsd:attribute name="stopIfTrue" type="xsd:boolean" use="optional" default="false"/>
2774   <xsd:attribute name="aboveAverage" type="xsd:boolean" use="optional" default="true"/>
2775   <xsd:attribute name="percent" type="xsd:boolean" use="optional" default="false"/>
2776   <xsd:attribute name="bottom" type="xsd:boolean" use="optional" default="false"/>
2777   <xsd:attribute name="operator" type="ST_ConditionalFormattingOperator" use="optional"/>
2778   <xsd:attribute name="text" type="xsd:string" use="optional"/>
2779   <xsd:attribute name="timePeriod" type="ST_TimePeriod" use="optional"/>
2780   <xsd:attribute name="rank" type="xsd:unsignedInt" use="optional"/>
2781   <xsd:attribute name="stdDev" type="xsd:int" use="optional"/>
2782   <xsd:attribute name="equalAverage" type="xsd:boolean" use="optional" default="false"/>
2783 </xsd:complexType>
2784 <xsd:complexType name="CT_Hyperlinks">

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2785     <xsd:sequence>
2786         <xsd:element name="hyperlink" type="CT_Hyperlink" minOccurs="1" maxOccurs="unbounded"/>
2787     </xsd:sequence>
2788 </xsd:complexType>
2789 <xsd:complexType name="CT_Hyperlink">
2790     <xsd:attribute name="ref" type="ST_Ref" use="required"/>
2791     <xsd:attribute ref="r:id" use="optional"/>
2792     <xsd:attribute name="location" type="s:ST_Xstring" use="optional"/>
2793     <xsd:attribute name="tooltip" type="s:ST_Xstring" use="optional"/>
2794     <xsd:attribute name="display" type="s:ST_Xstring" use="optional"/>
2795 </xsd:complexType>
2796 <xsd:complexType name="CT_CellFormula">
2797     <xsd:simpleContent>
2798         <xsd:extension base="ST_Formula">
2799             <xsd:attribute name="t" type="ST_CellFormulaType" use="optional" default="normal"/>
2800             <xsd:attribute name="aca" type="xsd:boolean" use="optional" default="false"/>
2801             <xsd:attribute name="ref" type="ST_Ref" use="optional"/>
2802             <xsd:attribute name="dt2D" type="xsd:boolean" use="optional" default="false"/>
2803             <xsd:attribute name="dtr" type="xsd:boolean" use="optional" default="false"/>
2804             <xsd:attribute name="del1" type="xsd:boolean" use="optional" default="false"/>
2805             <xsd:attribute name="del2" type="xsd:boolean" use="optional" default="false"/>
2806             <xsd:attribute name="r1" type="ST_CellRef" use="optional"/>
2807             <xsd:attribute name="r2" type="ST_CellRef" use="optional"/>
2808             <xsd:attribute name="ca" type="xsd:boolean" use="optional" default="false"/>
2809             <xsd:attribute name="si" type="xsd:unsignedInt" use="optional"/>
2810             <xsd:attribute name="bx" type="xsd:boolean" use="optional" default="false"/>
2811         </xsd:extension>
2812     </xsd:simpleContent>
2813 </xsd:complexType>
2814 <xsd:complexType name="CT_ColorScale">
2815     <xsd:sequence>
2816         <xsd:element name="cfvo" type="CT_Cfvo" minOccurs="2" maxOccurs="unbounded"/>
2817         <xsd:element name="color" type="CT_Color" minOccurs="2" maxOccurs="unbounded"/>
2818     </xsd:sequence>
2819 </xsd:complexType>
2820 <xsd:complexType name="CT_DataBar">
2821     <xsd:sequence>
2822         <xsd:element name="cfvo" type="CT_Cfvo" minOccurs="2" maxOccurs="2"/>
2823         <xsd:element name="color" type="CT_Color" minOccurs="1" maxOccurs="1"/>
2824     </xsd:sequence>
2825     <xsd:attribute name="minLength" type="xsd:unsignedInt" use="optional" default="10"/>
2826     <xsd:attribute name="maxLength" type="xsd:unsignedInt" use="optional" default="90"/>
2827     <xsd:attribute name="showValue" type="xsd:boolean" use="optional" default="true"/>
2828 </xsd:complexType>
2829 <xsd:complexType name="CT_IconSet">
2830     <xsd:sequence>
2831         <xsd:element name="cfvo" type="CT_Cfvo" minOccurs="2" maxOccurs="unbounded"/>
2832     </xsd:sequence>
2833     <xsd:attribute name="iconSet" type="ST_IconSetType" use="optional" default="3TrafficLights1"/>
2834     <xsd:attribute name="showValue" type="xsd:boolean" use="optional" default="true"/>
2835     <xsd:attribute name="percent" type="xsd:boolean" default="true"/>
2836     <xsd:attribute name="reverse" type="xsd:boolean" use="optional" default="false"/>
2837 </xsd:complexType>

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2838 <xsd:complexType name="CT_Cfvo">
2839   <xsd:sequence>
2840     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
2841   </xsd:sequence>
2842   <xsd:attribute name="type" type="ST_CfvoType" use="required"/>
2843   <xsd:attribute name="val" type="s:ST_Xstring" use="optional"/>
2844   <xsd:attribute name="gte" type="xsd:boolean" use="optional" default="true"/>
2845 </xsd:complexType>
2846 <xsd:complexType name="CT_PageMargins">
2847   <xsd:attribute name="left" type="xsd:double" use="required"/>
2848   <xsd:attribute name="right" type="xsd:double" use="required"/>
2849   <xsd:attribute name="top" type="xsd:double" use="required"/>
2850   <xsd:attribute name="bottom" type="xsd:double" use="required"/>
2851   <xsd:attribute name="header" type="xsd:double" use="required"/>
2852   <xsd:attribute name="footer" type="xsd:double" use="required"/>
2853 </xsd:complexType>
2854 <xsd:complexType name="CT_PrintOptions">
2855   <xsd:attribute name="horizontalCentered" type="xsd:boolean" use="optional" default="false"/>
2856   <xsd:attribute name="verticalCentered" type="xsd:boolean" use="optional" default="false"/>
2857   <xsd:attribute name="headings" type="xsd:boolean" use="optional" default="false"/>
2858   <xsd:attribute name="gridLines" type="xsd:boolean" use="optional" default="false"/>
2859   <xsd:attribute name="gridLinesSet" type="xsd:boolean" use="optional" default="true"/>
2860 </xsd:complexType>
2861 <xsd:complexType name="CT_PageSetup">
2862   <xsd:attribute name="paperSize" type="xsd:unsignedInt" use="optional" default="1"/>
2863   <xsd:attribute name="paperHeight" type="s:ST_PositiveUniversalMeasure" use="optional"/>
2864   <xsd:attribute name="paperWidth" type="s:ST_PositiveUniversalMeasure" use="optional"/>
2865   <xsd:attribute name="scale" type="xsd:unsignedInt" use="optional" default="100"/>
2866   <xsd:attribute name="firstPageNumber" type="xsd:unsignedInt" use="optional" default="1"/>
2867   <xsd:attribute name="fitToWidth" type="xsd:unsignedInt" use="optional" default="1"/>
2868   <xsd:attribute name="fitToHeight" type="xsd:unsignedInt" use="optional" default="1"/>
2869   <xsd:attribute name="pageOrder" type="ST_PageOrder" use="optional" default="downThenOver"/>
2870   <xsd:attribute name="orientation" type="ST_Orientation" use="optional" default="default"/>
2871   <xsd:attribute name="usePrinterDefaults" type="xsd:boolean" use="optional" default="true"/>
2872   <xsd:attribute name="blackAndWhite" type="xsd:boolean" use="optional" default="false"/>
2873   <xsd:attribute name="draft" type="xsd:boolean" use="optional" default="false"/>
2874   <xsd:attribute name="cellComments" type="ST_CellComments" use="optional" default="none"/>
2875   <xsd:attribute name="useFirstPageNumber" type="xsd:boolean" use="optional" default="false"/>
2876   <xsd:attribute name="errors" type="ST_PrintError" use="optional" default="displayed"/>
2877   <xsd:attribute name="horizontalDpi" type="xsd:unsignedInt" use="optional" default="600"/>
2878   <xsd:attribute name="verticalDpi" type="xsd:unsignedInt" use="optional" default="600"/>
2879   <xsd:attribute name="copies" type="xsd:unsignedInt" use="optional" default="1"/>
2880   <xsd:attribute ref="r:id" use="optional"/>
2881 </xsd:complexType>
2882 <xsd:simpleType name="ST_PageOrder">
2883   <xsd:restriction base="xsd:string">
2884     <xsd:enumeration value="downThenOver"/>
2885     <xsd:enumeration value="overThenDown"/>
2886   </xsd:restriction>
2887 </xsd:simpleType>
2888 <xsd:simpleType name="ST_Orientation">
2889   <xsd:restriction base="xsd:string">
2890     <xsd:enumeration value="default"/>

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2891         <xsd:enumeration value="portrait"/>
2892         <xsd:enumeration value="landscape"/>
2893     </xsd:restriction>
2894 </xsd:simpleType>
2895 <xsd:simpleType name="ST_CellComments">
2896     <xsd:restriction base="xsd:string">
2897         <xsd:enumeration value="none"/>
2898         <xsd:enumeration value="asDisplayed"/>
2899         <xsd:enumeration value="atEnd"/>
2900     </xsd:restriction>
2901 </xsd:simpleType>
2902 <xsd:complexType name="CT_HeaderFooter">
2903     <xsd:sequence>
2904         <xsd:element name="oddHeader" type="s:ST_Xstring" minOccurs="0" maxOccurs="1"/>
2905         <xsd:element name="oddFooter" type="s:ST_Xstring" minOccurs="0" maxOccurs="1"/>
2906         <xsd:element name="evenHeader" type="s:ST_Xstring" minOccurs="0" maxOccurs="1"/>
2907         <xsd:element name="evenFooter" type="s:ST_Xstring" minOccurs="0" maxOccurs="1"/>
2908         <xsd:element name="firstHeader" type="s:ST_Xstring" minOccurs="0" maxOccurs="1"/>
2909         <xsd:element name="firstFooter" type="s:ST_Xstring" minOccurs="0" maxOccurs="1"/>
2910     </xsd:sequence>
2911     <xsd:attribute name="differentOddEven" type="xsd:boolean" default="false"/>
2912     <xsd:attribute name="differentFirst" type="xsd:boolean" default="false"/>
2913     <xsd:attribute name="scaleWithDoc" type="xsd:boolean" default="true"/>
2914     <xsd:attribute name="alignWithMargins" type="xsd:boolean" default="true"/>
2915 </xsd:complexType>
2916 <xsd:simpleType name="ST_PrintError">
2917     <xsd:restriction base="xsd:string">
2918         <xsd:enumeration value="displayed"/>
2919         <xsd:enumeration value="blank"/>
2920         <xsd:enumeration value="dash"/>
2921         <xsd:enumeration value="NA"/>
2922     </xsd:restriction>
2923 </xsd:simpleType>
2924 <xsd:complexType name="CT_Scenarios">
2925     <xsd:sequence>
2926         <xsd:element name="scenario" type="CT_Scenario" minOccurs="1" maxOccurs="unbounded"/>
2927     </xsd:sequence>
2928     <xsd:attribute name="current" type="xsd:unsignedInt" use="optional"/>
2929     <xsd:attribute name="show" type="xsd:unsignedInt" use="optional"/>
2930     <xsd:attribute name="sqref" type="ST_Sqref" use="optional"/>
2931 </xsd:complexType>
2932 <xsd:complexType name="CT_SheetProtection">
2933     <xsd:attribute name="password" type="ST_UnsignedShortHex" use="optional"/>
2934     <xsd:attribute name="algorithmName" type="s:ST_Xstring" use="optional"/>
2935     <xsd:attribute name="hashValue" type="xsd:base64Binary" use="optional"/>
2936     <xsd:attribute name="saltValue" type="xsd:base64Binary" use="optional"/>
2937     <xsd:attribute name="spinCount" type="xsd:unsignedInt" use="optional"/>
2938     <xsd:attribute name="sheet" type="xsd:boolean" use="optional" default="false"/>
2939     <xsd:attribute name="objects" type="xsd:boolean" use="optional" default="false"/>
2940     <xsd:attribute name="scenarios" type="xsd:boolean" use="optional" default="false"/>
2941     <xsd:attribute name="formatCells" type="xsd:boolean" use="optional" default="true"/>
2942     <xsd:attribute name="formatColumns" type="xsd:boolean" use="optional" default="true"/>
2943     <xsd:attribute name="formatRows" type="xsd:boolean" use="optional" default="true"/>

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2944 <xsd:attribute name="insertColumns" type="xsd:boolean" use="optional" default="true"/>
2945 <xsd:attribute name="insertRows" type="xsd:boolean" use="optional" default="true"/>
2946 <xsd:attribute name="insertHyperlinks" type="xsd:boolean" use="optional" default="true"/>
2947 <xsd:attribute name="deleteColumns" type="xsd:boolean" use="optional" default="true"/>
2948 <xsd:attribute name="deleteRows" type="xsd:boolean" use="optional" default="true"/>
2949 <xsd:attribute name="selectLockedCells" type="xsd:boolean" use="optional" default="false"/>
2950 <xsd:attribute name="sort" type="xsd:boolean" use="optional" default="true"/>
2951 <xsd:attribute name="autoFilter" type="xsd:boolean" use="optional" default="true"/>
2952 <xsd:attribute name="pivotTables" type="xsd:boolean" use="optional" default="true"/>
2953 <xsd:attribute name="selectUnlockedCells" type="xsd:boolean" use="optional" default="false"/>
2954 </xsd:complexType>
2955 <xsd:complexType name="CT_ProtectedRanges">
2956 <xsd:sequence>
2957 <xsd:element name="protectedRange" type="CT_ProtectedRange" minOccurs="1"
2958 maxOccurs="unbounded"/>
2959 </xsd:sequence>
2960 </xsd:complexType>
2961 <xsd:complexType name="CT_ProtectedRange">
2962 <xsd:sequence>
2963 <xsd:element name="securityDescriptor" type="xsd:string" minOccurs="0"
2964 maxOccurs="unbounded"/>
2965 </xsd:sequence>
2966 <xsd:attribute name="password" type="ST UnsignedShortHex" use="optional"/>
2967 <xsd:attribute name="sqref" type="ST Sqref" use="required"/>
2968 <xsd:attribute name="name" type="s:ST Xstring" use="required"/>
2969 <xsd:attribute name="securityDescriptor" type="xsd:string" use="optional"/>
2970 <xsd:attribute name="algorithmName" type="s:ST Xstring" use="optional"/>
2971 <xsd:attribute name="hashValue" type="xsd:base64Binary" use="optional"/>
2972 <xsd:attribute name="saltValue" type="xsd:base64Binary" use="optional"/>
2973 <xsd:attribute name="spinCount" type="xsd:unsignedInt" use="optional"/>
2974 </xsd:complexType>
2975 <xsd:complexType name="CT_Scenario">
2976 <xsd:sequence>
2977 <xsd:element name="inputCells" type="CT_InputCells" minOccurs="1" maxOccurs="unbounded"/>
2978 </xsd:sequence>
2979 <xsd:attribute name="name" type="s:ST Xstring" use="required"/>
2980 <xsd:attribute name="locked" type="xsd:boolean" use="optional" default="false"/>
2981 <xsd:attribute name="hidden" type="xsd:boolean" use="optional" default="false"/>
2982 <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
2983 <xsd:attribute name="user" type="s:ST Xstring" use="optional"/>
2984 <xsd:attribute name="comment" type="s:ST Xstring" use="optional"/>
2985 </xsd:complexType>
2986 <xsd:complexType name="CT_InputCells">
2987 <xsd:attribute name="r" type="ST CellRef" use="required"/>
2988 <xsd:attribute name="deleted" type="xsd:boolean" use="optional" default="false"/>
2989 <xsd:attribute name="undone" type="xsd:boolean" use="optional" default="false"/>
2990 <xsd:attribute name="val" type="s:ST Xstring" use="required"/>
2991 <xsd:attribute name="numFmtId" type="ST NumFmtId" use="optional"/>
2992 </xsd:complexType>
2993 <xsd:complexType name="CT_CellWatches">
2994 <xsd:sequence>
2995 <xsd:element name="cellWatch" type="CT_CellWatch" minOccurs="1" maxOccurs="unbounded"/>
2996 </xsd:sequence>

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2997 </xsd:complexType>
2998 <xsd:complexType name="CT_CellWatch">
2999   <xsd:attribute name="r" type="ST_CellRef" use="required"/>
3000 </xsd:complexType>
3001 <xsd:complexType name="CT_Chartsheet">
3002   <xsd:sequence>
3003     <xsd:element name="sheetPr" type="CT_ChartsheetPr" minOccurs="0" maxOccurs="1"/>
3004     <xsd:element name="sheetViews" type="CT_ChartsheetViews" minOccurs="1" maxOccurs="1"/>
3005     <xsd:element name="sheetProtection" type="CT_ChartsheetProtection" minOccurs="0"
3006       maxOccurs="1"/>
3007     <xsd:element name="customSheetViews" type="CT_CustomChartsheetViews" minOccurs="0"
3008       maxOccurs="1"/>
3009     <xsd:element name="pageMargins" minOccurs="0" type="CT_PageMargins"/>
3010     <xsd:element name="pageSetup" type="CT_CsPageSetup" minOccurs="0" maxOccurs="1"/>
3011     <xsd:element name="headerFooter" minOccurs="0" type="CT_HeaderFooter"/>
3012     <xsd:element name="drawing" type="CT_Drawing" minOccurs="1" maxOccurs="1"/>
3013     <xsd:element name="legacyDrawing" type="CT_LegacyDrawing" minOccurs="0" maxOccurs="1"/>
3014     <xsd:element name="legacyDrawingHF" type="CT_LegacyDrawing" minOccurs="0" maxOccurs="1"/>
3015     <xsd:element name="drawingHF" type="CT_DrawingHF" minOccurs="0" maxOccurs="1"/>
3016     <xsd:element name="picture" type="CT_SheetBackgroundPicture" minOccurs="0" maxOccurs="1"/>
3017     <xsd:element name="webPublishItems" type="CT_WebPublishItems" minOccurs="0"
3018       maxOccurs="1"/>
3019     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
3020   </xsd:sequence>
3021 </xsd:complexType>
3022 <xsd:complexType name="CT_ChartsheetPr">
3023   <xsd:sequence>
3024     <xsd:element name="tabColor" type="CT_Color" minOccurs="0" maxOccurs="1"/>
3025   </xsd:sequence>
3026   <xsd:attribute name="published" type="xsd:boolean" use="optional" default="true"/>
3027   <xsd:attribute name="codeName" type="xsd:string" use="optional"/>
3028 </xsd:complexType>
3029 <xsd:complexType name="CT_ChartsheetViews">
3030   <xsd:sequence>
3031     <xsd:element name="sheetView" type="CT_ChartsheetView" minOccurs="1"
3032       maxOccurs="unbounded"/>
3033     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
3034   </xsd:sequence>
3035 </xsd:complexType>
3036 <xsd:complexType name="CT_ChartsheetView">
3037   <xsd:sequence>
3038     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
3039   </xsd:sequence>
3040   <xsd:attribute name="tabSelected" type="xsd:boolean" use="optional" default="false"/>
3041   <xsd:attribute name="zoomScale" type="xsd:unsignedInt" default="100" use="optional"/>
3042   <xsd:attribute name="workbookViewId" type="xsd:unsignedInt" use="required"/>
3043   <xsd:attribute name="zoomToFit" type="xsd:boolean" use="optional" default="false"/>
3044 </xsd:complexType>
3045 <xsd:complexType name="CT_ChartsheetProtection">
3046   <xsd:attribute name="password" type="ST_UnsignedShortHex" use="optional"/>
3047   <xsd:attribute name="algorithmName" type="s:ST_Xstring" use="optional"/>
3048   <xsd:attribute name="hashValue" type="xsd:base64Binary" use="optional"/>
3049   <xsd:attribute name="saltValue" type="xsd:base64Binary" use="optional"/>

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3050     <xsd:attribute name="spinCount" type="xsd:unsignedInt" use="optional"/>
3051     <xsd:attribute name="content" type="xsd:boolean" use="optional" default="false"/>
3052     <xsd:attribute name="objects" type="xsd:boolean" use="optional" default="false"/>
3053 </xsd:complexType>
3054 <xsd:complexType name="CT_CsPageSetup">
3055     <xsd:attribute name="paperSize" type="xsd:unsignedInt" use="optional" default="1"/>
3056     <xsd:attribute name="paperHeight" type="s:ST_PositiveUniversalMeasure" use="optional"/>
3057     <xsd:attribute name="paperWidth" type="s:ST_PositiveUniversalMeasure" use="optional"/>
3058     <xsd:attribute name="firstPageNumber" type="xsd:unsignedInt" use="optional" default="1"/>
3059     <xsd:attribute name="orientation" type="ST_Orientation" use="optional" default="default"/>
3060     <xsd:attribute name="usePrinterDefaults" type="xsd:boolean" use="optional" default="true"/>
3061     <xsd:attribute name="blackAndWhite" type="xsd:boolean" use="optional" default="false"/>
3062     <xsd:attribute name="draft" type="xsd:boolean" use="optional" default="false"/>
3063     <xsd:attribute name="useFirstPageNumber" type="xsd:boolean" use="optional" default="false"/>
3064     <xsd:attribute name="horizontalDpi" type="xsd:unsignedInt" use="optional" default="600"/>
3065     <xsd:attribute name="verticalDpi" type="xsd:unsignedInt" use="optional" default="600"/>
3066     <xsd:attribute name="copies" type="xsd:unsignedInt" use="optional" default="1"/>
3067     <xsd:attribute ref="r:id" use="optional"/>
3068 </xsd:complexType>
3069 <xsd:complexType name="CT_CustomChartsheetViews">
3070     <xsd:sequence>
3071         <xsd:element name="customSheetView" minOccurs="0" maxOccurs="unbounded"
3072             type="CT_CustomChartsheetView"/>
3073     </xsd:sequence>
3074 </xsd:complexType>
3075 <xsd:complexType name="CT_CustomChartsheetView">
3076     <xsd:sequence>
3077         <xsd:element name="pageMargins" type="CT_PageMargins" minOccurs="0" maxOccurs="1"/>
3078         <xsd:element name="pageSetup" type="CT_CsPageSetup" minOccurs="0" maxOccurs="1"/>
3079         <xsd:element name="headerFooter" type="CT_HeaderFooter" minOccurs="0" maxOccurs="1"/>
3080     </xsd:sequence>
3081     <xsd:attribute name="guid" type="s:ST_Guid" use="required"/>
3082     <xsd:attribute name="scale" type="xsd:unsignedInt" default="100"/>
3083     <xsd:attribute name="state" type="ST_SheetState" default="visible"/>
3084     <xsd:attribute name="zoomToFit" type="xsd:boolean" use="optional" default="false"/>
3085 </xsd:complexType>
3086 <xsd:complexType name="CT_CustomProperties">
3087     <xsd:sequence>
3088         <xsd:element name="customPr" type="CT_CustomProperty" minOccurs="1"
3089             maxOccurs="unbounded"/>
3090     </xsd:sequence>
3091 </xsd:complexType>
3092 <xsd:complexType name="CT_CustomProperty">
3093     <xsd:attribute name="name" type="s:ST_Xstring" use="required"/>
3094     <xsd:attribute ref="r:id" use="required"/>
3095 </xsd:complexType>
3096 <xsd:complexType name="CT_OleObjects">
3097     <xsd:sequence>
3098         <xsd:element name="oleObject" type="CT_OleObject" minOccurs="1" maxOccurs="unbounded"/>
3099     </xsd:sequence>
3100 </xsd:complexType>
3101 <xsd:complexType name="CT_OleObject">
3102     <xsd:sequence>

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3103     <xsd:element name="objectPr" type="CT_ObjectPr" minOccurs="0" maxOccurs="1"/>
3104 </xsd:sequence>
3105 <xsd:attribute name="progId" type="xsd:string" use="optional"/>
3106 <xsd:attribute name="dvAspect" type="ST_DvAspect" use="optional" default="DVASPECT_CONTENT"/>
3107 <xsd:attribute name="link" type="s:ST_Xstring" use="optional"/>
3108 <xsd:attribute name="oleUpdate" type="ST_OleUpdate" use="optional"/>
3109 <xsd:attribute name="autoLoad" type="xsd:boolean" use="optional" default="false"/>
3110 <xsd:attribute name="shapeId" type="xsd:unsignedInt" use="required"/>
3111 <xsd:attribute ref="r:id" use="optional"/>
3112 </xsd:complexType>
3113 <xsd:complexType name="CT_ObjectPr">
3114     <xsd:sequence>
3115         <xsd:element name="anchor" type="CT_ObjectAnchor" minOccurs="1" maxOccurs="1"/>
3116     </xsd:sequence>
3117     <xsd:attribute name="locked" type="xsd:boolean" use="optional" default="true"/>
3118     <xsd:attribute name="defaultSize" type="xsd:boolean" use="optional" default="true"/>
3119     <xsd:attribute name="print" type="xsd:boolean" use="optional" default="true"/>
3120     <xsd:attribute name="disabled" type="xsd:boolean" use="optional" default="false"/>
3121     <xsd:attribute name="uiObject" type="xsd:boolean" use="optional" default="false"/>
3122     <xsd:attribute name="autoFill" type="xsd:boolean" use="optional" default="true"/>
3123     <xsd:attribute name="autoLine" type="xsd:boolean" use="optional" default="true"/>
3124     <xsd:attribute name="autoPict" type="xsd:boolean" use="optional" default="true"/>
3125     <xsd:attribute name="macro" type="ST_Formula" use="optional"/>
3126     <xsd:attribute name="altText" type="s:ST_Xstring" use="optional"/>
3127     <xsd:attribute name="dde" type="xsd:boolean" use="optional" default="false"/>
3128     <xsd:attribute ref="r:id" use="optional"/>
3129 </xsd:complexType>
3130 <xsd:simpleType name="ST_DvAspect">
3131     <xsd:restriction base="xsd:string">
3132         <xsd:enumeration value="DVASPECT_CONTENT"/>
3133         <xsd:enumeration value="DVASPECT_ICON"/>
3134     </xsd:restriction>
3135 </xsd:simpleType>
3136 <xsd:simpleType name="ST_OleUpdate">
3137     <xsd:restriction base="xsd:string">
3138         <xsd:enumeration value="OLEUPDATE_ALWAYS"/>
3139         <xsd:enumeration value="OLEUPDATE_ONCALL"/>
3140     </xsd:restriction>
3141 </xsd:simpleType>
3142 <xsd:complexType name="CT_WebPublishItems">
3143     <xsd:sequence>
3144         <xsd:element name="webPublishItem" type="CT_WebPublishItem" minOccurs="1"
3145             maxOccurs="unbounded"/>
3146     </xsd:sequence>
3147     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
3148 </xsd:complexType>
3149 <xsd:complexType name="CT_WebPublishItem">
3150     <xsd:attribute name="id" type="xsd:unsignedInt" use="required"/>
3151     <xsd:attribute name="divId" type="s:ST_Xstring" use="required"/>
3152     <xsd:attribute name="sourceType" type="ST_WebSourceType" use="required"/>
3153     <xsd:attribute name="sourceRef" type="ST_Ref" use="optional"/>
3154     <xsd:attribute name="sourceObject" type="s:ST_Xstring" use="optional"/>
3155     <xsd:attribute name="destinationFile" type="s:ST_Xstring" use="required"/>

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3156     <xsd:attribute name="title" type="s:ST Xstring" use="optional"/>
3157     <xsd:attribute name="autoRepublish" type="xsd:boolean" use="optional" default="false"/>
3158 </xsd:complexType>
3159 <xsd:complexType name="CT_Controls">
3160     <xsd:sequence>
3161         <xsd:element name="control" type="CT_Control" minOccurs="1" maxOccurs="unbounded"/>
3162     </xsd:sequence>
3163 </xsd:complexType>
3164 <xsd:complexType name="CT_Control">
3165     <xsd:sequence>
3166         <xsd:element name="controlPr" type="CT_ControlPr" minOccurs="0" maxOccurs="1"/>
3167     </xsd:sequence>
3168     <xsd:attribute name="shapeId" type="xsd:unsignedInt" use="required"/>
3169     <xsd:attribute ref="r:id" use="required"/>
3170     <xsd:attribute name="name" type="xsd:string" use="optional"/>
3171 </xsd:complexType>
3172 <xsd:complexType name="CT_ControlPr">
3173     <xsd:sequence>
3174         <xsd:element name="anchor" type="CT_ObjectAnchor" minOccurs="1" maxOccurs="1"/>
3175     </xsd:sequence>
3176     <xsd:attribute name="locked" type="xsd:boolean" use="optional" default="true"/>
3177     <xsd:attribute name="defaultSize" type="xsd:boolean" use="optional" default="true"/>
3178     <xsd:attribute name="print" type="xsd:boolean" use="optional" default="true"/>
3179     <xsd:attribute name="disabled" type="xsd:boolean" use="optional" default="false"/>
3180     <xsd:attribute name="recalcAlways" type="xsd:boolean" use="optional" default="false"/>
3181     <xsd:attribute name="uiObject" type="xsd:boolean" use="optional" default="false"/>
3182     <xsd:attribute name="autoFill" type="xsd:boolean" use="optional" default="true"/>
3183     <xsd:attribute name="autoLine" type="xsd:boolean" use="optional" default="true"/>
3184     <xsd:attribute name="autoPict" type="xsd:boolean" use="optional" default="true"/>
3185     <xsd:attribute name="macro" type="ST Formula" use="optional"/>
3186     <xsd:attribute name="altText" type="s:ST Xstring" use="optional"/>
3187     <xsd:attribute name="linkedCell" type="ST Formula" use="optional"/>
3188     <xsd:attribute name="listFillRange" type="ST Formula" use="optional"/>
3189     <xsd:attribute name="cf" type="s:ST Xstring" use="optional" default="pict"/>
3190     <xsd:attribute ref="r:id" use="optional"/>
3191 </xsd:complexType>
3192 <xsd:simpleType name="ST_WebSourceType">
3193     <xsd:restriction base="xsd:string">
3194         <xsd:enumeration value="sheet"/>
3195         <xsd:enumeration value="printArea"/>
3196         <xsd:enumeration value="autoFilter"/>
3197         <xsd:enumeration value="range"/>
3198         <xsd:enumeration value="chart"/>
3199         <xsd:enumeration value="pivotTable"/>
3200         <xsd:enumeration value="query"/>
3201         <xsd:enumeration value="label"/>
3202     </xsd:restriction>
3203 </xsd:simpleType>
3204 <xsd:complexType name="CT_IgnoredErrors">
3205     <xsd:sequence>
3206         <xsd:element name="ignoredError" type="CT_IgnoredError" minOccurs="1"
3207             maxOccurs="unbounded"/>
3208         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>

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3209     </xsd:sequence>
3210 </xsd:complexType>
3211 <xsd:complexType name="CT_IgnoredError">
3212     <xsd:attribute name="sqref" type="ST_Sqref" use="required"/>
3213     <xsd:attribute name="evalError" type="xsd:boolean" use="optional" default="false"/>
3214     <xsd:attribute name="twoDigitTextYear" type="xsd:boolean" use="optional" default="false"/>
3215     <xsd:attribute name="numberStoredAsText" type="xsd:boolean" use="optional" default="false"/>
3216     <xsd:attribute name="formula" type="xsd:boolean" use="optional" default="false"/>
3217     <xsd:attribute name="formulaRange" type="xsd:boolean" use="optional" default="false"/>
3218     <xsd:attribute name="unlockedFormula" type="xsd:boolean" use="optional" default="false"/>
3219     <xsd:attribute name="emptyCellReference" type="xsd:boolean" use="optional" default="false"/>
3220     <xsd:attribute name="listDataValidation" type="xsd:boolean" use="optional" default="false"/>
3221     <xsd:attribute name="calculatedColumn" type="xsd:boolean" use="optional" default="false"/>
3222 </xsd:complexType>
3223 <xsd:simpleType name="ST_PaneState">
3224     <xsd:restriction base="xsd:string">
3225         <xsd:enumeration value="split"/>
3226         <xsd:enumeration value="frozen"/>
3227         <xsd:enumeration value="frozenSplit"/>
3228     </xsd:restriction>
3229 </xsd:simpleType>
3230 <xsd:complexType name="CT_TableParts">
3231     <xsd:sequence>
3232         <xsd:element name="tablePart" type="CT_TablePart" minOccurs="0" maxOccurs="unbounded"/>
3233     </xsd:sequence>
3234     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
3235 </xsd:complexType>
3236 <xsd:complexType name="CT_TablePart">
3237     <xsd:attribute ref="r:id" use="required"/>
3238 </xsd:complexType>
3239 <xsd:element name="metadata" type="CT_Metadata"/>
3240 <xsd:complexType name="CT_Metadata">
3241     <xsd:sequence>
3242         <xsd:element name="metadataTypes" type="CT_MetadataTypes" minOccurs="0" maxOccurs="1"/>
3243         <xsd:element name="metadataStrings" type="CT_MetadataStrings" minOccurs="0"
3244             maxOccurs="1"/>
3245         <xsd:element name="mdxMetadata" type="CT_MdxMetadata" minOccurs="0" maxOccurs="1"/>
3246         <xsd:element name="futureMetadata" type="CT_FutureMetadata" minOccurs="0"
3247             maxOccurs="unbounded"/>
3248         <xsd:element name="cellMetadata" type="CT_MetadataBlocks" minOccurs="0" maxOccurs="1"/>
3249         <xsd:element name="valueMetadata" type="CT_MetadataBlocks" minOccurs="0" maxOccurs="1"/>
3250         <xsd:element name="extLst" minOccurs="0" maxOccurs="1" type="CT_ExtensionList"/>
3251     </xsd:sequence>
3252 </xsd:complexType>
3253 <xsd:complexType name="CT_MetadataTypes">
3254     <xsd:sequence>
3255         <xsd:element name="metadataType" type="CT_MetadataType" minOccurs="1"
3256             maxOccurs="unbounded"/>
3257     </xsd:sequence>
3258     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional" default="0"/>
3259 </xsd:complexType>
3260 <xsd:complexType name="CT_MetadataType">
3261     <xsd:attribute name="name" type="s:ST_Xstring" use="required"/>

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3262 <xsd:attribute name="minSupportedVersion" type="xsd:unsignedInt" use="required"/>
3263 <xsd:attribute name="ghostRow" type="xsd:boolean" use="optional" default="false"/>
3264 <xsd:attribute name="ghostCol" type="xsd:boolean" use="optional" default="false"/>
3265 <xsd:attribute name="edit" type="xsd:boolean" use="optional" default="false"/>
3266 <xsd:attribute name="delete" type="xsd:boolean" use="optional" default="false"/>
3267 <xsd:attribute name="copy" type="xsd:boolean" use="optional" default="false"/>
3268 <xsd:attribute name="pasteAll" type="xsd:boolean" use="optional" default="false"/>
3269 <xsd:attribute name="pasteFormulas" type="xsd:boolean" use="optional" default="false"/>
3270 <xsd:attribute name="pasteValues" type="xsd:boolean" use="optional" default="false"/>
3271 <xsd:attribute name="pasteFormats" type="xsd:boolean" use="optional" default="false"/>
3272 <xsd:attribute name="pasteComments" type="xsd:boolean" use="optional" default="false"/>
3273 <xsd:attribute name="pasteDataValidation" type="xsd:boolean" use="optional" default="false"/>
3274 <xsd:attribute name="pasteBorders" type="xsd:boolean" use="optional" default="false"/>
3275 <xsd:attribute name="pasteColWidths" type="xsd:boolean" use="optional" default="false"/>
3276 <xsd:attribute name="pasteNumberFormats" type="xsd:boolean" use="optional" default="false"/>
3277 <xsd:attribute name="merge" type="xsd:boolean" use="optional" default="false"/>
3278 <xsd:attribute name="splitFirst" type="xsd:boolean" use="optional" default="false"/>
3279 <xsd:attribute name="splitAll" type="xsd:boolean" use="optional" default="false"/>
3280 <xsd:attribute name="rowColShift" type="xsd:boolean" use="optional" default="false"/>
3281 <xsd:attribute name="clearAll" type="xsd:boolean" default="false"/>
3282 <xsd:attribute name="clearFormats" type="xsd:boolean" use="optional" default="false"/>
3283 <xsd:attribute name="clearContents" type="xsd:boolean" use="optional" default="false"/>
3284 <xsd:attribute name="clearComments" type="xsd:boolean" use="optional" default="false"/>
3285 <xsd:attribute name="assign" type="xsd:boolean" use="optional" default="false"/>
3286 <xsd:attribute name="coerce" type="xsd:boolean" use="optional" default="false"/>
3287 <xsd:attribute name="adjust" type="xsd:boolean" use="optional" default="false"/>
3288 <xsd:attribute name="cellMeta" type="xsd:boolean" use="optional" default="false"/>
3289 </xsd:complexType>
3290 <xsd:complexType name="CT_MetadataBlocks">
3291   <xsd:sequence>
3292     <xsd:element name="bk" type="CT_MetadataBlock" minOccurs="1" maxOccurs="unbounded"/>
3293   </xsd:sequence>
3294   <xsd:attribute name="count" type="xsd:unsignedInt" use="optional" default="0"/>
3295 </xsd:complexType>
3296 <xsd:complexType name="CT_MetadataBlock">
3297   <xsd:sequence>
3298     <xsd:element name="rc" type="CT_MetadataRecord" minOccurs="1" maxOccurs="unbounded"/>
3299   </xsd:sequence>
3300 </xsd:complexType>
3301 <xsd:complexType name="CT_MetadataRecord">
3302   <xsd:attribute name="t" type="xsd:unsignedInt" use="required"/>
3303   <xsd:attribute name="v" type="xsd:unsignedInt" use="required"/>
3304 </xsd:complexType>
3305 <xsd:complexType name="CT_FutureMetadata">
3306   <xsd:sequence>
3307     <xsd:element name="bk" type="CT_FutureMetadataBlock" minOccurs="0" maxOccurs="unbounded"/>
3308     <xsd:element name="extLst" minOccurs="0" maxOccurs="1" type="CT_ExtensionList"/>
3309   </xsd:sequence>
3310   <xsd:attribute name="name" type="s:ST_Xstring" use="required"/>
3311   <xsd:attribute name="count" type="xsd:unsignedInt" use="optional" default="0"/>
3312 </xsd:complexType>
3313 <xsd:complexType name="CT_FutureMetadataBlock">
3314   <xsd:sequence>

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3315     <xsd:element name="extLst" minOccurs="0" maxOccurs="1" type="CT_ExtensionList"/>
3316   </xsd:sequence>
3317 </xsd:complexType>
3318 <xsd:complexType name="CT_MdxMetadata">
3319   <xsd:sequence>
3320     <xsd:element name="mdx" type="CT_Mdx" minOccurs="1" maxOccurs="unbounded"/>
3321   </xsd:sequence>
3322   <xsd:attribute name="count" type="xsd:unsignedInt" use="optional" default="0"/>
3323 </xsd:complexType>
3324 <xsd:complexType name="CT_Mdx">
3325   <xsd:choice minOccurs="1" maxOccurs="1">
3326     <xsd:element name="t" type="CT_MdxTuple"/>
3327     <xsd:element name="ms" type="CT_MdxSet"/>
3328     <xsd:element name="p" type="CT_MdxMemberProp"/>
3329     <xsd:element name="k" type="CT_MdxKPI"/>
3330   </xsd:choice>
3331   <xsd:attribute name="n" type="xsd:unsignedInt" use="required"/>
3332   <xsd:attribute name="f" type="ST_MdxFunctionType" use="required"/>
3333 </xsd:complexType>
3334 <xsd:simpleType name="ST_MdxFunctionType">
3335   <xsd:restriction base="xsd:string">
3336     <xsd:enumeration value="m"/>
3337     <xsd:enumeration value="v"/>
3338     <xsd:enumeration value="s"/>
3339     <xsd:enumeration value="c"/>
3340     <xsd:enumeration value="r"/>
3341     <xsd:enumeration value="p"/>
3342     <xsd:enumeration value="k"/>
3343   </xsd:restriction>
3344 </xsd:simpleType>
3345 <xsd:complexType name="CT_MdxTuple">
3346   <xsd:sequence>
3347     <xsd:element name="n" type="CT_MetadataStringIndex" minOccurs="0" maxOccurs="unbounded"/>
3348   </xsd:sequence>
3349   <xsd:attribute name="c" type="xsd:unsignedInt" use="optional" default="0"/>
3350   <xsd:attribute name="ct" type="s:ST_Xstring" use="optional"/>
3351   <xsd:attribute name="si" type="xsd:unsignedInt" use="optional"/>
3352   <xsd:attribute name="fi" type="xsd:unsignedInt" use="optional"/>
3353   <xsd:attribute name="bc" type="ST_UnsignedIntHex" use="optional"/>
3354   <xsd:attribute name="fc" type="ST_UnsignedIntHex" use="optional"/>
3355   <xsd:attribute name="i" type="xsd:boolean" use="optional" default="false"/>
3356   <xsd:attribute name="u" type="xsd:boolean" use="optional" default="false"/>
3357   <xsd:attribute name="st" type="xsd:boolean" use="optional" default="false"/>
3358   <xsd:attribute name="b" type="xsd:boolean" use="optional" default="false"/>
3359 </xsd:complexType>
3360 <xsd:complexType name="CT_MdxSet">
3361   <xsd:sequence>
3362     <xsd:element name="n" type="CT_MetadataStringIndex" minOccurs="0" maxOccurs="unbounded"/>
3363   </xsd:sequence>
3364   <xsd:attribute name="ns" type="xsd:unsignedInt" use="required"/>
3365   <xsd:attribute name="c" type="xsd:unsignedInt" use="optional" default="0"/>
3366   <xsd:attribute name="o" type="ST_MdxSetOrder" use="optional" default="u"/>
3367 </xsd:complexType>

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3368 <xsd:simpleType name="ST_MdxSetOrder">
3369   <xsd:restriction base="xsd:string">
3370     <xsd:enumeration value="u"/>
3371     <xsd:enumeration value="a"/>
3372     <xsd:enumeration value="d"/>
3373     <xsd:enumeration value="aa"/>
3374     <xsd:enumeration value="ad"/>
3375     <xsd:enumeration value="na"/>
3376     <xsd:enumeration value="nd"/>
3377   </xsd:restriction>
3378 </xsd:simpleType>
3379 <xsd:complexType name="CT_MdxMemberProp">
3380   <xsd:attribute name="n" type="xsd:unsignedInt" use="required"/>
3381   <xsd:attribute name="np" type="xsd:unsignedInt" use="required"/>
3382 </xsd:complexType>
3383 <xsd:complexType name="CT_MdxKPI">
3384   <xsd:attribute name="n" type="xsd:unsignedInt" use="required"/>
3385   <xsd:attribute name="np" type="xsd:unsignedInt" use="required"/>
3386   <xsd:attribute name="p" type="ST_MdxKPIProperty" use="required"/>
3387 </xsd:complexType>
3388 <xsd:simpleType name="ST_MdxKPIProperty">
3389   <xsd:restriction base="xsd:string">
3390     <xsd:enumeration value="v"/>
3391     <xsd:enumeration value="g"/>
3392     <xsd:enumeration value="s"/>
3393     <xsd:enumeration value="t"/>
3394     <xsd:enumeration value="w"/>
3395     <xsd:enumeration value="m"/>
3396   </xsd:restriction>
3397 </xsd:simpleType>
3398 <xsd:complexType name="CT_MetadataStringIndex">
3399   <xsd:attribute name="x" type="xsd:unsignedInt" use="required"/>
3400   <xsd:attribute name="s" type="xsd:boolean" use="optional" default="false"/>
3401 </xsd:complexType>
3402 <xsd:complexType name="CT_MetadataStrings">
3403   <xsd:sequence>
3404     <xsd:element name="s" type="CT_XStringElement" minOccurs="1" maxOccurs="unbounded"/>
3405   </xsd:sequence>
3406   <xsd:attribute name="count" type="xsd:unsignedInt" use="optional" default="0"/>
3407 </xsd:complexType>
3408 <xsd:element name="singleXmlCells" type="CT_SingleXmlCells"/>
3409 <xsd:complexType name="CT_SingleXmlCells">
3410   <xsd:sequence>
3411     <xsd:element name="singleXmlCell" type="CT_SingleXmlCell" maxOccurs="unbounded"/>
3412   </xsd:sequence>
3413 </xsd:complexType>
3414 <xsd:complexType name="CT_SingleXmlCell">
3415   <xsd:sequence>
3416     <xsd:element name="xmlCellPr" type="CT_XmlCellPr" minOccurs="1" maxOccurs="1"/>
3417     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
3418   </xsd:sequence>
3419   <xsd:attribute name="id" type="xsd:unsignedInt" use="required"/>
3420   <xsd:attribute name="r" type="ST_CellRef" use="required"/>

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3421     <xsd:attribute name="connectionId" type="xsd:unsignedInt" use="required"/>
3422 </xsd:complexType>
3423 <xsd:complexType name="CT_XmlCellPr">
3424     <xsd:sequence>
3425         <xsd:element name="xmlPr" type="CT_XmlPr" minOccurs="1" maxOccurs="1"/>
3426         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
3427     </xsd:sequence>
3428     <xsd:attribute name="id" type="xsd:unsignedInt" use="required"/>
3429     <xsd:attribute name="uniqueName" type="s:ST_Xstring" use="optional"/>
3430 </xsd:complexType>
3431 <xsd:complexType name="CT_XmlPr">
3432     <xsd:sequence>
3433         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
3434     </xsd:sequence>
3435     <xsd:attribute name="mapId" type="xsd:unsignedInt" use="required"/>
3436     <xsd:attribute name="xpath" type="s:ST_Xstring" use="required"/>
3437     <xsd:attribute name="xmlDataType" type="ST_XmlDataType" use="required"/>
3438 </xsd:complexType>
3439 <xsd:element name="styleSheet" type="CT_Stylesheet"/>
3440 <xsd:complexType name="CT_Stylesheet">
3441     <xsd:sequence>
3442         <xsd:element name="numFmts" type="CT_NumFmts" minOccurs="0" maxOccurs="1"/>
3443         <xsd:element name="fonts" type="CT_Fonts" minOccurs="0" maxOccurs="1"/>
3444         <xsd:element name="fills" type="CT_Fills" minOccurs="0" maxOccurs="1"/>
3445         <xsd:element name="borders" type="CT_Borders" minOccurs="0" maxOccurs="1"/>
3446         <xsd:element name="cellStyleXfs" type="CT_CellStyleXfs" minOccurs="0" maxOccurs="1"/>
3447         <xsd:element name="cellXfs" type="CT_CellXfs" minOccurs="0" maxOccurs="1"/>
3448         <xsd:element name="cellStyles" type="CT_CellStyles" minOccurs="0" maxOccurs="1"/>
3449         <xsd:element name="dxfs" type="CT_Dxfs" minOccurs="0" maxOccurs="1"/>
3450         <xsd:element name="tableStyles" type="CT_TableStyles" minOccurs="0" maxOccurs="1"/>
3451         <xsd:element name="colors" type="CT_Colors" minOccurs="0" maxOccurs="1"/>
3452         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
3453     </xsd:sequence>
3454 </xsd:complexType>
3455 <xsd:complexType name="CT_CellAlignment">
3456     <xsd:attribute name="horizontal" type="ST_HorizontalAlignment" use="optional"/>
3457     <xsd:attribute name="vertical" type="ST_VerticalAlignment" use="optional"/>
3458     <xsd:attribute name="textRotation" type="xsd:unsignedInt" use="optional"/>
3459     <xsd:attribute name="wrapText" type="xsd:boolean" use="optional"/>
3460     <xsd:attribute name="indent" type="xsd:unsignedInt" use="optional"/>
3461     <xsd:attribute name="relativeIndent" type="xsd:int" use="optional"/>
3462     <xsd:attribute name="justifyLastLine" type="xsd:boolean" use="optional"/>
3463     <xsd:attribute name="shrinkToFit" type="xsd:boolean" use="optional"/>
3464     <xsd:attribute name="readingOrder" type="xsd:unsignedInt" use="optional"/>
3465 </xsd:complexType>
3466 <xsd:simpleType name="ST_BorderStyle">
3467     <xsd:restriction base="xsd:string">
3468         <xsd:enumeration value="none"/>
3469         <xsd:enumeration value="thin"/>
3470         <xsd:enumeration value="medium"/>
3471         <xsd:enumeration value="dashed"/>
3472         <xsd:enumeration value="dotted"/>
3473         <xsd:enumeration value="thick"/>

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3474     <xsd:enumeration value="double"/>
3475     <xsd:enumeration value="hair"/>
3476     <xsd:enumeration value="mediumDashed"/>
3477     <xsd:enumeration value="dashDot"/>
3478     <xsd:enumeration value="mediumDashDot"/>
3479     <xsd:enumeration value="dashDotDot"/>
3480     <xsd:enumeration value="mediumDashDotDot"/>
3481     <xsd:enumeration value="slantDashDot"/>
3482   </xsd:restriction>
3483 </xsd:simpleType>
3484 <xsd:complexType name="CT_Borders">
3485   <xsd:sequence>
3486     <xsd:element name="border" type="CT_Border" minOccurs="0" maxOccurs="unbounded"/>
3487   </xsd:sequence>
3488   <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
3489 </xsd:complexType>
3490 <xsd:complexType name="CT_Border">
3491   <xsd:sequence>
3492     <xsd:element name="start" type="CT_BorderPr" minOccurs="0" maxOccurs="1"/>
3493     <xsd:element name="end" type="CT_BorderPr" minOccurs="0" maxOccurs="1"/>
3494     <xsd:element name="left" type="CT_BorderPr" minOccurs="0"/>
3495     <xsd:element name="right" type="CT_BorderPr" minOccurs="0"/>
3496     <xsd:element name="top" type="CT_BorderPr" minOccurs="0" maxOccurs="1"/>
3497     <xsd:element name="bottom" type="CT_BorderPr" minOccurs="0" maxOccurs="1"/>
3498     <xsd:element name="diagonal" type="CT_BorderPr" minOccurs="0" maxOccurs="1"/>
3499     <xsd:element name="vertical" type="CT_BorderPr" minOccurs="0" maxOccurs="1"/>
3500     <xsd:element name="horizontal" type="CT_BorderPr" minOccurs="0" maxOccurs="1"/>
3501   </xsd:sequence>
3502   <xsd:attribute name="diagonalUp" type="xsd:boolean" use="optional"/>
3503   <xsd:attribute name="diagonalDown" type="xsd:boolean" use="optional"/>
3504   <xsd:attribute name="outline" type="xsd:boolean" use="optional" default="true"/>
3505 </xsd:complexType>
3506 <xsd:complexType name="CT_BorderPr">
3507   <xsd:sequence>
3508     <xsd:element name="color" type="CT_Color" minOccurs="0" maxOccurs="1"/>
3509   </xsd:sequence>
3510   <xsd:attribute name="style" type="ST_BorderStyle" use="optional" default="none"/>
3511 </xsd:complexType>
3512 <xsd:complexType name="CT_CellProtection">
3513   <xsd:attribute name="locked" type="xsd:boolean" use="optional"/>
3514   <xsd:attribute name="hidden" type="xsd:boolean" use="optional"/>
3515 </xsd:complexType>
3516 <xsd:complexType name="CT_Fonts">
3517   <xsd:sequence>
3518     <xsd:element name="font" type="CT_Font" minOccurs="0" maxOccurs="unbounded"/>
3519   </xsd:sequence>
3520   <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
3521 </xsd:complexType>
3522 <xsd:complexType name="CT_Fills">
3523   <xsd:sequence>
3524     <xsd:element name="fill" type="CT_Fill" minOccurs="0" maxOccurs="unbounded"/>
3525   </xsd:sequence>
3526   <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>

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3527 </xsd:complexType>
3528 <xsd:complexType name="CT_Fill">
3529     <xsd:choice minOccurs="1" maxOccurs="1">
3530         <xsd:element name="patternFill" type="CT_PatternFill" minOccurs="0" maxOccurs="1"/>
3531         <xsd:element name="gradientFill" type="CT_GradientFill" minOccurs="0" maxOccurs="1"/>
3532     </xsd:choice>
3533 </xsd:complexType>
3534 <xsd:complexType name="CT_PatternFill">
3535     <xsd:sequence>
3536         <xsd:element name="fgColor" type="CT_Color" minOccurs="0" maxOccurs="1"/>
3537         <xsd:element name="bgColor" type="CT_Color" minOccurs="0" maxOccurs="1"/>
3538     </xsd:sequence>
3539     <xsd:attribute name="patternType" type="ST_PatternType" use="optional"/>
3540 </xsd:complexType>
3541 <xsd:complexType name="CT_Color">
3542     <xsd:attribute name="auto" type="xsd:boolean" use="optional"/>
3543     <xsd:attribute name="indexed" type="xsd:unsignedInt" use="optional"/>
3544     <xsd:attribute name="rgb" type="ST_UnsignedIntHex" use="optional"/>
3545     <xsd:attribute name="theme" type="xsd:unsignedInt" use="optional"/>
3546     <xsd:attribute name="tint" type="xsd:double" use="optional" default="0.0"/>
3547 </xsd:complexType>
3548 <xsd:simpleType name="ST_PatternType">
3549     <xsd:restriction base="xsd:string">
3550         <xsd:enumeration value="none"/>
3551         <xsd:enumeration value="solid"/>
3552         <xsd:enumeration value="mediumGray"/>
3553         <xsd:enumeration value="darkGray"/>
3554         <xsd:enumeration value="lightGray"/>
3555         <xsd:enumeration value="darkHorizontal"/>
3556         <xsd:enumeration value="darkVertical"/>
3557         <xsd:enumeration value="darkDown"/>
3558         <xsd:enumeration value="darkUp"/>
3559         <xsd:enumeration value="darkGrid"/>
3560         <xsd:enumeration value="darkTrellis"/>
3561         <xsd:enumeration value="lightHorizontal"/>
3562         <xsd:enumeration value="lightVertical"/>
3563         <xsd:enumeration value="lightDown"/>
3564         <xsd:enumeration value="lightUp"/>
3565         <xsd:enumeration value="lightGrid"/>
3566         <xsd:enumeration value="lightTrellis"/>
3567         <xsd:enumeration value="gray125"/>
3568         <xsd:enumeration value="gray0625"/>
3569     </xsd:restriction>
3570 </xsd:simpleType>
3571 <xsd:complexType name="CT_GradientFill">
3572     <xsd:sequence>
3573         <xsd:element name="stop" type="CT_GradientStop" minOccurs="0" maxOccurs="unbounded"/>
3574     </xsd:sequence>
3575     <xsd:attribute name="type" type="ST_GradientType" use="optional" default="linear"/>
3576     <xsd:attribute name="degree" type="xsd:double" use="optional" default="0"/>
3577     <xsd:attribute name="left" type="xsd:double" use="optional" default="0"/>
3578     <xsd:attribute name="right" type="xsd:double" use="optional" default="0"/>
3579     <xsd:attribute name="top" type="xsd:double" use="optional" default="0"/>

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3580     <xsd:attribute name="bottom" type="xsd:double" use="optional" default="0"/>
3581 </xsd:complexType>
3582 <xsd:complexType name="CT_GradientStop">
3583     <xsd:sequence>
3584         <xsd:element name="color" type="CT_Color" minOccurs="1" maxOccurs="1"/>
3585     </xsd:sequence>
3586     <xsd:attribute name="position" type="xsd:double" use="required"/>
3587 </xsd:complexType>
3588 <xsd:simpleType name="ST_GradientType">
3589     <xsd:restriction base="xsd:string">
3590         <xsd:enumeration value="linear"/>
3591         <xsd:enumeration value="path"/>
3592     </xsd:restriction>
3593 </xsd:simpleType>
3594 <xsd:simpleType name="ST_HorizontalAlignment">
3595     <xsd:restriction base="xsd:string">
3596         <xsd:enumeration value="general"/>
3597         <xsd:enumeration value="left"/>
3598         <xsd:enumeration value="center"/>
3599         <xsd:enumeration value="right"/>
3600         <xsd:enumeration value="fill"/>
3601         <xsd:enumeration value="justify"/>
3602         <xsd:enumeration value="centerContinuous"/>
3603         <xsd:enumeration value="distributed"/>
3604     </xsd:restriction>
3605 </xsd:simpleType>
3606 <xsd:simpleType name="ST_VerticalAlignment">
3607     <xsd:restriction base="xsd:string">
3608         <xsd:enumeration value="top"/>
3609         <xsd:enumeration value="center"/>
3610         <xsd:enumeration value="bottom"/>
3611         <xsd:enumeration value="justify"/>
3612         <xsd:enumeration value="distributed"/>
3613     </xsd:restriction>
3614 </xsd:simpleType>
3615 <xsd:complexType name="CT_NumFmts">
3616     <xsd:sequence>
3617         <xsd:element name="numFmt" type="CT_NumFmt" minOccurs="0" maxOccurs="unbounded"/>
3618     </xsd:sequence>
3619     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
3620 </xsd:complexType>
3621 <xsd:complexType name="CT_NumFmt">
3622     <xsd:attribute name="numFmtId" type="ST_NumFmtId" use="required"/>
3623     <xsd:attribute name="formatCode" type="s:ST_Xstring" use="required"/>
3624 </xsd:complexType>
3625 <xsd:complexType name="CT_CellStyleXfs">
3626     <xsd:sequence>
3627         <xsd:element name="xf" type="CT_Xf" minOccurs="1" maxOccurs="unbounded"/>
3628     </xsd:sequence>
3629     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
3630 </xsd:complexType>
3631 <xsd:complexType name="CT_CellXfs">
3632     <xsd:sequence>

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3633     <xsd:element name="xf" type="CT_Xf" minOccurs="1" maxOccurs="unbounded"/>
3634 </xsd:sequence>
3635 <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
3636 </xsd:complexType>
3637 <xsd:complexType name="CT_Xf">
3638   <xsd:sequence>
3639     <xsd:element name="alignment" type="CT_CellAlignment" minOccurs="0" maxOccurs="1"/>
3640     <xsd:element name="protection" type="CT_CellProtection" minOccurs="0" maxOccurs="1"/>
3641     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
3642   </xsd:sequence>
3643   <xsd:attribute name="numFmtId" type="ST_NumFmtId" use="optional"/>
3644   <xsd:attribute name="fontId" type="ST_FontId" use="optional"/>
3645   <xsd:attribute name="fillId" type="ST_FillId" use="optional"/>
3646   <xsd:attribute name="borderId" type="ST_BorderId" use="optional"/>
3647   <xsd:attribute name="xfId" type="ST_CellStyleXfId" use="optional"/>
3648   <xsd:attribute name="quotePrefix" type="xsd:boolean" use="optional" default="false"/>
3649   <xsd:attribute name="pivotButton" type="xsd:boolean" use="optional" default="false"/>
3650   <xsd:attribute name="applyNumberFormat" type="xsd:boolean" use="optional"/>
3651   <xsd:attribute name="applyFont" type="xsd:boolean" use="optional"/>
3652   <xsd:attribute name="applyFill" type="xsd:boolean" use="optional"/>
3653   <xsd:attribute name="applyBorder" type="xsd:boolean" use="optional"/>
3654   <xsd:attribute name="applyAlignment" type="xsd:boolean" use="optional"/>
3655   <xsd:attribute name="applyProtection" type="xsd:boolean" use="optional"/>
3656 </xsd:complexType>
3657 <xsd:complexType name="CT_CellStyles">
3658   <xsd:sequence>
3659     <xsd:element name="cellStyle" type="CT_CellStyle" minOccurs="1" maxOccurs="unbounded"/>
3660   </xsd:sequence>
3661   <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
3662 </xsd:complexType>
3663 <xsd:complexType name="CT_CellStyle">
3664   <xsd:sequence>
3665     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
3666   </xsd:sequence>
3667   <xsd:attribute name="name" type="s:ST_Xstring" use="optional"/>
3668   <xsd:attribute name="xfId" type="ST_CellStyleXfId" use="required"/>
3669   <xsd:attribute name="builtinId" type="xsd:unsignedInt" use="optional"/>
3670   <xsd:attribute name="iLevel" type="xsd:unsignedInt" use="optional"/>
3671   <xsd:attribute name="hidden" type="xsd:boolean" use="optional"/>
3672   <xsd:attribute name="customBuiltin" type="xsd:boolean" use="optional"/>
3673 </xsd:complexType>
3674 <xsd:complexType name="CT_Dxfs">
3675   <xsd:sequence>
3676     <xsd:element name="dxf" type="CT_Dxf" minOccurs="0" maxOccurs="unbounded"/>
3677   </xsd:sequence>
3678   <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
3679 </xsd:complexType>
3680 <xsd:complexType name="CT_Dxf">
3681   <xsd:sequence>
3682     <xsd:element name="font" type="CT_Font" minOccurs="0" maxOccurs="1"/>
3683     <xsd:element name="numFmt" type="CT_NumFmt" minOccurs="0" maxOccurs="1"/>
3684     <xsd:element name="fill" type="CT_Fill" minOccurs="0" maxOccurs="1"/>
3685     <xsd:element name="alignment" type="CT_CellAlignment" minOccurs="0" maxOccurs="1"/>

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3686     <xsd:element name="border" type="CT_Border" minOccurs="0" maxOccurs="1"/>
3687     <xsd:element name="protection" type="CT_CellProtection" minOccurs="0" maxOccurs="1"/>
3688     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
3689   </xsd:sequence>
3690 </xsd:complexType>
3691 <xsd:simpleType name="ST_NumFmtId">
3692   <xsd:restriction base="xsd:unsignedInt"/>
3693 </xsd:simpleType>
3694 <xsd:simpleType name="ST_FontId">
3695   <xsd:restriction base="xsd:unsignedInt"/>
3696 </xsd:simpleType>
3697 <xsd:simpleType name="ST_FillId">
3698   <xsd:restriction base="xsd:unsignedInt"/>
3699 </xsd:simpleType>
3700 <xsd:simpleType name="ST_BorderId">
3701   <xsd:restriction base="xsd:unsignedInt"/>
3702 </xsd:simpleType>
3703 <xsd:simpleType name="ST_CellStyleXfId">
3704   <xsd:restriction base="xsd:unsignedInt"/>
3705 </xsd:simpleType>
3706 <xsd:simpleType name="ST_DxfId">
3707   <xsd:restriction base="xsd:unsignedInt"/>
3708 </xsd:simpleType>
3709 <xsd:complexType name="CT_Colors">
3710   <xsd:sequence>
3711     <xsd:element name="indexedColors" type="CT_IndexedColors" minOccurs="0" maxOccurs="1"/>
3712     <xsd:element name="mruColors" type="CT_MRUColors" minOccurs="0" maxOccurs="1"/>
3713   </xsd:sequence>
3714 </xsd:complexType>
3715 <xsd:complexType name="CT_IndexedColors">
3716   <xsd:sequence>
3717     <xsd:element name="rgbColor" type="CT_RgbColor" minOccurs="1" maxOccurs="unbounded"/>
3718   </xsd:sequence>
3719 </xsd:complexType>
3720 <xsd:complexType name="CT_MRUColors">
3721   <xsd:sequence>
3722     <xsd:element name="color" type="CT_Color" minOccurs="1" maxOccurs="unbounded"/>
3723   </xsd:sequence>
3724 </xsd:complexType>
3725 <xsd:complexType name="CT_RgbColor">
3726   <xsd:attribute name="rgb" type="ST_UnsignedIntHex" use="optional"/>
3727 </xsd:complexType>
3728 <xsd:complexType name="CT_TableStyles">
3729   <xsd:sequence>
3730     <xsd:element name="tableStyle" type="CT_TableStyle" minOccurs="0" maxOccurs="unbounded"/>
3731   </xsd:sequence>
3732   <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
3733   <xsd:attribute name="defaultTableStyle" type="xsd:string" use="optional"/>
3734   <xsd:attribute name="defaultPivotStyle" type="xsd:string" use="optional"/>
3735 </xsd:complexType>
3736 <xsd:complexType name="CT_TableStyle">
3737   <xsd:sequence>

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3738     <xsd:element name="tableStyleElement" type="CT_TableStyleElement" minOccurs="0"
3739         maxOccurs="unbounded"/>
3740 </xsd:sequence>
3741 <xsd:attribute name="name" type="xsd:string" use="required"/>
3742 <xsd:attribute name="pivot" type="xsd:boolean" use="optional" default="true"/>
3743 <xsd:attribute name="table" type="xsd:boolean" use="optional" default="true"/>
3744 <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
3745 </xsd:complexType>
3746 <xsd:complexType name="CT_TableStyleElement">
3747     <xsd:attribute name="type" type="ST_TableStyleType" use="required"/>
3748     <xsd:attribute name="size" type="xsd:unsignedInt" use="optional" default="1"/>
3749     <xsd:attribute name="dxId" type="ST_DxId" use="optional"/>
3750 </xsd:complexType>
3751 <xsd:simpleType name="ST_TableStyleType">
3752     <xsd:restriction base="xsd:string">
3753         <xsd:enumeration value="wholeTable"/>
3754         <xsd:enumeration value="headerRow"/>
3755         <xsd:enumeration value="totalRow"/>
3756         <xsd:enumeration value="firstColumn"/>
3757         <xsd:enumeration value="lastColumn"/>
3758         <xsd:enumeration value="firstRowStripe"/>
3759         <xsd:enumeration value="secondRowStripe"/>
3760         <xsd:enumeration value="firstColumnStripe"/>
3761         <xsd:enumeration value="secondColumnStripe"/>
3762         <xsd:enumeration value="firstHeaderCell"/>
3763         <xsd:enumeration value="lastHeaderCell"/>
3764         <xsd:enumeration value="firstTotalCell"/>
3765         <xsd:enumeration value="lastTotalCell"/>
3766         <xsd:enumeration value="firstSubtotalColumn"/>
3767         <xsd:enumeration value="secondSubtotalColumn"/>
3768         <xsd:enumeration value="thirdSubtotalColumn"/>
3769         <xsd:enumeration value="firstSubtotalRow"/>
3770         <xsd:enumeration value="secondSubtotalRow"/>
3771         <xsd:enumeration value="thirdSubtotalRow"/>
3772         <xsd:enumeration value="blankRow"/>
3773         <xsd:enumeration value="firstColumnSubheading"/>
3774         <xsd:enumeration value="secondColumnSubheading"/>
3775         <xsd:enumeration value="thirdColumnSubheading"/>
3776         <xsd:enumeration value="firstRowSubheading"/>
3777         <xsd:enumeration value="secondRowSubheading"/>
3778         <xsd:enumeration value="thirdRowSubheading"/>
3779         <xsd:enumeration value="pageFieldLabels"/>
3780         <xsd:enumeration value="pageFieldValues"/>
3781     </xsd:restriction>
3782 </xsd:simpleType>
3783 <xsd:complexType name="CT_BooleanProperty">
3784     <xsd:attribute name="val" type="xsd:boolean" use="optional" default="true"/>
3785 </xsd:complexType>
3786 <xsd:complexType name="CT_FontSize">
3787     <xsd:attribute name="val" type="xsd:double" use="required"/>
3788 </xsd:complexType>
3789 <xsd:complexType name="CT_IntProperty">
3790     <xsd:attribute name="val" type="xsd:int" use="required"/>

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3791 </xsd:complexType>
3792 <xsd:complexType name="CT_FontName">
3793   <xsd:attribute name="val" type="s:ST_Xstring" use="required"/>
3794 </xsd:complexType>
3795 <xsd:complexType name="CT_VerticalAlignFontProperty">
3796   <xsd:attribute name="val" type="s:ST_VerticalAlignRun" use="required"/>
3797 </xsd:complexType>
3798 <xsd:complexType name="CT_FontScheme">
3799   <xsd:attribute name="val" type="ST_FontScheme" use="required"/>
3800 </xsd:complexType>
3801 <xsd:simpleType name="ST_FontScheme">
3802   <xsd:restriction base="xsd:string">
3803     <xsd:enumeration value="none"/>
3804     <xsd:enumeration value="major"/>
3805     <xsd:enumeration value="minor"/>
3806   </xsd:restriction>
3807 </xsd:simpleType>
3808 <xsd:complexType name="CT_UnderlineProperty">
3809   <xsd:attribute name="val" type="ST_UnderlineValues" use="optional" default="single"/>
3810 </xsd:complexType>
3811 <xsd:simpleType name="ST_UnderlineValues">
3812   <xsd:restriction base="xsd:string">
3813     <xsd:enumeration value="single"/>
3814     <xsd:enumeration value="double"/>
3815     <xsd:enumeration value="singleAccounting"/>
3816     <xsd:enumeration value="doubleAccounting"/>
3817     <xsd:enumeration value="none"/>
3818   </xsd:restriction>
3819 </xsd:simpleType>
3820 <xsd:complexType name="CT_Font">
3821   <xsd:choice maxOccurs="unbounded">
3822     <xsd:element name="name" type="CT_FontName" minOccurs="0" maxOccurs="1"/>
3823     <xsd:element name="charset" type="CT_IntProperty" minOccurs="0" maxOccurs="1"/>
3824     <xsd:element name="family" type="CT_FontFamily" minOccurs="0" maxOccurs="1"/>
3825     <xsd:element name="b" type="CT_BooleanProperty" minOccurs="0" maxOccurs="1"/>
3826     <xsd:element name="i" type="CT_BooleanProperty" minOccurs="0" maxOccurs="1"/>
3827     <xsd:element name="strike" type="CT_BooleanProperty" minOccurs="0" maxOccurs="1"/>
3828     <xsd:element name="outline" type="CT_BooleanProperty" minOccurs="0" maxOccurs="1"/>
3829     <xsd:element name="shadow" type="CT_BooleanProperty" minOccurs="0" maxOccurs="1"/>
3830     <xsd:element name="condense" type="CT_BooleanProperty" minOccurs="0" maxOccurs="1"/>
3831     <xsd:element name="extend" type="CT_BooleanProperty" minOccurs="0" maxOccurs="1"/>
3832     <xsd:element name="color" type="CT_Color" minOccurs="0" maxOccurs="1"/>
3833     <xsd:element name="sz" type="CT_FontSize" minOccurs="0" maxOccurs="1"/>
3834     <xsd:element name="u" type="CT_UnderlineProperty" minOccurs="0" maxOccurs="1"/>
3835     <xsd:element name="vertAlign" type="CT_VerticalAlignFontProperty" minOccurs="0"
3836       maxOccurs="1"/>
3837     <xsd:element name="scheme" type="CT_FontScheme" minOccurs="0" maxOccurs="1"/>
3838   </xsd:choice>
3839 </xsd:complexType>
3840 <xsd:complexType name="CT_FontFamily">
3841   <xsd:attribute name="val" type="ST_FontFamily" use="required"/>
3842 </xsd:complexType>
3843 <xsd:simpleType name="ST_FontFamily">

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3844     <xsd:restriction base="xsd:integer">
3845         <xsd:minInclusive value="0"/>
3846         <xsd:maxInclusive value="14"/>
3847     </xsd:restriction>
3848 </xsd:simpleType>
3849 <xsd:attributeGroup name="AG_AutoFormat">
3850     <xsd:attribute name="autoFormatId" type="xsd:unsignedInt"/>
3851     <xsd:attribute name="applyNumberFormats" type="xsd:boolean"/>
3852     <xsd:attribute name="applyBorderFormats" type="xsd:boolean"/>
3853     <xsd:attribute name="applyFontFormats" type="xsd:boolean"/>
3854     <xsd:attribute name="applyPatternFormats" type="xsd:boolean"/>
3855     <xsd:attribute name="applyAlignmentFormats" type="xsd:boolean"/>
3856     <xsd:attribute name="applyWidthHeightFormats" type="xsd:boolean"/>
3857 </xsd:attributeGroup>
3858 <xsd:element name="externalLink" type="CT_ExternalLink"/>
3859 <xsd:complexType name="CT_ExternalLink">
3860     <xsd:sequence>
3861         <xsd:choice>
3862             <xsd:element name="externalBook" type="CT_ExternalBook" minOccurs="0" maxOccurs="1"/>
3863             <xsd:element name="ddeLink" type="CT_DdeLink" minOccurs="0" maxOccurs="1"/>
3864             <xsd:element name="oleLink" type="CT_OleLink" minOccurs="0" maxOccurs="1"/>
3865         </xsd:choice>
3866         <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
3867     </xsd:sequence>
3868 </xsd:complexType>
3869 <xsd:complexType name="CT_ExternalBook">
3870     <xsd:sequence>
3871         <xsd:element name="sheetNames" type="CT_ExternalSheetNames" minOccurs="0" maxOccurs="1"/>
3872         <xsd:element name="definedNames" type="CT_ExternalDefinedNames" minOccurs="0"
3873             maxOccurs="1"/>
3874         <xsd:element name="sheetDataSet" type="CT_ExternalSheetDataSet" minOccurs="0"
3875             maxOccurs="1"/>
3876     </xsd:sequence>
3877     <xsd:attribute ref="r:id" use="required"/>
3878 </xsd:complexType>
3879 <xsd:complexType name="CT_ExternalSheetNames">
3880     <xsd:sequence>
3881         <xsd:element name="sheetName" minOccurs="1" maxOccurs="unbounded"
3882             type="CT_ExternalSheetName"/>
3883     </xsd:sequence>
3884 </xsd:complexType>
3885 <xsd:complexType name="CT_ExternalSheetName">
3886     <xsd:attribute name="val" type="s:ST_Xstring"/>
3887 </xsd:complexType>
3888 <xsd:complexType name="CT_ExternalDefinedNames">
3889     <xsd:sequence>
3890         <xsd:element name="definedName" type="CT_ExternalDefinedName" minOccurs="0"
3891             maxOccurs="unbounded"/>
3892     </xsd:sequence>
3893 </xsd:complexType>
3894 <xsd:complexType name="CT_ExternalDefinedName">
3895     <xsd:attribute name="name" type="s:ST_Xstring" use="required"/>
3896     <xsd:attribute name="refersTo" type="s:ST_Xstring" use="optional"/>

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3897     <xsd:attribute name="sheetId" type="xsd:unsignedInt" use="optional"/>
3898   </xsd:complexType>
3899   <xsd:complexType name="CT_ExternalSheetDataSet">
3900     <xsd:sequence>
3901       <xsd:element name="sheetData" type="CT_ExternalSheetData" minOccurs="1"
3902         maxOccurs="unbounded"/>
3903     </xsd:sequence>
3904   </xsd:complexType>
3905   <xsd:complexType name="CT_ExternalSheetData">
3906     <xsd:sequence>
3907       <xsd:element name="row" type="CT_ExternalRow" minOccurs="0" maxOccurs="unbounded"/>
3908     </xsd:sequence>
3909     <xsd:attribute name="sheetId" type="xsd:unsignedInt" use="required"/>
3910     <xsd:attribute name="refreshError" type="xsd:boolean" use="optional" default="false"/>
3911   </xsd:complexType>
3912   <xsd:complexType name="CT_ExternalRow">
3913     <xsd:sequence>
3914       <xsd:element name="cell" type="CT_ExternalCell" minOccurs="0" maxOccurs="unbounded"/>
3915     </xsd:sequence>
3916     <xsd:attribute name="r" type="xsd:unsignedInt" use="required"/>
3917   </xsd:complexType>
3918   <xsd:complexType name="CT_ExternalCell">
3919     <xsd:sequence>
3920       <xsd:element name="v" type="s:ST Xstring" minOccurs="0" maxOccurs="1"/>
3921     </xsd:sequence>
3922     <xsd:attribute name="r" type="ST CellRef" use="optional"/>
3923     <xsd:attribute name="t" type="ST CellType" use="optional" default="n"/>
3924     <xsd:attribute name="vm" type="xsd:unsignedInt" use="optional" default="0"/>
3925   </xsd:complexType>
3926   <xsd:complexType name="CT_DdeLink">
3927     <xsd:sequence>
3928       <xsd:element name="ddeItems" type="CT_DdeItems" minOccurs="0" maxOccurs="1"/>
3929     </xsd:sequence>
3930     <xsd:attribute name="ddeService" type="s:ST Xstring" use="required"/>
3931     <xsd:attribute name="ddeTopic" type="s:ST Xstring" use="required"/>
3932   </xsd:complexType>
3933   <xsd:complexType name="CT_DdeItems">
3934     <xsd:sequence>
3935       <xsd:element name="ddeItem" type="CT_DdeItem" minOccurs="0" maxOccurs="unbounded"/>
3936     </xsd:sequence>
3937   </xsd:complexType>
3938   <xsd:complexType name="CT_DdeItem">
3939     <xsd:sequence>
3940       <xsd:element name="values" type="CT_DdeValues" minOccurs="0" maxOccurs="1"/>
3941     </xsd:sequence>
3942     <xsd:attribute name="name" type="s:ST Xstring" default="0"/>
3943     <xsd:attribute name="ole" type="xsd:boolean" use="optional" default="false"/>
3944     <xsd:attribute name="advise" type="xsd:boolean" use="optional" default="false"/>
3945     <xsd:attribute name="preferPic" type="xsd:boolean" use="optional" default="false"/>
3946   </xsd:complexType>
3947   <xsd:complexType name="CT_DdeValues">
3948     <xsd:sequence>
3949       <xsd:element name="value" minOccurs="1" maxOccurs="unbounded" type="CT_DdeValue"/>

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3950     </xsd:sequence>
3951     <xsd:attribute name="rows" type="xsd:unsignedInt" use="optional" default="1"/>
3952     <xsd:attribute name="cols" type="xsd:unsignedInt" use="optional" default="1"/>
3953 </xsd:complexType>
3954 <xsd:complexType name="CT_DdeValue">
3955     <xsd:sequence>
3956         <xsd:element name="val" type="s:ST Xstring" minOccurs="1" maxOccurs="1"/>
3957     </xsd:sequence>
3958     <xsd:attribute name="t" type="ST DdeValueType" use="optional" default="n"/>
3959 </xsd:complexType>
3960 <xsd:simpleType name="ST_DdeValueType">
3961     <xsd:restriction base="xsd:string">
3962         <xsd:enumeration value="nil"/>
3963         <xsd:enumeration value="b"/>
3964         <xsd:enumeration value="n"/>
3965         <xsd:enumeration value="e"/>
3966         <xsd:enumeration value="str"/>
3967     </xsd:restriction>
3968 </xsd:simpleType>
3969 <xsd:complexType name="CT_OleLink">
3970     <xsd:sequence>
3971         <xsd:element name="oleItems" type="CT OleItems" minOccurs="0" maxOccurs="1"/>
3972     </xsd:sequence>
3973     <xsd:attribute ref="r:id" use="required"/>
3974     <xsd:attribute name="progId" type="s:ST Xstring" use="required"/>
3975 </xsd:complexType>
3976 <xsd:complexType name="CT_OleItems">
3977     <xsd:sequence>
3978         <xsd:element name="oleItem" type="CT OleItem" minOccurs="0" maxOccurs="unbounded"/>
3979     </xsd:sequence>
3980 </xsd:complexType>
3981 <xsd:complexType name="CT_OleItem">
3982     <xsd:attribute name="name" type="s:ST Xstring" use="required"/>
3983     <xsd:attribute name="icon" type="xsd:boolean" use="optional" default="false"/>
3984     <xsd:attribute name="advise" type="xsd:boolean" use="optional" default="false"/>
3985     <xsd:attribute name="preferPic" type="xsd:boolean" use="optional" default="false"/>
3986 </xsd:complexType>
3987 <xsd:element name="table" type="CT Table"/>
3988 <xsd:complexType name="CT_Table">
3989     <xsd:sequence>
3990         <xsd:element name="autoFilter" type="CT AutoFilter" minOccurs="0" maxOccurs="1"/>
3991         <xsd:element name="sortState" type="CT SortState" minOccurs="0" maxOccurs="1"/>
3992         <xsd:element name="tableColumns" type="CT TableColumns" minOccurs="1" maxOccurs="1"/>
3993         <xsd:element name="tableStyleInfo" type="CT TableStyleInfo" minOccurs="0" maxOccurs="1"/>
3994         <xsd:element name="extLst" type="CT ExtensionList" minOccurs="0" maxOccurs="1"/>
3995     </xsd:sequence>
3996     <xsd:attribute name="id" type="xsd:unsignedInt" use="required"/>
3997     <xsd:attribute name="name" type="s:ST Xstring" use="optional"/>
3998     <xsd:attribute name="displayName" type="s:ST Xstring" use="required"/>
3999     <xsd:attribute name="comment" type="s:ST Xstring" use="optional"/>
4000     <xsd:attribute name="ref" type="ST Ref" use="required"/>
4001     <xsd:attribute name="tableType" type="ST TableType" use="optional" default="worksheet"/>
4002     <xsd:attribute name="headerRowCount" type="xsd:unsignedInt" use="optional" default="1"/>

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4003     <xsd:attribute name="insertRow" type="xsd:boolean" use="optional" default="false"/>
4004     <xsd:attribute name="insertRowShift" type="xsd:boolean" use="optional" default="false"/>
4005     <xsd:attribute name="totalsRowCount" type="xsd:unsignedInt" use="optional" default="0"/>
4006     <xsd:attribute name="totalsRowShown" type="xsd:boolean" use="optional" default="true"/>
4007     <xsd:attribute name="published" type="xsd:boolean" use="optional" default="false"/>
4008     <xsd:attribute name="headerRowDxfId" type="ST DxfId" use="optional"/>
4009     <xsd:attribute name="dataDxfId" type="ST DxfId" use="optional"/>
4010     <xsd:attribute name="totalsRowDxfId" type="ST DxfId" use="optional"/>
4011     <xsd:attribute name="headerRowBorderDxfId" type="ST DxfId" use="optional"/>
4012     <xsd:attribute name="tableBorderDxfId" type="ST DxfId" use="optional"/>
4013     <xsd:attribute name="totalsRowBorderDxfId" type="ST DxfId" use="optional"/>
4014     <xsd:attribute name="headerRowCellStyle" type="s:ST Xstring" use="optional"/>
4015     <xsd:attribute name="dataCellStyle" type="s:ST Xstring" use="optional"/>
4016     <xsd:attribute name="totalsRowCellStyle" type="s:ST Xstring" use="optional"/>
4017     <xsd:attribute name="connectionId" type="xsd:unsignedInt" use="optional"/>
4018 </xsd:complexType>
4019 <xsd:simpleType name="ST_TableType">
4020     <xsd:restriction base="xsd:string">
4021         <xsd:enumeration value="worksheet"/>
4022         <xsd:enumeration value="xml"/>
4023         <xsd:enumeration value="queryTable"/>
4024     </xsd:restriction>
4025 </xsd:simpleType>
4026 <xsd:complexType name="CT_TableStyleInfo">
4027     <xsd:attribute name="name" type="s:ST Xstring" use="optional"/>
4028     <xsd:attribute name="showFirstColumn" type="xsd:boolean" use="optional"/>
4029     <xsd:attribute name="showLastColumn" type="xsd:boolean" use="optional"/>
4030     <xsd:attribute name="showRowStripes" type="xsd:boolean" use="optional"/>
4031     <xsd:attribute name="showColumnStripes" type="xsd:boolean" use="optional"/>
4032 </xsd:complexType>
4033 <xsd:complexType name="CT_TableColumns">
4034     <xsd:sequence>
4035         <xsd:element name="tableColumn" type="CT_TableColumn" minOccurs="1"
4036             maxOccurs="unbounded"/>
4037     </xsd:sequence>
4038     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
4039 </xsd:complexType>
4040 <xsd:complexType name="CT_TableColumn">
4041     <xsd:sequence>
4042         <xsd:element name="calculatedColumnFormula" type="CT_TableFormula" minOccurs="0"
4043             maxOccurs="1"/>
4044         <xsd:element name="totalsRowFormula" type="CT_TableFormula" minOccurs="0" maxOccurs="1"/>
4045         <xsd:element name="xmlColumnPr" type="CT XmlColumnPr" minOccurs="0" maxOccurs="1"/>
4046         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
4047     </xsd:sequence>
4048     <xsd:attribute name="id" type="xsd:unsignedInt" use="required"/>
4049     <xsd:attribute name="uniqueName" type="s:ST Xstring" use="optional"/>
4050     <xsd:attribute name="name" type="s:ST Xstring" use="required"/>
4051     <xsd:attribute name="totalsRowFunction" type="ST TotalsRowFunction" use="optional"
4052         default="none"/>
4053     <xsd:attribute name="totalsRowLabel" type="s:ST Xstring" use="optional"/>
4054     <xsd:attribute name="queryTableFieldId" type="xsd:unsignedInt" use="optional"/>
4055     <xsd:attribute name="headerRowDxfId" type="ST DxfId" use="optional"/>

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4056     <xsd:attribute name="dataDxfId" type="ST DxfId" use="optional"/>
4057     <xsd:attribute name="totalsRowDxfId" type="ST DxfId" use="optional"/>
4058     <xsd:attribute name="headerRowCellStyle" type="s:ST Xstring" use="optional"/>
4059     <xsd:attribute name="dataCellStyle" type="s:ST Xstring" use="optional"/>
4060     <xsd:attribute name="totalsRowCellStyle" type="s:ST Xstring" use="optional"/>
4061 </xsd:complexType>
4062 <xsd:complexType name="CT_TableFormula">
4063     <xsd:simpleContent>
4064         <xsd:extension base="ST Formula">
4065             <xsd:attribute name="array" type="xsd:boolean" default="false"/>
4066         </xsd:extension>
4067     </xsd:simpleContent>
4068 </xsd:complexType>
4069 <xsd:simpleType name="ST_TotalsRowFunction">
4070     <xsd:restriction base="xsd:string">
4071         <xsd:enumeration value="none"/>
4072         <xsd:enumeration value="sum"/>
4073         <xsd:enumeration value="min"/>
4074         <xsd:enumeration value="max"/>
4075         <xsd:enumeration value="average"/>
4076         <xsd:enumeration value="count"/>
4077         <xsd:enumeration value="countNums"/>
4078         <xsd:enumeration value="stdDev"/>
4079         <xsd:enumeration value="var"/>
4080         <xsd:enumeration value="custom"/>
4081     </xsd:restriction>
4082 </xsd:simpleType>
4083 <xsd:complexType name="CT_XmlColumnPr">
4084     <xsd:sequence>
4085         <xsd:element name="extLst" type="CT ExtensionList" minOccurs="0" maxOccurs="1"/>
4086     </xsd:sequence>
4087     <xsd:attribute name="mapId" type="xsd:unsignedInt" use="required"/>
4088     <xsd:attribute name="xpath" type="s:ST Xstring" use="required"/>
4089     <xsd:attribute name="denormalized" type="xsd:boolean" use="optional" default="false"/>
4090     <xsd:attribute name="xmlDataType" type="ST XmlDataType" use="required"/>
4091 </xsd:complexType>
4092 <xsd:simpleType name="ST_XmlDataType">
4093     <xsd:restriction base="xsd:string"/>
4094 </xsd:simpleType>
4095 <xsd:element name="volTypes" type="CT VolTypes"/>
4096 <xsd:complexType name="CT_VolTypes">
4097     <xsd:sequence>
4098         <xsd:element name="volType" type="CT VolType" minOccurs="1" maxOccurs="unbounded"/>
4099         <xsd:element name="extLst" minOccurs="0" type="CT ExtensionList"/>
4100     </xsd:sequence>
4101 </xsd:complexType>
4102 <xsd:complexType name="CT_VolType">
4103     <xsd:sequence>
4104         <xsd:element name="main" type="CT VolMain" minOccurs="1" maxOccurs="unbounded"/>
4105     </xsd:sequence>
4106     <xsd:attribute name="type" type="ST VolDepType" use="required"/>
4107 </xsd:complexType>
4108 <xsd:complexType name="CT_VolMain">

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4109     <xsd:sequence>
4110         <xsd:element name="tp" type="CT_VolTopic" minOccurs="1" maxOccurs="unbounded"/>
4111     </xsd:sequence>
4112     <xsd:attribute name="first" type="s:ST_Xstring" use="required"/>
4113 </xsd:complexType>
4114 <xsd:complexType name="CT_VolTopic">
4115     <xsd:sequence>
4116         <xsd:element name="v" type="s:ST_Xstring" minOccurs="1" maxOccurs="1"/>
4117         <xsd:element name="stp" type="s:ST_Xstring" minOccurs="0" maxOccurs="unbounded"/>
4118         <xsd:element name="tr" type="CT_VolTopicRef" minOccurs="1" maxOccurs="unbounded"/>
4119     </xsd:sequence>
4120     <xsd:attribute name="t" type="ST_VolValueType" use="optional" default="n"/>
4121 </xsd:complexType>
4122 <xsd:complexType name="CT_VolTopicRef">
4123     <xsd:attribute name="r" type="ST_CellRef" use="required"/>
4124     <xsd:attribute name="s" type="xsd:unsignedInt" use="required"/>
4125 </xsd:complexType>
4126 <xsd:simpleType name="ST_VolDepType">
4127     <xsd:restriction base="xsd:string">
4128         <xsd:enumeration value="realTimeData"/>
4129         <xsd:enumeration value="olapFunctions"/>
4130     </xsd:restriction>
4131 </xsd:simpleType>
4132 <xsd:simpleType name="ST_VolValueType">
4133     <xsd:restriction base="xsd:string">
4134         <xsd:enumeration value="b"/>
4135         <xsd:enumeration value="n"/>
4136         <xsd:enumeration value="e"/>
4137         <xsd:enumeration value="s"/>
4138     </xsd:restriction>
4139 </xsd:simpleType>
4140 <xsd:element name="workbook" type="CT_Workbook"/>
4141 <xsd:complexType name="CT_Workbook">
4142     <xsd:sequence>
4143         <xsd:element name="fileVersion" type="CT_FileVersion" minOccurs="0" maxOccurs="1"/>
4144         <xsd:element name="fileSharing" type="CT_FileSharing" minOccurs="0" maxOccurs="1"/>
4145         <xsd:element name="workbookPr" type="CT_WorkbookPr" minOccurs="0" maxOccurs="1"/>
4146         <xsd:element name="workbookProtection" type="CT_WorkbookProtection" minOccurs="0"
4147             maxOccurs="1"/>
4148         <xsd:element name="bookViews" type="CT_BookViews" minOccurs="0" maxOccurs="1"/>
4149         <xsd:element name="sheets" type="CT_Sheets" minOccurs="1" maxOccurs="1"/>
4150         <xsd:element name="functionGroups" type="CT_FunctionGroups" minOccurs="0" maxOccurs="1"/>
4151         <xsd:element name="externalReferences" type="CT_ExternalReferences" minOccurs="0"
4152             maxOccurs="1"/>
4153         <xsd:element name="definedNames" type="CT_DefinedNames" minOccurs="0" maxOccurs="1"/>
4154         <xsd:element name="calcPr" type="CT_CalcPr" minOccurs="0" maxOccurs="1"/>
4155         <xsd:element name="oleSize" type="CT_OleSize" minOccurs="0" maxOccurs="1"/>
4156         <xsd:element name="customWorkbookViews" type="CT_CustomWorkbookViews" minOccurs="0"
4157             maxOccurs="1"/>
4158         <xsd:element name="pivotCaches" type="CT_PivotCaches" minOccurs="0" maxOccurs="1"/>
4159         <xsd:element name="smartTagPr" type="CT_SmartTagPr" minOccurs="0" maxOccurs="1"/>
4160         <xsd:element name="smartTagTypes" type="CT_SmartTagTypes" minOccurs="0" maxOccurs="1"/>
4161         <xsd:element name="webPublishing" type="CT_WebPublishing" minOccurs="0" maxOccurs="1"/>

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4162     <xsd:element name="fileRecoveryPr" type="CT_FileRecoveryPr" minOccurs="0"
4163         maxOccurs="unbounded"/>
4164     <xsd:element name="webPublishObjects" type="CT_WebPublishObjects" minOccurs="0"
4165         maxOccurs="1"/>
4166     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
4167 </xsd:sequence>
4168 <xsd:attribute name="conformance" type="s:ST_ConformanceClass"/>
4169 </xsd:complexType>
4170 <xsd:complexType name="CT_FileVersion">
4171     <xsd:attribute name="appName" type="xsd:string" use="optional"/>
4172     <xsd:attribute name="lastEdited" type="xsd:string" use="optional"/>
4173     <xsd:attribute name="lowestEdited" type="xsd:string" use="optional"/>
4174     <xsd:attribute name="rupBuild" type="xsd:string" use="optional"/>
4175     <xsd:attribute name="codeName" type="s:ST_Guid" use="optional"/>
4176 </xsd:complexType>
4177 <xsd:complexType name="CT_BookViews">
4178     <xsd:sequence>
4179         <xsd:element name="workbookView" type="CT_BookView" minOccurs="1" maxOccurs="unbounded"/>
4180     </xsd:sequence>
4181 </xsd:complexType>
4182 <xsd:complexType name="CT_BookView">
4183     <xsd:sequence>
4184         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
4185     </xsd:sequence>
4186     <xsd:attribute name="visibility" type="ST_Visibility" use="optional" default="visible"/>
4187     <xsd:attribute name="minimized" type="xsd:boolean" use="optional" default="false"/>
4188     <xsd:attribute name="showHorizontalScroll" type="xsd:boolean" use="optional" default="true"/>
4189     <xsd:attribute name="showVerticalScroll" type="xsd:boolean" use="optional" default="true"/>
4190     <xsd:attribute name="showSheetTabs" type="xsd:boolean" use="optional" default="true"/>
4191     <xsd:attribute name="xWindow" type="xsd:int" use="optional"/>
4192     <xsd:attribute name="yWindow" type="xsd:int" use="optional"/>
4193     <xsd:attribute name="windowWidth" type="xsd:unsignedInt" use="optional"/>
4194     <xsd:attribute name="windowHeight" type="xsd:unsignedInt" use="optional"/>
4195     <xsd:attribute name="tabRatio" type="xsd:unsignedInt" use="optional" default="600"/>
4196     <xsd:attribute name="firstSheet" type="xsd:unsignedInt" use="optional" default="0"/>
4197     <xsd:attribute name="activeTab" type="xsd:unsignedInt" use="optional" default="0"/>
4198     <xsd:attribute name="autoFilterDateGrouping" type="xsd:boolean" use="optional"
4199         default="true"/>
4200 </xsd:complexType>
4201 <xsd:simpleType name="ST_Visibility">
4202     <xsd:restriction base="xsd:string">
4203         <xsd:enumeration value="visible"/>
4204         <xsd:enumeration value="hidden"/>
4205         <xsd:enumeration value="veryHidden"/>
4206     </xsd:restriction>
4207 </xsd:simpleType>
4208 <xsd:complexType name="CT_CustomWorkbookViews">
4209     <xsd:sequence>
4210         <xsd:element name="customWorkbookView" minOccurs="1" maxOccurs="unbounded"
4211             type="CT_CustomWorkbookView"/>
4212     </xsd:sequence>
4213 </xsd:complexType>
4214 <xsd:complexType name="CT_CustomWorkbookView">

```

```

4215     <xsd:sequence>
4216         <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
4217     </xsd:sequence>
4218     <xsd:attribute name="name" type="s:ST_Xstring" use="required"/>
4219     <xsd:attribute name="guid" type="s:ST_Guid" use="required"/>
4220     <xsd:attribute name="autoUpdate" type="xsd:boolean" use="optional" default="false"/>
4221     <xsd:attribute name="mergeInterval" type="xsd:unsignedInt" use="optional"/>
4222     <xsd:attribute name="changesSavedWin" type="xsd:boolean" use="optional" default="false"/>
4223     <xsd:attribute name="onlySync" type="xsd:boolean" use="optional" default="false"/>
4224     <xsd:attribute name="personalView" type="xsd:boolean" use="optional" default="false"/>
4225     <xsd:attribute name="includePrintSettings" type="xsd:boolean" use="optional" default="true"/>
4226     <xsd:attribute name="includeHiddenRowCol" type="xsd:boolean" use="optional" default="true"/>
4227     <xsd:attribute name="maximized" type="xsd:boolean" use="optional" default="false"/>
4228     <xsd:attribute name="minimized" type="xsd:boolean" use="optional" default="false"/>
4229     <xsd:attribute name="showHorizontalScroll" type="xsd:boolean" use="optional" default="true"/>
4230     <xsd:attribute name="showVerticalScroll" type="xsd:boolean" use="optional" default="true"/>
4231     <xsd:attribute name="showSheetTabs" type="xsd:boolean" use="optional" default="true"/>
4232     <xsd:attribute name="xWindow" type="xsd:int" use="optional" default="0"/>
4233     <xsd:attribute name="yWindow" type="xsd:int" use="optional" default="0"/>
4234     <xsd:attribute name="windowWidth" type="xsd:unsignedInt" use="required"/>
4235     <xsd:attribute name="windowHeight" type="xsd:unsignedInt" use="required"/>
4236     <xsd:attribute name="tabRatio" type="xsd:unsignedInt" use="optional" default="600"/>
4237     <xsd:attribute name="activeSheetId" type="xsd:unsignedInt" use="required"/>
4238     <xsd:attribute name="showFormulaBar" type="xsd:boolean" use="optional" default="true"/>
4239     <xsd:attribute name="showStatusbar" type="xsd:boolean" use="optional" default="true"/>
4240     <xsd:attribute name="showComments" type="ST_Comments" use="optional" default="commIndicator"/>
4241     <xsd:attribute name="showObjects" type="ST_Objects" use="optional" default="all"/>
4242 </xsd:complexType>
4243 <xsd:simpleType name="ST_Comments">
4244     <xsd:restriction base="xsd:string">
4245         <xsd:enumeration value="commNone"/>
4246         <xsd:enumeration value="commIndicator"/>
4247         <xsd:enumeration value="commIndAndComment"/>
4248     </xsd:restriction>
4249 </xsd:simpleType>
4250 <xsd:simpleType name="ST_Objects">
4251     <xsd:restriction base="xsd:string">
4252         <xsd:enumeration value="all"/>
4253         <xsd:enumeration value="placeholders"/>
4254         <xsd:enumeration value="none"/>
4255     </xsd:restriction>
4256 </xsd:simpleType>
4257 <xsd:complexType name="CT_Sheets">
4258     <xsd:sequence>
4259         <xsd:element name="sheet" type="CT_Sheet" minOccurs="1" maxOccurs="unbounded"/>
4260     </xsd:sequence>
4261 </xsd:complexType>
4262 <xsd:complexType name="CT_Sheet">
4263     <xsd:attribute name="name" type="s:ST_Xstring" use="required"/>
4264     <xsd:attribute name="sheetId" type="xsd:unsignedInt" use="required"/>
4265     <xsd:attribute name="state" type="ST_SheetState" use="optional" default="visible"/>
4266     <xsd:attribute ref="r:id" use="required"/>
4267 </xsd:complexType>

```



```

4268 <xsd:simpleType name="ST_SheetState">
4269   <xsd:restriction base="xsd:string">
4270     <xsd:enumeration value="visible"/>
4271     <xsd:enumeration value="hidden"/>
4272     <xsd:enumeration value="veryHidden"/>
4273   </xsd:restriction>
4274 </xsd:simpleType>
4275 <xsd:complexType name="CT_WorkbookPr">
4276   <xsd:attribute name="date1904" type="xsd:boolean" use="optional" default="false"/>
4277   <xsd:attribute name="dateCompatibility" type="xsd:boolean" use="optional" default="true"/>
4278   <xsd:attribute name="showObjects" type="ST_Objects" use="optional" default="all"/>
4279   <xsd:attribute name="showBorderUnselectedTables" type="xsd:boolean" use="optional"
4280     default="true"/>
4281   <xsd:attribute name="filterPrivacy" type="xsd:boolean" use="optional" default="false"/>
4282   <xsd:attribute name="promptedSolutions" type="xsd:boolean" use="optional" default="false"/>
4283   <xsd:attribute name="showInkAnnotation" type="xsd:boolean" use="optional" default="true"/>
4284   <xsd:attribute name="backupFile" type="xsd:boolean" use="optional" default="false"/>
4285   <xsd:attribute name="saveExternalLinkValues" type="xsd:boolean" use="optional"
4286     default="true"/>
4287   <xsd:attribute name="updateLinks" type="ST_UpdateLinks" use="optional" default="userSet"/>
4288   <xsd:attribute name="codeName" type="xsd:string" use="optional"/>
4289   <xsd:attribute name="hidePivotFieldList" type="xsd:boolean" use="optional" default="false"/>
4290   <xsd:attribute name="showPivotChartFilter" type="xsd:boolean" default="false"/>
4291   <xsd:attribute name="allowRefreshQuery" type="xsd:boolean" use="optional" default="false"/>
4292   <xsd:attribute name="publishItems" type="xsd:boolean" use="optional" default="false"/>
4293   <xsd:attribute name="checkCompatibility" type="xsd:boolean" use="optional" default="false"/>
4294   <xsd:attribute name="autoCompressPictures" type="xsd:boolean" use="optional" default="true"/>
4295   <xsd:attribute name="refreshAllConnections" type="xsd:boolean" use="optional"
4296     default="false"/>
4297   <xsd:attribute name="defaultThemeVersion" type="xsd:unsignedInt" use="optional"/>
4298 </xsd:complexType>
4299 <xsd:simpleType name="ST_UpdateLinks">
4300   <xsd:restriction base="xsd:string">
4301     <xsd:enumeration value="userSet"/>
4302     <xsd:enumeration value="never"/>
4303     <xsd:enumeration value="always"/>
4304   </xsd:restriction>
4305 </xsd:simpleType>
4306 <xsd:complexType name="CT_SmartTagPr">
4307   <xsd:attribute name="embed" type="xsd:boolean" use="optional" default="false"/>
4308   <xsd:attribute name="show" type="ST_SmartTagShow" use="optional" default="all"/>
4309 </xsd:complexType>
4310 <xsd:simpleType name="ST_SmartTagShow">
4311   <xsd:restriction base="xsd:string">
4312     <xsd:enumeration value="all"/>
4313     <xsd:enumeration value="none"/>
4314     <xsd:enumeration value="noIndicator"/>
4315   </xsd:restriction>
4316 </xsd:simpleType>
4317 <xsd:complexType name="CT_SmartTagTypes">
4318   <xsd:sequence>
4319     <xsd:element name="smartTagType" type="CT_SmartTagType" minOccurs="0"
4320       maxOccurs="unbounded"/>

```

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4321     </xsd:sequence>
4322 </xsd:complexType>
4323 <xsd:complexType name="CT_SmartTagType">
4324     <xsd:attribute name="namespaceUri" type="s:ST_Xstring" use="optional"/>
4325     <xsd:attribute name="name" type="s:ST_Xstring" use="optional"/>
4326     <xsd:attribute name="url" type="s:ST_Xstring" use="optional"/>
4327 </xsd:complexType>
4328 <xsd:complexType name="CT_FileRecoveryPr">
4329     <xsd:attribute name="autoRecover" type="xsd:boolean" use="optional" default="true"/>
4330     <xsd:attribute name="crashSave" type="xsd:boolean" use="optional" default="false"/>
4331     <xsd:attribute name="dataExtractLoad" type="xsd:boolean" use="optional" default="false"/>
4332     <xsd:attribute name="repairLoad" type="xsd:boolean" use="optional" default="false"/>
4333 </xsd:complexType>
4334 <xsd:complexType name="CT_CalcPr">
4335     <xsd:attribute name="calcId" type="xsd:unsignedInt"/>
4336     <xsd:attribute name="calcMode" type="ST_CalcMode" use="optional" default="auto"/>
4337     <xsd:attribute name="fullCalcOnLoad" type="xsd:boolean" use="optional" default="false"/>
4338     <xsd:attribute name="refMode" type="ST_RefMode" use="optional" default="A1"/>
4339     <xsd:attribute name="iterate" type="xsd:boolean" use="optional" default="false"/>
4340     <xsd:attribute name="iterateCount" type="xsd:unsignedInt" use="optional" default="100"/>
4341     <xsd:attribute name="iterateDelta" type="xsd:double" use="optional" default="0.001"/>
4342     <xsd:attribute name="fullPrecision" type="xsd:boolean" use="optional" default="true"/>
4343     <xsd:attribute name="calcCompleted" type="xsd:boolean" use="optional" default="true"/>
4344     <xsd:attribute name="calcOnSave" type="xsd:boolean" use="optional" default="true"/>
4345     <xsd:attribute name="concurrentCalc" type="xsd:boolean" use="optional" default="true"/>
4346     <xsd:attribute name="concurrentManualCount" type="xsd:unsignedInt" use="optional"/>
4347     <xsd:attribute name="forceFullCalc" type="xsd:boolean" use="optional"/>
4348 </xsd:complexType>
4349 <xsd:simpleType name="ST_CalcMode">
4350     <xsd:restriction base="xsd:string">
4351         <xsd:enumeration value="manual"/>
4352         <xsd:enumeration value="auto"/>
4353         <xsd:enumeration value="autoNoTable"/>
4354     </xsd:restriction>
4355 </xsd:simpleType>
4356 <xsd:simpleType name="ST_RefMode">
4357     <xsd:restriction base="xsd:string">
4358         <xsd:enumeration value="A1"/>
4359         <xsd:enumeration value="R1C1"/>
4360     </xsd:restriction>
4361 </xsd:simpleType>
4362 <xsd:complexType name="CT_DefinedNames">
4363     <xsd:sequence>
4364         <xsd:element name="definedName" type="CT_DefinedName" minOccurs="0"
4365             maxOccurs="unbounded"/>
4366     </xsd:sequence>
4367 </xsd:complexType>
4368 <xsd:complexType name="CT_DefinedName">
4369     <xsd:simpleContent>
4370         <xsd:extension base="ST_Formula">
4371             <xsd:attribute name="name" type="s:ST_Xstring" use="required"/>
4372             <xsd:attribute name="comment" type="s:ST_Xstring" use="optional"/>
4373             <xsd:attribute name="customMenu" type="s:ST_Xstring" use="optional"/>

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4374     <xsd:attribute name="description" type="s:ST Xstring" use="optional"/>
4375     <xsd:attribute name="help" type="s:ST Xstring" use="optional"/>
4376     <xsd:attribute name="statusBar" type="s:ST Xstring" use="optional"/>
4377     <xsd:attribute name="localSheetId" type="xsd:unsignedInt" use="optional"/>
4378     <xsd:attribute name="hidden" type="xsd:boolean" use="optional" default="false"/>
4379     <xsd:attribute name="function" type="xsd:boolean" use="optional" default="false"/>
4380     <xsd:attribute name="vbProcedure" type="xsd:boolean" use="optional" default="false"/>
4381     <xsd:attribute name="xlm" type="xsd:boolean" use="optional" default="false"/>
4382     <xsd:attribute name="functionGroupId" type="xsd:unsignedInt" use="optional"/>
4383     <xsd:attribute name="shortcutKey" type="s:ST Xstring" use="optional"/>
4384     <xsd:attribute name="publishToServer" type="xsd:boolean" use="optional"
4385         default="false"/>
4386     <xsd:attribute name="workbookParameter" type="xsd:boolean" use="optional"
4387         default="false"/>
4388     </xsd:extension>
4389 </xsd:simpleContent>
4390 </xsd:complexType>
4391 <xsd:complexType name="CT_ExternalReferences">
4392     <xsd:sequence>
4393         <xsd:element name="externalReference" type="CT_ExternalReference" minOccurs="1"
4394             maxOccurs="unbounded"/>
4395     </xsd:sequence>
4396 </xsd:complexType>
4397 <xsd:complexType name="CT_ExternalReference">
4398     <xsd:attribute ref="r:id" use="required"/>
4399 </xsd:complexType>
4400 <xsd:complexType name="CT_SheetBackgroundPicture">
4401     <xsd:attribute ref="r:id" use="required"/>
4402 </xsd:complexType>
4403 <xsd:complexType name="CT_PivotCaches">
4404     <xsd:sequence>
4405         <xsd:element name="pivotCache" type="CT_PivotCache" minOccurs="1" maxOccurs="unbounded"/>
4406     </xsd:sequence>
4407 </xsd:complexType>
4408 <xsd:complexType name="CT_PivotCache">
4409     <xsd:attribute name="cacheId" type="xsd:unsignedInt" use="required"/>
4410     <xsd:attribute ref="r:id" use="required"/>
4411 </xsd:complexType>
4412 <xsd:complexType name="CT_FileSharing">
4413     <xsd:attribute name="readOnlyRecommended" type="xsd:boolean" use="optional" default="false"/>
4414     <xsd:attribute name="userName" type="s:ST Xstring"/>
4415     <xsd:attribute name="reservationPassword" type="ST UnsignedShortHex"/>
4416     <xsd:attribute name="algorithmName" type="s:ST Xstring" use="optional"/>
4417     <xsd:attribute name="hashValue" type="xsd:base64Binary" use="optional"/>
4418     <xsd:attribute name="saltValue" type="xsd:base64Binary" use="optional"/>
4419     <xsd:attribute name="spinCount" type="xsd:unsignedInt" use="optional"/>
4420 </xsd:complexType>
4421 <xsd:complexType name="CT_OleSize">
4422     <xsd:attribute name="ref" type="ST Ref" use="required"/>
4423 </xsd:complexType>
4424 <xsd:complexType name="CT_WorkbookProtection">
4425     <xsd:attribute name="workbookPassword" type="ST UnsignedShortHex" use="optional"/>
4426     <xsd:attribute name="workbookPasswordCharacterSet" type="xsd:string" use="optional"/>

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4427 <xsd:attribute name="revisionsPassword" type="ST UnsignedShortHex" use="optional"/>
4428 <xsd:attribute name="revisionsPasswordCharacterSet" type="xsd:string" use="optional"/>
4429 <xsd:attribute name="lockStructure" type="xsd:boolean" use="optional" default="false"/>
4430 <xsd:attribute name="lockWindows" type="xsd:boolean" use="optional" default="false"/>
4431 <xsd:attribute name="lockRevision" type="xsd:boolean" use="optional" default="false"/>
4432 <xsd:attribute name="revisionsAlgorithmName" type="s:ST Xstring" use="optional"/>
4433 <xsd:attribute name="revisionsHashValue" type="xsd:base64Binary" use="optional"/>
4434 <xsd:attribute name="revisionsSaltValue" type="xsd:base64Binary" use="optional"/>
4435 <xsd:attribute name="revisionsSpinCount" type="xsd:unsignedInt" use="optional"/>
4436 <xsd:attribute name="workbookAlgorithmName" type="s:ST Xstring" use="optional"/>
4437 <xsd:attribute name="workbookHashValue" type="xsd:base64Binary" use="optional"/>
4438 <xsd:attribute name="workbookSaltValue" type="xsd:base64Binary" use="optional"/>
4439 <xsd:attribute name="workbookSpinCount" type="xsd:unsignedInt" use="optional"/>
4440 </xsd:complexType>
4441 <xsd:complexType name="CT_WebPublishing">
4442 <xsd:attribute name="css" type="xsd:boolean" use="optional" default="true"/>
4443 <xsd:attribute name="thicket" type="xsd:boolean" use="optional" default="true"/>
4444 <xsd:attribute name="longFileNames" type="xsd:boolean" use="optional" default="true"/>
4445 <xsd:attribute name="vml" type="xsd:boolean" use="optional" default="false"/>
4446 <xsd:attribute name="allowPng" type="xsd:boolean" use="optional" default="false"/>
4447 <xsd:attribute name="targetScreenSize" type="ST TargetScreenSize" use="optional"
4448     default="800x600"/>
4449 <xsd:attribute name="dpi" type="xsd:unsignedInt" use="optional" default="96"/>
4450 <xsd:attribute name="codePage" type="xsd:unsignedInt" use="optional"/>
4451 <xsd:attribute name="characterSet" type="xsd:string" use="optional"/>
4452 </xsd:complexType>
4453 <xsd:simpleType name="ST_TargetScreenSize">
4454 <xsd:restriction base="xsd:string">
4455 <xsd:enumeration value="544x376"/>
4456 <xsd:enumeration value="640x480"/>
4457 <xsd:enumeration value="720x512"/>
4458 <xsd:enumeration value="800x600"/>
4459 <xsd:enumeration value="1024x768"/>
4460 <xsd:enumeration value="1152x882"/>
4461 <xsd:enumeration value="1152x900"/>
4462 <xsd:enumeration value="1280x1024"/>
4463 <xsd:enumeration value="1600x1200"/>
4464 <xsd:enumeration value="1800x1440"/>
4465 <xsd:enumeration value="1920x1200"/>
4466 </xsd:restriction>
4467 </xsd:simpleType>
4468 <xsd:complexType name="CT_FunctionGroups">
4469 <xsd:sequence maxOccurs="unbounded">
4470 <xsd:element name="functionGroup" type="CT_FunctionGroup" minOccurs="0"/>
4471 </xsd:sequence>
4472 <xsd:attribute name="builtInGroupCount" type="xsd:unsignedInt" default="16" use="optional"/>
4473 </xsd:complexType>
4474 <xsd:complexType name="CT_FunctionGroup">
4475 <xsd:attribute name="name" type="s:ST Xstring"/>
4476 </xsd:complexType>
4477 <xsd:complexType name="CT_WebPublishObjects">
4478 <xsd:sequence>

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4479     <xsd:element name="webPublishObject" type="CT_WebPublishObject" minOccurs="1"
4480         maxOccurs="unbounded"/>
4481     </xsd:sequence>
4482     <xsd:attribute name="count" type="xsd:unsignedInt" use="optional"/>
4483 </xsd:complexType>
4484 <xsd:complexType name="CT_WebPublishObject">
4485     <xsd:attribute name="id" type="xsd:unsignedInt" use="required"/>
4486     <xsd:attribute name="divId" type="s:ST_Xstring" use="required"/>
4487     <xsd:attribute name="sourceObject" type="s:ST_Xstring" use="optional"/>
4488     <xsd:attribute name="destinationFile" type="s:ST_Xstring" use="required"/>
4489     <xsd:attribute name="title" type="s:ST_Xstring" use="optional"/>
4490     <xsd:attribute name="autoRepublish" type="xsd:boolean" use="optional" default="false"/>
4491 </xsd:complexType>
4492 </xsd:schema>

```

A.3 PresentationML

This schema is available in the file pml.xsd.

```

1 <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
2   xmlns="http://schemas.openxmlformats.org/presentationml/2006/main"
3   xmlns:p="http://schemas.openxmlformats.org/presentationml/2006/main"
4   xmlns:a="http://schemas.openxmlformats.org/drawingml/2006/main"
5   xmlns:r="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
6   xmlns:s="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
7   elementFormDefault="qualified"
8   targetNamespace="http://schemas.openxmlformats.org/presentationml/2006/main">
9   <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
10     schemaLocation="shared-relationshipReference.xsd"/>
11   <xsd:import namespace="http://schemas.openxmlformats.org/drawingml/2006/main" schemaLocation="dml-
12     main.xsd"/>
13   <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
14     schemaLocation="shared-commonSimpleTypes.xsd"/>
15   <xsd:simpleType name="ST_TransitionSideDirectionType">
16     <xsd:restriction base="xsd:token">
17       <xsd:enumeration value="l"/>
18       <xsd:enumeration value="u"/>
19       <xsd:enumeration value="r"/>
20       <xsd:enumeration value="d"/>
21     </xsd:restriction>
22   </xsd:simpleType>
23   <xsd:simpleType name="ST_TransitionCornerDirectionType">
24     <xsd:restriction base="xsd:token">
25       <xsd:enumeration value="lu"/>
26       <xsd:enumeration value="ru"/>
27       <xsd:enumeration value="ld"/>
28       <xsd:enumeration value="rd"/>
29     </xsd:restriction>
30   </xsd:simpleType>
31   <xsd:simpleType name="ST_TransitionInOutDirectionType">
32     <xsd:restriction base="xsd:token">
33       <xsd:enumeration value="out"/>
34       <xsd:enumeration value="in"/>

```

```

35     </xsd:restriction>
36 </xsd:simpleType>
37 <xsd:complexType name="CT_SideDirectionTransition">
38     <xsd:attribute name="dir" type="ST_TransitionSideDirectionType" use="optional" default="1"/>
39 </xsd:complexType>
40 <xsd:complexType name="CT_CornerDirectionTransition">
41     <xsd:attribute name="dir" type="ST_TransitionCornerDirectionType" use="optional"
42         default="lu"/>
43 </xsd:complexType>
44 <xsd:simpleType name="ST_TransitionEightDirectionType">
45     <xsd:union memberTypes="ST_TransitionSideDirectionType ST_TransitionCornerDirectionType"/>
46 </xsd:simpleType>
47 <xsd:complexType name="CT_EightDirectionTransition">
48     <xsd:attribute name="dir" type="ST_TransitionEightDirectionType" use="optional" default="1"/>
49 </xsd:complexType>
50 <xsd:complexType name="CT_OrientationTransition">
51     <xsd:attribute name="dir" type="ST_Direction" use="optional" default="horz"/>
52 </xsd:complexType>
53 <xsd:complexType name="CT_InOutTransition">
54     <xsd:attribute name="dir" type="ST_TransitionInOutDirectionType" use="optional"
55         default="out"/>
56 </xsd:complexType>
57 <xsd:complexType name="CT_OptionalBlackTransition">
58     <xsd:attribute name="thruBlk" type="xsd:boolean" use="optional" default="false"/>
59 </xsd:complexType>
60 <xsd:complexType name="CT_SplitTransition">
61     <xsd:attribute name="orient" type="ST_Direction" use="optional" default="horz"/>
62     <xsd:attribute name="dir" type="ST_TransitionInOutDirectionType" use="optional"
63         default="out"/>
64 </xsd:complexType>
65 <xsd:complexType name="CT_WheelTransition">
66     <xsd:attribute name="spokes" type="xsd:unsignedInt" use="optional" default="4"/>
67 </xsd:complexType>
68 <xsd:complexType name="CT_TransitionStartSoundAction">
69     <xsd:sequence>
70         <xsd:element minOccurs="1" maxOccurs="1" name="snd" type="a:CT_EmbeddedWAVAudioFile"/>
71     </xsd:sequence>
72     <xsd:attribute name="loop" type="xsd:boolean" use="optional" default="false"/>
73 </xsd:complexType>
74 <xsd:complexType name="CT_TransitionSoundAction">
75     <xsd:choice minOccurs="1" maxOccurs="1">
76         <xsd:element name="stSnd" type="CT_TransitionStartSoundAction"/>
77         <xsd:element name="endSnd" type="CT_Empty"/>
78     </xsd:choice>
79 </xsd:complexType>
80 <xsd:simpleType name="ST_TransitionSpeed">
81     <xsd:restriction base="xsd:token">
82         <xsd:enumeration value="slow"/>
83         <xsd:enumeration value="med"/>
84         <xsd:enumeration value="fast"/>
85     </xsd:restriction>
86 </xsd:simpleType>
87 <xsd:complexType name="CT_SlideTransition">

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88     <xsd:sequence>
89         <xsd:choice minOccurs="0" maxOccurs="1">
90             <xsd:element name="blinds" type="CT_OrientationTransition"/>
91             <xsd:element name="checker" type="CT_OrientationTransition"/>
92             <xsd:element name="circle" type="CT_Empty"/>
93             <xsd:element name="dissolve" type="CT_Empty"/>
94             <xsd:element name="comb" type="CT_OrientationTransition"/>
95             <xsd:element name="cover" type="CT_EightDirectionTransition"/>
96             <xsd:element name="cut" type="CT_OptionalBlackTransition"/>
97             <xsd:element name="diamond" type="CT_Empty"/>
98             <xsd:element name="fade" type="CT_OptionalBlackTransition"/>
99             <xsd:element name="newsflash" type="CT_Empty"/>
100            <xsd:element name="plus" type="CT_Empty"/>
101            <xsd:element name="pull" type="CT_EightDirectionTransition"/>
102            <xsd:element name="push" type="CT_SideDirectionTransition"/>
103            <xsd:element name="random" type="CT_Empty"/>
104            <xsd:element name="randomBar" type="CT_OrientationTransition"/>
105            <xsd:element name="split" type="CT_SplitTransition"/>
106            <xsd:element name="strips" type="CT_CornerDirectionTransition"/>
107            <xsd:element name="wedge" type="CT_Empty"/>
108            <xsd:element name="wheel" type="CT_WheelTransition"/>
109            <xsd:element name="wipe" type="CT_SideDirectionTransition"/>
110            <xsd:element name="zoom" type="CT_InOutTransition"/>
111        </xsd:choice>
112        <xsd:element name="sndAc" minOccurs="0" maxOccurs="1" type="CT_TransitionSoundAction"/>
113        <xsd:element name="extLst" type="CT_ExtensionListModify" minOccurs="0" maxOccurs="1"/>
114    </xsd:sequence>
115    <xsd:attribute name="spd" type="ST_TransitionSpeed" use="optional" default="fast"/>
116    <xsd:attribute name="advClick" type="xsd:boolean" use="optional" default="true"/>
117    <xsd:attribute name="advTm" type="xsd:unsignedInt" use="optional"/>
118</xsd:complexType>
119<xsd:simpleType name="ST_TLTimeIndefinite">
120    <xsd:restriction base="xsd:token">
121        <xsd:enumeration value="indefinite"/>
122    </xsd:restriction>
123</xsd:simpleType>
124<xsd:simpleType name="ST_TLTime">
125    <xsd:union memberTypes="xsd:unsignedInt ST_TLTimeIndefinite"/>
126</xsd:simpleType>
127<xsd:simpleType name="ST_TLTimeNodeID">
128    <xsd:restriction base="xsd:unsignedInt"/>
129</xsd:simpleType>
130<xsd:complexType name="CT_TLIterateIntervalTime">
131    <xsd:attribute name="val" type="ST_TLTime" use="required"/>
132</xsd:complexType>
133<xsd:complexType name="CT_TLIterateIntervalPercentage">
134    <xsd:attribute name="val" type="a:ST_PositivePercentage" use="required"/>
135</xsd:complexType>
136<xsd:simpleType name="ST_IterateType">
137    <xsd:restriction base="xsd:token">
138        <xsd:enumeration value="el"/>
139        <xsd:enumeration value="wd"/>
140        <xsd:enumeration value="lt"/>

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141     </xsd:restriction>
142 </xsd:simpleType>
143 <xsd:complexType name="CT_TLIterateData">
144     <xsd:choice minOccurs="1" maxOccurs="1">
145         <xsd:element name="tmAbs" type="CT_TLIterateIntervalTime"/>
146         <xsd:element name="tmPct" type="CT_TLIterateIntervalPercentage"/>
147     </xsd:choice>
148     <xsd:attribute name="type" type="ST_IterateType" use="optional" default="el"/>
149     <xsd:attribute name="backwards" type="xsd:boolean" use="optional" default="false"/>
150 </xsd:complexType>
151 <xsd:complexType name="CT_TLSubShapeId">
152     <xsd:attribute name="spid" type="a:ST_ShapeID" use="required"/>
153 </xsd:complexType>
154 <xsd:complexType name="CT_TLTextTargetElement">
155     <xsd:choice minOccurs="0" maxOccurs="1">
156         <xsd:element name="charRg" type="CT_IndexRange"/>
157         <xsd:element name="pRg" type="CT_IndexRange"/>
158     </xsd:choice>
159 </xsd:complexType>
160 <xsd:simpleType name="ST_TLChartSubelementType">
161     <xsd:restriction base="xsd:token">
162         <xsd:enumeration value="gridLegend"/>
163         <xsd:enumeration value="series"/>
164         <xsd:enumeration value="category"/>
165         <xsd:enumeration value="ptInSeries"/>
166         <xsd:enumeration value="ptInCategory"/>
167     </xsd:restriction>
168 </xsd:simpleType>
169 <xsd:complexType name="CT_TLOleChartTargetElement">
170     <xsd:attribute name="type" type="ST_TLChartSubelementType" use="required"/>
171     <xsd:attribute name="lvl" type="xsd:unsignedInt" use="optional" default="0"/>
172 </xsd:complexType>
173 <xsd:complexType name="CT_TLShapeTargetElement">
174     <xsd:choice minOccurs="0" maxOccurs="1">
175         <xsd:element name="bg" type="CT_Empty"/>
176         <xsd:element name="subSp" type="CT_TLSubShapeId"/>
177         <xsd:element name="oleChartEl" type="CT_TLOleChartTargetElement"/>
178         <xsd:element name="txEl" type="CT_TLTextTargetElement"/>
179         <xsd:element name="graphicEl" type="a:CT_AnimationElementChoice"/>
180     </xsd:choice>
181     <xsd:attribute name="spid" type="a:ST_ShapeID" use="required"/>
182 </xsd:complexType>
183 <xsd:complexType name="CT_TLTimeTargetElement">
184     <xsd:choice minOccurs="1" maxOccurs="1">
185         <xsd:element name="sldTgt" type="CT_Empty"/>
186         <xsd:element name="sndTgt" type="a:CT_EmbeddedWAVAudioFile"/>
187         <xsd:element name="spTgt" type="CT_TLShapeTargetElement"/>
188         <xsd:element name="inkTgt" type="CT_TLSubShapeId"/>
189     </xsd:choice>
190 </xsd:complexType>
191 <xsd:complexType name="CT_TLTriggerTimeNodeID">
192     <xsd:attribute name="val" type="ST_TLTimeNodeID" use="required"/>
193 </xsd:complexType>

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194 <xsd:simpleType name="ST_TLTriggerRuntimeNode">
195   <xsd:restriction base="xsd:token">
196     <xsd:enumeration value="first"/>
197     <xsd:enumeration value="last"/>
198     <xsd:enumeration value="all"/>
199   </xsd:restriction>
200 </xsd:simpleType>
201 <xsd:complexType name="CT_TLTriggerRuntimeNode">
202   <xsd:attribute name="val" type="ST_TLTriggerRuntimeNode" use="required"/>
203 </xsd:complexType>
204 <xsd:simpleType name="ST_TLTriggerEvent">
205   <xsd:restriction base="xsd:token">
206     <xsd:enumeration value="onBegin"/>
207     <xsd:enumeration value="onEnd"/>
208     <xsd:enumeration value="begin"/>
209     <xsd:enumeration value="end"/>
210     <xsd:enumeration value="onClick"/>
211     <xsd:enumeration value="onDbClick"/>
212     <xsd:enumeration value="onMouseOver"/>
213     <xsd:enumeration value="onMouseOut"/>
214     <xsd:enumeration value="onNext"/>
215     <xsd:enumeration value="onPrev"/>
216     <xsd:enumeration value="onStopAudio"/>
217   </xsd:restriction>
218 </xsd:simpleType>
219 <xsd:complexType name="CT_TLTimeCondition">
220   <xsd:choice minOccurs="0" maxOccurs="1">
221     <xsd:element name="tgtEl" type="CT_TLTimeTargetElement"/>
222     <xsd:element name="tn" type="CT_TLTriggerTimeNodeID"/>
223     <xsd:element name="rtn" type="CT_TLTriggerRuntimeNode"/>
224   </xsd:choice>
225   <xsd:attribute name="evt" use="optional" type="ST_TLTriggerEvent"/>
226   <xsd:attribute name="delay" type="ST_TLTime" use="optional"/>
227 </xsd:complexType>
228 <xsd:complexType name="CT_TLTimeConditionList">
229   <xsd:sequence>
230     <xsd:element name="cond" type="CT_TLTimeCondition" minOccurs="1" maxOccurs="unbounded"/>
231   </xsd:sequence>
232 </xsd:complexType>
233 <xsd:complexType name="CT_TimeNodeList">
234   <xsd:choice minOccurs="1" maxOccurs="unbounded">
235     <xsd:element name="par" type="CT_TLTimeNodeParallel"/>
236     <xsd:element name="seq" type="CT_TLTimeNodeSequence"/>
237     <xsd:element name="excl" type="CT_TLTimeNodeExclusive"/>
238     <xsd:element name="anim" type="CT_TLAnimateBehavior"/>
239     <xsd:element name="animClr" type="CT_TLAnimateColorBehavior"/>
240     <xsd:element name="animEffect" type="CT_TLAnimateEffectBehavior"/>
241     <xsd:element name="animMotion" type="CT_TLAnimateMotionBehavior"/>
242     <xsd:element name="animRot" type="CT_TLAnimateRotationBehavior"/>
243     <xsd:element name="animScale" type="CT_TLAnimateScaleBehavior"/>
244     <xsd:element name="cmd" type="CT_TLCommandBehavior"/>
245     <xsd:element name="set" type="CT_TLSetBehavior"/>
246     <xsd:element name="audio" type="CT_TLMediaNodeAudio"/>

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247     <xsd:element name="video" type="CT_TLMediaNodeVideo"/>
248   </xsd:choice>
249 </xsd:complexType>
250 <xsd:simpleType name="ST_TLTimeNodePresetClassType">
251   <xsd:restriction base="xsd:token">
252     <xsd:enumeration value="entr"/>
253     <xsd:enumeration value="exit"/>
254     <xsd:enumeration value="emph"/>
255     <xsd:enumeration value="path"/>
256     <xsd:enumeration value="verb"/>
257     <xsd:enumeration value="mediacall"/>
258   </xsd:restriction>
259 </xsd:simpleType>
260 <xsd:simpleType name="ST_TLTimeNodeRestartType">
261   <xsd:restriction base="xsd:token">
262     <xsd:enumeration value="always"/>
263     <xsd:enumeration value="whenNotActive"/>
264     <xsd:enumeration value="never"/>
265   </xsd:restriction>
266 </xsd:simpleType>
267 <xsd:simpleType name="ST_TLTimeNodeFillType">
268   <xsd:restriction base="xsd:token">
269     <xsd:enumeration value="remove"/>
270     <xsd:enumeration value="freeze"/>
271     <xsd:enumeration value="hold"/>
272     <xsd:enumeration value="transition"/>
273   </xsd:restriction>
274 </xsd:simpleType>
275 <xsd:simpleType name="ST_TLTimeNodeSyncType">
276   <xsd:restriction base="xsd:token">
277     <xsd:enumeration value="canSlip"/>
278     <xsd:enumeration value="locked"/>
279   </xsd:restriction>
280 </xsd:simpleType>
281 <xsd:simpleType name="ST_TLTimeNodeMasterRelation">
282   <xsd:restriction base="xsd:token">
283     <xsd:enumeration value="sameClick"/>
284     <xsd:enumeration value="lastClick"/>
285     <xsd:enumeration value="nextClick"/>
286   </xsd:restriction>
287 </xsd:simpleType>
288 <xsd:simpleType name="ST_TLTimeNodeType">
289   <xsd:restriction base="xsd:token">
290     <xsd:enumeration value="clickEffect"/>
291     <xsd:enumeration value="withEffect"/>
292     <xsd:enumeration value="afterEffect"/>
293     <xsd:enumeration value="mainSeq"/>
294     <xsd:enumeration value="interactiveSeq"/>
295     <xsd:enumeration value="clickPar"/>
296     <xsd:enumeration value="withGroup"/>
297     <xsd:enumeration value="afterGroup"/>
298     <xsd:enumeration value="tmRoot"/>
299   </xsd:restriction>

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300 </xsd:simpleType>
301 <xsd:complexType name="CT_TLCommonTimeNodeData">
302   <xsd:sequence>
303     <xsd:element name="stCondLst" type="CT_TLTimeConditionList" minOccurs="0" maxOccurs="1"/>
304     <xsd:element name="endCondLst" type="CT_TLTimeConditionList" minOccurs="0" maxOccurs="1"/>
305     <xsd:element name="endSync" type="CT_TLTimeCondition" minOccurs="0" maxOccurs="1"/>
306     <xsd:element name="iterate" type="CT_TLIterateData" minOccurs="0" maxOccurs="1"/>
307     <xsd:element name="childTnLst" type="CT_TimeNodeList" minOccurs="0" maxOccurs="1"/>
308     <xsd:element name="subTnLst" type="CT_TimeNodeList" minOccurs="0" maxOccurs="1"/>
309   </xsd:sequence>
310   <xsd:attribute name="id" type="ST_TLTimeNodeID" use="optional"/>
311   <xsd:attribute name="presetID" type="xsd:int" use="optional"/>
312   <xsd:attribute name="presetClass" type="ST_TLTimeNodePresetClassType" use="optional"/>
313   <xsd:attribute name="presetSubtype" type="xsd:int" use="optional"/>
314   <xsd:attribute name="dur" type="ST_TLTime" use="optional"/>
315   <xsd:attribute name="repeatCount" type="ST_TLTime" use="optional" default="1000"/>
316   <xsd:attribute name="repeatDur" type="ST_TLTime" use="optional"/>
317   <xsd:attribute name="spd" type="a:ST_Percentage" use="optional" default="100%"/>
318   <xsd:attribute name="accel" type="a:ST_PositiveFixedPercentage" use="optional" default="0%"/>
319   <xsd:attribute name="decel" type="a:ST_PositiveFixedPercentage" use="optional" default="0%"/>
320   <xsd:attribute name="autoRev" type="xsd:boolean" use="optional" default="false"/>
321   <xsd:attribute name="restart" type="ST_TLTimeNodeRestartType" use="optional"/>
322   <xsd:attribute name="fill" type="ST_TLTimeNodeFillType" use="optional"/>
323   <xsd:attribute name="syncBehavior" type="ST_TLTimeNodeSyncType" use="optional"/>
324   <xsd:attribute name="tmFilter" type="xsd:string" use="optional"/>
325   <xsd:attribute name="evtFilter" type="xsd:string" use="optional"/>
326   <xsd:attribute name="display" type="xsd:boolean" use="optional"/>
327   <xsd:attribute name="masterRel" type="ST_TLTimeNodeMasterRelation" use="optional"/>
328   <xsd:attribute name="bldLvl" type="xsd:int" use="optional"/>
329   <xsd:attribute name="grpId" type="xsd:unsignedInt" use="optional"/>
330   <xsd:attribute name="afterEffect" type="xsd:boolean" use="optional"/>
331   <xsd:attribute name="nodeType" type="ST_TLTimeNodeType" use="optional"/>
332   <xsd:attribute name="nodePh" type="xsd:boolean" use="optional"/>
333 </xsd:complexType>
334 <xsd:complexType name="CT_TLTimeNodeParallel">
335   <xsd:sequence>
336     <xsd:element name="cTn" type="CT_TLCommonTimeNodeData" minOccurs="1" maxOccurs="1"/>
337   </xsd:sequence>
338 </xsd:complexType>
339 <xsd:simpleType name="ST_TLNextActionType">
340   <xsd:restriction base="xsd:token">
341     <xsd:enumeration value="none"/>
342     <xsd:enumeration value="seek"/>
343   </xsd:restriction>
344 </xsd:simpleType>
345 <xsd:simpleType name="ST_TLPreviousActionType">
346   <xsd:restriction base="xsd:token">
347     <xsd:enumeration value="none"/>
348     <xsd:enumeration value="skipTimed"/>
349   </xsd:restriction>
350 </xsd:simpleType>
351 <xsd:complexType name="CT_TLTimeNodeSequence">
352   <xsd:sequence>

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353     <xsd:element name="cTn" type="CT_TLCommonTimeNodeData" minOccurs="1" maxOccurs="1"/>
354     <xsd:element name="prevCondLst" type="CT_TLTimeConditionList" minOccurs="0"
355         maxOccurs="1"/>
356     <xsd:element name="nextCondLst" type="CT_TLTimeConditionList" minOccurs="0"
357         maxOccurs="1"/>
358 </xsd:sequence>
359 <xsd:attribute name="concurrent" type="xsd:boolean" use="optional"/>
360 <xsd:attribute name="prevAc" type="ST_TLPreviousActionType" use="optional"/>
361 <xsd:attribute name="nextAc" type="ST_TLNextActionType" use="optional"/>
362 </xsd:complexType>
363 <xsd:complexType name="CT_TLTimeNodeExclusive">
364     <xsd:sequence>
365         <xsd:element name="cTn" type="CT_TLCommonTimeNodeData" minOccurs="1" maxOccurs="1"/>
366     </xsd:sequence>
367 </xsd:complexType>
368 <xsd:complexType name="CT_TLBehaviorAttributeNameList">
369     <xsd:sequence>
370         <xsd:element name="attrName" type="xsd:string" minOccurs="1" maxOccurs="unbounded"/>
371     </xsd:sequence>
372 </xsd:complexType>
373 <xsd:simpleType name="ST_TLBehaviorAdditiveType">
374     <xsd:restriction base="xsd:token">
375         <xsd:enumeration value="base"/>
376         <xsd:enumeration value="sum"/>
377         <xsd:enumeration value="repl"/>
378         <xsd:enumeration value="mult"/>
379         <xsd:enumeration value="none"/>
380     </xsd:restriction>
381 </xsd:simpleType>
382 <xsd:simpleType name="ST_TLBehaviorAccumulateType">
383     <xsd:restriction base="xsd:token">
384         <xsd:enumeration value="none"/>
385         <xsd:enumeration value="always"/>
386     </xsd:restriction>
387 </xsd:simpleType>
388 <xsd:simpleType name="ST_TLBehaviorTransformType">
389     <xsd:restriction base="xsd:token">
390         <xsd:enumeration value="pt"/>
391         <xsd:enumeration value="img"/>
392     </xsd:restriction>
393 </xsd:simpleType>
394 <xsd:simpleType name="ST_TLBehaviorOverrideType">
395     <xsd:restriction base="xsd:token">
396         <xsd:enumeration value="normal"/>
397         <xsd:enumeration value="childStyle"/>
398     </xsd:restriction>
399 </xsd:simpleType>
400 <xsd:complexType name="CT_TLCommonBehaviorData">
401     <xsd:sequence>
402         <xsd:element name="cTn" type="CT_TLCommonTimeNodeData" minOccurs="1" maxOccurs="1"/>
403         <xsd:element name="tgtEl" type="CT_TLTimeTargetElement" minOccurs="1" maxOccurs="1"/>
404         <xsd:element name="attrNameLst" type="CT_TLBehaviorAttributeNameList" minOccurs="0"
405             maxOccurs="1"/>

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406     </xsd:sequence>
407     <xsd:attribute name="additive" type="ST_TLBehaviorAdditiveType" use="optional"/>
408     <xsd:attribute name="accumulate" type="ST_TLBehaviorAccumulateType" use="optional"/>
409     <xsd:attribute name="xfrmType" type="ST_TLBehaviorTransformType" use="optional"/>
410     <xsd:attribute name="from" type="xsd:string" use="optional"/>
411     <xsd:attribute name="to" type="xsd:string" use="optional"/>
412     <xsd:attribute name="by" type="xsd:string" use="optional"/>
413     <xsd:attribute name="rctx" type="xsd:string" use="optional"/>
414     <xsd:attribute name="override" type="ST_TLBehaviorOverrideType" use="optional"/>
415 </xsd:complexType>
416 <xsd:complexType name="CT_TLAnimVariantBooleanVal">
417     <xsd:attribute name="val" type="xsd:boolean" use="required"/>
418 </xsd:complexType>
419 <xsd:complexType name="CT_TLAnimVariantIntegerVal">
420     <xsd:attribute name="val" type="xsd:int" use="required"/>
421 </xsd:complexType>
422 <xsd:complexType name="CT_TLAnimVariantFloatVal">
423     <xsd:attribute name="val" type="xsd:float" use="required"/>
424 </xsd:complexType>
425 <xsd:complexType name="CT_TLAnimVariantStringVal">
426     <xsd:attribute name="val" type="xsd:string" use="required"/>
427 </xsd:complexType>
428 <xsd:complexType name="CT_TLAnimVariant">
429     <xsd:choice minOccurs="1" maxOccurs="1">
430         <xsd:element name="boolVal" type="CT_TLAnimVariantBooleanVal"/>
431         <xsd:element name="intVal" type="CT_TLAnimVariantIntegerVal"/>
432         <xsd:element name="fltVal" type="CT_TLAnimVariantFloatVal"/>
433         <xsd:element name="strVal" type="CT_TLAnimVariantStringVal"/>
434         <xsd:element name="clrVal" type="a:CT_Color"/>
435     </xsd:choice>
436 </xsd:complexType>
437 <xsd:simpleType name="ST_TLTimeAnimateValueTime">
438     <xsd:union memberTypes="a:ST_PositiveFixedPercentage ST_TLTimeIndefinite"/>
439 </xsd:simpleType>
440 <xsd:complexType name="CT_TLTimeAnimateValue">
441     <xsd:sequence>
442         <xsd:element name="val" type="CT_TLAnimVariant" minOccurs="0" maxOccurs="1"/>
443     </xsd:sequence>
444     <xsd:attribute name="tm" type="ST_TLTimeAnimateValueTime" use="optional"
445         default="indefinite"/>
446     <xsd:attribute name="fmla" type="xsd:string" use="optional" default=""/>
447 </xsd:complexType>
448 <xsd:complexType name="CT_TLTimeAnimateValueList">
449     <xsd:sequence>
450         <xsd:element name="tav" type="CT_TLTimeAnimateValue" minOccurs="0" maxOccurs="unbounded"/>
451     </xsd:sequence>
452 </xsd:complexType>
453 <xsd:simpleType name="ST_TLAnimateBehaviorCalcMode">
454     <xsd:restriction base="xsd:token">
455         <xsd:enumeration value="discrete"/>
456         <xsd:enumeration value="lin"/>
457         <xsd:enumeration value="fmla"/>
458     </xsd:restriction>

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459 </xsd:simpleType>
460 <xsd:simpleType name="ST_TLAnimateBehaviorValueType">
461   <xsd:restriction base="xsd:token">
462     <xsd:enumeration value="str"/>
463     <xsd:enumeration value="num"/>
464     <xsd:enumeration value="clr"/>
465   </xsd:restriction>
466 </xsd:simpleType>
467 <xsd:complexType name="CT_TLAnimateBehavior">
468   <xsd:sequence>
469     <xsd:element name="cBhvr" type="CT_TLCommonBehaviorData" minOccurs="1" maxOccurs="1"/>
470     <xsd:element name="tavLst" type="CT_TLTimeAnimateValueList" minOccurs="0" maxOccurs="1"/>
471   </xsd:sequence>
472   <xsd:attribute name="by" type="xsd:string" use="optional"/>
473   <xsd:attribute name="from" type="xsd:string" use="optional"/>
474   <xsd:attribute name="to" type="xsd:string" use="optional"/>
475   <xsd:attribute name="calcmode" type="ST_TLAnimateBehaviorCalcMode" use="optional"/>
476   <xsd:attribute name="valueType" type="ST_TLAnimateBehaviorValueType" use="optional"/>
477 </xsd:complexType>
478 <xsd:complexType name="CT_TLByRgbColorTransform">
479   <xsd:attribute name="r" type="a:ST_FixedPercentage" use="required"/>
480   <xsd:attribute name="g" type="a:ST_FixedPercentage" use="required"/>
481   <xsd:attribute name="b" type="a:ST_FixedPercentage" use="required"/>
482 </xsd:complexType>
483 <xsd:complexType name="CT_TLByHslColorTransform">
484   <xsd:attribute name="h" type="a:ST_Angle" use="required"/>
485   <xsd:attribute name="s" type="a:ST_FixedPercentage" use="required"/>
486   <xsd:attribute name="l" type="a:ST_FixedPercentage" use="required"/>
487 </xsd:complexType>
488 <xsd:complexType name="CT_TLByAnimateColorTransform">
489   <xsd:choice minOccurs="1" maxOccurs="1">
490     <xsd:element name="rgb" type="CT_TLByRgbColorTransform"/>
491     <xsd:element name="hsl" type="CT_TLByHslColorTransform"/>
492   </xsd:choice>
493 </xsd:complexType>
494 <xsd:simpleType name="ST_TLAnimateColorSpace">
495   <xsd:restriction base="xsd:token">
496     <xsd:enumeration value="rgb"/>
497     <xsd:enumeration value="hsl"/>
498   </xsd:restriction>
499 </xsd:simpleType>
500 <xsd:simpleType name="ST_TLAnimateColorDirection">
501   <xsd:restriction base="xsd:token">
502     <xsd:enumeration value="cw"/>
503     <xsd:enumeration value="ccw"/>
504   </xsd:restriction>
505 </xsd:simpleType>
506 <xsd:complexType name="CT_TLAnimateColorBehavior">
507   <xsd:sequence>
508     <xsd:element name="cBhvr" type="CT_TLCommonBehaviorData" minOccurs="1" maxOccurs="1"/>
509     <xsd:element name="by" type="CT_TLByAnimateColorTransform" minOccurs="0" maxOccurs="1"/>
510     <xsd:element name="from" type="a:CT_Color" minOccurs="0" maxOccurs="1"/>
511     <xsd:element name="to" type="a:CT_Color" minOccurs="0" maxOccurs="1"/>

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512     </xsd:sequence>
513     <xsd:attribute name="clrSpc" type="ST_TLAnimateColorSpace" use="optional"/>
514     <xsd:attribute name="dir" type="ST_TLAnimateColorDirection" use="optional"/>
515 </xsd:complexType>
516 <xsd:simpleType name="ST_TLAnimateEffectTransition">
517     <xsd:restriction base="xsd:token">
518         <xsd:enumeration value="in"/>
519         <xsd:enumeration value="out"/>
520         <xsd:enumeration value="none"/>
521     </xsd:restriction>
522 </xsd:simpleType>
523 <xsd:complexType name="CT_TLAnimateEffectBehavior">
524     <xsd:sequence>
525         <xsd:element name="cBhvr" type="CT_TLCommonBehaviorData" minOccurs="1" maxOccurs="1"/>
526         <xsd:element name="progress" type="CT_TLAnimVariant" minOccurs="0" maxOccurs="1"/>
527     </xsd:sequence>
528     <xsd:attribute name="transition" type="ST_TLAnimateEffectTransition" use="optional"/>
529     <xsd:attribute name="filter" type="xsd:string" use="optional"/>
530     <xsd:attribute name="prLst" type="xsd:string" use="optional"/>
531 </xsd:complexType>
532 <xsd:simpleType name="ST_TLAnimateMotionBehaviorOrigin">
533     <xsd:restriction base="xsd:token">
534         <xsd:enumeration value="parent"/>
535         <xsd:enumeration value="layout"/>
536     </xsd:restriction>
537 </xsd:simpleType>
538 <xsd:simpleType name="ST_TLAnimateMotionPathEditMode">
539     <xsd:restriction base="xsd:token">
540         <xsd:enumeration value="relative"/>
541         <xsd:enumeration value="fixed"/>
542     </xsd:restriction>
543 </xsd:simpleType>
544 <xsd:complexType name="CT_TLPoint">
545     <xsd:attribute name="x" type="a:ST_Percentage" use="required"/>
546     <xsd:attribute name="y" type="a:ST_Percentage" use="required"/>
547 </xsd:complexType>
548 <xsd:complexType name="CT_TLAnimateMotionBehavior">
549     <xsd:sequence>
550         <xsd:element name="cBhvr" type="CT_TLCommonBehaviorData" minOccurs="1" maxOccurs="1"/>
551         <xsd:element name="by" type="CT_TLPoint" minOccurs="0" maxOccurs="1"/>
552         <xsd:element name="from" type="CT_TLPoint" minOccurs="0" maxOccurs="1"/>
553         <xsd:element name="to" type="CT_TLPoint" minOccurs="0" maxOccurs="1"/>
554         <xsd:element name="rCtr" type="CT_TLPoint" minOccurs="0" maxOccurs="1"/>
555     </xsd:sequence>
556     <xsd:attribute name="origin" type="ST_TLAnimateMotionBehaviorOrigin" use="optional"/>
557     <xsd:attribute name="path" type="xsd:string" use="optional"/>
558     <xsd:attribute name="pathEditMode" type="ST_TLAnimateMotionPathEditMode" use="optional"/>
559     <xsd:attribute name="rAng" type="a:ST_Angle" use="optional"/>
560     <xsd:attribute name="ptsTypes" type="xsd:string" use="optional"/>
561 </xsd:complexType>
562 <xsd:complexType name="CT_TLAnimateRotationBehavior">
563     <xsd:sequence>
564         <xsd:element name="cBhvr" type="CT_TLCommonBehaviorData" minOccurs="1" maxOccurs="1"/>

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565     </xsd:sequence>
566     <xsd:attribute name="by" type="a:ST Angle" use="optional"/>
567     <xsd:attribute name="from" type="a:ST Angle" use="optional"/>
568     <xsd:attribute name="to" type="a:ST Angle" use="optional"/>
569 </xsd:complexType>
570 <xsd:complexType name="CT_TLAnimateScaleBehavior">
571     <xsd:sequence>
572         <xsd:element name="cBhvr" type="CT_TLCommonBehaviorData" minOccurs="1" maxOccurs="1"/>
573         <xsd:element name="by" type="CT_TLPoint" minOccurs="0" maxOccurs="1"/>
574         <xsd:element name="from" type="CT_TLPoint" minOccurs="0" maxOccurs="1"/>
575         <xsd:element name="to" type="CT_TLPoint" minOccurs="0" maxOccurs="1"/>
576     </xsd:sequence>
577     <xsd:attribute name="zoomContents" type="xsd:boolean" use="optional"/>
578 </xsd:complexType>
579 <xsd:simpleType name="ST_TLCommandType">
580     <xsd:restriction base="xsd:token">
581         <xsd:enumeration value="evt"/>
582         <xsd:enumeration value="call"/>
583         <xsd:enumeration value="verb"/>
584     </xsd:restriction>
585 </xsd:simpleType>
586 <xsd:complexType name="CT_TLCommandBehavior">
587     <xsd:sequence>
588         <xsd:element name="cBhvr" type="CT_TLCommonBehaviorData" minOccurs="1" maxOccurs="1"/>
589     </xsd:sequence>
590     <xsd:attribute type="ST_TLCommandType" name="type" use="optional"/>
591     <xsd:attribute name="cmd" type="xsd:string" use="optional"/>
592 </xsd:complexType>
593 <xsd:complexType name="CT_TLSetBehavior">
594     <xsd:sequence>
595         <xsd:element name="cBhvr" type="CT_TLCommonBehaviorData" minOccurs="1" maxOccurs="1"/>
596         <xsd:element name="to" type="CT_TLAnimVariant" minOccurs="0" maxOccurs="1"/>
597     </xsd:sequence>
598 </xsd:complexType>
599 <xsd:complexType name="CT_TLCommonMediaNodeData">
600     <xsd:sequence>
601         <xsd:element name="cTn" type="CT_TLCommonTimeNodeData" minOccurs="1" maxOccurs="1"/>
602         <xsd:element name="tgtEl" type="CT_TLTimeTargetElement" minOccurs="1" maxOccurs="1"/>
603     </xsd:sequence>
604     <xsd:attribute name="vol" type="a:ST PositiveFixedPercentage" default="50%" use="optional"/>
605     <xsd:attribute name="mute" type="xsd:boolean" use="optional" default="false"/>
606     <xsd:attribute name="numSld" type="xsd:unsignedInt" use="optional" default="1"/>
607     <xsd:attribute name="showWhenStopped" type="xsd:boolean" use="optional" default="true"/>
608 </xsd:complexType>
609 <xsd:complexType name="CT_TLMediaNodeAudio">
610     <xsd:sequence>
611         <xsd:element name="cMediaNode" type="CT_TLCommonMediaNodeData" minOccurs="1"
612             maxOccurs="1"/>
613     </xsd:sequence>
614     <xsd:attribute name="isNarration" type="xsd:boolean" use="optional" default="false"/>
615 </xsd:complexType>
616 <xsd:complexType name="CT_TLMediaNodeVideo">
617     <xsd:sequence>

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618         <xsd:element name="cMediaNode" type="CT_TLCommonMediaNodeData" minOccurs="1"
619             maxOccurs="1"/>
620     </xsd:sequence>
621     <xsd:attribute name="fullScrn" type="xsd:boolean" use="optional" default="false"/>
622 </xsd:complexType>
623 <xsd:attributeGroup name="AG_TLBuild">
624     <xsd:attribute name="spid" type="a:ST_ShapeID" use="required"/>
625     <xsd:attribute name="grpId" type="xsd:unsignedInt" use="required"/>
626     <xsd:attribute name="uiExpand" type="xsd:boolean" use="optional" default="false"/>
627 </xsd:attributeGroup>
628 <xsd:complexType name="CT_TLTemplate">
629     <xsd:sequence>
630         <xsd:element name="tnLst" type="CT_TimeNodeList" minOccurs="1" maxOccurs="1"/>
631     </xsd:sequence>
632     <xsd:attribute name="lvl" type="xsd:unsignedInt" use="optional" default="0"/>
633 </xsd:complexType>
634 <xsd:complexType name="CT_TLTemplateList">
635     <xsd:sequence>
636         <xsd:element name="tmpl" type="CT_TLTemplate" minOccurs="0" maxOccurs="9"/>
637     </xsd:sequence>
638 </xsd:complexType>
639 <xsd:simpleType name="ST_TLParaBuildType">
640     <xsd:restriction base="xsd:token">
641         <xsd:enumeration value="allAtOnce"/>
642         <xsd:enumeration value="p"/>
643         <xsd:enumeration value="cust"/>
644         <xsd:enumeration value="whole"/>
645     </xsd:restriction>
646 </xsd:simpleType>
647 <xsd:complexType name="CT_TLBuildParagraph">
648     <xsd:sequence>
649         <xsd:element name="tmplLst" type="CT_TLTemplateList" minOccurs="0" maxOccurs="1"/>
650     </xsd:sequence>
651     <xsd:attributeGroup ref="AG_TLBuild"/>
652     <xsd:attribute name="build" type="ST_TLParaBuildType" use="optional" default="whole"/>
653     <xsd:attribute name="bldLvl" type="xsd:unsignedInt" use="optional" default="1"/>
654     <xsd:attribute name="animBg" type="xsd:boolean" use="optional" default="false"/>
655     <xsd:attribute name="autoUpdateAnimBg" type="xsd:boolean" default="true" use="optional"/>
656     <xsd:attribute name="rev" type="xsd:boolean" use="optional" default="false"/>
657     <xsd:attribute name="advAuto" type="ST_TLTime" use="optional" default="indefinite"/>
658 </xsd:complexType>
659 <xsd:simpleType name="ST_TLDiagramBuildType">
660     <xsd:restriction base="xsd:token">
661         <xsd:enumeration value="whole"/>
662         <xsd:enumeration value="depthByNode"/>
663         <xsd:enumeration value="depthByBranch"/>
664         <xsd:enumeration value="breadthByNode"/>
665         <xsd:enumeration value="breadthByLvl"/>
666         <xsd:enumeration value="cw"/>
667         <xsd:enumeration value="cwIn"/>
668         <xsd:enumeration value="cwOut"/>
669         <xsd:enumeration value="ccw"/>
670         <xsd:enumeration value="ccwIn"/>

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671     <xsd:enumeration value="ccwOut"/>
672     <xsd:enumeration value="inByRing"/>
673     <xsd:enumeration value="outByRing"/>
674     <xsd:enumeration value="up"/>
675     <xsd:enumeration value="down"/>
676     <xsd:enumeration value="allAtOnce"/>
677     <xsd:enumeration value="cust"/>
678   </xsd:restriction>
679 </xsd:simpleType>
680 <xsd:complexType name="CT_TLBuildDiagram">
681   <xsd:attributeGroup ref="AG_TLBuild"/>
682   <xsd:attribute name="bld" type="ST_TLDiagramBuildType" use="optional" default="whole"/>
683 </xsd:complexType>
684 <xsd:simpleType name="ST_TLOleChartBuildType">
685   <xsd:restriction base="xsd:token">
686     <xsd:enumeration value="allAtOnce"/>
687     <xsd:enumeration value="series"/>
688     <xsd:enumeration value="category"/>
689     <xsd:enumeration value="seriesEl"/>
690     <xsd:enumeration value="categoryEl"/>
691   </xsd:restriction>
692 </xsd:simpleType>
693 <xsd:complexType name="CT_TLOleBuildChart">
694   <xsd:attributeGroup ref="AG_TLBuild"/>
695   <xsd:attribute name="bld" type="ST_TLOleChartBuildType" use="optional" default="allAtOnce"/>
696   <xsd:attribute name="animBg" type="xsd:boolean" use="optional" default="true"/>
697 </xsd:complexType>
698 <xsd:complexType name="CT_TLGraphicalObjectBuild">
699   <xsd:choice minOccurs="1" maxOccurs="1">
700     <xsd:element name="bldAsOne" type="CT_Empty"/>
701     <xsd:element name="bldSub" type="a:CT_AnimationGraphicalObjectBuildProperties"/>
702   </xsd:choice>
703   <xsd:attributeGroup ref="AG_TLBuild"/>
704 </xsd:complexType>
705 <xsd:complexType name="CT_BuildList">
706   <xsd:choice minOccurs="1" maxOccurs="unbounded">
707     <xsd:element name="bldP" type="CT_TLBuildParagraph"/>
708     <xsd:element name="bldDgm" type="CT_TLBuildDiagram"/>
709     <xsd:element name="bldOleChart" type="CT_TLOleBuildChart"/>
710     <xsd:element name="bldGraphic" type="CT_TLGraphicalObjectBuild"/>
711   </xsd:choice>
712 </xsd:complexType>
713 <xsd:complexType name="CT_SlideTiming">
714   <xsd:sequence>
715     <xsd:element name="tnLst" type="CT_TimeNodeList" minOccurs="0" maxOccurs="1"/>
716     <xsd:element name="bldLst" type="CT_BuildList" minOccurs="0" maxOccurs="1"/>
717     <xsd:element name="extLst" type="CT_ExtensionListModify" minOccurs="0" maxOccurs="1"/>
718   </xsd:sequence>
719 </xsd:complexType>
720 <xsd:complexType name="CT_Empty"/>
721 <xsd:simpleType name="ST_Name">
722   <xsd:restriction base="xsd:string"/>
723 </xsd:simpleType>

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724 <xsd:simpleType name="ST_Direction">
725   <xsd:restriction base="xsd:token">
726     <xsd:enumeration value="horz"/>
727     <xsd:enumeration value="vert"/>
728   </xsd:restriction>
729 </xsd:simpleType>
730 <xsd:simpleType name="ST_Index">
731   <xsd:restriction base="xsd:unsignedInt"/>
732 </xsd:simpleType>
733 <xsd:complexType name="CT_IndexRange">
734   <xsd:attribute name="st" type="ST_Index" use="required"/>
735   <xsd:attribute name="end" type="ST_Index" use="required"/>
736 </xsd:complexType>
737 <xsd:complexType name="CT_SlideRelationshipListEntry">
738   <xsd:attribute ref="r:id" use="required"/>
739 </xsd:complexType>
740 <xsd:complexType name="CT_SlideRelationshipList">
741   <xsd:sequence>
742     <xsd:element name="sld" type="CT_SlideRelationshipListEntry" minOccurs="0"
743       maxOccurs="unbounded"/>
744   </xsd:sequence>
745 </xsd:complexType>
746 <xsd:complexType name="CT_CustomShowId">
747   <xsd:attribute name="id" type="xsd:unsignedInt" use="required"/>
748 </xsd:complexType>
749 <xsd:group name="EG_SlideListChoice">
750   <xsd:choice>
751     <xsd:element name="sldAll" type="CT_Empty"/>
752     <xsd:element name="sldRg" type="CT_IndexRange"/>
753     <xsd:element name="custShow" type="CT_CustomShowId"/>
754   </xsd:choice>
755 </xsd:group>
756 <xsd:complexType name="CT_CustomerData">
757   <xsd:attribute ref="r:id" use="required"/>
758 </xsd:complexType>
759 <xsd:complexType name="CT_TagsData">
760   <xsd:attribute ref="r:id" use="required"/>
761 </xsd:complexType>
762 <xsd:complexType name="CT_CustomerDataList">
763   <xsd:sequence minOccurs="0" maxOccurs="1">
764     <xsd:element name="custData" type="CT_CustomerData" minOccurs="0" maxOccurs="unbounded"/>
765     <xsd:element name="tags" type="CT_TagsData" minOccurs="0" maxOccurs="1"/>
766   </xsd:sequence>
767 </xsd:complexType>
768 <xsd:complexType name="CT_Extension">
769   <xsd:sequence>
770     <xsd:any processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
771   </xsd:sequence>
772   <xsd:attribute name="uri" type="xsd:token" use="required"/>
773 </xsd:complexType>
774 <xsd:group name="EG_ExtensionList">
775   <xsd:sequence>
776     <xsd:element name="ext" type="CT_Extension" minOccurs="0" maxOccurs="unbounded"/>

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777     </xsd:sequence>
778 </xsd:group>
779 <xsd:complexType name="CT_ExtensionList">
780     <xsd:sequence>
781         <xsd:group ref="EG_ExtensionList" minOccurs="0" maxOccurs="1"/>
782     </xsd:sequence>
783 </xsd:complexType>
784 <xsd:complexType name="CT_ExtensionListModify">
785     <xsd:sequence>
786         <xsd:group ref="EG_ExtensionList" minOccurs="0" maxOccurs="1"/>
787     </xsd:sequence>
788     <xsd:attribute name="mod" type="xsd:boolean" use="optional" default="false"/>
789 </xsd:complexType>
790 <xsd:complexType name="CT_CommentAuthor">
791     <xsd:sequence>
792         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
793     </xsd:sequence>
794     <xsd:attribute name="id" type="xsd:unsignedInt" use="required"/>
795     <xsd:attribute name="name" type="ST_Name" use="required"/>
796     <xsd:attribute name="initials" type="ST_Name" use="required"/>
797     <xsd:attribute name="lastIdx" type="xsd:unsignedInt" use="required"/>
798     <xsd:attribute name="clrIdx" type="xsd:unsignedInt" use="required"/>
799 </xsd:complexType>
800 <xsd:complexType name="CT_CommentAuthorList">
801     <xsd:sequence>
802         <xsd:element name="cmAuthor" type="CT_CommentAuthor" minOccurs="0" maxOccurs="unbounded"/>
803     </xsd:sequence>
804 </xsd:complexType>
805 <xsd:element name="cmAuthorLst" type="CT_CommentAuthorList"/>
806 <xsd:complexType name="CT_Comment">
807     <xsd:sequence>
808         <xsd:element name="pos" type="a:CT_Point2D" minOccurs="1" maxOccurs="1"/>
809         <xsd:element name="text" type="xsd:string" minOccurs="1" maxOccurs="1"/>
810         <xsd:element name="extLst" type="CT_ExtensionListModify" minOccurs="0" maxOccurs="1"/>
811     </xsd:sequence>
812     <xsd:attribute name="authorId" type="xsd:unsignedInt" use="required"/>
813     <xsd:attribute name="dt" type="xsd:dateTime" use="optional"/>
814     <xsd:attribute name="idx" type="ST_Index" use="required"/>
815 </xsd:complexType>
816 <xsd:complexType name="CT_CommentList">
817     <xsd:sequence>
818         <xsd:element name="cm" type="CT_Comment" minOccurs="0" maxOccurs="unbounded"/>
819     </xsd:sequence>
820 </xsd:complexType>
821 <xsd:element name="cmLst" type="CT_CommentList"/>
822 <xsd:attributeGroup name="AG_Ole">
823     <xsd:attribute name="spid" type="a:ST_ShapeID" use="required"/>
824     <xsd:attribute name="name" type="xsd:string" use="optional" default=""/>
825     <xsd:attribute name="showAsIcon" type="xsd:boolean" use="optional" default="false"/>
826     <xsd:attribute ref="r:id" use="optional"/>
827     <xsd:attribute name="imgW" type="a:ST_PositiveCoordinate32" use="optional"/>
828     <xsd:attribute name="imgH" type="a:ST_PositiveCoordinate32" use="optional"/>
829 </xsd:attributeGroup>

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830 <xsd:simpleType name="ST_OleObjectFollowColorScheme">
831   <xsd:restriction base="xsd:token">
832     <xsd:enumeration value="none"/>
833     <xsd:enumeration value="full"/>
834     <xsd:enumeration value="textAndBackground"/>
835   </xsd:restriction>
836 </xsd:simpleType>
837 <xsd:complexType name="CT_OleObjectEmbed">
838   <xsd:sequence>
839     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
840   </xsd:sequence>
841   <xsd:attribute name="followColorScheme" type="ST_OleObjectFollowColorScheme" use="optional"
842     default="none"/>
843 </xsd:complexType>
844 <xsd:complexType name="CT_OleObjectLink">
845   <xsd:sequence>
846     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
847   </xsd:sequence>
848   <xsd:attribute name="updateAutomatic" type="xsd:boolean" use="optional" default="false"/>
849 </xsd:complexType>
850 <xsd:complexType name="CT_OleObject">
851   <xsd:sequence>
852     <xsd:choice minOccurs="1" maxOccurs="1">
853       <xsd:element name="embed" type="CT_OleObjectEmbed"/>
854       <xsd:element name="link" type="CT_OleObjectLink"/>
855     </xsd:choice>
856     <xsd:element name="pic" type="CT_Picture" minOccurs="0" maxOccurs="1"/>
857   </xsd:sequence>
858   <xsd:attributeGroup ref="AG_Ole"/>
859   <xsd:attribute name="progId" type="xsd:string" use="optional"/>
860 </xsd:complexType>
861 <xsd:element name="oleObj" type="CT_OleObject"/>
862 <xsd:complexType name="CT_Control">
863   <xsd:sequence>
864     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
865     <xsd:element name="pic" type="CT_Picture" minOccurs="0" maxOccurs="1"/>
866   </xsd:sequence>
867   <xsd:attributeGroup ref="AG_Ole"/>
868 </xsd:complexType>
869 <xsd:complexType name="CT_ControlList">
870   <xsd:sequence>
871     <xsd:element name="control" type="CT_Control" minOccurs="0" maxOccurs="unbounded"/>
872   </xsd:sequence>
873 </xsd:complexType>
874 <xsd:simpleType name="ST_SlideId">
875   <xsd:restriction base="xsd:unsignedInt">
876     <xsd:minInclusive value="256"/>
877     <xsd:maxExclusive value="2147483648"/>
878   </xsd:restriction>
879 </xsd:simpleType>
880 <xsd:complexType name="CT_SlideIdListEntry">
881   <xsd:sequence>
882     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>

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883     </xsd:sequence>
884     <xsd:attribute name="id" type="ST_SlideId" use="required"/>
885     <xsd:attribute ref="r:id" use="required"/>
886 </xsd:complexType>
887 <xsd:complexType name="CT_SlideIdList">
888     <xsd:sequence>
889         <xsd:element name="sldId" type="CT_SlideIdListEntry" minOccurs="0" maxOccurs="unbounded"/>
890     </xsd:sequence>
891 </xsd:complexType>
892 <xsd:simpleType name="ST_SlideMasterId">
893     <xsd:restriction base="xsd:unsignedInt">
894         <xsd:minInclusive value="2147483648"/>
895     </xsd:restriction>
896 </xsd:simpleType>
897 <xsd:complexType name="CT_SlideMasterIdListEntry">
898     <xsd:sequence>
899         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
900     </xsd:sequence>
901     <xsd:attribute name="id" type="ST_SlideMasterId" use="optional"/>
902     <xsd:attribute ref="r:id" use="required"/>
903 </xsd:complexType>
904 <xsd:complexType name="CT_SlideMasterIdList">
905     <xsd:sequence>
906         <xsd:element name="sldMasterId" type="CT_SlideMasterIdListEntry" minOccurs="0"
907             maxOccurs="unbounded"/>
908     </xsd:sequence>
909 </xsd:complexType>
910 <xsd:complexType name="CT_NotesMasterIdListEntry">
911     <xsd:sequence>
912         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
913     </xsd:sequence>
914     <xsd:attribute ref="r:id" use="required"/>
915 </xsd:complexType>
916 <xsd:complexType name="CT_NotesMasterIdList">
917     <xsd:sequence>
918         <xsd:element name="notesMasterId" type="CT_NotesMasterIdListEntry" minOccurs="0"
919             maxOccurs="1"/>
920     </xsd:sequence>
921 </xsd:complexType>
922 <xsd:complexType name="CT_HandoutMasterIdListEntry">
923     <xsd:sequence>
924         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
925     </xsd:sequence>
926     <xsd:attribute ref="r:id" use="required"/>
927 </xsd:complexType>
928 <xsd:complexType name="CT_HandoutMasterIdList">
929     <xsd:sequence>
930         <xsd:element name="handoutMasterId" type="CT_HandoutMasterIdListEntry" minOccurs="0"
931             maxOccurs="1"/>
932     </xsd:sequence>
933 </xsd:complexType>
934 <xsd:complexType name="CT_EmbeddedFontDataId">
935     <xsd:attribute ref="r:id" use="required"/>

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936 </xsd:complexType>
937 <xsd:complexType name="CT_EmbeddedFontListEntry">
938   <xsd:sequence>
939     <xsd:element name="font" type="a:CT_TextFont" minOccurs="1" maxOccurs="1"/>
940     <xsd:element name="regular" type="CT_EmbeddedFontDataId" minOccurs="0" maxOccurs="1"/>
941     <xsd:element name="bold" type="CT_EmbeddedFontDataId" minOccurs="0" maxOccurs="1"/>
942     <xsd:element name="italic" type="CT_EmbeddedFontDataId" minOccurs="0" maxOccurs="1"/>
943     <xsd:element name="boldItalic" type="CT_EmbeddedFontDataId" minOccurs="0" maxOccurs="1"/>
944   </xsd:sequence>
945 </xsd:complexType>
946 <xsd:complexType name="CT_EmbeddedFontList">
947   <xsd:sequence>
948     <xsd:element name="embeddedFont" type="CT_EmbeddedFontListEntry" minOccurs="0"
949       maxOccurs="unbounded"/>
950   </xsd:sequence>
951 </xsd:complexType>
952 <xsd:complexType name="CT_SmartTags">
953   <xsd:attribute ref="r:id" use="required"/>
954 </xsd:complexType>
955 <xsd:complexType name="CT_CustomShow">
956   <xsd:sequence>
957     <xsd:element name="sldLst" type="CT_SlideRelationshipList" minOccurs="1" maxOccurs="1"/>
958     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
959   </xsd:sequence>
960   <xsd:attribute name="name" type="ST_Name" use="required"/>
961   <xsd:attribute name="id" type="xsd:unsignedInt" use="required"/>
962 </xsd:complexType>
963 <xsd:complexType name="CT_CustomShowList">
964   <xsd:sequence>
965     <xsd:element name="custShow" type="CT_CustomShow" minOccurs="0" maxOccurs="unbounded"/>
966   </xsd:sequence>
967 </xsd:complexType>
968 <xsd:simpleType name="ST_PhotoAlbumLayout">
969   <xsd:restriction base="xsd:token">
970     <xsd:enumeration value="fitToSlide"/>
971     <xsd:enumeration value="1pic"/>
972     <xsd:enumeration value="2pic"/>
973     <xsd:enumeration value="4pic"/>
974     <xsd:enumeration value="1picTitle"/>
975     <xsd:enumeration value="2picTitle"/>
976     <xsd:enumeration value="4picTitle"/>
977   </xsd:restriction>
978 </xsd:simpleType>
979 <xsd:simpleType name="ST_PhotoAlbumFrameShape">
980   <xsd:restriction base="xsd:token">
981     <xsd:enumeration value="frameStyle1"/>
982     <xsd:enumeration value="frameStyle2"/>
983     <xsd:enumeration value="frameStyle3"/>
984     <xsd:enumeration value="frameStyle4"/>
985     <xsd:enumeration value="frameStyle5"/>
986     <xsd:enumeration value="frameStyle6"/>
987     <xsd:enumeration value="frameStyle7"/>
988   </xsd:restriction>

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989 </xsd:simpleType>
990 <xsd:complexType name="CT_PhotoAlbum">
991   <xsd:sequence>
992     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
993   </xsd:sequence>
994   <xsd:attribute name="bw" type="xsd:boolean" use="optional" default="false"/>
995   <xsd:attribute name="showCaptions" type="xsd:boolean" use="optional" default="false"/>
996   <xsd:attribute name="layout" type="ST_PhotoAlbumLayout" use="optional" default="fitToSlide"/>
997   <xsd:attribute name="frame" type="ST_PhotoAlbumFrameShape" use="optional"
998     default="frameStyle1"/>
999 </xsd:complexType>
1000 <xsd:simpleType name="ST_SlideSizeCoordinate">
1001   <xsd:restriction base="a:ST_PositiveCoordinate32">
1002     <xsd:minInclusive value="914400"/>
1003     <xsd:maxInclusive value="51206400"/>
1004   </xsd:restriction>
1005 </xsd:simpleType>
1006 <xsd:simpleType name="ST_SlideSizeType">
1007   <xsd:restriction base="xsd:token">
1008     <xsd:enumeration value="screen4x3"/>
1009     <xsd:enumeration value="letter"/>
1010     <xsd:enumeration value="A4"/>
1011     <xsd:enumeration value="35mm"/>
1012     <xsd:enumeration value="overhead"/>
1013     <xsd:enumeration value="banner"/>
1014     <xsd:enumeration value="custom"/>
1015     <xsd:enumeration value="ledger"/>
1016     <xsd:enumeration value="A3"/>
1017     <xsd:enumeration value="B4ISO"/>
1018     <xsd:enumeration value="B5ISO"/>
1019     <xsd:enumeration value="B4JIS"/>
1020     <xsd:enumeration value="B5JIS"/>
1021     <xsd:enumeration value="hagakiCard"/>
1022     <xsd:enumeration value="screen16x9"/>
1023     <xsd:enumeration value="screen16x10"/>
1024   </xsd:restriction>
1025 </xsd:simpleType>
1026 <xsd:complexType name="CT_SlideSize">
1027   <xsd:attribute name="cx" type="ST_SlideSizeCoordinate" use="required"/>
1028   <xsd:attribute name="cy" type="ST_SlideSizeCoordinate" use="required"/>
1029   <xsd:attribute name="type" type="ST_SlideSizeType" use="optional" default="custom"/>
1030 </xsd:complexType>
1031 <xsd:complexType name="CT_Kinsoku">
1032   <xsd:attribute name="lang" type="xsd:string" use="optional"/>
1033   <xsd:attribute name="invalStChars" type="xsd:string" use="required"/>
1034   <xsd:attribute name="invalEndChars" type="xsd:string" use="required"/>
1035 </xsd:complexType>
1036 <xsd:simpleType name="ST_BookmarkIdSeed">
1037   <xsd:restriction base="xsd:unsignedInt">
1038     <xsd:minInclusive value="1"/>
1039     <xsd:maxExclusive value="2147483648"/>
1040   </xsd:restriction>
1041 </xsd:simpleType>

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1042 <xsd:complexType name="CT_ModifyVerifier">
1043   <xsd:attribute name="algorithmName" type="xsd:string" use="optional"/>
1044   <xsd:attribute name="hashValue" type="xsd:base64Binary" use="optional"/>
1045   <xsd:attribute name="saltValue" type="xsd:base64Binary" use="optional"/>
1046   <xsd:attribute name="spinValue" type="xsd:unsignedInt" use="optional"/>
1047   <xsd:attribute name="cryptProviderType" type="s:ST_CryptProv" use="optional"/>
1048   <xsd:attribute name="cryptAlgorithmClass" type="s:ST_AlgorithmClass" use="optional"/>
1049   <xsd:attribute name="cryptAlgorithmType" type="s:ST_AlgorithmType" use="optional"/>
1050   <xsd:attribute name="cryptAlgorithmSid" type="xsd:unsignedInt" use="optional"/>
1051   <xsd:attribute name="spinCount" type="xsd:unsignedInt" use="optional"/>
1052   <xsd:attribute name="saltData" type="xsd:base64Binary" use="optional"/>
1053   <xsd:attribute name="hashData" type="xsd:base64Binary" use="optional"/>
1054   <xsd:attribute name="cryptProvider" type="xsd:string" use="optional"/>
1055   <xsd:attribute name="algIdExt" type="xsd:unsignedInt" use="optional"/>
1056   <xsd:attribute name="algIdExtSource" type="xsd:string" use="optional"/>
1057   <xsd:attribute name="cryptProviderTypeExt" type="xsd:unsignedInt" use="optional"/>
1058   <xsd:attribute name="cryptProviderTypeExtSource" type="xsd:string" use="optional"/>
1059 </xsd:complexType>
1060 <xsd:complexType name="CT_Presentation">
1061   <xsd:sequence>
1062     <xsd:element name="sldMasterIdList" type="CT_SlideMasterIdList" minOccurs="0"
1063       maxOccurs="1"/>
1064     <xsd:element name="notesMasterIdList" type="CT_NotesMasterIdList" minOccurs="0"
1065       maxOccurs="1"/>
1066     <xsd:element name="handoutMasterIdList" type="CT_HandoutMasterIdList" minOccurs="0"
1067       maxOccurs="1"/>
1068     <xsd:element name="sldIdList" type="CT_SlideIdList" minOccurs="0" maxOccurs="1"/>
1069     <xsd:element name="sldSz" type="CT_SlideSize" minOccurs="0" maxOccurs="1"/>
1070     <xsd:element name="notesSz" type="a:CT_PositiveSize2D" minOccurs="1" maxOccurs="1"/>
1071     <xsd:element name="smartTags" type="CT_SmartTags" minOccurs="0" maxOccurs="1"/>
1072     <xsd:element name="embeddedFontList" type="CT_EmbeddedFontList" minOccurs="0"
1073       maxOccurs="1"/>
1074     <xsd:element name="custShowList" type="CT_CustomShowList" minOccurs="0" maxOccurs="1"/>
1075     <xsd:element name="photoAlbum" type="CT_PhotoAlbum" minOccurs="0" maxOccurs="1"/>
1076     <xsd:element name="custDataList" type="CT_CustomerDataList" minOccurs="0" maxOccurs="1"/>
1077     <xsd:element name="kinsoku" type="CT_Kinsoku" minOccurs="0"/>
1078     <xsd:element name="defaultTextStyle" type="a:CT_TextListStyle" minOccurs="0"
1079       maxOccurs="1"/>
1080     <xsd:element name="modifyVerifier" type="CT_ModifyVerifier" minOccurs="0" maxOccurs="1"/>
1081     <xsd:element name="extList" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1082   </xsd:sequence>
1083   <xsd:attribute name="serverZoom" type="a:ST_Percentage" use="optional" default="50%"/>
1084   <xsd:attribute name="firstSlideNum" type="xsd:int" use="optional" default="1"/>
1085   <xsd:attribute name="showSpecialPlsOnTitleSld" type="xsd:boolean" use="optional"
1086     default="true"/>
1087   <xsd:attribute name="rtl" type="xsd:boolean" use="optional" default="false"/>
1088   <xsd:attribute name="removePersonalInfoOnSave" type="xsd:boolean" use="optional"
1089     default="false"/>
1090   <xsd:attribute name="compatMode" type="xsd:boolean" use="optional" default="false"/>
1091   <xsd:attribute name="strictFirstAndLastChars" type="xsd:boolean" use="optional"
1092     default="true"/>
1093   <xsd:attribute name="embedTrueTypeFonts" type="xsd:boolean" use="optional" default="false"/>
1094   <xsd:attribute name="saveSubsetFonts" type="xsd:boolean" use="optional" default="false"/>

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1095     <xsd:attribute name="autoCompressPictures" type="xsd:boolean" use="optional" default="true"/>
1096     <xsd:attribute name="bookmarkIdSeed" type="ST_BookmarkIdSeed" use="optional" default="1"/>
1097     <xsd:attribute name="conformance" type="s:ST_ConformanceClass"/>
1098 </xsd:complexType>
1099 <xsd:element name="presentation" type="CT_Presentation"/>
1100 <xsd:complexType name="CT_HtmlPublishProperties">
1101     <xsd:sequence>
1102         <xsd:group ref="EG_SlideListChoice" minOccurs="1" maxOccurs="1"/>
1103         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1104     </xsd:sequence>
1105     <xsd:attribute name="showSpeakerNotes" type="xsd:boolean" use="optional" default="true"/>
1106     <xsd:attribute name="target" type="xsd:string" use="optional"/>
1107     <xsd:attribute name="title" type="xsd:string" use="optional" default=""/>
1108     <xsd:attribute ref="r:id" use="required"/>
1109 </xsd:complexType>
1110 <xsd:simpleType name="ST_WebColorType">
1111     <xsd:restriction base="xsd:token">
1112         <xsd:enumeration value="none"/>
1113         <xsd:enumeration value="browser"/>
1114         <xsd:enumeration value="presentationText"/>
1115         <xsd:enumeration value="presentationAccent"/>
1116         <xsd:enumeration value="whiteTextOnBlack"/>
1117         <xsd:enumeration value="blackTextOnWhite"/>
1118     </xsd:restriction>
1119 </xsd:simpleType>
1120 <xsd:simpleType name="ST_WebScreenSize">
1121     <xsd:restriction base="xsd:token">
1122         <xsd:enumeration value="544x376"/>
1123         <xsd:enumeration value="640x480"/>
1124         <xsd:enumeration value="720x512"/>
1125         <xsd:enumeration value="800x600"/>
1126         <xsd:enumeration value="1024x768"/>
1127         <xsd:enumeration value="1152x882"/>
1128         <xsd:enumeration value="1152x900"/>
1129         <xsd:enumeration value="1280x1024"/>
1130         <xsd:enumeration value="1600x1200"/>
1131         <xsd:enumeration value="1800x1400"/>
1132         <xsd:enumeration value="1920x1200"/>
1133     </xsd:restriction>
1134 </xsd:simpleType>
1135 <xsd:simpleType name="ST_WebEncoding">
1136     <xsd:restriction base="xsd:string"/>
1137 </xsd:simpleType>
1138 <xsd:complexType name="CT_WebProperties">
1139     <xsd:sequence>
1140         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1141     </xsd:sequence>
1142     <xsd:attribute name="showAnimation" type="xsd:boolean" use="optional" default="false"/>
1143     <xsd:attribute name="resizeGraphics" type="xsd:boolean" use="optional" default="true"/>
1144     <xsd:attribute name="allowPng" type="xsd:boolean" use="optional" default="false"/>
1145     <xsd:attribute name="relyOnVml" type="xsd:boolean" use="optional" default="false"/>
1146     <xsd:attribute name="organizeInFolders" type="xsd:boolean" use="optional" default="true"/>
1147     <xsd:attribute name="useLongFileNames" type="xsd:boolean" use="optional" default="true"/>

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1148     <xsd:attribute name="imgSz" type="ST_WebScreenSize" use="optional" default="800x600"/>
1149     <xsd:attribute name="encoding" type="ST_WebEncoding" use="optional" default=""/>
1150     <xsd:attribute name="clr" type="ST_WebColorType" use="optional" default="whiteTextOnBlack"/>
1151 </xsd:complexType>
1152 <xsd:simpleType name="ST_PrintWhat">
1153     <xsd:restriction base="xsd:token">
1154         <xsd:enumeration value="slides"/>
1155         <xsd:enumeration value="handouts1"/>
1156         <xsd:enumeration value="handouts2"/>
1157         <xsd:enumeration value="handouts3"/>
1158         <xsd:enumeration value="handouts4"/>
1159         <xsd:enumeration value="handouts6"/>
1160         <xsd:enumeration value="handouts9"/>
1161         <xsd:enumeration value="notes"/>
1162         <xsd:enumeration value="outline"/>
1163     </xsd:restriction>
1164 </xsd:simpleType>
1165 <xsd:simpleType name="ST_PrintColorMode">
1166     <xsd:restriction base="xsd:token">
1167         <xsd:enumeration value="bw"/>
1168         <xsd:enumeration value="gray"/>
1169         <xsd:enumeration value="clr"/>
1170     </xsd:restriction>
1171 </xsd:simpleType>
1172 <xsd:complexType name="CT_PrintProperties">
1173     <xsd:sequence>
1174         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1175     </xsd:sequence>
1176     <xsd:attribute name="prnWhat" type="ST_PrintWhat" use="optional" default="slides"/>
1177     <xsd:attribute name="clrMode" type="ST_PrintColorMode" use="optional" default="clr"/>
1178     <xsd:attribute name="hiddenSlides" type="xsd:boolean" use="optional" default="false"/>
1179     <xsd:attribute name="scaleToFitPaper" type="xsd:boolean" use="optional" default="false"/>
1180     <xsd:attribute name="frameSlides" type="xsd:boolean" use="optional" default="false"/>
1181 </xsd:complexType>
1182 <xsd:complexType name="CT_ShowInfoBrowse">
1183     <xsd:attribute name="showScrollbar" type="xsd:boolean" use="optional" default="true"/>
1184 </xsd:complexType>
1185 <xsd:complexType name="CT_ShowInfoKiosk">
1186     <xsd:attribute name="restart" type="xsd:unsignedInt" use="optional" default="300000"/>
1187 </xsd:complexType>
1188 <xsd:group name="EG_ShowType">
1189     <xsd:choice>
1190         <xsd:element name="present" type="CT_Empty"/>
1191         <xsd:element name="browse" type="CT_ShowInfoBrowse"/>
1192         <xsd:element name="kiosk" type="CT_ShowInfoKiosk"/>
1193     </xsd:choice>
1194 </xsd:group>
1195 <xsd:complexType name="CT_ShowProperties">
1196     <xsd:sequence minOccurs="0" maxOccurs="1">
1197         <xsd:group ref="EG_ShowType" minOccurs="0" maxOccurs="1"/>
1198         <xsd:group ref="EG_SlideListChoice" minOccurs="0" maxOccurs="1"/>
1199         <xsd:element name="penClr" type="a:CT_Color" minOccurs="0" maxOccurs="1"/>
1200         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>

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1201     </xsd:sequence>
1202     <xsd:attribute name="loop" type="xsd:boolean" use="optional" default="false"/>
1203     <xsd:attribute name="showNarration" type="xsd:boolean" use="optional" default="false"/>
1204     <xsd:attribute name="showAnimation" type="xsd:boolean" use="optional" default="true"/>
1205     <xsd:attribute name="useTimings" type="xsd:boolean" use="optional" default="true"/>
1206 </xsd:complexType>
1207 <xsd:complexType name="CT_PresentationProperties">
1208     <xsd:sequence>
1209         <xsd:element name="htmlPubPr" type="CT_HtmlPublishProperties" minOccurs="0"
1210             maxOccurs="1"/>
1211         <xsd:element name="webPr" type="CT_WebProperties" minOccurs="0" maxOccurs="1"/>
1212         <xsd:element name="prnPr" type="CT_PrintProperties" minOccurs="0" maxOccurs="1"/>
1213         <xsd:element name="showPr" type="CT_ShowProperties" minOccurs="0" maxOccurs="1"/>
1214         <xsd:element name="clrMru" type="a:CT_ColorMRU" minOccurs="0" maxOccurs="1"/>
1215         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1216     </xsd:sequence>
1217 </xsd:complexType>
1218 <xsd:element name="presentationPr" type="CT_PresentationProperties"/>
1219 <xsd:complexType name="CT_HeaderFooter">
1220     <xsd:sequence>
1221         <xsd:element name="extLst" type="CT_ExtensionListModify" minOccurs="0" maxOccurs="1"/>
1222     </xsd:sequence>
1223     <xsd:attribute name="sldNum" type="xsd:boolean" use="optional" default="true"/>
1224     <xsd:attribute name="hdr" type="xsd:boolean" use="optional" default="true"/>
1225     <xsd:attribute name="ftr" type="xsd:boolean" use="optional" default="true"/>
1226     <xsd:attribute name="dt" type="xsd:boolean" use="optional" default="true"/>
1227 </xsd:complexType>
1228 <xsd:simpleType name="ST_PlaceholderType">
1229     <xsd:restriction base="xsd:token">
1230         <xsd:enumeration value="title"/>
1231         <xsd:enumeration value="body"/>
1232         <xsd:enumeration value="ctrTitle"/>
1233         <xsd:enumeration value="subTitle"/>
1234         <xsd:enumeration value="dt"/>
1235         <xsd:enumeration value="sldNum"/>
1236         <xsd:enumeration value="ftr"/>
1237         <xsd:enumeration value="hdr"/>
1238         <xsd:enumeration value="obj"/>
1239         <xsd:enumeration value="chart"/>
1240         <xsd:enumeration value="tbl"/>
1241         <xsd:enumeration value="clipArt"/>
1242         <xsd:enumeration value="dgm"/>
1243         <xsd:enumeration value="media"/>
1244         <xsd:enumeration value="sldImg"/>
1245         <xsd:enumeration value="pic"/>
1246     </xsd:restriction>
1247 </xsd:simpleType>
1248 <xsd:simpleType name="ST_PlaceholderSize">
1249     <xsd:restriction base="xsd:token">
1250         <xsd:enumeration value="full"/>
1251         <xsd:enumeration value="half"/>
1252         <xsd:enumeration value="quarter"/>
1253     </xsd:restriction>

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1254 </xsd:simpleType>
1255 <xsd:complexType name="CT_Placeholder">
1256   <xsd:sequence>
1257     <xsd:element name="extLst" type="CT_ExtensionListModify" minOccurs="0" maxOccurs="1"/>
1258   </xsd:sequence>
1259   <xsd:attribute name="type" type="ST_PlaceholderType" use="optional" default="obj"/>
1260   <xsd:attribute name="orient" type="ST_Direction" use="optional" default="horz"/>
1261   <xsd:attribute name="sz" type="ST_PlaceholderSize" use="optional" default="full"/>
1262   <xsd:attribute name="idx" type="xsd:unsignedInt" use="optional" default="0"/>
1263   <xsd:attribute name="hasCustomPrompt" type="xsd:boolean" use="optional" default="false"/>
1264 </xsd:complexType>
1265 <xsd:complexType name="CT_ApplicationNonVisualDrawingProps">
1266   <xsd:sequence>
1267     <xsd:element name="ph" type="CT_Placeholder" minOccurs="0" maxOccurs="1"/>
1268     <xsd:group ref="a:EG_Media" minOccurs="0" maxOccurs="1"/>
1269     <xsd:element name="custDataLst" type="CT_CustomerDataList" minOccurs="0" maxOccurs="1"/>
1270     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1271   </xsd:sequence>
1272   <xsd:attribute name="isPhoto" type="xsd:boolean" use="optional" default="false"/>
1273   <xsd:attribute name="userDrawn" type="xsd:boolean" use="optional" default="false"/>
1274 </xsd:complexType>
1275 <xsd:complexType name="CT_ShapeNonVisual">
1276   <xsd:sequence>
1277     <xsd:element name="cNvPr" type="a:CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
1278     <xsd:element name="cNvSpPr" type="a:CT_NonVisualDrawingShapeProps" minOccurs="1"
1279       maxOccurs="1"/>
1280     <xsd:element name="nvPr" type="CT_ApplicationNonVisualDrawingProps" minOccurs="1"
1281       maxOccurs="1"/>
1282   </xsd:sequence>
1283 </xsd:complexType>
1284 <xsd:complexType name="CT_Shape">
1285   <xsd:sequence>
1286     <xsd:element name="nvSpPr" type="CT_ShapeNonVisual" minOccurs="1" maxOccurs="1"/>
1287     <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="1" maxOccurs="1"/>
1288     <xsd:element name="style" type="a:CT_ShapeStyle" minOccurs="0" maxOccurs="1"/>
1289     <xsd:element name="txBody" type="a:CT_TextBody" minOccurs="0" maxOccurs="1"/>
1290     <xsd:element name="extLst" type="CT_ExtensionListModify" minOccurs="0" maxOccurs="1"/>
1291   </xsd:sequence>
1292   <xsd:attribute name="useBgFill" type="xsd:boolean" use="optional" default="false"/>
1293 </xsd:complexType>
1294 <xsd:complexType name="CT_ConnectorNonVisual">
1295   <xsd:sequence>
1296     <xsd:element name="cNvPr" type="a:CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
1297     <xsd:element name="cNvCxnSpPr" type="a:CT_NonVisualConnectorProperties" minOccurs="1"
1298       maxOccurs="1"/>
1299     <xsd:element name="nvPr" type="CT_ApplicationNonVisualDrawingProps" minOccurs="1"
1300       maxOccurs="1"/>
1301   </xsd:sequence>
1302 </xsd:complexType>
1303 <xsd:complexType name="CT_Connector">
1304   <xsd:sequence>
1305     <xsd:element name="nvCxnSpPr" type="CT_ConnectorNonVisual" minOccurs="1" maxOccurs="1"/>
1306     <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="1" maxOccurs="1"/>

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1307     <xsd:element name="style" type="a:CT_ShapeStyle" minOccurs="0" maxOccurs="1"/>
1308     <xsd:element name="extLst" type="CT_ExtensionListModify" minOccurs="0" maxOccurs="1"/>
1309   </xsd:sequence>
1310 </xsd:complexType>
1311 <xsd:complexType name="CT_PictureNonVisual">
1312   <xsd:sequence>
1313     <xsd:element name="cNvPr" type="a:CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
1314     <xsd:element name="cNvPicPr" type="a:CT_NonVisualPictureProperties" minOccurs="1"
1315       maxOccurs="1"/>
1316     <xsd:element name="nvPr" type="CT_ApplicationNonVisualDrawingProps" minOccurs="1"
1317       maxOccurs="1"/>
1318   </xsd:sequence>
1319 </xsd:complexType>
1320 <xsd:complexType name="CT_Picture">
1321   <xsd:sequence>
1322     <xsd:element name="nvPicPr" type="CT_PictureNonVisual" minOccurs="1" maxOccurs="1"/>
1323     <xsd:element name="blipFill" type="a:CT_BlipFillProperties" minOccurs="1" maxOccurs="1"/>
1324     <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="1" maxOccurs="1"/>
1325     <xsd:element name="style" type="a:CT_ShapeStyle" minOccurs="0" maxOccurs="1"/>
1326     <xsd:element name="extLst" type="CT_ExtensionListModify" minOccurs="0" maxOccurs="1"/>
1327   </xsd:sequence>
1328 </xsd:complexType>
1329 <xsd:complexType name="CT_GraphicalObjectFrameNonVisual">
1330   <xsd:sequence>
1331     <xsd:element name="cNvPr" type="a:CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
1332     <xsd:element name="cNvGraphicFramePr" type="a:CT_NonVisualGraphicFrameProperties"
1333       minOccurs="1" maxOccurs="1"/>
1334     <xsd:element name="nvPr" type="CT_ApplicationNonVisualDrawingProps" minOccurs="1"
1335       maxOccurs="1"/>
1336   </xsd:sequence>
1337 </xsd:complexType>
1338 <xsd:complexType name="CT_GraphicalObjectFrame">
1339   <xsd:sequence>
1340     <xsd:element name="nvGraphicFramePr" type="CT_GraphicalObjectFrameNonVisual" minOccurs="1"
1341       maxOccurs="1"/>
1342     <xsd:element name="xfrm" type="a:CT_Transform2D" minOccurs="1" maxOccurs="1"/>
1343     <xsd:element ref="a:graphic" minOccurs="1" maxOccurs="1"/>
1344     <xsd:element name="extLst" type="CT_ExtensionListModify" minOccurs="0" maxOccurs="1"/>
1345   </xsd:sequence>
1346   <xsd:attribute name="bwMode" type="a:ST_BlackWhiteMode" use="optional"/>
1347 </xsd:complexType>
1348 <xsd:complexType name="CT_GroupShapeNonVisual">
1349   <xsd:sequence>
1350     <xsd:element name="cNvPr" type="a:CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
1351     <xsd:element name="cNvGrpSpPr" type="a:CT_NonVisualGroupDrawingShapeProps" minOccurs="1"
1352       maxOccurs="1"/>
1353     <xsd:element name="nvPr" type="CT_ApplicationNonVisualDrawingProps" minOccurs="1"
1354       maxOccurs="1"/>
1355   </xsd:sequence>
1356 </xsd:complexType>
1357 <xsd:complexType name="CT_GroupShape">
1358   <xsd:sequence>
1359     <xsd:element name="nvGrpSpPr" type="CT_GroupShapeNonVisual" minOccurs="1" maxOccurs="1"/>

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1360     <xsd:element name="grpSpPr" type="a:CT_GroupShapeProperties" minOccurs="1" maxOccurs="1"/>
1361     <xsd:choice minOccurs="0" maxOccurs="unbounded">
1362         <xsd:element name="sp" type="CT_Shape"/>
1363         <xsd:element name="grpSp" type="CT_GroupShape"/>
1364         <xsd:element name="graphicFrame" type="CT_GraphicalObjectFrame"/>
1365         <xsd:element name="cxnSp" type="CT_Connector"/>
1366         <xsd:element name="pic" type="CT_Picture"/>
1367         <xsd:element name="contentPart" type="CT_Rel"/>
1368     </xsd:choice>
1369     <xsd:element name="extLst" type="CT_ExtensionListModify" minOccurs="0" maxOccurs="1"/>
1370 </xsd:sequence>
1371 </xsd:complexType>
1372 <xsd:complexType name="CT_Rel">
1373     <xsd:attribute ref="r:id" use="required"/>
1374 </xsd:complexType>
1375 <xsd:group name="EG_TopLevelSlide">
1376     <xsd:sequence>
1377         <xsd:element name="clrMap" type="a:CT_ColorMapping" minOccurs="1" maxOccurs="1"/>
1378     </xsd:sequence>
1379 </xsd:group>
1380 <xsd:group name="EG_ChildSlide">
1381     <xsd:sequence>
1382         <xsd:element name="clrMapOvr" type="a:CT_ColorMappingOverride" minOccurs="0"
1383             maxOccurs="1"/>
1384     </xsd:sequence>
1385 </xsd:group>
1386 <xsd:attributeGroup name="AG_ChildSlide">
1387     <xsd:attribute name="showMasterSp" type="xsd:boolean" use="optional" default="true"/>
1388     <xsd:attribute name="showMasterPhAnim" type="xsd:boolean" use="optional" default="true"/>
1389 </xsd:attributeGroup>
1390 <xsd:complexType name="CT_BackgroundProperties">
1391     <xsd:sequence>
1392         <xsd:group ref="a:EG_FillProperties" minOccurs="1" maxOccurs="1"/>
1393         <xsd:group ref="a:EG_EffectProperties" minOccurs="0" maxOccurs="1"/>
1394         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1395     </xsd:sequence>
1396     <xsd:attribute name="shadeToTitle" type="xsd:boolean" use="optional" default="false"/>
1397 </xsd:complexType>
1398 <xsd:group name="EG_Background">
1399     <xsd:choice>
1400         <xsd:element name="bgPr" type="CT_BackgroundProperties"/>
1401         <xsd:element name="bgRef" type="a:CT_StyleMatrixReference"/>
1402     </xsd:choice>
1403 </xsd:group>
1404 <xsd:complexType name="CT_Background">
1405     <xsd:sequence>
1406         <xsd:group ref="EG_Background"/>
1407     </xsd:sequence>
1408     <xsd:attribute name="bwMode" type="a:ST_BlackWhiteMode" use="optional" default="white"/>
1409 </xsd:complexType>
1410 <xsd:complexType name="CT_CommonSlideData">
1411     <xsd:sequence>
1412         <xsd:element name="bg" type="CT_Background" minOccurs="0" maxOccurs="1"/>

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1413     <xsd:element name="spTree" type="CT_GroupShape" minOccurs="1" maxOccurs="1"/>
1414     <xsd:element name="custDataLst" type="CT_CustomerDataList" minOccurs="0" maxOccurs="1"/>
1415     <xsd:element name="controls" type="CT_ControlList" minOccurs="0" maxOccurs="1"/>
1416     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1417   </xsd:sequence>
1418   <xsd:attribute name="name" type="xsd:string" use="optional" default=""/>
1419 </xsd:complexType>
1420 <xsd:complexType name="CT_Slide">
1421   <xsd:sequence minOccurs="1" maxOccurs="1">
1422     <xsd:element name="cSld" type="CT_CommonSlideData" minOccurs="1" maxOccurs="1"/>
1423     <xsd:group ref="EG_ChildSlide" minOccurs="0" maxOccurs="1"/>
1424     <xsd:element name="transition" type="CT_SlideTransition" minOccurs="0" maxOccurs="1"/>
1425     <xsd:element name="timing" type="CT_SlideTiming" minOccurs="0" maxOccurs="1"/>
1426     <xsd:element name="extLst" type="CT_ExtensionListModify" minOccurs="0" maxOccurs="1"/>
1427   </xsd:sequence>
1428   <xsd:attributeGroup ref="AG_ChildSlide"/>
1429   <xsd:attribute name="show" type="xsd:boolean" use="optional" default="true"/>
1430 </xsd:complexType>
1431 <xsd:element name="sld" type="CT_Slide"/>
1432 <xsd:simpleType name="ST_SlideLayoutType">
1433   <xsd:restriction base="xsd:token">
1434     <xsd:enumeration value="title"/>
1435     <xsd:enumeration value="tx"/>
1436     <xsd:enumeration value="twoColTx"/>
1437     <xsd:enumeration value="tbl"/>
1438     <xsd:enumeration value="txAndChart"/>
1439     <xsd:enumeration value="chartAndTx"/>
1440     <xsd:enumeration value="dgm"/>
1441     <xsd:enumeration value="chart"/>
1442     <xsd:enumeration value="txAndClipArt"/>
1443     <xsd:enumeration value="clipArtAndTx"/>
1444     <xsd:enumeration value="titleOnly"/>
1445     <xsd:enumeration value="blank"/>
1446     <xsd:enumeration value="txAndObj"/>
1447     <xsd:enumeration value="objAndTx"/>
1448     <xsd:enumeration value="objOnly"/>
1449     <xsd:enumeration value="obj"/>
1450     <xsd:enumeration value="txAndMedia"/>
1451     <xsd:enumeration value="mediaAndTx"/>
1452     <xsd:enumeration value="objOverTx"/>
1453     <xsd:enumeration value="txOverObj"/>
1454     <xsd:enumeration value="txAndTwoObj"/>
1455     <xsd:enumeration value="twoObjAndTx"/>
1456     <xsd:enumeration value="twoObjOverTx"/>
1457     <xsd:enumeration value="fourObj"/>
1458     <xsd:enumeration value="vertTx"/>
1459     <xsd:enumeration value="clipArtAndVertTx"/>
1460     <xsd:enumeration value="vertTitleAndTx"/>
1461     <xsd:enumeration value="vertTitleAndTxOverChart"/>
1462     <xsd:enumeration value="twoObj"/>
1463     <xsd:enumeration value="objAndTwoObj"/>
1464     <xsd:enumeration value="twoObjAndObj"/>
1465     <xsd:enumeration value="cust"/>

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1466     <xsd:enumeration value="secHead"/>
1467     <xsd:enumeration value="twoTxTwoObj"/>
1468     <xsd:enumeration value="objTx"/>
1469     <xsd:enumeration value="picTx"/>
1470   </xsd:restriction>
1471 </xsd:simpleType>
1472 <xsd:complexType name="CT_SlideLayout">
1473   <xsd:sequence minOccurs="1" maxOccurs="1">
1474     <xsd:element name="cSld" type="CT_CommonSlideData" minOccurs="1" maxOccurs="1"/>
1475     <xsd:group ref="EG_ChildSlide" minOccurs="0" maxOccurs="1"/>
1476     <xsd:element name="transition" type="CT_SlideTransition" minOccurs="0" maxOccurs="1"/>
1477     <xsd:element name="timing" type="CT_SlideTiming" minOccurs="0" maxOccurs="1"/>
1478     <xsd:element name="hf" type="CT_HeaderFooter" minOccurs="0" maxOccurs="1"/>
1479     <xsd:element name="extLst" type="CT_ExtensionListModify" minOccurs="0" maxOccurs="1"/>
1480   </xsd:sequence>
1481   <xsd:attributeGroup ref="AG_ChildSlide"/>
1482   <xsd:attribute name="matchingName" type="xsd:string" use="optional" default=""/>
1483   <xsd:attribute name="type" type="ST_SlideLayoutType" use="optional" default="cust"/>
1484   <xsd:attribute name="preserve" type="xsd:boolean" use="optional" default="false"/>
1485   <xsd:attribute name="userDrawn" type="xsd:boolean" use="optional" default="false"/>
1486 </xsd:complexType>
1487 <xsd:element name="sldLayout" type="CT_SlideLayout"/>
1488 <xsd:complexType name="CT_SlideMasterTextStyles">
1489   <xsd:sequence>
1490     <xsd:element name="titleStyle" type="a:CT_TextListStyle" minOccurs="0" maxOccurs="1"/>
1491     <xsd:element name="bodyStyle" type="a:CT_TextListStyle" minOccurs="0" maxOccurs="1"/>
1492     <xsd:element name="otherStyle" type="a:CT_TextListStyle" minOccurs="0" maxOccurs="1"/>
1493     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1494   </xsd:sequence>
1495 </xsd:complexType>
1496 <xsd:simpleType name="ST_SlideLayoutId">
1497   <xsd:restriction base="xsd:unsignedInt">
1498     <xsd:minInclusive value="2147483648"/>
1499   </xsd:restriction>
1500 </xsd:simpleType>
1501 <xsd:complexType name="CT_SlideLayoutIdListEntry">
1502   <xsd:sequence>
1503     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1504   </xsd:sequence>
1505   <xsd:attribute name="id" type="ST_SlideLayoutId" use="optional"/>
1506   <xsd:attribute ref="r:id" use="required"/>
1507 </xsd:complexType>
1508 <xsd:complexType name="CT_SlideLayoutIdList">
1509   <xsd:sequence>
1510     <xsd:element name="sldLayoutId" type="CT_SlideLayoutIdListEntry" minOccurs="0"
1511       maxOccurs="unbounded"/>
1512   </xsd:sequence>
1513 </xsd:complexType>
1514 <xsd:complexType name="CT_SlideMaster">
1515   <xsd:sequence minOccurs="1" maxOccurs="1">
1516     <xsd:element name="cSld" type="CT_CommonSlideData" minOccurs="1" maxOccurs="1"/>
1517     <xsd:group ref="EG_TopLevelSlide" minOccurs="1" maxOccurs="1"/>

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1518     <xsd:element name="sldLayoutIdList" type="CT_SlideLayoutIdList" minOccurs="0"
1519         maxOccurs="1"/>
1520     <xsd:element name="transition" type="CT_SlideTransition" minOccurs="0" maxOccurs="1"/>
1521     <xsd:element name="timing" type="CT_SlideTiming" minOccurs="0" maxOccurs="1"/>
1522     <xsd:element name="hf" type="CT_HeaderFooter" minOccurs="0" maxOccurs="1"/>
1523     <xsd:element name="txStyles" type="CT_SlideMasterTextStyles" minOccurs="0" maxOccurs="1"/>
1524     <xsd:element name="extLst" type="CT_ExtensionListModify" minOccurs="0" maxOccurs="1"/>
1525 </xsd:sequence>
1526 <xsd:attribute name="preserve" type="xsd:boolean" use="optional" default="false"/>
1527 </xsd:complexType>
1528 <xsd:element name="sldMaster" type="CT_SlideMaster"/>
1529 <xsd:complexType name="CT_HandoutMaster">
1530     <xsd:sequence>
1531         <xsd:element name="cSld" type="CT_CommonSlideData" minOccurs="1" maxOccurs="1"/>
1532         <xsd:group ref="EG_TopLevelSlide" minOccurs="1" maxOccurs="1"/>
1533         <xsd:element name="hf" type="CT_HeaderFooter" minOccurs="0" maxOccurs="1"/>
1534         <xsd:element name="extLst" type="CT_ExtensionListModify" minOccurs="0" maxOccurs="1"/>
1535     </xsd:sequence>
1536 </xsd:complexType>
1537 <xsd:element name="handoutMaster" type="CT_HandoutMaster"/>
1538 <xsd:complexType name="CT_NotesMaster">
1539     <xsd:sequence>
1540         <xsd:element name="cSld" type="CT_CommonSlideData" minOccurs="1" maxOccurs="1"/>
1541         <xsd:group ref="EG_TopLevelSlide" minOccurs="1" maxOccurs="1"/>
1542         <xsd:element name="hf" type="CT_HeaderFooter" minOccurs="0" maxOccurs="1"/>
1543         <xsd:element name="notesStyle" type="a:CT_TextListStyle" minOccurs="0" maxOccurs="1"/>
1544         <xsd:element name="extLst" type="CT_ExtensionListModify" minOccurs="0" maxOccurs="1"/>
1545     </xsd:sequence>
1546 </xsd:complexType>
1547 <xsd:element name="notesMaster" type="CT_NotesMaster"/>
1548 <xsd:complexType name="CT_NotesSlide">
1549     <xsd:sequence minOccurs="1" maxOccurs="1">
1550         <xsd:element name="cSld" type="CT_CommonSlideData" minOccurs="1" maxOccurs="1"/>
1551         <xsd:group ref="EG_ChildSlide" minOccurs="0" maxOccurs="1"/>
1552         <xsd:element name="extLst" type="CT_ExtensionListModify" minOccurs="0" maxOccurs="1"/>
1553     </xsd:sequence>
1554     <xsd:attributeGroup ref="AG_ChildSlide"/>
1555 </xsd:complexType>
1556 <xsd:element name="notes" type="CT_NotesSlide"/>
1557 <xsd:complexType name="CT_SlideSyncProperties">
1558     <xsd:sequence>
1559         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1560     </xsd:sequence>
1561     <xsd:attribute name="serverSldId" type="xsd:string" use="required"/>
1562     <xsd:attribute name="serverSldModifiedTime" type="xsd:dateTime" use="required"/>
1563     <xsd:attribute name="clientInsertedTime" type="xsd:dateTime" use="required"/>
1564 </xsd:complexType>
1565 <xsd:element name="sldSyncPr" type="CT_SlideSyncProperties"/>
1566 <xsd:complexType name="CT_StringTag">
1567     <xsd:attribute name="name" type="xsd:string" use="required"/>
1568     <xsd:attribute name="val" type="xsd:string" use="required"/>
1569 </xsd:complexType>
1570 <xsd:complexType name="CT_TagList">

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1571     <xsd:sequence>
1572         <xsd:element name="tag" type="CT_StringTag" minOccurs="0" maxOccurs="unbounded"/>
1573     </xsd:sequence>
1574 </xsd:complexType>
1575 <xsd:element name="tagLst" type="CT_TagList"/>
1576 <xsd:simpleType name="ST_SplitterBarState">
1577     <xsd:restriction base="xsd:token">
1578         <xsd:enumeration value="minimized"/>
1579         <xsd:enumeration value="restored"/>
1580         <xsd:enumeration value="maximized"/>
1581     </xsd:restriction>
1582 </xsd:simpleType>
1583 <xsd:simpleType name="ST_ViewType">
1584     <xsd:restriction base="xsd:token">
1585         <xsd:enumeration value="sldView"/>
1586         <xsd:enumeration value="sldMasterView"/>
1587         <xsd:enumeration value="notesView"/>
1588         <xsd:enumeration value="handoutView"/>
1589         <xsd:enumeration value="notesMasterView"/>
1590         <xsd:enumeration value="outlineView"/>
1591         <xsd:enumeration value="sldSorterView"/>
1592         <xsd:enumeration value="sldThumbnailView"/>
1593     </xsd:restriction>
1594 </xsd:simpleType>
1595 <xsd:complexType name="CT_NormalViewPortion">
1596     <xsd:attribute name="sz" type="a:ST_PositiveFixedPercentage" use="required"/>
1597     <xsd:attribute name="autoAdjust" type="xsd:boolean" use="optional" default="true"/>
1598 </xsd:complexType>
1599 <xsd:complexType name="CT_NormalViewProperties">
1600     <xsd:sequence>
1601         <xsd:element name="restoredLeft" type="CT_NormalViewPortion" minOccurs="1" maxOccurs="1"/>
1602         <xsd:element name="restoredTop" type="CT_NormalViewPortion" minOccurs="1" maxOccurs="1"/>
1603         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1604     </xsd:sequence>
1605     <xsd:attribute name="showOutlineIcons" type="xsd:boolean" use="optional" default="true"/>
1606     <xsd:attribute name="snapVertSplitter" type="xsd:boolean" use="optional" default="false"/>
1607     <xsd:attribute name="vertBarState" type="ST_SplitterBarState" use="optional"
1608         default="restored"/>
1609     <xsd:attribute name="horzBarState" type="ST_SplitterBarState" use="optional"
1610         default="restored"/>
1611     <xsd:attribute name="preferSingleView" type="xsd:boolean" use="optional" default="false"/>
1612 </xsd:complexType>
1613 <xsd:complexType name="CT_CommonViewProperties">
1614     <xsd:sequence>
1615         <xsd:element name="scale" type="a:CT_Scale2D" minOccurs="1" maxOccurs="1"/>
1616         <xsd:element name="origin" type="a:CT_Point2D" minOccurs="1" maxOccurs="1"/>
1617     </xsd:sequence>
1618     <xsd:attribute name="varScale" type="xsd:boolean" use="optional" default="false"/>
1619 </xsd:complexType>
1620 <xsd:complexType name="CT_NotesTextViewProperties">
1621     <xsd:sequence minOccurs="1" maxOccurs="1">
1622         <xsd:element name="cViewPr" type="CT_CommonViewProperties" minOccurs="1" maxOccurs="1"/>
1623         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>

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1624     </xsd:sequence>
1625 </xsd:complexType>
1626 <xsd:complexType name="CT_OutlineViewSlideEntry">
1627     <xsd:attribute ref="r:id" use="required"/>
1628     <xsd:attribute name="collapse" type="xsd:boolean" use="optional" default="false"/>
1629 </xsd:complexType>
1630 <xsd:complexType name="CT_OutlineViewSlideList">
1631     <xsd:sequence>
1632         <xsd:element name="sld" type="CT_OutlineViewSlideEntry" minOccurs="0"
1633             maxOccurs="unbounded"/>
1634     </xsd:sequence>
1635 </xsd:complexType>
1636 <xsd:complexType name="CT_OutlineViewProperties">
1637     <xsd:sequence minOccurs="1" maxOccurs="1">
1638         <xsd:element name="cViewPr" type="CT_CommonViewProperties" minOccurs="1" maxOccurs="1"/>
1639         <xsd:element name="sldLst" type="CT_OutlineViewSlideList" minOccurs="0" maxOccurs="1"/>
1640         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1641     </xsd:sequence>
1642 </xsd:complexType>
1643 <xsd:complexType name="CT_SlideSorterViewProperties">
1644     <xsd:sequence minOccurs="1" maxOccurs="1">
1645         <xsd:element name="cViewPr" type="CT_CommonViewProperties" minOccurs="1" maxOccurs="1"/>
1646         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1647     </xsd:sequence>
1648     <xsd:attribute name="showFormatting" type="xsd:boolean" use="optional" default="true"/>
1649 </xsd:complexType>
1650 <xsd:complexType name="CT_Guide">
1651     <xsd:attribute name="orient" type="ST_Direction" use="optional" default="vert"/>
1652     <xsd:attribute name="pos" type="a:ST_Coordinate32" use="optional" default="0"/>
1653 </xsd:complexType>
1654 <xsd:complexType name="CT_GuideList">
1655     <xsd:sequence minOccurs="0" maxOccurs="1">
1656         <xsd:element name="guide" type="CT_Guide" minOccurs="0" maxOccurs="unbounded"/>
1657     </xsd:sequence>
1658 </xsd:complexType>
1659 <xsd:complexType name="CT_CommonSlideViewProperties">
1660     <xsd:sequence>
1661         <xsd:element name="cViewPr" type="CT_CommonViewProperties" minOccurs="1" maxOccurs="1"/>
1662         <xsd:element name="guideLst" type="CT_GuideList" minOccurs="0" maxOccurs="1"/>
1663     </xsd:sequence>
1664     <xsd:attribute name="snapToGrid" type="xsd:boolean" use="optional" default="true"/>
1665     <xsd:attribute name="snapToObjects" type="xsd:boolean" use="optional" default="false"/>
1666     <xsd:attribute name="showGuides" type="xsd:boolean" use="optional" default="false"/>
1667 </xsd:complexType>
1668 <xsd:complexType name="CT_SlideViewProperties">
1669     <xsd:sequence>
1670         <xsd:element name="cSldViewPr" type="CT_CommonSlideViewProperties" minOccurs="1"
1671             maxOccurs="1"/>
1672         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1673     </xsd:sequence>
1674 </xsd:complexType>
1675 <xsd:complexType name="CT_NotesViewProperties">
1676     <xsd:sequence>

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1677     <xsd:element name="cSldViewPr" type="CT_CommonSlideViewProperties" minOccurs="1"
1678         maxOccurs="1"/>
1679     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1680 </xsd:sequence>
1681 </xsd:complexType>
1682 <xsd:complexType name="CT_ViewProperties">
1683     <xsd:sequence minOccurs="0" maxOccurs="1">
1684         <xsd:element name="normalViewPr" type="CT_NormalViewProperties" minOccurs="0"
1685             maxOccurs="1"/>
1686         <xsd:element name="slideViewPr" type="CT_SlideViewProperties" minOccurs="0"
1687             maxOccurs="1"/>
1688         <xsd:element name="outlineViewPr" type="CT_OutlineViewProperties" minOccurs="0"
1689             maxOccurs="1"/>
1690         <xsd:element name="notesTextViewPr" type="CT_NotesTextViewProperties" minOccurs="0"
1691             maxOccurs="1"/>
1692         <xsd:element name="sorterViewPr" type="CT_SlideSorterViewProperties" minOccurs="0"
1693             maxOccurs="1"/>
1694         <xsd:element name="notesViewPr" type="CT_NotesViewProperties" minOccurs="0"
1695             maxOccurs="1"/>
1696         <xsd:element name="gridSpacing" type="a:CT_PositiveSize2D" minOccurs="0" maxOccurs="1"/>
1697         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1698     </xsd:sequence>
1699     <xsd:attribute name="lastView" type="ST_ViewType" use="optional" default="sldView"/>
1700     <xsd:attribute name="showComments" type="xsd:boolean" use="optional" default="true"/>
1701 </xsd:complexType>
1702 <xsd:element name="viewPr" type="CT_ViewProperties"/>
1703 </xsd:schema>

```

A.4 DrawingML - Framework

A.4.1 DrawingML - Main

This schema is available in the file dml-main.xsd.

```

1 <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
2   xmlns:r="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
3   xmlns:s="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
4   xmlns="http://schemas.openxmlformats.org/drawingml/2006/main"
5   targetNamespace="http://schemas.openxmlformats.org/drawingml/2006/main"
6   elementFormDefault="qualified">
7   <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
8       schemaLocation="shared-relationshipReference.xsd"/>
9   <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
10       schemaLocation="shared-commonSimpleTypes.xsd"/>
11   <xsd:import namespace="http://schemas.openxmlformats.org/drawingml/2006/diagram"
12       schemaLocation="dml-diagram.xsd"/>
13   <xsd:import namespace="http://schemas.openxmlformats.org/drawingml/2006/chart"
14       schemaLocation="dml-chart.xsd"/>
15   <xsd:import namespace="http://schemas.openxmlformats.org/drawingml/2006/picture"
16       schemaLocation="dml-picture.xsd"/>
17   <xsd:import namespace="http://schemas.openxmlformats.org/drawingml/2006/compatibility"
18       schemaLocation="dml-compatibility.xsd"/>

```

```

19 <xsd:import namespace="http://schemas.openxmlformats.org/drawingml/2006/lockedCanvas"
20   schemaLocation="dml-lockedCanvas.xsd"/>
21 <xsd:complexType name="CT_AudioFile">
22   <xsd:sequence>
23     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
24   </xsd:sequence>
25   <xsd:attribute ref="r:link" use="required"/>
26   <xsd:attribute name="contentType" type="xsd:string" use="optional"/>
27 </xsd:complexType>
28 <xsd:complexType name="CT_VideoFile">
29   <xsd:sequence>
30     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
31   </xsd:sequence>
32   <xsd:attribute ref="r:link" use="required"/>
33   <xsd:attribute name="contentType" type="xsd:string" use="optional"/>
34 </xsd:complexType>
35 <xsd:complexType name="CT_QuickTimeFile">
36   <xsd:sequence>
37     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
38   </xsd:sequence>
39   <xsd:attribute ref="r:link" use="required"/>
40 </xsd:complexType>
41 <xsd:complexType name="CT_AudioCDTime">
42   <xsd:attribute name="track" type="xsd:unsignedByte" use="required"/>
43   <xsd:attribute name="time" type="xsd:unsignedInt" use="optional" default="0"/>
44 </xsd:complexType>
45 <xsd:complexType name="CT_AudioCD">
46   <xsd:sequence>
47     <xsd:element name="st" type="CT_AudioCDTime" minOccurs="1" maxOccurs="1"/>
48     <xsd:element name="end" type="CT_AudioCDTime" minOccurs="1" maxOccurs="1"/>
49     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
50   </xsd:sequence>
51 </xsd:complexType>
52 <xsd:group name="EG_Media">
53   <xsd:choice>
54     <xsd:element name="audioCd" type="CT_AudioCD"/>
55     <xsd:element name="wavAudioFile" type="CT_EmbeddedWAVAudioFile"/>
56     <xsd:element name="audioFile" type="CT_AudioFile"/>
57     <xsd:element name="videoFile" type="CT_VideoFile"/>
58     <xsd:element name="quickTimeFile" type="CT_QuickTimeFile"/>
59   </xsd:choice>
60 </xsd:group>
61 <xsd:element name="videoFile" type="CT_VideoFile"/>
62 <xsd:simpleType name="ST_StyleMatrixColumnIndex">
63   <xsd:restriction base="xsd:unsignedInt"/>
64 </xsd:simpleType>
65 <xsd:simpleType name="ST_FontCollectionIndex">
66   <xsd:restriction base="xsd:token">
67     <xsd:enumeration value="major"/>
68     <xsd:enumeration value="minor"/>
69     <xsd:enumeration value="none"/>
70   </xsd:restriction>
71 </xsd:simpleType>

```

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72 <xsd:simpleType name="ST_ColorSchemeIndex">
73   <xsd:restriction base="xsd:token">
74     <xsd:enumeration value="dk1"/>
75     <xsd:enumeration value="lt1"/>
76     <xsd:enumeration value="dk2"/>
77     <xsd:enumeration value="lt2"/>
78     <xsd:enumeration value="accent1"/>
79     <xsd:enumeration value="accent2"/>
80     <xsd:enumeration value="accent3"/>
81     <xsd:enumeration value="accent4"/>
82     <xsd:enumeration value="accent5"/>
83     <xsd:enumeration value="accent6"/>
84     <xsd:enumeration value="hlink"/>
85     <xsd:enumeration value="folHlink"/>
86   </xsd:restriction>
87 </xsd:simpleType>
88 <xsd:complexType name="CT_ColorScheme">
89   <xsd:sequence>
90     <xsd:element name="dk1" type="CT_Color" minOccurs="1" maxOccurs="1"/>
91     <xsd:element name="lt1" type="CT_Color" minOccurs="1" maxOccurs="1"/>
92     <xsd:element name="dk2" type="CT_Color" minOccurs="1" maxOccurs="1"/>
93     <xsd:element name="lt2" type="CT_Color" minOccurs="1" maxOccurs="1"/>
94     <xsd:element name="accent1" type="CT_Color" minOccurs="1" maxOccurs="1"/>
95     <xsd:element name="accent2" type="CT_Color" minOccurs="1" maxOccurs="1"/>
96     <xsd:element name="accent3" type="CT_Color" minOccurs="1" maxOccurs="1"/>
97     <xsd:element name="accent4" type="CT_Color" minOccurs="1" maxOccurs="1"/>
98     <xsd:element name="accent5" type="CT_Color" minOccurs="1" maxOccurs="1"/>
99     <xsd:element name="accent6" type="CT_Color" minOccurs="1" maxOccurs="1"/>
100    <xsd:element name="hlink" type="CT_Color" minOccurs="1" maxOccurs="1"/>
101    <xsd:element name="folHlink" type="CT_Color" minOccurs="1" maxOccurs="1"/>
102    <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
103  </xsd:sequence>
104  <xsd:attribute name="name" type="xsd:string" use="required"/>
105 </xsd:complexType>
106 <xsd:complexType name="CT_CustomColor">
107   <xsd:sequence>
108     <xsd:group ref="EG_ColorChoice" minOccurs="1" maxOccurs="1"/>
109   </xsd:sequence>
110   <xsd:attribute name="name" type="xsd:string" use="optional" default=""/>
111 </xsd:complexType>
112 <xsd:complexType name="CT_SupplementalFont">
113   <xsd:attribute name="script" type="xsd:string" use="required"/>
114   <xsd:attribute name="typeface" type="ST_TextTypeface" use="required"/>
115 </xsd:complexType>
116 <xsd:complexType name="CT_CustomColorList">
117   <xsd:sequence>
118     <xsd:element name="custClr" type="CT_CustomColor" minOccurs="0" maxOccurs="unbounded"/>
119   </xsd:sequence>
120 </xsd:complexType>
121 <xsd:complexType name="CT_FontCollection">
122   <xsd:sequence>
123     <xsd:element name="latin" type="CT_TextFont" minOccurs="1" maxOccurs="1"/>
124     <xsd:element name="ea" type="CT_TextFont" minOccurs="1" maxOccurs="1"/>

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125     <xsd:element name="cs" type="CT_TextFont" minOccurs="1" maxOccurs="1"/>
126     <xsd:element name="font" type="CT_SupplementalFont" minOccurs="0" maxOccurs="unbounded"/>
127     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
128   </xsd:sequence>
129 </xsd:complexType>
130 <xsd:complexType name="CT_EffectStyleItem">
131   <xsd:sequence>
132     <xsd:group ref="EG_EffectProperties" minOccurs="1" maxOccurs="1"/>
133     <xsd:element name="scene3d" type="CT_Scene3D" minOccurs="0" maxOccurs="1"/>
134     <xsd:element name="sp3d" type="CT_Shape3D" minOccurs="0" maxOccurs="1"/>
135   </xsd:sequence>
136 </xsd:complexType>
137 <xsd:complexType name="CT_FontScheme">
138   <xsd:sequence>
139     <xsd:element name="majorFont" type="CT_FontCollection" minOccurs="1" maxOccurs="1"/>
140     <xsd:element name="minorFont" type="CT_FontCollection" minOccurs="1" maxOccurs="1"/>
141     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
142   </xsd:sequence>
143   <xsd:attribute name="name" type="xsd:string" use="required"/>
144 </xsd:complexType>
145 <xsd:complexType name="CT_FillStyleList">
146   <xsd:sequence>
147     <xsd:group ref="EG_FillProperties" minOccurs="3" maxOccurs="unbounded"/>
148   </xsd:sequence>
149 </xsd:complexType>
150 <xsd:complexType name="CT_LineStyleList">
151   <xsd:sequence>
152     <xsd:element name="ln" type="CT_LineProperties" minOccurs="3" maxOccurs="unbounded"/>
153   </xsd:sequence>
154 </xsd:complexType>
155 <xsd:complexType name="CT_EffectStyleList">
156   <xsd:sequence>
157     <xsd:element name="effectStyle" type="CT_EffectStyleItem" minOccurs="3"
158       maxOccurs="unbounded"/>
159   </xsd:sequence>
160 </xsd:complexType>
161 <xsd:complexType name="CT_BackgroundFillStyleList">
162   <xsd:sequence>
163     <xsd:group ref="EG_FillProperties" minOccurs="3" maxOccurs="unbounded"/>
164   </xsd:sequence>
165 </xsd:complexType>
166 <xsd:complexType name="CT_StyleMatrix">
167   <xsd:sequence>
168     <xsd:element name="fillStyleLst" type="CT_FillStyleList" minOccurs="1" maxOccurs="1"/>
169     <xsd:element name="lnStyleLst" type="CT_LineStyleList" minOccurs="1" maxOccurs="1"/>
170     <xsd:element name="effectStyleLst" type="CT_EffectStyleList" minOccurs="1" maxOccurs="1"/>
171     <xsd:element name="bgFillStyleLst" type="CT_BackgroundFillStyleList" minOccurs="1"
172       maxOccurs="1"/>
173   </xsd:sequence>
174   <xsd:attribute name="name" type="xsd:string" use="optional" default=""/>
175 </xsd:complexType>
176 <xsd:complexType name="CT_BaseStyles">
177   <xsd:sequence>

```



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178     <xsd:element name="clrScheme" type="CT_ColorScheme" minOccurs="1" maxOccurs="1"/>
179     <xsd:element name="fontScheme" type="CT_FontScheme" minOccurs="1" maxOccurs="1"/>
180     <xsd:element name="fmtScheme" type="CT_StyleMatrix" minOccurs="1" maxOccurs="1"/>
181     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
182   </xsd:sequence>
183 </xsd:complexType>
184 <xsd:complexType name="CT_OfficeArtExtension">
185   <xsd:sequence>
186     <xsd:any processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
187   </xsd:sequence>
188   <xsd:attribute name="uri" type="xsd:token" use="required"/>
189 </xsd:complexType>
190 <xsd:simpleType name="ST_Coordinate">
191   <xsd:union memberTypes="ST_CoordinateUnqualified s:ST_UniversalMeasure"/>
192 </xsd:simpleType>
193 <xsd:simpleType name="ST_CoordinateUnqualified">
194   <xsd:restriction base="xsd:long">
195     <xsd:minInclusive value="-27273042329600"/>
196     <xsd:maxInclusive value="27273042316900"/>
197   </xsd:restriction>
198 </xsd:simpleType>
199 <xsd:simpleType name="ST_Coordinate32">
200   <xsd:union memberTypes="ST_Coordinate32Unqualified s:ST_UniversalMeasure"/>
201 </xsd:simpleType>
202 <xsd:simpleType name="ST_Coordinate32Unqualified">
203   <xsd:restriction base="xsd:int"/>
204 </xsd:simpleType>
205 <xsd:simpleType name="ST_PositiveCoordinate">
206   <xsd:restriction base="xsd:long">
207     <xsd:minInclusive value="0"/>
208     <xsd:maxInclusive value="27273042316900"/>
209   </xsd:restriction>
210 </xsd:simpleType>
211 <xsd:simpleType name="ST_PositiveCoordinate32">
212   <xsd:restriction base="ST_Coordinate32Unqualified">
213     <xsd:minInclusive value="0"/>
214   </xsd:restriction>
215 </xsd:simpleType>
216 <xsd:simpleType name="ST_Angle">
217   <xsd:restriction base="xsd:int"/>
218 </xsd:simpleType>
219 <xsd:complexType name="CT_Angle">
220   <xsd:attribute name="val" type="ST_Angle" use="required"/>
221 </xsd:complexType>
222 <xsd:simpleType name="ST_FixedAngle">
223   <xsd:restriction base="ST_Angle">
224     <xsd:minExclusive value="-5400000"/>
225     <xsd:maxExclusive value="5400000"/>
226   </xsd:restriction>
227 </xsd:simpleType>
228 <xsd:simpleType name="ST_PositiveFixedAngle">
229   <xsd:restriction base="ST_Angle">
230     <xsd:minInclusive value="0"/>

```

```

231         <xsd:maxExclusive value="21600000"/>
232     </xsd:restriction>
233 </xsd:simpleType>
234 <xsd:complexType name="CT_PositiveFixedAngle">
235     <xsd:attribute name="val" type="ST_PositiveFixedAngle" use="required"/>
236 </xsd:complexType>
237 <xsd:simpleType name="ST_Percentage">
238     <xsd:union memberTypes="ST_PercentageDecimal s:ST_Percentage"/>
239 </xsd:simpleType>
240 <xsd:simpleType name="ST_PercentageDecimal">
241     <xsd:restriction base="xsd:int"/>
242 </xsd:simpleType>
243 <xsd:complexType name="CT_Percentage">
244     <xsd:attribute name="val" type="ST_Percentage" use="required"/>
245 </xsd:complexType>
246 <xsd:simpleType name="ST_PositivePercentage">
247     <xsd:union memberTypes="ST_PositivePercentageDecimal s:ST_PositivePercentage"/>
248 </xsd:simpleType>
249 <xsd:simpleType name="ST_PositivePercentageDecimal">
250     <xsd:restriction base="ST_PercentageDecimal">
251         <xsd:minInclusive value="0"/>
252     </xsd:restriction>
253 </xsd:simpleType>
254 <xsd:complexType name="CT_PositivePercentage">
255     <xsd:attribute name="val" type="ST_PositivePercentage" use="required"/>
256 </xsd:complexType>
257 <xsd:simpleType name="ST_FixedPercentage">
258     <xsd:union memberTypes="ST_FixedPercentageDecimal s:ST_FixedPercentage"/>
259 </xsd:simpleType>
260 <xsd:simpleType name="ST_FixedPercentageDecimal">
261     <xsd:restriction base="ST_PercentageDecimal">
262         <xsd:minInclusive value="-100000"/>
263         <xsd:maxInclusive value="100000"/>
264     </xsd:restriction>
265 </xsd:simpleType>
266 <xsd:complexType name="CT_FixedPercentage">
267     <xsd:attribute name="val" type="ST_FixedPercentage" use="required"/>
268 </xsd:complexType>
269 <xsd:simpleType name="ST_PositiveFixedPercentage">
270     <xsd:union memberTypes="ST_PositiveFixedPercentageDecimal s:ST_PositiveFixedPercentage"/>
271 </xsd:simpleType>
272 <xsd:simpleType name="ST_PositiveFixedPercentageDecimal">
273     <xsd:restriction base="ST_PercentageDecimal">
274         <xsd:minInclusive value="0"/>
275         <xsd:maxInclusive value="100000"/>
276     </xsd:restriction>
277 </xsd:simpleType>
278 <xsd:complexType name="CT_PositiveFixedPercentage">
279     <xsd:attribute name="val" type="ST_PositiveFixedPercentage" use="required"/>
280 </xsd:complexType>
281 <xsd:complexType name="CT_Ratio">
282     <xsd:attribute name="n" type="xsd:long" use="required"/>
283     <xsd:attribute name="d" type="xsd:long" use="required"/>

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284 </xsd:complexType>
285 <xsd:complexType name="CT_Point2D">
286   <xsd:attribute name="x" type="ST_Coordinate" use="required"/>
287   <xsd:attribute name="y" type="ST_Coordinate" use="required"/>
288 </xsd:complexType>
289 <xsd:complexType name="CT_PositiveSize2D">
290   <xsd:attribute name="cx" type="ST_PositiveCoordinate" use="required"/>
291   <xsd:attribute name="cy" type="ST_PositiveCoordinate" use="required"/>
292 </xsd:complexType>
293 <xsd:complexType name="CT_ComplementTransform"/>
294 <xsd:complexType name="CT_InverseTransform"/>
295 <xsd:complexType name="CT_GrayscaleTransform"/>
296 <xsd:complexType name="CT_GammaTransform"/>
297 <xsd:complexType name="CT_InverseGammaTransform"/>
298 <xsd:group name="EG_ColorTransform">
299   <xsd:choice>
300     <xsd:element name="tint" type="CT_PositiveFixedPercentage" minOccurs="1" maxOccurs="1"/>
301     <xsd:element name="shade" type="CT_PositiveFixedPercentage" minOccurs="1" maxOccurs="1"/>
302     <xsd:element name="comp" type="CT_ComplementTransform" minOccurs="1" maxOccurs="1"/>
303     <xsd:element name="inv" type="CT_InverseTransform" minOccurs="1" maxOccurs="1"/>
304     <xsd:element name="gray" type="CT_GrayscaleTransform" minOccurs="1" maxOccurs="1"/>
305     <xsd:element name="alpha" type="CT_PositiveFixedPercentage" minOccurs="1" maxOccurs="1"/>
306     <xsd:element name="alphaOff" type="CT_FixedPercentage" minOccurs="1" maxOccurs="1"/>
307     <xsd:element name="alphaMod" type="CT_PositivePercentage" minOccurs="1" maxOccurs="1"/>
308     <xsd:element name="hue" type="CT_PositiveFixedAngle" minOccurs="1" maxOccurs="1"/>
309     <xsd:element name="hueOff" type="CT_Angle" minOccurs="1" maxOccurs="1"/>
310     <xsd:element name="hueMod" type="CT_PositivePercentage" minOccurs="1" maxOccurs="1"/>
311     <xsd:element name="sat" type="CT_Percentage" minOccurs="1" maxOccurs="1"/>
312     <xsd:element name="satOff" type="CT_Percentage" minOccurs="1" maxOccurs="1"/>
313     <xsd:element name="satMod" type="CT_Percentage" minOccurs="1" maxOccurs="1"/>
314     <xsd:element name="lum" type="CT_Percentage" minOccurs="1" maxOccurs="1"/>
315     <xsd:element name="lumOff" type="CT_Percentage" minOccurs="1" maxOccurs="1"/>
316     <xsd:element name="lumMod" type="CT_Percentage" minOccurs="1" maxOccurs="1"/>
317     <xsd:element name="red" type="CT_Percentage" minOccurs="1" maxOccurs="1"/>
318     <xsd:element name="redOff" type="CT_Percentage" minOccurs="1" maxOccurs="1"/>
319     <xsd:element name="redMod" type="CT_Percentage" minOccurs="1" maxOccurs="1"/>
320     <xsd:element name="green" type="CT_Percentage" minOccurs="1" maxOccurs="1"/>
321     <xsd:element name="greenOff" type="CT_Percentage" minOccurs="1" maxOccurs="1"/>
322     <xsd:element name="greenMod" type="CT_Percentage" minOccurs="1" maxOccurs="1"/>
323     <xsd:element name="blue" type="CT_Percentage" minOccurs="1" maxOccurs="1"/>
324     <xsd:element name="blueOff" type="CT_Percentage" minOccurs="1" maxOccurs="1"/>
325     <xsd:element name="blueMod" type="CT_Percentage" minOccurs="1" maxOccurs="1"/>
326     <xsd:element name="gamma" type="CT_GammaTransform" minOccurs="1" maxOccurs="1"/>
327     <xsd:element name="invGamma" type="CT_InverseGammaTransform" minOccurs="1" maxOccurs="1"/>
328   </xsd:choice>
329 </xsd:group>
330 <xsd:complexType name="CT_ScRgbColor">
331   <xsd:sequence>
332     <xsd:group ref="EG_ColorTransform" minOccurs="0" maxOccurs="unbounded"/>
333   </xsd:sequence>
334   <xsd:attribute name="r" type="ST_Percentage" use="required"/>
335   <xsd:attribute name="g" type="ST_Percentage" use="required"/>
336   <xsd:attribute name="b" type="ST_Percentage" use="required"/>

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```

337 </xsd:complexType>
338 <xsd:complexType name="CT_SRgbColor">
339   <xsd:sequence>
340     <xsd:group ref="EG_ColorTransform" minOccurs="0" maxOccurs="unbounded"/>
341   </xsd:sequence>
342   <xsd:attribute name="val" type="s:ST_HexColorRGB" use="required"/>
343 </xsd:complexType>
344 <xsd:complexType name="CT_HslColor">
345   <xsd:sequence>
346     <xsd:group ref="EG_ColorTransform" minOccurs="0" maxOccurs="unbounded"/>
347   </xsd:sequence>
348   <xsd:attribute name="hue" type="ST_PositiveFixedAngle" use="required"/>
349   <xsd:attribute name="sat" type="ST_Percentage" use="required"/>
350   <xsd:attribute name="lum" type="ST_Percentage" use="required"/>
351 </xsd:complexType>
352 <xsd:simpleType name="ST_SystemColorVal">
353   <xsd:restriction base="xsd:token">
354     <xsd:enumeration value="scrollBar"/>
355     <xsd:enumeration value="background"/>
356     <xsd:enumeration value="activeCaption"/>
357     <xsd:enumeration value="inactiveCaption"/>
358     <xsd:enumeration value="menu"/>
359     <xsd:enumeration value="window"/>
360     <xsd:enumeration value="windowFrame"/>
361     <xsd:enumeration value="menuText"/>
362     <xsd:enumeration value="windowText"/>
363     <xsd:enumeration value="captionText"/>
364     <xsd:enumeration value="activeBorder"/>
365     <xsd:enumeration value="inactiveBorder"/>
366     <xsd:enumeration value="appWorkspace"/>
367     <xsd:enumeration value="highlight"/>
368     <xsd:enumeration value="highlightText"/>
369     <xsd:enumeration value="btnFace"/>
370     <xsd:enumeration value="btnShadow"/>
371     <xsd:enumeration value="grayText"/>
372     <xsd:enumeration value="btnText"/>
373     <xsd:enumeration value="inactiveCaptionText"/>
374     <xsd:enumeration value="btnHighlight"/>
375     <xsd:enumeration value="3dDkShadow"/>
376     <xsd:enumeration value="3dLight"/>
377     <xsd:enumeration value="infoText"/>
378     <xsd:enumeration value="infoBk"/>
379     <xsd:enumeration value="hotLight"/>
380     <xsd:enumeration value="gradientActiveCaption"/>
381     <xsd:enumeration value="gradientInactiveCaption"/>
382     <xsd:enumeration value="menuHighlight"/>
383     <xsd:enumeration value="menuBar"/>
384   </xsd:restriction>
385 </xsd:simpleType>
386 <xsd:complexType name="CT_SystemColor">
387   <xsd:sequence>
388     <xsd:group ref="EG_ColorTransform" minOccurs="0" maxOccurs="unbounded"/>
389   </xsd:sequence>

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390     <xsd:attribute name="val" type="ST_SystemColorVal" use="required"/>
391     <xsd:attribute name="lastClr" type="s:ST_HexColorRGB" use="optional"/>
392 </xsd:complexType>
393 <xsd:simpleType name="ST_SchemeColorVal">
394     <xsd:restriction base="xsd:token">
395         <xsd:enumeration value="bg1"/>
396         <xsd:enumeration value="tx1"/>
397         <xsd:enumeration value="bg2"/>
398         <xsd:enumeration value="tx2"/>
399         <xsd:enumeration value="accent1"/>
400         <xsd:enumeration value="accent2"/>
401         <xsd:enumeration value="accent3"/>
402         <xsd:enumeration value="accent4"/>
403         <xsd:enumeration value="accent5"/>
404         <xsd:enumeration value="accent6"/>
405         <xsd:enumeration value="hlink"/>
406         <xsd:enumeration value="folHlink"/>
407         <xsd:enumeration value="phClr"/>
408         <xsd:enumeration value="dk1"/>
409         <xsd:enumeration value="lt1"/>
410         <xsd:enumeration value="dk2"/>
411         <xsd:enumeration value="lt2"/>
412     </xsd:restriction>
413 </xsd:simpleType>
414 <xsd:complexType name="CT_SchemeColor">
415     <xsd:sequence>
416         <xsd:group ref="EG_ColorTransform" minOccurs="0" maxOccurs="unbounded"/>
417     </xsd:sequence>
418     <xsd:attribute name="val" type="ST_SchemeColorVal" use="required"/>
419 </xsd:complexType>
420 <xsd:simpleType name="ST_PresetColorVal">
421     <xsd:restriction base="xsd:token">
422         <xsd:enumeration value="aliceBlue"/>
423         <xsd:enumeration value="antiqueWhite"/>
424         <xsd:enumeration value="aqua"/>
425         <xsd:enumeration value="aquamarine"/>
426         <xsd:enumeration value="azure"/>
427         <xsd:enumeration value="beige"/>
428         <xsd:enumeration value="bisque"/>
429         <xsd:enumeration value="black"/>
430         <xsd:enumeration value="blanchedAlmond"/>
431         <xsd:enumeration value="blue"/>
432         <xsd:enumeration value="blueViolet"/>
433         <xsd:enumeration value="brown"/>
434         <xsd:enumeration value="burlyWood"/>
435         <xsd:enumeration value="cadetBlue"/>
436         <xsd:enumeration value="chartreuse"/>
437         <xsd:enumeration value="chocolate"/>
438         <xsd:enumeration value="coral"/>
439         <xsd:enumeration value="cornflowerBlue"/>
440         <xsd:enumeration value="cornsilk"/>
441         <xsd:enumeration value="crimson"/>
442         <xsd:enumeration value="cyan"/>

```

```

443     <xsd:enumeration value="darkBlue"/>
444     <xsd:enumeration value="darkCyan"/>
445     <xsd:enumeration value="darkGoldenrod"/>
446     <xsd:enumeration value="darkGray"/>
447     <xsd:enumeration value="darkGrey"/>
448     <xsd:enumeration value="darkGreen"/>
449     <xsd:enumeration value="darkKhaki"/>
450     <xsd:enumeration value="darkMagenta"/>
451     <xsd:enumeration value="darkOliveGreen"/>
452     <xsd:enumeration value="darkOrange"/>
453     <xsd:enumeration value="darkOrchid"/>
454     <xsd:enumeration value="darkRed"/>
455     <xsd:enumeration value="darkSalmon"/>
456     <xsd:enumeration value="darkSeaGreen"/>
457     <xsd:enumeration value="darkSlateBlue"/>
458     <xsd:enumeration value="darkSlateGray"/>
459     <xsd:enumeration value="darkSlateGrey"/>
460     <xsd:enumeration value="darkTurquoise"/>
461     <xsd:enumeration value="darkViolet"/>
462     <xsd:enumeration value="dkBlue"/>
463     <xsd:enumeration value="dkCyan"/>
464     <xsd:enumeration value="dkGoldenrod"/>
465     <xsd:enumeration value="dkGray"/>
466     <xsd:enumeration value="dkGrey"/>
467     <xsd:enumeration value="dkGreen"/>
468     <xsd:enumeration value="dkKhaki"/>
469     <xsd:enumeration value="dkMagenta"/>
470     <xsd:enumeration value="dkOliveGreen"/>
471     <xsd:enumeration value="dkOrange"/>
472     <xsd:enumeration value="dkOrchid"/>
473     <xsd:enumeration value="dkRed"/>
474     <xsd:enumeration value="dkSalmon"/>
475     <xsd:enumeration value="dkSeaGreen"/>
476     <xsd:enumeration value="dkSlateBlue"/>
477     <xsd:enumeration value="dkSlateGray"/>
478     <xsd:enumeration value="dkSlateGrey"/>
479     <xsd:enumeration value="dkTurquoise"/>
480     <xsd:enumeration value="dkViolet"/>
481     <xsd:enumeration value="deepPink"/>
482     <xsd:enumeration value="deepSkyBlue"/>
483     <xsd:enumeration value="dimGray"/>
484     <xsd:enumeration value="dimGrey"/>
485     <xsd:enumeration value="dodgerBlue"/>
486     <xsd:enumeration value="firebrick"/>
487     <xsd:enumeration value="floralWhite"/>
488     <xsd:enumeration value="forestGreen"/>
489     <xsd:enumeration value="fuchsia"/>
490     <xsd:enumeration value="gainsboro"/>
491     <xsd:enumeration value="ghostWhite"/>
492     <xsd:enumeration value="gold"/>
493     <xsd:enumeration value="goldenrod"/>
494     <xsd:enumeration value="gray"/>
495     <xsd:enumeration value="grey"/>

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```

496     <xsd:enumeration value="green"/>
497     <xsd:enumeration value="greenYellow"/>
498     <xsd:enumeration value="honeydew"/>
499     <xsd:enumeration value="hotPink"/>
500     <xsd:enumeration value="indianRed"/>
501     <xsd:enumeration value="indigo"/>
502     <xsd:enumeration value="ivory"/>
503     <xsd:enumeration value="khaki"/>
504     <xsd:enumeration value="lavender"/>
505     <xsd:enumeration value="lavenderBlush"/>
506     <xsd:enumeration value="lawnGreen"/>
507     <xsd:enumeration value="lemonChiffon"/>
508     <xsd:enumeration value="lightBlue"/>
509     <xsd:enumeration value="lightCoral"/>
510     <xsd:enumeration value="lightCyan"/>
511     <xsd:enumeration value="lightGoldenrodYellow"/>
512     <xsd:enumeration value="lightGray"/>
513     <xsd:enumeration value="lightGrey"/>
514     <xsd:enumeration value="lightGreen"/>
515     <xsd:enumeration value="lightPink"/>
516     <xsd:enumeration value="lightSalmon"/>
517     <xsd:enumeration value="lightSeaGreen"/>
518     <xsd:enumeration value="lightSkyBlue"/>
519     <xsd:enumeration value="lightSlateGray"/>
520     <xsd:enumeration value="lightSlateGrey"/>
521     <xsd:enumeration value="lightSteelBlue"/>
522     <xsd:enumeration value="lightYellow"/>
523     <xsd:enumeration value="ltBlue"/>
524     <xsd:enumeration value="ltCoral"/>
525     <xsd:enumeration value="ltCyan"/>
526     <xsd:enumeration value="ltGoldenrodYellow"/>
527     <xsd:enumeration value="ltGray"/>
528     <xsd:enumeration value="ltGrey"/>
529     <xsd:enumeration value="ltGreen"/>
530     <xsd:enumeration value="ltPink"/>
531     <xsd:enumeration value="ltSalmon"/>
532     <xsd:enumeration value="ltSeaGreen"/>
533     <xsd:enumeration value="ltSkyBlue"/>
534     <xsd:enumeration value="ltSlateGray"/>
535     <xsd:enumeration value="ltSlateGrey"/>
536     <xsd:enumeration value="ltSteelBlue"/>
537     <xsd:enumeration value="ltYellow"/>
538     <xsd:enumeration value="lime"/>
539     <xsd:enumeration value="limeGreen"/>
540     <xsd:enumeration value="linen"/>
541     <xsd:enumeration value="magenta"/>
542     <xsd:enumeration value="maroon"/>
543     <xsd:enumeration value="medAquamarine"/>
544     <xsd:enumeration value="medBlue"/>
545     <xsd:enumeration value="medOrchid"/>
546     <xsd:enumeration value="medPurple"/>
547     <xsd:enumeration value="medSeaGreen"/>
548     <xsd:enumeration value="medSlateBlue"/>

```

```

549     <xsd:enumeration value="medSpringGreen"/>
550     <xsd:enumeration value="medTurquoise"/>
551     <xsd:enumeration value="medVioletRed"/>
552     <xsd:enumeration value="mediumAquamarine"/>
553     <xsd:enumeration value="mediumBlue"/>
554     <xsd:enumeration value="mediumOrchid"/>
555     <xsd:enumeration value="mediumPurple"/>
556     <xsd:enumeration value="mediumSeaGreen"/>
557     <xsd:enumeration value="mediumSlateBlue"/>
558     <xsd:enumeration value="mediumSpringGreen"/>
559     <xsd:enumeration value="mediumTurquoise"/>
560     <xsd:enumeration value="mediumVioletRed"/>
561     <xsd:enumeration value="midnightBlue"/>
562     <xsd:enumeration value="mintCream"/>
563     <xsd:enumeration value="mistyRose"/>
564     <xsd:enumeration value="moccasin"/>
565     <xsd:enumeration value="navajoWhite"/>
566     <xsd:enumeration value="navy"/>
567     <xsd:enumeration value="oldLace"/>
568     <xsd:enumeration value="olive"/>
569     <xsd:enumeration value="oliveDrab"/>
570     <xsd:enumeration value="orange"/>
571     <xsd:enumeration value="orangeRed"/>
572     <xsd:enumeration value="orchid"/>
573     <xsd:enumeration value="paleGoldenrod"/>
574     <xsd:enumeration value="paleGreen"/>
575     <xsd:enumeration value="paleTurquoise"/>
576     <xsd:enumeration value="paleVioletRed"/>
577     <xsd:enumeration value="papayaWhip"/>
578     <xsd:enumeration value="peachPuff"/>
579     <xsd:enumeration value="peru"/>
580     <xsd:enumeration value="pink"/>
581     <xsd:enumeration value="plum"/>
582     <xsd:enumeration value="powderBlue"/>
583     <xsd:enumeration value="purple"/>
584     <xsd:enumeration value="red"/>
585     <xsd:enumeration value="rosyBrown"/>
586     <xsd:enumeration value="royalBlue"/>
587     <xsd:enumeration value="saddleBrown"/>
588     <xsd:enumeration value="salmon"/>
589     <xsd:enumeration value="sandyBrown"/>
590     <xsd:enumeration value="seaGreen"/>
591     <xsd:enumeration value="seaShell"/>
592     <xsd:enumeration value="sienna"/>
593     <xsd:enumeration value="silver"/>
594     <xsd:enumeration value="skyBlue"/>
595     <xsd:enumeration value="slateBlue"/>
596     <xsd:enumeration value="slateGray"/>
597     <xsd:enumeration value="slateGrey"/>
598     <xsd:enumeration value="snow"/>
599     <xsd:enumeration value="springGreen"/>
600     <xsd:enumeration value="steelBlue"/>
601     <xsd:enumeration value="tan"/>

```



```

602         <xsd:enumeration value="teal"/>
603         <xsd:enumeration value="thistle"/>
604         <xsd:enumeration value="tomato"/>
605         <xsd:enumeration value="turquoise"/>
606         <xsd:enumeration value="violet"/>
607         <xsd:enumeration value="wheat"/>
608         <xsd:enumeration value="white"/>
609         <xsd:enumeration value="whiteSmoke"/>
610         <xsd:enumeration value="yellow"/>
611         <xsd:enumeration value="yellowGreen"/>
612     </xsd:restriction>
613 </xsd:simpleType>
614 <xsd:complexType name="CT_PresetColor">
615     <xsd:sequence>
616         <xsd:group ref="EG_ColorTransform" minOccurs="0" maxOccurs="unbounded"/>
617     </xsd:sequence>
618     <xsd:attribute name="val" type="ST_PresetColorVal" use="required"/>
619 </xsd:complexType>
620 <xsd:group name="EG_OfficeArtExtensionList">
621     <xsd:sequence>
622         <xsd:element name="ext" type="CT_OfficeArtExtension" minOccurs="0" maxOccurs="unbounded"/>
623     </xsd:sequence>
624 </xsd:group>
625 <xsd:complexType name="CT_OfficeArtExtensionList">
626     <xsd:sequence>
627         <xsd:group ref="EG_OfficeArtExtensionList" minOccurs="1" maxOccurs="1"/>
628     </xsd:sequence>
629 </xsd:complexType>
630 <xsd:complexType name="CT_Scale2D">
631     <xsd:sequence>
632         <xsd:element name="sx" type="CT_Ratio" minOccurs="1" maxOccurs="1"/>
633         <xsd:element name="sy" type="CT_Ratio" minOccurs="1" maxOccurs="1"/>
634     </xsd:sequence>
635 </xsd:complexType>
636 <xsd:complexType name="CT_Transform2D">
637     <xsd:sequence>
638         <xsd:element name="off" type="CT_Point2D" minOccurs="0" maxOccurs="1"/>
639         <xsd:element name="ext" type="CT_PositiveSize2D" minOccurs="0" maxOccurs="1"/>
640     </xsd:sequence>
641     <xsd:attribute name="rot" type="ST_Angle" use="optional" default="0"/>
642     <xsd:attribute name="flipH" type="xsd:boolean" use="optional" default="false"/>
643     <xsd:attribute name="flipV" type="xsd:boolean" use="optional" default="false"/>
644 </xsd:complexType>
645 <xsd:complexType name="CT_GroupTransform2D">
646     <xsd:sequence>
647         <xsd:element name="off" type="CT_Point2D" minOccurs="0" maxOccurs="1"/>
648         <xsd:element name="ext" type="CT_PositiveSize2D" minOccurs="0" maxOccurs="1"/>
649         <xsd:element name="chOff" type="CT_Point2D" minOccurs="0" maxOccurs="1"/>
650         <xsd:element name="chExt" type="CT_PositiveSize2D" minOccurs="0" maxOccurs="1"/>
651     </xsd:sequence>
652     <xsd:attribute name="rot" type="ST_Angle" use="optional" default="0"/>
653     <xsd:attribute name="flipH" type="xsd:boolean" use="optional" default="false"/>
654     <xsd:attribute name="flipV" type="xsd:boolean" use="optional" default="false"/>

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655 </xsd:complexType>
656 <xsd:complexType name="CT_Point3D">
657   <xsd:attribute name="x" type="ST_Coordinate" use="required"/>
658   <xsd:attribute name="y" type="ST_Coordinate" use="required"/>
659   <xsd:attribute name="z" type="ST_Coordinate" use="required"/>
660 </xsd:complexType>
661 <xsd:complexType name="CT_Vector3D">
662   <xsd:attribute name="dx" type="ST_Coordinate" use="required"/>
663   <xsd:attribute name="dy" type="ST_Coordinate" use="required"/>
664   <xsd:attribute name="dz" type="ST_Coordinate" use="required"/>
665 </xsd:complexType>
666 <xsd:complexType name="CT_SphereCoords">
667   <xsd:attribute name="lat" type="ST_PositiveFixedAngle" use="required"/>
668   <xsd:attribute name="lon" type="ST_PositiveFixedAngle" use="required"/>
669   <xsd:attribute name="rev" type="ST_PositiveFixedAngle" use="required"/>
670 </xsd:complexType>
671 <xsd:complexType name="CT_RelativeRect">
672   <xsd:attribute name="l" type="ST_Percentage" use="optional" default="0%"/>
673   <xsd:attribute name="t" type="ST_Percentage" use="optional" default="0%"/>
674   <xsd:attribute name="r" type="ST_Percentage" use="optional" default="0%"/>
675   <xsd:attribute name="b" type="ST_Percentage" use="optional" default="0%"/>
676 </xsd:complexType>
677 <xsd:simpleType name="ST_RectAlignment">
678   <xsd:restriction base="xsd:token">
679     <xsd:enumeration value="tl"/>
680     <xsd:enumeration value="t"/>
681     <xsd:enumeration value="tr"/>
682     <xsd:enumeration value="l"/>
683     <xsd:enumeration value="ctr"/>
684     <xsd:enumeration value="r"/>
685     <xsd:enumeration value="bl"/>
686     <xsd:enumeration value="b"/>
687     <xsd:enumeration value="br"/>
688   </xsd:restriction>
689 </xsd:simpleType>
690 <xsd:group name="EG_ColorChoice">
691   <xsd:choice>
692     <xsd:element name="scrgbClr" type="CT_ScRgbColor" minOccurs="1" maxOccurs="1"/>
693     <xsd:element name="srgbClr" type="CT_SRgbColor" minOccurs="1" maxOccurs="1"/>
694     <xsd:element name="hslClr" type="CT_HslColor" minOccurs="1" maxOccurs="1"/>
695     <xsd:element name="sysClr" type="CT_SystemColor" minOccurs="1" maxOccurs="1"/>
696     <xsd:element name="schemeClr" type="CT_SchemeColor" minOccurs="1" maxOccurs="1"/>
697     <xsd:element name="prstClr" type="CT_PresetColor" minOccurs="1" maxOccurs="1"/>
698   </xsd:choice>
699 </xsd:group>
700 <xsd:complexType name="CT_Color">
701   <xsd:sequence>
702     <xsd:group ref="EG_ColorChoice"/>
703   </xsd:sequence>
704 </xsd:complexType>
705 <xsd:complexType name="CT_ColorMRU">
706   <xsd:sequence>
707     <xsd:group ref="EG_ColorChoice" minOccurs="0" maxOccurs="unbounded"/>

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708     </xsd:sequence>
709 </xsd:complexType>
710 <xsd:simpleType name="ST_BlackWhiteMode">
711     <xsd:restriction base="xsd:token">
712         <xsd:enumeration value="clr"/>
713         <xsd:enumeration value="auto"/>
714         <xsd:enumeration value="gray"/>
715         <xsd:enumeration value="ltGray"/>
716         <xsd:enumeration value="invGray"/>
717         <xsd:enumeration value="grayWhite"/>
718         <xsd:enumeration value="blackGray"/>
719         <xsd:enumeration value="blackWhite"/>
720         <xsd:enumeration value="black"/>
721         <xsd:enumeration value="white"/>
722         <xsd:enumeration value="hidden"/>
723     </xsd:restriction>
724 </xsd:simpleType>
725 <xsd:attributeGroup name="AG_Blob">
726     <xsd:attribute ref="r:embed" use="optional" default=""/>
727     <xsd:attribute ref="r:link" use="optional" default=""/>
728 </xsd:attributeGroup>
729 <xsd:complexType name="CT_EmbeddedWAVAudioFile">
730     <xsd:attribute ref="r:embed" use="required"/>
731     <xsd:attribute name="name" type="xsd:string" use="optional" default=""/>
732 </xsd:complexType>
733 <xsd:complexType name="CT_Hyperlink">
734     <xsd:sequence>
735         <xsd:element name="snd" type="CT_EmbeddedWAVAudioFile" minOccurs="0" maxOccurs="1"/>
736         <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
737     </xsd:sequence>
738     <xsd:attribute ref="r:id" use="optional"/>
739     <xsd:attribute name="invalidUrl" type="xsd:string" use="optional" default=""/>
740     <xsd:attribute name="action" type="xsd:string" use="optional" default=""/>
741     <xsd:attribute name="tgtFrame" type="xsd:string" use="optional" default=""/>
742     <xsd:attribute name="tooltip" type="xsd:string" use="optional" default=""/>
743     <xsd:attribute name="history" type="xsd:boolean" use="optional" default="true"/>
744     <xsd:attribute name="highlightClick" type="xsd:boolean" use="optional" default="false"/>
745     <xsd:attribute name="endSnd" type="xsd:boolean" use="optional" default="false"/>
746 </xsd:complexType>
747 <xsd:simpleType name="ST_DrawingElementId">
748     <xsd:restriction base="xsd:unsignedInt"/>
749 </xsd:simpleType>
750 <xsd:attributeGroup name="AG_Locking">
751     <xsd:attribute name="noGrp" type="xsd:boolean" use="optional" default="false"/>
752     <xsd:attribute name="noSelect" type="xsd:boolean" use="optional" default="false"/>
753     <xsd:attribute name="noRot" type="xsd:boolean" use="optional" default="false"/>
754     <xsd:attribute name="noChangeAspect" type="xsd:boolean" use="optional" default="false"/>
755     <xsd:attribute name="noMove" type="xsd:boolean" use="optional" default="false"/>
756     <xsd:attribute name="noResize" type="xsd:boolean" use="optional" default="false"/>
757     <xsd:attribute name="noEditPoints" type="xsd:boolean" use="optional" default="false"/>
758     <xsd:attribute name="noAdjustHandles" type="xsd:boolean" use="optional" default="false"/>
759     <xsd:attribute name="noChangeArrowheads" type="xsd:boolean" use="optional" default="false"/>
760     <xsd:attribute name="noChangeShapeType" type="xsd:boolean" use="optional" default="false"/>

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761 </xsd:attributeGroup>
762 <xsd:complexType name="CT_ConnectorLocking">
763   <xsd:sequence>
764     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
765   </xsd:sequence>
766   <xsd:attributeGroup ref="AG_Locking"/>
767 </xsd:complexType>
768 <xsd:complexType name="CT_ShapeLocking">
769   <xsd:sequence>
770     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
771   </xsd:sequence>
772   <xsd:attributeGroup ref="AG_Locking"/>
773   <xsd:attribute name="noTextEdit" type="xsd:boolean" use="optional" default="false"/>
774 </xsd:complexType>
775 <xsd:complexType name="CT_PictureLocking">
776   <xsd:sequence>
777     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
778   </xsd:sequence>
779   <xsd:attributeGroup ref="AG_Locking"/>
780   <xsd:attribute name="noCrop" type="xsd:boolean" use="optional" default="false"/>
781 </xsd:complexType>
782 <xsd:complexType name="CT_GroupLocking">
783   <xsd:sequence>
784     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
785   </xsd:sequence>
786   <xsd:attribute name="noGrp" type="xsd:boolean" use="optional" default="false"/>
787   <xsd:attribute name="noUngrp" type="xsd:boolean" use="optional" default="false"/>
788   <xsd:attribute name="noSelect" type="xsd:boolean" use="optional" default="false"/>
789   <xsd:attribute name="noRot" type="xsd:boolean" use="optional" default="false"/>
790   <xsd:attribute name="noChangeAspect" type="xsd:boolean" use="optional" default="false"/>
791   <xsd:attribute name="noMove" type="xsd:boolean" use="optional" default="false"/>
792   <xsd:attribute name="noResize" type="xsd:boolean" use="optional" default="false"/>
793 </xsd:complexType>
794 <xsd:complexType name="CT_GraphicalObjectFrameLocking">
795   <xsd:sequence>
796     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
797   </xsd:sequence>
798   <xsd:attribute name="noGrp" type="xsd:boolean" use="optional" default="false"/>
799   <xsd:attribute name="noDrilldown" type="xsd:boolean" use="optional" default="false"/>
800   <xsd:attribute name="noSelect" type="xsd:boolean" use="optional" default="false"/>
801   <xsd:attribute name="noChangeAspect" type="xsd:boolean" use="optional" default="false"/>
802   <xsd:attribute name="noMove" type="xsd:boolean" use="optional" default="false"/>
803   <xsd:attribute name="noResize" type="xsd:boolean" use="optional" default="false"/>
804 </xsd:complexType>
805 <xsd:complexType name="CT_NonVisualDrawingProps">
806   <xsd:sequence>
807     <xsd:element name="hlinkClick" type="CT_Hyperlink" minOccurs="0" maxOccurs="1"/>
808     <xsd:element name="hlinkHover" type="CT_Hyperlink" minOccurs="0" maxOccurs="1"/>
809     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
810   </xsd:sequence>
811   <xsd:attribute name="id" type="ST_DrawingElementId" use="required"/>
812   <xsd:attribute name="name" type="xsd:string" use="required"/>
813   <xsd:attribute name="descr" type="xsd:string" use="optional" default=""/>

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814     <xsd:attribute name="hidden" type="xsd:boolean" use="optional" default="false"/>
815     <xsd:attribute name="title" type="xsd:string" use="optional" default=""/>
816 </xsd:complexType>
817 <xsd:complexType name="CT_NonVisualDrawingShapeProps">
818     <xsd:sequence>
819         <xsd:element name="spLocks" type="CT_ShapeLocking" minOccurs="0" maxOccurs="1"/>
820         <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
821     </xsd:sequence>
822     <xsd:attribute name="txBox" type="xsd:boolean" use="optional" default="false"/>
823 </xsd:complexType>
824 <xsd:complexType name="CT_NonVisualConnectorProperties">
825     <xsd:sequence>
826         <xsd:element name="cxnSpLocks" type="CT_ConnectorLocking" minOccurs="0" maxOccurs="1"/>
827         <xsd:element name="stCxn" type="CT_Connection" minOccurs="0" maxOccurs="1"/>
828         <xsd:element name="endCxn" type="CT_Connection" minOccurs="0" maxOccurs="1"/>
829         <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
830     </xsd:sequence>
831 </xsd:complexType>
832 <xsd:complexType name="CT_NonVisualPictureProperties">
833     <xsd:sequence>
834         <xsd:element name="picLocks" type="CT_PictureLocking" minOccurs="0" maxOccurs="1"/>
835         <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
836     </xsd:sequence>
837     <xsd:attribute name="preferRelativeResize" type="xsd:boolean" use="optional" default="true"/>
838 </xsd:complexType>
839 <xsd:complexType name="CT_NonVisualGroupDrawingShapeProps">
840     <xsd:sequence>
841         <xsd:element name="grpSpLocks" type="CT_GroupLocking" minOccurs="0" maxOccurs="1"/>
842         <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
843     </xsd:sequence>
844 </xsd:complexType>
845 <xsd:complexType name="CT_NonVisualGraphicFrameProperties">
846     <xsd:sequence>
847         <xsd:element name="graphicFrameLocks" type="CT_GraphicalObjectFrameLocking" minOccurs="0"
848             maxOccurs="1"/>
849         <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
850     </xsd:sequence>
851 </xsd:complexType>
852 <xsd:complexType name="CT_GraphicalObjectData">
853     <xsd:sequence>
854         <xsd:any minOccurs="0" maxOccurs="unbounded" processContents="strict"/>
855     </xsd:sequence>
856     <xsd:attribute name="uri" type="xsd:token" use="required"/>
857 </xsd:complexType>
858 <xsd:complexType name="CT_GraphicalObject">
859     <xsd:sequence>
860         <xsd:element name="graphicData" type="CT_GraphicalObjectData"/>
861     </xsd:sequence>
862 </xsd:complexType>
863 <xsd:element name="graphic" type="CT_GraphicalObject"/>
864 <xsd:simpleType name="ST_ChartBuildStep">
865     <xsd:restriction base="xsd:token">
866         <xsd:enumeration value="category"/>

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867         <xsd:enumeration value="ptInCategory"/>
868         <xsd:enumeration value="series"/>
869         <xsd:enumeration value="ptInSeries"/>
870         <xsd:enumeration value="allPts"/>
871         <xsd:enumeration value="gridLegend"/>
872     </xsd:restriction>
873 </xsd:simpleType>
874 <xsd:simpleType name="ST_DgmBuildStep">
875     <xsd:restriction base="xsd:token">
876         <xsd:enumeration value="sp"/>
877         <xsd:enumeration value="bg"/>
878     </xsd:restriction>
879 </xsd:simpleType>
880 <xsd:complexType name="CT_AnimationDgmElement">
881     <xsd:attribute name="id" type="s:ST_Guid" use="optional" default="{00000000-0000-0000-0000-
882         000000000000}"/>
883     <xsd:attribute name="bldStep" type="ST_DgmBuildStep" use="optional" default="sp"/>
884 </xsd:complexType>
885 <xsd:complexType name="CT_AnimationChartElement">
886     <xsd:attribute name="seriesIdx" type="xsd:int" use="optional" default="-1"/>
887     <xsd:attribute name="categoryIdx" type="xsd:int" use="optional" default="-1"/>
888     <xsd:attribute name="bldStep" type="ST_ChartBuildStep" use="required"/>
889 </xsd:complexType>
890 <xsd:complexType name="CT_AnimationElementChoice">
891     <xsd:choice minOccurs="1" maxOccurs="1">
892         <xsd:element name="dgm" type="CT_AnimationDgmElement"/>
893         <xsd:element name="chart" type="CT_AnimationChartElement"/>
894     </xsd:choice>
895 </xsd:complexType>
896 <xsd:simpleType name="ST_AnimationBuildType">
897     <xsd:restriction base="xsd:token">
898         <xsd:enumeration value="allAtOnce"/>
899     </xsd:restriction>
900 </xsd:simpleType>
901 <xsd:simpleType name="ST_AnimationDgmOnlyBuildType">
902     <xsd:restriction base="xsd:token">
903         <xsd:enumeration value="one"/>
904         <xsd:enumeration value="lvlOne"/>
905         <xsd:enumeration value="lvlAtOnce"/>
906     </xsd:restriction>
907 </xsd:simpleType>
908 <xsd:simpleType name="ST_AnimationDgmBuildType">
909     <xsd:union memberTypes="ST_AnimationBuildType ST_AnimationDgmOnlyBuildType"/>
910 </xsd:simpleType>
911 <xsd:complexType name="CT_AnimationDgmBuildProperties">
912     <xsd:attribute name="bld" type="ST_AnimationDgmBuildType" use="optional" default="allAtOnce"/>
913     <xsd:attribute name="rev" type="xsd:boolean" use="optional" default="false"/>
914 </xsd:complexType>
915 <xsd:simpleType name="ST_AnimationChartOnlyBuildType">
916     <xsd:restriction base="xsd:token">
917         <xsd:enumeration value="series"/>
918         <xsd:enumeration value="category"/>
919         <xsd:enumeration value="seriesEl"/>

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920     <xsd:enumeration value="categoryEl"/>
921   </xsd:restriction>
922 </xsd:simpleType>
923 <xsd:simpleType name="ST_AnimationChartBuildType">
924   <xsd:union memberTypes="ST_AnimationBuildType ST_AnimationChartOnlyBuildType"/>
925 </xsd:simpleType>
926 <xsd:complexType name="CT_AnimationChartBuildProperties">
927   <xsd:attribute name="bld" type="ST_AnimationChartBuildType" use="optional"
928     default="allAtOnce"/>
929   <xsd:attribute name="animBg" type="xsd:boolean" use="optional" default="true"/>
930 </xsd:complexType>
931 <xsd:complexType name="CT_AnimationGraphicalObjectBuildProperties">
932   <xsd:choice>
933     <xsd:element name="bldDgm" type="CT_AnimationDgmBuildProperties"/>
934     <xsd:element name="bldChart" type="CT_AnimationChartBuildProperties"/>
935   </xsd:choice>
936 </xsd:complexType>
937 <xsd:complexType name="CT_BackgroundFormatting">
938   <xsd:sequence>
939     <xsd:group ref="EG_FillProperties" minOccurs="0" maxOccurs="1"/>
940     <xsd:group ref="EG_EffectProperties" minOccurs="0" maxOccurs="1"/>
941   </xsd:sequence>
942 </xsd:complexType>
943 <xsd:complexType name="CT_WholeE2oFormatting">
944   <xsd:sequence>
945     <xsd:element name="ln" type="CT_LineProperties" minOccurs="0" maxOccurs="1"/>
946     <xsd:group ref="EG_EffectProperties" minOccurs="0" maxOccurs="1"/>
947   </xsd:sequence>
948 </xsd:complexType>
949 <xsd:complexType name="CT_GvmlUseShapeRectangle"/>
950 <xsd:complexType name="CT_GvmlTextShape">
951   <xsd:sequence>
952     <xsd:element name="txBody" type="CT_TextBody" minOccurs="1" maxOccurs="1"/>
953     <xsd:choice>
954       <xsd:element name="useSpRect" type="CT_GvmlUseShapeRectangle" minOccurs="1"
955         maxOccurs="1"/>
956       <xsd:element name="xfrm" type="CT_Transform2D" minOccurs="1" maxOccurs="1"/>
957     </xsd:choice>
958     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
959   </xsd:sequence>
960 </xsd:complexType>
961 <xsd:complexType name="CT_GvmlShapeNonVisual">
962   <xsd:sequence>
963     <xsd:element name="cNvPr" type="CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
964     <xsd:element name="cNvSpPr" type="CT_NonVisualDrawingShapeProps" minOccurs="1"
965       maxOccurs="1"/>
966   </xsd:sequence>
967 </xsd:complexType>
968 <xsd:complexType name="CT_GvmlShape">
969   <xsd:sequence>
970     <xsd:element name="nvSpPr" type="CT_GvmlShapeNonVisual" minOccurs="1" maxOccurs="1"/>
971     <xsd:element name="spPr" type="CT_ShapeProperties" minOccurs="1" maxOccurs="1"/>
972     <xsd:element name="txSp" type="CT_GvmlTextShape" minOccurs="0" maxOccurs="1"/>

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973     <xsd:element name="style" type="CT_ShapeStyle" minOccurs="0" maxOccurs="1"/>
974     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
975   </xsd:sequence>
976 </xsd:complexType>
977 <xsd:complexType name="CT_GvmlConnectorNonVisual">
978   <xsd:sequence>
979     <xsd:element name="cNvPr" type="CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
980     <xsd:element name="cNvCxnSpPr" type="CT_NonVisualConnectorProperties" minOccurs="1"
981       maxOccurs="1"/>
982   </xsd:sequence>
983 </xsd:complexType>
984 <xsd:complexType name="CT_GvmlConnector">
985   <xsd:sequence>
986     <xsd:element name="nvCxnSpPr" type="CT_GvmlConnectorNonVisual" minOccurs="1"
987       maxOccurs="1"/>
988     <xsd:element name="spPr" type="CT_ShapeProperties" minOccurs="1" maxOccurs="1"/>
989     <xsd:element name="style" type="CT_ShapeStyle" minOccurs="0" maxOccurs="1"/>
990     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
991   </xsd:sequence>
992 </xsd:complexType>
993 <xsd:complexType name="CT_GvmlPictureNonVisual">
994   <xsd:sequence>
995     <xsd:element name="cNvPr" type="CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
996     <xsd:element name="cNvPicPr" type="CT_NonVisualPictureProperties" minOccurs="1"
997       maxOccurs="1"/>
998   </xsd:sequence>
999 </xsd:complexType>
1000 <xsd:complexType name="CT_GvmlPicture">
1001   <xsd:sequence>
1002     <xsd:element name="nvPicPr" type="CT_GvmlPictureNonVisual" minOccurs="1" maxOccurs="1"/>
1003     <xsd:element name="blipFill" type="CT_BlipFillProperties" minOccurs="1" maxOccurs="1"/>
1004     <xsd:element name="spPr" type="CT_ShapeProperties" minOccurs="1" maxOccurs="1"/>
1005     <xsd:element name="style" type="CT_ShapeStyle" minOccurs="0" maxOccurs="1"/>
1006     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
1007   </xsd:sequence>
1008 </xsd:complexType>
1009 <xsd:complexType name="CT_GvmlGraphicFrameNonVisual">
1010   <xsd:sequence>
1011     <xsd:element name="cNvPr" type="CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
1012     <xsd:element name="cNvGraphicFramePr" type="CT_NonVisualGraphicFrameProperties"
1013       minOccurs="1" maxOccurs="1"/>
1014   </xsd:sequence>
1015 </xsd:complexType>
1016 <xsd:complexType name="CT_GvmlGraphicalObjectFrame">
1017   <xsd:sequence>
1018     <xsd:element name="nvGraphicFramePr" type="CT_GvmlGraphicFrameNonVisual" minOccurs="1"
1019       maxOccurs="1"/>
1020     <xsd:element ref="graphic" minOccurs="1" maxOccurs="1"/>
1021     <xsd:element name="xfrm" type="CT_Transform2D" minOccurs="1" maxOccurs="1"/>
1022     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
1023   </xsd:sequence>
1024 </xsd:complexType>
1025 <xsd:complexType name="CT_GvmlGroupShapeNonVisual">

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1026     <xsd:sequence>
1027         <xsd:element name="cNvPr" type="CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
1028         <xsd:element name="cNvGrpSpPr" type="CT_NonVisualGroupDrawingShapeProps" minOccurs="1"
1029             maxOccurs="1"/>
1030     </xsd:sequence>
1031 </xsd:complexType>
1032 <xsd:complexType name="CT_GvmlGroupShape">
1033     <xsd:sequence>
1034         <xsd:element name="nvGrpSpPr" type="CT_GvmlGroupShapeNonVisual" minOccurs="1"
1035             maxOccurs="1"/>
1036         <xsd:element name="grpSpPr" type="CT_GroupShapeProperties" minOccurs="1" maxOccurs="1"/>
1037         <xsd:choice minOccurs="0" maxOccurs="unbounded">
1038             <xsd:element name="txSp" type="CT_GvmlTextShape"/>
1039             <xsd:element name="sp" type="CT_GvmlShape"/>
1040             <xsd:element name="cxnSp" type="CT_GvmlConnector"/>
1041             <xsd:element name="pic" type="CT_GvmlPicture"/>
1042             <xsd:element name="graphicFrame" type="CT_GvmlGraphicalObjectFrame"/>
1043             <xsd:element name="grpSp" type="CT_GvmlGroupShape"/>
1044         </xsd:choice>
1045         <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
1046     </xsd:sequence>
1047 </xsd:complexType>
1048 <xsd:simpleType name="ST_PresetCameraType">
1049     <xsd:restriction base="xsd:token">
1050         <xsd:enumeration value="legacyObliqueTopLeft"/>
1051         <xsd:enumeration value="legacyObliqueTop"/>
1052         <xsd:enumeration value="legacyObliqueTopRight"/>
1053         <xsd:enumeration value="legacyObliqueLeft"/>
1054         <xsd:enumeration value="legacyObliqueFront"/>
1055         <xsd:enumeration value="legacyObliqueRight"/>
1056         <xsd:enumeration value="legacyObliqueBottomLeft"/>
1057         <xsd:enumeration value="legacyObliqueBottom"/>
1058         <xsd:enumeration value="legacyObliqueBottomRight"/>
1059         <xsd:enumeration value="legacyPerspectiveTopLeft"/>
1060         <xsd:enumeration value="legacyPerspectiveTop"/>
1061         <xsd:enumeration value="legacyPerspectiveTopRight"/>
1062         <xsd:enumeration value="legacyPerspectiveLeft"/>
1063         <xsd:enumeration value="legacyPerspectiveFront"/>
1064         <xsd:enumeration value="legacyPerspectiveRight"/>
1065         <xsd:enumeration value="legacyPerspectiveBottomLeft"/>
1066         <xsd:enumeration value="legacyPerspectiveBottom"/>
1067         <xsd:enumeration value="legacyPerspectiveBottomRight"/>
1068         <xsd:enumeration value="orthographicFront"/>
1069         <xsd:enumeration value="isometricTopUp"/>
1070         <xsd:enumeration value="isometricTopDown"/>
1071         <xsd:enumeration value="isometricBottomUp"/>
1072         <xsd:enumeration value="isometricBottomDown"/>
1073         <xsd:enumeration value="isometricLeftUp"/>
1074         <xsd:enumeration value="isometricLeftDown"/>
1075         <xsd:enumeration value="isometricRightUp"/>
1076         <xsd:enumeration value="isometricRightDown"/>
1077         <xsd:enumeration value="isometricOffAxis1Left"/>
1078         <xsd:enumeration value="isometricOffAxis1Right"/>

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1079     <xsd:enumeration value="isometricOffAxis1Top"/>
1080     <xsd:enumeration value="isometricOffAxis2Left"/>
1081     <xsd:enumeration value="isometricOffAxis2Right"/>
1082     <xsd:enumeration value="isometricOffAxis2Top"/>
1083     <xsd:enumeration value="isometricOffAxis3Left"/>
1084     <xsd:enumeration value="isometricOffAxis3Right"/>
1085     <xsd:enumeration value="isometricOffAxis3Bottom"/>
1086     <xsd:enumeration value="isometricOffAxis4Left"/>
1087     <xsd:enumeration value="isometricOffAxis4Right"/>
1088     <xsd:enumeration value="isometricOffAxis4Bottom"/>
1089     <xsd:enumeration value="obliqueTopLeft"/>
1090     <xsd:enumeration value="obliqueTop"/>
1091     <xsd:enumeration value="obliqueTopRight"/>
1092     <xsd:enumeration value="obliqueLeft"/>
1093     <xsd:enumeration value="obliqueRight"/>
1094     <xsd:enumeration value="obliqueBottomLeft"/>
1095     <xsd:enumeration value="obliqueBottom"/>
1096     <xsd:enumeration value="obliqueBottomRight"/>
1097     <xsd:enumeration value="perspectiveFront"/>
1098     <xsd:enumeration value="perspectiveLeft"/>
1099     <xsd:enumeration value="perspectiveRight"/>
1100     <xsd:enumeration value="perspectiveAbove"/>
1101     <xsd:enumeration value="perspectiveBelow"/>
1102     <xsd:enumeration value="perspectiveAboveLeftFacing"/>
1103     <xsd:enumeration value="perspectiveAboveRightFacing"/>
1104     <xsd:enumeration value="perspectiveContrastingLeftFacing"/>
1105     <xsd:enumeration value="perspectiveContrastingRightFacing"/>
1106     <xsd:enumeration value="perspectiveHeroicLeftFacing"/>
1107     <xsd:enumeration value="perspectiveHeroicRightFacing"/>
1108     <xsd:enumeration value="perspectiveHeroicExtremeLeftFacing"/>
1109     <xsd:enumeration value="perspectiveHeroicExtremeRightFacing"/>
1110     <xsd:enumeration value="perspectiveRelaxed"/>
1111     <xsd:enumeration value="perspectiveRelaxedModerately"/>
1112   </xsd:restriction>
1113 </xsd:simpleType>
1114 <xsd:simpleType name="ST_FOVAngle">
1115   <xsd:restriction base="ST_Angle">
1116     <xsd:minInclusive value="0"/>
1117     <xsd:maxInclusive value="10800000"/>
1118   </xsd:restriction>
1119 </xsd:simpleType>
1120 <xsd:complexType name="CT_Camera">
1121   <xsd:sequence>
1122     <xsd:element name="rot" type="CT_SphereCoords" minOccurs="0" maxOccurs="1"/>
1123   </xsd:sequence>
1124   <xsd:attribute name="prst" type="ST_PresetCameraType" use="required"/>
1125   <xsd:attribute name="fov" type="ST_FOVAngle" use="optional"/>
1126   <xsd:attribute name="zoom" type="ST_PositivePercentage" use="optional" default="100%"/>
1127 </xsd:complexType>
1128 <xsd:simpleType name="ST_LightRigDirection">
1129   <xsd:restriction base="xsd:token">
1130     <xsd:enumeration value="tl"/>
1131     <xsd:enumeration value="t"/>

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1132         <xsd:enumeration value="tr"/>
1133         <xsd:enumeration value="l"/>
1134         <xsd:enumeration value="r"/>
1135         <xsd:enumeration value="bl"/>
1136         <xsd:enumeration value="b"/>
1137         <xsd:enumeration value="br"/>
1138     </xsd:restriction>
1139 </xsd:simpleType>
1140 <xsd:simpleType name="ST_LightRigType">
1141     <xsd:restriction base="xsd:token">
1142         <xsd:enumeration value="legacyFlat1"/>
1143         <xsd:enumeration value="legacyFlat2"/>
1144         <xsd:enumeration value="legacyFlat3"/>
1145         <xsd:enumeration value="legacyFlat4"/>
1146         <xsd:enumeration value="legacyNormal1"/>
1147         <xsd:enumeration value="legacyNormal2"/>
1148         <xsd:enumeration value="legacyNormal3"/>
1149         <xsd:enumeration value="legacyNormal4"/>
1150         <xsd:enumeration value="legacyHarsh1"/>
1151         <xsd:enumeration value="legacyHarsh2"/>
1152         <xsd:enumeration value="legacyHarsh3"/>
1153         <xsd:enumeration value="legacyHarsh4"/>
1154         <xsd:enumeration value="threePt"/>
1155         <xsd:enumeration value="balanced"/>
1156         <xsd:enumeration value="soft"/>
1157         <xsd:enumeration value="harsh"/>
1158         <xsd:enumeration value="flood"/>
1159         <xsd:enumeration value="contrasting"/>
1160         <xsd:enumeration value="morning"/>
1161         <xsd:enumeration value="sunrise"/>
1162         <xsd:enumeration value="sunset"/>
1163         <xsd:enumeration value="chilly"/>
1164         <xsd:enumeration value="freezing"/>
1165         <xsd:enumeration value="flat"/>
1166         <xsd:enumeration value="twoPt"/>
1167         <xsd:enumeration value="glow"/>
1168         <xsd:enumeration value="brightRoom"/>
1169     </xsd:restriction>
1170 </xsd:simpleType>
1171 <xsd:complexType name="CT_LightRig">
1172     <xsd:sequence>
1173         <xsd:element name="rot" type="CT_SphereCoords" minOccurs="0" maxOccurs="1"/>
1174     </xsd:sequence>
1175     <xsd:attribute name="rig" type="ST_LightRigType" use="required"/>
1176     <xsd:attribute name="dir" type="ST_LightRigDirection" use="required"/>
1177 </xsd:complexType>
1178 <xsd:complexType name="CT_Scene3D">
1179     <xsd:sequence>
1180         <xsd:element name="camera" type="CT_Camera" minOccurs="1" maxOccurs="1"/>
1181         <xsd:element name="lightRig" type="CT_LightRig" minOccurs="1" maxOccurs="1"/>
1182         <xsd:element name="backdrop" type="CT_Backdrop" minOccurs="0" maxOccurs="1"/>
1183         <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
1184     </xsd:sequence>

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1185 </xsd:complexType>
1186 <xsd:complexType name="CT_Backdrop">
1187   <xsd:sequence>
1188     <xsd:element name="anchor" type="CT_Point3D" minOccurs="1" maxOccurs="1"/>
1189     <xsd:element name="norm" type="CT_Vector3D" minOccurs="1" maxOccurs="1"/>
1190     <xsd:element name="up" type="CT_Vector3D" minOccurs="1" maxOccurs="1"/>
1191     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
1192   </xsd:sequence>
1193 </xsd:complexType>
1194 <xsd:simpleType name="ST_BevelPresetType">
1195   <xsd:restriction base="xsd:token">
1196     <xsd:enumeration value="relaxedInset"/>
1197     <xsd:enumeration value="circle"/>
1198     <xsd:enumeration value="slope"/>
1199     <xsd:enumeration value="cross"/>
1200     <xsd:enumeration value="angle"/>
1201     <xsd:enumeration value="softRound"/>
1202     <xsd:enumeration value="convex"/>
1203     <xsd:enumeration value="coolSlant"/>
1204     <xsd:enumeration value="divot"/>
1205     <xsd:enumeration value="riblet"/>
1206     <xsd:enumeration value="hardEdge"/>
1207     <xsd:enumeration value="artDeco"/>
1208   </xsd:restriction>
1209 </xsd:simpleType>
1210 <xsd:complexType name="CT_Bevel">
1211   <xsd:attribute name="w" type="ST_PositiveCoordinate" use="optional" default="76200"/>
1212   <xsd:attribute name="h" type="ST_PositiveCoordinate" use="optional" default="76200"/>
1213   <xsd:attribute name="prst" type="ST_BevelPresetType" use="optional" default="circle"/>
1214 </xsd:complexType>
1215 <xsd:simpleType name="ST_PresetMaterialType">
1216   <xsd:restriction base="xsd:token">
1217     <xsd:enumeration value="legacyMatte"/>
1218     <xsd:enumeration value="legacyPlastic"/>
1219     <xsd:enumeration value="legacyMetal"/>
1220     <xsd:enumeration value="legacyWireframe"/>
1221     <xsd:enumeration value="matte"/>
1222     <xsd:enumeration value="plastic"/>
1223     <xsd:enumeration value="metal"/>
1224     <xsd:enumeration value="warmMatte"/>
1225     <xsd:enumeration value="translucentPowder"/>
1226     <xsd:enumeration value="powder"/>
1227     <xsd:enumeration value="dkEdge"/>
1228     <xsd:enumeration value="softEdge"/>
1229     <xsd:enumeration value="clear"/>
1230     <xsd:enumeration value="flat"/>
1231     <xsd:enumeration value="softmetal"/>
1232   </xsd:restriction>
1233 </xsd:simpleType>
1234 <xsd:complexType name="CT_Shape3D">
1235   <xsd:sequence>
1236     <xsd:element name="bevelT" type="CT_Bevel" minOccurs="0" maxOccurs="1"/>
1237     <xsd:element name="bevelB" type="CT_Bevel" minOccurs="0" maxOccurs="1"/>

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1238     <xsd:element name="extrusionClr" type="CT_Color" minOccurs="0" maxOccurs="1"/>
1239     <xsd:element name="contourClr" type="CT_Color" minOccurs="0" maxOccurs="1"/>
1240     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
1241   </xsd:sequence>
1242   <xsd:attribute name="z" type="ST_Coordinate" use="optional" default="0"/>
1243   <xsd:attribute name="extrusionH" type="ST_PositiveCoordinate" use="optional" default="0"/>
1244   <xsd:attribute name="contourW" type="ST_PositiveCoordinate" use="optional" default="0"/>
1245   <xsd:attribute name="prstMaterial" type="ST_PresetMaterialType" use="optional"
1246     default="warmMatte"/>
1247 </xsd:complexType>
1248 <xsd:complexType name="CT_FlatText">
1249   <xsd:attribute name="z" type="ST_Coordinate" use="optional" default="0"/>
1250 </xsd:complexType>
1251 <xsd:group name="EG_Text3D">
1252   <xsd:choice>
1253     <xsd:element name="sp3d" type="CT_Shape3D" minOccurs="1" maxOccurs="1"/>
1254     <xsd:element name="flatTx" type="CT_FlatText" minOccurs="1" maxOccurs="1"/>
1255   </xsd:choice>
1256 </xsd:group>
1257 <xsd:complexType name="CT_AlphaBiLevelEffect">
1258   <xsd:attribute name="thresh" type="ST_PositiveFixedPercentage" use="required"/>
1259 </xsd:complexType>
1260 <xsd:complexType name="CT_AlphaCeilingEffect"/>
1261 <xsd:complexType name="CT_AlphaFloorEffect"/>
1262 <xsd:complexType name="CT_AlphaInverseEffect">
1263   <xsd:sequence>
1264     <xsd:group ref="EG_ColorChoice" minOccurs="0" maxOccurs="1"/>
1265   </xsd:sequence>
1266 </xsd:complexType>
1267 <xsd:complexType name="CT_AlphaModulateFixedEffect">
1268   <xsd:attribute name="amt" type="ST_PositivePercentage" use="optional" default="100%"/>
1269 </xsd:complexType>
1270 <xsd:complexType name="CT_AlphaOutsetEffect">
1271   <xsd:attribute name="rad" type="ST_Coordinate" use="optional" default="0"/>
1272 </xsd:complexType>
1273 <xsd:complexType name="CT_AlphaReplaceEffect">
1274   <xsd:attribute name="a" type="ST_PositiveFixedPercentage" use="required"/>
1275 </xsd:complexType>
1276 <xsd:complexType name="CT_BiLevelEffect">
1277   <xsd:attribute name="thresh" type="ST_PositiveFixedPercentage" use="required"/>
1278 </xsd:complexType>
1279 <xsd:complexType name="CT_BlurEffect">
1280   <xsd:attribute name="rad" type="ST_PositiveCoordinate" use="optional" default="0"/>
1281   <xsd:attribute name="grow" type="xsd:boolean" use="optional" default="true"/>
1282 </xsd:complexType>
1283 <xsd:complexType name="CT_ColorChangeEffect">
1284   <xsd:sequence>
1285     <xsd:element name="clrFrom" type="CT_Color" minOccurs="1" maxOccurs="1"/>
1286     <xsd:element name="clrTo" type="CT_Color" minOccurs="1" maxOccurs="1"/>
1287   </xsd:sequence>
1288   <xsd:attribute name="useA" type="xsd:boolean" use="optional" default="true"/>
1289 </xsd:complexType>
1290 <xsd:complexType name="CT_ColorReplaceEffect">

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1291     <xsd:sequence>
1292         <xsd:group ref="EG_ColorChoice" minOccurs="1" maxOccurs="1"/>
1293     </xsd:sequence>
1294 </xsd:complexType>
1295 <xsd:complexType name="CT_DuotoneEffect">
1296     <xsd:sequence>
1297         <xsd:group ref="EG_ColorChoice" minOccurs="2" maxOccurs="2"/>
1298     </xsd:sequence>
1299 </xsd:complexType>
1300 <xsd:complexType name="CT_GlowEffect">
1301     <xsd:sequence>
1302         <xsd:group ref="EG_ColorChoice" minOccurs="1" maxOccurs="1"/>
1303     </xsd:sequence>
1304     <xsd:attribute name="rad" type="ST_PositiveCoordinate" use="optional" default="0"/>
1305 </xsd:complexType>
1306 <xsd:complexType name="CT_GrayscaleEffect"/>
1307 <xsd:complexType name="CT_HSLEffect">
1308     <xsd:attribute name="hue" type="ST_PositiveFixedAngle" use="optional" default="0"/>
1309     <xsd:attribute name="sat" type="ST_FixedPercentage" use="optional" default="0%"/>
1310     <xsd:attribute name="lum" type="ST_FixedPercentage" use="optional" default="0%"/>
1311 </xsd:complexType>
1312 <xsd:complexType name="CT_InnerShadowEffect">
1313     <xsd:sequence>
1314         <xsd:group ref="EG_ColorChoice" minOccurs="1" maxOccurs="1"/>
1315     </xsd:sequence>
1316     <xsd:attribute name="blurRad" type="ST_PositiveCoordinate" use="optional" default="0"/>
1317     <xsd:attribute name="dist" type="ST_PositiveCoordinate" use="optional" default="0"/>
1318     <xsd:attribute name="dir" type="ST_PositiveFixedAngle" use="optional" default="0"/>
1319 </xsd:complexType>
1320 <xsd:complexType name="CT_LuminanceEffect">
1321     <xsd:attribute name="bright" type="ST_FixedPercentage" use="optional" default="0%"/>
1322     <xsd:attribute name="contrast" type="ST_FixedPercentage" use="optional" default="0%"/>
1323 </xsd:complexType>
1324 <xsd:complexType name="CT_OuterShadowEffect">
1325     <xsd:sequence>
1326         <xsd:group ref="EG_ColorChoice" minOccurs="1" maxOccurs="1"/>
1327     </xsd:sequence>
1328     <xsd:attribute name="blurRad" type="ST_PositiveCoordinate" use="optional" default="0"/>
1329     <xsd:attribute name="dist" type="ST_PositiveCoordinate" use="optional" default="0"/>
1330     <xsd:attribute name="dir" type="ST_PositiveFixedAngle" use="optional" default="0"/>
1331     <xsd:attribute name="sx" type="ST_Percentage" use="optional" default="100%"/>
1332     <xsd:attribute name="sy" type="ST_Percentage" use="optional" default="100%"/>
1333     <xsd:attribute name="kx" type="ST_FixedAngle" use="optional" default="0"/>
1334     <xsd:attribute name="ky" type="ST_FixedAngle" use="optional" default="0"/>
1335     <xsd:attribute name="align" type="ST_RectAlignment" use="optional" default="b"/>
1336     <xsd:attribute name="rotWithShape" type="xsd:boolean" use="optional" default="true"/>
1337 </xsd:complexType>
1338 <xsd:simpleType name="ST_PresetShadowVal">
1339     <xsd:restriction base="xsd:token">
1340         <xsd:enumeration value="shdw1"/>
1341         <xsd:enumeration value="shdw2"/>
1342         <xsd:enumeration value="shdw3"/>
1343         <xsd:enumeration value="shdw4"/>

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1344     <xsd:enumeration value="shdw5"/>
1345     <xsd:enumeration value="shdw6"/>
1346     <xsd:enumeration value="shdw7"/>
1347     <xsd:enumeration value="shdw8"/>
1348     <xsd:enumeration value="shdw9"/>
1349     <xsd:enumeration value="shdw10"/>
1350     <xsd:enumeration value="shdw11"/>
1351     <xsd:enumeration value="shdw12"/>
1352     <xsd:enumeration value="shdw13"/>
1353     <xsd:enumeration value="shdw14"/>
1354     <xsd:enumeration value="shdw15"/>
1355     <xsd:enumeration value="shdw16"/>
1356     <xsd:enumeration value="shdw17"/>
1357     <xsd:enumeration value="shdw18"/>
1358     <xsd:enumeration value="shdw19"/>
1359     <xsd:enumeration value="shdw20"/>
1360 </xsd:restriction>
1361 </xsd:simpleType>
1362 <xsd:complexType name="CT_PresetShadowEffect">
1363     <xsd:sequence>
1364         <xsd:group ref="EG_ColorChoice" minOccurs="1" maxOccurs="1"/>
1365     </xsd:sequence>
1366     <xsd:attribute name="prst" type="ST_PresetShadowVal" use="required"/>
1367     <xsd:attribute name="dist" type="ST_PositiveCoordinate" use="optional" default="0"/>
1368     <xsd:attribute name="dir" type="ST_PositiveFixedAngle" use="optional" default="0"/>
1369 </xsd:complexType>
1370 <xsd:complexType name="CT_ReflectionEffect">
1371     <xsd:attribute name="blurRad" type="ST_PositiveCoordinate" use="optional" default="0"/>
1372     <xsd:attribute name="stA" type="ST_PositiveFixedPercentage" use="optional" default="100%"/>
1373     <xsd:attribute name="stPos" type="ST_PositiveFixedPercentage" use="optional" default="0%"/>
1374     <xsd:attribute name="endA" type="ST_PositiveFixedPercentage" use="optional" default="0%"/>
1375     <xsd:attribute name="endPos" type="ST_PositiveFixedPercentage" use="optional" default="100%"/>
1376     <xsd:attribute name="dist" type="ST_PositiveCoordinate" use="optional" default="0"/>
1377     <xsd:attribute name="dir" type="ST_PositiveFixedAngle" use="optional" default="0"/>
1378     <xsd:attribute name="fadeDir" type="ST_PositiveFixedAngle" use="optional" default="5400000"/>
1379     <xsd:attribute name="sx" type="ST_Percentage" use="optional" default="100%"/>
1380     <xsd:attribute name="sy" type="ST_Percentage" use="optional" default="100%"/>
1381     <xsd:attribute name="kx" type="ST_FixedAngle" use="optional" default="0"/>
1382     <xsd:attribute name="ky" type="ST_FixedAngle" use="optional" default="0"/>
1383     <xsd:attribute name="algn" type="ST_RectAlignment" use="optional" default="b"/>
1384     <xsd:attribute name="rotWithShape" type="xsd:boolean" use="optional" default="true"/>
1385 </xsd:complexType>
1386 <xsd:complexType name="CT_RelativeOffsetEffect">
1387     <xsd:attribute name="tx" type="ST_Percentage" use="optional" default="0%"/>
1388     <xsd:attribute name="ty" type="ST_Percentage" use="optional" default="0%"/>
1389 </xsd:complexType>
1390 <xsd:complexType name="CT_SoftEdgesEffect">
1391     <xsd:attribute name="rad" type="ST_PositiveCoordinate" use="required"/>
1392 </xsd:complexType>
1393 <xsd:complexType name="CT_TintEffect">
1394     <xsd:attribute name="hue" type="ST_PositiveFixedAngle" use="optional" default="0"/>
1395     <xsd:attribute name="amt" type="ST_FixedPercentage" use="optional" default="0%"/>
1396 </xsd:complexType>

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1397 <xsd:complexType name="CT_TransformEffect">
1398   <xsd:attribute name="sx" type="ST_Percentage" use="optional" default="100%"/>
1399   <xsd:attribute name="sy" type="ST_Percentage" use="optional" default="100%"/>
1400   <xsd:attribute name="kx" type="ST_FixedAngle" use="optional" default="0"/>
1401   <xsd:attribute name="ky" type="ST_FixedAngle" use="optional" default="0"/>
1402   <xsd:attribute name="tx" type="ST_Coordinate" use="optional" default="0"/>
1403   <xsd:attribute name="ty" type="ST_Coordinate" use="optional" default="0"/>
1404 </xsd:complexType>
1405 <xsd:complexType name="CT_NoFillProperties"/>
1406 <xsd:complexType name="CT_SolidColorFillProperties">
1407   <xsd:sequence>
1408     <xsd:group ref="EG_ColorChoice" minOccurs="0" maxOccurs="1"/>
1409   </xsd:sequence>
1410 </xsd:complexType>
1411 <xsd:complexType name="CT_LinearShadeProperties">
1412   <xsd:attribute name="ang" type="ST_PositiveFixedAngle" use="optional"/>
1413   <xsd:attribute name="scaled" type="xsd:boolean" use="optional"/>
1414 </xsd:complexType>
1415 <xsd:simpleType name="ST_PathShadeType">
1416   <xsd:restriction base="xsd:token">
1417     <xsd:enumeration value="shape"/>
1418     <xsd:enumeration value="circle"/>
1419     <xsd:enumeration value="rect"/>
1420   </xsd:restriction>
1421 </xsd:simpleType>
1422 <xsd:complexType name="CT_PathShadeProperties">
1423   <xsd:sequence>
1424     <xsd:element name="fillToRect" type="CT_RelativeRect" minOccurs="0" maxOccurs="1"/>
1425   </xsd:sequence>
1426   <xsd:attribute name="path" type="ST_PathShadeType" use="optional"/>
1427 </xsd:complexType>
1428 <xsd:group name="EG_ShadeProperties">
1429   <xsd:choice>
1430     <xsd:element name="lin" type="CT_LinearShadeProperties" minOccurs="1" maxOccurs="1"/>
1431     <xsd:element name="path" type="CT_PathShadeProperties" minOccurs="1" maxOccurs="1"/>
1432   </xsd:choice>
1433 </xsd:group>
1434 <xsd:simpleType name="ST_TileFlipMode">
1435   <xsd:restriction base="xsd:token">
1436     <xsd:enumeration value="none"/>
1437     <xsd:enumeration value="x"/>
1438     <xsd:enumeration value="y"/>
1439     <xsd:enumeration value="xy"/>
1440   </xsd:restriction>
1441 </xsd:simpleType>
1442 <xsd:complexType name="CT_GradientStop">
1443   <xsd:sequence>
1444     <xsd:group ref="EG_ColorChoice" minOccurs="1" maxOccurs="1"/>
1445   </xsd:sequence>
1446   <xsd:attribute name="pos" type="ST_PositiveFixedPercentage" use="required"/>
1447 </xsd:complexType>
1448 <xsd:complexType name="CT_GradientStopList">
1449   <xsd:sequence>

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1450     <xsd:element name="gs" type="CT_GradientStop" minOccurs="2" maxOccurs="unbounded"/>
1451   </xsd:sequence>
1452 </xsd:complexType>
1453 <xsd:complexType name="CT_GradientFillProperties">
1454   <xsd:sequence>
1455     <xsd:element name="gsList" type="CT_GradientStopList" minOccurs="0" maxOccurs="1"/>
1456     <xsd:group ref="EG_ShadeProperties" minOccurs="0" maxOccurs="1"/>
1457     <xsd:element name="tileRect" type="CT_RelativeRect" minOccurs="0" maxOccurs="1"/>
1458   </xsd:sequence>
1459   <xsd:attribute name="flip" type="ST_TileFlipMode" use="optional"/>
1460   <xsd:attribute name="rotWithShape" type="xsd:boolean" use="optional"/>
1461 </xsd:complexType>
1462 <xsd:complexType name="CT_TileInfoProperties">
1463   <xsd:attribute name="tx" type="ST_Coordinate" use="optional"/>
1464   <xsd:attribute name="ty" type="ST_Coordinate" use="optional"/>
1465   <xsd:attribute name="sx" type="ST_Percentage" use="optional"/>
1466   <xsd:attribute name="sy" type="ST_Percentage" use="optional"/>
1467   <xsd:attribute name="flip" type="ST_TileFlipMode" use="optional"/>
1468   <xsd:attribute name="align" type="ST_RectAlignment" use="optional"/>
1469 </xsd:complexType>
1470 <xsd:complexType name="CT_StretchInfoProperties">
1471   <xsd:sequence>
1472     <xsd:element name="fillRect" type="CT_RelativeRect" minOccurs="0" maxOccurs="1"/>
1473   </xsd:sequence>
1474 </xsd:complexType>
1475 <xsd:group name="EG_FillModeProperties">
1476   <xsd:choice>
1477     <xsd:element name="tile" type="CT_TileInfoProperties" minOccurs="1" maxOccurs="1"/>
1478     <xsd:element name="stretch" type="CT_StretchInfoProperties" minOccurs="1" maxOccurs="1"/>
1479   </xsd:choice>
1480 </xsd:group>
1481 <xsd:simpleType name="ST_BlipCompression">
1482   <xsd:restriction base="xsd:token">
1483     <xsd:enumeration value="email"/>
1484     <xsd:enumeration value="screen"/>
1485     <xsd:enumeration value="print"/>
1486     <xsd:enumeration value="hqprint"/>
1487     <xsd:enumeration value="none"/>
1488   </xsd:restriction>
1489 </xsd:simpleType>
1490 <xsd:complexType name="CT_Blip">
1491   <xsd:sequence>
1492     <xsd:choice minOccurs="0" maxOccurs="unbounded">
1493       <xsd:element name="alphaBiLevel" type="CT_AlphaBiLevelEffect" minOccurs="1"
1494         maxOccurs="1"/>
1495       <xsd:element name="alphaCeiling" type="CT_AlphaCeilingEffect" minOccurs="1"
1496         maxOccurs="1"/>
1497       <xsd:element name="alphaFloor" type="CT_AlphaFloorEffect" minOccurs="1" maxOccurs="1"/>
1498       <xsd:element name="alphaInv" type="CT_AlphaInverseEffect" minOccurs="1" maxOccurs="1"/>
1499       <xsd:element name="alphaMod" type="CT_AlphaModulateEffect" minOccurs="1"
1500         maxOccurs="1"/>
1501       <xsd:element name="alphaModFix" type="CT_AlphaModulateFixedEffect" minOccurs="1"
1502         maxOccurs="1"/>

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1503     <xsd:element name="alphaRepl" type="CT_AlphaReplaceEffect" minOccurs="1"
1504         maxOccurs="1"/>
1505     <xsd:element name="biLevel" type="CT_BiLevelEffect" minOccurs="1" maxOccurs="1"/>
1506     <xsd:element name="blur" type="CT_BlurEffect" minOccurs="1" maxOccurs="1"/>
1507     <xsd:element name="clrChange" type="CT_ColorChangeEffect" minOccurs="1" maxOccurs="1"/>
1508     <xsd:element name="clrRepl" type="CT_ColorReplaceEffect" minOccurs="1" maxOccurs="1"/>
1509     <xsd:element name="duotone" type="CT_DuotoneEffect" minOccurs="1" maxOccurs="1"/>
1510     <xsd:element name="fillOverlay" type="CT_FillOverlayEffect" minOccurs="1"
1511         maxOccurs="1"/>
1512     <xsd:element name="grayscale" type="CT_GrayscaleEffect" minOccurs="1" maxOccurs="1"/>
1513     <xsd:element name="hsl" type="CT_HSLEffect" minOccurs="1" maxOccurs="1"/>
1514     <xsd:element name="lum" type="CT_LuminanceEffect" minOccurs="1" maxOccurs="1"/>
1515     <xsd:element name="tint" type="CT_TintEffect" minOccurs="1" maxOccurs="1"/>
1516 </xsd:choice>
1517     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
1518 </xsd:sequence>
1519 <xsd:attributeGroup ref="AG_Blob"/>
1520 <xsd:attribute name="cstate" type="ST_BlipCompression" use="optional" default="none"/>
1521 </xsd:complexType>
1522 <xsd:complexType name="CT_BlipFillProperties">
1523     <xsd:sequence>
1524         <xsd:element name="blip" type="CT_Blip" minOccurs="0" maxOccurs="1"/>
1525         <xsd:element name="srcRect" type="CT_RelativeRect" minOccurs="0" maxOccurs="1"/>
1526         <xsd:group ref="EG_FillModeProperties" minOccurs="0" maxOccurs="1"/>
1527     </xsd:sequence>
1528     <xsd:attribute name="dpi" type="xsd:unsignedInt" use="optional"/>
1529     <xsd:attribute name="rotWithShape" type="xsd:boolean" use="optional"/>
1530 </xsd:complexType>
1531 <xsd:simpleType name="ST_PresetPatternVal">
1532     <xsd:restriction base="xsd:token">
1533         <xsd:enumeration value="pct5"/>
1534         <xsd:enumeration value="pct10"/>
1535         <xsd:enumeration value="pct20"/>
1536         <xsd:enumeration value="pct25"/>
1537         <xsd:enumeration value="pct30"/>
1538         <xsd:enumeration value="pct40"/>
1539         <xsd:enumeration value="pct50"/>
1540         <xsd:enumeration value="pct60"/>
1541         <xsd:enumeration value="pct70"/>
1542         <xsd:enumeration value="pct75"/>
1543         <xsd:enumeration value="pct80"/>
1544         <xsd:enumeration value="pct90"/>
1545         <xsd:enumeration value="horz"/>
1546         <xsd:enumeration value="vert"/>
1547         <xsd:enumeration value="ltHorz"/>
1548         <xsd:enumeration value="ltVert"/>
1549         <xsd:enumeration value="dkHorz"/>
1550         <xsd:enumeration value="dkVert"/>
1551         <xsd:enumeration value="narHorz"/>
1552         <xsd:enumeration value="narVert"/>
1553         <xsd:enumeration value="dashHorz"/>
1554         <xsd:enumeration value="dashVert"/>
1555         <xsd:enumeration value="cross"/>

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1556     <xsd:enumeration value="dnDiag"/>
1557     <xsd:enumeration value="upDiag"/>
1558     <xsd:enumeration value="ltDnDiag"/>
1559     <xsd:enumeration value="ltUpDiag"/>
1560     <xsd:enumeration value="dkDnDiag"/>
1561     <xsd:enumeration value="dkUpDiag"/>
1562     <xsd:enumeration value="wdDnDiag"/>
1563     <xsd:enumeration value="wdUpDiag"/>
1564     <xsd:enumeration value="dashDnDiag"/>
1565     <xsd:enumeration value="dashUpDiag"/>
1566     <xsd:enumeration value="diagCross"/>
1567     <xsd:enumeration value="smCheck"/>
1568     <xsd:enumeration value="lgCheck"/>
1569     <xsd:enumeration value="smGrid"/>
1570     <xsd:enumeration value="lgGrid"/>
1571     <xsd:enumeration value="dotGrid"/>
1572     <xsd:enumeration value="smConfetti"/>
1573     <xsd:enumeration value="lgConfetti"/>
1574     <xsd:enumeration value="horzBrick"/>
1575     <xsd:enumeration value="diagBrick"/>
1576     <xsd:enumeration value="solidDmnd"/>
1577     <xsd:enumeration value="openDmnd"/>
1578     <xsd:enumeration value="dotDmnd"/>
1579     <xsd:enumeration value="plaid"/>
1580     <xsd:enumeration value="sphere"/>
1581     <xsd:enumeration value="weave"/>
1582     <xsd:enumeration value="divot"/>
1583     <xsd:enumeration value="shingle"/>
1584     <xsd:enumeration value="wave"/>
1585     <xsd:enumeration value="trellis"/>
1586     <xsd:enumeration value="zigZag"/>
1587 </xsd:restriction>
1588 </xsd:simpleType>
1589 <xsd:complexType name="CT_PatternFillProperties">
1590     <xsd:sequence>
1591         <xsd:element name="fgClr" type="CT_Color" minOccurs="0" maxOccurs="1"/>
1592         <xsd:element name="bgClr" type="CT_Color" minOccurs="0" maxOccurs="1"/>
1593     </xsd:sequence>
1594     <xsd:attribute name="prst" type="ST_PresetPatternVal" use="optional"/>
1595 </xsd:complexType>
1596 <xsd:complexType name="CT_GroupFillProperties"/>
1597 <xsd:group name="EG_FillProperties">
1598     <xsd:choice>
1599         <xsd:element name="noFill" type="CT_NoFillProperties" minOccurs="1" maxOccurs="1"/>
1600         <xsd:element name="solidFill" type="CT_SolidColorFillProperties" minOccurs="1"
1601             maxOccurs="1"/>
1602         <xsd:element name="gradFill" type="CT_GradientFillProperties" minOccurs="1"
1603             maxOccurs="1"/>
1604         <xsd:element name="blipFill" type="CT_BlipFillProperties" minOccurs="1" maxOccurs="1"/>
1605         <xsd:element name="pattFill" type="CT_PatternFillProperties" minOccurs="1" maxOccurs="1"/>
1606         <xsd:element name="grpFill" type="CT_GroupFillProperties" minOccurs="1" maxOccurs="1"/>
1607     </xsd:choice>
1608 </xsd:group>

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1609 <xsd:complexType name="CT_FillProperties">
1610   <xsd:sequence>
1611     <xsd:group ref="EG_FillProperties" minOccurs="1" maxOccurs="1"/>
1612   </xsd:sequence>
1613 </xsd:complexType>
1614 <xsd:complexType name="CT_FillEffect">
1615   <xsd:sequence>
1616     <xsd:group ref="EG_FillProperties" minOccurs="1" maxOccurs="1"/>
1617   </xsd:sequence>
1618 </xsd:complexType>
1619 <xsd:simpleType name="ST_BlendMode">
1620   <xsd:restriction base="xsd:token">
1621     <xsd:enumeration value="over"/>
1622     <xsd:enumeration value="mult"/>
1623     <xsd:enumeration value="screen"/>
1624     <xsd:enumeration value="darken"/>
1625     <xsd:enumeration value="lighten"/>
1626   </xsd:restriction>
1627 </xsd:simpleType>
1628 <xsd:complexType name="CT_FillOverlayEffect">
1629   <xsd:sequence>
1630     <xsd:group ref="EG_FillProperties" minOccurs="1" maxOccurs="1"/>
1631   </xsd:sequence>
1632   <xsd:attribute name="blend" type="ST_BlendMode" use="required"/>
1633 </xsd:complexType>
1634 <xsd:complexType name="CT_EffectReference">
1635   <xsd:attribute name="ref" type="xsd:token" use="required"/>
1636 </xsd:complexType>
1637 <xsd:group name="EG_Effect">
1638   <xsd:choice>
1639     <xsd:element name="cont" type="CT_EffectContainer" minOccurs="1" maxOccurs="1"/>
1640     <xsd:element name="effect" type="CT_EffectReference" minOccurs="1" maxOccurs="1"/>
1641     <xsd:element name="alphaBiLevel" type="CT_AlphaBiLevelEffect" minOccurs="1"
1642       maxOccurs="1"/>
1643     <xsd:element name="alphaCeiling" type="CT_AlphaCeilingEffect" minOccurs="1"
1644       maxOccurs="1"/>
1645     <xsd:element name="alphaFloor" type="CT_AlphaFloorEffect" minOccurs="1" maxOccurs="1"/>
1646     <xsd:element name="alphaInv" type="CT_AlphaInverseEffect" minOccurs="1" maxOccurs="1"/>
1647     <xsd:element name="alphaMod" type="CT_AlphaModulateEffect" minOccurs="1" maxOccurs="1"/>
1648     <xsd:element name="alphaModFix" type="CT_AlphaModulateFixedEffect" minOccurs="1"
1649       maxOccurs="1"/>
1650     <xsd:element name="alphaOutset" type="CT_AlphaOutsetEffect" minOccurs="1" maxOccurs="1"/>
1651     <xsd:element name="alphaRepl" type="CT_AlphaReplaceEffect" minOccurs="1" maxOccurs="1"/>
1652     <xsd:element name="biLevel" type="CT_BiLevelEffect" minOccurs="1" maxOccurs="1"/>
1653     <xsd:element name="blend" type="CT_BlendEffect" minOccurs="1" maxOccurs="1"/>
1654     <xsd:element name="blur" type="CT_BlurEffect" minOccurs="1" maxOccurs="1"/>
1655     <xsd:element name="clrChange" type="CT_ColorChangeEffect" minOccurs="1" maxOccurs="1"/>
1656     <xsd:element name="clrRepl" type="CT_ColorReplaceEffect" minOccurs="1" maxOccurs="1"/>
1657     <xsd:element name="duotone" type="CT_DuotoneEffect" minOccurs="1" maxOccurs="1"/>
1658     <xsd:element name="fill" type="CT_FillEffect" minOccurs="1" maxOccurs="1"/>
1659     <xsd:element name="fillOverlay" type="CT_FillOverlayEffect" minOccurs="1" maxOccurs="1"/>
1660     <xsd:element name="glow" type="CT_GlowEffect" minOccurs="1" maxOccurs="1"/>
1661     <xsd:element name="grayscale" type="CT_GrayscaleEffect" minOccurs="1" maxOccurs="1"/>

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1662     <xsd:element name="hsl" type="CT_HSLEffect" minOccurs="1" maxOccurs="1"/>
1663     <xsd:element name="innerShdw" type="CT_InnerShadowEffect" minOccurs="1" maxOccurs="1"/>
1664     <xsd:element name="lum" type="CT_LuminanceEffect" minOccurs="1" maxOccurs="1"/>
1665     <xsd:element name="outerShdw" type="CT_OuterShadowEffect" minOccurs="1" maxOccurs="1"/>
1666     <xsd:element name="prstShdw" type="CT_PresetShadowEffect" minOccurs="1" maxOccurs="1"/>
1667     <xsd:element name="reflection" type="CT_ReflectionEffect" minOccurs="1" maxOccurs="1"/>
1668     <xsd:element name="relOff" type="CT_RelativeOffsetEffect" minOccurs="1" maxOccurs="1"/>
1669     <xsd:element name="softEdge" type="CT_SoftEdgesEffect" minOccurs="1" maxOccurs="1"/>
1670     <xsd:element name="tint" type="CT_TintEffect" minOccurs="1" maxOccurs="1"/>
1671     <xsd:element name="xfrm" type="CT_TransformEffect" minOccurs="1" maxOccurs="1"/>
1672   </xsd:choice>
1673 </xsd:group>
1674 <xsd:simpleType name="ST_EffectContainerType">
1675   <xsd:restriction base="xsd:token">
1676     <xsd:enumeration value="sib"/>
1677     <xsd:enumeration value="tree"/>
1678   </xsd:restriction>
1679 </xsd:simpleType>
1680 <xsd:complexType name="CT_EffectContainer">
1681   <xsd:group ref="EG_Effect" minOccurs="0" maxOccurs="unbounded"/>
1682   <xsd:attribute name="type" type="ST_EffectContainerType" use="optional" default="sib"/>
1683   <xsd:attribute name="name" type="xsd:token" use="optional"/>
1684 </xsd:complexType>
1685 <xsd:complexType name="CT_AlphaModulateEffect">
1686   <xsd:sequence>
1687     <xsd:element name="cont" type="CT_EffectContainer" minOccurs="1" maxOccurs="1"/>
1688   </xsd:sequence>
1689 </xsd:complexType>
1690 <xsd:complexType name="CT_BlendEffect">
1691   <xsd:sequence>
1692     <xsd:element name="cont" type="CT_EffectContainer" minOccurs="1" maxOccurs="1"/>
1693   </xsd:sequence>
1694   <xsd:attribute name="blend" type="ST_BlendMode" use="required"/>
1695 </xsd:complexType>
1696 <xsd:complexType name="CT_EffectList">
1697   <xsd:sequence>
1698     <xsd:element name="blur" type="CT_BlurEffect" minOccurs="0" maxOccurs="1"/>
1699     <xsd:element name="fillOverlay" type="CT_FillOverlayEffect" minOccurs="0" maxOccurs="1"/>
1700     <xsd:element name="glow" type="CT_GlowEffect" minOccurs="0" maxOccurs="1"/>
1701     <xsd:element name="innerShdw" type="CT_InnerShadowEffect" minOccurs="0" maxOccurs="1"/>
1702     <xsd:element name="outerShdw" type="CT_OuterShadowEffect" minOccurs="0" maxOccurs="1"/>
1703     <xsd:element name="prstShdw" type="CT_PresetShadowEffect" minOccurs="0" maxOccurs="1"/>
1704     <xsd:element name="reflection" type="CT_ReflectionEffect" minOccurs="0" maxOccurs="1"/>
1705     <xsd:element name="softEdge" type="CT_SoftEdgesEffect" minOccurs="0" maxOccurs="1"/>
1706   </xsd:sequence>
1707 </xsd:complexType>
1708 <xsd:group name="EG_EffectProperties">
1709   <xsd:choice>
1710     <xsd:element name="effectLst" type="CT_EffectList" minOccurs="1" maxOccurs="1"/>
1711     <xsd:element name="effectDag" type="CT_EffectContainer" minOccurs="1" maxOccurs="1"/>
1712   </xsd:choice>
1713 </xsd:group>
1714 <xsd:complexType name="CT_EffectProperties">

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1715     <xsd:sequence>
1716         <xsd:group ref="EG_EffectProperties" minOccurs="1" maxOccurs="1"/>
1717     </xsd:sequence>
1718 </xsd:complexType>
1719 <xsd:element name="blip" type="CT_Blip"/>
1720 <xsd:simpleType name="ST_ShapeType">
1721     <xsd:restriction base="xsd:token">
1722         <xsd:enumeration value="line"/>
1723         <xsd:enumeration value="lineInv"/>
1724         <xsd:enumeration value="triangle"/>
1725         <xsd:enumeration value="rtTriangle"/>
1726         <xsd:enumeration value="rect"/>
1727         <xsd:enumeration value="diamond"/>
1728         <xsd:enumeration value="parallelogram"/>
1729         <xsd:enumeration value="trapezoid"/>
1730         <xsd:enumeration value="nonIsoscelesTrapezoid"/>
1731         <xsd:enumeration value="pentagon"/>
1732         <xsd:enumeration value="hexagon"/>
1733         <xsd:enumeration value="heptagon"/>
1734         <xsd:enumeration value="octagon"/>
1735         <xsd:enumeration value="decagon"/>
1736         <xsd:enumeration value="dodecagon"/>
1737         <xsd:enumeration value="star4"/>
1738         <xsd:enumeration value="star5"/>
1739         <xsd:enumeration value="star6"/>
1740         <xsd:enumeration value="star7"/>
1741         <xsd:enumeration value="star8"/>
1742         <xsd:enumeration value="star10"/>
1743         <xsd:enumeration value="star12"/>
1744         <xsd:enumeration value="star16"/>
1745         <xsd:enumeration value="star24"/>
1746         <xsd:enumeration value="star32"/>
1747         <xsd:enumeration value="roundRect"/>
1748         <xsd:enumeration value="round1Rect"/>
1749         <xsd:enumeration value="round2SameRect"/>
1750         <xsd:enumeration value="round2DiagRect"/>
1751         <xsd:enumeration value="snipRoundRect"/>
1752         <xsd:enumeration value="snip1Rect"/>
1753         <xsd:enumeration value="snip2SameRect"/>
1754         <xsd:enumeration value="snip2DiagRect"/>
1755         <xsd:enumeration value="plaque"/>
1756         <xsd:enumeration value="ellipse"/>
1757         <xsd:enumeration value="teardrop"/>
1758         <xsd:enumeration value="homePlate"/>
1759         <xsd:enumeration value="chevron"/>
1760         <xsd:enumeration value="pieWedge"/>
1761         <xsd:enumeration value="pie"/>
1762         <xsd:enumeration value="blockArc"/>
1763         <xsd:enumeration value="donut"/>
1764         <xsd:enumeration value="noSmoking"/>
1765         <xsd:enumeration value="rightArrow"/>
1766         <xsd:enumeration value="leftArrow"/>
1767         <xsd:enumeration value="upArrow"/>

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1768 <xsd:enumeration value="downArrow"/>
1769 <xsd:enumeration value="stripedRightArrow"/>
1770 <xsd:enumeration value="notchedRightArrow"/>
1771 <xsd:enumeration value="bentUpArrow"/>
1772 <xsd:enumeration value="leftRightArrow"/>
1773 <xsd:enumeration value="upDownArrow"/>
1774 <xsd:enumeration value="leftUpArrow"/>
1775 <xsd:enumeration value="leftRightUpArrow"/>
1776 <xsd:enumeration value="quadArrow"/>
1777 <xsd:enumeration value="leftArrowCallout"/>
1778 <xsd:enumeration value="rightArrowCallout"/>
1779 <xsd:enumeration value="upArrowCallout"/>
1780 <xsd:enumeration value="downArrowCallout"/>
1781 <xsd:enumeration value="leftRightArrowCallout"/>
1782 <xsd:enumeration value="upDownArrowCallout"/>
1783 <xsd:enumeration value="quadArrowCallout"/>
1784 <xsd:enumeration value="bentArrow"/>
1785 <xsd:enumeration value="uturnArrow"/>
1786 <xsd:enumeration value="circularArrow"/>
1787 <xsd:enumeration value="leftCircularArrow"/>
1788 <xsd:enumeration value="leftRightCircularArrow"/>
1789 <xsd:enumeration value="curvedRightArrow"/>
1790 <xsd:enumeration value="curvedLeftArrow"/>
1791 <xsd:enumeration value="curvedUpArrow"/>
1792 <xsd:enumeration value="curvedDownArrow"/>
1793 <xsd:enumeration value="swooshArrow"/>
1794 <xsd:enumeration value="cube"/>
1795 <xsd:enumeration value="can"/>
1796 <xsd:enumeration value="lightningBolt"/>
1797 <xsd:enumeration value="heart"/>
1798 <xsd:enumeration value="sun"/>
1799 <xsd:enumeration value="moon"/>
1800 <xsd:enumeration value="smileyFace"/>
1801 <xsd:enumeration value="irregularSeal1"/>
1802 <xsd:enumeration value="irregularSeal2"/>
1803 <xsd:enumeration value="foldedCorner"/>
1804 <xsd:enumeration value="bevel"/>
1805 <xsd:enumeration value="frame"/>
1806 <xsd:enumeration value="halfFrame"/>
1807 <xsd:enumeration value="corner"/>
1808 <xsd:enumeration value="diagStripe"/>
1809 <xsd:enumeration value="chord"/>
1810 <xsd:enumeration value="arc"/>
1811 <xsd:enumeration value="leftBracket"/>
1812 <xsd:enumeration value="rightBracket"/>
1813 <xsd:enumeration value="leftBrace"/>
1814 <xsd:enumeration value="rightBrace"/>
1815 <xsd:enumeration value="bracketPair"/>
1816 <xsd:enumeration value="bracePair"/>
1817 <xsd:enumeration value="straightConnector1"/>
1818 <xsd:enumeration value="bentConnector2"/>
1819 <xsd:enumeration value="bentConnector3"/>
1820 <xsd:enumeration value="bentConnector4"/>

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1821     <xsd:enumeration value="bentConnector5"/>
1822     <xsd:enumeration value="curvedConnector2"/>
1823     <xsd:enumeration value="curvedConnector3"/>
1824     <xsd:enumeration value="curvedConnector4"/>
1825     <xsd:enumeration value="curvedConnector5"/>
1826     <xsd:enumeration value="callout1"/>
1827     <xsd:enumeration value="callout2"/>
1828     <xsd:enumeration value="callout3"/>
1829     <xsd:enumeration value="accentCallout1"/>
1830     <xsd:enumeration value="accentCallout2"/>
1831     <xsd:enumeration value="accentCallout3"/>
1832     <xsd:enumeration value="borderCallout1"/>
1833     <xsd:enumeration value="borderCallout2"/>
1834     <xsd:enumeration value="borderCallout3"/>
1835     <xsd:enumeration value="accentBorderCallout1"/>
1836     <xsd:enumeration value="accentBorderCallout2"/>
1837     <xsd:enumeration value="accentBorderCallout3"/>
1838     <xsd:enumeration value="wedgeRectCallout"/>
1839     <xsd:enumeration value="wedgeRoundRectCallout"/>
1840     <xsd:enumeration value="wedgeEllipseCallout"/>
1841     <xsd:enumeration value="cloudCallout"/>
1842     <xsd:enumeration value="cloud"/>
1843     <xsd:enumeration value="ribbon"/>
1844     <xsd:enumeration value="ribbon2"/>
1845     <xsd:enumeration value="ellipseRibbon"/>
1846     <xsd:enumeration value="ellipseRibbon2"/>
1847     <xsd:enumeration value="leftRightRibbon"/>
1848     <xsd:enumeration value="verticalScroll"/>
1849     <xsd:enumeration value="horizontalScroll"/>
1850     <xsd:enumeration value="wave"/>
1851     <xsd:enumeration value="doubleWave"/>
1852     <xsd:enumeration value="plus"/>
1853     <xsd:enumeration value="flowChartProcess"/>
1854     <xsd:enumeration value="flowChartDecision"/>
1855     <xsd:enumeration value="flowChartInputOutput"/>
1856     <xsd:enumeration value="flowChartPredefinedProcess"/>
1857     <xsd:enumeration value="flowChartInternalStorage"/>
1858     <xsd:enumeration value="flowChartDocument"/>
1859     <xsd:enumeration value="flowChartMultidocument"/>
1860     <xsd:enumeration value="flowChartTerminator"/>
1861     <xsd:enumeration value="flowChartPreparation"/>
1862     <xsd:enumeration value="flowChartManualInput"/>
1863     <xsd:enumeration value="flowChartManualOperation"/>
1864     <xsd:enumeration value="flowChartConnector"/>
1865     <xsd:enumeration value="flowChartPunchedCard"/>
1866     <xsd:enumeration value="flowChartPunchedTape"/>
1867     <xsd:enumeration value="flowChartSummingJunction"/>
1868     <xsd:enumeration value="flowChartOr"/>
1869     <xsd:enumeration value="flowChartCollate"/>
1870     <xsd:enumeration value="flowChartSort"/>
1871     <xsd:enumeration value="flowChartExtract"/>
1872     <xsd:enumeration value="flowChartMerge"/>
1873     <xsd:enumeration value="flowChartOfflineStorage"/>

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1874     <xsd:enumeration value="flowChartOnlineStorage"/>
1875     <xsd:enumeration value="flowChartMagneticTape"/>
1876     <xsd:enumeration value="flowChartMagneticDisk"/>
1877     <xsd:enumeration value="flowChartMagneticDrum"/>
1878     <xsd:enumeration value="flowChartDisplay"/>
1879     <xsd:enumeration value="flowChartDelay"/>
1880     <xsd:enumeration value="flowChartAlternateProcess"/>
1881     <xsd:enumeration value="flowChartOffpageConnector"/>
1882     <xsd:enumeration value="actionButtonBlank"/>
1883     <xsd:enumeration value="actionButtonHome"/>
1884     <xsd:enumeration value="actionButtonHelp"/>
1885     <xsd:enumeration value="actionButtonInformation"/>
1886     <xsd:enumeration value="actionButtonForwardNext"/>
1887     <xsd:enumeration value="actionButtonBackPrevious"/>
1888     <xsd:enumeration value="actionButtonEnd"/>
1889     <xsd:enumeration value="actionButtonBeginning"/>
1890     <xsd:enumeration value="actionButtonReturn"/>
1891     <xsd:enumeration value="actionButtonDocument"/>
1892     <xsd:enumeration value="actionButtonSound"/>
1893     <xsd:enumeration value="actionButtonMovie"/>
1894     <xsd:enumeration value="gear6"/>
1895     <xsd:enumeration value="gear9"/>
1896     <xsd:enumeration value="funnel"/>
1897     <xsd:enumeration value="mathPlus"/>
1898     <xsd:enumeration value="mathMinus"/>
1899     <xsd:enumeration value="mathMultiply"/>
1900     <xsd:enumeration value="mathDivide"/>
1901     <xsd:enumeration value="mathEqual"/>
1902     <xsd:enumeration value="mathNotEqual"/>
1903     <xsd:enumeration value="cornerTabs"/>
1904     <xsd:enumeration value="squareTabs"/>
1905     <xsd:enumeration value="plaqueTabs"/>
1906     <xsd:enumeration value="chartX"/>
1907     <xsd:enumeration value="chartStar"/>
1908     <xsd:enumeration value="chartPlus"/>
1909 </xsd:restriction>
1910 </xsd:simpleType>
1911 <xsd:simpleType name="ST_TextShapeType">
1912     <xsd:restriction base="xsd:token">
1913         <xsd:enumeration value="textNoShape"/>
1914         <xsd:enumeration value="textPlain"/>
1915         <xsd:enumeration value="textStop"/>
1916         <xsd:enumeration value="textTriangle"/>
1917         <xsd:enumeration value="textTriangleInverted"/>
1918         <xsd:enumeration value="textChevron"/>
1919         <xsd:enumeration value="textChevronInverted"/>
1920         <xsd:enumeration value="textRingInside"/>
1921         <xsd:enumeration value="textRingOutside"/>
1922         <xsd:enumeration value="textArchUp"/>
1923         <xsd:enumeration value="textArchDown"/>
1924         <xsd:enumeration value="textCircle"/>
1925         <xsd:enumeration value="textButton"/>
1926         <xsd:enumeration value="textArchUpPour"/>

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1927     <xsd:enumeration value="textArchDownPour"/>
1928     <xsd:enumeration value="textCirclePour"/>
1929     <xsd:enumeration value="textButtonPour"/>
1930     <xsd:enumeration value="textCurveUp"/>
1931     <xsd:enumeration value="textCurveDown"/>
1932     <xsd:enumeration value="textCanUp"/>
1933     <xsd:enumeration value="textCanDown"/>
1934     <xsd:enumeration value="textWave1"/>
1935     <xsd:enumeration value="textWave2"/>
1936     <xsd:enumeration value="textDoubleWave1"/>
1937     <xsd:enumeration value="textWave4"/>
1938     <xsd:enumeration value="textInflate"/>
1939     <xsd:enumeration value="textDeflate"/>
1940     <xsd:enumeration value="textInflateBottom"/>
1941     <xsd:enumeration value="textDeflateBottom"/>
1942     <xsd:enumeration value="textInflateTop"/>
1943     <xsd:enumeration value="textDeflateTop"/>
1944     <xsd:enumeration value="textDeflateInflate"/>
1945     <xsd:enumeration value="textDeflateInflateDeflate"/>
1946     <xsd:enumeration value="textFadeRight"/>
1947     <xsd:enumeration value="textFadeLeft"/>
1948     <xsd:enumeration value="textFadeUp"/>
1949     <xsd:enumeration value="textFadeDown"/>
1950     <xsd:enumeration value="textSlantUp"/>
1951     <xsd:enumeration value="textSlantDown"/>
1952     <xsd:enumeration value="textCascadeUp"/>
1953     <xsd:enumeration value="textCascadeDown"/>
1954 </xsd:restriction>
1955 </xsd:simpleType>
1956 <xsd:simpleType name="ST_GeomGuideName">
1957     <xsd:restriction base="xsd:token"/>
1958 </xsd:simpleType>
1959 <xsd:simpleType name="ST_GeomGuideFormula">
1960     <xsd:restriction base="xsd:string"/>
1961 </xsd:simpleType>
1962 <xsd:complexType name="CT_GeomGuide">
1963     <xsd:attribute name="name" type="ST_GeomGuideName" use="required"/>
1964     <xsd:attribute name="fmla" type="ST_GeomGuideFormula" use="required"/>
1965 </xsd:complexType>
1966 <xsd:complexType name="CT_GeomGuideList">
1967     <xsd:sequence>
1968         <xsd:element name="gd" type="CT_GeomGuide" minOccurs="0" maxOccurs="unbounded"/>
1969     </xsd:sequence>
1970 </xsd:complexType>
1971 <xsd:simpleType name="ST_AdjCoordinate">
1972     <xsd:union memberTypes="ST_Coordinate ST_GeomGuideName"/>
1973 </xsd:simpleType>
1974 <xsd:simpleType name="ST_AdjAngle">
1975     <xsd:union memberTypes="ST_Angle ST_GeomGuideName"/>
1976 </xsd:simpleType>
1977 <xsd:complexType name="CT_AdjPoint2D">
1978     <xsd:attribute name="x" type="ST_AdjCoordinate" use="required"/>
1979     <xsd:attribute name="y" type="ST_AdjCoordinate" use="required"/>

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1980 </xsd:complexType>
1981 <xsd:complexType name="CT_GeomRect">
1982   <xsd:attribute name="l" type="ST AdjCoordinate" use="required"/>
1983   <xsd:attribute name="t" type="ST AdjCoordinate" use="required"/>
1984   <xsd:attribute name="r" type="ST AdjCoordinate" use="required"/>
1985   <xsd:attribute name="b" type="ST AdjCoordinate" use="required"/>
1986 </xsd:complexType>
1987 <xsd:complexType name="CT_XYAdjustHandle">
1988   <xsd:sequence>
1989     <xsd:element name="pos" type="CT AdjPoint2D" minOccurs="1" maxOccurs="1"/>
1990   </xsd:sequence>
1991   <xsd:attribute name="gdRefX" type="ST GeomGuideName" use="optional"/>
1992   <xsd:attribute name="minX" type="ST AdjCoordinate" use="optional"/>
1993   <xsd:attribute name="maxX" type="ST AdjCoordinate" use="optional"/>
1994   <xsd:attribute name="gdRefY" type="ST GeomGuideName" use="optional"/>
1995   <xsd:attribute name="minY" type="ST AdjCoordinate" use="optional"/>
1996   <xsd:attribute name="maxY" type="ST AdjCoordinate" use="optional"/>
1997 </xsd:complexType>
1998 <xsd:complexType name="CT_PolarAdjustHandle">
1999   <xsd:sequence>
2000     <xsd:element name="pos" type="CT AdjPoint2D" minOccurs="1" maxOccurs="1"/>
2001   </xsd:sequence>
2002   <xsd:attribute name="gdRefR" type="ST GeomGuideName" use="optional"/>
2003   <xsd:attribute name="minR" type="ST AdjCoordinate" use="optional"/>
2004   <xsd:attribute name="maxR" type="ST AdjCoordinate" use="optional"/>
2005   <xsd:attribute name="gdRefAng" type="ST GeomGuideName" use="optional"/>
2006   <xsd:attribute name="minAng" type="ST AdjAngle" use="optional"/>
2007   <xsd:attribute name="maxAng" type="ST AdjAngle" use="optional"/>
2008 </xsd:complexType>
2009 <xsd:complexType name="CT_ConnectionSite">
2010   <xsd:sequence>
2011     <xsd:element name="pos" type="CT AdjPoint2D" minOccurs="1" maxOccurs="1"/>
2012   </xsd:sequence>
2013   <xsd:attribute name="ang" type="ST AdjAngle" use="required"/>
2014 </xsd:complexType>
2015 <xsd:complexType name="CT_AdjustHandleList">
2016   <xsd:choice minOccurs="0" maxOccurs="unbounded">
2017     <xsd:element name="ahXY" type="CT XYAdjustHandle" minOccurs="1" maxOccurs="1"/>
2018     <xsd:element name="ahPolar" type="CT PolarAdjustHandle" minOccurs="1" maxOccurs="1"/>
2019   </xsd:choice>
2020 </xsd:complexType>
2021 <xsd:complexType name="CT_ConnectionSiteList">
2022   <xsd:sequence>
2023     <xsd:element name="cxn" type="CT ConnectionSite" minOccurs="0" maxOccurs="unbounded"/>
2024   </xsd:sequence>
2025 </xsd:complexType>
2026 <xsd:complexType name="CT_Connection">
2027   <xsd:attribute name="id" type="ST DrawingElementId" use="required"/>
2028   <xsd:attribute name="idx" type="xsd:unsignedInt" use="required"/>
2029 </xsd:complexType>
2030 <xsd:complexType name="CT_Path2DMoveTo">
2031   <xsd:sequence>
2032     <xsd:element name="pt" type="CT AdjPoint2D" minOccurs="1" maxOccurs="1"/>

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2033     </xsd:sequence>
2034 </xsd:complexType>
2035 <xsd:complexType name="CT_Path2DLineTo">
2036     <xsd:sequence>
2037         <xsd:element name="pt" type="CT_AdjPoint2D" minOccurs="1" maxOccurs="1"/>
2038     </xsd:sequence>
2039 </xsd:complexType>
2040 <xsd:complexType name="CT_Path2DArcTo">
2041     <xsd:attribute name="wR" type="ST_AdjCoordinate" use="required"/>
2042     <xsd:attribute name="hR" type="ST_AdjCoordinate" use="required"/>
2043     <xsd:attribute name="stAng" type="ST_AdjAngle" use="required"/>
2044     <xsd:attribute name="swAng" type="ST_AdjAngle" use="required"/>
2045 </xsd:complexType>
2046 <xsd:complexType name="CT_Path2DQuadBezierTo">
2047     <xsd:sequence>
2048         <xsd:element name="pt" type="CT_AdjPoint2D" minOccurs="2" maxOccurs="2"/>
2049     </xsd:sequence>
2050 </xsd:complexType>
2051 <xsd:complexType name="CT_Path2DCubicBezierTo">
2052     <xsd:sequence>
2053         <xsd:element name="pt" type="CT_AdjPoint2D" minOccurs="3" maxOccurs="3"/>
2054     </xsd:sequence>
2055 </xsd:complexType>
2056 <xsd:complexType name="CT_Path2DClose"/>
2057 <xsd:simpleType name="ST_PathFillMode">
2058     <xsd:restriction base="xsd:token">
2059         <xsd:enumeration value="none"/>
2060         <xsd:enumeration value="norm"/>
2061         <xsd:enumeration value="lighten"/>
2062         <xsd:enumeration value="lightenLess"/>
2063         <xsd:enumeration value="darken"/>
2064         <xsd:enumeration value="darkenLess"/>
2065     </xsd:restriction>
2066 </xsd:simpleType>
2067 <xsd:complexType name="CT_Path2D">
2068     <xsd:choice minOccurs="0" maxOccurs="unbounded">
2069         <xsd:element name="close" type="CT_Path2DClose" minOccurs="1" maxOccurs="1"/>
2070         <xsd:element name="moveTo" type="CT_Path2DMoveTo" minOccurs="1" maxOccurs="1"/>
2071         <xsd:element name="lnTo" type="CT_Path2DLineTo" minOccurs="1" maxOccurs="1"/>
2072         <xsd:element name="arcTo" type="CT_Path2DArcTo" minOccurs="1" maxOccurs="1"/>
2073         <xsd:element name="quadBezTo" type="CT_Path2DQuadBezierTo" minOccurs="1" maxOccurs="1"/>
2074         <xsd:element name="cubicBezTo" type="CT_Path2DCubicBezierTo" minOccurs="1" maxOccurs="1"/>
2075     </xsd:choice>
2076     <xsd:attribute name="w" type="ST_PositiveCoordinate" use="optional" default="0"/>
2077     <xsd:attribute name="h" type="ST_PositiveCoordinate" use="optional" default="0"/>
2078     <xsd:attribute name="fill" type="ST_PathFillMode" use="optional" default="norm"/>
2079     <xsd:attribute name="stroke" type="xsd:boolean" use="optional" default="true"/>
2080     <xsd:attribute name="extrusionOk" type="xsd:boolean" use="optional" default="true"/>
2081 </xsd:complexType>
2082 <xsd:complexType name="CT_Path2DList">
2083     <xsd:sequence>
2084         <xsd:element name="path" type="CT_Path2D" minOccurs="0" maxOccurs="unbounded"/>
2085     </xsd:sequence>

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2086 </xsd:complexType>
2087 <xsd:complexType name="CT_PresetGeometry2D">
2088   <xsd:sequence>
2089     <xsd:element name="avLst" type="CT_GeomGuideList" minOccurs="0" maxOccurs="1"/>
2090   </xsd:sequence>
2091   <xsd:attribute name="prst" type="ST_ShapeType" use="required"/>
2092 </xsd:complexType>
2093 <xsd:complexType name="CT_PresetTextShape">
2094   <xsd:sequence>
2095     <xsd:element name="avLst" type="CT_GeomGuideList" minOccurs="0" maxOccurs="1"/>
2096   </xsd:sequence>
2097   <xsd:attribute name="prst" type="ST_TextShapeType" use="required"/>
2098 </xsd:complexType>
2099 <xsd:complexType name="CT_CustomGeometry2D">
2100   <xsd:sequence>
2101     <xsd:element name="avLst" type="CT_GeomGuideList" minOccurs="0" maxOccurs="1"/>
2102     <xsd:element name="gdLst" type="CT_GeomGuideList" minOccurs="0" maxOccurs="1"/>
2103     <xsd:element name="ahLst" type="CT_AdjustHandleList" minOccurs="0" maxOccurs="1"/>
2104     <xsd:element name="cxnLst" type="CT_ConnectionSiteList" minOccurs="0" maxOccurs="1"/>
2105     <xsd:element name="rect" type="CT_GeomRect" minOccurs="0" maxOccurs="1"/>
2106     <xsd:element name="pathLst" type="CT_Path2DList" minOccurs="1" maxOccurs="1"/>
2107   </xsd:sequence>
2108 </xsd:complexType>
2109 <xsd:group name="EG_Geometry">
2110   <xsd:choice>
2111     <xsd:element name="custGeom" type="CT_CustomGeometry2D" minOccurs="1" maxOccurs="1"/>
2112     <xsd:element name="prstGeom" type="CT_PresetGeometry2D" minOccurs="1" maxOccurs="1"/>
2113   </xsd:choice>
2114 </xsd:group>
2115 <xsd:group name="EG_TextGeometry">
2116   <xsd:choice>
2117     <xsd:element name="custGeom" type="CT_CustomGeometry2D" minOccurs="1" maxOccurs="1"/>
2118     <xsd:element name="prstTxWarp" type="CT_PresetTextShape" minOccurs="1" maxOccurs="1"/>
2119   </xsd:choice>
2120 </xsd:group>
2121 <xsd:simpleType name="ST_LineEndType">
2122   <xsd:restriction base="xsd:token">
2123     <xsd:enumeration value="none"/>
2124     <xsd:enumeration value="triangle"/>
2125     <xsd:enumeration value="stealth"/>
2126     <xsd:enumeration value="diamond"/>
2127     <xsd:enumeration value="oval"/>
2128     <xsd:enumeration value="arrow"/>
2129   </xsd:restriction>
2130 </xsd:simpleType>
2131 <xsd:simpleType name="ST_LineEndWidth">
2132   <xsd:restriction base="xsd:token">
2133     <xsd:enumeration value="sm"/>
2134     <xsd:enumeration value="med"/>
2135     <xsd:enumeration value="lg"/>
2136   </xsd:restriction>
2137 </xsd:simpleType>
2138 <xsd:simpleType name="ST_LineEndLength">

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2139     <xsd:restriction base="xsd:token">
2140       <xsd:enumeration value="sm"/>
2141       <xsd:enumeration value="med"/>
2142       <xsd:enumeration value="lg"/>
2143     </xsd:restriction>
2144   </xsd:simpleType>
2145   <xsd:complexType name="CT_LineEndProperties">
2146     <xsd:attribute name="type" type="ST_LineEndType" use="optional"/>
2147     <xsd:attribute name="w" type="ST_LineEndWidth" use="optional"/>
2148     <xsd:attribute name="len" type="ST_LineEndLength" use="optional"/>
2149   </xsd:complexType>
2150   <xsd:group name="EG_LineFillProperties">
2151     <xsd:choice>
2152       <xsd:element name="noFill" type="CT_NoFillProperties" minOccurs="1" maxOccurs="1"/>
2153       <xsd:element name="solidFill" type="CT_SolidColorFillProperties" minOccurs="1"
2154         maxOccurs="1"/>
2155       <xsd:element name="gradFill" type="CT_GradientFillProperties" minOccurs="1"
2156         maxOccurs="1"/>
2157       <xsd:element name="pattFill" type="CT_PatternFillProperties" minOccurs="1" maxOccurs="1"/>
2158     </xsd:choice>
2159   </xsd:group>
2160   <xsd:complexType name="CT_LineJoinBevel"/>
2161   <xsd:complexType name="CT_LineJoinRound"/>
2162   <xsd:complexType name="CT_LineJoinMiterProperties">
2163     <xsd:attribute name="lim" type="ST_PositivePercentage" use="optional"/>
2164   </xsd:complexType>
2165   <xsd:group name="EG_LineJoinProperties">
2166     <xsd:choice>
2167       <xsd:element name="round" type="CT_LineJoinRound" minOccurs="1" maxOccurs="1"/>
2168       <xsd:element name="bevel" type="CT_LineJoinBevel" minOccurs="1" maxOccurs="1"/>
2169       <xsd:element name="miter" type="CT_LineJoinMiterProperties" minOccurs="1" maxOccurs="1"/>
2170     </xsd:choice>
2171   </xsd:group>
2172   <xsd:simpleType name="ST_PresetLineDashVal">
2173     <xsd:restriction base="xsd:token">
2174       <xsd:enumeration value="solid"/>
2175       <xsd:enumeration value="dot"/>
2176       <xsd:enumeration value="dash"/>
2177       <xsd:enumeration value="lgDash"/>
2178       <xsd:enumeration value="dashDot"/>
2179       <xsd:enumeration value="lgDashDot"/>
2180       <xsd:enumeration value="lgDashDotDot"/>
2181       <xsd:enumeration value="sysDash"/>
2182       <xsd:enumeration value="sysDot"/>
2183       <xsd:enumeration value="sysDashDot"/>
2184       <xsd:enumeration value="sysDashDotDot"/>
2185     </xsd:restriction>
2186   </xsd:simpleType>
2187   <xsd:complexType name="CT_PresetLineDashProperties">
2188     <xsd:attribute name="val" type="ST_PresetLineDashVal" use="optional"/>
2189   </xsd:complexType>
2190   <xsd:complexType name="CT_DashStop">
2191     <xsd:attribute name="d" type="ST_PositivePercentage" use="required"/>

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2192     <xsd:attribute name="sp" type="ST_PositivePercentage" use="required"/>
2193 </xsd:complexType>
2194 <xsd:complexType name="CT_DashStopList">
2195     <xsd:sequence>
2196         <xsd:element name="ds" type="CT_DashStop" minOccurs="0" maxOccurs="unbounded"/>
2197     </xsd:sequence>
2198 </xsd:complexType>
2199 <xsd:group name="EG_LineDashProperties">
2200     <xsd:choice>
2201         <xsd:element name="prstDash" type="CT_PresetLineDashProperties" minOccurs="1"
2202             maxOccurs="1"/>
2203         <xsd:element name="custDash" type="CT_DashStopList" minOccurs="1" maxOccurs="1"/>
2204     </xsd:choice>
2205 </xsd:group>
2206 <xsd:simpleType name="ST_LineCap">
2207     <xsd:restriction base="xsd:token">
2208         <xsd:enumeration value="rnd"/>
2209         <xsd:enumeration value="sq"/>
2210         <xsd:enumeration value="flat"/>
2211     </xsd:restriction>
2212 </xsd:simpleType>
2213 <xsd:simpleType name="ST_LineWidth">
2214     <xsd:restriction base="ST_Coordinate32Unqualified">
2215         <xsd:minInclusive value="0"/>
2216         <xsd:maxInclusive value="20116800"/>
2217     </xsd:restriction>
2218 </xsd:simpleType>
2219 <xsd:simpleType name="ST_PenAlignment">
2220     <xsd:restriction base="xsd:token">
2221         <xsd:enumeration value="ctr"/>
2222         <xsd:enumeration value="in"/>
2223     </xsd:restriction>
2224 </xsd:simpleType>
2225 <xsd:simpleType name="ST_CompoundLine">
2226     <xsd:restriction base="xsd:token">
2227         <xsd:enumeration value="sng"/>
2228         <xsd:enumeration value="dbl"/>
2229         <xsd:enumeration value="thickThin"/>
2230         <xsd:enumeration value="thinThick"/>
2231         <xsd:enumeration value="tri"/>
2232     </xsd:restriction>
2233 </xsd:simpleType>
2234 <xsd:complexType name="CT_LineProperties">
2235     <xsd:sequence>
2236         <xsd:group ref="EG_LineFillProperties" minOccurs="0" maxOccurs="1"/>
2237         <xsd:group ref="EG_LineDashProperties" minOccurs="0" maxOccurs="1"/>
2238         <xsd:group ref="EG_LineJoinProperties" minOccurs="0" maxOccurs="1"/>
2239         <xsd:element name="headEnd" type="CT_LineEndProperties" minOccurs="0" maxOccurs="1"/>
2240         <xsd:element name="tailEnd" type="CT_LineEndProperties" minOccurs="0" maxOccurs="1"/>
2241         <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2242     </xsd:sequence>
2243     <xsd:attribute name="w" type="ST_LineWidth" use="optional"/>
2244     <xsd:attribute name="cap" type="ST_LineCap" use="optional"/>

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2245     <xsd:attribute name="cmpd" type="ST CompoundLine" use="optional"/>
2246     <xsd:attribute name="aln" type="ST PenAlignment" use="optional"/>
2247   </xsd:complexType>
2248   <xsd:simpleType name="ST_ShapeID">
2249     <xsd:restriction base="xsd:token"/>
2250   </xsd:simpleType>
2251   <xsd:complexType name="CT_ShapeProperties">
2252     <xsd:sequence>
2253       <xsd:element name="xfrm" type="CT Transform2D" minOccurs="0" maxOccurs="1"/>
2254       <xsd:group ref="EG Geometry" minOccurs="0" maxOccurs="1"/>
2255       <xsd:group ref="EG FillProperties" minOccurs="0" maxOccurs="1"/>
2256       <xsd:element name="ln" type="CT LineProperties" minOccurs="0" maxOccurs="1"/>
2257       <xsd:group ref="EG EffectProperties" minOccurs="0" maxOccurs="1"/>
2258       <xsd:element name="scene3d" type="CT Scene3D" minOccurs="0" maxOccurs="1"/>
2259       <xsd:element name="sp3d" type="CT Shape3D" minOccurs="0" maxOccurs="1"/>
2260       <xsd:element name="extLst" type="CT OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2261     </xsd:sequence>
2262     <xsd:attribute name="bwMode" type="ST BlackWhiteMode" use="optional"/>
2263   </xsd:complexType>
2264   <xsd:complexType name="CT_GroupShapeProperties">
2265     <xsd:sequence>
2266       <xsd:element name="xfrm" type="CT GroupTransform2D" minOccurs="0" maxOccurs="1"/>
2267       <xsd:group ref="EG FillProperties" minOccurs="0" maxOccurs="1"/>
2268       <xsd:group ref="EG EffectProperties" minOccurs="0" maxOccurs="1"/>
2269       <xsd:element name="scene3d" type="CT Scene3D" minOccurs="0" maxOccurs="1"/>
2270       <xsd:element name="extLst" type="CT OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2271     </xsd:sequence>
2272     <xsd:attribute name="bwMode" type="ST BlackWhiteMode" use="optional"/>
2273   </xsd:complexType>
2274   <xsd:complexType name="CT_StyleMatrixReference">
2275     <xsd:sequence>
2276       <xsd:group ref="EG ColorChoice" minOccurs="0" maxOccurs="1"/>
2277     </xsd:sequence>
2278     <xsd:attribute name="idx" type="ST StyleMatrixColumnIndex" use="required"/>
2279   </xsd:complexType>
2280   <xsd:complexType name="CT_FontReference">
2281     <xsd:sequence>
2282       <xsd:group ref="EG ColorChoice" minOccurs="0" maxOccurs="1"/>
2283     </xsd:sequence>
2284     <xsd:attribute name="idx" type="ST FontCollectionIndex" use="required"/>
2285   </xsd:complexType>
2286   <xsd:complexType name="CT_ShapeStyle">
2287     <xsd:sequence>
2288       <xsd:element name="lnRef" type="CT StyleMatrixReference" minOccurs="1" maxOccurs="1"/>
2289       <xsd:element name="fillRef" type="CT StyleMatrixReference" minOccurs="1" maxOccurs="1"/>
2290       <xsd:element name="effectRef" type="CT StyleMatrixReference" minOccurs="1" maxOccurs="1"/>
2291       <xsd:element name="fontRef" type="CT FontReference" minOccurs="1" maxOccurs="1"/>
2292     </xsd:sequence>
2293   </xsd:complexType>
2294   <xsd:complexType name="CT_DefaultShapeDefinition">
2295     <xsd:sequence>
2296       <xsd:element name="spPr" type="CT ShapeProperties" minOccurs="1" maxOccurs="1"/>
2297       <xsd:element name="bodyPr" type="CT TextBodyProperties" minOccurs="1" maxOccurs="1"/>

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2298     <xsd:element name="lstStyle" type="CT_TextListStyle" minOccurs="1" maxOccurs="1"/>
2299     <xsd:element name="style" type="CT_ShapeStyle" minOccurs="0" maxOccurs="1"/>
2300     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2301   </xsd:sequence>
2302 </xsd:complexType>
2303 <xsd:complexType name="CT_ObjectStyleDefaults">
2304   <xsd:sequence>
2305     <xsd:element name="spDef" type="CT_DefaultShapeDefinition" minOccurs="0" maxOccurs="1"/>
2306     <xsd:element name="lnDef" type="CT_DefaultShapeDefinition" minOccurs="0" maxOccurs="1"/>
2307     <xsd:element name="txDef" type="CT_DefaultShapeDefinition" minOccurs="0" maxOccurs="1"/>
2308     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2309   </xsd:sequence>
2310 </xsd:complexType>
2311 <xsd:complexType name="CT_EmptyElement"/>
2312 <xsd:complexType name="CT_ColorMapping">
2313   <xsd:sequence>
2314     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2315   </xsd:sequence>
2316   <xsd:attribute name="bg1" type="ST_ColorSchemeIndex" use="required"/>
2317   <xsd:attribute name="tx1" type="ST_ColorSchemeIndex" use="required"/>
2318   <xsd:attribute name="bg2" type="ST_ColorSchemeIndex" use="required"/>
2319   <xsd:attribute name="tx2" type="ST_ColorSchemeIndex" use="required"/>
2320   <xsd:attribute name="accent1" type="ST_ColorSchemeIndex" use="required"/>
2321   <xsd:attribute name="accent2" type="ST_ColorSchemeIndex" use="required"/>
2322   <xsd:attribute name="accent3" type="ST_ColorSchemeIndex" use="required"/>
2323   <xsd:attribute name="accent4" type="ST_ColorSchemeIndex" use="required"/>
2324   <xsd:attribute name="accent5" type="ST_ColorSchemeIndex" use="required"/>
2325   <xsd:attribute name="accent6" type="ST_ColorSchemeIndex" use="required"/>
2326   <xsd:attribute name="hlink" type="ST_ColorSchemeIndex" use="required"/>
2327   <xsd:attribute name="folHlink" type="ST_ColorSchemeIndex" use="required"/>
2328 </xsd:complexType>
2329 <xsd:complexType name="CT_ColorMappingOverride">
2330   <xsd:sequence>
2331     <xsd:choice minOccurs="1" maxOccurs="1">
2332       <xsd:element name="masterClrMapping" type="CT_EmptyElement"/>
2333       <xsd:element name="overrideClrMapping" type="CT_ColorMapping"/>
2334     </xsd:choice>
2335   </xsd:sequence>
2336 </xsd:complexType>
2337 <xsd:complexType name="CT_ColorSchemeAndMapping">
2338   <xsd:sequence>
2339     <xsd:element name="clrScheme" type="CT_ColorScheme" minOccurs="1" maxOccurs="1"/>
2340     <xsd:element name="clrMap" type="CT_ColorMapping" minOccurs="0" maxOccurs="1"/>
2341   </xsd:sequence>
2342 </xsd:complexType>
2343 <xsd:complexType name="CT_ColorSchemeList">
2344   <xsd:sequence>
2345     <xsd:element name="extraClrScheme" type="CT_ColorSchemeAndMapping" minOccurs="0"
2346       maxOccurs="unbounded"/>
2347   </xsd:sequence>
2348 </xsd:complexType>
2349 <xsd:complexType name="CT_OfficeStyleSheet">
2350   <xsd:sequence>

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2351     <xsd:element name="themeElements" type="CT_BaseStyles" minOccurs="1" maxOccurs="1"/>
2352     <xsd:element name="objectDefaults" type="CT_ObjectStyleDefaults" minOccurs="0"
2353         maxOccurs="1"/>
2354     <xsd:element name="extraClrSchemeLst" type="CT_ColorSchemeList" minOccurs="0"
2355         maxOccurs="1"/>
2356     <xsd:element name="custClrLst" type="CT_CustomColorList" minOccurs="0" maxOccurs="1"/>
2357     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2358 </xsd:sequence>
2359 <xsd:attribute name="name" type="xsd:string" use="optional" default=""/>
2360 </xsd:complexType>
2361 <xsd:complexType name="CT_BaseStylesOverride">
2362     <xsd:sequence>
2363         <xsd:element name="clrScheme" type="CT_ColorScheme" minOccurs="0" maxOccurs="1"/>
2364         <xsd:element name="fontScheme" type="CT_FontScheme" minOccurs="0" maxOccurs="1"/>
2365         <xsd:element name="fmtScheme" type="CT_StyleMatrix" minOccurs="0" maxOccurs="1"/>
2366     </xsd:sequence>
2367 </xsd:complexType>
2368 <xsd:complexType name="CT_ClipboardStyleSheet">
2369     <xsd:sequence>
2370         <xsd:element name="themeElements" type="CT_BaseStyles" minOccurs="1" maxOccurs="1"/>
2371         <xsd:element name="clrMap" type="CT_ColorMapping" minOccurs="1" maxOccurs="1"/>
2372     </xsd:sequence>
2373 </xsd:complexType>
2374 <xsd:element name="theme" type="CT_OfficeStyleSheet"/>
2375 <xsd:element name="themeOverride" type="CT_BaseStylesOverride"/>
2376 <xsd:element name="themeManager" type="CT_EmptyElement"/>
2377 <xsd:complexType name="CT_TableCellProperties">
2378     <xsd:sequence>
2379         <xsd:element name="lnL" type="CT_LineProperties" minOccurs="0" maxOccurs="1"/>
2380         <xsd:element name="lnR" type="CT_LineProperties" minOccurs="0" maxOccurs="1"/>
2381         <xsd:element name="lnT" type="CT_LineProperties" minOccurs="0" maxOccurs="1"/>
2382         <xsd:element name="lnB" type="CT_LineProperties" minOccurs="0" maxOccurs="1"/>
2383         <xsd:element name="lnTlToBr" type="CT_LineProperties" minOccurs="0" maxOccurs="1"/>
2384         <xsd:element name="lnBlToTr" type="CT_LineProperties" minOccurs="0" maxOccurs="1"/>
2385         <xsd:element name="cell3D" type="CT_Cell3D" minOccurs="0" maxOccurs="1"/>
2386         <xsd:group ref="EG_FillProperties" minOccurs="0" maxOccurs="1"/>
2387         <xsd:element name="headers" type="CT_Headers" minOccurs="0"/>
2388         <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2389     </xsd:sequence>
2390     <xsd:attribute name="marL" type="ST_Coordinate32" use="optional" default="91440"/>
2391     <xsd:attribute name="marR" type="ST_Coordinate32" use="optional" default="91440"/>
2392     <xsd:attribute name="marT" type="ST_Coordinate32" use="optional" default="45720"/>
2393     <xsd:attribute name="marB" type="ST_Coordinate32" use="optional" default="45720"/>
2394     <xsd:attribute name="vert" type="ST_TextVerticalType" use="optional" default="horz"/>
2395     <xsd:attribute name="anchor" type="ST_TextAnchoringType" use="optional" default="t"/>
2396     <xsd:attribute name="anchorCtr" type="xsd:boolean" use="optional" default="false"/>
2397     <xsd:attribute name="horzOverflow" type="ST_TextHorzOverflowType" use="optional"
2398         default="clip"/>
2399 </xsd:complexType>
2400 <xsd:complexType name="CT_Headers">
2401     <xsd:sequence minOccurs="0" maxOccurs="unbounded">
2402         <xsd:element name="header" type="xsd:string"/>
2403     </xsd:sequence>

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2404 </xsd:complexType>
2405 <xsd:complexType name="CT_TableCol">
2406   <xsd:sequence>
2407     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2408   </xsd:sequence>
2409   <xsd:attribute name="w" type="ST_Coordinate" use="required"/>
2410 </xsd:complexType>
2411 <xsd:complexType name="CT_TableGrid">
2412   <xsd:sequence>
2413     <xsd:element name="gridCol" type="CT_TableCol" minOccurs="0" maxOccurs="unbounded"/>
2414   </xsd:sequence>
2415 </xsd:complexType>
2416 <xsd:complexType name="CT_TableCell">
2417   <xsd:sequence>
2418     <xsd:element name="txBody" type="CT_TextBody" minOccurs="0" maxOccurs="1"/>
2419     <xsd:element name="tcPr" type="CT_TableCellProperties" minOccurs="0" maxOccurs="1"/>
2420     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2421   </xsd:sequence>
2422   <xsd:attribute name="rowSpan" type="xsd:int" use="optional" default="1"/>
2423   <xsd:attribute name="gridSpan" type="xsd:int" use="optional" default="1"/>
2424   <xsd:attribute name="hMerge" type="xsd:boolean" use="optional" default="false"/>
2425   <xsd:attribute name="vMerge" type="xsd:boolean" use="optional" default="false"/>
2426   <xsd:attribute name="id" type="xsd:string" use="optional"/>
2427 </xsd:complexType>
2428 <xsd:complexType name="CT_TableRow">
2429   <xsd:sequence>
2430     <xsd:element name="tc" type="CT_TableCell" minOccurs="0" maxOccurs="unbounded"/>
2431     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2432   </xsd:sequence>
2433   <xsd:attribute name="h" type="ST_Coordinate" use="required"/>
2434 </xsd:complexType>
2435 <xsd:complexType name="CT_TableProperties">
2436   <xsd:sequence>
2437     <xsd:group ref="EG_FillProperties" minOccurs="0" maxOccurs="1"/>
2438     <xsd:group ref="EG_EffectProperties" minOccurs="0" maxOccurs="1"/>
2439     <xsd:choice minOccurs="0" maxOccurs="1">
2440       <xsd:element name="tableStyle" type="CT_TableStyle"/>
2441       <xsd:element name="tableStyleId" type="s:ST_Guid"/>
2442     </xsd:choice>
2443     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2444   </xsd:sequence>
2445   <xsd:attribute name="rtl" type="xsd:boolean" use="optional" default="false"/>
2446   <xsd:attribute name="firstRow" type="xsd:boolean" use="optional" default="false"/>
2447   <xsd:attribute name="firstCol" type="xsd:boolean" use="optional" default="false"/>
2448   <xsd:attribute name="lastRow" type="xsd:boolean" use="optional" default="false"/>
2449   <xsd:attribute name="lastCol" type="xsd:boolean" use="optional" default="false"/>
2450   <xsd:attribute name="bandRow" type="xsd:boolean" use="optional" default="false"/>
2451   <xsd:attribute name="bandCol" type="xsd:boolean" use="optional" default="false"/>
2452 </xsd:complexType>
2453 <xsd:complexType name="CT_Table">
2454   <xsd:sequence>
2455     <xsd:element name="tblPr" type="CT_TableProperties" minOccurs="0" maxOccurs="1"/>
2456     <xsd:element name="tblGrid" type="CT_TableGrid" minOccurs="1" maxOccurs="1"/>

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2457     <xsd:element name="tr" type="CT_TableRow" minOccurs="0" maxOccurs="unbounded"/>
2458   </xsd:sequence>
2459 </xsd:complexType>
2460 <xsd:element name="tbl" type="CT_Table"/>
2461 <xsd:complexType name="CT_Cell3D">
2462   <xsd:sequence>
2463     <xsd:element name="bevel" type="CT_Bevel" minOccurs="1" maxOccurs="1"/>
2464     <xsd:element name="lightRig" type="CT_LightRig" minOccurs="0" maxOccurs="1"/>
2465     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2466   </xsd:sequence>
2467   <xsd:attribute name="prstMaterial" type="ST_PresetMaterialType" use="optional"
2468     default="plastic"/>
2469 </xsd:complexType>
2470 <xsd:group name="EG_ThemeableFillStyle">
2471   <xsd:choice>
2472     <xsd:element name="fill" type="CT_FillProperties" minOccurs="1" maxOccurs="1"/>
2473     <xsd:element name="fillRef" type="CT_StyleMatrixReference" minOccurs="1" maxOccurs="1"/>
2474   </xsd:choice>
2475 </xsd:group>
2476 <xsd:complexType name="CT_ThemeableLineStyle">
2477   <xsd:choice>
2478     <xsd:element name="ln" type="CT_LineProperties" minOccurs="1" maxOccurs="1"/>
2479     <xsd:element name="lnRef" type="CT_StyleMatrixReference" minOccurs="1" maxOccurs="1"/>
2480   </xsd:choice>
2481 </xsd:complexType>
2482 <xsd:group name="EG_ThemeableEffectStyle">
2483   <xsd:choice>
2484     <xsd:element name="effect" type="CT_EffectProperties" minOccurs="1" maxOccurs="1"/>
2485     <xsd:element name="effectRef" type="CT_StyleMatrixReference" minOccurs="1" maxOccurs="1"/>
2486   </xsd:choice>
2487 </xsd:group>
2488 <xsd:group name="EG_ThemeableFontStyles">
2489   <xsd:choice>
2490     <xsd:element name="font" type="CT_FontCollection" minOccurs="1" maxOccurs="1"/>
2491     <xsd:element name="fontRef" type="CT_FontReference" minOccurs="1" maxOccurs="1"/>
2492   </xsd:choice>
2493 </xsd:group>
2494 <xsd:simpleType name="ST_OnOffStyleType">
2495   <xsd:restriction base="xsd:token">
2496     <xsd:enumeration value="on"/>
2497     <xsd:enumeration value="off"/>
2498     <xsd:enumeration value="def"/>
2499   </xsd:restriction>
2500 </xsd:simpleType>
2501 <xsd:complexType name="CT_TableStyleTextStyle">
2502   <xsd:sequence>
2503     <xsd:group ref="EG_ThemeableFontStyles" minOccurs="0" maxOccurs="1"/>
2504     <xsd:group ref="EG_ColorChoice" minOccurs="0" maxOccurs="1"/>
2505     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2506   </xsd:sequence>
2507   <xsd:attribute name="b" type="ST_OnOffStyleType" use="optional" default="def"/>
2508   <xsd:attribute name="i" type="ST_OnOffStyleType" use="optional" default="def"/>
2509 </xsd:complexType>

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2510 <xsd:complexType name="CT_TableCellBorderStyle">
2511   <xsd:sequence>
2512     <xsd:element name="left" type="CT ThemeableLineStyle" minOccurs="0" maxOccurs="1"/>
2513     <xsd:element name="right" type="CT ThemeableLineStyle" minOccurs="0" maxOccurs="1"/>
2514     <xsd:element name="top" type="CT ThemeableLineStyle" minOccurs="0" maxOccurs="1"/>
2515     <xsd:element name="bottom" type="CT ThemeableLineStyle" minOccurs="0" maxOccurs="1"/>
2516     <xsd:element name="insideH" type="CT ThemeableLineStyle" minOccurs="0" maxOccurs="1"/>
2517     <xsd:element name="insideV" type="CT ThemeableLineStyle" minOccurs="0" maxOccurs="1"/>
2518     <xsd:element name="tl2br" type="CT ThemeableLineStyle" minOccurs="0" maxOccurs="1"/>
2519     <xsd:element name="tr2bl" type="CT ThemeableLineStyle" minOccurs="0" maxOccurs="1"/>
2520     <xsd:element name="extLst" type="CT OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2521   </xsd:sequence>
2522 </xsd:complexType>
2523 <xsd:complexType name="CT_TableBackgroundStyle">
2524   <xsd:sequence>
2525     <xsd:group ref="EG ThemeableFillStyle" minOccurs="0" maxOccurs="1"/>
2526     <xsd:group ref="EG ThemeableEffectStyle" minOccurs="0" maxOccurs="1"/>
2527   </xsd:sequence>
2528 </xsd:complexType>
2529 <xsd:complexType name="CT_TableStyleCellStyle">
2530   <xsd:sequence>
2531     <xsd:element name="tcBdr" type="CT TableCellStyle" minOccurs="0" maxOccurs="1"/>
2532     <xsd:group ref="EG ThemeableFillStyle" minOccurs="0" maxOccurs="1"/>
2533     <xsd:element name="cell3D" type="CT Cell3D" minOccurs="0" maxOccurs="1"/>
2534   </xsd:sequence>
2535 </xsd:complexType>
2536 <xsd:complexType name="CT_TablePartStyle">
2537   <xsd:sequence>
2538     <xsd:element name="tcTxStyle" type="CT TableStyleText" minOccurs="0" maxOccurs="1"/>
2539     <xsd:element name="tcStyle" type="CT TableStyleCell" minOccurs="0" maxOccurs="1"/>
2540   </xsd:sequence>
2541 </xsd:complexType>
2542 <xsd:complexType name="CT_TableStyle">
2543   <xsd:sequence>
2544     <xsd:element name="tblBg" type="CT TableBackground" minOccurs="0" maxOccurs="1"/>
2545     <xsd:element name="wholeTbl" type="CT TablePart" minOccurs="0" maxOccurs="1"/>
2546     <xsd:element name="band1H" type="CT TablePart" minOccurs="0" maxOccurs="1"/>
2547     <xsd:element name="band2H" type="CT TablePart" minOccurs="0" maxOccurs="1"/>
2548     <xsd:element name="band1V" type="CT TablePart" minOccurs="0" maxOccurs="1"/>
2549     <xsd:element name="band2V" type="CT TablePart" minOccurs="0" maxOccurs="1"/>
2550     <xsd:element name="lastCol" type="CT TablePart" minOccurs="0" maxOccurs="1"/>
2551     <xsd:element name="firstCol" type="CT TablePart" minOccurs="0" maxOccurs="1"/>
2552     <xsd:element name="lastRow" type="CT TablePart" minOccurs="0" maxOccurs="1"/>
2553     <xsd:element name="seCell" type="CT TablePart" minOccurs="0" maxOccurs="1"/>
2554     <xsd:element name="swCell" type="CT TablePart" minOccurs="0" maxOccurs="1"/>
2555     <xsd:element name="firstRow" type="CT TablePart" minOccurs="0" maxOccurs="1"/>
2556     <xsd:element name="neCell" type="CT TablePart" minOccurs="0" maxOccurs="1"/>
2557     <xsd:element name="nwCell" type="CT TablePart" minOccurs="0" maxOccurs="1"/>
2558     <xsd:element name="extLst" type="CT OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2559   </xsd:sequence>
2560   <xsd:attribute name="styleId" type="s:ST_Guid" use="required"/>
2561   <xsd:attribute name="styleName" type="xsd:string" use="required"/>
2562 </xsd:complexType>

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2563 <xsd:complexType name="CT_TableStyleList">
2564   <xsd:sequence>
2565     <xsd:element name="tblStyle" type="CT_TableStyle" minOccurs="0" maxOccurs="unbounded"/>
2566   </xsd:sequence>
2567   <xsd:attribute name="def" type="s:ST_Guid" use="required"/>
2568 </xsd:complexType>
2569 <xsd:element name="tblStyleList" type="CT_TableStyleList"/>
2570 <xsd:complexType name="CT_TextParagraph">
2571   <xsd:sequence>
2572     <xsd:element name="pPr" type="CT_TextParagraphProperties" minOccurs="0" maxOccurs="1"/>
2573     <xsd:group ref="EG_TextRun" minOccurs="0" maxOccurs="unbounded"/>
2574     <xsd:element name="endParaRPr" type="CT_TextCharacterProperties" minOccurs="0"
2575       maxOccurs="1"/>
2576   </xsd:sequence>
2577 </xsd:complexType>
2578 <xsd:simpleType name="ST_TextAnchoringType">
2579   <xsd:restriction base="xsd:token">
2580     <xsd:enumeration value="t"/>
2581     <xsd:enumeration value="ctr"/>
2582     <xsd:enumeration value="b"/>
2583     <xsd:enumeration value="just"/>
2584     <xsd:enumeration value="dist"/>
2585   </xsd:restriction>
2586 </xsd:simpleType>
2587 <xsd:simpleType name="ST_TextVertOverflowType">
2588   <xsd:restriction base="xsd:token">
2589     <xsd:enumeration value="overflow"/>
2590     <xsd:enumeration value="ellipsis"/>
2591     <xsd:enumeration value="clip"/>
2592   </xsd:restriction>
2593 </xsd:simpleType>
2594 <xsd:simpleType name="ST_TextHorzOverflowType">
2595   <xsd:restriction base="xsd:token">
2596     <xsd:enumeration value="overflow"/>
2597     <xsd:enumeration value="clip"/>
2598   </xsd:restriction>
2599 </xsd:simpleType>
2600 <xsd:simpleType name="ST_TextVerticalType">
2601   <xsd:restriction base="xsd:token">
2602     <xsd:enumeration value="horz"/>
2603     <xsd:enumeration value="vert"/>
2604     <xsd:enumeration value="vert270"/>
2605     <xsd:enumeration value="wordArtVert"/>
2606     <xsd:enumeration value="eaVert"/>
2607     <xsd:enumeration value="mongolianVert"/>
2608     <xsd:enumeration value="wordArtVertRtl"/>
2609   </xsd:restriction>
2610 </xsd:simpleType>
2611 <xsd:simpleType name="ST_TextWrappingType">
2612   <xsd:restriction base="xsd:token">
2613     <xsd:enumeration value="none"/>
2614     <xsd:enumeration value="square"/>
2615   </xsd:restriction>

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2616 </xsd:simpleType>
2617 <xsd:simpleType name="ST_TextColumnCount">
2618   <xsd:restriction base="xsd:int">
2619     <xsd:minInclusive value="1"/>
2620     <xsd:maxInclusive value="16"/>
2621   </xsd:restriction>
2622 </xsd:simpleType>
2623 <xsd:complexType name="CT_TextListStyle">
2624   <xsd:sequence>
2625     <xsd:element name="defPPr" type="CT_TextParagraphProperties" minOccurs="0" maxOccurs="1"/>
2626     <xsd:element name="lv11pPr" type="CT_TextParagraphProperties" minOccurs="0"
2627       maxOccurs="1"/>
2628     <xsd:element name="lv12pPr" type="CT_TextParagraphProperties" minOccurs="0"
2629       maxOccurs="1"/>
2630     <xsd:element name="lv13pPr" type="CT_TextParagraphProperties" minOccurs="0"
2631       maxOccurs="1"/>
2632     <xsd:element name="lv14pPr" type="CT_TextParagraphProperties" minOccurs="0"
2633       maxOccurs="1"/>
2634     <xsd:element name="lv15pPr" type="CT_TextParagraphProperties" minOccurs="0"
2635       maxOccurs="1"/>
2636     <xsd:element name="lv16pPr" type="CT_TextParagraphProperties" minOccurs="0"
2637       maxOccurs="1"/>
2638     <xsd:element name="lv17pPr" type="CT_TextParagraphProperties" minOccurs="0"
2639       maxOccurs="1"/>
2640     <xsd:element name="lv18pPr" type="CT_TextParagraphProperties" minOccurs="0"
2641       maxOccurs="1"/>
2642     <xsd:element name="lv19pPr" type="CT_TextParagraphProperties" minOccurs="0"
2643       maxOccurs="1"/>
2644     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2645   </xsd:sequence>
2646 </xsd:complexType>
2647 <xsd:simpleType name="ST_TextFontScalePercentOrPercentString">
2648   <xsd:union memberTypes="ST_TextFontScalePercent s:ST_Percentage"/>
2649 </xsd:simpleType>
2650 <xsd:simpleType name="ST_TextFontScalePercent">
2651   <xsd:restriction base="ST_PercentageDecimal">
2652     <xsd:minInclusive value="1000"/>
2653     <xsd:maxInclusive value="100000"/>
2654   </xsd:restriction>
2655 </xsd:simpleType>
2656 <xsd:complexType name="CT_TextNormalAutofit">
2657   <xsd:attribute name="fontScale" type="ST_TextFontScalePercentOrPercentString" use="optional"
2658     default="100%"/>
2659   <xsd:attribute name="lnSpcReduction" type="ST_TextSpacingPercentOrPercentString"
2660     use="optional" default="0%"/>
2661 </xsd:complexType>
2662 <xsd:complexType name="CT_TextShapeAutofit"/>
2663 <xsd:complexType name="CT_TextNoAutofit"/>
2664 <xsd:group name="EG_TextAutofit">
2665   <xsd:choice>
2666     <xsd:element name="noAutofit" type="CT_TextNoAutofit"/>
2667     <xsd:element name="normAutofit" type="CT_TextNormalAutofit"/>
2668     <xsd:element name="spAutoFit" type="CT_TextShapeAutofit"/>

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2669     </xsd:choice>
2670 </xsd:group>
2671 <xsd:complexType name="CT_TextBodyProperties">
2672     <xsd:sequence>
2673         <xsd:element name="prstTxWarp" type="CT_PresetTextShape" minOccurs="0" maxOccurs="1"/>
2674         <xsd:group ref="EG_TextAutofit" minOccurs="0" maxOccurs="1"/>
2675         <xsd:element name="scene3d" type="CT_Scene3D" minOccurs="0" maxOccurs="1"/>
2676         <xsd:group ref="EG_Text3D" minOccurs="0" maxOccurs="1"/>
2677         <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2678     </xsd:sequence>
2679     <xsd:attribute name="rot" type="ST_Angle" use="optional"/>
2680     <xsd:attribute name="spcFirstLastPara" type="xsd:boolean" use="optional"/>
2681     <xsd:attribute name="vertOverflow" type="ST_TextVertOverflowType" use="optional"/>
2682     <xsd:attribute name="horzOverflow" type="ST_TextHorzOverflowType" use="optional"/>
2683     <xsd:attribute name="vert" type="ST_TextVerticalType" use="optional"/>
2684     <xsd:attribute name="wrap" type="ST_TextWrappingType" use="optional"/>
2685     <xsd:attribute name="lIns" type="ST_Coordinate32" use="optional"/>
2686     <xsd:attribute name="tIns" type="ST_Coordinate32" use="optional"/>
2687     <xsd:attribute name="rIns" type="ST_Coordinate32" use="optional"/>
2688     <xsd:attribute name="bIns" type="ST_Coordinate32" use="optional"/>
2689     <xsd:attribute name="numCol" type="ST_TextColumnCount" use="optional"/>
2690     <xsd:attribute name="spcCol" type="ST_PositiveCoordinate32" use="optional"/>
2691     <xsd:attribute name="rtlCol" type="xsd:boolean" use="optional"/>
2692     <xsd:attribute name="fromWordArt" type="xsd:boolean" use="optional"/>
2693     <xsd:attribute name="anchor" type="ST_TextAnchoringType" use="optional"/>
2694     <xsd:attribute name="anchorCtr" type="xsd:boolean" use="optional"/>
2695     <xsd:attribute name="forceAA" type="xsd:boolean" use="optional"/>
2696     <xsd:attribute name="upright" type="xsd:boolean" use="optional" default="false"/>
2697     <xsd:attribute name="compatLnSpc" type="xsd:boolean" use="optional"/>
2698 </xsd:complexType>
2699 <xsd:complexType name="CT_TextBody">
2700     <xsd:sequence>
2701         <xsd:element name="bodyPr" type="CT_TextBodyProperties" minOccurs="1" maxOccurs="1"/>
2702         <xsd:element name="lstStyle" type="CT_TextListStyle" minOccurs="0" maxOccurs="1"/>
2703         <xsd:element name="p" type="CT_TextParagraph" minOccurs="1" maxOccurs="unbounded"/>
2704     </xsd:sequence>
2705 </xsd:complexType>
2706 <xsd:simpleType name="ST_TextBulletStartAtNum">
2707     <xsd:restriction base="xsd:int">
2708         <xsd:minInclusive value="1"/>
2709         <xsd:maxInclusive value="32767"/>
2710     </xsd:restriction>
2711 </xsd:simpleType>
2712 <xsd:simpleType name="ST_TextAutonumberScheme">
2713     <xsd:restriction base="xsd:token">
2714         <xsd:enumeration value="alphaLcParenBoth"/>
2715         <xsd:enumeration value="alphaUcParenBoth"/>
2716         <xsd:enumeration value="alphaLcParenR"/>
2717         <xsd:enumeration value="alphaUcParenR"/>
2718         <xsd:enumeration value="alphaLcPeriod"/>
2719         <xsd:enumeration value="alphaUcPeriod"/>
2720         <xsd:enumeration value="arabicParenBoth"/>
2721         <xsd:enumeration value="arabicParenR"/>

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2722     <xsd:enumeration value="arabicPeriod"/>
2723     <xsd:enumeration value="arabicPlain"/>
2724     <xsd:enumeration value="romanLcParenBoth"/>
2725     <xsd:enumeration value="romanUcParenBoth"/>
2726     <xsd:enumeration value="romanLcParenR"/>
2727     <xsd:enumeration value="romanUcParenR"/>
2728     <xsd:enumeration value="romanLcPeriod"/>
2729     <xsd:enumeration value="romanUcPeriod"/>
2730     <xsd:enumeration value="circleNumDbPlain"/>
2731     <xsd:enumeration value="circleNumWdBlackPlain"/>
2732     <xsd:enumeration value="circleNumWdWhitePlain"/>
2733     <xsd:enumeration value="arabicDbPeriod"/>
2734     <xsd:enumeration value="arabicDbPlain"/>
2735     <xsd:enumeration value="ea1ChsPeriod"/>
2736     <xsd:enumeration value="ea1ChsPlain"/>
2737     <xsd:enumeration value="ea1ChtPeriod"/>
2738     <xsd:enumeration value="ea1ChtPlain"/>
2739     <xsd:enumeration value="ea1JpnChsDbPeriod"/>
2740     <xsd:enumeration value="ea1JpnKorPlain"/>
2741     <xsd:enumeration value="ea1JpnKorPeriod"/>
2742     <xsd:enumeration value="arabic1Minus"/>
2743     <xsd:enumeration value="arabic2Minus"/>
2744     <xsd:enumeration value="hebrew2Minus"/>
2745     <xsd:enumeration value="thaiAlphaPeriod"/>
2746     <xsd:enumeration value="thaiAlphaParenR"/>
2747     <xsd:enumeration value="thaiAlphaParenBoth"/>
2748     <xsd:enumeration value="thaiNumPeriod"/>
2749     <xsd:enumeration value="thaiNumParenR"/>
2750     <xsd:enumeration value="thaiNumParenBoth"/>
2751     <xsd:enumeration value="hindiAlphaPeriod"/>
2752     <xsd:enumeration value="hindiNumPeriod"/>
2753     <xsd:enumeration value="hindiNumParenR"/>
2754     <xsd:enumeration value="hindiAlpha1Period"/>
2755 </xsd:restriction>
2756 </xsd:simpleType>
2757 <xsd:complexType name="CT_TextBulletColorFollowText"/>
2758 <xsd:group name="EG_TextBulletColor">
2759     <xsd:choice>
2760         <xsd:element name="buClrTx" type="CT_TextBulletColorFollowText" minOccurs="1"
2761             maxOccurs="1"/>
2762         <xsd:element name="buClr" type="CT_Color" minOccurs="1" maxOccurs="1"/>
2763     </xsd:choice>
2764 </xsd:group>
2765 <xsd:simpleType name="ST_TextBulletSize">
2766     <xsd:union memberTypes="ST_TextBulletSizePercent ST_TextBulletSizeDecimal"/>
2767 </xsd:simpleType>
2768 <xsd:simpleType name="ST_TextBulletSizePercent">
2769     <xsd:restriction base="xsd:string">
2770         <xsd:pattern value="0*(([2[5-9]]|([3-9][0-9])|([1-3][0-9][0-9])|400)%"/>
2771     </xsd:restriction>
2772 </xsd:simpleType>
2773 <xsd:simpleType name="ST_TextBulletSizeDecimal">
2774     <xsd:restriction base="ST_PercentageDecimal">

```

```

2775         <xsd:minInclusive value="25000"/>
2776         <xsd:maxInclusive value="400000"/>
2777     </xsd:restriction>
2778 </xsd:simpleType>
2779 <xsd:complexType name="CT_TextBulletSizeFollowText"/>
2780 <xsd:complexType name="CT_TextBulletSizePercent">
2781     <xsd:attribute name="val" type="ST_TextBulletSizePercent" use="required"/>
2782 </xsd:complexType>
2783 <xsd:complexType name="CT_TextBulletSizePoint">
2784     <xsd:attribute name="val" type="ST_TextFontSize" use="required"/>
2785 </xsd:complexType>
2786 <xsd:group name="EG_TextBulletSize">
2787     <xsd:choice>
2788         <xsd:element name="buSzTx" type="CT_TextBulletSizeFollowText"/>
2789         <xsd:element name="buSzPct" type="CT_TextBulletSizePercent"/>
2790         <xsd:element name="buSzPts" type="CT_TextBulletSizePoint"/>
2791     </xsd:choice>
2792 </xsd:group>
2793 <xsd:complexType name="CT_TextBulletTypefaceFollowText"/>
2794 <xsd:group name="EG_TextBulletTypeface">
2795     <xsd:choice>
2796         <xsd:element name="buFontTx" type="CT_TextBulletTypefaceFollowText"/>
2797         <xsd:element name="buFont" type="CT_TextFont"/>
2798     </xsd:choice>
2799 </xsd:group>
2800 <xsd:complexType name="CT_TextAutonumberBullet">
2801     <xsd:attribute name="type" type="ST_TextAutonumberScheme" use="required"/>
2802     <xsd:attribute name="startAt" type="ST_TextBulletStartAtNum" use="optional" default="1"/>
2803 </xsd:complexType>
2804 <xsd:complexType name="CT_TextCharBullet">
2805     <xsd:attribute name="char" type="xsd:string" use="required"/>
2806 </xsd:complexType>
2807 <xsd:complexType name="CT_TextBlipBullet">
2808     <xsd:sequence>
2809         <xsd:element name="blip" type="CT_Blip" minOccurs="1" maxOccurs="1"/>
2810     </xsd:sequence>
2811 </xsd:complexType>
2812 <xsd:complexType name="CT_TextNoBullet"/>
2813 <xsd:group name="EG_TextBullet">
2814     <xsd:choice>
2815         <xsd:element name="buNone" type="CT_TextNoBullet"/>
2816         <xsd:element name="buAutoNum" type="CT_TextAutonumberBullet"/>
2817         <xsd:element name="buChar" type="CT_TextCharBullet"/>
2818         <xsd:element name="buBlip" type="CT_TextBlipBullet"/>
2819     </xsd:choice>
2820 </xsd:group>
2821 <xsd:simpleType name="ST_TextPoint">
2822     <xsd:union memberTypes="ST_TextPointUnqualified s:ST_UniversalMeasure"/>
2823 </xsd:simpleType>
2824 <xsd:simpleType name="ST_TextPointUnqualified">
2825     <xsd:restriction base="xsd:int">
2826         <xsd:minInclusive value="-400000"/>
2827         <xsd:maxInclusive value="400000"/>

```

```

2828     </xsd:restriction>
2829 </xsd:simpleType>
2830 <xsd:simpleType name="ST_TextNonNegativePoint">
2831     <xsd:restriction base="xsd:int">
2832         <xsd:minInclusive value="0"/>
2833         <xsd:maxInclusive value="400000"/>
2834     </xsd:restriction>
2835 </xsd:simpleType>
2836 <xsd:simpleType name="ST_TextFontSize">
2837     <xsd:restriction base="xsd:int">
2838         <xsd:minInclusive value="100"/>
2839         <xsd:maxInclusive value="400000"/>
2840     </xsd:restriction>
2841 </xsd:simpleType>
2842 <xsd:simpleType name="ST_TextTypeface">
2843     <xsd:restriction base="xsd:string"/>
2844 </xsd:simpleType>
2845 <xsd:complexType name="CT_TextFont">
2846     <xsd:attribute name="typeface" type="ST_TextTypeface" use="required"/>
2847     <xsd:attribute name="panose" type="s:ST_Panose" use="optional"/>
2848     <xsd:attribute name="pitchFamily" type="xsd:byte" use="optional" default="0"/>
2849     <xsd:attribute name="charset" type="xsd:byte" use="optional" default="1"/>
2850 </xsd:complexType>
2851 <xsd:simpleType name="ST_TextUnderlineType">
2852     <xsd:restriction base="xsd:token">
2853         <xsd:enumeration value="none"/>
2854         <xsd:enumeration value="words"/>
2855         <xsd:enumeration value="sng"/>
2856         <xsd:enumeration value="dbl"/>
2857         <xsd:enumeration value="heavy"/>
2858         <xsd:enumeration value="dotted"/>
2859         <xsd:enumeration value="dottedHeavy"/>
2860         <xsd:enumeration value="dash"/>
2861         <xsd:enumeration value="dashHeavy"/>
2862         <xsd:enumeration value="dashLong"/>
2863         <xsd:enumeration value="dashLongHeavy"/>
2864         <xsd:enumeration value="dotDash"/>
2865         <xsd:enumeration value="dotDashHeavy"/>
2866         <xsd:enumeration value="dotDotDash"/>
2867         <xsd:enumeration value="dotDotDashHeavy"/>
2868         <xsd:enumeration value="wavy"/>
2869         <xsd:enumeration value="wavyHeavy"/>
2870         <xsd:enumeration value="wavyDbl"/>
2871     </xsd:restriction>
2872 </xsd:simpleType>
2873 <xsd:complexType name="CT_TextUnderlineLineFollowText"/>
2874 <xsd:complexType name="CT_TextUnderlineFillFollowText"/>
2875 <xsd:complexType name="CT_TextUnderlineFillGroupWrapper">
2876     <xsd:group ref="EG_FillProperties" minOccurs="1" maxOccurs="1"/>
2877 </xsd:complexType>
2878 <xsd:group name="EG_TextUnderlineLine">
2879     <xsd:choice>
2880         <xsd:element name="uLnTx" type="CT_TextUnderlineLineFollowText"/>

```

```

2881     <xsd:element name="uLn" type="CT_LineProperties" minOccurs="0" maxOccurs="1"/>
2882   </xsd:choice>
2883 </xsd:group>
2884 <xsd:group name="EG_TextUnderlineFill">
2885   <xsd:choice>
2886     <xsd:element name="uFillTx" type="CT_TextUnderlineFillFollowText"/>
2887     <xsd:element name="uFill" type="CT_TextUnderlineFillGroupWrapper"/>
2888   </xsd:choice>
2889 </xsd:group>
2890 <xsd:simpleType name="ST_TextStrikeType">
2891   <xsd:restriction base="xsd:token">
2892     <xsd:enumeration value="noStrike"/>
2893     <xsd:enumeration value="sngStrike"/>
2894     <xsd:enumeration value="dblStrike"/>
2895   </xsd:restriction>
2896 </xsd:simpleType>
2897 <xsd:simpleType name="ST_TextCapsType">
2898   <xsd:restriction base="xsd:token">
2899     <xsd:enumeration value="none"/>
2900     <xsd:enumeration value="small"/>
2901     <xsd:enumeration value="all"/>
2902   </xsd:restriction>
2903 </xsd:simpleType>
2904 <xsd:complexType name="CT_TextCharacterProperties">
2905   <xsd:sequence>
2906     <xsd:element name="ln" type="CT_LineProperties" minOccurs="0" maxOccurs="1"/>
2907     <xsd:group ref="EG_FillProperties" minOccurs="0" maxOccurs="1"/>
2908     <xsd:group ref="EG_EffectProperties" minOccurs="0" maxOccurs="1"/>
2909     <xsd:element name="highlight" type="CT_Color" minOccurs="0" maxOccurs="1"/>
2910     <xsd:group ref="EG_TextUnderlineLine" minOccurs="0" maxOccurs="1"/>
2911     <xsd:group ref="EG_TextUnderlineFill" minOccurs="0" maxOccurs="1"/>
2912     <xsd:element name="latin" type="CT_TextFont" minOccurs="0" maxOccurs="1"/>
2913     <xsd:element name="ea" type="CT_TextFont" minOccurs="0" maxOccurs="1"/>
2914     <xsd:element name="cs" type="CT_TextFont" minOccurs="0" maxOccurs="1"/>
2915     <xsd:element name="sym" type="CT_TextFont" minOccurs="0" maxOccurs="1"/>
2916     <xsd:element name="hlinkClick" type="CT_Hyperlink" minOccurs="0" maxOccurs="1"/>
2917     <xsd:element name="hlinkMouseOver" type="CT_Hyperlink" minOccurs="0" maxOccurs="1"/>
2918     <xsd:element name="rtl" type="CT_Boolean" minOccurs="0"/>
2919     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
2920   </xsd:sequence>
2921   <xsd:attribute name="kumimoji" type="xsd:boolean" use="optional"/>
2922   <xsd:attribute name="lang" type="s:ST_Lang" use="optional"/>
2923   <xsd:attribute name="altLang" type="s:ST_Lang" use="optional"/>
2924   <xsd:attribute name="sz" type="ST_TextFontSize" use="optional"/>
2925   <xsd:attribute name="b" type="xsd:boolean" use="optional"/>
2926   <xsd:attribute name="i" type="xsd:boolean" use="optional"/>
2927   <xsd:attribute name="u" type="ST_TextUnderlineType" use="optional"/>
2928   <xsd:attribute name="strike" type="ST_TextStrikeType" use="optional"/>
2929   <xsd:attribute name="kern" type="ST_TextNonNegativePoint" use="optional"/>
2930   <xsd:attribute name="cap" type="ST_TextCapsType" use="optional"/>
2931   <xsd:attribute name="spc" type="ST_TextPoint" use="optional"/>
2932   <xsd:attribute name="normalizeH" type="xsd:boolean" use="optional"/>
2933   <xsd:attribute name="baseline" type="ST_Percentage" use="optional"/>

```

```

2934     <xsd:attribute name="noProof" type="xsd:boolean" use="optional"/>
2935     <xsd:attribute name="dirty" type="xsd:boolean" use="optional" default="true"/>
2936     <xsd:attribute name="err" type="xsd:boolean" use="optional" default="false"/>
2937     <xsd:attribute name="smtClean" type="xsd:boolean" use="optional" default="true"/>
2938     <xsd:attribute name="smtId" type="xsd:unsignedInt" use="optional" default="0"/>
2939     <xsd:attribute name="bmk" type="xsd:string" use="optional"/>
2940 </xsd:complexType>
2941 <xsd:complexType name="CT_Boolean">
2942     <xsd:attribute name="val" type="s:ST_OnOff" default="0"/>
2943 </xsd:complexType>
2944 <xsd:simpleType name="ST_TextSpacingPoint">
2945     <xsd:restriction base="xsd:int">
2946         <xsd:minInclusive value="0"/>
2947         <xsd:maxInclusive value="158400"/>
2948     </xsd:restriction>
2949 </xsd:simpleType>
2950 <xsd:simpleType name="ST_TextSpacingPercentOrPercentString">
2951     <xsd:union memberTypes="ST_TextSpacingPercent s:ST_Percentage"/>
2952 </xsd:simpleType>
2953 <xsd:simpleType name="ST_TextSpacingPercent">
2954     <xsd:restriction base="ST_PercentageDecimal">
2955         <xsd:minInclusive value="0"/>
2956         <xsd:maxInclusive value="13200000"/>
2957     </xsd:restriction>
2958 </xsd:simpleType>
2959 <xsd:complexType name="CT_TextSpacingPercent">
2960     <xsd:attribute name="val" type="ST_TextSpacingPercentOrPercentString" use="required"/>
2961 </xsd:complexType>
2962 <xsd:complexType name="CT_TextSpacingPoint">
2963     <xsd:attribute name="val" type="ST_TextSpacingPoint" use="required"/>
2964 </xsd:complexType>
2965 <xsd:simpleType name="ST_TextMargin">
2966     <xsd:restriction base="ST_Coordinate32Unqualified">
2967         <xsd:minInclusive value="0"/>
2968         <xsd:maxInclusive value="51206400"/>
2969     </xsd:restriction>
2970 </xsd:simpleType>
2971 <xsd:simpleType name="ST_TextIndent">
2972     <xsd:restriction base="ST_Coordinate32Unqualified">
2973         <xsd:minInclusive value="-51206400"/>
2974         <xsd:maxInclusive value="51206400"/>
2975     </xsd:restriction>
2976 </xsd:simpleType>
2977 <xsd:simpleType name="ST_TextTabAlignType">
2978     <xsd:restriction base="xsd:token">
2979         <xsd:enumeration value="l"/>
2980         <xsd:enumeration value="ctr"/>
2981         <xsd:enumeration value="r"/>
2982         <xsd:enumeration value="dec"/>
2983     </xsd:restriction>
2984 </xsd:simpleType>
2985 <xsd:complexType name="CT_TextTabStop">
2986     <xsd:attribute name="pos" type="ST_Coordinate32" use="optional"/>

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2987     <xsd:attribute name="align" type="ST_TextTabAlignType" use="optional"/>
2988   </xsd:complexType>
2989   <xsd:complexType name="CT_TextTabStopList">
2990     <xsd:sequence>
2991       <xsd:element name="tab" type="CT_TextTabStop" minOccurs="0" maxOccurs="32"/>
2992     </xsd:sequence>
2993   </xsd:complexType>
2994   <xsd:complexType name="CT_TextLineBreak">
2995     <xsd:sequence>
2996       <xsd:element name="rPr" type="CT_TextCharacterProperties" minOccurs="0" maxOccurs="1"/>
2997     </xsd:sequence>
2998   </xsd:complexType>
2999   <xsd:complexType name="CT_TextSpacing">
3000     <xsd:choice>
3001       <xsd:element name="spcPct" type="CT_TextSpacingPercent"/>
3002       <xsd:element name="spcPts" type="CT_TextSpacingPoint"/>
3003     </xsd:choice>
3004   </xsd:complexType>
3005   <xsd:simpleType name="ST_TextAlignType">
3006     <xsd:restriction base="xsd:token">
3007       <xsd:enumeration value="l"/>
3008       <xsd:enumeration value="ctr"/>
3009       <xsd:enumeration value="r"/>
3010       <xsd:enumeration value="just"/>
3011       <xsd:enumeration value="justLow"/>
3012       <xsd:enumeration value="dist"/>
3013       <xsd:enumeration value="thaiDist"/>
3014     </xsd:restriction>
3015   </xsd:simpleType>
3016   <xsd:simpleType name="ST_TextFontAlignType">
3017     <xsd:restriction base="xsd:token">
3018       <xsd:enumeration value="auto"/>
3019       <xsd:enumeration value="t"/>
3020       <xsd:enumeration value="ctr"/>
3021       <xsd:enumeration value="base"/>
3022       <xsd:enumeration value="b"/>
3023     </xsd:restriction>
3024   </xsd:simpleType>
3025   <xsd:simpleType name="ST_TextIndentLevelType">
3026     <xsd:restriction base="xsd:int">
3027       <xsd:minInclusive value="0"/>
3028       <xsd:maxInclusive value="8"/>
3029     </xsd:restriction>
3030   </xsd:simpleType>
3031   <xsd:complexType name="CT_TextParagraphProperties">
3032     <xsd:sequence>
3033       <xsd:element name="lnSpc" type="CT_TextSpacing" minOccurs="0" maxOccurs="1"/>
3034       <xsd:element name="spcBef" type="CT_TextSpacing" minOccurs="0" maxOccurs="1"/>
3035       <xsd:element name="spcAft" type="CT_TextSpacing" minOccurs="0" maxOccurs="1"/>
3036       <xsd:group ref="EG_TextBulletColor" minOccurs="0" maxOccurs="1"/>
3037       <xsd:group ref="EG_TextBulletSize" minOccurs="0" maxOccurs="1"/>
3038       <xsd:group ref="EG_TextBulletTypeface" minOccurs="0" maxOccurs="1"/>
3039       <xsd:group ref="EG_TextBullet" minOccurs="0" maxOccurs="1"/>

```

```

3040     <xsd:element name="tabLst" type="CT_TextTabStopList" minOccurs="0" maxOccurs="1"/>
3041     <xsd:element name="defRPr" type="CT_TextCharacterProperties" minOccurs="0" maxOccurs="1"/>
3042     <xsd:element name="extLst" type="CT_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>
3043 </xsd:sequence>
3044 <xsd:attribute name="marL" type="ST_TextMargin" use="optional"/>
3045 <xsd:attribute name="marR" type="ST_TextMargin" use="optional"/>
3046 <xsd:attribute name="lvl" type="ST_TextIndentLevelType" use="optional"/>
3047 <xsd:attribute name="indent" type="ST_TextIndent" use="optional"/>
3048 <xsd:attribute name="algn" type="ST_TextAlignType" use="optional"/>
3049 <xsd:attribute name="defTabSz" type="ST_Coordinate32" use="optional"/>
3050 <xsd:attribute name="rtl" type="xsd:boolean" use="optional"/>
3051 <xsd:attribute name="eaLnBrk" type="xsd:boolean" use="optional"/>
3052 <xsd:attribute name="fontAlgn" type="ST_TextFontAlignType" use="optional"/>
3053 <xsd:attribute name="latinLnBrk" type="xsd:boolean" use="optional"/>
3054 <xsd:attribute name="hangingPunct" type="xsd:boolean" use="optional"/>
3055 </xsd:complexType>
3056 <xsd:complexType name="CT_TextField">
3057     <xsd:sequence>
3058         <xsd:element name="rPr" type="CT_TextCharacterProperties" minOccurs="0" maxOccurs="1"/>
3059         <xsd:element name="pPr" type="CT_TextParagraphProperties" minOccurs="0" maxOccurs="1"/>
3060         <xsd:element name="t" type="xsd:string" minOccurs="0" maxOccurs="1"/>
3061     </xsd:sequence>
3062     <xsd:attribute name="id" type="s:ST_Guid" use="required"/>
3063     <xsd:attribute name="type" type="xsd:string" use="optional"/>
3064 </xsd:complexType>
3065 <xsd:group name="EG_TextRun">
3066     <xsd:choice>
3067         <xsd:element name="r" type="CT-RegularTextRun"/>
3068         <xsd:element name="br" type="CT_TextLineBreak"/>
3069         <xsd:element name="fld" type="CT_TextField"/>
3070     </xsd:choice>
3071 </xsd:group>
3072 <xsd:complexType name="CT-RegularTextRun">
3073     <xsd:sequence>
3074         <xsd:element name="rPr" type="CT_TextCharacterProperties" minOccurs="0" maxOccurs="1"/>
3075         <xsd:element name="t" type="xsd:string" minOccurs="1" maxOccurs="1"/>
3076     </xsd:sequence>
3077 </xsd:complexType>
3078 </xsd:schema>

```

A.4.2 DrawingML - Picture

This schema is available in the file dml-picture.xsd.

```

1 <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
2   xmlns="http://schemas.openxmlformats.org/drawingml/2006/picture"
3   xmlns:a="http://schemas.openxmlformats.org/drawingml/2006/main" elementFormDefault="qualified"
4   targetNamespace="http://schemas.openxmlformats.org/drawingml/2006/picture">
5   <xsd:import namespace="http://schemas.openxmlformats.org/drawingml/2006/main" schemaLocation="dml-
6     main.xsd"/>
7   <xsd:complexType name="CT_PictureNonVisual">
8     <xsd:sequence>
9       <xsd:element name="cNvPr" type="a:CT-NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>

```

```

10      <xsd:element name="cNvPicPr" type="a:CT_NonVisualPictureProperties" minOccurs="1"
11        maxOccurs="1"/>
12    </xsd:sequence>
13  </xsd:complexType>
14  <xsd:complexType name="CT_Picture">
15    <xsd:sequence minOccurs="1" maxOccurs="1">
16      <xsd:element name="nvPicPr" type="CT_PictureNonVisual" minOccurs="1" maxOccurs="1"/>
17      <xsd:element name="blipFill" type="a:CT_BlipFillProperties" minOccurs="1" maxOccurs="1"/>
18      <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="1" maxOccurs="1"/>
19    </xsd:sequence>
20  </xsd:complexType>
21  <xsd:element name="pic" type="CT_Picture"/>
22 </xsd:schema>

```

A.4.3 DrawingML - Legacy Compatibility

This schema is available in the file dml-compatibility.xsd.

```

1 <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
2   xmlns="http://schemas.openxmlformats.org/drawingml/2006/compatibility"
3   xmlns:a="http://schemas.openxmlformats.org/drawingml/2006/main"
4   xmlns:r="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
5   elementFormDefault="qualified"
6   targetNamespace="http://schemas.openxmlformats.org/drawingml/2006/compatibility">
7   <xsd:import namespace="http://schemas.openxmlformats.org/drawingml/2006/main" schemaLocation="dml-
8     main.xsd"/>
9   <xsd:complexType name="CT_Compat">
10     <xsd:attribute name="spid" type="a:ST_ShapeID" use="required"/>
11   </xsd:complexType>
12   <xsd:element name="legacyDrawing" type="CT_Compat"/>
13 </xsd:schema>

```

A.4.4 DrawingML - Locked Canvas

This schema is available in the file dml-lockedCanvas.xsd.

```

1 <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
2   xmlns="http://schemas.openxmlformats.org/drawingml/2006/lockedCanvas"
3   xmlns:a="http://schemas.openxmlformats.org/drawingml/2006/main"
4   xmlns:r="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
5   elementFormDefault="qualified"
6   targetNamespace="http://schemas.openxmlformats.org/drawingml/2006/lockedCanvas">
7   <xsd:import namespace="http://schemas.openxmlformats.org/drawingml/2006/main" schemaLocation="dml-
8     main.xsd"/>
9   <xsd:element name="lockedCanvas" type="a:CT_GvmlGroupShape"/>
10 </xsd:schema>

```

A.4.5 DrawingML - WordprocessingML Drawing

This schema is available in the file dml-wordprocessingDrawing.xsd.

```

1 <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
2   xmlns:a="http://schemas.openxmlformats.org/drawingml/2006/main"

```



```

3  xmlns:w="http://schemas.openxmlformats.org/wordprocessingml/2006/main"
4  xmlns="http://schemas.openxmlformats.org/drawingml/2006/wordprocessingDrawing"
5  targetNamespace="http://schemas.openxmlformats.org/drawingml/2006/wordprocessingDrawing"
6  elementFormDefault="qualified">
7    <xsd:import namespace="http://schemas.openxmlformats.org/drawingml/2006/main" schemaLocation="dml-
8      main.xsd"/>
9    <xsd:import schemaLocation="wml.xsd"
10      namespace="http://schemas.openxmlformats.org/wordprocessingml/2006/main"/>
11    <xsd:complexType name="CT_EffectExtent">
12      <xsd:attribute name="l" type="a:ST_Coordinate" use="required"/>
13      <xsd:attribute name="t" type="a:ST_Coordinate" use="required"/>
14      <xsd:attribute name="r" type="a:ST_Coordinate" use="required"/>
15      <xsd:attribute name="b" type="a:ST_Coordinate" use="required"/>
16    </xsd:complexType>
17    <xsd:simpleType name="ST_WrapDistance">
18      <xsd:restriction base="xsd:unsignedInt"/>
19    </xsd:simpleType>
20    <xsd:complexType name="CT_Inline">
21      <xsd:sequence>
22        <xsd:element name="extent" type="a:CT_PositiveSize2D"/>
23        <xsd:element name="effectExtent" type="CT_EffectExtent" minOccurs="0"/>
24        <xsd:element name="docPr" type="a:CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
25        <xsd:element name="cNvGraphicFramePr" type="a:CT_NonVisualGraphicFrameProperties"
26          minOccurs="0" maxOccurs="1"/>
27        <xsd:element ref="a:graphic" minOccurs="1" maxOccurs="1"/>
28      </xsd:sequence>
29      <xsd:attribute name="distT" type="ST_WrapDistance" use="optional"/>
30      <xsd:attribute name="distB" type="ST_WrapDistance" use="optional"/>
31      <xsd:attribute name="distL" type="ST_WrapDistance" use="optional"/>
32      <xsd:attribute name="distR" type="ST_WrapDistance" use="optional"/>
33    </xsd:complexType>
34    <xsd:simpleType name="ST_WrapText">
35      <xsd:restriction base="xsd:token">
36        <xsd:enumeration value="bothSides"/>
37        <xsd:enumeration value="left"/>
38        <xsd:enumeration value="right"/>
39        <xsd:enumeration value="largest"/>
40      </xsd:restriction>
41    </xsd:simpleType>
42    <xsd:complexType name="CT_WrapPath">
43      <xsd:sequence>
44        <xsd:element name="start" type="a:CT_Point2D" minOccurs="1" maxOccurs="1"/>
45        <xsd:element name="lineTo" type="a:CT_Point2D" minOccurs="2" maxOccurs="unbounded"/>
46      </xsd:sequence>
47      <xsd:attribute name="edited" type="xsd:boolean" use="optional"/>
48    </xsd:complexType>
49    <xsd:complexType name="CT_WrapNone"/>
50    <xsd:complexType name="CT_WrapSquare">
51      <xsd:sequence>
52        <xsd:element name="effectExtent" type="CT_EffectExtent" minOccurs="0"/>
53      </xsd:sequence>
54      <xsd:attribute name="wrapText" type="ST_WrapText" use="required"/>
55      <xsd:attribute name="distT" type="ST_WrapDistance" use="optional"/>

```

```

56     <xsd:attribute name="distB" type="ST WrapDistance" use="optional"/>
57     <xsd:attribute name="distL" type="ST WrapDistance" use="optional"/>
58     <xsd:attribute name="distR" type="ST WrapDistance" use="optional"/>
59 </xsd:complexType>
60 <xsd:complexType name="CT_WrapTight">
61     <xsd:sequence>
62         <xsd:element name="wrapPolygon" type="CT WrapPath" minOccurs="1" maxOccurs="1"/>
63     </xsd:sequence>
64     <xsd:attribute name="wrapText" type="ST WrapText" use="required"/>
65     <xsd:attribute name="distL" type="ST WrapDistance" use="optional"/>
66     <xsd:attribute name="distR" type="ST WrapDistance" use="optional"/>
67 </xsd:complexType>
68 <xsd:complexType name="CT_WrapThrough">
69     <xsd:sequence>
70         <xsd:element name="wrapPolygon" type="CT WrapPath" minOccurs="1" maxOccurs="1"/>
71     </xsd:sequence>
72     <xsd:attribute name="wrapText" type="ST WrapText" use="required"/>
73     <xsd:attribute name="distL" type="ST WrapDistance" use="optional"/>
74     <xsd:attribute name="distR" type="ST WrapDistance" use="optional"/>
75 </xsd:complexType>
76 <xsd:complexType name="CT_WrapTopBottom">
77     <xsd:sequence>
78         <xsd:element name="effectExtent" type="CT EffectExtent" minOccurs="0"/>
79     </xsd:sequence>
80     <xsd:attribute name="distT" type="ST WrapDistance" use="optional"/>
81     <xsd:attribute name="distB" type="ST WrapDistance" use="optional"/>
82 </xsd:complexType>
83 <xsd:group name="EG_WrapType">
84     <xsd:sequence>
85         <xsd:choice minOccurs="1" maxOccurs="1">
86             <xsd:element name="wrapNone" type="CT WrapNone" minOccurs="1" maxOccurs="1"/>
87             <xsd:element name="wrapSquare" type="CT WrapSquare" minOccurs="1" maxOccurs="1"/>
88             <xsd:element name="wrapTight" type="CT WrapTight" minOccurs="1" maxOccurs="1"/>
89             <xsd:element name="wrapThrough" type="CT WrapThrough" minOccurs="1" maxOccurs="1"/>
90             <xsd:element name="wrapTopAndBottom" type="CT WrapTopBottom" minOccurs="1"
91                 maxOccurs="1"/>
92         </xsd:choice>
93     </xsd:sequence>
94 </xsd:group>
95 <xsd:simpleType name="ST_PositionOffset">
96     <xsd:restriction base="xsd:int"/>
97 </xsd:simpleType>
98 <xsd:simpleType name="ST_AlignH">
99     <xsd:restriction base="xsd:token">
100         <xsd:enumeration value="left"/>
101         <xsd:enumeration value="right"/>
102         <xsd:enumeration value="center"/>
103         <xsd:enumeration value="inside"/>
104         <xsd:enumeration value="outside"/>
105     </xsd:restriction>
106 </xsd:simpleType>
107 <xsd:simpleType name="ST_RelFromH">
108     <xsd:restriction base="xsd:token">

```

```

109         <xsd:enumeration value="margin"/>
110         <xsd:enumeration value="page"/>
111         <xsd:enumeration value="column"/>
112         <xsd:enumeration value="character"/>
113         <xsd:enumeration value="leftMargin"/>
114         <xsd:enumeration value="rightMargin"/>
115         <xsd:enumeration value="insideMargin"/>
116         <xsd:enumeration value="outsideMargin"/>
117     </xsd:restriction>
118 </xsd:simpleType>
119 <xsd:complexType name="CT_PosH">
120     <xsd:sequence>
121         <xsd:choice minOccurs="1" maxOccurs="1">
122             <xsd:element name="align" type="ST_AlignH" minOccurs="1" maxOccurs="1"/>
123             <xsd:element name="posOffset" type="ST_PositionOffset" minOccurs="1" maxOccurs="1"/>
124         </xsd:choice>
125     </xsd:sequence>
126     <xsd:attribute name="relativeFrom" type="ST_RelFromH" use="required"/>
127 </xsd:complexType>
128 <xsd:simpleType name="ST_AlignV">
129     <xsd:restriction base="xsd:token">
130         <xsd:enumeration value="top"/>
131         <xsd:enumeration value="bottom"/>
132         <xsd:enumeration value="center"/>
133         <xsd:enumeration value="inside"/>
134         <xsd:enumeration value="outside"/>
135     </xsd:restriction>
136 </xsd:simpleType>
137 <xsd:simpleType name="ST_RelFromV">
138     <xsd:restriction base="xsd:token">
139         <xsd:enumeration value="margin"/>
140         <xsd:enumeration value="page"/>
141         <xsd:enumeration value="paragraph"/>
142         <xsd:enumeration value="line"/>
143         <xsd:enumeration value="topMargin"/>
144         <xsd:enumeration value="bottomMargin"/>
145         <xsd:enumeration value="insideMargin"/>
146         <xsd:enumeration value="outsideMargin"/>
147     </xsd:restriction>
148 </xsd:simpleType>
149 <xsd:complexType name="CT_PosV">
150     <xsd:sequence>
151         <xsd:choice minOccurs="1" maxOccurs="1">
152             <xsd:element name="align" type="ST_AlignV" minOccurs="1" maxOccurs="1"/>
153             <xsd:element name="posOffset" type="ST_PositionOffset" minOccurs="1" maxOccurs="1"/>
154         </xsd:choice>
155     </xsd:sequence>
156     <xsd:attribute name="relativeFrom" type="ST_RelFromV" use="required"/>
157 </xsd:complexType>
158 <xsd:complexType name="CT_Anchor">
159     <xsd:sequence>
160         <xsd:element name="simplePos" type="a:CT_Point2D"/>
161         <xsd:element name="positionH" type="CT_PosH"/>

```

```

162     <xsd:element name="positionV" type="CT_PosV"/>
163     <xsd:element name="extent" type="a:CT_PositiveSize2D"/>
164     <xsd:element name="effectExtent" type="CT_EffectExtent" minOccurs="0"/>
165     <xsd:group ref="EG_WrapType"/>
166     <xsd:element name="docPr" type="a:CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
167     <xsd:element name="cNvGraphicFramePr" type="a:CT_NonVisualGraphicFrameProperties"
168         minOccurs="0" maxOccurs="1"/>
169     <xsd:element ref="a:graphic" minOccurs="1" maxOccurs="1"/>
170 </xsd:sequence>
171 <xsd:attribute name="distT" type="ST_WrapDistance" use="optional"/>
172 <xsd:attribute name="distB" type="ST_WrapDistance" use="optional"/>
173 <xsd:attribute name="distL" type="ST_WrapDistance" use="optional"/>
174 <xsd:attribute name="distR" type="ST_WrapDistance" use="optional"/>
175 <xsd:attribute name="simplePos" type="xsd:boolean"/>
176 <xsd:attribute name="relativeHeight" type="xsd:unsignedInt" use="required"/>
177 <xsd:attribute name="behindDoc" type="xsd:boolean" use="required"/>
178 <xsd:attribute name="locked" type="xsd:boolean" use="required"/>
179 <xsd:attribute name="layoutInCell" type="xsd:boolean" use="required"/>
180 <xsd:attribute name="hidden" type="xsd:boolean" use="optional"/>
181 <xsd:attribute name="allowOverlap" type="xsd:boolean" use="required"/>
182 </xsd:complexType>
183 <xsd:element name="inline" type="CT_Inline"/>
184 <xsd:element name="anchor" type="CT_Anchor"/>
185 </xsd:schema>

```

A.4.6 DrawingML - SpreadsheetML Drawing

This schema is available in the file dml-spreadsheetDrawing.xsd.

```

1 <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
2   xmlns:a="http://schemas.openxmlformats.org/drawingml/2006/main"
3   xmlns="http://schemas.openxmlformats.org/drawingml/2006/spreadsheetDrawing"
4   xmlns:r="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
5   targetNamespace="http://schemas.openxmlformats.org/drawingml/2006/spreadsheetDrawing"
6   elementFormDefault="qualified">
7   <xsd:import namespace="http://schemas.openxmlformats.org/drawingml/2006/main" schemaLocation="dml-
8       main.xsd"/>
9   <xsd:import schemaLocation="shared-relationshipReference.xsd"
10       namespace="http://schemas.openxmlformats.org/officeDocument/2006/relationships"/>
11   <xsd:element name="from" type="CT_Marker"/>
12   <xsd:element name="to" type="CT_Marker"/>
13   <xsd:complexType name="CT_AnchorClientData">
14       <xsd:attribute name="fLocksWithSheet" type="xsd:boolean" use="optional" default="true"/>
15       <xsd:attribute name="fPrintsWithSheet" type="xsd:boolean" use="optional" default="true"/>
16   </xsd:complexType>
17   <xsd:complexType name="CT_ShapeNonVisual">
18       <xsd:sequence>
19           <xsd:element name="cNvPr" type="a:CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
20           <xsd:element name="cNvSpPr" type="a:CT_NonVisualDrawingShapeProps" minOccurs="1"
21               maxOccurs="1"/>
22       </xsd:sequence>
23   </xsd:complexType>
24   <xsd:complexType name="CT_Shape">

```

```

25     <xsd:sequence>
26         <xsd:element name="nvSpPr" type="CT_ShapeNonVisual" minOccurs="1" maxOccurs="1"/>
27         <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="1" maxOccurs="1"/>
28         <xsd:element name="style" type="a:CT_ShapeStyle" minOccurs="0" maxOccurs="1"/>
29         <xsd:element name="txBody" type="a:CT_TextBody" minOccurs="0" maxOccurs="1"/>
30     </xsd:sequence>
31     <xsd:attribute name="macro" type="xsd:string" use="optional"/>
32     <xsd:attribute name="textlink" type="xsd:string" use="optional"/>
33     <xsd:attribute name="fLocksText" type="xsd:boolean" use="optional" default="true"/>
34     <xsd:attribute name="fPublished" type="xsd:boolean" use="optional" default="false"/>
35 </xsd:complexType>
36 <xsd:complexType name="CT_ConnectorNonVisual">
37     <xsd:sequence>
38         <xsd:element name="cNvPr" type="a:CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
39         <xsd:element name="cNvCxnSpPr" type="a:CT_NonVisualConnectorProperties" minOccurs="1"
40             maxOccurs="1"/>
41     </xsd:sequence>
42 </xsd:complexType>
43 <xsd:complexType name="CT_Connector">
44     <xsd:sequence>
45         <xsd:element name="nvCxnSpPr" type="CT_ConnectorNonVisual" minOccurs="1" maxOccurs="1"/>
46         <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="1" maxOccurs="1"/>
47         <xsd:element name="style" type="a:CT_ShapeStyle" minOccurs="0" maxOccurs="1"/>
48     </xsd:sequence>
49     <xsd:attribute name="macro" type="xsd:string" use="optional"/>
50     <xsd:attribute name="fPublished" type="xsd:boolean" use="optional" default="false"/>
51 </xsd:complexType>
52 <xsd:complexType name="CT_PictureNonVisual">
53     <xsd:sequence>
54         <xsd:element name="cNvPr" type="a:CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
55         <xsd:element name="cNvPicPr" type="a:CT_NonVisualPictureProperties" minOccurs="1"
56             maxOccurs="1"/>
57     </xsd:sequence>
58 </xsd:complexType>
59 <xsd:complexType name="CT_Picture">
60     <xsd:sequence>
61         <xsd:element name="nvPicPr" type="CT_PictureNonVisual" minOccurs="1" maxOccurs="1"/>
62         <xsd:element name="blipFill" type="a:CT_BlipFillProperties" minOccurs="1" maxOccurs="1"/>
63         <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="1" maxOccurs="1"/>
64         <xsd:element name="style" type="a:CT_ShapeStyle" minOccurs="0" maxOccurs="1"/>
65     </xsd:sequence>
66     <xsd:attribute name="macro" type="xsd:string" use="optional" default=""/>
67     <xsd:attribute name="fPublished" type="xsd:boolean" use="optional" default="false"/>
68 </xsd:complexType>
69 <xsd:complexType name="CT_GraphicalObjectFrameNonVisual">
70     <xsd:sequence>
71         <xsd:element name="cNvPr" type="a:CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
72         <xsd:element name="cNvGraphicFramePr" type="a:CT_NonVisualGraphicFrameProperties"
73             minOccurs="1" maxOccurs="1"/>
74     </xsd:sequence>
75 </xsd:complexType>
76 <xsd:complexType name="CT_GraphicalObjectFrame">
77     <xsd:sequence>

```

```

78      <xsd:element name="nvGraphicFramePr" type="CT_GraphicalObjectFrameNonVisual" minOccurs="1"
79      maxOccurs="1"/>
80      <xsd:element name="xfrm" type="a:CT_Transform2D" minOccurs="1" maxOccurs="1"/>
81      <xsd:element ref="a:graphic" minOccurs="1" maxOccurs="1"/>
82    </xsd:sequence>
83    <xsd:attribute name="macro" type="xsd:string" use="optional"/>
84    <xsd:attribute name="fPublished" type="xsd:boolean" use="optional" default="false"/>
85  </xsd:complexType>
86  <xsd:complexType name="CT_GroupShapeNonVisual">
87    <xsd:sequence>
88      <xsd:element name="cNvPr" type="a:CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
89      <xsd:element name="cNvGrpSpPr" type="a:CT_NonVisualGroupDrawingShapeProps" minOccurs="1"
90      maxOccurs="1"/>
91    </xsd:sequence>
92  </xsd:complexType>
93  <xsd:complexType name="CT_GroupShape">
94    <xsd:sequence>
95      <xsd:element name="nvGrpSpPr" type="CT_GroupShapeNonVisual" minOccurs="1" maxOccurs="1"/>
96      <xsd:element name="grpSpPr" type="a:CT_GroupShapeProperties" minOccurs="1" maxOccurs="1"/>
97      <xsd:choice minOccurs="0" maxOccurs="unbounded">
98        <xsd:element name="sp" type="CT_Shape"/>
99        <xsd:element name="grpSp" type="CT_GroupShape"/>
100        <xsd:element name="graphicFrame" type="CT_GraphicalObjectFrame"/>
101        <xsd:element name="cxnSp" type="CT_Connector"/>
102        <xsd:element name="pic" type="CT_Picture"/>
103      </xsd:choice>
104    </xsd:sequence>
105  </xsd:complexType>
106  <xsd:group name="EG_ObjectChoices">
107    <xsd:sequence>
108      <xsd:choice minOccurs="1" maxOccurs="1">
109        <xsd:element name="sp" type="CT_Shape"/>
110        <xsd:element name="grpSp" type="CT_GroupShape"/>
111        <xsd:element name="graphicFrame" type="CT_GraphicalObjectFrame"/>
112        <xsd:element name="cxnSp" type="CT_Connector"/>
113        <xsd:element name="pic" type="CT_Picture"/>
114        <xsd:element name="contentPart" type="CT_Rel"/>
115      </xsd:choice>
116    </xsd:sequence>
117  </xsd:group>
118  <xsd:complexType name="CT_Rel">
119    <xsd:attribute ref="r:id" use="required"/>
120  </xsd:complexType>
121  <xsd:simpleType name="ST_ColID">
122    <xsd:restriction base="xsd:int">
123      <xsd:minInclusive value="0"/>
124    </xsd:restriction>
125  </xsd:simpleType>
126  <xsd:simpleType name="ST_RowID">
127    <xsd:restriction base="xsd:int">
128      <xsd:minInclusive value="0"/>
129    </xsd:restriction>
130  </xsd:simpleType>

```

```

131 <xsd:complexType name="CT_Marker">
132   <xsd:sequence>
133     <xsd:element name="col" type="ST_ColID"/>
134     <xsd:element name="colOff" type="a:ST_Coordinate"/>
135     <xsd:element name="row" type="ST_RowID"/>
136     <xsd:element name="rowOff" type="a:ST_Coordinate"/>
137   </xsd:sequence>
138 </xsd:complexType>
139 <xsd:simpleType name="ST_EditAs">
140   <xsd:restriction base="xsd:token">
141     <xsd:enumeration value="twoCell"/>
142     <xsd:enumeration value="oneCell"/>
143     <xsd:enumeration value="absolute"/>
144   </xsd:restriction>
145 </xsd:simpleType>
146 <xsd:complexType name="CT_TwoCellAnchor">
147   <xsd:sequence>
148     <xsd:element name="from" type="CT_Marker"/>
149     <xsd:element name="to" type="CT_Marker"/>
150     <xsd:group ref="EG_ObjectChoices"/>
151     <xsd:element name="clientData" type="CT_AnchorClientData" minOccurs="1" maxOccurs="1"/>
152   </xsd:sequence>
153   <xsd:attribute name="editAs" type="ST_EditAs" use="optional" default="twoCell"/>
154 </xsd:complexType>
155 <xsd:complexType name="CT_OneCellAnchor">
156   <xsd:sequence>
157     <xsd:element name="from" type="CT_Marker"/>
158     <xsd:element name="ext" type="a:CT_PositiveSize2D"/>
159     <xsd:group ref="EG_ObjectChoices"/>
160     <xsd:element name="clientData" type="CT_AnchorClientData" minOccurs="1" maxOccurs="1"/>
161   </xsd:sequence>
162 </xsd:complexType>
163 <xsd:complexType name="CT_AbsoluteAnchor">
164   <xsd:sequence>
165     <xsd:element name="pos" type="a:CT_Point2D"/>
166     <xsd:element name="ext" type="a:CT_PositiveSize2D"/>
167     <xsd:group ref="EG_ObjectChoices"/>
168     <xsd:element name="clientData" type="CT_AnchorClientData" minOccurs="1" maxOccurs="1"/>
169   </xsd:sequence>
170 </xsd:complexType>
171 <xsd:group name="EG_Anchor">
172   <xsd:choice>
173     <xsd:element name="twoCellAnchor" type="CT_TwoCellAnchor"/>
174     <xsd:element name="oneCellAnchor" type="CT_OneCellAnchor"/>
175     <xsd:element name="absoluteAnchor" type="CT_AbsoluteAnchor"/>
176   </xsd:choice>
177 </xsd:group>
178 <xsd:complexType name="CT_Drawing">
179   <xsd:sequence>
180     <xsd:group ref="EG_Anchor" minOccurs="0" maxOccurs="unbounded"/>
181   </xsd:sequence>
182 </xsd:complexType>
183 <xsd:element name="wsDr" type="CT_Drawing"/>

```

184 </xsd:schema>

A.5 DrawingML - Components

A.5.1 DrawingML - Charts

This schema is available in the file dml-chart.xsd.

```

1 <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
2   xmlns:a="http://schemas.openxmlformats.org/drawingml/2006/main"
3   xmlns:r="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
4   xmlns="http://schemas.openxmlformats.org/drawingml/2006/chart"
5   xmlns:cdr="http://schemas.openxmlformats.org/drawingml/2006/chartDrawing"
6   xmlns:s="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
7   targetNamespace="http://schemas.openxmlformats.org/drawingml/2006/chart"
8   elementFormDefault="qualified" attributeFormDefault="unqualified" blockDefault="#all">
9   <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
10     schemaLocation="shared-relationshipReference.xsd"/>
11   <xsd:import namespace="http://schemas.openxmlformats.org/drawingml/2006/main" schemaLocation="dml-
12     main.xsd"/>
13   <xsd:import namespace="http://schemas.openxmlformats.org/drawingml/2006/chartDrawing"
14     schemaLocation="dml-chartDrawing.xsd"/>
15   <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
16     schemaLocation="shared-commonSimpleTypes.xsd"/>
17   <xsd:complexType name="CT_Boolean">
18     <xsd:attribute name="val" type="xsd:boolean" use="optional" default="true"/>
19   </xsd:complexType>
20   <xsd:complexType name="CT_Double">
21     <xsd:attribute name="val" type="xsd:double" use="required"/>
22   </xsd:complexType>
23   <xsd:complexType name="CT_UnsignedInt">
24     <xsd:attribute name="val" type="xsd:unsignedInt" use="required"/>
25   </xsd:complexType>
26   <xsd:complexType name="CT_RelId">
27     <xsd:attribute ref="r:id" use="required"/>
28   </xsd:complexType>
29   <xsd:complexType name="CT_Extension">
30     <xsd:sequence>
31       <xsd:any processContents="lax"/>
32     </xsd:sequence>
33     <xsd:attribute name="uri" type="xsd:token"/>
34   </xsd:complexType>
35   <xsd:complexType name="CT_ExtensionList">
36     <xsd:sequence>
37       <xsd:element name="ext" type="CT_Extension" minOccurs="0" maxOccurs="unbounded"/>
38     </xsd:sequence>
39   </xsd:complexType>
40   <xsd:complexType name="CT_NumVal">
41     <xsd:sequence>
42       <xsd:element name="v" type="s:ST_Xstring" minOccurs="1" maxOccurs="1"/>
43     </xsd:sequence>
44     <xsd:attribute name="idx" type="xsd:unsignedInt" use="required"/>
45     <xsd:attribute name="formatCode" type="s:ST_Xstring" use="optional"/>

```



```

46 </xsd:complexType>
47 <xsd:complexType name="CT_NumData">
48   <xsd:sequence>
49     <xsd:element name="formatCode" type="s:ST_Xstring" minOccurs="0" maxOccurs="1"/>
50     <xsd:element name="ptCount" type="CT_UnsignedInt" minOccurs="0" maxOccurs="1"/>
51     <xsd:element name="pt" type="CT_NumVal" minOccurs="0" maxOccurs="unbounded"/>
52     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
53   </xsd:sequence>
54 </xsd:complexType>
55 <xsd:complexType name="CT_NumRef">
56   <xsd:sequence>
57     <xsd:element name="f" type="xsd:string" minOccurs="1" maxOccurs="1"/>
58     <xsd:element name="numCache" type="CT_NumData" minOccurs="0" maxOccurs="1"/>
59     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
60   </xsd:sequence>
61 </xsd:complexType>
62 <xsd:complexType name="CT_NumDataSource">
63   <xsd:sequence>
64     <xsd:choice minOccurs="1" maxOccurs="1">
65       <xsd:element name="numRef" type="CT_NumRef" minOccurs="1" maxOccurs="1"/>
66       <xsd:element name="numLit" type="CT_NumData" minOccurs="1" maxOccurs="1"/>
67     </xsd:choice>
68   </xsd:sequence>
69 </xsd:complexType>
70 <xsd:complexType name="CT_StrVal">
71   <xsd:sequence>
72     <xsd:element name="v" type="s:ST_Xstring" minOccurs="1" maxOccurs="1"/>
73   </xsd:sequence>
74   <xsd:attribute name="idx" type="xsd:unsignedInt" use="required"/>
75 </xsd:complexType>
76 <xsd:complexType name="CT_StrData">
77   <xsd:sequence>
78     <xsd:element name="ptCount" type="CT_UnsignedInt" minOccurs="0" maxOccurs="1"/>
79     <xsd:element name="pt" type="CT_StrVal" minOccurs="0" maxOccurs="unbounded"/>
80     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
81   </xsd:sequence>
82 </xsd:complexType>
83 <xsd:complexType name="CT_StrRef">
84   <xsd:sequence>
85     <xsd:element name="f" type="xsd:string" minOccurs="1" maxOccurs="1"/>
86     <xsd:element name="strCache" type="CT_StrData" minOccurs="0" maxOccurs="1"/>
87     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
88   </xsd:sequence>
89 </xsd:complexType>
90 <xsd:complexType name="CT_Tx">
91   <xsd:sequence>
92     <xsd:choice minOccurs="1" maxOccurs="1">
93       <xsd:element name="strRef" type="CT_StrRef" minOccurs="1" maxOccurs="1"/>
94       <xsd:element name="rich" type="a:CT_TextBody" minOccurs="1" maxOccurs="1"/>
95     </xsd:choice>
96   </xsd:sequence>
97 </xsd:complexType>
98 <xsd:complexType name="CT_TextLanguageID">

```

```

99     <xsd:attribute name="val" type="s:ST Lang" use="required"/>
100   </xsd:complexType>
101   <xsd:complexType name="CT_Lvl1">
102     <xsd:sequence>
103       <xsd:element name="pt" type="CT StrVal" minOccurs="0" maxOccurs="unbounded"/>
104     </xsd:sequence>
105   </xsd:complexType>
106   <xsd:complexType name="CT_MultiLvlStrData">
107     <xsd:sequence>
108       <xsd:element name="ptCount" type="CT UnsignedInt" minOccurs="0" maxOccurs="1"/>
109       <xsd:element name="lvl" type="CT Lvl1" minOccurs="0" maxOccurs="unbounded"/>
110       <xsd:element name="extLst" type="CT ExtensionList" minOccurs="0" maxOccurs="1"/>
111     </xsd:sequence>
112   </xsd:complexType>
113   <xsd:complexType name="CT_MultiLvlStrRef">
114     <xsd:sequence>
115       <xsd:element name="f" type="xsd:string" minOccurs="1" maxOccurs="1"/>
116       <xsd:element name="multiLvlStrCache" type="CT MultiLvlStrData" minOccurs="0"
117         maxOccurs="1"/>
118       <xsd:element name="extLst" type="CT ExtensionList" minOccurs="0" maxOccurs="1"/>
119     </xsd:sequence>
120   </xsd:complexType>
121   <xsd:complexType name="CT_AxDataSource">
122     <xsd:sequence>
123       <xsd:choice minOccurs="1" maxOccurs="1">
124         <xsd:element name="multiLvlStrRef" type="CT MultiLvlStrRef" minOccurs="1"
125           maxOccurs="1"/>
126         <xsd:element name="numRef" type="CT NumRef" minOccurs="1" maxOccurs="1"/>
127         <xsd:element name="numLit" type="CT NumData" minOccurs="1" maxOccurs="1"/>
128         <xsd:element name="strRef" type="CT StrRef" minOccurs="1" maxOccurs="1"/>
129         <xsd:element name="strLit" type="CT StrData" minOccurs="1" maxOccurs="1"/>
130       </xsd:choice>
131     </xsd:sequence>
132   </xsd:complexType>
133   <xsd:complexType name="CT_SerTx">
134     <xsd:sequence>
135       <xsd:choice minOccurs="1" maxOccurs="1">
136         <xsd:element name="strRef" type="CT StrRef" minOccurs="1" maxOccurs="1"/>
137         <xsd:element name="v" type="s:ST Xstring" minOccurs="1" maxOccurs="1"/>
138       </xsd:choice>
139     </xsd:sequence>
140   </xsd:complexType>
141   <xsd:simpleType name="ST_LayoutTarget">
142     <xsd:restriction base="xsd:string">
143       <xsd:enumeration value="inner"/>
144       <xsd:enumeration value="outer"/>
145     </xsd:restriction>
146   </xsd:simpleType>
147   <xsd:complexType name="CT_LayoutTarget">
148     <xsd:attribute name="val" type="ST LayoutTarget" default="outer"/>
149   </xsd:complexType>
150   <xsd:simpleType name="ST_LayoutMode">
151     <xsd:restriction base="xsd:string">

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152         <xsd:enumeration value="edge"/>
153         <xsd:enumeration value="factor"/>
154     </xsd:restriction>
155 </xsd:simpleType>
156 <xsd:complexType name="CT_LayoutMode">
157     <xsd:attribute name="val" type="ST_LayoutMode" default="factor"/>
158 </xsd:complexType>
159 <xsd:complexType name="CT_ManualLayout">
160     <xsd:sequence>
161         <xsd:element name="layoutTarget" type="CT_LayoutTarget" minOccurs="0" maxOccurs="1"/>
162         <xsd:element name="xMode" type="CT_LayoutMode" minOccurs="0" maxOccurs="1"/>
163         <xsd:element name="yMode" type="CT_LayoutMode" minOccurs="0" maxOccurs="1"/>
164         <xsd:element name="wMode" type="CT_LayoutMode" minOccurs="0" maxOccurs="1"/>
165         <xsd:element name="hMode" type="CT_LayoutMode" minOccurs="0" maxOccurs="1"/>
166         <xsd:element name="x" type="CT_Double" minOccurs="0" maxOccurs="1"/>
167         <xsd:element name="y" type="CT_Double" minOccurs="0" maxOccurs="1"/>
168         <xsd:element name="w" type="CT_Double" minOccurs="0" maxOccurs="1"/>
169         <xsd:element name="h" type="CT_Double" minOccurs="0" maxOccurs="1"/>
170         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
171     </xsd:sequence>
172 </xsd:complexType>
173 <xsd:complexType name="CT_Layout">
174     <xsd:sequence>
175         <xsd:element name="manualLayout" type="CT_ManualLayout" minOccurs="0" maxOccurs="1"/>
176         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
177     </xsd:sequence>
178 </xsd:complexType>
179 <xsd:complexType name="CT_Title">
180     <xsd:sequence>
181         <xsd:element name="tx" type="CT_Tx" minOccurs="0" maxOccurs="1"/>
182         <xsd:element name="layout" type="CT_Layout" minOccurs="0" maxOccurs="1"/>
183         <xsd:element name="overlay" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
184         <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="0" maxOccurs="1"/>
185         <xsd:element name="txPr" type="a:CT_TextBody" minOccurs="0" maxOccurs="1"/>
186         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
187     </xsd:sequence>
188 </xsd:complexType>
189 <xsd:simpleType name="ST_RotX">
190     <xsd:restriction base="xsd:byte">
191         <xsd:minInclusive value="-90"/>
192         <xsd:maxInclusive value="90"/>
193     </xsd:restriction>
194 </xsd:simpleType>
195 <xsd:complexType name="CT_RotX">
196     <xsd:attribute name="val" type="ST_RotX" default="0"/>
197 </xsd:complexType>
198 <xsd:simpleType name="ST_HPercent">
199     <xsd:restriction base="xsd:unsignedShort">
200         <xsd:minInclusive value="5"/>
201         <xsd:maxInclusive value="500"/>
202     </xsd:restriction>
203     <xsd:union memberTypes="ST_HPercentWithSymbol ST_HPercentUShort"/>
204 </xsd:simpleType>

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205 <xsd:simpleType name="ST_HPercentWithSymbol">
206   <xsd:restriction base="xsd:string">
207     <xsd:pattern value="0*(([5-9])|([1-9][0-9])|([1-4][0-9][0-9])|500)%"/>
208   </xsd:restriction>
209 </xsd:simpleType>
210 <xsd:simpleType name="ST_HPercentUShort">
211   <xsd:restriction base="xsd:unsignedShort">
212     <xsd:minInclusive value="5"/>
213     <xsd:maxInclusive value="500"/>
214   </xsd:restriction>
215 </xsd:simpleType>
216 <xsd:complexType name="CT_HPercent">
217   <xsd:attribute name="val" type="ST_HPercent" default="100%"/>
218 </xsd:complexType>
219 <xsd:simpleType name="ST_RotY">
220   <xsd:restriction base="xsd:unsignedShort">
221     <xsd:minInclusive value="0"/>
222     <xsd:maxInclusive value="360"/>
223   </xsd:restriction>
224 </xsd:simpleType>
225 <xsd:complexType name="CT_RotY">
226   <xsd:attribute name="val" type="ST_RotY" default="0"/>
227 </xsd:complexType>
228 <xsd:simpleType name="ST_DepthPercent">
229   <xsd:union memberTypes="ST_DepthPercentWithSymbol ST_DepthPercentUShort"/>
230 </xsd:simpleType>
231 <xsd:simpleType name="ST_DepthPercentWithSymbol">
232   <xsd:restriction base="xsd:string">
233     <xsd:pattern value="0*(([2-9][0-9])|([1-9][0-9][0-9])|(1[0-9][0-9][0-9])|2000)%"/>
234   </xsd:restriction>
235 </xsd:simpleType>
236 <xsd:simpleType name="ST_DepthPercentUShort">
237   <xsd:restriction base="xsd:unsignedShort">
238     <xsd:minInclusive value="20"/>
239     <xsd:maxInclusive value="2000"/>
240   </xsd:restriction>
241 </xsd:simpleType>
242 <xsd:complexType name="CT_DepthPercent">
243   <xsd:attribute name="val" type="ST_DepthPercent" default="100%"/>
244 </xsd:complexType>
245 <xsd:simpleType name="ST_Perspective">
246   <xsd:restriction base="xsd:unsignedByte">
247     <xsd:minInclusive value="0"/>
248     <xsd:maxInclusive value="240"/>
249   </xsd:restriction>
250 </xsd:simpleType>
251 <xsd:complexType name="CT_Perspective">
252   <xsd:attribute name="val" type="ST_Perspective" default="30"/>
253 </xsd:complexType>
254 <xsd:complexType name="CT_View3D">
255   <xsd:sequence>
256     <xsd:element name="rotX" type="CT_RotX" minOccurs="0" maxOccurs="1"/>
257     <xsd:element name="hPercent" type="CT_HPercent" minOccurs="0" maxOccurs="1"/>

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258     <xsd:element name="rotY" type="CT_RotY" minOccurs="0" maxOccurs="1"/>
259     <xsd:element name="depthPercent" type="CT_DepthPercent" minOccurs="0" maxOccurs="1"/>
260     <xsd:element name="rAngAx" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
261     <xsd:element name="perspective" type="CT_Perspective" minOccurs="0" maxOccurs="1"/>
262     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
263   </xsd:sequence>
264 </xsd:complexType>
265 <xsd:complexType name="CT_Surface">
266   <xsd:sequence>
267     <xsd:element name="thickness" type="CT_Thickness" minOccurs="0" maxOccurs="1"/>
268     <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="0" maxOccurs="1"/>
269     <xsd:element name="pictureOptions" type="CT_PictureOptions" minOccurs="0" maxOccurs="1"/>
270     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
271   </xsd:sequence>
272 </xsd:complexType>
273 <xsd:simpleType name="ST_Thickness">
274   <xsd:union memberTypes="ST_ThicknessPercent xsd:unsignedInt"/>
275 </xsd:simpleType>
276 <xsd:simpleType name="ST_ThicknessPercent">
277   <xsd:restriction base="xsd:string">
278     <xsd:pattern value="([0-9]+)%"/>
279   </xsd:restriction>
280 </xsd:simpleType>
281 <xsd:complexType name="CT_Thickness">
282   <xsd:attribute name="val" type="ST_Thickness" use="required"/>
283 </xsd:complexType>
284 <xsd:complexType name="CT_DTable">
285   <xsd:sequence>
286     <xsd:element name="showHorzBorder" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
287     <xsd:element name="showVertBorder" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
288     <xsd:element name="showOutline" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
289     <xsd:element name="showKeys" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
290     <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="0" maxOccurs="1"/>
291     <xsd:element name="txPr" type="a:CT_TextBody" minOccurs="0" maxOccurs="1"/>
292     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
293   </xsd:sequence>
294 </xsd:complexType>
295 <xsd:simpleType name="ST_GapAmount">
296   <xsd:union memberTypes="ST_GapAmountPercent ST_GapAmountUShort"/>
297 </xsd:simpleType>
298 <xsd:simpleType name="ST_GapAmountPercent">
299   <xsd:restriction base="xsd:string">
300     <xsd:pattern value="0*([0-9])|([1-9][0-9])|([1-4][0-9][0-9])|500)%"/>
301   </xsd:restriction>
302 </xsd:simpleType>
303 <xsd:simpleType name="ST_GapAmountUShort">
304   <xsd:restriction base="xsd:unsignedShort">
305     <xsd:minInclusive value="0"/>
306     <xsd:maxInclusive value="500"/>
307   </xsd:restriction>
308 </xsd:simpleType>
309 <xsd:complexType name="CT_GapAmount">
310   <xsd:attribute name="val" type="ST_GapAmount" default="150%"/>

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311 </xsd:complexType>
312 <xsd:simpleType name="ST_Overlap">
313   <xsd:union memberTypes="ST_OverlapPercent ST_OverlapByte"/>
314 </xsd:simpleType>
315 <xsd:simpleType name="ST_OverlapPercent">
316   <xsd:restriction base="xsd:string">
317     <xsd:pattern value="(-?0*([0-9]|([1-9][0-9])|100))%"/>
318   </xsd:restriction>
319 </xsd:simpleType>
320 <xsd:simpleType name="ST_OverlapByte">
321   <xsd:restriction base="xsd:byte">
322     <xsd:minInclusive value="-100"/>
323     <xsd:maxInclusive value="100"/>
324   </xsd:restriction>
325 </xsd:simpleType>
326 <xsd:complexType name="CT_Overlap">
327   <xsd:attribute name="val" type="ST_Overlap" default="0%"/>
328 </xsd:complexType>
329 <xsd:simpleType name="ST_BubbleScale">
330   <xsd:union memberTypes="ST_BubbleScalePercent ST_BubbleScaleUInt"/>
331 </xsd:simpleType>
332 <xsd:simpleType name="ST_BubbleScalePercent">
333   <xsd:restriction base="xsd:string">
334     <xsd:pattern value="0*([0-9]|([1-9][0-9])|([1-2][0-9][0-9])|300)%"/>
335   </xsd:restriction>
336 </xsd:simpleType>
337 <xsd:simpleType name="ST_BubbleScaleUInt">
338   <xsd:restriction base="xsd:unsignedInt">
339     <xsd:minInclusive value="0"/>
340     <xsd:maxInclusive value="300"/>
341   </xsd:restriction>
342 </xsd:simpleType>
343 <xsd:complexType name="CT_BubbleScale">
344   <xsd:attribute name="val" type="ST_BubbleScale" default="100%"/>
345 </xsd:complexType>
346 <xsd:simpleType name="ST_SizeRepresents">
347   <xsd:restriction base="xsd:string">
348     <xsd:enumeration value="area"/>
349     <xsd:enumeration value="w"/>
350   </xsd:restriction>
351 </xsd:simpleType>
352 <xsd:complexType name="CT_SizeRepresents">
353   <xsd:attribute name="val" type="ST_SizeRepresents" default="area"/>
354 </xsd:complexType>
355 <xsd:simpleType name="ST_FirstSliceAng">
356   <xsd:restriction base="xsd:unsignedShort">
357     <xsd:minInclusive value="0"/>
358     <xsd:maxInclusive value="360"/>
359   </xsd:restriction>
360 </xsd:simpleType>
361 <xsd:complexType name="CT_FirstSliceAng">
362   <xsd:attribute name="val" type="ST_FirstSliceAng" default="0"/>
363 </xsd:complexType>

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364 <xsd:simpleType name="ST_HoleSize">
365   <xsd:union memberTypes="ST_HoleSizePercent ST_HoleSizeUByte"/>
366 </xsd:simpleType>
367 <xsd:simpleType name="ST_HoleSizePercent">
368   <xsd:restriction base="xsd:string">
369     <xsd:pattern value="0*([1-9]|([1-8][0-9])|90)%"/>
370   </xsd:restriction>
371 </xsd:simpleType>
372 <xsd:simpleType name="ST_HoleSizeUByte">
373   <xsd:restriction base="xsd:unsignedByte">
374     <xsd:minInclusive value="10"/>
375     <xsd:maxInclusive value="90"/>
376   </xsd:restriction>
377 </xsd:simpleType>
378 <xsd:complexType name="CT_HoleSize">
379   <xsd:attribute name="val" type="ST_HoleSize" default="10%"/>
380 </xsd:complexType>
381 <xsd:simpleType name="ST_SplitType">
382   <xsd:restriction base="xsd:string">
383     <xsd:enumeration value="auto"/>
384     <xsd:enumeration value="cust"/>
385     <xsd:enumeration value="percent"/>
386     <xsd:enumeration value="pos"/>
387     <xsd:enumeration value="val"/>
388   </xsd:restriction>
389 </xsd:simpleType>
390 <xsd:complexType name="CT_SplitType">
391   <xsd:attribute name="val" type="ST_SplitType" default="auto"/>
392 </xsd:complexType>
393 <xsd:complexType name="CT_CustSplit">
394   <xsd:sequence>
395     <xsd:element name="secondPiePt" type="CT_UnsignedInt" minOccurs="0"
396       maxOccurs="unbounded"/>
397   </xsd:sequence>
398 </xsd:complexType>
399 <xsd:simpleType name="ST_SecondPieSize">
400   <xsd:union memberTypes="ST_SecondPieSizePercent ST_SecondPieSizeUShort"/>
401 </xsd:simpleType>
402 <xsd:simpleType name="ST_SecondPieSizePercent">
403   <xsd:restriction base="xsd:string">
404     <xsd:pattern value="0*(([5-9]|([1-9][0-9])|(1[0-9][0-9])|200)%"/>
405   </xsd:restriction>
406 </xsd:simpleType>
407 <xsd:simpleType name="ST_SecondPieSizeUShort">
408   <xsd:restriction base="xsd:unsignedShort">
409     <xsd:minInclusive value="5"/>
410     <xsd:maxInclusive value="200"/>
411   </xsd:restriction>
412 </xsd:simpleType>
413 <xsd:complexType name="CT_SecondPieSize">
414   <xsd:attribute name="val" type="ST_SecondPieSize" default="75%"/>
415 </xsd:complexType>
416 <xsd:complexType name="CT_NumFmt">

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417     <xsd:attribute name="formatCode" type="s:ST_Xstring" use="required"/>
418     <xsd:attribute name="sourceLinked" type="xsd:boolean"/>
419 </xsd:complexType>
420 <xsd:simpleType name="ST_LblAlign">
421     <xsd:restriction base="xsd:string">
422         <xsd:enumeration value="ctr"/>
423         <xsd:enumeration value="l"/>
424         <xsd:enumeration value="r"/>
425     </xsd:restriction>
426 </xsd:simpleType>
427 <xsd:complexType name="CT_LblAlign">
428     <xsd:attribute name="val" type="ST_LblAlign" use="required"/>
429 </xsd:complexType>
430 <xsd:simpleType name="ST_DLblPos">
431     <xsd:restriction base="xsd:string">
432         <xsd:enumeration value="bestFit"/>
433         <xsd:enumeration value="b"/>
434         <xsd:enumeration value="ctr"/>
435         <xsd:enumeration value="inBase"/>
436         <xsd:enumeration value="inEnd"/>
437         <xsd:enumeration value="l"/>
438         <xsd:enumeration value="outEnd"/>
439         <xsd:enumeration value="r"/>
440         <xsd:enumeration value="t"/>
441     </xsd:restriction>
442 </xsd:simpleType>
443 <xsd:complexType name="CT_DLblPos">
444     <xsd:attribute name="val" type="ST_DLblPos" use="required"/>
445 </xsd:complexType>
446 <xsd:group name="EG_DLblShared">
447     <xsd:sequence>
448         <xsd:element name="numFmt" type="CT_NumFmt" minOccurs="0" maxOccurs="1"/>
449         <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="0" maxOccurs="1"/>
450         <xsd:element name="txPr" type="a:CT_TextBody" minOccurs="0" maxOccurs="1"/>
451         <xsd:element name="dLblPos" type="CT_DLblPos" minOccurs="0" maxOccurs="1"/>
452         <xsd:element name="showLegendKey" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
453         <xsd:element name="showVal" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
454         <xsd:element name="showCatName" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
455         <xsd:element name="showSerName" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
456         <xsd:element name="showPercent" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
457         <xsd:element name="showBubbleSize" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
458         <xsd:element name="separator" type="xsd:string" minOccurs="0" maxOccurs="1"/>
459     </xsd:sequence>
460 </xsd:group>
461 <xsd:group name="Group_DLbl">
462     <xsd:sequence>
463         <xsd:element name="layout" type="CT_Layout" minOccurs="0" maxOccurs="1"/>
464         <xsd:element name="tx" type="CT_Tx" minOccurs="0" maxOccurs="1"/>
465         <xsd:group ref="EG_DLblShared" minOccurs="1" maxOccurs="1"/>
466     </xsd:sequence>
467 </xsd:group>
468 <xsd:complexType name="CT_DLbl">
469     <xsd:sequence>

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470     <xsd:element name="idx" type="CT UnsignedInt" minOccurs="1" maxOccurs="1"/>
471     <xsd:choice>
472         <xsd:element name="delete" type="CT Boolean" minOccurs="1" maxOccurs="1"/>
473         <xsd:group ref="Group_DLbl1" minOccurs="1" maxOccurs="1"/>
474     </xsd:choice>
475     <xsd:element name="extLst" type="CT ExtensionList" minOccurs="0" maxOccurs="1"/>
476 </xsd:sequence>
477 </xsd:complexType>
478 <xsd:group name="Group_DLbls">
479     <xsd:sequence>
480         <xsd:group ref="EG_DLbl1Shared" minOccurs="1" maxOccurs="1"/>
481         <xsd:element name="showLeaderLines" type="CT Boolean" minOccurs="0" maxOccurs="1"/>
482         <xsd:element name="leaderLines" type="CT ChartLines" minOccurs="0" maxOccurs="1"/>
483     </xsd:sequence>
484 </xsd:group>
485 <xsd:complexType name="CT_DLbls">
486     <xsd:sequence>
487         <xsd:element name="dLbl1" type="CT DLbl1" minOccurs="0" maxOccurs="unbounded"/>
488         <xsd:choice>
489             <xsd:element name="delete" type="CT Boolean" minOccurs="1" maxOccurs="1"/>
490             <xsd:group ref="Group_DLbls" minOccurs="1" maxOccurs="1"/>
491         </xsd:choice>
492         <xsd:element name="extLst" type="CT ExtensionList" minOccurs="0" maxOccurs="1"/>
493     </xsd:sequence>
494 </xsd:complexType>
495 <xsd:simpleType name="ST_MarkerStyle">
496     <xsd:restriction base="xsd:string">
497         <xsd:enumeration value="circle"/>
498         <xsd:enumeration value="dash"/>
499         <xsd:enumeration value="diamond"/>
500         <xsd:enumeration value="dot"/>
501         <xsd:enumeration value="none"/>
502         <xsd:enumeration value="picture"/>
503         <xsd:enumeration value="plus"/>
504         <xsd:enumeration value="square"/>
505         <xsd:enumeration value="star"/>
506         <xsd:enumeration value="triangle"/>
507         <xsd:enumeration value="x"/>
508         <xsd:enumeration value="auto"/>
509     </xsd:restriction>
510 </xsd:simpleType>
511 <xsd:complexType name="CT_MarkerStyle">
512     <xsd:attribute name="val" type="ST_MarkerStyle" use="required"/>
513 </xsd:complexType>
514 <xsd:simpleType name="ST_MarkerSize">
515     <xsd:restriction base="xsd:unsignedByte">
516         <xsd:minInclusive value="2"/>
517         <xsd:maxInclusive value="72"/>
518     </xsd:restriction>
519 </xsd:simpleType>
520 <xsd:complexType name="CT_MarkerSize">
521     <xsd:attribute name="val" type="ST_MarkerSize" default="5"/>
522 </xsd:complexType>

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523 <xsd:complexType name="CT_Marker">
524   <xsd:sequence>
525     <xsd:element name="symbol" type="CT_MarkerStyle" minOccurs="0" maxOccurs="1"/>
526     <xsd:element name="size" type="CT_MarkerSize" minOccurs="0" maxOccurs="1"/>
527     <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="0" maxOccurs="1"/>
528     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
529   </xsd:sequence>
530 </xsd:complexType>
531 <xsd:complexType name="CT_DPt">
532   <xsd:sequence>
533     <xsd:element name="idx" type="CT_UnsignedInt" minOccurs="1" maxOccurs="1"/>
534     <xsd:element name="invertIfNegative" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
535     <xsd:element name="marker" type="CT_Marker" minOccurs="0" maxOccurs="1"/>
536     <xsd:element name="bubble3D" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
537     <xsd:element name="explosion" type="CT_UnsignedInt" minOccurs="0" maxOccurs="1"/>
538     <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="0" maxOccurs="1"/>
539     <xsd:element name="pictureOptions" type="CT_PictureOptions" minOccurs="0" maxOccurs="1"/>
540     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
541   </xsd:sequence>
542 </xsd:complexType>
543 <xsd:simpleType name="ST_TrendlineType">
544   <xsd:restriction base="xsd:string">
545     <xsd:enumeration value="exp"/>
546     <xsd:enumeration value="linear"/>
547     <xsd:enumeration value="log"/>
548     <xsd:enumeration value="movingAvg"/>
549     <xsd:enumeration value="poly"/>
550     <xsd:enumeration value="power"/>
551   </xsd:restriction>
552 </xsd:simpleType>
553 <xsd:complexType name="CT_TrendlineType">
554   <xsd:attribute name="val" type="ST_TrendlineType" default="linear"/>
555 </xsd:complexType>
556 <xsd:simpleType name="ST_Order">
557   <xsd:restriction base="xsd:unsignedByte">
558     <xsd:minInclusive value="2"/>
559     <xsd:maxInclusive value="6"/>
560   </xsd:restriction>
561 </xsd:simpleType>
562 <xsd:complexType name="CT_Order">
563   <xsd:attribute name="val" type="ST_Order" default="2"/>
564 </xsd:complexType>
565 <xsd:simpleType name="ST_Period">
566   <xsd:restriction base="xsd:unsignedInt">
567     <xsd:minInclusive value="2"/>
568   </xsd:restriction>
569 </xsd:simpleType>
570 <xsd:complexType name="CT_Period">
571   <xsd:attribute name="val" type="ST_Period" default="2"/>
572 </xsd:complexType>
573 <xsd:complexType name="CT_TrendlineLbl">
574   <xsd:sequence>
575     <xsd:element name="layout" type="CT_Layout" minOccurs="0" maxOccurs="1"/>

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576     <xsd:element name="tx" type="CT Tx" minOccurs="0" maxOccurs="1"/>
577     <xsd:element name="numFmt" type="CT NumFmt" minOccurs="0" maxOccurs="1"/>
578     <xsd:element name="spPr" type="a:CT ShapeProperties" minOccurs="0" maxOccurs="1"/>
579     <xsd:element name="txPr" type="a:CT TextBody" minOccurs="0" maxOccurs="1"/>
580     <xsd:element name="extLst" type="CT ExtensionList" minOccurs="0" maxOccurs="1"/>
581   </xsd:sequence>
582 </xsd:complexType>
583 <xsd:complexType name="CT_Trendline">
584   <xsd:sequence>
585     <xsd:element name="name" type="xsd:string" minOccurs="0" maxOccurs="1"/>
586     <xsd:element name="spPr" type="a:CT ShapeProperties" minOccurs="0" maxOccurs="1"/>
587     <xsd:element name="trendlineType" type="CT TrendlineType" minOccurs="1" maxOccurs="1"/>
588     <xsd:element name="order" type="CT Order" minOccurs="0" maxOccurs="1"/>
589     <xsd:element name="period" type="CT Period" minOccurs="0" maxOccurs="1"/>
590     <xsd:element name="forward" type="CT Double" minOccurs="0" maxOccurs="1"/>
591     <xsd:element name="backward" type="CT Double" minOccurs="0" maxOccurs="1"/>
592     <xsd:element name="intercept" type="CT Double" minOccurs="0" maxOccurs="1"/>
593     <xsd:element name="dispRSqr" type="CT Boolean" minOccurs="0" maxOccurs="1"/>
594     <xsd:element name="dispEq" type="CT Boolean" minOccurs="0" maxOccurs="1"/>
595     <xsd:element name="trendlineLbl" type="CT TrendlineLbl" minOccurs="0" maxOccurs="1"/>
596     <xsd:element name="extLst" type="CT ExtensionList" minOccurs="0" maxOccurs="1"/>
597   </xsd:sequence>
598 </xsd:complexType>
599 <xsd:simpleType name="ST_ErrDir">
600   <xsd:restriction base="xsd:string">
601     <xsd:enumeration value="x"/>
602     <xsd:enumeration value="y"/>
603   </xsd:restriction>
604 </xsd:simpleType>
605 <xsd:complexType name="CT_ErrDir">
606   <xsd:attribute name="val" type="ST_ErrDir" use="required"/>
607 </xsd:complexType>
608 <xsd:simpleType name="ST_ErrBarType">
609   <xsd:restriction base="xsd:string">
610     <xsd:enumeration value="both"/>
611     <xsd:enumeration value="minus"/>
612     <xsd:enumeration value="plus"/>
613   </xsd:restriction>
614 </xsd:simpleType>
615 <xsd:complexType name="CT_ErrBarType">
616   <xsd:attribute name="val" type="ST_ErrBarType" default="both"/>
617 </xsd:complexType>
618 <xsd:simpleType name="ST_ErrValType">
619   <xsd:restriction base="xsd:string">
620     <xsd:enumeration value="cust"/>
621     <xsd:enumeration value="fixedVal"/>
622     <xsd:enumeration value="percentage"/>
623     <xsd:enumeration value="stdDev"/>
624     <xsd:enumeration value="stdErr"/>
625   </xsd:restriction>
626 </xsd:simpleType>
627 <xsd:complexType name="CT_ErrValType">
628   <xsd:attribute name="val" type="ST_ErrValType" default="fixedVal"/>

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629 </xsd:complexType>
630 <xsd:complexType name="CT_ErrBars">
631   <xsd:sequence>
632     <xsd:element name="errDir" type="CT_ErrDir" minOccurs="0" maxOccurs="1"/>
633     <xsd:element name="errBarType" type="CT_ErrBarType" minOccurs="1" maxOccurs="1"/>
634     <xsd:element name="errValType" type="CT_ErrValType" minOccurs="1" maxOccurs="1"/>
635     <xsd:element name="noEndCap" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
636     <xsd:element name="plus" type="CT_NumDataSource" minOccurs="0" maxOccurs="1"/>
637     <xsd:element name="minus" type="CT_NumDataSource" minOccurs="0" maxOccurs="1"/>
638     <xsd:element name="val" type="CT_Double" minOccurs="0" maxOccurs="1"/>
639     <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="0" maxOccurs="1"/>
640     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
641   </xsd:sequence>
642 </xsd:complexType>
643 <xsd:complexType name="CT_UpDownBar">
644   <xsd:sequence>
645     <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="0" maxOccurs="1"/>
646   </xsd:sequence>
647 </xsd:complexType>
648 <xsd:complexType name="CT_UpDownBars">
649   <xsd:sequence>
650     <xsd:element name="gapWidth" type="CT_GapAmount" minOccurs="0" maxOccurs="1"/>
651     <xsd:element name="upBars" type="CT_UpDownBar" minOccurs="0" maxOccurs="1"/>
652     <xsd:element name="downBars" type="CT_UpDownBar" minOccurs="0" maxOccurs="1"/>
653     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
654   </xsd:sequence>
655 </xsd:complexType>
656 <xsd:group name="EG_SerShared">
657   <xsd:sequence>
658     <xsd:element name="idx" type="CT_UnsignedInt" minOccurs="1" maxOccurs="1"/>
659     <xsd:element name="order" type="CT_UnsignedInt" minOccurs="1" maxOccurs="1"/>
660     <xsd:element name="tx" type="CT_SerTx" minOccurs="0" maxOccurs="1"/>
661     <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="0" maxOccurs="1"/>
662   </xsd:sequence>
663 </xsd:group>
664 <xsd:complexType name="CT_LineSer">
665   <xsd:sequence>
666     <xsd:group ref="EG_SerShared" minOccurs="1" maxOccurs="1"/>
667     <xsd:element name="marker" type="CT_Marker" minOccurs="0" maxOccurs="1"/>
668     <xsd:element name="dPt" type="CT_DPt" minOccurs="0" maxOccurs="unbounded"/>
669     <xsd:element name="dLbls" type="CT_DLbls" minOccurs="0" maxOccurs="1"/>
670     <xsd:element name="trendline" type="CT_Trendline" minOccurs="0" maxOccurs="unbounded"/>
671     <xsd:element name="errBars" type="CT_ErrBars" minOccurs="0" maxOccurs="1"/>
672     <xsd:element name="cat" type="CT_AxDataSource" minOccurs="0" maxOccurs="1"/>
673     <xsd:element name="val" type="CT_NumDataSource" minOccurs="0" maxOccurs="1"/>
674     <xsd:element name="smooth" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
675     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
676   </xsd:sequence>
677 </xsd:complexType>
678 <xsd:complexType name="CT_ScatterSer">
679   <xsd:sequence>
680     <xsd:group ref="EG_SerShared" minOccurs="1" maxOccurs="1"/>
681     <xsd:element name="marker" type="CT_Marker" minOccurs="0" maxOccurs="1"/>

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682     <xsd:element name="dPt" type="CT DPt" minOccurs="0" maxOccurs="unbounded"/>
683     <xsd:element name="dLbls" type="CT DLbls" minOccurs="0" maxOccurs="1"/>
684     <xsd:element name="trendline" type="CT Trendline" minOccurs="0" maxOccurs="unbounded"/>
685     <xsd:element name="errBars" type="CT ErrBars" minOccurs="0" maxOccurs="2"/>
686     <xsd:element name="xVal" type="CT AxDataSource" minOccurs="0" maxOccurs="1"/>
687     <xsd:element name="yVal" type="CT NumDataSource" minOccurs="0" maxOccurs="1"/>
688     <xsd:element name="smooth" type="CT Boolean" minOccurs="0" maxOccurs="1"/>
689     <xsd:element name="extLst" type="CT ExtensionList" minOccurs="0" maxOccurs="1"/>
690   </xsd:sequence>
691 </xsd:complexType>
692 <xsd:complexType name="CT_RadarSer">
693   <xsd:sequence>
694     <xsd:group ref="EG SerShared" minOccurs="1" maxOccurs="1"/>
695     <xsd:element name="marker" type="CT Marker" minOccurs="0" maxOccurs="1"/>
696     <xsd:element name="dPt" type="CT DPt" minOccurs="0" maxOccurs="unbounded"/>
697     <xsd:element name="dLbls" type="CT DLbls" minOccurs="0" maxOccurs="1"/>
698     <xsd:element name="cat" type="CT AxDataSource" minOccurs="0" maxOccurs="1"/>
699     <xsd:element name="val" type="CT NumDataSource" minOccurs="0" maxOccurs="1"/>
700     <xsd:element name="extLst" type="CT ExtensionList" minOccurs="0" maxOccurs="1"/>
701   </xsd:sequence>
702 </xsd:complexType>
703 <xsd:complexType name="CT_BarSer">
704   <xsd:sequence>
705     <xsd:group ref="EG SerShared" minOccurs="1" maxOccurs="1"/>
706     <xsd:element name="invertIfNegative" type="CT Boolean" minOccurs="0" maxOccurs="1"/>
707     <xsd:element name="pictureOptions" type="CT PictureOptions" minOccurs="0" maxOccurs="1"/>
708     <xsd:element name="dPt" type="CT DPt" minOccurs="0" maxOccurs="unbounded"/>
709     <xsd:element name="dLbls" type="CT DLbls" minOccurs="0" maxOccurs="1"/>
710     <xsd:element name="trendline" type="CT Trendline" minOccurs="0" maxOccurs="unbounded"/>
711     <xsd:element name="errBars" type="CT ErrBars" minOccurs="0" maxOccurs="1"/>
712     <xsd:element name="cat" type="CT AxDataSource" minOccurs="0" maxOccurs="1"/>
713     <xsd:element name="val" type="CT NumDataSource" minOccurs="0" maxOccurs="1"/>
714     <xsd:element name="shape" type="CT Shape" minOccurs="0" maxOccurs="1"/>
715     <xsd:element name="extLst" type="CT ExtensionList" minOccurs="0" maxOccurs="1"/>
716   </xsd:sequence>
717 </xsd:complexType>
718 <xsd:complexType name="CT_AreaSer">
719   <xsd:sequence>
720     <xsd:group ref="EG SerShared" minOccurs="1" maxOccurs="1"/>
721     <xsd:element name="pictureOptions" type="CT PictureOptions" minOccurs="0" maxOccurs="1"/>
722     <xsd:element name="dPt" type="CT DPt" minOccurs="0" maxOccurs="unbounded"/>
723     <xsd:element name="dLbls" type="CT DLbls" minOccurs="0" maxOccurs="1"/>
724     <xsd:element name="trendline" type="CT Trendline" minOccurs="0" maxOccurs="unbounded"/>
725     <xsd:element name="errBars" type="CT ErrBars" minOccurs="0" maxOccurs="2"/>
726     <xsd:element name="cat" type="CT AxDataSource" minOccurs="0" maxOccurs="1"/>
727     <xsd:element name="val" type="CT NumDataSource" minOccurs="0" maxOccurs="1"/>
728     <xsd:element name="extLst" type="CT ExtensionList" minOccurs="0" maxOccurs="1"/>
729   </xsd:sequence>
730 </xsd:complexType>
731 <xsd:complexType name="CT_PieSer">
732   <xsd:sequence>
733     <xsd:group ref="EG SerShared" minOccurs="1" maxOccurs="1"/>
734     <xsd:element name="explosion" type="CT UnsignedInt" minOccurs="0" maxOccurs="1"/>

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735     <xsd:element name="dPt" type="CT DPt" minOccurs="0" maxOccurs="unbounded"/>
736     <xsd:element name="dLbls" type="CT DLbls" minOccurs="0" maxOccurs="1"/>
737     <xsd:element name="cat" type="CT AxDataSource" minOccurs="0" maxOccurs="1"/>
738     <xsd:element name="val" type="CT NumDataSource" minOccurs="0" maxOccurs="1"/>
739     <xsd:element name="extLst" type="CT ExtensionList" minOccurs="0" maxOccurs="1"/>
740   </xsd:sequence>
741 </xsd:complexType>
742 <xsd:complexType name="CT_BubbleSer">
743   <xsd:sequence>
744     <xsd:group ref="EG SerShared" minOccurs="1" maxOccurs="1"/>
745     <xsd:element name="invertIfNegative" type="CT Boolean" minOccurs="0" maxOccurs="1"/>
746     <xsd:element name="dPt" type="CT DPt" minOccurs="0" maxOccurs="unbounded"/>
747     <xsd:element name="dLbls" type="CT DLbls" minOccurs="0" maxOccurs="1"/>
748     <xsd:element name="trendline" type="CT Trendline" minOccurs="0" maxOccurs="unbounded"/>
749     <xsd:element name="errBars" type="CT ErrBars" minOccurs="0" maxOccurs="2"/>
750     <xsd:element name="xVal" type="CT AxDataSource" minOccurs="0" maxOccurs="1"/>
751     <xsd:element name="yVal" type="CT NumDataSource" minOccurs="0" maxOccurs="1"/>
752     <xsd:element name="bubbleSize" type="CT NumDataSource" minOccurs="0" maxOccurs="1"/>
753     <xsd:element name="bubble3D" type="CT Boolean" minOccurs="0" maxOccurs="1"/>
754     <xsd:element name="extLst" type="CT ExtensionList" minOccurs="0" maxOccurs="1"/>
755   </xsd:sequence>
756 </xsd:complexType>
757 <xsd:complexType name="CT_SurfaceSer">
758   <xsd:sequence>
759     <xsd:group ref="EG SerShared" minOccurs="1" maxOccurs="1"/>
760     <xsd:element name="cat" type="CT AxDataSource" minOccurs="0" maxOccurs="1"/>
761     <xsd:element name="val" type="CT NumDataSource" minOccurs="0" maxOccurs="1"/>
762     <xsd:element name="extLst" type="CT ExtensionList" minOccurs="0" maxOccurs="1"/>
763   </xsd:sequence>
764 </xsd:complexType>
765 <xsd:simpleType name="ST_Grouping">
766   <xsd:restriction base="xsd:string">
767     <xsd:enumeration value="percentStacked"/>
768     <xsd:enumeration value="standard"/>
769     <xsd:enumeration value="stacked"/>
770   </xsd:restriction>
771 </xsd:simpleType>
772 <xsd:complexType name="CT_Grouping">
773   <xsd:attribute name="val" type="ST Grouping" default="standard"/>
774 </xsd:complexType>
775 <xsd:complexType name="CT_ChartLines">
776   <xsd:sequence>
777     <xsd:element name="spPr" type="a:CT ShapeProperties" minOccurs="0" maxOccurs="1"/>
778   </xsd:sequence>
779 </xsd:complexType>
780 <xsd:group name="EG_LineChartShared">
781   <xsd:sequence>
782     <xsd:element name="grouping" type="CT Grouping" minOccurs="1" maxOccurs="1"/>
783     <xsd:element name="varyColors" type="CT Boolean" minOccurs="0" maxOccurs="1"/>
784     <xsd:element name="ser" type="CT LineSer" minOccurs="0" maxOccurs="unbounded"/>
785     <xsd:element name="dLbls" type="CT DLbls" minOccurs="0" maxOccurs="1"/>
786     <xsd:element name="dropLines" type="CT ChartLines" minOccurs="0" maxOccurs="1"/>
787   </xsd:sequence>

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788 </xsd:group>
789 <xsd:complexType name="CT_LineChart">
790   <xsd:sequence>
791     <xsd:group ref="EG_LineChartShared" minOccurs="1" maxOccurs="1"/>
792     <xsd:element name="hiLowLines" type="CT_ChartLines" minOccurs="0" maxOccurs="1"/>
793     <xsd:element name="upDownBars" type="CT_UpDownBars" minOccurs="0" maxOccurs="1"/>
794     <xsd:element name="marker" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
795     <xsd:element name="smooth" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
796     <xsd:element name="axId" type="CT_UnsignedInt" minOccurs="2" maxOccurs="2"/>
797     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
798   </xsd:sequence>
799 </xsd:complexType>
800 <xsd:complexType name="CT_Line3DChart">
801   <xsd:sequence>
802     <xsd:group ref="EG_LineChartShared" minOccurs="1" maxOccurs="1"/>
803     <xsd:element name="gapDepth" type="CT_GapAmount" minOccurs="0" maxOccurs="1"/>
804     <xsd:element name="axId" type="CT_UnsignedInt" minOccurs="3" maxOccurs="3"/>
805     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
806   </xsd:sequence>
807 </xsd:complexType>
808 <xsd:complexType name="CT_StockChart">
809   <xsd:sequence>
810     <xsd:element name="ser" type="CT_LineSer" minOccurs="3" maxOccurs="4"/>
811     <xsd:element name="dLbls" type="CT_DLbls" minOccurs="0" maxOccurs="1"/>
812     <xsd:element name="dropLines" type="CT_ChartLines" minOccurs="0" maxOccurs="1"/>
813     <xsd:element name="hiLowLines" type="CT_ChartLines" minOccurs="0" maxOccurs="1"/>
814     <xsd:element name="upDownBars" type="CT_UpDownBars" minOccurs="0" maxOccurs="1"/>
815     <xsd:element name="axId" type="CT_UnsignedInt" minOccurs="2" maxOccurs="2"/>
816     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
817   </xsd:sequence>
818 </xsd:complexType>
819 <xsd:simpleType name="ST_ScatterStyle">
820   <xsd:restriction base="xsd:string">
821     <xsd:enumeration value="none"/>
822     <xsd:enumeration value="line"/>
823     <xsd:enumeration value="lineMarker"/>
824     <xsd:enumeration value="marker"/>
825     <xsd:enumeration value="smooth"/>
826     <xsd:enumeration value="smoothMarker"/>
827   </xsd:restriction>
828 </xsd:simpleType>
829 <xsd:complexType name="CT_ScatterStyle">
830   <xsd:attribute name="val" type="ST_ScatterStyle" default="marker"/>
831 </xsd:complexType>
832 <xsd:complexType name="CT_ScatterChart">
833   <xsd:sequence>
834     <xsd:element name="scatterStyle" type="CT_ScatterStyle" minOccurs="1" maxOccurs="1"/>
835     <xsd:element name="varyColors" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
836     <xsd:element name="ser" type="CT_ScatterSer" minOccurs="0" maxOccurs="unbounded"/>
837     <xsd:element name="dLbls" type="CT_DLbls" minOccurs="0" maxOccurs="1"/>
838     <xsd:element name="axId" type="CT_UnsignedInt" minOccurs="2" maxOccurs="2"/>
839     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
840   </xsd:sequence>

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841 </xsd:complexType>
842 <xsd:simpleType name="ST_RadarStyle">
843   <xsd:restriction base="xsd:string">
844     <xsd:enumeration value="standard"/>
845     <xsd:enumeration value="marker"/>
846     <xsd:enumeration value="filled"/>
847   </xsd:restriction>
848 </xsd:simpleType>
849 <xsd:complexType name="CT_RadarStyle">
850   <xsd:attribute name="val" type="ST_RadarStyle" default="standard"/>
851 </xsd:complexType>
852 <xsd:complexType name="CT_RadarChart">
853   <xsd:sequence>
854     <xsd:element name="radarStyle" type="CT_RadarStyle" minOccurs="1" maxOccurs="1"/>
855     <xsd:element name="varyColors" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
856     <xsd:element name="ser" type="CT_RadarSer" minOccurs="0" maxOccurs="unbounded"/>
857     <xsd:element name="dLbls" type="CT_DLbls" minOccurs="0" maxOccurs="1"/>
858     <xsd:element name="axId" type="CT_UnsignedInt" minOccurs="2" maxOccurs="2"/>
859     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
860   </xsd:sequence>
861 </xsd:complexType>
862 <xsd:simpleType name="ST_BarGrouping">
863   <xsd:restriction base="xsd:string">
864     <xsd:enumeration value="percentStacked"/>
865     <xsd:enumeration value="clustered"/>
866     <xsd:enumeration value="standard"/>
867     <xsd:enumeration value="stacked"/>
868   </xsd:restriction>
869 </xsd:simpleType>
870 <xsd:complexType name="CT_BarGrouping">
871   <xsd:attribute name="val" type="ST_BarGrouping" default="clustered"/>
872 </xsd:complexType>
873 <xsd:simpleType name="ST_BarDir">
874   <xsd:restriction base="xsd:string">
875     <xsd:enumeration value="bar"/>
876     <xsd:enumeration value="col"/>
877   </xsd:restriction>
878 </xsd:simpleType>
879 <xsd:complexType name="CT_BarDir">
880   <xsd:attribute name="val" type="ST_BarDir" default="col"/>
881 </xsd:complexType>
882 <xsd:simpleType name="ST_Shape">
883   <xsd:restriction base="xsd:string">
884     <xsd:enumeration value="cone"/>
885     <xsd:enumeration value="coneToMax"/>
886     <xsd:enumeration value="box"/>
887     <xsd:enumeration value="cylinder"/>
888     <xsd:enumeration value="pyramid"/>
889     <xsd:enumeration value="pyramidToMax"/>
890   </xsd:restriction>
891 </xsd:simpleType>
892 <xsd:complexType name="CT_Shape">
893   <xsd:attribute name="val" type="ST_Shape" default="box"/>

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894 </xsd:complexType>
895 <xsd:group name="EG_BarChartShared">
896   <xsd:sequence>
897     <xsd:element name="barDir" type="CT_BarDir" minOccurs="1" maxOccurs="1"/>
898     <xsd:element name="grouping" type="CT_BarGrouping" minOccurs="0" maxOccurs="1"/>
899     <xsd:element name="varyColors" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
900     <xsd:element name="ser" type="CT_BarSer" minOccurs="0" maxOccurs="unbounded"/>
901     <xsd:element name="dLbls" type="CT_DLbls" minOccurs="0" maxOccurs="1"/>
902   </xsd:sequence>
903 </xsd:group>
904 <xsd:complexType name="CT_BarChart">
905   <xsd:sequence>
906     <xsd:group ref="EG_BarChartShared" minOccurs="1" maxOccurs="1"/>
907     <xsd:element name="gapWidth" type="CT_GapAmount" minOccurs="0" maxOccurs="1"/>
908     <xsd:element name="overlap" type="CT_Overlap" minOccurs="0" maxOccurs="1"/>
909     <xsd:element name="serLines" type="CT_ChartLines" minOccurs="0" maxOccurs="unbounded"/>
910     <xsd:element name="axId" type="CT_UnsignedInt" minOccurs="2" maxOccurs="2"/>
911     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
912   </xsd:sequence>
913 </xsd:complexType>
914 <xsd:complexType name="CT_Bar3DChart">
915   <xsd:sequence>
916     <xsd:group ref="EG_BarChartShared" minOccurs="1" maxOccurs="1"/>
917     <xsd:element name="gapWidth" type="CT_GapAmount" minOccurs="0" maxOccurs="1"/>
918     <xsd:element name="gapDepth" type="CT_GapAmount" minOccurs="0" maxOccurs="1"/>
919     <xsd:element name="shape" type="CT_Shape" minOccurs="0" maxOccurs="1"/>
920     <xsd:element name="axId" type="CT_UnsignedInt" minOccurs="2" maxOccurs="3"/>
921     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
922   </xsd:sequence>
923 </xsd:complexType>
924 <xsd:group name="EG_AreaChartShared">
925   <xsd:sequence>
926     <xsd:element name="grouping" type="CT_Grouping" minOccurs="0" maxOccurs="1"/>
927     <xsd:element name="varyColors" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
928     <xsd:element name="ser" type="CT_AreaSer" minOccurs="0" maxOccurs="unbounded"/>
929     <xsd:element name="dLbls" type="CT_DLbls" minOccurs="0" maxOccurs="1"/>
930     <xsd:element name="dropLines" type="CT_ChartLines" minOccurs="0" maxOccurs="1"/>
931   </xsd:sequence>
932 </xsd:group>
933 <xsd:complexType name="CT_AreaChart">
934   <xsd:sequence>
935     <xsd:group ref="EG_AreaChartShared" minOccurs="1" maxOccurs="1"/>
936     <xsd:element name="axId" type="CT_UnsignedInt" minOccurs="2" maxOccurs="2"/>
937     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
938   </xsd:sequence>
939 </xsd:complexType>
940 <xsd:complexType name="CT_Area3DChart">
941   <xsd:sequence>
942     <xsd:group ref="EG_AreaChartShared" minOccurs="1" maxOccurs="1"/>
943     <xsd:element name="gapDepth" type="CT_GapAmount" minOccurs="0" maxOccurs="1"/>
944     <xsd:element name="axId" type="CT_UnsignedInt" minOccurs="2" maxOccurs="3"/>
945     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
946   </xsd:sequence>

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947 </xsd:complexType>
948 <xsd:group name="EG_PieChartShared">
949   <xsd:sequence>
950     <xsd:element name="varyColors" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
951     <xsd:element name="ser" type="CT_PieSer" minOccurs="0" maxOccurs="unbounded"/>
952     <xsd:element name="dLbls" type="CT_DLbls" minOccurs="0" maxOccurs="1"/>
953   </xsd:sequence>
954 </xsd:group>
955 <xsd:complexType name="CT_PieChart">
956   <xsd:sequence>
957     <xsd:group ref="EG_PieChartShared" minOccurs="1" maxOccurs="1"/>
958     <xsd:element name="firstSliceAng" type="CT_FirstSliceAng" minOccurs="0" maxOccurs="1"/>
959     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
960   </xsd:sequence>
961 </xsd:complexType>
962 <xsd:complexType name="CT_Pie3DChart">
963   <xsd:sequence>
964     <xsd:group ref="EG_PieChartShared" minOccurs="1" maxOccurs="1"/>
965     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
966   </xsd:sequence>
967 </xsd:complexType>
968 <xsd:complexType name="CT_DoughnutChart">
969   <xsd:sequence>
970     <xsd:group ref="EG_PieChartShared" minOccurs="1" maxOccurs="1"/>
971     <xsd:element name="firstSliceAng" type="CT_FirstSliceAng" minOccurs="0" maxOccurs="1"/>
972     <xsd:element name="holeSize" type="CT_HoleSize" minOccurs="0" maxOccurs="1"/>
973     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
974   </xsd:sequence>
975 </xsd:complexType>
976 <xsd:simpleType name="ST_OfPieType">
977   <xsd:restriction base="xsd:string">
978     <xsd:enumeration value="pie"/>
979     <xsd:enumeration value="bar"/>
980   </xsd:restriction>
981 </xsd:simpleType>
982 <xsd:complexType name="CT_OfPieType">
983   <xsd:attribute name="val" type="ST_OfPieType" default="pie"/>
984 </xsd:complexType>
985 <xsd:complexType name="CT_OfPieChart">
986   <xsd:sequence>
987     <xsd:element name="ofPieType" type="CT_OfPieType" minOccurs="1" maxOccurs="1"/>
988     <xsd:group ref="EG_PieChartShared" minOccurs="1" maxOccurs="1"/>
989     <xsd:element name="gapWidth" type="CT_GapAmount" minOccurs="0" maxOccurs="1"/>
990     <xsd:element name="splitType" type="CT_SplitType" minOccurs="0" maxOccurs="1"/>
991     <xsd:element name="splitPos" type="CT_Double" minOccurs="0" maxOccurs="1"/>
992     <xsd:element name="custSplit" type="CT_CustSplit" minOccurs="0" maxOccurs="1"/>
993     <xsd:element name="secondPieSize" type="CT_SecondPieSize" minOccurs="0" maxOccurs="1"/>
994     <xsd:element name="serLines" type="CT_ChartLines" minOccurs="0" maxOccurs="unbounded"/>
995     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
996   </xsd:sequence>
997 </xsd:complexType>
998 <xsd:complexType name="CT_BubbleChart">
999   <xsd:sequence>

```

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1000     <xsd:element name="varyColors" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1001     <xsd:element name="ser" type="CT_BubbleSer" minOccurs="0" maxOccurs="unbounded"/>
1002     <xsd:element name="dLbls" type="CT_DLbls" minOccurs="0" maxOccurs="1"/>
1003     <xsd:element name="bubble3D" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1004     <xsd:element name="bubbleScale" type="CT_BubbleScale" minOccurs="0" maxOccurs="1"/>
1005     <xsd:element name="showNegBubbles" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1006     <xsd:element name="sizeRepresents" type="CT_SizeRepresents" minOccurs="0" maxOccurs="1"/>
1007     <xsd:element name="axId" type="CT_UnsignedInt" minOccurs="2" maxOccurs="2"/>
1008     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1009   </xsd:sequence>
1010 </xsd:complexType>
1011 <xsd:complexType name="CT_BandFmt">
1012   <xsd:sequence>
1013     <xsd:element name="idx" type="CT_UnsignedInt" minOccurs="1" maxOccurs="1"/>
1014     <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="0" maxOccurs="1"/>
1015   </xsd:sequence>
1016 </xsd:complexType>
1017 <xsd:complexType name="CT_BandFmts">
1018   <xsd:sequence>
1019     <xsd:element name="bandFmt" type="CT_BandFmt" minOccurs="0" maxOccurs="unbounded"/>
1020   </xsd:sequence>
1021 </xsd:complexType>
1022 <xsd:group name="EG_SurfaceChartShared">
1023   <xsd:sequence>
1024     <xsd:element name="wireframe" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1025     <xsd:element name="ser" type="CT_SurfaceSer" minOccurs="0" maxOccurs="unbounded"/>
1026     <xsd:element name="bandFmts" type="CT_BandFmts" minOccurs="0" maxOccurs="1"/>
1027   </xsd:sequence>
1028 </xsd:group>
1029 <xsd:complexType name="CT_SurfaceChart">
1030   <xsd:sequence>
1031     <xsd:group ref="EG_SurfaceChartShared" minOccurs="1" maxOccurs="1"/>
1032     <xsd:element name="axId" type="CT_UnsignedInt" minOccurs="2" maxOccurs="3"/>
1033     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1034   </xsd:sequence>
1035 </xsd:complexType>
1036 <xsd:complexType name="CT_Surface3DChart">
1037   <xsd:sequence>
1038     <xsd:group ref="EG_SurfaceChartShared" minOccurs="1" maxOccurs="1"/>
1039     <xsd:element name="axId" type="CT_UnsignedInt" minOccurs="3" maxOccurs="3"/>
1040     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1041   </xsd:sequence>
1042 </xsd:complexType>
1043 <xsd:simpleType name="ST_AxPos">
1044   <xsd:restriction base="xsd:string">
1045     <xsd:enumeration value="b"/>
1046     <xsd:enumeration value="l"/>
1047     <xsd:enumeration value="r"/>
1048     <xsd:enumeration value="t"/>
1049   </xsd:restriction>
1050 </xsd:simpleType>
1051 <xsd:complexType name="CT_AxPos">
1052   <xsd:attribute name="val" type="ST_AxPos" use="required"/>

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1053 </xsd:complexType>
1054 <xsd:simpleType name="ST_Crosses">
1055   <xsd:restriction base="xsd:string">
1056     <xsd:enumeration value="autoZero"/>
1057     <xsd:enumeration value="max"/>
1058     <xsd:enumeration value="min"/>
1059   </xsd:restriction>
1060 </xsd:simpleType>
1061 <xsd:complexType name="CT_Crosses">
1062   <xsd:attribute name="val" type="ST_Crosses" use="required"/>
1063 </xsd:complexType>
1064 <xsd:simpleType name="ST_CrossBetween">
1065   <xsd:restriction base="xsd:string">
1066     <xsd:enumeration value="between"/>
1067     <xsd:enumeration value="midCat"/>
1068   </xsd:restriction>
1069 </xsd:simpleType>
1070 <xsd:complexType name="CT_CrossBetween">
1071   <xsd:attribute name="val" type="ST_CrossBetween" use="required"/>
1072 </xsd:complexType>
1073 <xsd:simpleType name="ST_TickMark">
1074   <xsd:restriction base="xsd:string">
1075     <xsd:enumeration value="cross"/>
1076     <xsd:enumeration value="in"/>
1077     <xsd:enumeration value="none"/>
1078     <xsd:enumeration value="out"/>
1079   </xsd:restriction>
1080 </xsd:simpleType>
1081 <xsd:complexType name="CT_TickMark">
1082   <xsd:attribute name="val" type="ST_TickMark" default="cross"/>
1083 </xsd:complexType>
1084 <xsd:simpleType name="ST_TickLblPos">
1085   <xsd:restriction base="xsd:string">
1086     <xsd:enumeration value="high"/>
1087     <xsd:enumeration value="low"/>
1088     <xsd:enumeration value="nextTo"/>
1089     <xsd:enumeration value="none"/>
1090   </xsd:restriction>
1091 </xsd:simpleType>
1092 <xsd:complexType name="CT_TickLblPos">
1093   <xsd:attribute name="val" type="ST_TickLblPos" default="nextTo"/>
1094 </xsd:complexType>
1095 <xsd:simpleType name="ST_Skip">
1096   <xsd:restriction base="xsd:unsignedInt">
1097     <xsd:minInclusive value="1"/>
1098   </xsd:restriction>
1099 </xsd:simpleType>
1100 <xsd:complexType name="CT_Skip">
1101   <xsd:attribute name="val" type="ST_Skip" use="required"/>
1102 </xsd:complexType>
1103 <xsd:simpleType name="ST_TimeUnit">
1104   <xsd:restriction base="xsd:string">
1105     <xsd:enumeration value="days"/>

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1106         <xsd:enumeration value="months"/>
1107         <xsd:enumeration value="years"/>
1108     </xsd:restriction>
1109 </xsd:simpleType>
1110 <xsd:complexType name="CT_TimeUnit">
1111     <xsd:attribute name="val" type="ST_TimeUnit" default="days"/>
1112 </xsd:complexType>
1113 <xsd:simpleType name="ST_AxisUnit">
1114     <xsd:restriction base="xsd:double">
1115         <xsd:minExclusive value="0"/>
1116     </xsd:restriction>
1117 </xsd:simpleType>
1118 <xsd:complexType name="CT_AxisUnit">
1119     <xsd:attribute name="val" type="ST_AxisUnit" use="required"/>
1120 </xsd:complexType>
1121 <xsd:simpleType name="ST_BuiltInUnit">
1122     <xsd:restriction base="xsd:string">
1123         <xsd:enumeration value="hundreds"/>
1124         <xsd:enumeration value="thousands"/>
1125         <xsd:enumeration value="tenThousands"/>
1126         <xsd:enumeration value="hundredThousands"/>
1127         <xsd:enumeration value="millions"/>
1128         <xsd:enumeration value="tenMillions"/>
1129         <xsd:enumeration value="hundredMillions"/>
1130         <xsd:enumeration value="billions"/>
1131         <xsd:enumeration value="trillions"/>
1132     </xsd:restriction>
1133 </xsd:simpleType>
1134 <xsd:complexType name="CT_BuiltInUnit">
1135     <xsd:attribute name="val" type="ST_BuiltInUnit" default="thousands"/>
1136 </xsd:complexType>
1137 <xsd:simpleType name="ST_PictureFormat">
1138     <xsd:restriction base="xsd:string">
1139         <xsd:enumeration value="stretch"/>
1140         <xsd:enumeration value="stack"/>
1141         <xsd:enumeration value="stackScale"/>
1142     </xsd:restriction>
1143 </xsd:simpleType>
1144 <xsd:complexType name="CT_PictureFormat">
1145     <xsd:attribute name="val" type="ST_PictureFormat" use="required"/>
1146 </xsd:complexType>
1147 <xsd:simpleType name="ST_PictureStackUnit">
1148     <xsd:restriction base="xsd:double">
1149         <xsd:minExclusive value="0"/>
1150     </xsd:restriction>
1151 </xsd:simpleType>
1152 <xsd:complexType name="CT_PictureStackUnit">
1153     <xsd:attribute name="val" type="ST_PictureStackUnit" use="required"/>
1154 </xsd:complexType>
1155 <xsd:complexType name="CT_PictureOptions">
1156     <xsd:sequence>
1157         <xsd:element name="applyToFront" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1158         <xsd:element name="applyToSides" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>

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1159     <xsd:element name="applyToEnd" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1160     <xsd:element name="pictureFormat" type="CT_PictureFormat" minOccurs="0" maxOccurs="1"/>
1161     <xsd:element name="pictureStackUnit" type="CT_PictureStackUnit" minOccurs="0"
1162         maxOccurs="1"/>
1163     </xsd:sequence>
1164 </xsd:complexType>
1165 <xsd:complexType name="CT_DispUnitsLbl">
1166     <xsd:sequence>
1167         <xsd:element name="layout" type="CT_Layout" minOccurs="0" maxOccurs="1"/>
1168         <xsd:element name="tx" type="CT_Tx" minOccurs="0" maxOccurs="1"/>
1169         <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="0" maxOccurs="1"/>
1170         <xsd:element name="txPr" type="a:CT_TextBody" minOccurs="0" maxOccurs="1"/>
1171     </xsd:sequence>
1172 </xsd:complexType>
1173 <xsd:complexType name="CT_DispUnits">
1174     <xsd:sequence>
1175         <xsd:choice>
1176             <xsd:element name="custUnit" type="CT_Double" minOccurs="1" maxOccurs="1"/>
1177             <xsd:element name="builtInUnit" type="CT_BuiltInUnit" minOccurs="1" maxOccurs="1"/>
1178         </xsd:choice>
1179         <xsd:element name="dispUnitsLbl" type="CT_DispUnitsLbl" minOccurs="0" maxOccurs="1"/>
1180         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1181     </xsd:sequence>
1182 </xsd:complexType>
1183 <xsd:simpleType name="ST_Orientation">
1184     <xsd:restriction base="xsd:string">
1185         <xsd:enumeration value="maxMin"/>
1186         <xsd:enumeration value="minMax"/>
1187     </xsd:restriction>
1188 </xsd:simpleType>
1189 <xsd:complexType name="CT_Orientation">
1190     <xsd:attribute name="val" type="ST_Orientation" default="minMax"/>
1191 </xsd:complexType>
1192 <xsd:simpleType name="ST_LogBase">
1193     <xsd:restriction base="xsd:double">
1194         <xsd:minInclusive value="2"/>
1195         <xsd:maxInclusive value="1000"/>
1196     </xsd:restriction>
1197 </xsd:simpleType>
1198 <xsd:complexType name="CT_LogBase">
1199     <xsd:attribute name="val" type="ST_LogBase" use="required"/>
1200 </xsd:complexType>
1201 <xsd:complexType name="CT_Scaling">
1202     <xsd:sequence>
1203         <xsd:element name="logBase" type="CT_LogBase" minOccurs="0" maxOccurs="1"/>
1204         <xsd:element name="orientation" type="CT_Orientation" minOccurs="0" maxOccurs="1"/>
1205         <xsd:element name="max" type="CT_Double" minOccurs="0" maxOccurs="1"/>
1206         <xsd:element name="min" type="CT_Double" minOccurs="0" maxOccurs="1"/>
1207         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1208     </xsd:sequence>
1209 </xsd:complexType>
1210 <xsd:simpleType name="ST_LblOffset">
1211     <xsd:union memberTypes="ST_LblOffsetPercent ST_LblOffsetUShort"/>

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1212 </xsd:simpleType>
1213 <xsd:simpleType name="ST_LblOffsetPercent">
1214   <xsd:restriction base="xsd:string">
1215     <xsd:pattern value="0*([0-9])|([1-9][0-9])|([1-9][0-9][0-9])|1000)%"/>
1216   </xsd:restriction>
1217 </xsd:simpleType>
1218 <xsd:simpleType name="ST_LblOffsetUShort">
1219   <xsd:restriction base="xsd:unsignedShort">
1220     <xsd:minInclusive value="0"/>
1221     <xsd:maxInclusive value="1000"/>
1222   </xsd:restriction>
1223 </xsd:simpleType>
1224 <xsd:complexType name="CT_LblOffset">
1225   <xsd:attribute name="val" type="ST_LblOffset" default="100%"/>
1226 </xsd:complexType>
1227 <xsd:group name="EG_AxShared">
1228   <xsd:sequence>
1229     <xsd:element name="axId" type="CT_UnsignedInt" minOccurs="1" maxOccurs="1"/>
1230     <xsd:element name="scaling" type="CT_Scaling" minOccurs="1" maxOccurs="1"/>
1231     <xsd:element name="delete" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1232     <xsd:element name="axPos" type="CT_AxPos" minOccurs="1" maxOccurs="1"/>
1233     <xsd:element name="majorGridlines" type="CT_ChartLines" minOccurs="0" maxOccurs="1"/>
1234     <xsd:element name="minorGridlines" type="CT_ChartLines" minOccurs="0" maxOccurs="1"/>
1235     <xsd:element name="title" type="CT_Title" minOccurs="0" maxOccurs="1"/>
1236     <xsd:element name="numFmt" type="CT_NumFmt" minOccurs="0" maxOccurs="1"/>
1237     <xsd:element name="majorTickMark" type="CT_TickMark" minOccurs="0" maxOccurs="1"/>
1238     <xsd:element name="minorTickMark" type="CT_TickMark" minOccurs="0" maxOccurs="1"/>
1239     <xsd:element name="tickLblPos" type="CT_TickLblPos" minOccurs="0" maxOccurs="1"/>
1240     <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="0" maxOccurs="1"/>
1241     <xsd:element name="txPr" type="a:CT_TextBody" minOccurs="0" maxOccurs="1"/>
1242     <xsd:element name="crossAx" type="CT_UnsignedInt" minOccurs="1" maxOccurs="1"/>
1243     <xsd:choice minOccurs="0" maxOccurs="1">
1244       <xsd:element name="crosses" type="CT_Crosses" minOccurs="1" maxOccurs="1"/>
1245       <xsd:element name="crossesAt" type="CT_Double" minOccurs="1" maxOccurs="1"/>
1246     </xsd:choice>
1247   </xsd:sequence>
1248 </xsd:group>
1249 <xsd:complexType name="CT_CatAx">
1250   <xsd:sequence>
1251     <xsd:group ref="EG_AxShared" minOccurs="1" maxOccurs="1"/>
1252     <xsd:element name="auto" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1253     <xsd:element name="lblAlign" type="CT_LblAlign" minOccurs="0" maxOccurs="1"/>
1254     <xsd:element name="lblOffset" type="CT_LblOffset" minOccurs="0" maxOccurs="1"/>
1255     <xsd:element name="tickLblSkip" type="CT_Skip" minOccurs="0" maxOccurs="1"/>
1256     <xsd:element name="tickMarkSkip" type="CT_Skip" minOccurs="0" maxOccurs="1"/>
1257     <xsd:element name="noMultiLvlLbl" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1258     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1259   </xsd:sequence>
1260 </xsd:complexType>
1261 <xsd:complexType name="CT_DateAx">
1262   <xsd:sequence>
1263     <xsd:group ref="EG_AxShared" minOccurs="1" maxOccurs="1"/>
1264     <xsd:element name="auto" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>

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1265     <xsd:element name="lblOffset" type="CT_LblOffset" minOccurs="0" maxOccurs="1"/>
1266     <xsd:element name="baseTimeUnit" type="CT_TimeUnit" minOccurs="0" maxOccurs="1"/>
1267     <xsd:element name="majorUnit" type="CT_AxisUnit" minOccurs="0" maxOccurs="1"/>
1268     <xsd:element name="majorTimeUnit" type="CT_TimeUnit" minOccurs="0" maxOccurs="1"/>
1269     <xsd:element name="minorUnit" type="CT_AxisUnit" minOccurs="0" maxOccurs="1"/>
1270     <xsd:element name="minorTimeUnit" type="CT_TimeUnit" minOccurs="0" maxOccurs="1"/>
1271     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1272   </xsd:sequence>
1273 </xsd:complexType>
1274 <xsd:complexType name="CT_SerAx">
1275   <xsd:sequence>
1276     <xsd:group ref="EG_AxShared" minOccurs="1" maxOccurs="1"/>
1277     <xsd:element name="tickLblSkip" type="CT_Skip" minOccurs="0" maxOccurs="1"/>
1278     <xsd:element name="tickMarkSkip" type="CT_Skip" minOccurs="0" maxOccurs="1"/>
1279     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1280   </xsd:sequence>
1281 </xsd:complexType>
1282 <xsd:complexType name="CT_ValAx">
1283   <xsd:sequence>
1284     <xsd:group ref="EG_AxShared" minOccurs="1" maxOccurs="1"/>
1285     <xsd:element name="crossBetween" type="CT_CrossBetween" minOccurs="0" maxOccurs="1"/>
1286     <xsd:element name="majorUnit" type="CT_AxisUnit" minOccurs="0" maxOccurs="1"/>
1287     <xsd:element name="minorUnit" type="CT_AxisUnit" minOccurs="0" maxOccurs="1"/>
1288     <xsd:element name="dispUnits" type="CT_DispUnits" minOccurs="0" maxOccurs="1"/>
1289     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1290   </xsd:sequence>
1291 </xsd:complexType>
1292 <xsd:complexType name="CT_PlotArea">
1293   <xsd:sequence>
1294     <xsd:element name="layout" type="CT_Layout" minOccurs="0" maxOccurs="1"/>
1295     <xsd:choice minOccurs="1" maxOccurs="unbounded">
1296       <xsd:element name="areaChart" type="CT_AreaChart" minOccurs="1" maxOccurs="1"/>
1297       <xsd:element name="area3DChart" type="CT_Area3DChart" minOccurs="1" maxOccurs="1"/>
1298       <xsd:element name="lineChart" type="CT_LineChart" minOccurs="1" maxOccurs="1"/>
1299       <xsd:element name="line3DChart" type="CT_Line3DChart" minOccurs="1" maxOccurs="1"/>
1300       <xsd:element name="stockChart" type="CT_StockChart" minOccurs="1" maxOccurs="1"/>
1301       <xsd:element name="radarChart" type="CT_RadarChart" minOccurs="1" maxOccurs="1"/>
1302       <xsd:element name="scatterChart" type="CT_ScatterChart" minOccurs="1" maxOccurs="1"/>
1303       <xsd:element name="pieChart" type="CT_PieChart" minOccurs="1" maxOccurs="1"/>
1304       <xsd:element name="pie3DChart" type="CT_Pie3DChart" minOccurs="1" maxOccurs="1"/>
1305       <xsd:element name="doughnutChart" type="CT_DoughnutChart" minOccurs="1" maxOccurs="1"/>
1306       <xsd:element name="barChart" type="CT_BarChart" minOccurs="1" maxOccurs="1"/>
1307       <xsd:element name="bar3DChart" type="CT_Bar3DChart" minOccurs="1" maxOccurs="1"/>
1308       <xsd:element name="ofPieChart" type="CT_OfPieChart" minOccurs="1" maxOccurs="1"/>
1309       <xsd:element name="surfaceChart" type="CT_SurfaceChart" minOccurs="1" maxOccurs="1"/>
1310       <xsd:element name="surface3DChart" type="CT_Surface3DChart" minOccurs="1"
1311         maxOccurs="1"/>
1312       <xsd:element name="bubbleChart" type="CT_BubbleChart" minOccurs="1" maxOccurs="1"/>
1313     </xsd:choice>
1314     <xsd:choice minOccurs="0" maxOccurs="unbounded">
1315       <xsd:element name="valAx" type="CT_ValAx" minOccurs="1" maxOccurs="1"/>
1316       <xsd:element name="catAx" type="CT_CatAx" minOccurs="1" maxOccurs="1"/>
1317       <xsd:element name="dateAx" type="CT_DateAx" minOccurs="1" maxOccurs="1"/>

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1318     <xsd:element name="serAx" type="CT_SerAx" minOccurs="1" maxOccurs="1"/>
1319   </xsd:choice>
1320   <xsd:element name="dTable" type="CT_DTable" minOccurs="0" maxOccurs="1"/>
1321   <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="0" maxOccurs="1"/>
1322   <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1323 </xsd:sequence>
1324 </xsd:complexType>
1325 <xsd:complexType name="CT_PivotFmt">
1326   <xsd:sequence>
1327     <xsd:element name="idx" type="CT_UnsignedInt" minOccurs="1" maxOccurs="1"/>
1328     <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="0" maxOccurs="1"/>
1329     <xsd:element name="txPr" type="a:CT_TextBody" minOccurs="0" maxOccurs="1"/>
1330     <xsd:element name="marker" type="CT_Marker" minOccurs="0" maxOccurs="1"/>
1331     <xsd:element name="dLbl" type="CT_DLbl" minOccurs="0" maxOccurs="1"/>
1332     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1333   </xsd:sequence>
1334 </xsd:complexType>
1335 <xsd:complexType name="CT_PivotFmts">
1336   <xsd:sequence>
1337     <xsd:element name="pivotFmt" type="CT_PivotFmt" minOccurs="0" maxOccurs="unbounded"/>
1338   </xsd:sequence>
1339 </xsd:complexType>
1340 <xsd:simpleType name="ST_LegendPos">
1341   <xsd:restriction base="xsd:string">
1342     <xsd:enumeration value="b"/>
1343     <xsd:enumeration value="tr"/>
1344     <xsd:enumeration value="l"/>
1345     <xsd:enumeration value="r"/>
1346     <xsd:enumeration value="t"/>
1347   </xsd:restriction>
1348 </xsd:simpleType>
1349 <xsd:complexType name="CT_LegendPos">
1350   <xsd:attribute name="val" type="ST_LegendPos" default="r"/>
1351 </xsd:complexType>
1352 <xsd:group name="EG_LegendEntryData">
1353   <xsd:sequence>
1354     <xsd:element name="txPr" type="a:CT_TextBody" minOccurs="0" maxOccurs="1"/>
1355   </xsd:sequence>
1356 </xsd:group>
1357 <xsd:complexType name="CT_LegendEntry">
1358   <xsd:sequence>
1359     <xsd:element name="idx" type="CT_UnsignedInt" minOccurs="1" maxOccurs="1"/>
1360     <xsd:choice>
1361       <xsd:element name="delete" type="CT_Boolean" minOccurs="1" maxOccurs="1"/>
1362       <xsd:group ref="EG_LegendEntryData" minOccurs="1" maxOccurs="1"/>
1363     </xsd:choice>
1364     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1365   </xsd:sequence>
1366 </xsd:complexType>
1367 <xsd:complexType name="CT_Legend">
1368   <xsd:sequence>
1369     <xsd:element name="legendPos" type="CT_LegendPos" minOccurs="0" maxOccurs="1"/>

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1370     <xsd:element name="legendEntry" type="CT_LegendEntry" minOccurs="0"
1371         maxOccurs="unbounded"/>
1372     <xsd:element name="layout" type="CT_Layout" minOccurs="0" maxOccurs="1"/>
1373     <xsd:element name="overlay" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1374     <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="0" maxOccurs="1"/>
1375     <xsd:element name="txPr" type="a:CT_TextBody" minOccurs="0" maxOccurs="1"/>
1376     <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1377 </xsd:sequence>
1378 </xsd:complexType>
1379 <xsd:simpleType name="ST_DisbBlanksAs">
1380     <xsd:restriction base="xsd:string">
1381         <xsd:enumeration value="span"/>
1382         <xsd:enumeration value="gap"/>
1383         <xsd:enumeration value="zero"/>
1384     </xsd:restriction>
1385 </xsd:simpleType>
1386 <xsd:complexType name="CT_DisbBlanksAs">
1387     <xsd:attribute name="val" type="ST_DisbBlanksAs" default="zero"/>
1388 </xsd:complexType>
1389 <xsd:complexType name="CT_Chart">
1390     <xsd:sequence>
1391         <xsd:element name="title" type="CT_Title" minOccurs="0" maxOccurs="1"/>
1392         <xsd:element name="autoTitleDeleted" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1393         <xsd:element name="pivotFmts" type="CT_PivotFmts" minOccurs="0" maxOccurs="1"/>
1394         <xsd:element name="view3D" type="CT_View3D" minOccurs="0" maxOccurs="1"/>
1395         <xsd:element name="floor" type="CT_Surface" minOccurs="0" maxOccurs="1"/>
1396         <xsd:element name="sideWall" type="CT_Surface" minOccurs="0" maxOccurs="1"/>
1397         <xsd:element name="backWall" type="CT_Surface" minOccurs="0" maxOccurs="1"/>
1398         <xsd:element name="plotArea" type="CT_PlotArea" minOccurs="1" maxOccurs="1"/>
1399         <xsd:element name="legend" type="CT_Legend" minOccurs="0" maxOccurs="1"/>
1400         <xsd:element name="plotVisOnly" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1401         <xsd:element name="disbBlanksAs" type="CT_DisbBlanksAs" minOccurs="0" maxOccurs="1"/>
1402         <xsd:element name="showDLblsOverMax" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1403         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1404     </xsd:sequence>
1405 </xsd:complexType>
1406 <xsd:simpleType name="ST_Style">
1407     <xsd:restriction base="xsd:unsignedByte">
1408         <xsd:minInclusive value="1"/>
1409         <xsd:maxInclusive value="48"/>
1410     </xsd:restriction>
1411 </xsd:simpleType>
1412 <xsd:complexType name="CT_Style">
1413     <xsd:attribute name="val" type="ST_Style" use="required"/>
1414 </xsd:complexType>
1415 <xsd:complexType name="CT_PivotSource">
1416     <xsd:sequence>
1417         <xsd:element name="name" type="s:ST_Xstring" minOccurs="1" maxOccurs="1"/>
1418         <xsd:element name="fmtId" type="CT_UnsignedInt" minOccurs="1" maxOccurs="1"/>
1419         <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="unbounded"/>
1420     </xsd:sequence>
1421 </xsd:complexType>
1422 <xsd:complexType name="CT_Protection">

```

```

1423     <xsd:sequence>
1424         <xsd:element name="chartObject" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1425         <xsd:element name="data" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1426         <xsd:element name="formatting" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1427         <xsd:element name="selection" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1428         <xsd:element name="userInterface" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1429     </xsd:sequence>
1430 </xsd:complexType>
1431 <xsd:complexType name="CT_HeaderFooter">
1432     <xsd:sequence>
1433         <xsd:element name="oddHeader" type="s:ST_Xstring" minOccurs="0" maxOccurs="1"/>
1434         <xsd:element name="oddFooter" type="s:ST_Xstring" minOccurs="0" maxOccurs="1"/>
1435         <xsd:element name="evenHeader" type="s:ST_Xstring" minOccurs="0" maxOccurs="1"/>
1436         <xsd:element name="evenFooter" type="s:ST_Xstring" minOccurs="0" maxOccurs="1"/>
1437         <xsd:element name="firstHeader" type="s:ST_Xstring" minOccurs="0" maxOccurs="1"/>
1438         <xsd:element name="firstFooter" type="s:ST_Xstring" minOccurs="0" maxOccurs="1"/>
1439     </xsd:sequence>
1440     <xsd:attribute name="alignWithMargins" type="xsd:boolean" default="true"/>
1441     <xsd:attribute name="differentOddEven" type="xsd:boolean" default="false"/>
1442     <xsd:attribute name="differentFirst" type="xsd:boolean" default="false"/>
1443 </xsd:complexType>
1444 <xsd:complexType name="CT_PageMargins">
1445     <xsd:attribute name="l" type="xsd:double" use="required"/>
1446     <xsd:attribute name="r" type="xsd:double" use="required"/>
1447     <xsd:attribute name="t" type="xsd:double" use="required"/>
1448     <xsd:attribute name="b" type="xsd:double" use="required"/>
1449     <xsd:attribute name="header" type="xsd:double" use="required"/>
1450     <xsd:attribute name="footer" type="xsd:double" use="required"/>
1451 </xsd:complexType>
1452 <xsd:simpleType name="ST_PageSetupOrientation">
1453     <xsd:restriction base="xsd:string">
1454         <xsd:enumeration value="default"/>
1455         <xsd:enumeration value="portrait"/>
1456         <xsd:enumeration value="landscape"/>
1457     </xsd:restriction>
1458 </xsd:simpleType>
1459 <xsd:complexType name="CT_ExternalData">
1460     <xsd:sequence>
1461         <xsd:element name="autoUpdate" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1462     </xsd:sequence>
1463     <xsd:attribute ref="r:id" use="required"/>
1464 </xsd:complexType>
1465 <xsd:complexType name="CT_PageSetup">
1466     <xsd:attribute name="paperSize" type="xsd:unsignedInt" use="optional" default="1"/>
1467     <xsd:attribute name="paperHeight" type="s:ST_PositiveUniversalMeasure" use="optional"/>
1468     <xsd:attribute name="paperWidth" type="s:ST_PositiveUniversalMeasure" use="optional"/>
1469     <xsd:attribute name="firstPageNumber" type="xsd:unsignedInt" use="optional" default="1"/>
1470     <xsd:attribute name="orientation" type="ST_PageSetupOrientation" use="optional"
1471         default="default"/>
1472     <xsd:attribute name="blackAndWhite" type="xsd:boolean" use="optional" default="false"/>
1473     <xsd:attribute name="draft" type="xsd:boolean" use="optional" default="false"/>
1474     <xsd:attribute name="useFirstPageNumber" type="xsd:boolean" use="optional" default="false"/>
1475     <xsd:attribute name="horizontalDpi" type="xsd:int" use="optional" default="600"/>

```

```

1476     <xsd:attribute name="verticalDpi" type="xsd:int" use="optional" default="600"/>
1477     <xsd:attribute name="copies" type="xsd:unsignedInt" use="optional" default="1"/>
1478   </xsd:complexType>
1479   <xsd:complexType name="CT_PrintSettings">
1480     <xsd:sequence>
1481       <xsd:element name="headerFooter" type="CT_HeaderFooter" minOccurs="0" maxOccurs="1"/>
1482       <xsd:element name="pageMargins" type="CT_PageMargins" minOccurs="0" maxOccurs="1"/>
1483       <xsd:element name="pageSetup" type="CT_PageSetup" minOccurs="0" maxOccurs="1"/>
1484       <xsd:element name="legacyDrawingHF" type="CT_RelId" minOccurs="0" maxOccurs="1"/>
1485     </xsd:sequence>
1486   </xsd:complexType>
1487   <xsd:complexType name="CT_ChartSpace">
1488     <xsd:sequence>
1489       <xsd:element name="date1904" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1490       <xsd:element name="lang" type="CT_TextLanguageID" minOccurs="0" maxOccurs="1"/>
1491       <xsd:element name="roundedCorners" type="CT_Boolean" minOccurs="0" maxOccurs="1"/>
1492       <xsd:element name="style" type="CT_Style" minOccurs="0" maxOccurs="1"/>
1493       <xsd:element name="clrMapOvr" type="a:CT_ColorMapping" minOccurs="0" maxOccurs="1"/>
1494       <xsd:element name="pivotSource" type="CT_PivotSource" minOccurs="0" maxOccurs="1"/>
1495       <xsd:element name="protection" type="CT_Protection" minOccurs="0" maxOccurs="1"/>
1496       <xsd:element name="chart" type="CT_Chart" minOccurs="1" maxOccurs="1"/>
1497       <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="0" maxOccurs="1"/>
1498       <xsd:element name="txPr" type="a:CT_TextBody" minOccurs="0" maxOccurs="1"/>
1499       <xsd:element name="externalData" type="CT_ExternalData" minOccurs="0" maxOccurs="1"/>
1500       <xsd:element name="printSettings" type="CT_PrintSettings" minOccurs="0" maxOccurs="1"/>
1501       <xsd:element name="userShapes" type="CT_RelId" minOccurs="0" maxOccurs="1"/>
1502       <xsd:element name="extLst" type="CT_ExtensionList" minOccurs="0" maxOccurs="1"/>
1503     </xsd:sequence>
1504   </xsd:complexType>
1505   <xsd:element name="chartSpace" type="CT_ChartSpace"/>
1506   <xsd:element name="userShapes" type="cdr:CT_Drawing"/>
1507   <xsd:element name="chart" type="CT_RelId"/>
1508 </xsd:schema>

```

A.5.2 DrawingML - Chart Drawings

This schema is available in the file dml-chartDrawing.xsd.

```

1 <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
2   xmlns:a="http://schemas.openxmlformats.org/drawingml/2006/main"
3   xmlns="http://schemas.openxmlformats.org/drawingml/2006/chartDrawing"
4   targetNamespace="http://schemas.openxmlformats.org/drawingml/2006/chartDrawing"
5   elementFormDefault="qualified">
6   <xsd:import namespace="http://schemas.openxmlformats.org/drawingml/2006/main" schemaLocation="dml-
7     main.xsd"/>
8   <xsd:complexType name="CT_ShapeNonVisual">
9     <xsd:sequence>
10       <xsd:element name="cNvPr" type="a:CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
11       <xsd:element name="cNvSpPr" type="a:CT_NonVisualDrawingShapeProps" minOccurs="1"
12         maxOccurs="1"/>
13     </xsd:sequence>
14   </xsd:complexType>
15   <xsd:complexType name="CT_Shape">

```

```

16      <xsd:sequence>
17          <xsd:element name="nvSpPr" type="CT_ShapeNonVisual" minOccurs="1" maxOccurs="1"/>
18          <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="1" maxOccurs="1"/>
19          <xsd:element name="style" type="a:CT_ShapeStyle" minOccurs="0" maxOccurs="1"/>
20          <xsd:element name="txBody" type="a:CT_TextBody" minOccurs="0" maxOccurs="1"/>
21      </xsd:sequence>
22      <xsd:attribute name="macro" type="xsd:string" use="optional"/>
23      <xsd:attribute name="textlink" type="xsd:string" use="optional"/>
24      <xsd:attribute name="fLocksText" type="xsd:boolean" use="optional" default="true"/>
25      <xsd:attribute name="fPublished" type="xsd:boolean" use="optional" default="false"/>
26  </xsd:complexType>
27  <xsd:complexType name="CT_ConnectorNonVisual">
28      <xsd:sequence>
29          <xsd:element name="cNvPr" type="a:CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
30          <xsd:element name="cNvCxnSpPr" type="a:CT_NonVisualConnectorProperties" minOccurs="1"
31              maxOccurs="1"/>
32      </xsd:sequence>
33  </xsd:complexType>
34  <xsd:complexType name="CT_Connector">
35      <xsd:sequence>
36          <xsd:element name="nvCxnSpPr" type="CT_ConnectorNonVisual" minOccurs="1" maxOccurs="1"/>
37          <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="1" maxOccurs="1"/>
38          <xsd:element name="style" type="a:CT_ShapeStyle" minOccurs="0" maxOccurs="1"/>
39      </xsd:sequence>
40      <xsd:attribute name="macro" type="xsd:string" use="optional"/>
41      <xsd:attribute name="fPublished" type="xsd:boolean" use="optional" default="false"/>
42  </xsd:complexType>
43  <xsd:complexType name="CT_PictureNonVisual">
44      <xsd:sequence>
45          <xsd:element name="cNvPr" type="a:CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
46          <xsd:element name="cNvPicPr" type="a:CT_NonVisualPictureProperties" minOccurs="1"
47              maxOccurs="1"/>
48      </xsd:sequence>
49  </xsd:complexType>
50  <xsd:complexType name="CT_Picture">
51      <xsd:sequence>
52          <xsd:element name="nvPicPr" type="CT_PictureNonVisual" minOccurs="1" maxOccurs="1"/>
53          <xsd:element name="blipFill" type="a:CT_BlipFillProperties" minOccurs="1" maxOccurs="1"/>
54          <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="1" maxOccurs="1"/>
55          <xsd:element name="style" type="a:CT_ShapeStyle" minOccurs="0" maxOccurs="1"/>
56      </xsd:sequence>
57      <xsd:attribute name="macro" type="xsd:string" use="optional" default=""/>
58      <xsd:attribute name="fPublished" type="xsd:boolean" use="optional" default="false"/>
59  </xsd:complexType>
60  <xsd:complexType name="CT_GraphicFrameNonVisual">
61      <xsd:sequence>
62          <xsd:element name="cNvPr" type="a:CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
63          <xsd:element name="cNvGraphicFramePr" type="a:CT_NonVisualGraphicFrameProperties"
64              minOccurs="1" maxOccurs="1"/>
65      </xsd:sequence>
66  </xsd:complexType>
67  <xsd:complexType name="CT_GraphicFrame">
68      <xsd:sequence>

```

```

69      <xsd:element name="nvGraphicFramePr" type="CT_GraphicFrameNonVisual" minOccurs="1"
70        maxOccurs="1"/>
71      <xsd:element name="xfrm" type="a:CT_Transform2D" minOccurs="1" maxOccurs="1"/>
72      <xsd:element ref="a:graphic" minOccurs="1" maxOccurs="1"/>
73    </xsd:sequence>
74    <xsd:attribute name="macro" type="xsd:string" use="optional"/>
75    <xsd:attribute name="fPublished" type="xsd:boolean" use="optional" default="false"/>
76  </xsd:complexType>
77  <xsd:complexType name="CT_GroupShapeNonVisual">
78    <xsd:sequence>
79      <xsd:element name="cNvPr" type="a:CT_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>
80      <xsd:element name="cNvGrpSpPr" type="a:CT_NonVisualGroupDrawingShapeProps" minOccurs="1"
81        maxOccurs="1"/>
82    </xsd:sequence>
83  </xsd:complexType>
84  <xsd:complexType name="CT_GroupShape">
85    <xsd:sequence>
86      <xsd:element name="nvGrpSpPr" type="CT_GroupShapeNonVisual" minOccurs="1" maxOccurs="1"/>
87      <xsd:element name="grpSpPr" type="a:CT_GroupShapeProperties" minOccurs="1" maxOccurs="1"/>
88      <xsd:choice minOccurs="0" maxOccurs="unbounded">
89        <xsd:element name="sp" type="CT_Shape"/>
90        <xsd:element name="grpSp" type="CT_GroupShape"/>
91        <xsd:element name="graphicFrame" type="CT_GraphicFrame"/>
92        <xsd:element name="cxnSp" type="CT_Connector"/>
93        <xsd:element name="pic" type="CT_Picture"/>
94      </xsd:choice>
95    </xsd:sequence>
96  </xsd:complexType>
97  <xsd:group name="EG_ObjectChoices">
98    <xsd:sequence>
99      <xsd:choice minOccurs="1" maxOccurs="1">
100        <xsd:element name="sp" type="CT_Shape"/>
101        <xsd:element name="grpSp" type="CT_GroupShape"/>
102        <xsd:element name="graphicFrame" type="CT_GraphicFrame"/>
103        <xsd:element name="cxnSp" type="CT_Connector"/>
104        <xsd:element name="pic" type="CT_Picture"/>
105      </xsd:choice>
106    </xsd:sequence>
107  </xsd:group>
108  <xsd:simpleType name="ST_MarkerCoordinate">
109    <xsd:restriction base="xsd:double">
110      <xsd:minInclusive value="0.0"/>
111      <xsd:maxInclusive value="1.0"/>
112    </xsd:restriction>
113  </xsd:simpleType>
114  <xsd:complexType name="CT_Marker">
115    <xsd:sequence>
116      <xsd:element name="x" type="ST_MarkerCoordinate" minOccurs="1" maxOccurs="1"/>
117      <xsd:element name="y" type="ST_MarkerCoordinate" minOccurs="1" maxOccurs="1"/>
118    </xsd:sequence>
119  </xsd:complexType>
120  <xsd:complexType name="CT_RelSizeAnchor">
121    <xsd:sequence>

```

```

122     <xsd:element name="from" type="CT_Marker"/>
123     <xsd:element name="to" type="CT_Marker"/>
124     <xsd:group ref="EG_ObjectChoices"/>
125   </xsd:sequence>
126 </xsd:complexType>
127 <xsd:complexType name="CT_AbsSizeAnchor">
128   <xsd:sequence>
129     <xsd:element name="from" type="CT_Marker"/>
130     <xsd:element name="ext" type="a:CT_PositiveSize2D"/>
131     <xsd:group ref="EG_ObjectChoices"/>
132   </xsd:sequence>
133 </xsd:complexType>
134 <xsd:group name="EG_Anchor">
135   <xsd:choice>
136     <xsd:element name="relSizeAnchor" type="CT_RelSizeAnchor"/>
137     <xsd:element name="absSizeAnchor" type="CT_AbsSizeAnchor"/>
138   </xsd:choice>
139 </xsd:group>
140 <xsd:complexType name="CT_Drawing">
141   <xsd:sequence>
142     <xsd:group ref="EG_Anchor" minOccurs="0" maxOccurs="unbounded"/>
143   </xsd:sequence>
144 </xsd:complexType>
145 </xsd:schema>

```

A.5.3 DrawingML - Diagrams

This schema is available in the file dml-diagram.xsd.

```

1 <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
2   xmlns="http://schemas.openxmlformats.org/drawingml/2006/diagram"
3   xmlns:a="http://schemas.openxmlformats.org/drawingml/2006/main"
4   xmlns:r="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
5   xmlns:s="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
6   targetNamespace="http://schemas.openxmlformats.org/drawingml/2006/diagram"
7   elementFormDefault="qualified" attributeFormDefault="unqualified">
8   <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
9     schemaLocation="shared-relationshipReference.xsd"/>
10  <xsd:import namespace="http://schemas.openxmlformats.org/drawingml/2006/main" schemaLocation="dml-
11    main.xsd"/>
12  <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
13    schemaLocation="shared-commonSimpleTypes.xsd"/>
14  <xsd:complexType name="CT_CTName">
15    <xsd:attribute name="lang" type="xsd:string" use="optional" default=""/>
16    <xsd:attribute name="val" type="xsd:string" use="required"/>
17  </xsd:complexType>
18  <xsd:complexType name="CT_CTDescription">
19    <xsd:attribute name="lang" type="xsd:string" use="optional" default=""/>
20    <xsd:attribute name="val" type="xsd:string" use="required"/>
21  </xsd:complexType>
22  <xsd:complexType name="CT_CTCategory">
23    <xsd:attribute name="type" type="xsd:anyURI" use="required"/>
24    <xsd:attribute name="pri" type="xsd:unsignedInt" use="required"/>

```

```

25 </xsd:complexType>
26 <xsd:complexType name="CT_CTCategories">
27   <xsd:sequence minOccurs="0" maxOccurs="unbounded">
28     <xsd:element name="cat" type="CT_CTCategory" minOccurs="0" maxOccurs="unbounded"/>
29   </xsd:sequence>
30 </xsd:complexType>
31 <xsd:simpleType name="ST_ClrAppMethod">
32   <xsd:restriction base="xsd:token">
33     <xsd:enumeration value="span"/>
34     <xsd:enumeration value="cycle"/>
35     <xsd:enumeration value="repeat"/>
36   </xsd:restriction>
37 </xsd:simpleType>
38 <xsd:simpleType name="ST_HueDir">
39   <xsd:restriction base="xsd:token">
40     <xsd:enumeration value="cw"/>
41     <xsd:enumeration value="ccw"/>
42   </xsd:restriction>
43 </xsd:simpleType>
44 <xsd:complexType name="CT_Colors">
45   <xsd:sequence>
46     <xsd:group ref="a:EG_ColorChoice" minOccurs="0" maxOccurs="unbounded"/>
47   </xsd:sequence>
48   <xsd:attribute name="meth" type="ST_ClrAppMethod" use="optional" default="span"/>
49   <xsd:attribute name="hueDir" type="ST_HueDir" use="optional" default="cw"/>
50 </xsd:complexType>
51 <xsd:complexType name="CT_CTStyleLabel">
52   <xsd:sequence>
53     <xsd:element name="fillClrLst" type="CT_Colors" minOccurs="0" maxOccurs="1"/>
54     <xsd:element name="linClrLst" type="CT_Colors" minOccurs="0" maxOccurs="1"/>
55     <xsd:element name="effectClrLst" type="CT_Colors" minOccurs="0" maxOccurs="1"/>
56     <xsd:element name="txLinClrLst" type="CT_Colors" minOccurs="0" maxOccurs="1"/>
57     <xsd:element name="txFillClrLst" type="CT_Colors" minOccurs="0" maxOccurs="1"/>
58     <xsd:element name="txEffectClrLst" type="CT_Colors" minOccurs="0" maxOccurs="1"/>
59     <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
60       maxOccurs="1"/>
61   </xsd:sequence>
62   <xsd:attribute name="name" type="xsd:string" use="required"/>
63 </xsd:complexType>
64 <xsd:complexType name="CT_ColorTransform">
65   <xsd:sequence>
66     <xsd:element name="title" type="CT_CTName" minOccurs="0" maxOccurs="unbounded"/>
67     <xsd:element name="desc" type="CT_CTDescription" minOccurs="0" maxOccurs="unbounded"/>
68     <xsd:element name="catLst" type="CT_CTCategories" minOccurs="0"/>
69     <xsd:element name="styleLbl" type="CT_CTStyleLabel" minOccurs="0" maxOccurs="unbounded"/>
70     <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
71       maxOccurs="1"/>
72   </xsd:sequence>
73   <xsd:attribute name="uniqueId" type="xsd:string" use="optional" default=""/>
74   <xsd:attribute name="minVer" type="xsd:string" use="optional"
75     default="http://schemas.openxmlformats.org/drawingml/2006/diagram"/>
76 </xsd:complexType>
77 <xsd:element name="colorsDef" type="CT_ColorTransform"/>

```



```

78 <xsd:complexType name="CT_ColorTransformHeader">
79   <xsd:sequence>
80     <xsd:element name="title" type="CT_CTName" minOccurs="1" maxOccurs="unbounded"/>
81     <xsd:element name="desc" type="CT_CTDescription" minOccurs="1" maxOccurs="unbounded"/>
82     <xsd:element name="catLst" type="CT_CTCategories" minOccurs="0"/>
83     <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
84       maxOccurs="1"/>
85   </xsd:sequence>
86   <xsd:attribute name="uniqueId" type="xsd:string" use="required"/>
87   <xsd:attribute name="minVer" type="xsd:string" use="optional"
88     default="http://schemas.openxmlformats.org/drawingml/2006/diagram"/>
89   <xsd:attribute name="resId" type="xsd:int" use="optional" default="0"/>
90 </xsd:complexType>
91 <xsd:element name="colorsDefHdr" type="CT_ColorTransformHeader"/>
92 <xsd:complexType name="CT_ColorTransformHeaderLst">
93   <xsd:sequence>
94     <xsd:element name="colorsDefHdr" type="CT_ColorTransformHeader" minOccurs="0"
95       maxOccurs="unbounded"/>
96   </xsd:sequence>
97 </xsd:complexType>
98 <xsd:element name="colorsDefHdrLst" type="CT_ColorTransformHeaderLst"/>
99 <xsd:simpleType name="ST_PtType">
100   <xsd:restriction base="xsd:token">
101     <xsd:enumeration value="node"/>
102     <xsd:enumeration value="asst"/>
103     <xsd:enumeration value="doc"/>
104     <xsd:enumeration value="pres"/>
105     <xsd:enumeration value="parTrans"/>
106     <xsd:enumeration value="sibTrans"/>
107   </xsd:restriction>
108 </xsd:simpleType>
109 <xsd:complexType name="CT_Pt">
110   <xsd:sequence>
111     <xsd:element name="prSet" type="CT_ElemPropSet" minOccurs="0" maxOccurs="1"/>
112     <xsd:element name="spPr" type="a:CT_ShapeProperties" minOccurs="0" maxOccurs="1"/>
113     <xsd:element name="t" type="a:CT_TextBody" minOccurs="0" maxOccurs="1"/>
114     <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
115       maxOccurs="1"/>
116   </xsd:sequence>
117   <xsd:attribute name="modelId" type="ST_ModelId" use="required"/>
118   <xsd:attribute name="type" type="ST_PtType" use="optional" default="node"/>
119   <xsd:attribute name="cxnId" type="ST_ModelId" use="optional" default="0"/>
120 </xsd:complexType>
121 <xsd:complexType name="CT_PtList">
122   <xsd:sequence>
123     <xsd:element name="pt" type="CT_Pt" minOccurs="0" maxOccurs="unbounded"/>
124   </xsd:sequence>
125 </xsd:complexType>
126 <xsd:simpleType name="ST_CxnType">
127   <xsd:restriction base="xsd:token">
128     <xsd:enumeration value="parOf"/>
129     <xsd:enumeration value="presOf"/>
130     <xsd:enumeration value="presParOf"/>

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131     <xsd:enumeration value="unknownRelationship"/>
132   </xsd:restriction>
133 </xsd:simpleType>
134 <xsd:complexType name="CT_Cxn">
135   <xsd:sequence>
136     <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
137       maxOccurs="1"/>
138   </xsd:sequence>
139   <xsd:attribute name="modelId" type="ST_ModelId" use="required"/>
140   <xsd:attribute name="type" type="ST_CxnType" use="optional" default="parOf"/>
141   <xsd:attribute name="srcId" type="ST_ModelId" use="required"/>
142   <xsd:attribute name="destId" type="ST_ModelId" use="required"/>
143   <xsd:attribute name="srcOrd" type="xsd:unsignedInt" use="required"/>
144   <xsd:attribute name="destOrd" type="xsd:unsignedInt" use="required"/>
145   <xsd:attribute name="parTransId" type="ST_ModelId" use="optional" default="0"/>
146   <xsd:attribute name="sibTransId" type="ST_ModelId" use="optional" default="0"/>
147   <xsd:attribute name="presId" type="xsd:string" use="optional" default=""/>
148 </xsd:complexType>
149 <xsd:complexType name="CT_CxnList">
150   <xsd:sequence>
151     <xsd:element name="cxn" type="CT_Cxn" minOccurs="0" maxOccurs="unbounded"/>
152   </xsd:sequence>
153 </xsd:complexType>
154 <xsd:complexType name="CT_DataModel">
155   <xsd:sequence>
156     <xsd:element name="ptLst" type="CT_PtList"/>
157     <xsd:element name="cxnLst" type="CT_CxnList" minOccurs="0" maxOccurs="1"/>
158     <xsd:element name="bg" type="a:CT_BackgroundFormatting" minOccurs="0"/>
159     <xsd:element name="whole" type="a:CT_WholeE2oFormatting" minOccurs="0"/>
160     <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
161       maxOccurs="1"/>
162   </xsd:sequence>
163 </xsd:complexType>
164 <xsd:element name="dataModel" type="CT_DataModel"/>
165 <xsd:attributeGroup name="AG_IteratorAttributes">
166   <xsd:attribute name="axis" type="ST_AxisTypes" use="optional" default="none"/>
167   <xsd:attribute name="ptType" type="ST_ElementTypes" use="optional" default="all"/>
168   <xsd:attribute name="hideLastTrans" type="ST_Booleans" use="optional" default="true"/>
169   <xsd:attribute name="st" type="ST_Ints" use="optional" default="1"/>
170   <xsd:attribute name="cnt" type="ST_UnsignedInts" use="optional" default="0"/>
171   <xsd:attribute name="step" type="ST_Ints" use="optional" default="1"/>
172 </xsd:attributeGroup>
173 <xsd:attributeGroup name="AG_ConstraintAttributes">
174   <xsd:attribute name="type" type="ST_ConstraintType" use="required"/>
175   <xsd:attribute name="for" type="ST_ConstraintRelationship" use="optional" default="self"/>
176   <xsd:attribute name="forName" type="xsd:string" use="optional" default=""/>
177   <xsd:attribute name="ptType" type="ST_ElementType" use="optional" default="all"/>
178 </xsd:attributeGroup>
179 <xsd:attributeGroup name="AG_ConstraintRefAttributes">
180   <xsd:attribute name="refType" type="ST_ConstraintType" use="optional" default="none"/>
181   <xsd:attribute name="refFor" type="ST_ConstraintRelationship" use="optional" default="self"/>
182   <xsd:attribute name="refForName" type="xsd:string" use="optional" default=""/>
183   <xsd:attribute name="refPtType" type="ST_ElementType" use="optional" default="all"/>

```

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184 </xsd:attributeGroup>
185 <xsd:complexType name="CT_Constraint">
186   <xsd:sequence>
187     <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
188       maxOccurs="1"/>
189   </xsd:sequence>
190   <xsd:attributeGroup ref="AG_ConstraintAttributes"/>
191   <xsd:attributeGroup ref="AG_ConstraintRefAttributes"/>
192   <xsd:attribute name="op" type="ST_BooleanOperator" use="optional" default="none"/>
193   <xsd:attribute name="val" type="xsd:double" use="optional" default="0"/>
194   <xsd:attribute name="fact" type="xsd:double" use="optional" default="1"/>
195 </xsd:complexType>
196 <xsd:complexType name="CT_Constraints">
197   <xsd:sequence>
198     <xsd:element name="constr" type="CT_Constraint" minOccurs="0" maxOccurs="unbounded"/>
199   </xsd:sequence>
200 </xsd:complexType>
201 <xsd:complexType name="CT_NumericRule">
202   <xsd:sequence>
203     <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
204       maxOccurs="1"/>
205   </xsd:sequence>
206   <xsd:attributeGroup ref="AG_ConstraintAttributes"/>
207   <xsd:attribute name="val" type="xsd:double" use="optional" default="NaN"/>
208   <xsd:attribute name="fact" type="xsd:double" use="optional" default="NaN"/>
209   <xsd:attribute name="max" type="xsd:double" use="optional" default="NaN"/>
210 </xsd:complexType>
211 <xsd:complexType name="CT_Rules">
212   <xsd:sequence>
213     <xsd:element name="rule" type="CT_NumericRule" minOccurs="0" maxOccurs="unbounded"/>
214   </xsd:sequence>
215 </xsd:complexType>
216 <xsd:complexType name="CT_PresentationOf">
217   <xsd:sequence>
218     <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
219       maxOccurs="1"/>
220   </xsd:sequence>
221   <xsd:attributeGroup ref="AG_IteratorAttributes"/>
222 </xsd:complexType>
223 <xsd:simpleType name="ST_LayoutShapeType" final="restriction">
224   <xsd:union memberTypes="a:ST_ShapeType ST_OutputShapeType"/>
225 </xsd:simpleType>
226 <xsd:simpleType name="ST_Index1">
227   <xsd:restriction base="xsd:unsignedInt">
228     <xsd:minInclusive value="1"/>
229   </xsd:restriction>
230 </xsd:simpleType>
231 <xsd:complexType name="CT_Adj">
232   <xsd:attribute name="idx" type="ST_Index1" use="required"/>
233   <xsd:attribute name="val" type="xsd:double" use="required"/>
234 </xsd:complexType>
235 <xsd:complexType name="CT_AdjLst">
236   <xsd:sequence>

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237     <xsd:element name="adj" type="CT_Adj" minOccurs="0" maxOccurs="unbounded"/>
238   </xsd:sequence>
239 </xsd:complexType>
240 <xsd:complexType name="CT_Shape">
241   <xsd:sequence>
242     <xsd:element name="adjLst" type="CT_AdjLst" minOccurs="0" maxOccurs="1"/>
243     <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
244       maxOccurs="1"/>
245   </xsd:sequence>
246   <xsd:attribute name="rot" type="xsd:double" use="optional" default="0"/>
247   <xsd:attribute name="type" type="ST_LayoutShapeType" use="optional" default="none"/>
248   <xsd:attribute ref="r:blip" use="optional"/>
249   <xsd:attribute name="zOrderOff" type="xsd:int" use="optional" default="0"/>
250   <xsd:attribute name="hideGeom" type="xsd:boolean" use="optional" default="false"/>
251   <xsd:attribute name="lkTxEntry" type="xsd:boolean" use="optional" default="false"/>
252   <xsd:attribute name="blipPhldr" type="xsd:boolean" use="optional" default="false"/>
253 </xsd:complexType>
254 <xsd:complexType name="CT_Parameter">
255   <xsd:attribute name="type" type="ST_ParameterId" use="required"/>
256   <xsd:attribute name="val" type="ST_ParameterVal" use="required"/>
257 </xsd:complexType>
258 <xsd:complexType name="CT_Algorithm">
259   <xsd:sequence>
260     <xsd:element name="param" type="CT_Parameter" minOccurs="0" maxOccurs="unbounded"/>
261     <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
262       maxOccurs="1"/>
263   </xsd:sequence>
264   <xsd:attribute name="type" type="ST_AlgorithmType" use="required"/>
265   <xsd:attribute name="rev" type="xsd:unsignedInt" use="optional" default="0"/>
266 </xsd:complexType>
267 <xsd:complexType name="CT_LayoutNode">
268   <xsd:choice minOccurs="0" maxOccurs="unbounded">
269     <xsd:element name="alg" type="CT_Algorithm" minOccurs="0" maxOccurs="1"/>
270     <xsd:element name="shape" type="CT_Shape" minOccurs="0" maxOccurs="1"/>
271     <xsd:element name="presOf" type="CT_PresentationOf" minOccurs="0" maxOccurs="1"/>
272     <xsd:element name="constrLst" type="CT_Constraints" minOccurs="0" maxOccurs="1"/>
273     <xsd:element name="ruleLst" type="CT_Rules" minOccurs="0" maxOccurs="1"/>
274     <xsd:element name="varLst" type="CT_LayoutVariablePropertySet" minOccurs="0"
275       maxOccurs="1"/>
276     <xsd:element name="forEach" type="CT_ForEach"/>
277     <xsd:element name="layoutNode" type="CT_LayoutNode"/>
278     <xsd:element name="choose" type="CT_Choose"/>
279     <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
280       maxOccurs="1"/>
281   </xsd:choice>
282   <xsd:attribute name="name" type="xsd:string" use="optional" default=""/>
283   <xsd:attribute name="styleLbl" type="xsd:string" use="optional" default=""/>
284   <xsd:attribute name="chOrder" type="ST_ChildOrderType" use="optional" default="b"/>
285   <xsd:attribute name="moveWith" type="xsd:string" use="optional" default=""/>
286 </xsd:complexType>
287 <xsd:complexType name="CT_ForEach">
288   <xsd:choice minOccurs="0" maxOccurs="unbounded">
289     <xsd:element name="alg" type="CT_Algorithm" minOccurs="0" maxOccurs="1"/>

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290     <xsd:element name="shape" type="CT_Shape" minOccurs="0" maxOccurs="1"/>
291     <xsd:element name="presOf" type="CT_PresentationOf" minOccurs="0" maxOccurs="1"/>
292     <xsd:element name="constrLst" type="CT_Constraints" minOccurs="0" maxOccurs="1"/>
293     <xsd:element name="ruleLst" type="CT_Rules" minOccurs="0" maxOccurs="1"/>
294     <xsd:element name="forEach" type="CT_ForEach"/>
295     <xsd:element name="layoutNode" type="CT_LayoutNode"/>
296     <xsd:element name="choose" type="CT_Choose"/>
297     <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
298         maxOccurs="1"/>
299 </xsd:choice>
300 <xsd:attribute name="name" type="xsd:string" use="optional" default=""/>
301 <xsd:attribute name="ref" type="xsd:string" use="optional" default=""/>
302 <xsd:attributeGroup ref="AG_IteratorAttributes"/>
303 </xsd:complexType>
304 <xsd:complexType name="CT_When">
305     <xsd:choice minOccurs="0" maxOccurs="unbounded">
306         <xsd:element name="alg" type="CT_Algorithm" minOccurs="0" maxOccurs="1"/>
307         <xsd:element name="shape" type="CT_Shape" minOccurs="0" maxOccurs="1"/>
308         <xsd:element name="presOf" type="CT_PresentationOf" minOccurs="0" maxOccurs="1"/>
309         <xsd:element name="constrLst" type="CT_Constraints" minOccurs="0" maxOccurs="1"/>
310         <xsd:element name="ruleLst" type="CT_Rules" minOccurs="0" maxOccurs="1"/>
311         <xsd:element name="forEach" type="CT_ForEach"/>
312         <xsd:element name="layoutNode" type="CT_LayoutNode"/>
313         <xsd:element name="choose" type="CT_Choose"/>
314         <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
315             maxOccurs="1"/>
316     </xsd:choice>
317     <xsd:attribute name="name" type="xsd:string" use="optional" default=""/>
318     <xsd:attributeGroup ref="AG_IteratorAttributes"/>
319     <xsd:attribute name="func" type="ST_FunctionType" use="required"/>
320     <xsd:attribute name="arg" type="ST_FunctionArgument" use="optional" default="none"/>
321     <xsd:attribute name="op" type="ST_FunctionOperator" use="required"/>
322     <xsd:attribute name="val" type="ST_FunctionValue" use="required"/>
323 </xsd:complexType>
324 <xsd:complexType name="CT_Otherwise">
325     <xsd:choice minOccurs="0" maxOccurs="unbounded">
326         <xsd:element name="alg" type="CT_Algorithm" minOccurs="0" maxOccurs="1"/>
327         <xsd:element name="shape" type="CT_Shape" minOccurs="0" maxOccurs="1"/>
328         <xsd:element name="presOf" type="CT_PresentationOf" minOccurs="0" maxOccurs="1"/>
329         <xsd:element name="constrLst" type="CT_Constraints" minOccurs="0" maxOccurs="1"/>
330         <xsd:element name="ruleLst" type="CT_Rules" minOccurs="0" maxOccurs="1"/>
331         <xsd:element name="forEach" type="CT_ForEach"/>
332         <xsd:element name="layoutNode" type="CT_LayoutNode"/>
333         <xsd:element name="choose" type="CT_Choose"/>
334         <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
335             maxOccurs="1"/>
336     </xsd:choice>
337     <xsd:attribute name="name" type="xsd:string" use="optional" default=""/>
338 </xsd:complexType>
339 <xsd:complexType name="CT_Choose">
340     <xsd:sequence>
341         <xsd:element name="if" type="CT_When" maxOccurs="unbounded"/>
342         <xsd:element name="else" type="CT_Otherwise" minOccurs="0"/>

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343     </xsd:sequence>
344     <xsd:attribute name="name" type="xsd:string" use="optional" default=""/>
345 </xsd:complexType>
346 <xsd:complexType name="CT_SampleData">
347     <xsd:sequence>
348         <xsd:element name="dataModel" type="CT_DataModel" minOccurs="0"/>
349     </xsd:sequence>
350     <xsd:attribute name="useDef" type="xsd:boolean" use="optional" default="false"/>
351 </xsd:complexType>
352 <xsd:complexType name="CT_Category">
353     <xsd:attribute name="type" type="xsd:anyURI" use="required"/>
354     <xsd:attribute name="pri" type="xsd:unsignedInt" use="required"/>
355 </xsd:complexType>
356 <xsd:complexType name="CT_Categories">
357     <xsd:sequence>
358         <xsd:element name="cat" type="CT_Category" minOccurs="0" maxOccurs="unbounded"/>
359     </xsd:sequence>
360 </xsd:complexType>
361 <xsd:complexType name="CT_Name">
362     <xsd:attribute name="lang" type="xsd:string" use="optional" default=""/>
363     <xsd:attribute name="val" type="xsd:string" use="required"/>
364 </xsd:complexType>
365 <xsd:complexType name="CT_Description">
366     <xsd:attribute name="lang" type="xsd:string" use="optional" default=""/>
367     <xsd:attribute name="val" type="xsd:string" use="required"/>
368 </xsd:complexType>
369 <xsd:complexType name="CT_DiagramDefinition">
370     <xsd:sequence>
371         <xsd:element name="title" type="CT_Name" minOccurs="0" maxOccurs="unbounded"/>
372         <xsd:element name="desc" type="CT_Description" minOccurs="0" maxOccurs="unbounded"/>
373         <xsd:element name="catLst" type="CT_Categories" minOccurs="0"/>
374         <xsd:element name="sampData" type="CT_SampleData" minOccurs="0"/>
375         <xsd:element name="styleData" type="CT_SampleData" minOccurs="0"/>
376         <xsd:element name="clrData" type="CT_SampleData" minOccurs="0"/>
377         <xsd:element name="layoutNode" type="CT_LayoutNode"/>
378         <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
379             maxOccurs="1"/>
380     </xsd:sequence>
381     <xsd:attribute name="uniqueId" type="xsd:string" use="optional" default=""/>
382     <xsd:attribute name="minVer" type="xsd:string" use="optional"
383         default="http://schemas.openxmlformats.org/drawingml/2006/diagram"/>
384     <xsd:attribute name="defStyle" type="xsd:string" use="optional" default=""/>
385 </xsd:complexType>
386 <xsd:element name="layoutDef" type="CT_DiagramDefinition"/>
387 <xsd:complexType name="CT_DiagramDefinitionHeader">
388     <xsd:sequence>
389         <xsd:element name="title" type="CT_Name" minOccurs="1" maxOccurs="unbounded"/>
390         <xsd:element name="desc" type="CT_Description" minOccurs="1" maxOccurs="unbounded"/>
391         <xsd:element name="catLst" type="CT_Categories" minOccurs="0"/>
392         <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
393             maxOccurs="1"/>
394     </xsd:sequence>
395     <xsd:attribute name="uniqueId" type="xsd:string" use="required"/>

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396     <xsd:attribute name="minVer" type="xsd:string" use="optional"
397       default="http://schemas.openxmlformats.org/drawingml/2006/diagram"/>
398     <xsd:attribute name="defStyle" type="xsd:string" use="optional" default=""/>
399     <xsd:attribute name="resId" type="xsd:int" use="optional" default="0"/>
400   </xsd:complexType>
401   <xsd:element name="layoutDefHdr" type="CT_DiagramDefinitionHeader"/>
402   <xsd:complexType name="CT_DiagramDefinitionHeaderLst">
403     <xsd:sequence>
404       <xsd:element name="layoutDefHdr" type="CT_DiagramDefinitionHeader" minOccurs="0"
405         maxOccurs="unbounded"/>
406     </xsd:sequence>
407   </xsd:complexType>
408   <xsd:element name="layoutDefHdrLst" type="CT_DiagramDefinitionHeaderLst"/>
409   <xsd:complexType name="CT_RelIds">
410     <xsd:attribute ref="r:dm" use="required"/>
411     <xsd:attribute ref="r:lo" use="required"/>
412     <xsd:attribute ref="r:qs" use="required"/>
413     <xsd:attribute ref="r:cs" use="required"/>
414   </xsd:complexType>
415   <xsd:element name="relIds" type="CT_RelIds"/>
416   <xsd:simpleType name="ST_ParameterVal">
417     <xsd:union memberTypes="ST_DiagramHorizontalAlignment ST_VerticalAlignment ST_ChildDirection
418       ST_ChildAlignment ST_SecondaryChildAlignment ST_LinearDirection ST_SecondaryLinearDirection
419       ST_StartingElement ST_BendPoint ST_ConnectorRouting ST_ArrowheadStyle ST_ConnectorDimension
420       ST_RotationPath ST_CenterShapeMapping ST_NodeHorizontalAlignment ST_NodeVerticalAlignment
421       ST_FallbackDimension ST_TextDirection ST_PyramidAccentPosition ST_PyramidAccentTextMargin
422       ST_TextBlockDirection ST_TextAnchorHorizontal ST_TextAnchorVertical ST_DiagramTextAlignment
423       ST_AutoTextRotation ST_GrowDirection ST_FlowDirection ST_ContinueDirection ST_Breakpoint
424       ST_Offset ST_HierarchyAlignment xsd:int xsd:double xsd:boolean xsd:string
425       ST_ConnectorPoint"/>
426   </xsd:simpleType>
427   <xsd:simpleType name="ST_ModelId">
428     <xsd:union memberTypes="xsd:int s:ST_Guid"/>
429   </xsd:simpleType>
430   <xsd:simpleType name="ST_PrSetCustVal">
431     <xsd:union memberTypes="s:ST_Percentage xsd:int"/>
432   </xsd:simpleType>
433   <xsd:complexType name="CT_ElemPropSet">
434     <xsd:sequence>
435       <xsd:element name="presLayoutVars" type="CT_LayoutVariablePropertySet" minOccurs="0"
436         maxOccurs="1"/>
437       <xsd:element name="style" type="a:CT_ShapeStyle" minOccurs="0" maxOccurs="1"/>
438     </xsd:sequence>
439     <xsd:attribute name="presAssocID" type="ST_ModelId" use="optional"/>
440     <xsd:attribute name="presName" type="xsd:string" use="optional"/>
441     <xsd:attribute name="presStyleLbl" type="xsd:string" use="optional"/>
442     <xsd:attribute name="presStyleIdx" type="xsd:int" use="optional"/>
443     <xsd:attribute name="presStyleCnt" type="xsd:int" use="optional"/>
444     <xsd:attribute name="loTypeId" type="xsd:string" use="optional"/>
445     <xsd:attribute name="loCatId" type="xsd:string" use="optional"/>
446     <xsd:attribute name="qsTypeId" type="xsd:string" use="optional"/>
447     <xsd:attribute name="qsCatId" type="xsd:string" use="optional"/>
448     <xsd:attribute name="csTypeId" type="xsd:string" use="optional"/>

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449     <xsd:attribute name="csCatId" type="xsd:string" use="optional"/>
450     <xsd:attribute name="coherent3DOff" type="xsd:boolean" use="optional"/>
451     <xsd:attribute name="phldrT" type="xsd:string" use="optional"/>
452     <xsd:attribute name="phldr" type="xsd:boolean" use="optional"/>
453     <xsd:attribute name="custAng" type="xsd:int" use="optional"/>
454     <xsd:attribute name="custFlipVert" type="xsd:boolean" use="optional"/>
455     <xsd:attribute name="custFlipHor" type="xsd:boolean" use="optional"/>
456     <xsd:attribute name="custSzX" type="xsd:int" use="optional"/>
457     <xsd:attribute name="custSzY" type="xsd:int" use="optional"/>
458     <xsd:attribute name="custScaleX" type="ST_PrSetCustVal" use="optional"/>
459     <xsd:attribute name="custScaleY" type="ST_PrSetCustVal" use="optional"/>
460     <xsd:attribute name="custT" type="xsd:boolean" use="optional"/>
461     <xsd:attribute name="custLinFactX" type="ST_PrSetCustVal" use="optional"/>
462     <xsd:attribute name="custLinFactY" type="ST_PrSetCustVal" use="optional"/>
463     <xsd:attribute name="custLinFactNeighborX" type="ST_PrSetCustVal" use="optional"/>
464     <xsd:attribute name="custLinFactNeighborY" type="ST_PrSetCustVal" use="optional"/>
465     <xsd:attribute name="custRadScaleRad" type="ST_PrSetCustVal" use="optional"/>
466     <xsd:attribute name="custRadScaleInc" type="ST_PrSetCustVal" use="optional"/>
467 </xsd:complexType>
468 <xsd:simpleType name="ST_Direction" final="restriction">
469     <xsd:restriction base="xsd:token">
470         <xsd:enumeration value="norm"/>
471         <xsd:enumeration value="rev"/>
472     </xsd:restriction>
473 </xsd:simpleType>
474 <xsd:simpleType name="ST_HierBranchStyle" final="restriction">
475     <xsd:restriction base="xsd:token">
476         <xsd:enumeration value="l"/>
477         <xsd:enumeration value="r"/>
478         <xsd:enumeration value="hang"/>
479         <xsd:enumeration value="std"/>
480         <xsd:enumeration value="init"/>
481     </xsd:restriction>
482 </xsd:simpleType>
483 <xsd:simpleType name="ST_AnimOneStr" final="restriction">
484     <xsd:restriction base="xsd:token">
485         <xsd:enumeration value="none"/>
486         <xsd:enumeration value="one"/>
487         <xsd:enumeration value="branch"/>
488     </xsd:restriction>
489 </xsd:simpleType>
490 <xsd:simpleType name="ST_AnimLvlStr" final="restriction">
491     <xsd:restriction base="xsd:token">
492         <xsd:enumeration value="none"/>
493         <xsd:enumeration value="lvl"/>
494         <xsd:enumeration value="ctr"/>
495     </xsd:restriction>
496 </xsd:simpleType>
497 <xsd:complexType name="CT_OrgChart">
498     <xsd:attribute name="val" type="xsd:boolean" default="false" use="optional"/>
499 </xsd:complexType>
500 <xsd:simpleType name="ST_NodeCount">
501     <xsd:restriction base="xsd:int">

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502         <xsd:minInclusive value="-1"/>
503     </xsd:restriction>
504 </xsd:simpleType>
505 <xsd:complexType name="CT_ChildMax">
506     <xsd:attribute name="val" type="ST_NodeCount" default="-1" use="optional"/>
507 </xsd:complexType>
508 <xsd:complexType name="CT_ChildPref">
509     <xsd:attribute name="val" type="ST_NodeCount" default="-1" use="optional"/>
510 </xsd:complexType>
511 <xsd:complexType name="CT_BulletEnabled">
512     <xsd:attribute name="val" type="xsd:boolean" default="false" use="optional"/>
513 </xsd:complexType>
514 <xsd:complexType name="CT_Direction">
515     <xsd:attribute name="val" type="ST_Direction" default="norm" use="optional"/>
516 </xsd:complexType>
517 <xsd:complexType name="CT_HierBranchStyle">
518     <xsd:attribute name="val" type="ST_HierBranchStyle" default="std" use="optional"/>
519 </xsd:complexType>
520 <xsd:complexType name="CT_AnimOne">
521     <xsd:attribute name="val" type="ST_AnimOneStr" default="one" use="optional"/>
522 </xsd:complexType>
523 <xsd:complexType name="CT_AnimLvl">
524     <xsd:attribute name="val" type="ST_AnimLvlStr" default="none" use="optional"/>
525 </xsd:complexType>
526 <xsd:simpleType name="ST_ResizeHandlesStr" final="restriction">
527     <xsd:restriction base="xsd:token">
528         <xsd:enumeration value="exact"/>
529         <xsd:enumeration value="rel"/>
530     </xsd:restriction>
531 </xsd:simpleType>
532 <xsd:complexType name="CT_ResizeHandles">
533     <xsd:attribute name="val" type="ST_ResizeHandlesStr" default="rel" use="optional"/>
534 </xsd:complexType>
535 <xsd:complexType name="CT_LayoutVariablePropertySet">
536     <xsd:sequence>
537         <xsd:element name="orgChart" type="CT_OrgChart" minOccurs="0" maxOccurs="1"/>
538         <xsd:element name="chMax" type="CT_ChildMax" minOccurs="0" maxOccurs="1"/>
539         <xsd:element name="chPref" type="CT_ChildPref" minOccurs="0" maxOccurs="1"/>
540         <xsd:element name="bulletEnabled" type="CT_BulletEnabled" minOccurs="0" maxOccurs="1"/>
541         <xsd:element name="dir" type="CT_Direction" minOccurs="0" maxOccurs="1"/>
542         <xsd:element name="hierBranch" type="CT_HierBranchStyle" minOccurs="0" maxOccurs="1"/>
543         <xsd:element name="animOne" type="CT_AnimOne" minOccurs="0" maxOccurs="1"/>
544         <xsd:element name="animLvl" type="CT_AnimLvl" minOccurs="0" maxOccurs="1"/>
545         <xsd:element name="resizeHandles" type="CT_ResizeHandles" minOccurs="0" maxOccurs="1"/>
546     </xsd:sequence>
547 </xsd:complexType>
548 <xsd:complexType name="CT_SDName">
549     <xsd:attribute name="lang" type="xsd:string" use="optional" default=""/>
550     <xsd:attribute name="val" type="xsd:string" use="required"/>
551 </xsd:complexType>
552 <xsd:complexType name="CT_SDDescription">
553     <xsd:attribute name="lang" type="xsd:string" use="optional" default=""/>
554     <xsd:attribute name="val" type="xsd:string" use="required"/>

```

```

555 </xsd:complexType>
556 <xsd:complexType name="CT_SDCategory">
557   <xsd:attribute name="type" type="xsd:anyURI" use="required"/>
558   <xsd:attribute name="pri" type="xsd:unsignedInt" use="required"/>
559 </xsd:complexType>
560 <xsd:complexType name="CT_SDCategories">
561   <xsd:sequence minOccurs="0" maxOccurs="unbounded">
562     <xsd:element name="cat" type="CT_SDCategory" minOccurs="0" maxOccurs="unbounded"/>
563   </xsd:sequence>
564 </xsd:complexType>
565 <xsd:complexType name="CT_TextProps">
566   <xsd:sequence>
567     <xsd:group ref="a:EG_Text3D" minOccurs="0" maxOccurs="1"/>
568   </xsd:sequence>
569 </xsd:complexType>
570 <xsd:complexType name="CT_StyleLabel">
571   <xsd:sequence>
572     <xsd:element name="scene3d" type="a:CT_Scene3D" minOccurs="0" maxOccurs="1"/>
573     <xsd:element name="sp3d" type="a:CT_Shape3D" minOccurs="0" maxOccurs="1"/>
574     <xsd:element name="txPr" type="CT_TextProps" minOccurs="0" maxOccurs="1"/>
575     <xsd:element name="style" type="a:CT_ShapeStyle" minOccurs="0" maxOccurs="1"/>
576     <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
577       maxOccurs="1"/>
578   </xsd:sequence>
579   <xsd:attribute name="name" type="xsd:string" use="required"/>
580 </xsd:complexType>
581 <xsd:complexType name="CT_StyleDefinition">
582   <xsd:sequence>
583     <xsd:element name="title" type="CT_SDName" minOccurs="0" maxOccurs="unbounded"/>
584     <xsd:element name="desc" type="CT_SDDescription" minOccurs="0" maxOccurs="unbounded"/>
585     <xsd:element name="catLst" type="CT_SDCategories" minOccurs="0"/>
586     <xsd:element name="scene3d" type="a:CT_Scene3D" minOccurs="0" maxOccurs="1"/>
587     <xsd:element name="styleLbl" type="CT_StyleLabel" minOccurs="1" maxOccurs="unbounded"/>
588     <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
589       maxOccurs="1"/>
590   </xsd:sequence>
591   <xsd:attribute name="uniqueId" type="xsd:string" use="optional" default=""/>
592   <xsd:attribute name="minVer" type="xsd:string" use="optional"
593     default="http://schemas.openxmlformats.org/drawingml/2006/diagram"/>
594 </xsd:complexType>
595 <xsd:element name="styleDef" type="CT_StyleDefinition"/>
596 <xsd:complexType name="CT_StyleDefinitionHeader">
597   <xsd:sequence>
598     <xsd:element name="title" type="CT_SDName" minOccurs="1" maxOccurs="unbounded"/>
599     <xsd:element name="desc" type="CT_SDDescription" minOccurs="1" maxOccurs="unbounded"/>
600     <xsd:element name="catLst" type="CT_SDCategories" minOccurs="0"/>
601     <xsd:element name="extLst" type="a:CT_OfficeArtExtensionList" minOccurs="0"
602       maxOccurs="1"/>
603   </xsd:sequence>
604   <xsd:attribute name="uniqueId" type="xsd:string" use="required"/>
605   <xsd:attribute name="minVer" type="xsd:string" use="optional"
606     default="http://schemas.openxmlformats.org/drawingml/2006/diagram"/>
607   <xsd:attribute name="resId" type="xsd:int" use="optional" default="0"/>

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```

608 </xsd:complexType>
609 <xsd:element name="styleDefHdr" type="CT_StyleDefinitionHeader"/>
610 <xsd:complexType name="CT_StyleDefinitionHeaderLst">
611   <xsd:sequence>
612     <xsd:element name="styleDefHdr" type="CT_StyleDefinitionHeader" minOccurs="0"
613       maxOccurs="unbounded"/>
614   </xsd:sequence>
615 </xsd:complexType>
616 <xsd:element name="styleDefHdrLst" type="CT_StyleDefinitionHeaderLst"/>
617 <xsd:simpleType name="ST_AlgorithmType" final="restriction">
618   <xsd:restriction base="xsd:token">
619     <xsd:enumeration value="composite"/>
620     <xsd:enumeration value="conn"/>
621     <xsd:enumeration value="cycle"/>
622     <xsd:enumeration value="hierChild"/>
623     <xsd:enumeration value="hierRoot"/>
624     <xsd:enumeration value="pyra"/>
625     <xsd:enumeration value="lin"/>
626     <xsd:enumeration value="sp"/>
627     <xsd:enumeration value="tx"/>
628     <xsd:enumeration value="snake"/>
629   </xsd:restriction>
630 </xsd:simpleType>
631 <xsd:simpleType name="ST_AxisType" final="restriction">
632   <xsd:restriction base="xsd:token">
633     <xsd:enumeration value="self"/>
634     <xsd:enumeration value="ch"/>
635     <xsd:enumeration value="des"/>
636     <xsd:enumeration value="desOrSelf"/>
637     <xsd:enumeration value="par"/>
638     <xsd:enumeration value="ancst"/>
639     <xsd:enumeration value="ancstOrSelf"/>
640     <xsd:enumeration value="followSib"/>
641     <xsd:enumeration value="precedSib"/>
642     <xsd:enumeration value="follow"/>
643     <xsd:enumeration value="preced"/>
644     <xsd:enumeration value="root"/>
645     <xsd:enumeration value="none"/>
646   </xsd:restriction>
647 </xsd:simpleType>
648 <xsd:simpleType name="ST_AxisTypes">
649   <xsd:list itemType="ST_AxisType"/>
650 </xsd:simpleType>
651 <xsd:simpleType name="ST_BoolOperator" final="restriction">
652   <xsd:restriction base="xsd:token">
653     <xsd:enumeration value="none"/>
654     <xsd:enumeration value="equ"/>
655     <xsd:enumeration value="gte"/>
656     <xsd:enumeration value="lte"/>
657   </xsd:restriction>
658 </xsd:simpleType>
659 <xsd:simpleType name="ST_ChildOrderType" final="restriction">
660   <xsd:restriction base="xsd:token">

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661         <xsd:enumeration value="b"/>
662         <xsd:enumeration value="t"/>
663     </xsd:restriction>
664 </xsd:simpleType>
665 <xsd:simpleType name="ST_ConstraintType" final="restriction">
666     <xsd:restriction base="xsd:token">
667         <xsd:enumeration value="none"/>
668         <xsd:enumeration value="alignOff"/>
669         <xsd:enumeration value="begMarg"/>
670         <xsd:enumeration value="bendDist"/>
671         <xsd:enumeration value="begPad"/>
672         <xsd:enumeration value="b"/>
673         <xsd:enumeration value="bMarg"/>
674         <xsd:enumeration value="bOff"/>
675         <xsd:enumeration value="ctrX"/>
676         <xsd:enumeration value="ctrXOff"/>
677         <xsd:enumeration value="ctrY"/>
678         <xsd:enumeration value="ctrYOff"/>
679         <xsd:enumeration value="connDist"/>
680         <xsd:enumeration value="diam"/>
681         <xsd:enumeration value="endMarg"/>
682         <xsd:enumeration value="endPad"/>
683         <xsd:enumeration value="h"/>
684         <xsd:enumeration value="hArH"/>
685         <xsd:enumeration value="hOff"/>
686         <xsd:enumeration value="l"/>
687         <xsd:enumeration value="lMarg"/>
688         <xsd:enumeration value="lOff"/>
689         <xsd:enumeration value="r"/>
690         <xsd:enumeration value="rMarg"/>
691         <xsd:enumeration value="rOff"/>
692         <xsd:enumeration value="primFontSz"/>
693         <xsd:enumeration value="pyraAcctRatio"/>
694         <xsd:enumeration value="secFontSz"/>
695         <xsd:enumeration value="sibSp"/>
696         <xsd:enumeration value="secSibSp"/>
697         <xsd:enumeration value="sp"/>
698         <xsd:enumeration value="stemThick"/>
699         <xsd:enumeration value="t"/>
700         <xsd:enumeration value="tMarg"/>
701         <xsd:enumeration value="tOff"/>
702         <xsd:enumeration value="userA"/>
703         <xsd:enumeration value="userB"/>
704         <xsd:enumeration value="userC"/>
705         <xsd:enumeration value="userD"/>
706         <xsd:enumeration value="userE"/>
707         <xsd:enumeration value="userF"/>
708         <xsd:enumeration value="userG"/>
709         <xsd:enumeration value="userH"/>
710         <xsd:enumeration value="userI"/>
711         <xsd:enumeration value="userJ"/>
712         <xsd:enumeration value="userK"/>
713         <xsd:enumeration value="userL"/>

```

```

714         <xsd:enumeration value="userM"/>
715         <xsd:enumeration value="userN"/>
716         <xsd:enumeration value="userO"/>
717         <xsd:enumeration value="userP"/>
718         <xsd:enumeration value="userQ"/>
719         <xsd:enumeration value="userR"/>
720         <xsd:enumeration value="userS"/>
721         <xsd:enumeration value="userT"/>
722         <xsd:enumeration value="userU"/>
723         <xsd:enumeration value="userV"/>
724         <xsd:enumeration value="userW"/>
725         <xsd:enumeration value="userX"/>
726         <xsd:enumeration value="userY"/>
727         <xsd:enumeration value="userZ"/>
728         <xsd:enumeration value="w"/>
729         <xsd:enumeration value="wArH"/>
730         <xsd:enumeration value="wOff"/>
731     </xsd:restriction>
732 </xsd:simpleType>
733 <xsd:simpleType name="ST_ConstraintRelationship" final="restriction">
734     <xsd:restriction base="xsd:token">
735         <xsd:enumeration value="self"/>
736         <xsd:enumeration value="ch"/>
737         <xsd:enumeration value="des"/>
738     </xsd:restriction>
739 </xsd:simpleType>
740 <xsd:simpleType name="ST_ElementType" final="restriction">
741     <xsd:restriction base="xsd:token">
742         <xsd:enumeration value="all"/>
743         <xsd:enumeration value="doc"/>
744         <xsd:enumeration value="node"/>
745         <xsd:enumeration value="norm"/>
746         <xsd:enumeration value="nonNorm"/>
747         <xsd:enumeration value="asst"/>
748         <xsd:enumeration value="nonAsst"/>
749         <xsd:enumeration value="parTrans"/>
750         <xsd:enumeration value="pres"/>
751         <xsd:enumeration value="sibTrans"/>
752     </xsd:restriction>
753 </xsd:simpleType>
754 <xsd:simpleType name="ST_ElementTypes">
755     <xsd:list itemType="ST_ElementType"/>
756 </xsd:simpleType>
757 <xsd:simpleType name="ST_ParameterId" final="restriction">
758     <xsd:restriction base="xsd:token">
759         <xsd:enumeration value="horzAlign"/>
760         <xsd:enumeration value="vertAlign"/>
761         <xsd:enumeration value="chDir"/>
762         <xsd:enumeration value="chAlign"/>
763         <xsd:enumeration value="secChAlign"/>
764         <xsd:enumeration value="linDir"/>
765         <xsd:enumeration value="secLinDir"/>
766         <xsd:enumeration value="stElem"/>

```

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767     <xsd:enumeration value="bendPt"/>
768     <xsd:enumeration value="connRout"/>
769     <xsd:enumeration value="begSty"/>
770     <xsd:enumeration value="endSty"/>
771     <xsd:enumeration value="dim"/>
772     <xsd:enumeration value="rotPath"/>
773     <xsd:enumeration value="ctrShpMap"/>
774     <xsd:enumeration value="nodeHorzAlign"/>
775     <xsd:enumeration value="nodeVertAlign"/>
776     <xsd:enumeration value="fallback"/>
777     <xsd:enumeration value="txDir"/>
778     <xsd:enumeration value="pyraAcctPos"/>
779     <xsd:enumeration value="pyraAcctTxMar"/>
780     <xsd:enumeration value="txBlDir"/>
781     <xsd:enumeration value="txAnchorHorz"/>
782     <xsd:enumeration value="txAnchorVert"/>
783     <xsd:enumeration value="txAnchorHorzCh"/>
784     <xsd:enumeration value="txAnchorVertCh"/>
785     <xsd:enumeration value="parTxLTRAlign"/>
786     <xsd:enumeration value="parTxRTLAlign"/>
787     <xsd:enumeration value="shpTxLTRAlignCh"/>
788     <xsd:enumeration value="shpTxRTLAlignCh"/>
789     <xsd:enumeration value="autoTxRot"/>
790     <xsd:enumeration value="grDir"/>
791     <xsd:enumeration value="flowDir"/>
792     <xsd:enumeration value="contDir"/>
793     <xsd:enumeration value="bkpt"/>
794     <xsd:enumeration value="off"/>
795     <xsd:enumeration value="hierAlign"/>
796     <xsd:enumeration value="bkPtFixedVal"/>
797     <xsd:enumeration value="stBulletLvl"/>
798     <xsd:enumeration value="stAng"/>
799     <xsd:enumeration value="spanAng"/>
800     <xsd:enumeration value="ar"/>
801     <xsd:enumeration value="lnSpPar"/>
802     <xsd:enumeration value="lnSpAfParP"/>
803     <xsd:enumeration value="lnSpCh"/>
804     <xsd:enumeration value="lnSpAfChP"/>
805     <xsd:enumeration value="rtShortDist"/>
806     <xsd:enumeration value="alignTx"/>
807     <xsd:enumeration value="pyraLvlNode"/>
808     <xsd:enumeration value="pyraAcctBkgdNode"/>
809     <xsd:enumeration value="pyraAcctTxNode"/>
810     <xsd:enumeration value="srcNode"/>
811     <xsd:enumeration value="dstNode"/>
812     <xsd:enumeration value="begPts"/>
813     <xsd:enumeration value="endPts"/>
814   </xsd:restriction>
815 </xsd:simpleType>
816 <xsd:simpleType name="ST_Ints">
817   <xsd:list itemType="xsd:int"/>
818 </xsd:simpleType>
819 <xsd:simpleType name="ST_UnsignedInts">

```

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820     <xsd:list itemType="xsd:unsignedInt"/>
821 </xsd:simpleType>
822 <xsd:simpleType name="ST_Booleans">
823     <xsd:list itemType="xsd:boolean"/>
824 </xsd:simpleType>
825 <xsd:simpleType name="ST_FunctionType" final="restriction">
826     <xsd:restriction base="xsd:token">
827         <xsd:enumeration value="cnt"/>
828         <xsd:enumeration value="pos"/>
829         <xsd:enumeration value="revPos"/>
830         <xsd:enumeration value="posEven"/>
831         <xsd:enumeration value="posOdd"/>
832         <xsd:enumeration value="var"/>
833         <xsd:enumeration value="depth"/>
834         <xsd:enumeration value="maxDepth"/>
835     </xsd:restriction>
836 </xsd:simpleType>
837 <xsd:simpleType name="ST_FunctionOperator" final="restriction">
838     <xsd:restriction base="xsd:token">
839         <xsd:enumeration value="equ"/>
840         <xsd:enumeration value="neq"/>
841         <xsd:enumeration value="gt"/>
842         <xsd:enumeration value="lt"/>
843         <xsd:enumeration value="gte"/>
844         <xsd:enumeration value="lte"/>
845     </xsd:restriction>
846 </xsd:simpleType>
847 <xsd:simpleType name="ST_DiagramHorizontalAlignment" final="restriction">
848     <xsd:restriction base="xsd:token">
849         <xsd:enumeration value="l"/>
850         <xsd:enumeration value="ctr"/>
851         <xsd:enumeration value="r"/>
852         <xsd:enumeration value="none"/>
853     </xsd:restriction>
854 </xsd:simpleType>
855 <xsd:simpleType name="ST_VerticalAlignment" final="restriction">
856     <xsd:restriction base="xsd:token">
857         <xsd:enumeration value="t"/>
858         <xsd:enumeration value="mid"/>
859         <xsd:enumeration value="b"/>
860         <xsd:enumeration value="none"/>
861     </xsd:restriction>
862 </xsd:simpleType>
863 <xsd:simpleType name="ST_ChildDirection" final="restriction">
864     <xsd:restriction base="xsd:token">
865         <xsd:enumeration value="horz"/>
866         <xsd:enumeration value="vert"/>
867     </xsd:restriction>
868 </xsd:simpleType>
869 <xsd:simpleType name="ST_ChildAlignment" final="restriction">
870     <xsd:restriction base="xsd:token">
871         <xsd:enumeration value="t"/>
872         <xsd:enumeration value="b"/>

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873         <xsd:enumeration value="l"/>
874         <xsd:enumeration value="r"/>
875     </xsd:restriction>
876 </xsd:simpleType>
877 <xsd:simpleType name="ST_SecondaryChildAlignment" final="restriction">
878     <xsd:restriction base="xsd:token">
879         <xsd:enumeration value="none"/>
880         <xsd:enumeration value="t"/>
881         <xsd:enumeration value="b"/>
882         <xsd:enumeration value="l"/>
883         <xsd:enumeration value="r"/>
884     </xsd:restriction>
885 </xsd:simpleType>
886 <xsd:simpleType name="ST_LinearDirection" final="restriction">
887     <xsd:restriction base="xsd:token">
888         <xsd:enumeration value="fromL"/>
889         <xsd:enumeration value="fromR"/>
890         <xsd:enumeration value="fromT"/>
891         <xsd:enumeration value="fromB"/>
892     </xsd:restriction>
893 </xsd:simpleType>
894 <xsd:simpleType name="ST_SecondaryLinearDirection" final="restriction">
895     <xsd:restriction base="xsd:token">
896         <xsd:enumeration value="none"/>
897         <xsd:enumeration value="fromL"/>
898         <xsd:enumeration value="fromR"/>
899         <xsd:enumeration value="fromT"/>
900         <xsd:enumeration value="fromB"/>
901     </xsd:restriction>
902 </xsd:simpleType>
903 <xsd:simpleType name="ST_StartingElement" final="restriction">
904     <xsd:restriction base="xsd:token">
905         <xsd:enumeration value="node"/>
906         <xsd:enumeration value="trans"/>
907     </xsd:restriction>
908 </xsd:simpleType>
909 <xsd:simpleType name="ST_RotationPath" final="restriction">
910     <xsd:restriction base="xsd:token">
911         <xsd:enumeration value="none"/>
912         <xsd:enumeration value="alongPath"/>
913     </xsd:restriction>
914 </xsd:simpleType>
915 <xsd:simpleType name="ST_CenterShapeMapping" final="restriction">
916     <xsd:restriction base="xsd:token">
917         <xsd:enumeration value="none"/>
918         <xsd:enumeration value="fNode"/>
919     </xsd:restriction>
920 </xsd:simpleType>
921 <xsd:simpleType name="ST_BendPoint" final="restriction">
922     <xsd:restriction base="xsd:token">
923         <xsd:enumeration value="beg"/>
924         <xsd:enumeration value="def"/>
925         <xsd:enumeration value="end"/>

```



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926     </xsd:restriction>
927 </xsd:simpleType>
928 <xsd:simpleType name="ST_ConnectorRouting" final="restriction">
929     <xsd:restriction base="xsd:token">
930         <xsd:enumeration value="stra"/>
931         <xsd:enumeration value="bend"/>
932         <xsd:enumeration value="curve"/>
933         <xsd:enumeration value="longCurve"/>
934     </xsd:restriction>
935 </xsd:simpleType>
936 <xsd:simpleType name="ST_ArrowheadStyle" final="restriction">
937     <xsd:restriction base="xsd:token">
938         <xsd:enumeration value="auto"/>
939         <xsd:enumeration value="arr"/>
940         <xsd:enumeration value="noArr"/>
941     </xsd:restriction>
942 </xsd:simpleType>
943 <xsd:simpleType name="ST_ConnectorDimension" final="restriction">
944     <xsd:restriction base="xsd:token">
945         <xsd:enumeration value="1D"/>
946         <xsd:enumeration value="2D"/>
947         <xsd:enumeration value="cust"/>
948     </xsd:restriction>
949 </xsd:simpleType>
950 <xsd:simpleType name="ST_ConnectorPoint" final="restriction">
951     <xsd:restriction base="xsd:token">
952         <xsd:enumeration value="auto"/>
953         <xsd:enumeration value="bCtr"/>
954         <xsd:enumeration value="ctr"/>
955         <xsd:enumeration value="midL"/>
956         <xsd:enumeration value="midR"/>
957         <xsd:enumeration value="tCtr"/>
958         <xsd:enumeration value="bL"/>
959         <xsd:enumeration value="bR"/>
960         <xsd:enumeration value="tL"/>
961         <xsd:enumeration value="tR"/>
962         <xsd:enumeration value="radial"/>
963     </xsd:restriction>
964 </xsd:simpleType>
965 <xsd:simpleType name="ST_NodeHorizontalAlignment" final="restriction">
966     <xsd:restriction base="xsd:token">
967         <xsd:enumeration value="l"/>
968         <xsd:enumeration value="ctr"/>
969         <xsd:enumeration value="r"/>
970     </xsd:restriction>
971 </xsd:simpleType>
972 <xsd:simpleType name="ST_NodeVerticalAlignment" final="restriction">
973     <xsd:restriction base="xsd:token">
974         <xsd:enumeration value="t"/>
975         <xsd:enumeration value="mid"/>
976         <xsd:enumeration value="b"/>
977     </xsd:restriction>
978 </xsd:simpleType>

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979 <xsd:simpleType name="ST_FallbackDimension" final="restriction">
980   <xsd:restriction base="xsd:token">
981     <xsd:enumeration value="1D"/>
982     <xsd:enumeration value="2D"/>
983   </xsd:restriction>
984 </xsd:simpleType>
985 <xsd:simpleType name="ST_TextDirection" final="restriction">
986   <xsd:restriction base="xsd:token">
987     <xsd:enumeration value="fromT"/>
988     <xsd:enumeration value="fromB"/>
989   </xsd:restriction>
990 </xsd:simpleType>
991 <xsd:simpleType name="ST_PyramidAccentPosition" final="restriction">
992   <xsd:restriction base="xsd:token">
993     <xsd:enumeration value="bef"/>
994     <xsd:enumeration value="aft"/>
995   </xsd:restriction>
996 </xsd:simpleType>
997 <xsd:simpleType name="ST_PyramidAccentTextMargin" final="restriction">
998   <xsd:restriction base="xsd:token">
999     <xsd:enumeration value="step"/>
1000     <xsd:enumeration value="stack"/>
1001   </xsd:restriction>
1002 </xsd:simpleType>
1003 <xsd:simpleType name="ST_TextBlockDirection" final="restriction">
1004   <xsd:restriction base="xsd:token">
1005     <xsd:enumeration value="horz"/>
1006     <xsd:enumeration value="vert"/>
1007   </xsd:restriction>
1008 </xsd:simpleType>
1009 <xsd:simpleType name="ST_TextAnchorHorizontal" final="restriction">
1010   <xsd:restriction base="xsd:token">
1011     <xsd:enumeration value="none"/>
1012     <xsd:enumeration value="ctr"/>
1013   </xsd:restriction>
1014 </xsd:simpleType>
1015 <xsd:simpleType name="ST_TextAnchorVertical" final="restriction">
1016   <xsd:restriction base="xsd:token">
1017     <xsd:enumeration value="t"/>
1018     <xsd:enumeration value="mid"/>
1019     <xsd:enumeration value="b"/>
1020   </xsd:restriction>
1021 </xsd:simpleType>
1022 <xsd:simpleType name="ST_DiagramTextAlignment" final="restriction">
1023   <xsd:restriction base="xsd:token">
1024     <xsd:enumeration value="l"/>
1025     <xsd:enumeration value="ctr"/>
1026     <xsd:enumeration value="r"/>
1027   </xsd:restriction>
1028 </xsd:simpleType>
1029 <xsd:simpleType name="ST_AutoTextRotation" final="restriction">
1030   <xsd:restriction base="xsd:token">
1031     <xsd:enumeration value="none"/>

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1032         <xsd:enumeration value="upr"/>
1033         <xsd:enumeration value="grav"/>
1034     </xsd:restriction>
1035 </xsd:simpleType>
1036 <xsd:simpleType name="ST_GrowDirection" final="restriction">
1037     <xsd:restriction base="xsd:token">
1038         <xsd:enumeration value="tL"/>
1039         <xsd:enumeration value="tR"/>
1040         <xsd:enumeration value="bL"/>
1041         <xsd:enumeration value="bR"/>
1042     </xsd:restriction>
1043 </xsd:simpleType>
1044 <xsd:simpleType name="ST_FlowDirection" final="restriction">
1045     <xsd:restriction base="xsd:token">
1046         <xsd:enumeration value="row"/>
1047         <xsd:enumeration value="col"/>
1048     </xsd:restriction>
1049 </xsd:simpleType>
1050 <xsd:simpleType name="ST_ContinueDirection" final="restriction">
1051     <xsd:restriction base="xsd:token">
1052         <xsd:enumeration value="revDir"/>
1053         <xsd:enumeration value="sameDir"/>
1054     </xsd:restriction>
1055 </xsd:simpleType>
1056 <xsd:simpleType name="ST_Breakpoint" final="restriction">
1057     <xsd:restriction base="xsd:token">
1058         <xsd:enumeration value="endCnv"/>
1059         <xsd:enumeration value="bal"/>
1060         <xsd:enumeration value="fixed"/>
1061     </xsd:restriction>
1062 </xsd:simpleType>
1063 <xsd:simpleType name="ST_Offset" final="restriction">
1064     <xsd:restriction base="xsd:token">
1065         <xsd:enumeration value="ctr"/>
1066         <xsd:enumeration value="off"/>
1067     </xsd:restriction>
1068 </xsd:simpleType>
1069 <xsd:simpleType name="ST_HierarchyAlignment" final="restriction">
1070     <xsd:restriction base="xsd:token">
1071         <xsd:enumeration value="tL"/>
1072         <xsd:enumeration value="tR"/>
1073         <xsd:enumeration value="tCtrCh"/>
1074         <xsd:enumeration value="tCtrDes"/>
1075         <xsd:enumeration value="bL"/>
1076         <xsd:enumeration value="bR"/>
1077         <xsd:enumeration value="bCtrCh"/>
1078         <xsd:enumeration value="bCtrDes"/>
1079         <xsd:enumeration value="lT"/>
1080         <xsd:enumeration value="lB"/>
1081         <xsd:enumeration value="lCtrCh"/>
1082         <xsd:enumeration value="lCtrDes"/>
1083         <xsd:enumeration value="rT"/>
1084         <xsd:enumeration value="rB"/>

```

```

1085         <xsd:enumeration value="rCtrCh"/>
1086         <xsd:enumeration value="rCtrDes"/>
1087     </xsd:restriction>
1088 </xsd:simpleType>
1089 <xsd:simpleType name="ST_FunctionValue" final="restriction">
1090     <xsd:union memberTypes="xsd:int xsd:boolean ST_Direction ST_HierBranchStyle ST_AnimOneStr
1091         ST_AnimLvlStr ST_ResizeHandlesStr"/>
1092 </xsd:simpleType>
1093 <xsd:simpleType name="ST_VariableType" final="restriction">
1094     <xsd:restriction base="xsd:token">
1095         <xsd:enumeration value="none"/>
1096         <xsd:enumeration value="orgChart"/>
1097         <xsd:enumeration value="chMax"/>
1098         <xsd:enumeration value="chPref"/>
1099         <xsd:enumeration value="bulEnabled"/>
1100         <xsd:enumeration value="dir"/>
1101         <xsd:enumeration value="hierBranch"/>
1102         <xsd:enumeration value="animOne"/>
1103         <xsd:enumeration value="animLvl"/>
1104         <xsd:enumeration value="resizeHandles"/>
1105     </xsd:restriction>
1106 </xsd:simpleType>
1107 <xsd:simpleType name="ST_FunctionArgument" final="restriction">
1108     <xsd:union memberTypes="ST_VariableType"/>
1109 </xsd:simpleType>
1110 <xsd:simpleType name="ST_OutputShapeType" final="restriction">
1111     <xsd:restriction base="xsd:token">
1112         <xsd:enumeration value="none"/>
1113         <xsd:enumeration value="conn"/>
1114     </xsd:restriction>
1115 </xsd:simpleType>
1116 </xsd:schema>

```

A.6 VML

A.6.1 VML

This schema is available in the file vml-main.xsd.

```

1 <xsd:schema xmlns="urn:schemas-microsoft-com:vml" xmlns:pvml="urn:schemas-microsoft-
2 com:office:powerpoint" xmlns:o="urn:schemas-microsoft-com:office:office"
3 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
4 xmlns:w="http://schemas.openxmlformats.org/wordprocessingml/2006/main" xmlns:w10="urn:schemas-
5 microsoft-com:office:word"
6 xmlns:r="http://schemas.openxmlformats.org/officeDocument/2006/relationships" xmlns:x="urn:schemas-
7 microsoft-com:office:excel"
8 xmlns:s="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
9 targetNamespace="urn:schemas-microsoft-com:vml" elementFormDefault="qualified"
10 attributeFormDefault="unqualified">
11     <xsd:import namespace="urn:schemas-microsoft-com:office:office" schemaLocation="vml-
12         officeDrawing.xsd"/>
13     <xsd:import namespace="http://schemas.openxmlformats.org/wordprocessingml/2006/main"
14         schemaLocation="wml.xsd"/>

```

```

15 <xsd:import namespace="urn:schemas-microsoft-com:office:word" schemaLocation="vml-
16 wordprocessingDrawing.xsd"/>
17 <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
18 schemaLocation="shared-relationshipReference.xsd"/>
19 <xsd:import namespace="urn:schemas-microsoft-com:office:excel" schemaLocation="vml-
20 spreadsheetDrawing.xsd"/>
21 <xsd:import namespace="urn:schemas-microsoft-com:office:powerpoint" schemaLocation="vml-
22 presentationDrawing.xsd"/>
23 <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
24 schemaLocation="shared-commonSimpleTypes.xsd"/>
25 <xsd:attributeGroup name="AG_Id">
26 <xsd:attribute name="id" type="xsd:string" use="optional"/>
27 </xsd:attributeGroup>
28 <xsd:attributeGroup name="AG_Style">
29 <xsd:attribute name="style" type="xsd:string" use="optional"/>
30 </xsd:attributeGroup>
31 <xsd:attributeGroup name="AG_Type">
32 <xsd:attribute name="type" type="xsd:string" use="optional"/>
33 </xsd:attributeGroup>
34 <xsd:attributeGroup name="AG_Adj">
35 <xsd:attribute name="adj" type="xsd:string" use="optional"/>
36 </xsd:attributeGroup>
37 <xsd:attributeGroup name="AG_Path">
38 <xsd:attribute name="path" type="xsd:string" use="optional"/>
39 </xsd:attributeGroup>
40 <xsd:attributeGroup name="AG_Fill">
41 <xsd:attribute name="filled" type="s:ST TrueFalse" use="optional"/>
42 <xsd:attribute name="fillcolor" type="s:ST ColorType" use="optional"/>
43 </xsd:attributeGroup>
44 <xsd:attributeGroup name="AG_ChromaKey">
45 <xsd:attribute name="chromaKey" type="s:ST ColorType" use="optional"/>
46 </xsd:attributeGroup>
47 <xsd:attributeGroup name="AG_Ext">
48 <xsd:attribute name="ext" form="qualified" type="ST Ext"/>
49 </xsd:attributeGroup>
50 <xsd:attributeGroup name="AG_CoreAttributes">
51 <xsd:attributeGroup ref="AG_Id"/>
52 <xsd:attributeGroup ref="AG_Style"/>
53 <xsd:attribute name="href" type="xsd:string" use="optional"/>
54 <xsd:attribute name="target" type="xsd:string" use="optional"/>
55 <xsd:attribute name="class" type="xsd:string" use="optional"/>
56 <xsd:attribute name="title" type="xsd:string" use="optional"/>
57 <xsd:attribute name="alt" type="xsd:string" use="optional"/>
58 <xsd:attribute name="coordsize" type="xsd:string" use="optional"/>
59 <xsd:attribute name="coordorigin" type="xsd:string" use="optional"/>
60 <xsd:attribute name="wrapcoords" type="xsd:string" use="optional"/>
61 <xsd:attribute name="print" type="s:ST TrueFalse" use="optional"/>
62 </xsd:attributeGroup>
63 <xsd:attributeGroup name="AG_ShapeAttributes">
64 <xsd:attributeGroup ref="AG_ChromaKey"/>
65 <xsd:attributeGroup ref="AG_Fill"/>
66 <xsd:attribute name="opacity" type="xsd:string" use="optional"/>
67 <xsd:attribute name="stroked" type="s:ST TrueFalse" use="optional"/>

```

```

68     <xsd:attribute name="strokecolor" type="s:ST_ColorType" use="optional"/>
69     <xsd:attribute name="strokeweight" type="xsd:string" use="optional"/>
70     <xsd:attribute name="insetpen" type="s:ST_TrueFalse" use="optional"/>
71 </xsd:attributeGroup>
72 <xsd:attributeGroup name="AG_OfficeCoreAttributes">
73     <xsd:attribute ref="o:spid"/>
74     <xsd:attribute ref="o:oned"/>
75     <xsd:attribute ref="o:regroupid"/>
76     <xsd:attribute ref="o:doubleclicknotify"/>
77     <xsd:attribute ref="o:button"/>
78     <xsd:attribute ref="o:userhidden"/>
79     <xsd:attribute ref="o:bullet"/>
80     <xsd:attribute ref="o:hr"/>
81     <xsd:attribute ref="o:hrstd"/>
82     <xsd:attribute ref="o:hrnoshade"/>
83     <xsd:attribute ref="o:hrpct"/>
84     <xsd:attribute ref="o:hralign"/>
85     <xsd:attribute ref="o:allowincell"/>
86     <xsd:attribute ref="o:allowoverlap"/>
87     <xsd:attribute ref="o:userdrawn"/>
88     <xsd:attribute ref="o:bordertopcolor"/>
89     <xsd:attribute ref="o:borderleftcolor"/>
90     <xsd:attribute ref="o:borderbottomcolor"/>
91     <xsd:attribute ref="o:borderrightcolor"/>
92     <xsd:attribute ref="o:dgmLayout"/>
93     <xsd:attribute ref="o:dgmnodekind"/>
94     <xsd:attribute ref="o:dgmLayoutmru"/>
95     <xsd:attribute ref="o:insetmode"/>
96 </xsd:attributeGroup>
97 <xsd:attributeGroup name="AG_OfficeShapeAttributes">
98     <xsd:attribute ref="o:spt"/>
99     <xsd:attribute ref="o:connectortype"/>
100    <xsd:attribute ref="o:bwmode"/>
101    <xsd:attribute ref="o:bwpure"/>
102    <xsd:attribute ref="o:bwnormal"/>
103    <xsd:attribute ref="o:forcedash"/>
104    <xsd:attribute ref="o:oleicon"/>
105    <xsd:attribute ref="o:ole"/>
106    <xsd:attribute ref="o:preferrelative"/>
107    <xsd:attribute ref="o:cliptowrap"/>
108    <xsd:attribute ref="o:clip"/>
109 </xsd:attributeGroup>
110 <xsd:attributeGroup name="AG_AllCoreAttributes">
111     <xsd:attributeGroup ref="AG_CoreAttributes"/>
112     <xsd:attributeGroup ref="AG_OfficeCoreAttributes"/>
113 </xsd:attributeGroup>
114 <xsd:attributeGroup name="AG_AllShapeAttributes">
115     <xsd:attributeGroup ref="AG_ShapeAttributes"/>
116     <xsd:attributeGroup ref="AG_OfficeShapeAttributes"/>
117 </xsd:attributeGroup>
118 <xsd:attributeGroup name="AG_ImageAttributes">
119     <xsd:attribute name="src" type="xsd:string" use="optional"/>
120     <xsd:attribute name="cropleft" type="xsd:string" use="optional"/>

```

```

121     <xsd:attribute name="croptop" type="xsd:string" use="optional"/>
122     <xsd:attribute name="cropright" type="xsd:string" use="optional"/>
123     <xsd:attribute name="cropbottom" type="xsd:string" use="optional"/>
124     <xsd:attribute name="gain" type="xsd:string" use="optional"/>
125     <xsd:attribute name="blacklevel" type="xsd:string" use="optional"/>
126     <xsd:attribute name="gamma" type="xsd:string" use="optional"/>
127     <xsd:attribute name="grayscale" type="s:ST TrueFalse" use="optional"/>
128     <xsd:attribute name="bilevel" type="s:ST TrueFalse" use="optional"/>
129 </xsd:attributeGroup>
130 <xsd:attributeGroup name="AG_StrokeAttributes">
131     <xsd:attribute name="on" type="s:ST TrueFalse" use="optional"/>
132     <xsd:attribute name="weight" type="xsd:string" use="optional"/>
133     <xsd:attribute name="color" type="s:ST ColorType" use="optional"/>
134     <xsd:attribute name="opacity" type="xsd:string" use="optional"/>
135     <xsd:attribute name="linestyle" type="ST StrokeLineStyle" use="optional"/>
136     <xsd:attribute name="miterlimit" type="xsd:decimal" use="optional"/>
137     <xsd:attribute name="joinstyle" type="ST StrokeJoinStyle" use="optional"/>
138     <xsd:attribute name="endcap" type="ST StrokeEndCap" use="optional"/>
139     <xsd:attribute name="dashstyle" type="xsd:string" use="optional"/>
140     <xsd:attribute name="filltype" type="ST FillType" use="optional"/>
141     <xsd:attribute name="src" type="xsd:string" use="optional"/>
142     <xsd:attribute name="imageaspect" type="ST ImageAspect" use="optional"/>
143     <xsd:attribute name="imagesize" type="xsd:string" use="optional"/>
144     <xsd:attribute name="imagealignshape" type="s:ST TrueFalse" use="optional"/>
145     <xsd:attribute name="color2" type="s:ST ColorType" use="optional"/>
146     <xsd:attribute name="startarrow" type="ST StrokeArrowType" use="optional"/>
147     <xsd:attribute name="startarrowwidth" type="ST StrokeArrowWidth" use="optional"/>
148     <xsd:attribute name="startarrowlength" type="ST StrokeArrowLength" use="optional"/>
149     <xsd:attribute name="endarrow" type="ST StrokeArrowType" use="optional"/>
150     <xsd:attribute name="endarrowwidth" type="ST StrokeArrowWidth" use="optional"/>
151     <xsd:attribute name="endarrowlength" type="ST StrokeArrowLength" use="optional"/>
152     <xsd:attribute ref="o:href"/>
153     <xsd:attribute ref="o:althref"/>
154     <xsd:attribute ref="o:title"/>
155     <xsd:attribute ref="o:forcedash"/>
156     <xsd:attribute ref="r:id" use="optional"/>
157     <xsd:attribute name="insetpen" type="s:ST TrueFalse" use="optional"/>
158     <xsd:attribute ref="o:reldid"/>
159 </xsd:attributeGroup>
160 <xsd:group name="EG_ShapeElements">
161     <xsd:choice>
162         <xsd:element ref="path"/>
163         <xsd:element ref="formulas"/>
164         <xsd:element ref="handles"/>
165         <xsd:element ref="fill"/>
166         <xsd:element ref="stroke"/>
167         <xsd:element ref="shadow"/>
168         <xsd:element ref="textbox"/>
169         <xsd:element ref="textpath"/>
170         <xsd:element ref="imagedata"/>
171         <xsd:element ref="o:skew"/>
172         <xsd:element ref="o:extrusion"/>
173         <xsd:element ref="o:callout"/>

```

```

174     <xsd:element ref="o:lock"/>
175     <xsd:element ref="o:clippath"/>
176     <xsd:element ref="o:signatureline"/>
177     <xsd:element ref="w10:wrap"/>
178     <xsd:element ref="w10:anchorlock"/>
179     <xsd:element ref="w10:bordertop"/>
180     <xsd:element ref="w10:borderbottom"/>
181     <xsd:element ref="w10:borderleft"/>
182     <xsd:element ref="w10:borderright"/>
183     <xsd:element ref="x:ClientData" minOccurs="0"/>
184     <xsd:element ref="pvm1:textdata" minOccurs="0"/>
185   </xsd:choice>
186 </xsd:group>
187 <xsd:element name="shape" type="CT_Shape"/>
188 <xsd:element name="shapetype" type="CT_Shapetype"/>
189 <xsd:element name="group" type="CT_Group"/>
190 <xsd:element name="background" type="CT_Background"/>
191 <xsd:complexType name="CT_Shape">
192   <xsd:choice maxOccurs="unbounded">
193     <xsd:group ref="EG_ShapeElements"/>
194     <xsd:element ref="o:ink"/>
195     <xsd:element ref="pvm1:iscomment"/>
196     <xsd:element ref="o:equationxml"/>
197   </xsd:choice>
198   <xsd:attributeGroup ref="AG_AllCoreAttributes"/>
199   <xsd:attributeGroup ref="AG_AllShapeAttributes"/>
200   <xsd:attributeGroup ref="AG_Type"/>
201   <xsd:attributeGroup ref="AG_Adj"/>
202   <xsd:attributeGroup ref="AG_Path"/>
203   <xsd:attribute ref="o:gfxdata"/>
204   <xsd:attribute name="equationxml" type="xsd:string" use="optional"/>
205 </xsd:complexType>
206 <xsd:complexType name="CT_Shapetype">
207   <xsd:sequence>
208     <xsd:group ref="EG_ShapeElements" minOccurs="0" maxOccurs="unbounded"/>
209     <xsd:element ref="o:complex" minOccurs="0"/>
210   </xsd:sequence>
211   <xsd:attributeGroup ref="AG_AllCoreAttributes"/>
212   <xsd:attributeGroup ref="AG_AllShapeAttributes"/>
213   <xsd:attributeGroup ref="AG_Adj"/>
214   <xsd:attributeGroup ref="AG_Path"/>
215   <xsd:attribute ref="o:master"/>
216 </xsd:complexType>
217 <xsd:complexType name="CT_Group">
218   <xsd:choice maxOccurs="unbounded">
219     <xsd:group ref="EG_ShapeElements"/>
220     <xsd:element ref="group"/>
221     <xsd:element ref="shape"/>
222     <xsd:element ref="shapetype"/>
223     <xsd:element ref="arc"/>
224     <xsd:element ref="curve"/>
225     <xsd:element ref="image"/>
226     <xsd:element ref="line"/>

```



```

227     <xsd:element ref="oval"/>
228     <xsd:element ref="polyline"/>
229     <xsd:element ref="rect"/>
230     <xsd:element ref="roundrect"/>
231     <xsd:element ref="o:diagram"/>
232 </xsd:choice>
233 <xsd:attributeGroup ref="AG_AllCoreAttributes"/>
234 <xsd:attributeGroup ref="AG_Fill"/>
235 <xsd:attribute name="editas" type="ST_EditAs" use="optional"/>
236 <xsd:attribute ref="o:tableproperties"/>
237 <xsd:attribute ref="o:tablelimits"/>
238 </xsd:complexType>
239 <xsd:complexType name="CT_Background">
240     <xsd:sequence>
241         <xsd:element ref="fill" minOccurs="0"/>
242     </xsd:sequence>
243     <xsd:attributeGroup ref="AG_Id"/>
244     <xsd:attributeGroup ref="AG_Fill"/>
245     <xsd:attribute ref="o:bwmode"/>
246     <xsd:attribute ref="o:bwpure"/>
247     <xsd:attribute ref="o:bwnormal"/>
248     <xsd:attribute ref="o:targetscreensize"/>
249 </xsd:complexType>
250 <xsd:element name="fill" type="CT_Fill"/>
251 <xsd:element name="formulas" type="CT_Formulas"/>
252 <xsd:element name="handles" type="CT_Handles"/>
253 <xsd:element name="imagedata" type="CT_ImageData"/>
254 <xsd:element name="path" type="CT_Path"/>
255 <xsd:element name="textbox" type="CT_Textbox"/>
256 <xsd:element name="shadow" type="CT_Shadow"/>
257 <xsd:element name="stroke" type="CT_Stroke"/>
258 <xsd:element name="textpath" type="CT_TextPath"/>
259 <xsd:complexType name="CT_Fill">
260     <xsd:sequence>
261         <xsd:element ref="o:fill" minOccurs="0"/>
262     </xsd:sequence>
263     <xsd:attributeGroup ref="AG_Id"/>
264     <xsd:attribute name="type" type="ST_FillType" use="optional"/>
265     <xsd:attribute name="on" type="s:ST_TrueFalse" use="optional"/>
266     <xsd:attribute name="color" type="s:ST_ColorType" use="optional"/>
267     <xsd:attribute name="opacity" type="xsd:string" use="optional"/>
268     <xsd:attribute name="color2" type="s:ST_ColorType" use="optional"/>
269     <xsd:attribute name="src" type="xsd:string" use="optional"/>
270     <xsd:attribute ref="o:href"/>
271     <xsd:attribute ref="o:althref"/>
272     <xsd:attribute name="size" type="xsd:string" use="optional"/>
273     <xsd:attribute name="origin" type="xsd:string" use="optional"/>
274     <xsd:attribute name="position" type="xsd:string" use="optional"/>
275     <xsd:attribute name="aspect" type="ST_ImageAspect" use="optional"/>
276     <xsd:attribute name="colors" type="xsd:string" use="optional"/>
277     <xsd:attribute name="angle" type="xsd:decimal" use="optional"/>
278     <xsd:attribute name="alignshape" type="s:ST_TrueFalse" use="optional"/>
279     <xsd:attribute name="focus" type="xsd:string" use="optional"/>

```

```

280     <xsd:attribute name="focussize" type="xsd:string" use="optional"/>
281     <xsd:attribute name="focusposition" type="xsd:string" use="optional"/>
282     <xsd:attribute name="method" type="ST FillMethod" use="optional"/>
283     <xsd:attribute ref="o:detectmouseclick"/>
284     <xsd:attribute ref="o:title"/>
285     <xsd:attribute ref="o:opacity2"/>
286     <xsd:attribute name="recolor" type="s:ST TrueFalse" use="optional"/>
287     <xsd:attribute name="rotate" type="s:ST TrueFalse" use="optional"/>
288     <xsd:attribute ref="r:id" use="optional"/>
289     <xsd:attribute ref="o:relic" use="optional"/>
290 </xsd:complexType>
291 <xsd:complexType name="CT_Formulas">
292     <xsd:sequence>
293         <xsd:element name="f" type="CT F" minOccurs="0" maxOccurs="unbounded"/>
294     </xsd:sequence>
295 </xsd:complexType>
296 <xsd:complexType name="CT_F">
297     <xsd:attribute name="eqn" type="xsd:string"/>
298 </xsd:complexType>
299 <xsd:complexType name="CT_Handles">
300     <xsd:sequence>
301         <xsd:element name="h" type="CT H" minOccurs="0" maxOccurs="unbounded"/>
302     </xsd:sequence>
303 </xsd:complexType>
304 <xsd:complexType name="CT_H">
305     <xsd:attribute name="position" type="xsd:string"/>
306     <xsd:attribute name="polar" type="xsd:string"/>
307     <xsd:attribute name="map" type="xsd:string"/>
308     <xsd:attribute name="invx" type="s:ST TrueFalse"/>
309     <xsd:attribute name="invy" type="s:ST TrueFalse"/>
310     <xsd:attribute name="switch" type="s:ST TrueFalseBlank"/>
311     <xsd:attribute name="xrange" type="xsd:string"/>
312     <xsd:attribute name="yrange" type="xsd:string"/>
313     <xsd:attribute name="radiusrange" type="xsd:string"/>
314 </xsd:complexType>
315 <xsd:complexType name="CT_ImageData">
316     <xsd:attributeGroup ref="AG Id"/>
317     <xsd:attributeGroup ref="AG ImageAttributes"/>
318     <xsd:attributeGroup ref="AG Chromakey"/>
319     <xsd:attribute name="embosscolor" type="s:ST ColorType" use="optional"/>
320     <xsd:attribute name="recolortarget" type="s:ST ColorType"/>
321     <xsd:attribute ref="o:href"/>
322     <xsd:attribute ref="o:althref"/>
323     <xsd:attribute ref="o:title"/>
324     <xsd:attribute ref="o:oleid"/>
325     <xsd:attribute ref="o:detectmouseclick"/>
326     <xsd:attribute ref="o:movie"/>
327     <xsd:attribute ref="o:relic"/>
328     <xsd:attribute ref="r:id"/>
329     <xsd:attribute ref="r:pict"/>
330     <xsd:attribute ref="r:href"/>
331 </xsd:complexType>
332 <xsd:complexType name="CT_Path">

```

```

333     <xsd:attributeGroup ref="AG_Id"/>
334     <xsd:attribute name="v" type="xsd:string" use="optional"/>
335     <xsd:attribute name="limo" type="xsd:string" use="optional"/>
336     <xsd:attribute name="textboxrect" type="xsd:string" use="optional"/>
337     <xsd:attribute name="fillok" type="s:ST TrueFalse" use="optional"/>
338     <xsd:attribute name="strokeok" type="s:ST TrueFalse" use="optional"/>
339     <xsd:attribute name="shadowok" type="s:ST TrueFalse" use="optional"/>
340     <xsd:attribute name="arrowok" type="s:ST TrueFalse" use="optional"/>
341     <xsd:attribute name="gradientshapeok" type="s:ST TrueFalse" use="optional"/>
342     <xsd:attribute name="textpathok" type="s:ST TrueFalse" use="optional"/>
343     <xsd:attribute name="insetpenok" type="s:ST TrueFalse" use="optional"/>
344     <xsd:attribute ref="o:connecttype"/>
345     <xsd:attribute ref="o:connectlocs"/>
346     <xsd:attribute ref="o:connectangles"/>
347     <xsd:attribute ref="o:extrusionok"/>
348 </xsd:complexType>
349 <xsd:complexType name="CT_Shadow">
350     <xsd:attributeGroup ref="AG_Id"/>
351     <xsd:attribute name="on" type="s:ST TrueFalse" use="optional"/>
352     <xsd:attribute name="type" type="ST_ShadowType" use="optional"/>
353     <xsd:attribute name="obscured" type="s:ST TrueFalse" use="optional"/>
354     <xsd:attribute name="color" type="s:ST ColorType" use="optional"/>
355     <xsd:attribute name="opacity" type="xsd:string" use="optional"/>
356     <xsd:attribute name="offset" type="xsd:string" use="optional"/>
357     <xsd:attribute name="color2" type="s:ST ColorType" use="optional"/>
358     <xsd:attribute name="offset2" type="xsd:string" use="optional"/>
359     <xsd:attribute name="origin" type="xsd:string" use="optional"/>
360     <xsd:attribute name="matrix" type="xsd:string" use="optional"/>
361 </xsd:complexType>
362 <xsd:complexType name="CT_Stroke">
363     <xsd:sequence>
364         <xsd:element ref="o:left" minOccurs="0"/>
365         <xsd:element ref="o:top" minOccurs="0"/>
366         <xsd:element ref="o:right" minOccurs="0"/>
367         <xsd:element ref="o:bottom" minOccurs="0"/>
368         <xsd:element ref="o:column" minOccurs="0"/>
369     </xsd:sequence>
370     <xsd:attributeGroup ref="AG_Id"/>
371     <xsd:attributeGroup ref="AG_StrokeAttributes"/>
372 </xsd:complexType>
373 <xsd:complexType name="CT_Textbox">
374     <xsd:choice>
375         <xsd:element ref="w:txbxContent" minOccurs="0"/>
376     </xsd:choice>
377     <xsd:attributeGroup ref="AG_Id"/>
378     <xsd:attributeGroup ref="AG_Style"/>
379     <xsd:attribute name="inset" type="xsd:string" use="optional"/>
380     <xsd:attribute ref="o:singleclick"/>
381     <xsd:attribute ref="o:insetmode"/>
382 </xsd:complexType>
383 <xsd:complexType name="CT_TextPath">
384     <xsd:attributeGroup ref="AG_Id"/>
385     <xsd:attributeGroup ref="AG_Style"/>

```

```

386     <xsd:attribute name="on" type="s:ST TrueFalse" use="optional"/>
387     <xsd:attribute name="fitshape" type="s:ST TrueFalse" use="optional"/>
388     <xsd:attribute name="fitpath" type="s:ST TrueFalse" use="optional"/>
389     <xsd:attribute name="trim" type="s:ST TrueFalse" use="optional"/>
390     <xsd:attribute name="xscale" type="s:ST TrueFalse" use="optional"/>
391     <xsd:attribute name="string" type="xsd:string" use="optional"/>
392 </xsd:complexType>
393 <xsd:element name="arc" type="CT_Arc"/>
394 <xsd:element name="curve" type="CT_Curve"/>
395 <xsd:element name="image" type="CT_Image"/>
396 <xsd:element name="line" type="CT_Line"/>
397 <xsd:element name="oval" type="CT_Oval"/>
398 <xsd:element name="polyline" type="CT_PolyLine"/>
399 <xsd:element name="rect" type="CT_Rect"/>
400 <xsd:element name="roundrect" type="CT_RoundRect"/>
401 <xsd:complexType name="CT_Arc">
402     <xsd:sequence>
403         <xsd:group ref="EG_ShapeElements" minOccurs="0" maxOccurs="unbounded"/>
404     </xsd:sequence>
405     <xsd:attributeGroup ref="AG_AllCoreAttributes"/>
406     <xsd:attributeGroup ref="AG_AllShapeAttributes"/>
407     <xsd:attribute name="startAngle" type="xsd:decimal" use="optional"/>
408     <xsd:attribute name="endAngle" type="xsd:decimal" use="optional"/>
409 </xsd:complexType>
410 <xsd:complexType name="CT_Curve">
411     <xsd:sequence>
412         <xsd:group ref="EG_ShapeElements" minOccurs="0" maxOccurs="unbounded"/>
413     </xsd:sequence>
414     <xsd:attributeGroup ref="AG_AllCoreAttributes"/>
415     <xsd:attributeGroup ref="AG_AllShapeAttributes"/>
416     <xsd:attribute name="from" type="xsd:string" use="optional"/>
417     <xsd:attribute name="control1" type="xsd:string" use="optional"/>
418     <xsd:attribute name="control2" type="xsd:string" use="optional"/>
419     <xsd:attribute name="to" type="xsd:string" use="optional"/>
420 </xsd:complexType>
421 <xsd:complexType name="CT_Image">
422     <xsd:sequence>
423         <xsd:group ref="EG_ShapeElements" minOccurs="0" maxOccurs="unbounded"/>
424     </xsd:sequence>
425     <xsd:attributeGroup ref="AG_AllCoreAttributes"/>
426     <xsd:attributeGroup ref="AG_AllShapeAttributes"/>
427     <xsd:attributeGroup ref="AG_ImageAttributes"/>
428 </xsd:complexType>
429 <xsd:complexType name="CT_Line">
430     <xsd:sequence>
431         <xsd:group ref="EG_ShapeElements" minOccurs="0" maxOccurs="unbounded"/>
432     </xsd:sequence>
433     <xsd:attributeGroup ref="AG_AllCoreAttributes"/>
434     <xsd:attributeGroup ref="AG_AllShapeAttributes"/>
435     <xsd:attribute name="from" type="xsd:string" use="optional"/>
436     <xsd:attribute name="to" type="xsd:string" use="optional"/>
437 </xsd:complexType>
438 <xsd:complexType name="CT_Oval">

```

```

439     <xsd:choice maxOccurs="unbounded">
440         <xsd:group ref="EG_ShapeElements" minOccurs="0" maxOccurs="unbounded"/>
441     </xsd:choice>
442     <xsd:attributeGroup ref="AG_AllCoreAttributes"/>
443     <xsd:attributeGroup ref="AG_AllShapeAttributes"/>
444 </xsd:complexType>
445 <xsd:complexType name="CT_PolyLine">
446     <xsd:choice minOccurs="0" maxOccurs="unbounded">
447         <xsd:group ref="EG_ShapeElements"/>
448         <xsd:element ref="o:ink"/>
449     </xsd:choice>
450     <xsd:attributeGroup ref="AG_AllCoreAttributes"/>
451     <xsd:attributeGroup ref="AG_AllShapeAttributes"/>
452     <xsd:attribute name="points" type="xsd:string" use="optional"/>
453 </xsd:complexType>
454 <xsd:complexType name="CT_Rect">
455     <xsd:choice maxOccurs="unbounded">
456         <xsd:group ref="EG_ShapeElements" minOccurs="0" maxOccurs="unbounded"/>
457     </xsd:choice>
458     <xsd:attributeGroup ref="AG_AllCoreAttributes"/>
459     <xsd:attributeGroup ref="AG_AllShapeAttributes"/>
460 </xsd:complexType>
461 <xsd:complexType name="CT_RoundRect">
462     <xsd:choice maxOccurs="unbounded">
463         <xsd:group ref="EG_ShapeElements" minOccurs="0" maxOccurs="unbounded"/>
464     </xsd:choice>
465     <xsd:attributeGroup ref="AG_AllCoreAttributes"/>
466     <xsd:attributeGroup ref="AG_AllShapeAttributes"/>
467     <xsd:attribute name="arcsz" type="xsd:string" use="optional"/>
468 </xsd:complexType>
469 <xsd:simpleType name="ST_Ext">
470     <xsd:restriction base="xsd:string">
471         <xsd:enumeration value="view"/>
472         <xsd:enumeration value="edit"/>
473         <xsd:enumeration value="backwardCompatible"/>
474     </xsd:restriction>
475 </xsd:simpleType>
476 <xsd:simpleType name="ST_FillType">
477     <xsd:restriction base="xsd:string">
478         <xsd:enumeration value="solid"/>
479         <xsd:enumeration value="gradient"/>
480         <xsd:enumeration value="gradientRadial"/>
481         <xsd:enumeration value="tile"/>
482         <xsd:enumeration value="pattern"/>
483         <xsd:enumeration value="frame"/>
484     </xsd:restriction>
485 </xsd:simpleType>
486 <xsd:simpleType name="ST_FillMethod">
487     <xsd:restriction base="xsd:string">
488         <xsd:enumeration value="none"/>
489         <xsd:enumeration value="linear"/>
490         <xsd:enumeration value="sigma"/>
491         <xsd:enumeration value="any"/>

```

```

492         <xsd:enumeration value="linear sigma"/>
493     </xsd:restriction>
494 </xsd:simpleType>
495 <xsd:simpleType name="ST_ShadowType">
496     <xsd:restriction base="xsd:string">
497         <xsd:enumeration value="single"/>
498         <xsd:enumeration value="double"/>
499         <xsd:enumeration value="emboss"/>
500         <xsd:enumeration value="perspective"/>
501     </xsd:restriction>
502 </xsd:simpleType>
503 <xsd:simpleType name="ST_StrokeLineStyle">
504     <xsd:restriction base="xsd:string">
505         <xsd:enumeration value="single"/>
506         <xsd:enumeration value="thinThin"/>
507         <xsd:enumeration value="thinThick"/>
508         <xsd:enumeration value="thickThin"/>
509         <xsd:enumeration value="thickBetweenThin"/>
510     </xsd:restriction>
511 </xsd:simpleType>
512 <xsd:simpleType name="ST_StrokeJoinStyle">
513     <xsd:restriction base="xsd:string">
514         <xsd:enumeration value="round"/>
515         <xsd:enumeration value="bevel"/>
516         <xsd:enumeration value="miter"/>
517     </xsd:restriction>
518 </xsd:simpleType>
519 <xsd:simpleType name="ST_StrokeEndCap">
520     <xsd:restriction base="xsd:string">
521         <xsd:enumeration value="flat"/>
522         <xsd:enumeration value="square"/>
523         <xsd:enumeration value="round"/>
524     </xsd:restriction>
525 </xsd:simpleType>
526 <xsd:simpleType name="ST_StrokeArrowLength">
527     <xsd:restriction base="xsd:string">
528         <xsd:enumeration value="short"/>
529         <xsd:enumeration value="medium"/>
530         <xsd:enumeration value="long"/>
531     </xsd:restriction>
532 </xsd:simpleType>
533 <xsd:simpleType name="ST_StrokeArrowWidth">
534     <xsd:restriction base="xsd:string">
535         <xsd:enumeration value="narrow"/>
536         <xsd:enumeration value="medium"/>
537         <xsd:enumeration value="wide"/>
538     </xsd:restriction>
539 </xsd:simpleType>
540 <xsd:simpleType name="ST_StrokeArrowType">
541     <xsd:restriction base="xsd:string">
542         <xsd:enumeration value="none"/>
543         <xsd:enumeration value="block"/>
544         <xsd:enumeration value="classic"/>

```

```

545         <xsd:enumeration value="oval"/>
546         <xsd:enumeration value="diamond"/>
547         <xsd:enumeration value="open"/>
548     </xsd:restriction>
549 </xsd:simpleType>
550 <xsd:simpleType name="ST_ImageAspect">
551     <xsd:restriction base="xsd:string">
552         <xsd:enumeration value="ignore"/>
553         <xsd:enumeration value="atMost"/>
554         <xsd:enumeration value="atLeast"/>
555     </xsd:restriction>
556 </xsd:simpleType>
557 <xsd:simpleType name="ST_EditAs">
558     <xsd:restriction base="xsd:string">
559         <xsd:enumeration value="canvas"/>
560         <xsd:enumeration value="orgchart"/>
561         <xsd:enumeration value="radial"/>
562         <xsd:enumeration value="cycle"/>
563         <xsd:enumeration value="stacked"/>
564         <xsd:enumeration value="venn"/>
565         <xsd:enumeration value="bullseye"/>
566     </xsd:restriction>
567 </xsd:simpleType>
568 </xsd:schema>

```

A.6.2 VML - Office Drawing

This schema is available in the file vml-officeDrawing.xsd.

```

1 <xsd:schema xmlns="urn:schemas-microsoft-com:office:office" xmlns:v="urn:schemas-microsoft-com:vml"
2   xmlns:xsd="http://www.w3.org/2001/XMLSchema"
3   xmlns:r="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
4   xmlns:s="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
5   targetNamespace="urn:schemas-microsoft-com:office:office" elementFormDefault="qualified"
6   attributeFormDefault="unqualified">
7     <xsd:import namespace="urn:schemas-microsoft-com:vml" schemaLocation="vml-main.xsd"/>
8     <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
9       schemaLocation="shared-relationshipReference.xsd"/>
10    <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
11      schemaLocation="shared-commonSimpleTypes.xsd"/>
12    <xsd:attribute name="bwmode" type="ST_BWMode"/>
13    <xsd:attribute name="bwpure" type="ST_BWMode"/>
14    <xsd:attribute name="bwnormal" type="ST_BWMode"/>
15    <xsd:attribute name="targetscreensize" type="ST_ScreenSize"/>
16    <xsd:attribute name="insetmode" type="ST_InsetMode" default="custom"/>
17    <xsd:attribute name="spt" type="xsd:float"/>
18    <xsd:attribute name="wrapcoords" type="xsd:string"/>
19    <xsd:attribute name="oned" type="s:ST_TrueFalse"/>
20    <xsd:attribute name="regroupid" type="xsd:integer"/>
21    <xsd:attribute name="doubleclicknotify" type="s:ST_TrueFalse"/>
22    <xsd:attribute name="connectortype" type="ST_ConnectorType" default="straight"/>
23    <xsd:attribute name="button" type="s:ST_TrueFalse"/>
24    <xsd:attribute name="userhidden" type="s:ST_TrueFalse"/>

```

```

25 <xsd:attribute name="forcedash" type="s:ST TrueFalse"/>
26 <xsd:attribute name="oleicon" type="s:ST TrueFalse"/>
27 <xsd:attribute name="ole" type="s:ST TrueFalseBlank"/>
28 <xsd:attribute name="preferrelative" type="s:ST TrueFalse"/>
29 <xsd:attribute name="cliptowrap" type="s:ST TrueFalse"/>
30 <xsd:attribute name="clip" type="s:ST TrueFalse"/>
31 <xsd:attribute name="bullet" type="s:ST TrueFalse"/>
32 <xsd:attribute name="hr" type="s:ST TrueFalse"/>
33 <xsd:attribute name="hrstd" type="s:ST TrueFalse"/>
34 <xsd:attribute name="hrnoshade" type="s:ST TrueFalse"/>
35 <xsd:attribute name="hrpct" type="xsd:float"/>
36 <xsd:attribute name="hralign" type="ST HrAlign" default="left"/>
37 <xsd:attribute name="allowincell" type="s:ST TrueFalse"/>
38 <xsd:attribute name="allowoverlap" type="s:ST TrueFalse"/>
39 <xsd:attribute name="userdrawn" type="s:ST TrueFalse"/>
40 <xsd:attribute name="bordertopcolor" type="xsd:string"/>
41 <xsd:attribute name="borderleftcolor" type="xsd:string"/>
42 <xsd:attribute name="borderbottomcolor" type="xsd:string"/>
43 <xsd:attribute name="borderrightcolor" type="xsd:string"/>
44 <xsd:attribute name="connecttype" type="ST ConnectType"/>
45 <xsd:attribute name="connectlocs" type="xsd:string"/>
46 <xsd:attribute name="connectangles" type="xsd:string"/>
47 <xsd:attribute name="master" type="xsd:string"/>
48 <xsd:attribute name="extrusionok" type="s:ST TrueFalse"/>
49 <xsd:attribute name="href" type="xsd:string"/>
50 <xsd:attribute name="althref" type="xsd:string"/>
51 <xsd:attribute name="title" type="xsd:string"/>
52 <xsd:attribute name="singleclick" type="s:ST TrueFalse"/>
53 <xsd:attribute name="oleid" type="xsd:float"/>
54 <xsd:attribute name="detectmouseclick" type="s:ST TrueFalse"/>
55 <xsd:attribute name="movie" type="xsd:float"/>
56 <xsd:attribute name="spid" type="xsd:string"/>
57 <xsd:attribute name="opacity2" type="xsd:string"/>
58 <xsd:attribute name="relid" type="r:ST RelationshipId"/>
59 <xsd:attribute name="dgmlayout" type="ST DiagramLayout"/>
60 <xsd:attribute name="dgmnodekind" type="xsd:integer"/>
61 <xsd:attribute name="dgmlayoutmru" type="ST DiagramLayout"/>
62 <xsd:attribute name="gfxdata" type="xsd:base64Binary"/>
63 <xsd:attribute name="tableproperties" type="xsd:string"/>
64 <xsd:attribute name="tablelimits" type="xsd:string"/>
65 <xsd:element name="shapedefaults" type="CT ShapeDefaults"/>
66 <xsd:element name="shapelayout" type="CT ShapeLayout"/>
67 <xsd:element name="signatureline" type="CT SignatureLine"/>
68 <xsd:element name="ink" type="CT Ink"/>
69 <xsd:element name="diagram" type="CT Diagram"/>
70 <xsd:element name="equationxml" type="CT EquationXml"/>
71 <xsd:complexType name="CT_ShapeDefaults">
72   <xsd:all minOccurs="0">
73     <xsd:element ref="v:fill" minOccurs="0"/>
74     <xsd:element ref="v:stroke" minOccurs="0"/>
75     <xsd:element ref="v:textbox" minOccurs="0"/>
76     <xsd:element ref="v:shadow" minOccurs="0"/>
77     <xsd:element ref="skew" minOccurs="0"/>

```



```

78     <xsd:element ref="extrusion" minOccurs="0"/>
79     <xsd:element ref="callout" minOccurs="0"/>
80     <xsd:element ref="lock" minOccurs="0"/>
81     <xsd:element name="colormru" minOccurs="0" type="CT_ColorMru"/>
82     <xsd:element name="colormenu" minOccurs="0" type="CT_ColorMenu"/>
83 </xsd:all>
84 <xsd:attributeGroup ref="v:AG_Ext"/>
85 <xsd:attribute name="spidmax" type="xsd:integer" use="optional"/>
86 <xsd:attribute name="style" type="xsd:string" use="optional"/>
87 <xsd:attribute name="fill" type="s:ST_TrueFalse" use="optional"/>
88 <xsd:attribute name="fillcolor" type="s:ST_ColorType" use="optional"/>
89 <xsd:attribute name="stroke" type="s:ST_TrueFalse" use="optional"/>
90 <xsd:attribute name="strokecolor" type="s:ST_ColorType"/>
91 <xsd:attribute name="allowincell" form="qualified" type="s:ST_TrueFalse"/>
92 </xsd:complexType>
93 <xsd:complexType name="CT_Ink">
94     <xsd:sequence/>
95     <xsd:attribute name="i" type="xsd:string"/>
96     <xsd:attribute name="annotation" type="s:ST_TrueFalse"/>
97     <xsd:attribute name="contentType" type="ST_ContentType" use="optional"/>
98 </xsd:complexType>
99 <xsd:complexType name="CT_SignatureLine">
100     <xsd:attributeGroup ref="v:AG_Ext"/>
101     <xsd:attribute name="issignatureline" type="s:ST_TrueFalse"/>
102     <xsd:attribute name="id" type="s:ST_Guid"/>
103     <xsd:attribute name="provid" type="s:ST_Guid"/>
104     <xsd:attribute name="signinginstructionsset" type="s:ST_TrueFalse"/>
105     <xsd:attribute name="allowcomments" type="s:ST_TrueFalse"/>
106     <xsd:attribute name="showsigndate" type="s:ST_TrueFalse"/>
107     <xsd:attribute name="suggestedsigner" type="xsd:string" form="qualified"/>
108     <xsd:attribute name="suggestedsigner2" type="xsd:string" form="qualified"/>
109     <xsd:attribute name="suggestedsigneremail" type="xsd:string" form="qualified"/>
110     <xsd:attribute name="signinginstructions" type="xsd:string"/>
111     <xsd:attribute name="addlxml" type="xsd:string"/>
112     <xsd:attribute name="sigprovurl" type="xsd:string"/>
113 </xsd:complexType>
114 <xsd:complexType name="CT_ShapeLayout">
115     <xsd:all>
116         <xsd:element name="idmap" type="CT_IdMap" minOccurs="0"/>
117         <xsd:element name="regrouptable" type="CT_RegroupTable" minOccurs="0"/>
118         <xsd:element name="rules" type="CT_Rules" minOccurs="0"/>
119     </xsd:all>
120     <xsd:attributeGroup ref="v:AG_Ext"/>
121 </xsd:complexType>
122 <xsd:complexType name="CT_IdMap">
123     <xsd:attributeGroup ref="v:AG_Ext"/>
124     <xsd:attribute name="data" type="xsd:string" use="optional"/>
125 </xsd:complexType>
126 <xsd:complexType name="CT_RegroupTable">
127     <xsd:sequence>
128         <xsd:element name="entry" type="CT_Entry" minOccurs="0" maxOccurs="unbounded"/>
129     </xsd:sequence>
130     <xsd:attributeGroup ref="v:AG_Ext"/>

```

```

131 </xsd:complexType>
132 <xsd:complexType name="CT_Entry">
133   <xsd:attribute name="new" type="xsd:int" use="optional"/>
134   <xsd:attribute name="old" type="xsd:int" use="optional"/>
135 </xsd:complexType>
136 <xsd:complexType name="CT_Rules">
137   <xsd:sequence>
138     <xsd:element name="r" type="CT_R" minOccurs="0" maxOccurs="unbounded"/>
139   </xsd:sequence>
140   <xsd:attributeGroup ref="v:AG_Ext"/>
141 </xsd:complexType>
142 <xsd:complexType name="CT_R">
143   <xsd:sequence>
144     <xsd:element name="proxy" type="CT_Proxy" minOccurs="0" maxOccurs="unbounded"/>
145   </xsd:sequence>
146   <xsd:attribute name="id" type="xsd:string" use="required"/>
147   <xsd:attribute name="type" type="ST_RType" use="optional"/>
148   <xsd:attribute name="how" type="ST_How" use="optional"/>
149   <xsd:attribute name="idref" type="xsd:string" use="optional"/>
150 </xsd:complexType>
151 <xsd:complexType name="CT_Proxy">
152   <xsd:attribute name="start" type="s:ST_TrueFalseBlank" use="optional" default="false"/>
153   <xsd:attribute name="end" type="s:ST_TrueFalseBlank" use="optional" default="false"/>
154   <xsd:attribute name="idref" type="xsd:string" use="optional"/>
155   <xsd:attribute name="connectloc" type="xsd:int" use="optional"/>
156 </xsd:complexType>
157 <xsd:complexType name="CT_Diagram">
158   <xsd:sequence>
159     <xsd:element name="relationtable" type="CT_RelationTable" minOccurs="0"/>
160   </xsd:sequence>
161   <xsd:attributeGroup ref="v:AG_Ext"/>
162   <xsd:attribute name="dgmstyle" type="xsd:integer" use="optional"/>
163   <xsd:attribute name="autoformat" type="s:ST_TrueFalse" use="optional"/>
164   <xsd:attribute name="reverse" type="s:ST_TrueFalse" use="optional"/>
165   <xsd:attribute name="autolayout" type="s:ST_TrueFalse" use="optional"/>
166   <xsd:attribute name="dgmstyle" type="xsd:integer" use="optional"/>
167   <xsd:attribute name="dgmstyle" type="xsd:integer" use="optional"/>
168   <xsd:attribute name="dgmfontsize" type="xsd:integer" use="optional"/>
169   <xsd:attribute name="constrainbounds" type="xsd:string" use="optional"/>
170   <xsd:attribute name="dgmstyle" type="xsd:integer" use="optional"/>
171 </xsd:complexType>
172 <xsd:complexType name="CT_EquationXml">
173   <xsd:sequence>
174     <xsd:any namespace="##any"/>
175   </xsd:sequence>
176   <xsd:attribute name="contentType" type="ST_AlternateMathContentType" use="optional"/>
177 </xsd:complexType>
178 <xsd:simpleType name="ST_AlternateMathContentType">
179   <xsd:restriction base="xsd:string"/>
180 </xsd:simpleType>
181 <xsd:complexType name="CT_RelationTable">
182   <xsd:sequence>
183     <xsd:element name="rel" type="CT_Relation" minOccurs="0" maxOccurs="unbounded"/>

```

```

184     </xsd:sequence>
185     <xsd:attributeGroup ref="v:AG_Ext"/>
186 </xsd:complexType>
187 <xsd:complexType name="CT_Relation">
188     <xsd:attributeGroup ref="v:AG_Ext"/>
189     <xsd:attribute name="idsrc" type="xsd:string" use="optional"/>
190     <xsd:attribute name="iddest" type="xsd:string" use="optional"/>
191     <xsd:attribute name="idcntr" type="xsd:string" use="optional"/>
192 </xsd:complexType>
193 <xsd:complexType name="CT_ColorMru">
194     <xsd:attributeGroup ref="v:AG_Ext"/>
195     <xsd:attribute name="colors" type="xsd:string"/>
196 </xsd:complexType>
197 <xsd:complexType name="CT_ColorMenu">
198     <xsd:attributeGroup ref="v:AG_Ext"/>
199     <xsd:attribute name="strokecolor" type="s:ST_ColorType"/>
200     <xsd:attribute name="fillcolor" type="s:ST_ColorType"/>
201     <xsd:attribute name="shadowcolor" type="s:ST_ColorType"/>
202     <xsd:attribute name="extrusioncolor" type="s:ST_ColorType"/>
203 </xsd:complexType>
204 <xsd:element name="skew" type="CT_Skew"/>
205 <xsd:element name="extrusion" type="CT_Extrusion"/>
206 <xsd:element name="callout" type="CT_Callout"/>
207 <xsd:element name="lock" type="CT_Lock"/>
208 <xsd:element name="OLEObject" type="CT_OLEObject"/>
209 <xsd:element name="complex" type="CT_Complex"/>
210 <xsd:element name="left" type="CT_StrokeChild"/>
211 <xsd:element name="top" type="CT_StrokeChild"/>
212 <xsd:element name="right" type="CT_StrokeChild"/>
213 <xsd:element name="bottom" type="CT_StrokeChild"/>
214 <xsd:element name="column" type="CT_StrokeChild"/>
215 <xsd:element name="clippath" type="CT_ClipPath"/>
216 <xsd:element name="fill" type="CT_Fill"/>
217 <xsd:complexType name="CT_Skew">
218     <xsd:attributeGroup ref="v:AG_Ext"/>
219     <xsd:attribute name="id" type="xsd:string" use="optional"/>
220     <xsd:attribute name="on" type="s:ST_TrueFalse" use="optional"/>
221     <xsd:attribute name="offset" type="xsd:string" use="optional"/>
222     <xsd:attribute name="origin" type="xsd:string" use="optional"/>
223     <xsd:attribute name="matrix" type="xsd:string" use="optional"/>
224 </xsd:complexType>
225 <xsd:complexType name="CT_Extrusion">
226     <xsd:attributeGroup ref="v:AG_Ext"/>
227     <xsd:attribute name="on" type="s:ST_TrueFalse" use="optional"/>
228     <xsd:attribute name="type" type="ST_ExtrusionType" default="parallel" use="optional"/>
229     <xsd:attribute name="render" type="ST_ExtrusionRender" default="solid" use="optional"/>
230     <xsd:attribute name="viewpointorigin" type="xsd:string" use="optional"/>
231     <xsd:attribute name="viewpoint" type="xsd:string" use="optional"/>
232     <xsd:attribute name="plane" type="ST_ExtrusionPlane" default="XY" use="optional"/>
233     <xsd:attribute name="skewangle" type="xsd:float" use="optional"/>
234     <xsd:attribute name="skewamt" type="xsd:string" use="optional"/>
235     <xsd:attribute name="foredepth" type="xsd:string" use="optional"/>
236     <xsd:attribute name="backdepth" type="xsd:string" use="optional"/>

```

```

237 <xsd:attribute name="orientation" type="xsd:string" use="optional"/>
238 <xsd:attribute name="orientationangle" type="xsd:float" use="optional"/>
239 <xsd:attribute name="lockrotationcenter" type="s:ST TrueFalse" use="optional"/>
240 <xsd:attribute name="autorotationcenter" type="s:ST TrueFalse" use="optional"/>
241 <xsd:attribute name="rotationcenter" type="xsd:string" use="optional"/>
242 <xsd:attribute name="rotationangle" type="xsd:string" use="optional"/>
243 <xsd:attribute name="colormode" type="ST ColorMode" use="optional"/>
244 <xsd:attribute name="color" type="s:ST ColorType" use="optional"/>
245 <xsd:attribute name="shininess" type="xsd:float" use="optional"/>
246 <xsd:attribute name="specularity" type="xsd:string" use="optional"/>
247 <xsd:attribute name="diffusivity" type="xsd:string" use="optional"/>
248 <xsd:attribute name="metal" type="s:ST TrueFalse" use="optional"/>
249 <xsd:attribute name="edge" type="xsd:string" use="optional"/>
250 <xsd:attribute name="facet" type="xsd:string" use="optional"/>
251 <xsd:attribute name="lightface" type="s:ST TrueFalse" use="optional"/>
252 <xsd:attribute name="brightness" type="xsd:string" use="optional"/>
253 <xsd:attribute name="lightposition" type="xsd:string" use="optional"/>
254 <xsd:attribute name="lightlevel" type="xsd:string" use="optional"/>
255 <xsd:attribute name="lightharsh" type="s:ST TrueFalse" use="optional"/>
256 <xsd:attribute name="lightposition2" type="xsd:string" use="optional"/>
257 <xsd:attribute name="lightlevel2" type="xsd:string" use="optional"/>
258 <xsd:attribute name="lightharsh2" type="s:ST TrueFalse" use="optional"/>
259 </xsd:complexType>
260 <xsd:complexType name="CT_Callout">
261   <xsd:attributeGroup ref="v:AG Ext"/>
262   <xsd:attribute name="on" type="s:ST TrueFalse" use="optional"/>
263   <xsd:attribute name="type" type="xsd:string" use="optional"/>
264   <xsd:attribute name="gap" type="xsd:string" use="optional"/>
265   <xsd:attribute name="angle" type="ST Angle" use="optional"/>
266   <xsd:attribute name="dropauto" type="s:ST TrueFalse" use="optional"/>
267   <xsd:attribute name="drop" type="ST CalloutDrop" use="optional"/>
268   <xsd:attribute name="distance" type="xsd:string" use="optional"/>
269   <xsd:attribute name="lengthspecified" type="s:ST TrueFalse" default="f" use="optional"/>
270   <xsd:attribute name="length" type="xsd:string" use="optional"/>
271   <xsd:attribute name="accentbar" type="s:ST TrueFalse" use="optional"/>
272   <xsd:attribute name="textborder" type="s:ST TrueFalse" use="optional"/>
273   <xsd:attribute name="minusx" type="s:ST TrueFalse" use="optional"/>
274   <xsd:attribute name="minusy" type="s:ST TrueFalse" use="optional"/>
275 </xsd:complexType>
276 <xsd:complexType name="CT_Lock">
277   <xsd:attributeGroup ref="v:AG Ext"/>
278   <xsd:attribute name="position" type="s:ST TrueFalse" use="optional"/>
279   <xsd:attribute name="selection" type="s:ST TrueFalse" use="optional"/>
280   <xsd:attribute name="grouping" type="s:ST TrueFalse" use="optional"/>
281   <xsd:attribute name="ungrouping" type="s:ST TrueFalse" use="optional"/>
282   <xsd:attribute name="rotation" type="s:ST TrueFalse" use="optional"/>
283   <xsd:attribute name="cropping" type="s:ST TrueFalse" use="optional"/>
284   <xsd:attribute name="verticies" type="s:ST TrueFalse" use="optional"/>
285   <xsd:attribute name="adjusthandles" type="s:ST TrueFalse" use="optional"/>
286   <xsd:attribute name="text" type="s:ST TrueFalse" use="optional"/>
287   <xsd:attribute name="aspectratio" type="s:ST TrueFalse" use="optional"/>
288   <xsd:attribute name="shapetype" type="s:ST TrueFalse" use="optional"/>
289 </xsd:complexType>

```

```

290 <xsd:complexType name="CT_OLEObject">
291   <xsd:sequence>
292     <xsd:element name="LinkType" type="ST_OLELinkType" minOccurs="0"/>
293     <xsd:element name="LockedField" type="s:ST_TrueFalseBlank" minOccurs="0"/>
294     <xsd:element name="FieldCodes" type="xsd:string" minOccurs="0"/>
295   </xsd:sequence>
296   <xsd:attribute name="Type" type="ST_OLEType" use="optional"/>
297   <xsd:attribute name="ProgID" type="xsd:string" use="optional"/>
298   <xsd:attribute name="ShapeID" type="xsd:string" use="optional"/>
299   <xsd:attribute name="DrawAspect" type="ST_OLEDrawAspect" use="optional"/>
300   <xsd:attribute name="ObjectID" type="xsd:string" use="optional"/>
301   <xsd:attribute ref="r:id" use="optional"/>
302   <xsd:attribute name="UpdateMode" type="ST_OLEUpdateMode" use="optional"/>
303 </xsd:complexType>
304 <xsd:complexType name="CT_Complex">
305   <xsd:attributeGroup ref="v:AG_Ext"/>
306 </xsd:complexType>
307 <xsd:complexType name="CT_StrokeChild">
308   <xsd:attributeGroup ref="v:AG_Ext"/>
309   <xsd:attribute name="on" type="s:ST_TrueFalse" use="optional"/>
310   <xsd:attribute name="weight" type="xsd:string" use="optional"/>
311   <xsd:attribute name="color" type="s:ST_ColorType" use="optional"/>
312   <xsd:attribute name="color2" type="s:ST_ColorType" use="optional"/>
313   <xsd:attribute name="opacity" type="xsd:string" use="optional"/>
314   <xsd:attribute name="linestyle" type="v:ST_StrokeLineStyle" use="optional"/>
315   <xsd:attribute name="miterlimit" type="xsd:decimal" use="optional"/>
316   <xsd:attribute name="joinstyle" type="v:ST_StrokeJoinStyle" use="optional"/>
317   <xsd:attribute name="endcap" type="v:ST_StrokeEndCap" use="optional"/>
318   <xsd:attribute name="dashstyle" type="xsd:string" use="optional"/>
319   <xsd:attribute name="insetpen" type="s:ST_TrueFalse" use="optional"/>
320   <xsd:attribute name="filltype" type="v:ST_FillType" use="optional"/>
321   <xsd:attribute name="src" type="xsd:string" use="optional"/>
322   <xsd:attribute name="imageaspect" type="v:ST_ImageAspect" use="optional"/>
323   <xsd:attribute name="imagesize" type="xsd:string" use="optional"/>
324   <xsd:attribute name="imagealignshape" type="s:ST_TrueFalse" use="optional"/>
325   <xsd:attribute name="startarrow" type="v:ST_StrokeArrowType" use="optional"/>
326   <xsd:attribute name="startarrowwidth" type="v:ST_StrokeArrowWidth" use="optional"/>
327   <xsd:attribute name="startarrowlength" type="v:ST_StrokeArrowLength" use="optional"/>
328   <xsd:attribute name="endarrow" type="v:ST_StrokeArrowType" use="optional"/>
329   <xsd:attribute name="endarrowwidth" type="v:ST_StrokeArrowWidth" use="optional"/>
330   <xsd:attribute name="endarrowlength" type="v:ST_StrokeArrowLength" use="optional"/>
331   <xsd:attribute ref="href"/>
332   <xsd:attribute ref="althref"/>
333   <xsd:attribute ref="title"/>
334   <xsd:attribute ref="forcedash"/>
335 </xsd:complexType>
336 <xsd:complexType name="CT_ClipPath">
337   <xsd:attribute name="v" type="xsd:string" use="required" form="qualified"/>
338 </xsd:complexType>
339 <xsd:complexType name="CT_Fill">
340   <xsd:attributeGroup ref="v:AG_Ext"/>
341   <xsd:attribute name="type" type="ST_FillType"/>
342 </xsd:complexType>

```

```

343 <xsd:simpleType name="ST_RType">
344   <xsd:restriction base="xsd:string">
345     <xsd:enumeration value="arc"/>
346     <xsd:enumeration value="callout"/>
347     <xsd:enumeration value="connector"/>
348     <xsd:enumeration value="align"/>
349   </xsd:restriction>
350 </xsd:simpleType>
351 <xsd:simpleType name="ST_How">
352   <xsd:restriction base="xsd:string">
353     <xsd:enumeration value="top"/>
354     <xsd:enumeration value="middle"/>
355     <xsd:enumeration value="bottom"/>
356     <xsd:enumeration value="left"/>
357     <xsd:enumeration value="center"/>
358     <xsd:enumeration value="right"/>
359   </xsd:restriction>
360 </xsd:simpleType>
361 <xsd:simpleType name="ST_BWMode">
362   <xsd:restriction base="xsd:string">
363     <xsd:enumeration value="color"/>
364     <xsd:enumeration value="auto"/>
365     <xsd:enumeration value="grayScale"/>
366     <xsd:enumeration value="lightGrayscale"/>
367     <xsd:enumeration value="inverseGray"/>
368     <xsd:enumeration value="grayOutline"/>
369     <xsd:enumeration value="highContrast"/>
370     <xsd:enumeration value="black"/>
371     <xsd:enumeration value="white"/>
372     <xsd:enumeration value="hide"/>
373     <xsd:enumeration value="undrawn"/>
374     <xsd:enumeration value="blackTextAndLines"/>
375   </xsd:restriction>
376 </xsd:simpleType>
377 <xsd:simpleType name="ST_ScreenSize">
378   <xsd:restriction base="xsd:string">
379     <xsd:enumeration value="544,376"/>
380     <xsd:enumeration value="640,480"/>
381     <xsd:enumeration value="720,512"/>
382     <xsd:enumeration value="800,600"/>
383     <xsd:enumeration value="1024,768"/>
384     <xsd:enumeration value="1152,862"/>
385   </xsd:restriction>
386 </xsd:simpleType>
387 <xsd:simpleType name="ST_InsetMode">
388   <xsd:restriction base="xsd:string">
389     <xsd:enumeration value="auto"/>
390     <xsd:enumeration value="custom"/>
391   </xsd:restriction>
392 </xsd:simpleType>
393 <xsd:simpleType name="ST_ColorMode">
394   <xsd:restriction base="xsd:string">
395     <xsd:enumeration value="auto"/>

```

```

396         <xsd:enumeration value="custom"/>
397     </xsd:restriction>
398 </xsd:simpleType>
399 <xsd:simpleType name="ST_ContentType">
400     <xsd:restriction base="xsd:string"/>
401 </xsd:simpleType>
402 <xsd:simpleType name="ST_DiagramLayout">
403     <xsd:restriction base="xsd:integer">
404         <xsd:enumeration value="0"/>
405         <xsd:enumeration value="1"/>
406         <xsd:enumeration value="2"/>
407         <xsd:enumeration value="3"/>
408     </xsd:restriction>
409 </xsd:simpleType>
410 <xsd:simpleType name="ST_ExtrusionType">
411     <xsd:restriction base="xsd:string">
412         <xsd:enumeration value="perspective"/>
413         <xsd:enumeration value="parallel"/>
414     </xsd:restriction>
415 </xsd:simpleType>
416 <xsd:simpleType name="ST_ExtrusionRender">
417     <xsd:restriction base="xsd:string">
418         <xsd:enumeration value="solid"/>
419         <xsd:enumeration value="wireFrame"/>
420         <xsd:enumeration value="boundingCube"/>
421     </xsd:restriction>
422 </xsd:simpleType>
423 <xsd:simpleType name="ST_ExtrusionPlane">
424     <xsd:restriction base="xsd:string">
425         <xsd:enumeration value="XY"/>
426         <xsd:enumeration value="ZX"/>
427         <xsd:enumeration value="YZ"/>
428     </xsd:restriction>
429 </xsd:simpleType>
430 <xsd:simpleType name="ST_Angle">
431     <xsd:restriction base="xsd:string">
432         <xsd:enumeration value="any"/>
433         <xsd:enumeration value="30"/>
434         <xsd:enumeration value="45"/>
435         <xsd:enumeration value="60"/>
436         <xsd:enumeration value="90"/>
437         <xsd:enumeration value="auto"/>
438     </xsd:restriction>
439 </xsd:simpleType>
440 <xsd:simpleType name="ST_CalloutDrop">
441     <xsd:restriction base="xsd:string"/>
442 </xsd:simpleType>
443 <xsd:simpleType name="ST_CalloutPlacement">
444     <xsd:restriction base="xsd:string">
445         <xsd:enumeration value="top"/>
446         <xsd:enumeration value="center"/>
447         <xsd:enumeration value="bottom"/>
448         <xsd:enumeration value="user"/>

```

```

449     </xsd:restriction>
450 </xsd:simpleType>
451 <xsd:simpleType name="ST_ConnectorType">
452     <xsd:restriction base="xsd:string">
453         <xsd:enumeration value="none"/>
454         <xsd:enumeration value="straight"/>
455         <xsd:enumeration value="elbow"/>
456         <xsd:enumeration value="curved"/>
457     </xsd:restriction>
458 </xsd:simpleType>
459 <xsd:simpleType name="ST_HrAlign">
460     <xsd:restriction base="xsd:string">
461         <xsd:enumeration value="left"/>
462         <xsd:enumeration value="right"/>
463         <xsd:enumeration value="center"/>
464     </xsd:restriction>
465 </xsd:simpleType>
466 <xsd:simpleType name="ST_ConnectType">
467     <xsd:restriction base="xsd:string">
468         <xsd:enumeration value="none"/>
469         <xsd:enumeration value="rect"/>
470         <xsd:enumeration value="segments"/>
471         <xsd:enumeration value="custom"/>
472     </xsd:restriction>
473 </xsd:simpleType>
474 <xsd:simpleType name="ST_OLELinkType">
475     <xsd:restriction base="xsd:string"/>
476 </xsd:simpleType>
477 <xsd:simpleType name="ST_OLEType">
478     <xsd:restriction base="xsd:string">
479         <xsd:enumeration value="Embed"/>
480         <xsd:enumeration value="Link"/>
481     </xsd:restriction>
482 </xsd:simpleType>
483 <xsd:simpleType name="ST_OLEDrawAspect">
484     <xsd:restriction base="xsd:string">
485         <xsd:enumeration value="Content"/>
486         <xsd:enumeration value="Icon"/>
487     </xsd:restriction>
488 </xsd:simpleType>
489 <xsd:simpleType name="ST_OLEUpdateMode">
490     <xsd:restriction base="xsd:string">
491         <xsd:enumeration value="Always"/>
492         <xsd:enumeration value="OnCall"/>
493     </xsd:restriction>
494 </xsd:simpleType>
495 <xsd:simpleType name="ST_FillType">
496     <xsd:restriction base="xsd:string">
497         <xsd:enumeration value="gradientCenter"/>
498         <xsd:enumeration value="solid"/>
499         <xsd:enumeration value="pattern"/>
500         <xsd:enumeration value="tile"/>
501         <xsd:enumeration value="frame"/>

```



```

502         <xsd:enumeration value="gradientUnscaled"/>
503         <xsd:enumeration value="gradientRadial"/>
504         <xsd:enumeration value="gradient"/>
505         <xsd:enumeration value="background"/>
506     </xsd:restriction>
507 </xsd:simpleType>
508 </xsd:schema>

```

A.6.3 VML - WordprocessingML Drawing

This schema is available in the file vml-wordprocessingDrawing.xsd.

```

1  <xsd:schema xmlns="urn:schemas-microsoft-com:office:word"
2  xmlns:xsd="http://www.w3.org/2001/XMLSchema" targetNamespace="urn:schemas-microsoft-com:office:word"
3  elementFormDefault="qualified" attributeFormDefault="unqualified">
4      <xsd:element name="bordertop" type="CT_Border"/>
5      <xsd:element name="borderleft" type="CT_Border"/>
6      <xsd:element name="borderright" type="CT_Border"/>
7      <xsd:element name="borderbottom" type="CT_Border"/>
8      <xsd:complexType name="CT_Border">
9          <xsd:attribute name="type" type="ST_BorderType" use="optional"/>
10         <xsd:attribute name="width" type="xsd:positiveInteger" use="optional"/>
11         <xsd:attribute name="shadow" type="ST_BorderShadow" use="optional"/>
12     </xsd:complexType>
13     <xsd:element name="wrap" type="CT_Wrap"/>
14     <xsd:complexType name="CT_Wrap">
15         <xsd:attribute name="type" type="ST_WrapType" use="optional"/>
16         <xsd:attribute name="side" type="ST_WrapSide" use="optional"/>
17         <xsd:attribute name="anchorx" type="ST_HorizontalAnchor" use="optional"/>
18         <xsd:attribute name="anchory" type="ST_VerticalAnchor" use="optional"/>
19     </xsd:complexType>
20     <xsd:element name="anchorlock" type="CT_AnchorLock"/>
21     <xsd:complexType name="CT_AnchorLock"/>
22     <xsd:simpleType name="ST_BorderType">
23         <xsd:restriction base="xsd:string">
24             <xsd:enumeration value="none"/>
25             <xsd:enumeration value="single"/>
26             <xsd:enumeration value="thick"/>
27             <xsd:enumeration value="double"/>
28             <xsd:enumeration value="hairline"/>
29             <xsd:enumeration value="dot"/>
30             <xsd:enumeration value="dash"/>
31             <xsd:enumeration value="dotDash"/>
32             <xsd:enumeration value="dashDotDot"/>
33             <xsd:enumeration value="triple"/>
34             <xsd:enumeration value="thinThickSmall"/>
35             <xsd:enumeration value="thickThinSmall"/>
36             <xsd:enumeration value="thickBetweenThinSmall"/>
37             <xsd:enumeration value="thinThick"/>
38             <xsd:enumeration value="thickThin"/>
39             <xsd:enumeration value="thickBetweenThin"/>
40             <xsd:enumeration value="thinThickLarge"/>
41             <xsd:enumeration value="thickThinLarge"/>

```

```

42         <xsd:enumeration value="thickBetweenThinLarge"/>
43         <xsd:enumeration value="wave"/>
44         <xsd:enumeration value="doubleWave"/>
45         <xsd:enumeration value="dashedSmall"/>
46         <xsd:enumeration value="dashDotStroked"/>
47         <xsd:enumeration value="threeDEmboss"/>
48         <xsd:enumeration value="threeDEngrave"/>
49         <xsd:enumeration value="HTMLOutset"/>
50         <xsd:enumeration value="HTMLInset"/>
51     </xsd:restriction>
52 </xsd:simpleType>
53 <xsd:simpleType name="ST_BorderShadow">
54     <xsd:restriction base="xsd:string">
55         <xsd:enumeration value="t"/>
56         <xsd:enumeration value="true"/>
57         <xsd:enumeration value="f"/>
58         <xsd:enumeration value="false"/>
59     </xsd:restriction>
60 </xsd:simpleType>
61 <xsd:simpleType name="ST_WrapType">
62     <xsd:restriction base="xsd:string">
63         <xsd:enumeration value="topAndBottom"/>
64         <xsd:enumeration value="square"/>
65         <xsd:enumeration value="none"/>
66         <xsd:enumeration value="tight"/>
67         <xsd:enumeration value="through"/>
68     </xsd:restriction>
69 </xsd:simpleType>
70 <xsd:simpleType name="ST_WrapSide">
71     <xsd:restriction base="xsd:string">
72         <xsd:enumeration value="both"/>
73         <xsd:enumeration value="left"/>
74         <xsd:enumeration value="right"/>
75         <xsd:enumeration value="largest"/>
76     </xsd:restriction>
77 </xsd:simpleType>
78 <xsd:simpleType name="ST_HorizontalAnchor">
79     <xsd:restriction base="xsd:string">
80         <xsd:enumeration value="margin"/>
81         <xsd:enumeration value="page"/>
82         <xsd:enumeration value="text"/>
83         <xsd:enumeration value="char"/>
84     </xsd:restriction>
85 </xsd:simpleType>
86 <xsd:simpleType name="ST_VerticalAnchor">
87     <xsd:restriction base="xsd:string">
88         <xsd:enumeration value="margin"/>
89         <xsd:enumeration value="page"/>
90         <xsd:enumeration value="text"/>
91         <xsd:enumeration value="line"/>
92     </xsd:restriction>
93 </xsd:simpleType>
94 </xsd:schema>

```

A.6.4 VML - SpreadsheetML Drawing

This schema is available in the file vml-spreadsheetDrawing.xsd.

```

1 <xsd:schema xmlns="urn:schemas-microsoft-com:office:excel"
2   xmlns:xsd="http://www.w3.org/2001/XMLSchema"
3   xmlns:s="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
4   targetNamespace="urn:schemas-microsoft-com:office:excel" elementFormDefault="qualified"
5   attributeFormDefault="unqualified">
6   <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
7     schemaLocation="shared-commonSimpleTypes.xsd"/>
8   <xsd:element name="ClientData" type="CT_ClientData"/>
9   <xsd:complexType name="CT_ClientData">
10     <xsd:choice minOccurs="0" maxOccurs="unbounded">
11       <xsd:element name="MoveWithCells" type="s:ST_TrueFalseBlank"/>
12       <xsd:element name="SizeWithCells" type="s:ST_TrueFalseBlank"/>
13       <xsd:element name="Anchor" type="xsd:string"/>
14       <xsd:element name="Locked" type="s:ST_TrueFalseBlank"/>
15       <xsd:element name="DefaultSize" type="s:ST_TrueFalseBlank"/>
16       <xsd:element name="PrintObject" type="s:ST_TrueFalseBlank"/>
17       <xsd:element name="Disabled" type="s:ST_TrueFalseBlank"/>
18       <xsd:element name="AutoFill" type="s:ST_TrueFalseBlank"/>
19       <xsd:element name="AutoLine" type="s:ST_TrueFalseBlank"/>
20       <xsd:element name="AutoPict" type="s:ST_TrueFalseBlank"/>
21       <xsd:element name="FmlaMacro" type="xsd:string"/>
22       <xsd:element name="TextHAlign" type="xsd:string"/>
23       <xsd:element name="TextVAlign" type="xsd:string"/>
24       <xsd:element name="LockText" type="s:ST_TrueFalseBlank"/>
25       <xsd:element name="JustLastX" type="s:ST_TrueFalseBlank"/>
26       <xsd:element name="SecretEdit" type="s:ST_TrueFalseBlank"/>
27       <xsd:element name="Default" type="s:ST_TrueFalseBlank"/>
28       <xsd:element name="Help" type="s:ST_TrueFalseBlank"/>
29       <xsd:element name="Cancel" type="s:ST_TrueFalseBlank"/>
30       <xsd:element name="Dismiss" type="s:ST_TrueFalseBlank"/>
31       <xsd:element name="Accel" type="xsd:integer"/>
32       <xsd:element name="Accel2" type="xsd:integer"/>
33       <xsd:element name="Row" type="xsd:integer"/>
34       <xsd:element name="Column" type="xsd:integer"/>
35       <xsd:element name="Visible" type="s:ST_TrueFalseBlank"/>
36       <xsd:element name="RowHidden" type="s:ST_TrueFalseBlank"/>
37       <xsd:element name="ColHidden" type="s:ST_TrueFalseBlank"/>
38       <xsd:element name="VTEdit" type="xsd:integer"/>
39       <xsd:element name="MultiLine" type="s:ST_TrueFalseBlank"/>
40       <xsd:element name="VScroll" type="s:ST_TrueFalseBlank"/>
41       <xsd:element name="ValidIds" type="s:ST_TrueFalseBlank"/>
42       <xsd:element name="FmlaRange" type="xsd:string"/>
43       <xsd:element name="WidthMin" type="xsd:integer"/>
44       <xsd:element name="Sel" type="xsd:integer"/>
45       <xsd:element name="NoThreeD2" type="s:ST_TrueFalseBlank"/>
46       <xsd:element name="SelType" type="xsd:string"/>
47       <xsd:element name="MultiSel" type="xsd:string"/>
48       <xsd:element name="LCT" type="xsd:string"/>
49       <xsd:element name="ListItem" type="xsd:string"/>

```

```

50      <xsd:element name="DropStyle" type="xsd:string"/>
51      <xsd:element name="Colored" type="s:ST TrueFalseBlank"/>
52      <xsd:element name="DropLines" type="xsd:integer"/>
53      <xsd:element name="Checked" type="xsd:integer"/>
54      <xsd:element name="FmlaLink" type="xsd:string"/>
55      <xsd:element name="FmlaPict" type="xsd:string"/>
56      <xsd:element name="NoThreeD" type="s:ST TrueFalseBlank"/>
57      <xsd:element name="FirstButton" type="s:ST TrueFalseBlank"/>
58      <xsd:element name="FmlaGroup" type="xsd:string"/>
59      <xsd:element name="Val" type="xsd:integer"/>
60      <xsd:element name="Min" type="xsd:integer"/>
61      <xsd:element name="Max" type="xsd:integer"/>
62      <xsd:element name="Inc" type="xsd:integer"/>
63      <xsd:element name="Page" type="xsd:integer"/>
64      <xsd:element name="Horiz" type="s:ST TrueFalseBlank"/>
65      <xsd:element name="Dx" type="xsd:integer"/>
66      <xsd:element name="MapOCX" type="s:ST TrueFalseBlank"/>
67      <xsd:element name="CF" type="ST_CF"/>
68      <xsd:element name="Camera" type="s:ST TrueFalseBlank"/>
69      <xsd:element name="RecalcAlways" type="s:ST TrueFalseBlank"/>
70      <xsd:element name="AutoScale" type="s:ST TrueFalseBlank"/>
71      <xsd:element name="DDE" type="s:ST TrueFalseBlank"/>
72      <xsd:element name="UIObj" type="s:ST TrueFalseBlank"/>
73      <xsd:element name="ScriptText" type="xsd:string"/>
74      <xsd:element name="ScriptExtended" type="xsd:string"/>
75      <xsd:element name="ScriptLanguage" type="xsd:nonNegativeInteger"/>
76      <xsd:element name="ScriptLocation" type="xsd:nonNegativeInteger"/>
77      <xsd:element name="FmlaTxbx" type="xsd:string"/>
78    </xsd:choice>
79    <xsd:attribute name="ObjectType" type="ST_ObjectType" use="required"/>
80  </xsd:complexType>
81  <xsd:simpleType name="ST_CF">
82    <xsd:restriction base="xsd:string"/>
83  </xsd:simpleType>
84  <xsd:simpleType name="ST_ObjectType">
85    <xsd:restriction base="xsd:string">
86      <xsd:enumeration value="Button"/>
87      <xsd:enumeration value="Checkbox"/>
88      <xsd:enumeration value="Dialog"/>
89      <xsd:enumeration value="Drop"/>
90      <xsd:enumeration value="Edit"/>
91      <xsd:enumeration value="GBox"/>
92      <xsd:enumeration value="Label"/>
93      <xsd:enumeration value="LineA"/>
94      <xsd:enumeration value="List"/>
95      <xsd:enumeration value="Movie"/>
96      <xsd:enumeration value="Note"/>
97      <xsd:enumeration value="Pict"/>
98      <xsd:enumeration value="Radio"/>
99      <xsd:enumeration value="RectA"/>
100     <xsd:enumeration value="Scroll"/>
101     <xsd:enumeration value="Spin"/>
102     <xsd:enumeration value="Shape"/>

```

```

103         <xsd:enumeration value="Group"/>
104         <xsd:enumeration value="Rect"/>
105     </xsd:restriction>
106 </xsd:simpleType>
107 </xsd:schema>

```

A.6.5 VML - PresentationML Drawing

This schema is available in the file vml-presentationDrawing.xsd.

```

1 <xsd:schema xmlns="urn:schemas-microsoft-com:office:powerpoint"
2   xmlns:xsd="http://www.w3.org/2001/XMLSchema" targetNamespace="urn:schemas-microsoft-
3   com:office:powerpoint" elementFormDefault="qualified" attributeFormDefault="unqualified">
4   <xsd:element name="iscomment" type="CT_Empty"/>
5   <xsd:element name="textdata" type="CT_Rel"/>
6   <xsd:complexType name="CT_Empty"/>
7   <xsd:complexType name="CT_Rel">
8       <xsd:attribute name="id" type="xsd:string"/>
9   </xsd:complexType>
10 </xsd:schema>

```

A.7 Shared MLs

A.7.1 Math

This schema is available in the file shared-math.xsd.

```

1 <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
2   xmlns="http://schemas.openxmlformats.org/officeDocument/2006/math"
3   xmlns:m="http://schemas.openxmlformats.org/officeDocument/2006/math"
4   xmlns:w="http://schemas.openxmlformats.org/wordprocessingml/2006/main"
5   xmlns:s="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
6   elementFormDefault="qualified" attributeFormDefault="qualified" blockDefault="#all"
7   targetNamespace="http://schemas.openxmlformats.org/officeDocument/2006/math">
8   <xsd:import namespace="http://schemas.openxmlformats.org/wordprocessingml/2006/main"
9     schemaLocation="wml.xsd"/>
10   <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
11     schemaLocation="shared-commonSimpleTypes.xsd"/>
12   <xsd:import namespace="http://www.w3.org/XML/1998/namespace"/>
13   <xsd:simpleType name="ST_Integer255">
14       <xsd:restriction base="xsd:integer">
15           <xsd:minInclusive value="1"/>
16           <xsd:maxInclusive value="255"/>
17       </xsd:restriction>
18   </xsd:simpleType>
19   <xsd:complexType name="CT_Integer255">
20       <xsd:attribute name="val" type="ST_Integer255" use="required"/>
21   </xsd:complexType>
22   <xsd:simpleType name="ST_Integer2">
23       <xsd:restriction base="xsd:integer">
24           <xsd:minInclusive value="-2"/>
25           <xsd:maxInclusive value="2"/>
26       </xsd:restriction>

```

```

27 </xsd:simpleType>
28 <xsd:complexType name="CT_Integer2">
29   <xsd:attribute name="val" type="ST_Integer2" use="required"/>
30 </xsd:complexType>
31 <xsd:simpleType name="ST_SpacingRule">
32   <xsd:restriction base="xsd:integer">
33     <xsd:minInclusive value="0"/>
34     <xsd:maxInclusive value="4"/>
35   </xsd:restriction>
36 </xsd:simpleType>
37 <xsd:complexType name="CT_SpacingRule">
38   <xsd:attribute name="val" type="ST_SpacingRule" use="required"/>
39 </xsd:complexType>
40 <xsd:simpleType name="ST_UnSignedInteger">
41   <xsd:restriction base="xsd:unsignedInt"/>
42 </xsd:simpleType>
43 <xsd:complexType name="CT_UnSignedInteger">
44   <xsd:attribute name="val" type="ST_UnSignedInteger" use="required"/>
45 </xsd:complexType>
46 <xsd:simpleType name="ST_Char">
47   <xsd:restriction base="xsd:string">
48     <xsd:maxLength value="1"/>
49   </xsd:restriction>
50 </xsd:simpleType>
51 <xsd:complexType name="CT_Char">
52   <xsd:attribute name="val" type="ST_Char" use="required"/>
53 </xsd:complexType>
54 <xsd:complexType name="CT_OnOff">
55   <xsd:attribute name="val" type="s:ST_OnOff"/>
56 </xsd:complexType>
57 <xsd:complexType name="CT_String">
58   <xsd:attribute name="val" type="s:ST_String"/>
59 </xsd:complexType>
60 <xsd:complexType name="CT_XAlign">
61   <xsd:attribute name="val" type="s:ST_XAlign" use="required"/>
62 </xsd:complexType>
63 <xsd:complexType name="CT_YAlign">
64   <xsd:attribute name="val" type="s:ST_YAlign" use="required"/>
65 </xsd:complexType>
66 <xsd:simpleType name="ST_Shp">
67   <xsd:restriction base="xsd:string">
68     <xsd:enumeration value="centered"/>
69     <xsd:enumeration value="match"/>
70   </xsd:restriction>
71 </xsd:simpleType>
72 <xsd:complexType name="CT_Shp">
73   <xsd:attribute name="val" type="ST_Shp" use="required"/>
74 </xsd:complexType>
75 <xsd:simpleType name="ST_FType">
76   <xsd:restriction base="xsd:string">
77     <xsd:enumeration value="bar"/>
78     <xsd:enumeration value="skw"/>
79     <xsd:enumeration value="lin"/>

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80         <xsd:enumeration value="noBar"/>
81     </xsd:restriction>
82 </xsd:simpleType>
83 <xsd:complexType name="CT_FType">
84     <xsd:attribute name="val" type="ST_FType" use="required"/>
85 </xsd:complexType>
86 <xsd:simpleType name="ST_LimLoc">
87     <xsd:restriction base="xsd:string">
88         <xsd:enumeration value="undOvr"/>
89         <xsd:enumeration value="subSup"/>
90     </xsd:restriction>
91 </xsd:simpleType>
92 <xsd:complexType name="CT_LimLoc">
93     <xsd:attribute name="val" type="ST_LimLoc" use="required"/>
94 </xsd:complexType>
95 <xsd:simpleType name="ST_TopBot">
96     <xsd:restriction base="xsd:string">
97         <xsd:enumeration value="top"/>
98         <xsd:enumeration value="bot"/>
99     </xsd:restriction>
100 </xsd:simpleType>
101 <xsd:complexType name="CT_TopBot">
102     <xsd:attribute name="val" type="ST_TopBot" use="required"/>
103 </xsd:complexType>
104 <xsd:simpleType name="ST_Script">
105     <xsd:restriction base="xsd:string">
106         <xsd:enumeration value="roman"/>
107         <xsd:enumeration value="script"/>
108         <xsd:enumeration value="fraktur"/>
109         <xsd:enumeration value="double-struck"/>
110         <xsd:enumeration value="sans-serif"/>
111         <xsd:enumeration value="monospace"/>
112     </xsd:restriction>
113 </xsd:simpleType>
114 <xsd:complexType name="CT_Script">
115     <xsd:attribute name="val" type="ST_Script"/>
116 </xsd:complexType>
117 <xsd:simpleType name="ST_Style">
118     <xsd:restriction base="xsd:string">
119         <xsd:enumeration value="p"/>
120         <xsd:enumeration value="b"/>
121         <xsd:enumeration value="i"/>
122         <xsd:enumeration value="bi"/>
123     </xsd:restriction>
124 </xsd:simpleType>
125 <xsd:complexType name="CT_Style">
126     <xsd:attribute name="val" type="ST_Style"/>
127 </xsd:complexType>
128 <xsd:complexType name="CT_ManualBreak">
129     <xsd:attribute name="alnAt" type="ST_Integer255"/>
130 </xsd:complexType>
131 <xsd:group name="EG_ScriptStyle">
132     <xsd:sequence>

```

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133     <xsd:element name="scr" minOccurs="0" type="CT_Script"/>
134     <xsd:element name="sty" minOccurs="0" type="CT_Style"/>
135   </xsd:sequence>
136 </xsd:group>
137 <xsd:complexType name="CT_RPR">
138   <xsd:sequence>
139     <xsd:element name="lit" minOccurs="0" type="CT_OnOff"/>
140     <xsd:choice>
141       <xsd:element name="nor" minOccurs="0" type="CT_OnOff"/>
142       <xsd:sequence>
143         <xsd:group ref="EG_ScriptStyle"/>
144       </xsd:sequence>
145     </xsd:choice>
146     <xsd:element name="brk" minOccurs="0" type="CT_ManualBreak"/>
147     <xsd:element name="aln" minOccurs="0" type="CT_OnOff"/>
148   </xsd:sequence>
149 </xsd:complexType>
150 <xsd:complexType name="CT_Text">
151   <xsd:simpleContent>
152     <xsd:extension base="s:ST_String">
153       <xsd:attribute ref="xml:space" use="optional"/>
154     </xsd:extension>
155   </xsd:simpleContent>
156 </xsd:complexType>
157 <xsd:complexType name="CT_R">
158   <xsd:sequence>
159     <xsd:element name="rPr" type="CT_RPR" minOccurs="0"/>
160     <xsd:group ref="w:EG_RPr" minOccurs="0"/>
161     <xsd:choice minOccurs="0" maxOccurs="unbounded">
162       <xsd:group ref="w:EG_RunInnerContent"/>
163       <xsd:element name="t" type="CT_Text" minOccurs="0"/>
164     </xsd:choice>
165   </xsd:sequence>
166 </xsd:complexType>
167 <xsd:complexType name="CT_CtrlPr">
168   <xsd:sequence>
169     <xsd:group ref="w:EG_RPrMath" minOccurs="0"/>
170   </xsd:sequence>
171 </xsd:complexType>
172 <xsd:complexType name="CT_AccPr">
173   <xsd:sequence>
174     <xsd:element name="chr" type="CT_Char" minOccurs="0"/>
175     <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>
176   </xsd:sequence>
177 </xsd:complexType>
178 <xsd:complexType name="CT_Acc">
179   <xsd:sequence>
180     <xsd:element name="accPr" type="CT_AccPr" minOccurs="0"/>
181     <xsd:element name="e" type="CT_OMathArg"/>
182   </xsd:sequence>
183 </xsd:complexType>
184 <xsd:complexType name="CT_BarPr">
185   <xsd:sequence>

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186     <xsd:element name="pos" type="CT_TopBot" minOccurs="0"/>
187     <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>
188   </xsd:sequence>
189 </xsd:complexType>
190 <xsd:complexType name="CT_Bar">
191   <xsd:sequence>
192     <xsd:element name="barPr" type="CT_BarPr" minOccurs="0"/>
193     <xsd:element name="e" type="CT_OMathArg"/>
194   </xsd:sequence>
195 </xsd:complexType>
196 <xsd:complexType name="CT_BoxPr">
197   <xsd:sequence>
198     <xsd:element name="opEmu" type="CT_OnOff" minOccurs="0"/>
199     <xsd:element name="noBreak" type="CT_OnOff" minOccurs="0"/>
200     <xsd:element name="diff" type="CT_OnOff" minOccurs="0"/>
201     <xsd:element name="brk" type="CT_ManualBreak" minOccurs="0"/>
202     <xsd:element name="aln" type="CT_OnOff" minOccurs="0"/>
203     <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>
204   </xsd:sequence>
205 </xsd:complexType>
206 <xsd:complexType name="CT_Box">
207   <xsd:sequence>
208     <xsd:element name="boxPr" type="CT_BoxPr" minOccurs="0"/>
209     <xsd:element name="e" type="CT_OMathArg"/>
210   </xsd:sequence>
211 </xsd:complexType>
212 <xsd:complexType name="CT_BorderBoxPr">
213   <xsd:sequence>
214     <xsd:element name="hideTop" type="CT_OnOff" minOccurs="0"/>
215     <xsd:element name="hideBot" type="CT_OnOff" minOccurs="0"/>
216     <xsd:element name="hideLeft" type="CT_OnOff" minOccurs="0"/>
217     <xsd:element name="hideRight" type="CT_OnOff" minOccurs="0"/>
218     <xsd:element name="strikeH" type="CT_OnOff" minOccurs="0"/>
219     <xsd:element name="strikeV" type="CT_OnOff" minOccurs="0"/>
220     <xsd:element name="strikeBLTR" type="CT_OnOff" minOccurs="0"/>
221     <xsd:element name="strikeTLBR" type="CT_OnOff" minOccurs="0"/>
222     <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>
223   </xsd:sequence>
224 </xsd:complexType>
225 <xsd:complexType name="CT_BorderBox">
226   <xsd:sequence>
227     <xsd:element name="borderBoxPr" type="CT_BorderBoxPr" minOccurs="0"/>
228     <xsd:element name="e" type="CT_OMathArg"/>
229   </xsd:sequence>
230 </xsd:complexType>
231 <xsd:complexType name="CT_DPr">
232   <xsd:sequence>
233     <xsd:element name="begChr" type="CT_Char" minOccurs="0"/>
234     <xsd:element name="sepChr" type="CT_Char" minOccurs="0"/>
235     <xsd:element name="endChr" type="CT_Char" minOccurs="0"/>
236     <xsd:element name="grow" type="CT_OnOff" minOccurs="0"/>
237     <xsd:element name="shp" type="CT_Shp" minOccurs="0"/>
238     <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>

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239     </xsd:sequence>
240 </xsd:complexType>
241 <xsd:complexType name="CT_D">
242     <xsd:sequence>
243         <xsd:element name="dPr" type="CT_DPr" minOccurs="0"/>
244         <xsd:element name="e" type="CT_OMathArg" maxOccurs="unbounded"/>
245     </xsd:sequence>
246 </xsd:complexType>
247 <xsd:complexType name="CT_EqArrPr">
248     <xsd:sequence>
249         <xsd:element name="baseJc" type="CT_YAlign" minOccurs="0"/>
250         <xsd:element name="maxDist" type="CT_OnOff" minOccurs="0"/>
251         <xsd:element name="objDist" type="CT_OnOff" minOccurs="0"/>
252         <xsd:element name="rSpRule" type="CT_SpacingRule" minOccurs="0"/>
253         <xsd:element name="rSp" type="CT_UnSignedInteger" minOccurs="0"/>
254         <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>
255     </xsd:sequence>
256 </xsd:complexType>
257 <xsd:complexType name="CT_EqArr">
258     <xsd:sequence>
259         <xsd:element name="eqArrPr" type="CT_EqArrPr" minOccurs="0"/>
260         <xsd:element name="e" type="CT_OMathArg" maxOccurs="unbounded"/>
261     </xsd:sequence>
262 </xsd:complexType>
263 <xsd:complexType name="CT_FPr">
264     <xsd:sequence>
265         <xsd:element name="type" type="CT_FType" minOccurs="0"/>
266         <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>
267     </xsd:sequence>
268 </xsd:complexType>
269 <xsd:complexType name="CT_F">
270     <xsd:sequence>
271         <xsd:element name="fPr" type="CT_FPr" minOccurs="0"/>
272         <xsd:element name="num" type="CT_OMathArg"/>
273         <xsd:element name="den" type="CT_OMathArg"/>
274     </xsd:sequence>
275 </xsd:complexType>
276 <xsd:complexType name="CT_FuncPr">
277     <xsd:sequence>
278         <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>
279     </xsd:sequence>
280 </xsd:complexType>
281 <xsd:complexType name="CT_Func">
282     <xsd:sequence>
283         <xsd:element name="funcPr" type="CT_FuncPr" minOccurs="0"/>
284         <xsd:element name="fName" type="CT_OMathArg"/>
285         <xsd:element name="e" type="CT_OMathArg"/>
286     </xsd:sequence>
287 </xsd:complexType>
288 <xsd:complexType name="CT_GroupChrPr">
289     <xsd:sequence>
290         <xsd:element name="chr" type="CT_Char" minOccurs="0"/>
291         <xsd:element name="pos" type="CT_TopBot" minOccurs="0"/>

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292     <xsd:element name="vertJc" type="CT_TopBot" minOccurs="0"/>
293     <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>
294   </xsd:sequence>
295 </xsd:complexType>
296 <xsd:complexType name="CT_GroupChr">
297   <xsd:sequence>
298     <xsd:element name="groupChrPr" type="CT_GroupChrPr" minOccurs="0"/>
299     <xsd:element name="e" type="CT_OMathArg"/>
300   </xsd:sequence>
301 </xsd:complexType>
302 <xsd:complexType name="CT_LimLowPr">
303   <xsd:sequence>
304     <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>
305   </xsd:sequence>
306 </xsd:complexType>
307 <xsd:complexType name="CT_LimLow">
308   <xsd:sequence>
309     <xsd:element name="limLowPr" type="CT_LimLowPr" minOccurs="0"/>
310     <xsd:element name="e" type="CT_OMathArg"/>
311     <xsd:element name="lim" type="CT_OMathArg"/>
312   </xsd:sequence>
313 </xsd:complexType>
314 <xsd:complexType name="CT_LimUppPr">
315   <xsd:sequence>
316     <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>
317   </xsd:sequence>
318 </xsd:complexType>
319 <xsd:complexType name="CT_LimUpp">
320   <xsd:sequence>
321     <xsd:element name="limUppPr" type="CT_LimUppPr" minOccurs="0"/>
322     <xsd:element name="e" type="CT_OMathArg"/>
323     <xsd:element name="lim" type="CT_OMathArg"/>
324   </xsd:sequence>
325 </xsd:complexType>
326 <xsd:complexType name="CT_MCPr">
327   <xsd:sequence>
328     <xsd:element name="count" type="CT_Integer255" minOccurs="0"/>
329     <xsd:element name="mcJc" type="CT_XAlign" minOccurs="0"/>
330   </xsd:sequence>
331 </xsd:complexType>
332 <xsd:complexType name="CT_MC">
333   <xsd:sequence>
334     <xsd:element name="mcPr" type="CT_MCPr" minOccurs="0"/>
335   </xsd:sequence>
336 </xsd:complexType>
337 <xsd:complexType name="CT_MCS">
338   <xsd:sequence>
339     <xsd:element name="mc" type="CT_MC" maxOccurs="unbounded"/>
340   </xsd:sequence>
341 </xsd:complexType>
342 <xsd:complexType name="CT_MPr">
343   <xsd:sequence>
344     <xsd:element name="baseJc" type="CT_YAlign" minOccurs="0"/>

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345     <xsd:element name="plcHide" type="CT_OnOff" minOccurs="0"/>
346     <xsd:element name="rSpRule" type="CT_SpacingRule" minOccurs="0"/>
347     <xsd:element name="cGpRule" type="CT_SpacingRule" minOccurs="0"/>
348     <xsd:element name="rSp" type="CT_UnSignedInteger" minOccurs="0"/>
349     <xsd:element name="cSp" type="CT_UnSignedInteger" minOccurs="0"/>
350     <xsd:element name="cGp" type="CT_UnSignedInteger" minOccurs="0"/>
351     <xsd:element name="mcs" type="CT_MCS" minOccurs="0"/>
352     <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>
353   </xsd:sequence>
354 </xsd:complexType>
355 <xsd:complexType name="CT_MR">
356   <xsd:sequence>
357     <xsd:element name="e" type="CT_OMathArg" maxOccurs="unbounded"/>
358   </xsd:sequence>
359 </xsd:complexType>
360 <xsd:complexType name="CT_M">
361   <xsd:sequence>
362     <xsd:element name="mPr" type="CT_MPr" minOccurs="0"/>
363     <xsd:element name="mr" type="CT_MR" maxOccurs="unbounded"/>
364   </xsd:sequence>
365 </xsd:complexType>
366 <xsd:complexType name="CT_NaryPr">
367   <xsd:sequence>
368     <xsd:element name="chr" type="CT_Char" minOccurs="0"/>
369     <xsd:element name="limLoc" type="CT_LimLoc" minOccurs="0"/>
370     <xsd:element name="grow" type="CT_OnOff" minOccurs="0"/>
371     <xsd:element name="subHide" type="CT_OnOff" minOccurs="0"/>
372     <xsd:element name="supHide" type="CT_OnOff" minOccurs="0"/>
373     <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>
374   </xsd:sequence>
375 </xsd:complexType>
376 <xsd:complexType name="CT_Nary">
377   <xsd:sequence>
378     <xsd:element name="naryPr" type="CT_NaryPr" minOccurs="0"/>
379     <xsd:element name="sub" type="CT_OMathArg"/>
380     <xsd:element name="sup" type="CT_OMathArg"/>
381     <xsd:element name="e" type="CT_OMathArg"/>
382   </xsd:sequence>
383 </xsd:complexType>
384 <xsd:complexType name="CT_PhantPr">
385   <xsd:sequence>
386     <xsd:element name="show" type="CT_OnOff" minOccurs="0"/>
387     <xsd:element name="zeroWid" type="CT_OnOff" minOccurs="0"/>
388     <xsd:element name="zeroAsc" type="CT_OnOff" minOccurs="0"/>
389     <xsd:element name="zeroDesc" type="CT_OnOff" minOccurs="0"/>
390     <xsd:element name="transp" type="CT_OnOff" minOccurs="0"/>
391     <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>
392   </xsd:sequence>
393 </xsd:complexType>
394 <xsd:complexType name="CT_Phant">
395   <xsd:sequence>
396     <xsd:element name="phantPr" type="CT_PhantPr" minOccurs="0"/>
397     <xsd:element name="e" type="CT_OMathArg"/>

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398     </xsd:sequence>
399 </xsd:complexType>
400 <xsd:complexType name="CT_RadPr">
401     <xsd:sequence>
402         <xsd:element name="degHide" type="CT_OnOff" minOccurs="0"/>
403         <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>
404     </xsd:sequence>
405 </xsd:complexType>
406 <xsd:complexType name="CT_Rad">
407     <xsd:sequence>
408         <xsd:element name="radPr" type="CT_RadPr" minOccurs="0"/>
409         <xsd:element name="deg" type="CT_OMathArg"/>
410         <xsd:element name="e" type="CT_OMathArg"/>
411     </xsd:sequence>
412 </xsd:complexType>
413 <xsd:complexType name="CT_SPrePr">
414     <xsd:sequence>
415         <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>
416     </xsd:sequence>
417 </xsd:complexType>
418 <xsd:complexType name="CT_SPre">
419     <xsd:sequence>
420         <xsd:element name="sPrePr" type="CT_SPrePr" minOccurs="0"/>
421         <xsd:element name="sub" type="CT_OMathArg"/>
422         <xsd:element name="sup" type="CT_OMathArg"/>
423         <xsd:element name="e" type="CT_OMathArg"/>
424     </xsd:sequence>
425 </xsd:complexType>
426 <xsd:complexType name="CT_SSubPr">
427     <xsd:sequence>
428         <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>
429     </xsd:sequence>
430 </xsd:complexType>
431 <xsd:complexType name="CT_SSub">
432     <xsd:sequence>
433         <xsd:element name="sSubPr" type="CT_SSubPr" minOccurs="0"/>
434         <xsd:element name="e" type="CT_OMathArg"/>
435         <xsd:element name="sub" type="CT_OMathArg"/>
436     </xsd:sequence>
437 </xsd:complexType>
438 <xsd:complexType name="CT_SSubSupPr">
439     <xsd:sequence>
440         <xsd:element name="alnScr" type="CT_OnOff" minOccurs="0"/>
441         <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>
442     </xsd:sequence>
443 </xsd:complexType>
444 <xsd:complexType name="CT_SSubSup">
445     <xsd:sequence>
446         <xsd:element name="sSubSupPr" type="CT_SSubSupPr" minOccurs="0"/>
447         <xsd:element name="e" type="CT_OMathArg"/>
448         <xsd:element name="sub" type="CT_OMathArg"/>
449         <xsd:element name="sup" type="CT_OMathArg"/>
450 </xsd:sequence>

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451 </xsd:complexType>
452 <xsd:complexType name="CT_SSupPr">
453   <xsd:sequence>
454     <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>
455   </xsd:sequence>
456 </xsd:complexType>
457 <xsd:complexType name="CT_SSup">
458   <xsd:sequence>
459     <xsd:element name="sSupPr" type="CT_SSupPr" minOccurs="0"/>
460     <xsd:element name="e" type="CT_OMathArg"/>
461     <xsd:element name="sup" type="CT_OMathArg"/>
462   </xsd:sequence>
463 </xsd:complexType>
464 <xsd:group name="EG_OMathMathElements">
465   <xsd:choice>
466     <xsd:element name="acc" type="CT_Acc"/>
467     <xsd:element name="bar" type="CT_Bar"/>
468     <xsd:element name="box" type="CT_Box"/>
469     <xsd:element name="borderBox" type="CT_BorderBox"/>
470     <xsd:element name="d" type="CT_D"/>
471     <xsd:element name="eqArr" type="CT_EqArr"/>
472     <xsd:element name="f" type="CT_F"/>
473     <xsd:element name="func" type="CT_Func"/>
474     <xsd:element name="groupChr" type="CT_GroupChr"/>
475     <xsd:element name="limLow" type="CT_LimLow"/>
476     <xsd:element name="limUpp" type="CT_LimUpp"/>
477     <xsd:element name="m" type="CT_M"/>
478     <xsd:element name="nary" type="CT_Nary"/>
479     <xsd:element name="phant" type="CT_Phant"/>
480     <xsd:element name="rad" type="CT_Rad"/>
481     <xsd:element name="sPre" type="CT_SPre"/>
482     <xsd:element name="sSub" type="CT_SSub"/>
483     <xsd:element name="sSubSup" type="CT_SSubSup"/>
484     <xsd:element name="sSup" type="CT_SSup"/>
485     <xsd:element name="r" type="CT_R"/>
486   </xsd:choice>
487 </xsd:group>
488 <xsd:group name="EG_OMathElements">
489   <xsd:choice>
490     <xsd:group ref="EG_OMathMathElements"/>
491     <xsd:group ref="w:EG_PContentMath"/>
492   </xsd:choice>
493 </xsd:group>
494 <xsd:complexType name="CT_OMathArgPr">
495   <xsd:sequence>
496     <xsd:element name="argSz" type="CT_Integer2" minOccurs="0"/>
497   </xsd:sequence>
498 </xsd:complexType>
499 <xsd:complexType name="CT_OMathArg">
500   <xsd:sequence>
501     <xsd:element name="argPr" type="CT_OMathArgPr" minOccurs="0"/>
502     <xsd:group ref="EG_OMathElements" minOccurs="0" maxOccurs="unbounded"/>
503     <xsd:element name="ctrlPr" type="CT_CtrlPr" minOccurs="0"/>

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504     </xsd:sequence>
505 </xsd:complexType>
506 <xsd:simpleType name="ST_Jc">
507     <xsd:restriction base="xsd:string">
508         <xsd:enumeration value="left"/>
509         <xsd:enumeration value="right"/>
510         <xsd:enumeration value="center"/>
511         <xsd:enumeration value="centerGroup"/>
512     </xsd:restriction>
513 </xsd:simpleType>
514 <xsd:complexType name="CT_OMathJc">
515     <xsd:attribute name="val" type="ST_Jc"/>
516 </xsd:complexType>
517 <xsd:complexType name="CT_OMathParaPr">
518     <xsd:sequence>
519         <xsd:element name="jc" type="CT_OMathJc" minOccurs="0"/>
520     </xsd:sequence>
521 </xsd:complexType>
522 <xsd:complexType name="CT_TwipsMeasure">
523     <xsd:attribute name="val" type="s:ST_TwipsMeasure" use="required"/>
524 </xsd:complexType>
525 <xsd:simpleType name="ST_BreakBin">
526     <xsd:restriction base="xsd:string">
527         <xsd:enumeration value="before"/>
528         <xsd:enumeration value="after"/>
529         <xsd:enumeration value="repeat"/>
530     </xsd:restriction>
531 </xsd:simpleType>
532 <xsd:complexType name="CT_BreakBin">
533     <xsd:attribute name="val" type="ST_BreakBin"/>
534 </xsd:complexType>
535 <xsd:simpleType name="ST_BreakBinSub">
536     <xsd:restriction base="xsd:string">
537         <xsd:enumeration value="--"/>
538         <xsd:enumeration value="-+"/>
539         <xsd:enumeration value="+-"/>
540     </xsd:restriction>
541 </xsd:simpleType>
542 <xsd:complexType name="CT_BreakBinSub">
543     <xsd:attribute name="val" type="ST_BreakBinSub"/>
544 </xsd:complexType>
545 <xsd:complexType name="CT_MathPr">
546     <xsd:sequence>
547         <xsd:element name="mathFont" type="CT_String" minOccurs="0"/>
548         <xsd:element name="brkBin" type="CT_BreakBin" minOccurs="0"/>
549         <xsd:element name="brkBinSub" type="CT_BreakBinSub" minOccurs="0"/>
550         <xsd:element name="smallFrac" type="CT_OnOff" minOccurs="0"/>
551         <xsd:element name="dispDef" type="CT_OnOff" minOccurs="0"/>
552         <xsd:element name="lMargin" type="CT_TwipsMeasure" minOccurs="0"/>
553         <xsd:element name="rMargin" type="CT_TwipsMeasure" minOccurs="0"/>
554         <xsd:element name="defJc" type="CT_OMathJc" minOccurs="0"/>
555         <xsd:element name="preSp" type="CT_TwipsMeasure" minOccurs="0"/>
556         <xsd:element name="postSp" type="CT_TwipsMeasure" minOccurs="0"/>

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557     <xsd:element name="interSp" type="CT_TwipsMeasure" minOccurs="0"/>
558     <xsd:element name="intraSp" type="CT_TwipsMeasure" minOccurs="0"/>
559     <xsd:choice minOccurs="0">
560         <xsd:element name="wrapIndent" type="CT_TwipsMeasure"/>
561         <xsd:element name="wrapRight" type="CT_OnOff"/>
562     </xsd:choice>
563     <xsd:element name="intLim" type="CT_LimLoc" minOccurs="0"/>
564     <xsd:element name="naryLim" type="CT_LimLoc" minOccurs="0"/>
565 </xsd:sequence>
566 </xsd:complexType>
567 <xsd:element name="mathPr" type="CT_MathPr"/>
568 <xsd:complexType name="CT_OMathPara">
569     <xsd:sequence>
570         <xsd:element name="oMathParaPr" type="CT_OMathParaPr" minOccurs="0"/>
571         <xsd:element name="oMath" type="CT_OMath" maxOccurs="unbounded"/>
572     </xsd:sequence>
573 </xsd:complexType>
574 <xsd:complexType name="CT_OMath">
575     <xsd:sequence>
576         <xsd:group ref="EG_OMathElements" minOccurs="0" maxOccurs="unbounded"/>
577     </xsd:sequence>
578 </xsd:complexType>
579 <xsd:element name="oMathPara" type="CT_OMathPara"/>
580 <xsd:element name="oMath" type="CT_OMath"/>
581 </xsd:schema>

```

A.7.2 Extended Properties

This schema is available in the file shared-documentPropertiesExtended.xsd.

```

1 <xsd:schema xmlns="http://schemas.openxmlformats.org/officeDocument/2006/extended-properties"
2   xmlns:xsd="http://www.w3.org/2001/XMLSchema"
3   xmlns:vt="http://schemas.openxmlformats.org/officeDocument/2006/docPropsVTypes"
4   targetNamespace="http://schemas.openxmlformats.org/officeDocument/2006/extended-properties"
5   elementFormDefault="qualified" blockDefault="#all">
6   <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/docPropsVTypes"
7     schemaLocation="shared-documentPropertiesVariantTypes.xsd"/>
8   <xsd:element name="Properties" type="CT_Properties"/>
9   <xsd:complexType name="CT_Properties">
10     <xsd:all>
11         <xsd:element name="Template" minOccurs="0" maxOccurs="1" type="xsd:string"/>
12         <xsd:element name="Manager" minOccurs="0" maxOccurs="1" type="xsd:string"/>
13         <xsd:element name="Company" minOccurs="0" maxOccurs="1" type="xsd:string"/>
14         <xsd:element name="Pages" minOccurs="0" maxOccurs="1" type="xsd:int"/>
15         <xsd:element name="Words" minOccurs="0" maxOccurs="1" type="xsd:int"/>
16         <xsd:element name="Characters" minOccurs="0" maxOccurs="1" type="xsd:int"/>
17         <xsd:element name="PresentationFormat" minOccurs="0" maxOccurs="1" type="xsd:string"/>
18         <xsd:element name="Lines" minOccurs="0" maxOccurs="1" type="xsd:int"/>
19         <xsd:element name="Paragraphs" minOccurs="0" maxOccurs="1" type="xsd:int"/>
20         <xsd:element name="Slides" minOccurs="0" maxOccurs="1" type="xsd:int"/>
21         <xsd:element name="Notes" minOccurs="0" maxOccurs="1" type="xsd:int"/>
22         <xsd:element name="TotalTime" minOccurs="0" maxOccurs="1" type="xsd:int"/>
23         <xsd:element name="HiddenSlides" minOccurs="0" maxOccurs="1" type="xsd:int"/>

```



```

24     <xsd:element name="MMClips" minOccurs="0" maxOccurs="1" type="xsd:int"/>
25     <xsd:element name="ScaleCrop" minOccurs="0" maxOccurs="1" type="xsd:boolean"/>
26     <xsd:element name="HeadingPairs" minOccurs="0" maxOccurs="1" type="CT_VectorVariant"/>
27     <xsd:element name="TitlesOfParts" minOccurs="0" maxOccurs="1" type="CT_VectorLpstr"/>
28     <xsd:element name="LinksUpToDate" minOccurs="0" maxOccurs="1" type="xsd:boolean"/>
29     <xsd:element name="CharactersWithSpaces" minOccurs="0" maxOccurs="1" type="xsd:int"/>
30     <xsd:element name="SharedDoc" minOccurs="0" maxOccurs="1" type="xsd:boolean"/>
31     <xsd:element name="HyperlinkBase" minOccurs="0" maxOccurs="1" type="xsd:string"/>
32     <xsd:element name="HLinks" minOccurs="0" maxOccurs="1" type="CT_VectorVariant"/>
33     <xsd:element name="HyperlinksChanged" minOccurs="0" maxOccurs="1" type="xsd:boolean"/>
34     <xsd:element name="DigSig" minOccurs="0" maxOccurs="1" type="CT_DigSigBlob"/>
35     <xsd:element name="Application" minOccurs="0" maxOccurs="1" type="xsd:string"/>
36     <xsd:element name="AppVersion" minOccurs="0" maxOccurs="1" type="xsd:string"/>
37     <xsd:element name="DocSecurity" minOccurs="0" maxOccurs="1" type="xsd:int"/>
38   </xsd:all>
39 </xsd:complexType>
40 <xsd:complexType name="CT_VectorVariant">
41   <xsd:sequence minOccurs="1" maxOccurs="1">
42     <xsd:element ref="vt:vector"/>
43   </xsd:sequence>
44 </xsd:complexType>
45 <xsd:complexType name="CT_VectorLpstr">
46   <xsd:sequence minOccurs="1" maxOccurs="1">
47     <xsd:element ref="vt:vector"/>
48   </xsd:sequence>
49 </xsd:complexType>
50 <xsd:complexType name="CT_DigSigBlob">
51   <xsd:sequence minOccurs="1" maxOccurs="1">
52     <xsd:element ref="vt:blob"/>
53   </xsd:sequence>
54 </xsd:complexType>
55 </xsd:schema>

```

A.7.3 Custom Properties

This schema is available in the file shared-documentPropertiesCustom.xsd.

```

1 <xsd:schema xmlns="http://schemas.openxmlformats.org/officeDocument/2006/custom-properties"
2   xmlns:xsd="http://www.w3.org/2001/XMLSchema"
3   xmlns:vt="http://schemas.openxmlformats.org/officeDocument/2006/docPropsVTypes"
4   xmlns:s="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
5   targetNamespace="http://schemas.openxmlformats.org/officeDocument/2006/custom-properties"
6   blockDefault="#all" elementFormDefault="qualified">
7   <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/docPropsVTypes"
8     schemaLocation="shared-documentPropertiesVariantTypes.xsd"/>
9   <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
10     schemaLocation="shared-commonSimpleTypes.xsd"/>
11   <xsd:element name="Properties" type="CT_Properties"/>
12   <xsd:complexType name="CT_Properties">
13     <xsd:sequence>
14       <xsd:element name="property" minOccurs="0" maxOccurs="unbounded" type="CT_Property"/>
15     </xsd:sequence>
16   </xsd:complexType>

```

```

17 <xsd:complexType name="CT_Property">
18   <xsd:choice minOccurs="1" maxOccurs="1">
19     <xsd:element ref="vt:vector"/>
20     <xsd:element ref="vt:array"/>
21     <xsd:element ref="vt:blob"/>
22     <xsd:element ref="vt:oblob"/>
23     <xsd:element ref="vt:empty"/>
24     <xsd:element ref="vt:null"/>
25     <xsd:element ref="vt:i1"/>
26     <xsd:element ref="vt:i2"/>
27     <xsd:element ref="vt:i4"/>
28     <xsd:element ref="vt:i8"/>
29     <xsd:element ref="vt:int"/>
30     <xsd:element ref="vt:ui1"/>
31     <xsd:element ref="vt:ui2"/>
32     <xsd:element ref="vt:ui4"/>
33     <xsd:element ref="vt:ui8"/>
34     <xsd:element ref="vt:uint"/>
35     <xsd:element ref="vt:r4"/>
36     <xsd:element ref="vt:r8"/>
37     <xsd:element ref="vt:decimal"/>
38     <xsd:element ref="vt:lpstr"/>
39     <xsd:element ref="vt:lpwstr"/>
40     <xsd:element ref="vt:bstr"/>
41     <xsd:element ref="vt:date"/>
42     <xsd:element ref="vt:filetime"/>
43     <xsd:element ref="vt:bool"/>
44     <xsd:element ref="vt:cy"/>
45     <xsd:element ref="vt:error"/>
46     <xsd:element ref="vt:stream"/>
47     <xsd:element ref="vt:ostream"/>
48     <xsd:element ref="vt:storage"/>
49     <xsd:element ref="vt:ostorage"/>
50     <xsd:element ref="vt:vstream"/>
51     <xsd:element ref="vt:clsid"/>
52   </xsd:choice>
53   <xsd:attribute name="fmtid" use="required" type="s:ST_Guid"/>
54   <xsd:attribute name="pid" use="required" type="xsd:int"/>
55   <xsd:attribute name="name" use="optional" type="xsd:string"/>
56   <xsd:attribute name="linkTarget" use="optional" type="xsd:string"/>
57 </xsd:complexType>
58 </xsd:schema>

```

A.7.4 Variant Types

This schema is available in the file `shared-documentPropertiesVariantTypes.xsd`.

```

1 <xsd:schema xmlns="http://schemas.openxmlformats.org/officeDocument/2006/docPropsVTypes"
2   xmlns:xsd="http://www.w3.org/2001/XMLSchema"
3   xmlns:s="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
4   targetNamespace="http://schemas.openxmlformats.org/officeDocument/2006/docPropsVTypes"
5   blockDefault="#all" elementFormDefault="qualified">

```

```

6  <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
7    schemaLocation="shared-commonSimpleTypes.xsd"/>
8  <xsd:simpleType name="ST_VectorBaseType">
9    <xsd:restriction base="xsd:string">
10      <xsd:enumeration value="variant"/>
11      <xsd:enumeration value="i1"/>
12      <xsd:enumeration value="i2"/>
13      <xsd:enumeration value="i4"/>
14      <xsd:enumeration value="i8"/>
15      <xsd:enumeration value="ui1"/>
16      <xsd:enumeration value="ui2"/>
17      <xsd:enumeration value="ui4"/>
18      <xsd:enumeration value="ui8"/>
19      <xsd:enumeration value="r4"/>
20      <xsd:enumeration value="r8"/>
21      <xsd:enumeration value="lpstr"/>
22      <xsd:enumeration value="lpwstr"/>
23      <xsd:enumeration value="bstr"/>
24      <xsd:enumeration value="date"/>
25      <xsd:enumeration value="filetime"/>
26      <xsd:enumeration value="bool"/>
27      <xsd:enumeration value="cy"/>
28      <xsd:enumeration value="error"/>
29      <xsd:enumeration value="clsid"/>
30    </xsd:restriction>
31  </xsd:simpleType>
32  <xsd:simpleType name="ST_ArrayBaseType">
33    <xsd:restriction base="xsd:string">
34      <xsd:enumeration value="variant"/>
35      <xsd:enumeration value="i1"/>
36      <xsd:enumeration value="i2"/>
37      <xsd:enumeration value="i4"/>
38      <xsd:enumeration value="int"/>
39      <xsd:enumeration value="ui1"/>
40      <xsd:enumeration value="ui2"/>
41      <xsd:enumeration value="ui4"/>
42      <xsd:enumeration value="uint"/>
43      <xsd:enumeration value="r4"/>
44      <xsd:enumeration value="r8"/>
45      <xsd:enumeration value="decimal"/>
46      <xsd:enumeration value="bstr"/>
47      <xsd:enumeration value="date"/>
48      <xsd:enumeration value="bool"/>
49      <xsd:enumeration value="cy"/>
50      <xsd:enumeration value="error"/>
51    </xsd:restriction>
52  </xsd:simpleType>
53  <xsd:simpleType name="ST_Cy">
54    <xsd:restriction base="xsd:string">
55      <xsd:pattern value="\s*[0-9]*\.[0-9]{4}\s*" />
56    </xsd:restriction>
57  </xsd:simpleType>
58  <xsd:simpleType name="ST_Error">

```

```

59     <xsd:restriction base="xsd:string">
60         <xsd:pattern value="\s*\0x[0-9A-Za-z]{8}\s*" />
61     </xsd:restriction>
62 </xsd:simpleType>
63 <xsd:complexType name="CT_Empty" />
64 <xsd:complexType name="CT_Null" />
65 <xsd:complexType name="CT_Vector">
66     <xsd:choice minOccurs="1" maxOccurs="unbounded">
67         <xsd:element ref="variant" />
68         <xsd:element ref="i1" />
69         <xsd:element ref="i2" />
70         <xsd:element ref="i4" />
71         <xsd:element ref="i8" />
72         <xsd:element ref="ui1" />
73         <xsd:element ref="ui2" />
74         <xsd:element ref="ui4" />
75         <xsd:element ref="ui8" />
76         <xsd:element ref="r4" />
77         <xsd:element ref="r8" />
78         <xsd:element ref="lpstr" />
79         <xsd:element ref="lpwstr" />
80         <xsd:element ref="bstr" />
81         <xsd:element ref="date" />
82         <xsd:element ref="filetime" />
83         <xsd:element ref="bool" />
84         <xsd:element ref="cy" />
85         <xsd:element ref="error" />
86         <xsd:element ref="clsid" />
87     </xsd:choice>
88     <xsd:attribute name="baseType" type="ST_VectorBaseType" use="required" />
89     <xsd:attribute name="size" type="xsd:unsignedInt" use="required" />
90 </xsd:complexType>
91 <xsd:complexType name="CT_Array">
92     <xsd:choice minOccurs="1" maxOccurs="unbounded">
93         <xsd:element ref="variant" />
94         <xsd:element ref="i1" />
95         <xsd:element ref="i2" />
96         <xsd:element ref="i4" />
97         <xsd:element ref="int" />
98         <xsd:element ref="ui1" />
99         <xsd:element ref="ui2" />
100        <xsd:element ref="ui4" />
101        <xsd:element ref="uint" />
102        <xsd:element ref="r4" />
103        <xsd:element ref="r8" />
104        <xsd:element ref="decimal" />
105        <xsd:element ref="bstr" />
106        <xsd:element ref="date" />
107        <xsd:element ref="bool" />
108        <xsd:element ref="error" />
109        <xsd:element ref="cy" />
110    </xsd:choice>
111    <xsd:attribute name="lBounds" type="xsd:int" use="required" />

```

```

112     <xsd:attribute name="uBounds" type="xsd:int" use="required"/>
113     <xsd:attribute name="baseType" type="ST ArrayBaseType" use="required"/>
114 </xsd:complexType>
115 <xsd:complexType name="CT_Variant">
116     <xsd:choice minOccurs="1" maxOccurs="1">
117         <xsd:element ref="variant"/>
118         <xsd:element ref="vector"/>
119         <xsd:element ref="array"/>
120         <xsd:element ref="blob"/>
121         <xsd:element ref="oblob"/>
122         <xsd:element ref="empty"/>
123         <xsd:element ref="null"/>
124         <xsd:element ref="i1"/>
125         <xsd:element ref="i2"/>
126         <xsd:element ref="i4"/>
127         <xsd:element ref="i8"/>
128         <xsd:element ref="int"/>
129         <xsd:element ref="ui1"/>
130         <xsd:element ref="ui2"/>
131         <xsd:element ref="ui4"/>
132         <xsd:element ref="ui8"/>
133         <xsd:element ref="uint"/>
134         <xsd:element ref="r4"/>
135         <xsd:element ref="r8"/>
136         <xsd:element ref="decimal"/>
137         <xsd:element ref="lpstr"/>
138         <xsd:element ref="lpwstr"/>
139         <xsd:element ref="bstr"/>
140         <xsd:element ref="date"/>
141         <xsd:element ref="filetime"/>
142         <xsd:element ref="bool"/>
143         <xsd:element ref="cy"/>
144         <xsd:element ref="error"/>
145         <xsd:element ref="stream"/>
146         <xsd:element ref="ostream"/>
147         <xsd:element ref="storage"/>
148         <xsd:element ref="ostorage"/>
149         <xsd:element ref="vstream"/>
150         <xsd:element ref="clsid"/>
151     </xsd:choice>
152 </xsd:complexType>
153 <xsd:complexType name="CT_Vstream">
154     <xsd:simpleContent>
155         <xsd:extension base="xsd:base64Binary">
156             <xsd:attribute name="version" type="s:ST Guid" />
157         </xsd:extension>
158     </xsd:simpleContent>
159 </xsd:complexType>
160 <xsd:element name="variant" type="CT_Variant"/>
161 <xsd:element name="vector" type="CT_Vector"/>
162 <xsd:element name="array" type="CT_Array"/>
163 <xsd:element name="blob" type="xsd:base64Binary"/>
164 <xsd:element name="oblob" type="xsd:base64Binary"/>

```

```

165 <xsd:element name="empty" type="CT_Empty"/>
166 <xsd:element name="null" type="CT_Null"/>
167 <xsd:element name="i1" type="xsd:byte"/>
168 <xsd:element name="i2" type="xsd:short"/>
169 <xsd:element name="i4" type="xsd:int"/>
170 <xsd:element name="i8" type="xsd:long"/>
171 <xsd:element name="int" type="xsd:int"/>
172 <xsd:element name="ui1" type="xsd:unsignedByte"/>
173 <xsd:element name="ui2" type="xsd:unsignedShort"/>
174 <xsd:element name="ui4" type="xsd:unsignedInt"/>
175 <xsd:element name="ui8" type="xsd:unsignedLong"/>
176 <xsd:element name="uint" type="xsd:unsignedInt"/>
177 <xsd:element name="r4" type="xsd:float"/>
178 <xsd:element name="r8" type="xsd:double"/>
179 <xsd:element name="decimal" type="xsd:decimal"/>
180 <xsd:element name="lpstr" type="xsd:string"/>
181 <xsd:element name="lpwstr" type="xsd:string"/>
182 <xsd:element name="bstr" type="xsd:string"/>
183 <xsd:element name="date" type="xsd:dateTime"/>
184 <xsd:element name="filetime" type="xsd:dateTime"/>
185 <xsd:element name="bool" type="xsd:boolean"/>
186 <xsd:element name="cy" type="ST_Cy"/>
187 <xsd:element name="error" type="ST_Error"/>
188 <xsd:element name="stream" type="xsd:base64Binary"/>
189 <xsd:element name="ostream" type="xsd:base64Binary"/>
190 <xsd:element name="storage" type="xsd:base64Binary"/>
191 <xsd:element name="ostorage" type="xsd:base64Binary"/>
192 <xsd:element name="vstream" type="CT_Vstream"/>
193 <xsd:element name="clsid" type="s:ST_Guid"/>
194 </xsd:schema>

```

A.7.5 Custom XML Data Properties

This schema is available in the file shared-customXmlDataProperties.xsd.

```

1 <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
2   xmlns="http://schemas.openxmlformats.org/officeDocument/2006/customXml"
3   xmlns:s="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
4   targetNamespace="http://schemas.openxmlformats.org/officeDocument/2006/customXml"
5   elementFormDefault="qualified" attributeFormDefault="qualified" blockDefault="#all">
6   <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
7     schemaLocation="shared-commonSimpleTypes.xsd"/>
8   <xsd:complexType name="CT_DatastoreSchemaRef">
9     <xsd:attribute name="uri" type="xsd:string" use="required"/>
10  </xsd:complexType>
11  <xsd:complexType name="CT_DatastoreSchemaRefs">
12    <xsd:sequence>
13      <xsd:element name="schemaRef" type="CT_DatastoreSchemaRef" minOccurs="0"
14        maxOccurs="unbounded"/>
15    </xsd:sequence>
16  </xsd:complexType>
17  <xsd:complexType name="CT_DatastoreItem">
18    <xsd:sequence>

```

```

19      <xsd:element name="schemaRefs" type="CT_DatastoreSchemaRefs" minOccurs="0"/>
20    </xsd:sequence>
21    <xsd:attribute name="itemID" type="s:ST_Guid" use="required"/>
22  </xsd:complexType>
23  <xsd:element name="datastoreItem" type="CT_DatastoreItem"/>
24 </xsd:schema>

```

A.7.6 Bibliography

This schema is available in the file shared-bibliography.xsd.

```

1 <xsd:schema xmlns="http://schemas.openxmlformats.org/officeDocument/2006/bibliography"
2   xmlns:xsd="http://www.w3.org/2001/XMLSchema"
3   xmlns:s="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
4   targetNamespace="http://schemas.openxmlformats.org/officeDocument/2006/bibliography"
5   elementFormDefault="qualified">
6   <xsd:import namespace="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
7     schemaLocation="shared-commonSimpleTypes.xsd"/>
8   <xsd:simpleType name="ST_SourceType">
9     <xsd:restriction base="s:ST_String">
10       <xsd:enumeration value="ArticleInAPeriodical"/>
11       <xsd:enumeration value="Book"/>
12       <xsd:enumeration value="BookSection"/>
13       <xsd:enumeration value="JournalArticle"/>
14       <xsd:enumeration value="ConferenceProceedings"/>
15       <xsd:enumeration value="Report"/>
16       <xsd:enumeration value="SoundRecording"/>
17       <xsd:enumeration value="Performance"/>
18       <xsd:enumeration value="Art"/>
19       <xsd:enumeration value="DocumentFromInternetSite"/>
20       <xsd:enumeration value="InternetSite"/>
21       <xsd:enumeration value="Film"/>
22       <xsd:enumeration value="Interview"/>
23       <xsd:enumeration value="Patent"/>
24       <xsd:enumeration value="ElectronicSource"/>
25       <xsd:enumeration value="Case"/>
26       <xsd:enumeration value="Misc"/>
27     </xsd:restriction>
28   </xsd:simpleType>
29   <xsd:complexType name="CT_NameListType">
30     <xsd:sequence>
31       <xsd:element name="Person" type="CT_PersonType" minOccurs="1" maxOccurs="unbounded"/>
32     </xsd:sequence>
33   </xsd:complexType>
34   <xsd:complexType name="CT_PersonType">
35     <xsd:sequence>
36       <xsd:element name="Last" type="s:ST_String" minOccurs="0" maxOccurs="unbounded"/>
37       <xsd:element name="First" type="s:ST_String" minOccurs="0" maxOccurs="unbounded"/>
38       <xsd:element name="Middle" type="s:ST_String" minOccurs="0" maxOccurs="unbounded"/>
39     </xsd:sequence>
40   </xsd:complexType>
41   <xsd:complexType name="CT_NameType">
42     <xsd:sequence>

```

```

43     <xsd:element name="NameList" type="CT_NameListType" minOccurs="1" maxOccurs="1"/>
44   </xsd:sequence>
45 </xsd:complexType>
46 <xsd:complexType name="CT_NameOrCorporateType">
47   <xsd:sequence>
48     <xsd:choice minOccurs="0" maxOccurs="1">
49       <xsd:element name="NameList" type="CT_NameListType" minOccurs="1" maxOccurs="1"/>
50       <xsd:element name="Corporate" minOccurs="1" maxOccurs="1" type="s:ST_String"/>
51     </xsd:choice>
52   </xsd:sequence>
53 </xsd:complexType>
54 <xsd:complexType name="CT_AuthorType">
55   <xsd:sequence>
56     <xsd:choice minOccurs="0" maxOccurs="unbounded">
57       <xsd:element name="Artist" type="CT_NameType"/>
58       <xsd:element name="Author" type="CT_NameOrCorporateType"/>
59       <xsd:element name="BookAuthor" type="CT_NameType"/>
60       <xsd:element name="Compiler" type="CT_NameType"/>
61       <xsd:element name="Composer" type="CT_NameType"/>
62       <xsd:element name="Conductor" type="CT_NameType"/>
63       <xsd:element name="Counsel" type="CT_NameType"/>
64       <xsd:element name="Director" type="CT_NameType"/>
65       <xsd:element name="Editor" type="CT_NameType"/>
66       <xsd:element name="Interviewee" type="CT_NameType"/>
67       <xsd:element name="Interviewer" type="CT_NameType"/>
68       <xsd:element name="Inventor" type="CT_NameType"/>
69       <xsd:element name="Performer" type="CT_NameOrCorporateType"/>
70       <xsd:element name="ProducerName" type="CT_NameType"/>
71       <xsd:element name="Translator" type="CT_NameType"/>
72       <xsd:element name="Writer" type="CT_NameType"/>
73     </xsd:choice>
74   </xsd:sequence>
75 </xsd:complexType>
76 <xsd:complexType name="CT_SourceType">
77   <xsd:sequence>
78     <xsd:choice minOccurs="0" maxOccurs="unbounded">
79       <xsd:element name="AbbreviatedCaseNumber" type="s:ST_String"/>
80       <xsd:element name="AlbumTitle" type="s:ST_String"/>
81       <xsd:element name="Author" type="CT_AuthorType"/>
82       <xsd:element name="BookTitle" type="s:ST_String"/>
83       <xsd:element name="Broadcaster" type="s:ST_String"/>
84       <xsd:element name="BroadcastTitle" type="s:ST_String"/>
85       <xsd:element name="CaseNumber" type="s:ST_String"/>
86       <xsd:element name="ChapterNumber" type="s:ST_String"/>
87       <xsd:element name="City" type="s:ST_String"/>
88       <xsd:element name="Comments" type="s:ST_String"/>
89       <xsd:element name="ConferenceName" type="s:ST_String"/>
90       <xsd:element name="CountryRegion" type="s:ST_String"/>
91       <xsd:element name="Court" type="s:ST_String"/>
92       <xsd:element name="Day" type="s:ST_String"/>
93       <xsd:element name="DayAccessed" type="s:ST_String"/>
94       <xsd:element name="Department" type="s:ST_String"/>
95       <xsd:element name="Distributor" type="s:ST_String"/>

```



```

96      <xsd:element name="Edition" type="s:ST String"/>
97      <xsd:element name="Guid" type="s:ST String"/>
98      <xsd:element name="Institution" type="s:ST String"/>
99      <xsd:element name="InternetSiteTitle" type="s:ST String"/>
100     <xsd:element name="Issue" type="s:ST String"/>
101     <xsd:element name="JournalName" type="s:ST String"/>
102     <xsd:element name="LCID" type="s:ST Lang"/>
103     <xsd:element name="Medium" type="s:ST String"/>
104     <xsd:element name="Month" type="s:ST String"/>
105     <xsd:element name="MonthAccessed" type="s:ST String"/>
106     <xsd:element name="NumberVolumes" type="s:ST String"/>
107     <xsd:element name="Pages" type="s:ST String"/>
108     <xsd:element name="PatentNumber" type="s:ST String"/>
109     <xsd:element name="PeriodicalTitle" type="s:ST String"/>
110     <xsd:element name="ProductionCompany" type="s:ST String"/>
111     <xsd:element name="PublicationTitle" type="s:ST String"/>
112     <xsd:element name="Publisher" type="s:ST String"/>
113     <xsd:element name="RecordingNumber" type="s:ST String"/>
114     <xsd:element name="RefOrder" type="s:ST String"/>
115     <xsd:element name="Reporter" type="s:ST String"/>
116     <xsd:element name="SourceType" type="ST SourceType"/>
117     <xsd:element name="ShortTitle" type="s:ST String"/>
118     <xsd:element name="StandardNumber" type="s:ST String"/>
119     <xsd:element name="StateProvince" type="s:ST String"/>
120     <xsd:element name="Station" type="s:ST String"/>
121     <xsd:element name="Tag" type="s:ST String"/>
122     <xsd:element name="Theater" type="s:ST String"/>
123     <xsd:element name="ThesisType" type="s:ST String"/>
124     <xsd:element name="Title" type="s:ST String"/>
125     <xsd:element name="Type" type="s:ST String"/>
126     <xsd:element name="URL" type="s:ST String"/>
127     <xsd:element name="Version" type="s:ST String"/>
128     <xsd:element name="Volume" type="s:ST String"/>
129     <xsd:element name="Year" type="s:ST String"/>
130     <xsd:element name="YearAccessed" type="s:ST String"/>
131   </xsd:choice>
132 </xsd:sequence>
133 </xsd:complexType>
134 <xsd:element name="Sources" type="CT_Sources"/>
135 <xsd:complexType name="CT_Sources">
136   <xsd:sequence>
137     <xsd:element name="Source" type="CT SourceType" minOccurs="0" maxOccurs="unbounded"/>
138   </xsd:sequence>
139   <xsd:attribute name="SelectedStyle" type="s:ST String"/>
140   <xsd:attribute name="StyleName" type="s:ST String"/>
141   <xsd:attribute name="URI" type="s:ST String"/>
142 </xsd:complexType>
143 </xsd:schema>

```

A.7.7 Additional Characteristics

This schema is available in the file shared-additionalCharacteristics.xsd.

```

1 <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
2   xmlns="http://schemas.openxmlformats.org/officeDocument/2006/characteristics"
3   targetNamespace="http://schemas.openxmlformats.org/officeDocument/2006/characteristics"
4   elementFormDefault="qualified">
5   <xsd:complexType name="CT_AdditionalCharacteristics">
6     <xsd:sequence>
7       <xsd:element name="characteristic" type="CT_Characteristic" minOccurs="0"
8         maxOccurs="unbounded"/>
9     </xsd:sequence>
10  </xsd:complexType>
11  <xsd:complexType name="CT_Characteristic">
12    <xsd:attribute name="name" type="xsd:string" use="required"/>
13    <xsd:attribute name="relation" type="ST_Relation" use="required"/>
14    <xsd:attribute name="val" type="xsd:string" use="required"/>
15    <xsd:attribute name="vocabulary" type="xsd:anyURI" use="optional"/>
16  </xsd:complexType>
17  <xsd:simpleType name="ST_Relation">
18    <xsd:restriction base="xsd:string">
19      <xsd:enumeration value="ge"/>
20      <xsd:enumeration value="le"/>
21      <xsd:enumeration value="gt"/>
22      <xsd:enumeration value="lt"/>
23      <xsd:enumeration value="eq"/>
24    </xsd:restriction>
25  </xsd:simpleType>
26  <xsd:element name="additionalCharacteristics" type="CT_AdditionalCharacteristics"/>
27 </xsd:schema>

```

A.7.8 Office Document Relationships

This schema is available in the file shared-relationshipReference.xsd.

```

1 <xsd:schema xmlns="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
2   xmlns:r="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
3   xmlns:xsd="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified"
4   targetNamespace="http://schemas.openxmlformats.org/officeDocument/2006/relationships"
5   blockDefault="#all">
6   <xsd:simpleType name="ST_RelationshipId">
7     <xsd:restriction base="xsd:string"/>
8   </xsd:simpleType>
9   <xsd:attribute name="id" type="ST_RelationshipId"/>
10  <xsd:attribute name="embed" type="ST_RelationshipId"/>
11  <xsd:attribute name="link" type="ST_RelationshipId"/>
12  <xsd:attribute name="dm" type="ST_RelationshipId" default=""/>
13  <xsd:attribute name="lo" type="ST_RelationshipId" default=""/>
14  <xsd:attribute name="qs" type="ST_RelationshipId" default=""/>
15  <xsd:attribute name="cs" type="ST_RelationshipId" default=""/>
16  <xsd:attribute name="blip" type="ST_RelationshipId" default=""/>
17  <xsd:attribute name="pict" type="ST_RelationshipId"/>
18  <xsd:attribute name="href" type="ST_RelationshipId"/>
19  <xsd:attribute name="topLeft" type="ST_RelationshipId"/>
20  <xsd:attribute name="topRight" type="ST_RelationshipId"/>
21  <xsd:attribute name="bottomLeft" type="ST_RelationshipId"/>

```

```

22     <xsd:attribute name="bottomRight" type="ST_RelationshipId"/>
23 </xsd:schema>

```

A.7.9 Shared Simple Types

This schema is available in the file shared-commonSimpleTypes.xsd.

```

1  <xsd:schema xmlns="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
2    xmlns:xsd="http://www.w3.org/2001/XMLSchema"
3    targetNamespace="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
4    elementFormDefault="qualified">
5    <xsd:simpleType name="ST_Lang">
6      <xsd:restriction base="xsd:string"/>
7    </xsd:simpleType>
8    <xsd:simpleType name="ST_HexColorRGB">
9      <xsd:restriction base="xsd:hexBinary">
10        <xsd:length value="3" fixed="true"/>
11      </xsd:restriction>
12    </xsd:simpleType>
13    <xsd:simpleType name="ST_Panose">
14      <xsd:restriction base="xsd:hexBinary">
15        <xsd:length value="10"/>
16      </xsd:restriction>
17    </xsd:simpleType>
18    <xsd:simpleType name="ST_CalendarType">
19      <xsd:restriction base="xsd:string">
20        <xsd:enumeration value="gregorian"/>
21        <xsd:enumeration value="gregorianUs"/>
22        <xsd:enumeration value="gregorianMeFrench"/>
23        <xsd:enumeration value="gregorianArabic"/>
24        <xsd:enumeration value="hijri"/>
25        <xsd:enumeration value="hebrew"/>
26        <xsd:enumeration value="taiwan"/>
27        <xsd:enumeration value="japan"/>
28        <xsd:enumeration value="thai"/>
29        <xsd:enumeration value="korea"/>
30        <xsd:enumeration value="saka"/>
31        <xsd:enumeration value="gregorianXlitEnglish"/>
32        <xsd:enumeration value="gregorianXlitFrench"/>
33        <xsd:enumeration value="none"/>
34      </xsd:restriction>
35    </xsd:simpleType>
36    <xsd:simpleType name="ST_Algorithm">
37      <xsd:restriction base="xsd:string">
38        <xsd:enumeration value="hash"/>
39        <xsd:enumeration value="custom"/>
40      </xsd:restriction>
41    </xsd:simpleType>
42    <xsd:simpleType name="ST_CryptProv">
43      <xsd:restriction base="xsd:string">
44        <xsd:enumeration value="rsaAES"/>
45        <xsd:enumeration value="rsaFull"/>
46        <xsd:enumeration value="custom"/>

```

```

47     </xsd:restriction>
48 </xsd:simpleType>
49 <xsd:simpleType name="ST_AlgType">
50     <xsd:restriction base="xsd:string">
51         <xsd:enumeration value="typeAny"/>
52         <xsd:enumeration value="custom"/>
53     </xsd:restriction>
54 </xsd:simpleType>
55 <xsd:simpleType name="ST_ColorType">
56     <xsd:restriction base="xsd:string"/>
57 </xsd:simpleType>
58 <xsd:simpleType name="ST_Guid">
59     <xsd:restriction base="xsd:token">
60         <xsd:pattern value="\{[0-9A-F]{8}-[0-9A-F]{4}-[0-9A-F]{4}-[0-9A-F]{4}-[0-9A-F]{12}\}" />
61     </xsd:restriction>
62 </xsd:simpleType>
63 <xsd:simpleType name="ST_OnOff">
64     <xsd:union memberTypes="xsd:boolean ST_OnOff1"/>
65 </xsd:simpleType>
66 <xsd:simpleType name="ST_OnOff1">
67     <xsd:restriction base="xsd:string">
68         <xsd:enumeration value="on"/>
69         <xsd:enumeration value="off"/>
70     </xsd:restriction>
71 </xsd:simpleType>
72 <xsd:simpleType name="ST_String">
73     <xsd:restriction base="xsd:string"/>
74 </xsd:simpleType>
75 <xsd:simpleType name="ST_TrueFalse">
76     <xsd:restriction base="xsd:string">
77         <xsd:enumeration value="t"/>
78         <xsd:enumeration value="f"/>
79         <xsd:enumeration value="true"/>
80         <xsd:enumeration value="false"/>
81     </xsd:restriction>
82 </xsd:simpleType>
83 <xsd:simpleType name="ST_TrueFalseBlank">
84     <xsd:restriction base="xsd:string">
85         <xsd:enumeration value="t"/>
86         <xsd:enumeration value="f"/>
87         <xsd:enumeration value="true"/>
88         <xsd:enumeration value="false"/>
89         <xsd:enumeration value=""/>
90         <xsd:enumeration value="True"/>
91         <xsd:enumeration value="False"/>
92     </xsd:restriction>
93 </xsd:simpleType>
94 <xsd:simpleType name="ST_UnsignedDecimalNumber">
95     <xsd:restriction base="xsd:unsignedLong"/>
96 </xsd:simpleType>
97 <xsd:simpleType name="ST_TwipsMeasure">
98     <xsd:union memberTypes="ST_UnsignedDecimalNumber ST_PositiveUniversalMeasure"/>
99 </xsd:simpleType>

```

```

100 <xsd:simpleType name="ST_VerticalAlignRun">
101   <xsd:restriction base="xsd:string">
102     <xsd:enumeration value="baseline"/>
103     <xsd:enumeration value="superscript"/>
104     <xsd:enumeration value="subscript"/>
105   </xsd:restriction>
106 </xsd:simpleType>
107 <xsd:simpleType name="ST_Xstring">
108   <xsd:restriction base="xsd:string"/>
109 </xsd:simpleType>
110 <xsd:simpleType name="ST_XAlign">
111   <xsd:restriction base="xsd:string">
112     <xsd:enumeration value="left"/>
113     <xsd:enumeration value="center"/>
114     <xsd:enumeration value="right"/>
115     <xsd:enumeration value="inside"/>
116     <xsd:enumeration value="outside"/>
117   </xsd:restriction>
118 </xsd:simpleType>
119 <xsd:simpleType name="ST_YAlign">
120   <xsd:restriction base="xsd:string">
121     <xsd:enumeration value="inline"/>
122     <xsd:enumeration value="top"/>
123     <xsd:enumeration value="center"/>
124     <xsd:enumeration value="bottom"/>
125     <xsd:enumeration value="inside"/>
126     <xsd:enumeration value="outside"/>
127   </xsd:restriction>
128 </xsd:simpleType>
129 <xsd:simpleType name="ST_ConformanceClass">
130   <xsd:restriction base="xsd:string">
131     <xsd:enumeration value="strict"/>
132     <xsd:enumeration value="transitional"/>
133   </xsd:restriction>
134 </xsd:simpleType>
135 <xsd:simpleType name="ST_UniversalMeasure">
136   <xsd:restriction base="xsd:string">
137     <xsd:pattern value="-?[0-9]+(\.[0-9]+)?(mm|cm|in|pt|pc|pi)"/>
138   </xsd:restriction>
139 </xsd:simpleType>
140 <xsd:simpleType name="ST_PositiveUniversalMeasure">
141   <xsd:restriction base="ST_UniversalMeasure">
142     <xsd:pattern value="[0-9]+(\.[0-9]+)?(mm|cm|in|pt|pc|pi)"/>
143   </xsd:restriction>
144 </xsd:simpleType>
145 <xsd:simpleType name="ST_Percentage">
146   <xsd:restriction base="xsd:string">
147     <xsd:pattern value="-?[0-9]+(\.[0-9]+)?%/>
148   </xsd:restriction>
149 </xsd:simpleType>
150 <xsd:simpleType name="ST_FixedPercentage">
151   <xsd:restriction base="ST_Percentage">
152     <xsd:pattern value="-?((100)|([0-9][0-9]?))(\.[0-9][0-9]?)?%/>

```

```

153     </xsd:restriction>
154 </xsd:simpleType>
155 <xsd:simpleType name="ST_PositivePercentage">
156     <xsd:restriction base="ST_Percentage">
157         <xsd:pattern value="[0-9]+(\.[0-9]+)?%" />
158     </xsd:restriction>
159 </xsd:simpleType>
160 <xsd:simpleType name="ST_PositiveFixedPercentage">
161     <xsd:restriction base="ST_Percentage">
162         <xsd:pattern value="((100)|([0-9][0-9]?))(\.[0-9][0-9]?)?%" />
163     </xsd:restriction>
164 </xsd:simpleType>
165 </xsd:schema>

```

A.8 Custom XML Schema References

This schema is available in the file shared-customXmlSchemaProperties.xsd.

```

1 <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
2   xmlns="http://schemas.openxmlformats.org/schemaLibrary/2006/main"
3   targetNamespace="http://schemas.openxmlformats.org/schemaLibrary/2006/main"
4   attributeFormDefault="qualified" elementFormDefault="qualified">
5   <xsd:complexType name="CT_Schema">
6       <xsd:attribute name="uri" type="xsd:string" default=""/>
7       <xsd:attribute name="manifestLocation" type="xsd:string"/>
8       <xsd:attribute name="schemaLocation" type="xsd:string"/>
9       <xsd:attribute name="schemaLanguage" type="xsd:token"/>
10  </xsd:complexType>
11  <xsd:complexType name="CT_SchemaLibrary">
12      <xsd:sequence>
13          <xsd:element name="schema" type="CT_Schema" minOccurs="0" maxOccurs="unbounded"/>
14      </xsd:sequence>
15  </xsd:complexType>
16  <xsd:element name="schemaLibrary" type="CT_SchemaLibrary"/>
17 </xsd:schema>

```

Annex B.

(informative)

Schemas – RELAX NG

This annex is informative.

This Office Open XML specification includes a family of schemas defined using the RELAX NG syntax. The definitions of these schemas follow below, and they also reside in an accompanying file named OfficeOpenXML-RELAXNG-Transitional.zip, which is distributed in electronic form.

B.1 WordprocessingML

This schema is available in the file wml.rnc.

```

1 namespace m =
2   "http://schemas.openxmlformats.org/officeDocument/2006/math"
3 namespace o = "urn:schemas-microsoft-com:office:office"
4 namespace r =
5   "http://schemas.openxmlformats.org/officeDocument/2006/relationships"
6 namespace s =
7   "http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
8 namespace sl =
9   "http://schemas.openxmlformats.org/schemaLibrary/2006/main"
10 namespace v = "urn:schemas-microsoft-com:vml"
11 default namespace w =
12   "http://schemas.openxmlformats.org/wordprocessingml/2006/main"
13 namespace w10 = "urn:schemas-microsoft-com:office:word"
14 namespace wp =
15   "http://schemas.openxmlformats.org/drawingml/2006/wordprocessingDrawing"
16 namespace x = "urn:schemas-microsoft-com:office:excel"
17
18 w_CT_Empty = empty
19 w_CT_OnOff = attribute w:val { s_ST_OnOff }?
20 w_ST_LongHexNumber = xsd:hexBinary { length = "4" }
21 w_CT_LongHexNumber = attribute w:val { w_ST_LongHexNumber }
22 w_ST_ShortHexNumber = xsd:hexBinary { length = "2" }
23 w_ST_UcharHexNumber = xsd:hexBinary { length = "1" }
24 w_CT_Charset =
25   attribute w:val { w_ST_UcharHexNumber },
26   attribute w:characterSet { s_ST_String }?
27 w_ST_DecimalNumberOrPercent =
28   w_ST_UnqualifiedPercentage | s_ST_Percentage
29 w_ST_UnqualifiedPercentage = xsd:integer
30 w_ST_DecimalNumber = xsd:integer
31 w_CT_DecimalNumber = attribute w:val { w_ST_DecimalNumber }

```

```

32 w_CT_UnsignedDecimalNumber =
33     attribute w:val { s_ST_UnsignedDecimalNumber }
34 w_CT_DecimalNumberOrPrecent =
35     attribute w:val { w_ST_DecimalNumberOrPercent }
36 w_CT_TwipsMeasure = attribute w:val { s_ST_TwipsMeasure }
37 w_ST_SignedTwipsMeasure = xsd:integer | s_ST_UniversalMeasure
38 w_CT_SignedTwipsMeasure = attribute w:val { w_ST_SignedTwipsMeasure }
39 w_ST_PixelsMeasure = s_ST_UnsignedDecimalNumber
40 w_CT_PixelsMeasure = attribute w:val { w_ST_PixelsMeasure }
41 w_ST_HpsMeasure =
42     s_ST_UnsignedDecimalNumber | s_ST_PositiveUniversalMeasure
43 w_CT_HpsMeasure = attribute w:val { w_ST_HpsMeasure }
44 w_ST_SignedHpsMeasure = xsd:integer | s_ST_UniversalMeasure
45 w_CT_SignedHpsMeasure = attribute w:val { w_ST_SignedHpsMeasure }
46 w_ST_DateTime = xsd:dateTime
47 w_ST_MacroName = xsd:string { maxLength = "33" }
48 w_CT_MacroName = attribute w:val { w_ST_MacroName }
49 w_ST_EighthPointMeasure = s_ST_UnsignedDecimalNumber
50 w_ST_PointMeasure = s_ST_UnsignedDecimalNumber
51 w_CT_String = attribute w:val { s_ST_String }
52 w_ST_TextScale = w_ST_TextScalePercent | w_ST_TextScaleDecimal
53 w_ST_TextScalePercent = xsd:string { pattern = "0*(600|([0-5]?[0-9]?[0-9]))%" }
54 w_ST_TextScaleDecimal = xsd:integer { minInclusive = "0" maxInclusive = "600" }
55 w_CT_TextScale = attribute w:val { w_ST_TextScale }?
56 w_ST_HighlightColor =
57     string "black"
58     | string "blue"
59     | string "cyan"
60     | string "green"
61     | string "magenta"
62     | string "red"
63     | string "yellow"
64     | string "white"
65     | string "darkBlue"
66     | string "darkCyan"
67     | string "darkGreen"
68     | string "darkMagenta"
69     | string "darkRed"
70     | string "darkYellow"
71     | string "darkGray"
72     | string "lightGray"
73     | string "none"
74 w_CT_Highlight = attribute w:val { w_ST_HighlightColor }
75 w_ST_HexColorAuto = string "auto"
76 w_ST_HexColor = w_ST_HexColorAuto | s_ST_HexColorRGB
77 w_CT_Color =
78     attribute w:val { w_ST_HexColor },
79     attribute w:themeColor { w_ST_ThemeColor }?,
80     attribute w:themeTint { w_ST_UcharHexNumber }?,
81     attribute w:themeShade { w_ST_UcharHexNumber }?
82 w_CT_Lang = attribute w:val { s_ST_Lang }
83 w_CT_Guid = attribute w:val { s_ST_Guid }?
84 w_ST_Underline =

```



```

85 string "single"
86 | string "words"
87 | string "double"
88 | string "thick"
89 | string "dotted"
90 | string "dottedHeavy"
91 | string "dash"
92 | string "dashedHeavy"
93 | string "dashLong"
94 | string "dashLongHeavy"
95 | string "dotDash"
96 | string "dashDotHeavy"
97 | string "dotDotDash"
98 | string "dashDotDotHeavy"
99 | string "wave"
100 | string "wavyHeavy"
101 | string "wavyDouble"
102 | string "none"
103 w_CT_Underline =
104   attribute w:val { w_ST_Underline }?,
105   attribute w:color { w_ST_HexColor }?,
106   attribute w:themeColor { w_ST_ThemeColor }?,
107   attribute w:themeTint { w_ST_UcharHexNumber }?,
108   attribute w:themeShade { w_ST_UcharHexNumber }?
109 w_ST_TextEffect =
110   string "blinkBackground"
111   | string "lights"
112   | string "antsBlack"
113   | string "antsRed"
114   | string "shimmer"
115   | string "sparkle"
116   | string "none"
117 w_CT_TextEffect = attribute w:val { w_ST_TextEffect }
118 w_ST_Border =
119   string "nil"
120   | string "none"
121   | string "single"
122   | string "thick"
123   | string "double"
124   | string "dotted"
125   | string "dashed"
126   | string "dotDash"
127   | string "dotDotDash"
128   | string "triple"
129   | string "thinThickSmallGap"
130   | string "thickThinSmallGap"
131   | string "thinThickThinSmallGap"
132   | string "thinThickMediumGap"
133   | string "thickThinMediumGap"
134   | string "thinThickThinMediumGap"
135   | string "thinThickLargeGap"
136   | string "thickThinLargeGap"
137   | string "thinThickThinLargeGap"

```

138		string	"wave"
139		string	"doubleWave"
140		string	"dashSmallGap"
141		string	"dashDotStroked"
142		string	"threeDEmboss"
143		string	"threeDEngrave"
144		string	"outset"
145		string	"inset"
146		string	"apples"
147		string	"archedScallops"
148		string	"babyPacifier"
149		string	"babyRattle"
150		string	"balloons3Colors"
151		string	"balloonsHotAir"
152		string	"basicBlackDashes"
153		string	"basicBlackDots"
154		string	"basicBlackSquares"
155		string	"basicThinLines"
156		string	"basicWhiteDashes"
157		string	"basicWhiteDots"
158		string	"basicWhiteSquares"
159		string	"basicWideInline"
160		string	"basicWideMidline"
161		string	"basicWideOutline"
162		string	"bats"
163		string	"birds"
164		string	"birdsFlight"
165		string	"cabins"
166		string	"cakeSlice"
167		string	"candyCorn"
168		string	"celticKnotwork"
169		string	"certificateBanner"
170		string	"chainLink"
171		string	"champagneBottle"
172		string	"checkedBarBlack"
173		string	"checkedBarColor"
174		string	"checkered"
175		string	"christmasTree"
176		string	"circlesLines"
177		string	"circlesRectangles"
178		string	"classicalWave"
179		string	"clocks"
180		string	"compass"
181		string	"confetti"
182		string	"confettiGrays"
183		string	"confettiOutline"
184		string	"confettiStreamers"
185		string	"confettiWhite"
186		string	"cornerTriangles"
187		string	"couponCutoutDashes"
188		string	"couponCutoutDots"
189		string	"crazyMaze"
190		string	"creaturesButterfly"

```

191 | string "creaturesFish"
192 | string "creaturesInsects"
193 | string "creaturesLadyBug"
194 | string "crossStitch"
195 | string "cup"
196 | string "decoArch"
197 | string "decoArchColor"
198 | string "decoBlocks"
199 | string "diamondsGray"
200 | string "doubleD"
201 | string "doubleDiamonds"
202 | string "earth1"
203 | string "earth2"
204 | string "earth3"
205 | string "eclipsingSquares1"
206 | string "eclipsingSquares2"
207 | string "eggsBlack"
208 | string "fans"
209 | string "film"
210 | string "firecrackers"
211 | string "flowersBlockPrint"
212 | string "flowersDaisies"
213 | string "flowersModern1"
214 | string "flowersModern2"
215 | string "flowersPansy"
216 | string "flowersRedRose"
217 | string "flowersRoses"
218 | string "flowersTeacup"
219 | string "flowersTiny"
220 | string "gems"
221 | string "gingerbreadMan"
222 | string "gradient"
223 | string "handmade1"
224 | string "handmade2"
225 | string "heartBalloon"
226 | string "heartGray"
227 | string "hearts"
228 | string "heebieJeebies"
229 | string "holly"
230 | string "houseFunky"
231 | string "hypnotic"
232 | string "iceCreamCones"
233 | string "lightBulb"
234 | string "lightning1"
235 | string "lightning2"
236 | string "mapPins"
237 | string "mapleLeaf"
238 | string "mapleMuffins"
239 | string "marquee"
240 | string "marqueeToothed"
241 | string "moons"
242 | string "mosaic"
243 | string "musicNotes"

```

```

244 | string "northwest"
245 | string "ovals"
246 | string "packages"
247 | string "palmsBlack"
248 | string "palmsColor"
249 | string "paperClips"
250 | string "papyrus"
251 | string "partyFavor"
252 | string "partyGlass"
253 | string "pencils"
254 | string "people"
255 | string "peopleWaving"
256 | string "peopleHats"
257 | string "poinsettias"
258 | string "postageStamp"
259 | string "pumpkin1"
260 | string "pushPinNote2"
261 | string "pushPinNote1"
262 | string "pyramids"
263 | string "pyramidsAbove"
264 | string "quadrants"
265 | string "rings"
266 | string "safari"
267 | string "sawtooth"
268 | string "sawtoothGray"
269 | string "scaredCat"
270 | string "seattle"
271 | string "shadowedSquares"
272 | string "sharksTeeth"
273 | string "shorebirdTracks"
274 | string "skyrocket"
275 | string "snowflakeFancy"
276 | string "snowflakes"
277 | string "sombrero"
278 | string "southwest"
279 | string "stars"
280 | string "starsTop"
281 | string "stars3d"
282 | string "starsBlack"
283 | string "starsShadowed"
284 | string "sun"
285 | string "swirligig"
286 | string "tornPaper"
287 | string "tornPaperBlack"
288 | string "trees"
289 | string "triangleParty"
290 | string "triangles"
291 | string "triangle1"
292 | string "triangle2"
293 | string "triangleCircle1"
294 | string "triangleCircle2"
295 | string "shapes1"
296 | string "shapes2"

```

```

297 | string "twistedLines1"
298 | string "twistedLines2"
299 | string "vine"
300 | string "waveline"
301 | string "weavingAngles"
302 | string "weavingBraid"
303 | string "weavingRibbon"
304 | string "weavingStrips"
305 | string "whiteFlowers"
306 | string "woodwork"
307 | string "xIllusions"
308 | string "zanyTriangles"
309 | string "zigZag"
310 | string "zigZagStitch"
311 | string "custom"
312 w_CT_Border =
313   attribute w:val { w_ST_Border },
314   attribute w:color { w_ST_HexColor }?,
315   attribute w:themeColor { w_ST_ThemeColor }?,
316   attribute w:themeTint { w_ST_UcharHexNumber }?,
317   attribute w:themeShade { w_ST_UcharHexNumber }?,
318   attribute w:sz { w_ST_EighthPointMeasure }?,
319   attribute w:space { w_ST_PointMeasure }?,
320   attribute w:shadow { s_ST_OnOff }?,
321   attribute w:frame { s_ST_OnOff }?
322 w_ST_Shd =
323   string "nil"
324   | string "clear"
325   | string "solid"
326   | string "horzStripe"
327   | string "vertStripe"
328   | string "reverseDiagStripe"
329   | string "diagStripe"
330   | string "horzCross"
331   | string "diagCross"
332   | string "thinHorzStripe"
333   | string "thinVertStripe"
334   | string "thinReverseDiagStripe"
335   | string "thinDiagStripe"
336   | string "thinHorzCross"
337   | string "thinDiagCross"
338   | string "pct5"
339   | string "pct10"
340   | string "pct12"
341   | string "pct15"
342   | string "pct20"
343   | string "pct25"
344   | string "pct30"
345   | string "pct35"
346   | string "pct37"
347   | string "pct40"
348   | string "pct45"
349   | string "pct50"

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350 | string "pct55"
351 | string "pct60"
352 | string "pct62"
353 | string "pct65"
354 | string "pct70"
355 | string "pct75"
356 | string "pct80"
357 | string "pct85"
358 | string "pct87"
359 | string "pct90"
360 | string "pct95"
361 w_CT_Shd =
362   attribute w:val { w_ST_Shd },
363   attribute w:color { w_ST_HexColor }?,
364   attribute w:themeColor { w_ST_ThemeColor }?,
365   attribute w:themeTint { w_ST_UcharHexNumber }?,
366   attribute w:themeShade { w_ST_UcharHexNumber }?,
367   attribute w:fill { w_ST_HexColor }?,
368   attribute w:themeFill { w_ST_ThemeColor }?,
369   attribute w:themeFillTint { w_ST_UcharHexNumber }?,
370   attribute w:themeFillShade { w_ST_UcharHexNumber }?
371 w_CT_VerticalAlignRun = attribute w:val { s_ST_VerticalAlignRun }
372 w_CT_FitText =
373   attribute w:val { s_ST_TwipsMeasure },
374   attribute w:id { w_ST_DecimalNumber }?
375 w_ST_Em =
376   string "none"
377   | string "dot"
378   | string "comma"
379   | string "circle"
380   | string "underDot"
381 w_CT_Em = attribute w:val { w_ST_Em }
382 w_CT_Language =
383   attribute w:val { s_ST_Lang }?,
384   attribute w:eastAsia { s_ST_Lang }?,
385   attribute w:bidirectional { s_ST_Lang }?
386 w_ST_CombineBrackets =
387   string "none"
388   | string "round"
389   | string "square"
390   | string "angle"
391   | string "curly"
392 w_CT_EastAsianLayout =
393   attribute w:id { w_ST_DecimalNumber }?,
394   attribute w:combine { s_ST_OnOff }?,
395   attribute w:combineBrackets { w_ST_CombineBrackets }?,
396   attribute w:vertical { s_ST_OnOff }?,
397   attribute w:verticalCompress { s_ST_OnOff }?
398 w_ST_HeightRule = string "auto" | string "exact" | string "atLeast"
399 w_ST_Wrap =
400   string "auto"
401   | string "notBeside"
402   | string "around"

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403 | string "tight"
404 | string "through"
405 | string "none"
406 w_ST_VAnchor = string "text" | string "margin" | string "page"
407 w_ST_HAnchor = string "text" | string "margin" | string "page"
408 w_ST_DropCap = string "none" | string "drop" | string "margin"
409 w_CT_FramePr =
410     attribute w:dropCap { w_ST_DropCap }?,
411     attribute w:lines { w_ST_DecimalNumber }?,
412     attribute w:w { s_ST_TwipsMeasure }?,
413     attribute w:h { s_ST_TwipsMeasure }?,
414     attribute w:vSpace { s_ST_TwipsMeasure }?,
415     attribute w:hSpace { s_ST_TwipsMeasure }?,
416     attribute w:wrap { w_ST_Wrap }?,
417     attribute w:hAnchor { w_ST_HAnchor }?,
418     attribute w:vAnchor { w_ST_VAnchor }?,
419     attribute w:x { w_ST_SignedTwipsMeasure }?,
420     attribute w:xAlign { s_ST_XAlign }?,
421     attribute w:y { w_ST_SignedTwipsMeasure }?,
422     attribute w:yAlign { s_ST_YAlign }?,
423     attribute w:hRule { w_ST_HeightRule }?,
424     attribute w:anchorLock { s_ST_OnOff }?
425 w_ST_TabJc =
426     string "clear"
427     | string "start"
428     | string "center"
429     | string "end"
430     | string "decimal"
431     | string "bar"
432     | string "num"
433     | string "left"
434     | string "right"
435 w_ST_TabTlc =
436     string "none"
437     | string "dot"
438     | string "hyphen"
439     | string "underscore"
440     | string "heavy"
441     | string "middleDot"
442 w_CT_TabStop =
443     attribute w:val { w_ST_TabJc },
444     attribute w:leader { w_ST_TabTlc }?,
445     attribute w:pos { w_ST_SignedTwipsMeasure }
446 w_ST_LineSpacingRule = string "auto" | string "exact" | string "atLeast"
447 w_CT_Spacing =
448     attribute w:before { s_ST_TwipsMeasure }?,
449     attribute w:beforeLines { w_ST_DecimalNumber }?,
450     attribute w:beforeAutospacing { s_ST_OnOff }?,
451     attribute w:after { s_ST_TwipsMeasure }?,
452     attribute w:afterLines { w_ST_DecimalNumber }?,
453     attribute w:afterAutospacing { s_ST_OnOff }?,
454     attribute w:line { w_ST_SignedTwipsMeasure }?,
455     attribute w:lineRule { w_ST_LineSpacingRule }?

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456 w_CT_Ind =
457   attribute w:start { w_ST_SignedTwipsMeasure }?,
458   attribute w:startChars { w_ST_DecimalNumber }?,
459   attribute w:end { w_ST_SignedTwipsMeasure }?,
460   attribute w:endChars { w_ST_DecimalNumber }?,
461   attribute w:left { w_ST_SignedTwipsMeasure }?,
462   attribute w:leftChars { w_ST_DecimalNumber }?,
463   attribute w:right { w_ST_SignedTwipsMeasure }?,
464   attribute w:rightChars { w_ST_DecimalNumber }?,
465   attribute w:hanging { s_ST_TwipsMeasure }?,
466   attribute w:hangingChars { w_ST_DecimalNumber }?,
467   attribute w:firstLine { s_ST_TwipsMeasure }?,
468   attribute w:firstLineChars { w_ST_DecimalNumber }?
469 w_ST_Jc =
470   string "start"
471   | string "center"
472   | string "end"
473   | string "both"
474   | string "mediumKashida"
475   | string "distribute"
476   | string "numTab"
477   | string "highKashida"
478   | string "lowKashida"
479   | string "thaiDistribute"
480   | string "left"
481   | string "right"
482 w_ST_JcTable =
483   string "center"
484   | string "end"
485   | string "left"
486   | string "right"
487   | string "start"
488 w_CT_Jc = attribute w:val { w_ST_Jc }
489 w_CT_JcTable = attribute w:val { w_ST_JcTable }
490 w_ST_View =
491   string "none"
492   | string "print"
493   | string "outline"
494   | string "masterPages"
495   | string "normal"
496   | string "web"
497 w_CT_View = attribute w:val { w_ST_View }
498 w_ST_Zoom =
499   string "none"
500   | string "fullPage"
501   | string "bestFit"
502   | string "textFit"
503 w_CT_Zoom =
504   attribute w:val { w_ST_Zoom }?,
505   attribute w:percent { w_ST_DecimalNumberOrPercent }
506 w_CT_WritingStyle =
507   attribute w:lang { s_ST_Lang },
508   attribute w:vendorID { s_ST_String },

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509     attribute w:dllVersion { s_ST_String },
510     attribute w:nlCheck { s_ST_OnOff }?,
511     attribute w:checkStyle { s_ST_OnOff },
512     attribute w:appName { s_ST_String }
513 w_ST_Proof = string "clean" | string "dirty"
514 w_CT_Proof =
515     attribute w:spelling { w_ST_Proof }?,
516     attribute w:grammar { w_ST_Proof }?
517 w_ST_DocType = xsd:string
518 w_CT_DocType = attribute w:val { w_ST_DocType }
519 w_ST_DocProtect =
520     string "none"
521     | string "readOnly"
522     | string "comments"
523     | string "trackedChanges"
524     | string "forms"
525 w_AG_Password =
526     attribute w:algorithmName { s_ST_String }?,
527     attribute w:hashValue { xsd:base64Binary }?,
528     attribute w:saltValue { xsd:base64Binary }?,
529     attribute w:spinCount { w_ST_DecimalNumber }?
530 w_AG_TransitionalPassword =
531     attribute w:cryptProviderType { s_ST_CryptProv }?,
532     attribute w:cryptAlgorithmClass { s_ST_AlgClass }?,
533     attribute w:cryptAlgorithmType { s_ST_AlgType }?,
534     attribute w:cryptAlgorithmSid { w_ST_DecimalNumber }?,
535     attribute w:cryptSpinCount { w_ST_DecimalNumber }?,
536     attribute w:cryptProvider { s_ST_String }?,
537     attribute w:algIdExt { w_ST_LongHexNumber }?,
538     attribute w:algIdExtSource { s_ST_String }?,
539     attribute w:cryptProviderTypeExt { w_ST_LongHexNumber }?,
540     attribute w:cryptProviderTypeExtSource { s_ST_String }?,
541     attribute w:hash { xsd:base64Binary }?,
542     attribute w:salt { xsd:base64Binary }?
543 w_CT_DocProtect =
544     attribute w:edit { w_ST_DocProtect }?,
545     attribute w:formatting { s_ST_OnOff }?,
546     attribute w:enforcement { s_ST_OnOff }?,
547     w_AG_Password,
548     w_AG_TransitionalPassword
549 w_ST_MailMergeDocType =
550     string "catalog"
551     | string "envelopes"
552     | string "mailingLabels"
553     | string "formLetters"
554     | string "email"
555     | string "fax"
556 w_CT_MailMergeDocType = attribute w:val { w_ST_MailMergeDocType }
557 w_ST_MailMergeDataType = xsd:string
558 w_CT_MailMergeDataType = attribute w:val { w_ST_MailMergeDataType }
559 w_ST_MailMergeDest =
560     string "newDocument"
561     | string "printer"

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562 | string "email"
563 | string "fax"
564 w_CT_MailMergeDest = attribute w:val { w_ST_MailMergeDest }
565 w_ST_MailMergeOdsoFMDFieldType = string "null" | string "dbColumn"
566 w_CT_MailMergeOdsoFMDFieldType =
567     attribute w:val { w_ST_MailMergeOdsoFMDFieldType }
568 w_CT_TrackChangesView =
569     attribute w:markup { s_ST_OnOff }?,
570     attribute w:comments { s_ST_OnOff }?,
571     attribute w:insDel { s_ST_OnOff }?,
572     attribute w:formatting { s_ST_OnOff }?,
573     attribute w:inkAnnotations { s_ST_OnOff }?
574 w_CT_Kinsoku =
575     attribute w:lang { s_ST_Lang },
576     attribute w:val { s_ST_String }
577 w_ST_TextDirection =
578     string "tb"
579     | string "rl"
580     | string "lr"
581     | string "tbV"
582     | string "rlV"
583     | string "lrV"
584     | string "btLr"
585     | string "lrTb"
586     | string "lrTbV"
587     | string "tbLrV"
588     | string "tbRl"
589     | string "tbRlV"
590 w_CT_TextDirection = attribute w:val { w_ST_TextDirection }
591 w_ST_TextAlignment =
592     string "top"
593     | string "center"
594     | string "baseline"
595     | string "bottom"
596     | string "auto"
597 w_CT_TextAlignment = attribute w:val { w_ST_TextAlignment }
598 w_ST_DisplacedByCustomXml = string "next" | string "prev"
599 w_ST_AnnotationVMerge = string "cont" | string "rest"
600 w_CT_Markup = attribute w:id { w_ST_DecimalNumber }
601 w_CT_TrackChange =
602     w_CT_Markup,
603     attribute w:author { s_ST_String },
604     attribute w:date { w_ST_DateTime }?
605 w_CT_CellMergeTrackChange =
606     w_CT_TrackChange,
607     attribute w:vMerge { w_ST_AnnotationVMerge }?,
608     attribute w:vMergeOrig { w_ST_AnnotationVMerge }?
609 w_CT_TrackChangeRange =
610     w_CT_TrackChange,
611     attribute w:displacedByCustomXml { w_ST_DisplacedByCustomXml }?
612 w_CT_MarkupRange =
613     w_CT_Markup,
614     attribute w:displacedByCustomXml { w_ST_DisplacedByCustomXml }?

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615 w_CT_BookmarkRange =
616     w_CT_MarkupRange,
617     attribute w:colFirst { w_ST_DecimalNumber }?,
618     attribute w:colLast { w_ST_DecimalNumber }?
619 w_CT_Bookmark =
620     w_CT_BookmarkRange,
621     attribute w:name { s_ST_String }
622 w_CT_MoveBookmark =
623     w_CT_Bookmark,
624     attribute w:author { s_ST_String },
625     attribute w:date { w_ST_DateTime }
626 w_CT_Comment =
627     w_CT_TrackChange,
628     w_EG_BlockLevelElts*,
629     attribute w:initials { s_ST_String }?
630 w_CT_TrackChangeNumbering =
631     w_CT_TrackChange,
632     attribute w:original { s_ST_String }?
633 w_CT_TblPrExChange =
634     w_CT_TrackChange,
635     element tblPrEx { w_CT_TblPrExBase }
636 w_CT_TcPrChange =
637     w_CT_TrackChange,
638     element tcPr { w_CT_TcPrInner }
639 w_CT_TrPrChange =
640     w_CT_TrackChange,
641     element trPr { w_CT_TrPrBase }
642 w_CT_TblGridChange =
643     w_CT_Markup,
644     element tblGrid { w_CT_TblGridBase }
645 w_CT_TblPrChange =
646     w_CT_TrackChange,
647     element tblPr { w_CT_TblPrBase }
648 w_CT_SectPrChange =
649     w_CT_TrackChange,
650     element sectPr { w_CT_SectPrBase }?
651 w_CT_PPrChange =
652     w_CT_TrackChange,
653     element pPr { w_CT_PPrBase }
654 w_CT_RPrChange =
655     w_CT_TrackChange,
656     element rPr { w_CT_RPrOriginal }
657 w_CT_ParaRPrChange =
658     w_CT_TrackChange,
659     element rPr { w_CT_ParaRPrOriginal }
660 w_CT_RunTrackChange =
661     w_CT_TrackChange, (w_EG_ContentRunContent | m_EG_OMathMathElements)*
662 w_EG_PContentMath = w_EG_PContentBase* | w_EG_ContentRunContentBase*
663 w_EG_PContentBase =
664     element customXml { w_CT_CustomXmlRun }
665     | element fldSimple { w_CT_SimpleField }*
666     | element hyperlink { w_CT_Hyperlink }
667 w_EG_ContentRunContentBase =

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668     element smartTag { w_CT_SmartTagRun }
669     | element sdt { w_CT_SdtRun }
670     | w_EG_RunLevelElts*
671 w_EG_CellMarkupElements =
672     element cellIns { w_CT_TrackChange }?
673     | element cellDel { w_CT_TrackChange }?
674     | element cellMerge { w_CT_CellMergeTrackChange }?
675 w_EG_RangeMarkupElements =
676     element bookmarkStart { w_CT_Bookmark }
677     | element bookmarkEnd { w_CT_MarkupRange }
678     | element moveFromRangeStart { w_CT_MoveBookmark }
679     | element moveFromRangeEnd { w_CT_MarkupRange }
680     | element moveToRangeStart { w_CT_MoveBookmark }
681     | element moveToRangeEnd { w_CT_MarkupRange }
682     | element commentRangeStart { w_CT_MarkupRange }
683     | element commentRangeEnd { w_CT_MarkupRange }
684     | element customXmlInsRangeStart { w_CT_TrackChange }
685     | element customXmlInsRangeEnd { w_CT_Markup }
686     | element customXmlDelRangeStart { w_CT_TrackChange }
687     | element customXmlDelRangeEnd { w_CT_Markup }
688     | element customXmlMoveFromRangeStart { w_CT_TrackChange }
689     | element customXmlMoveFromRangeEnd { w_CT_Markup }
690     | element customXmlMoveToRangeStart { w_CT_TrackChange }
691     | element customXmlMoveToRangeEnd { w_CT_Markup }
692 w_CT_NumPr =
693     element ilvl { w_CT_DecimalNumber }?,
694     element numId { w_CT_DecimalNumber }?,
695     element numberingChange { w_CT_TrackChangeNumbering }?,
696     element ins { w_CT_TrackChange }?
697 w_CT_PBdr =
698     element top { w_CT_Border }?,
699     element left { w_CT_Border }?,
700     element bottom { w_CT_Border }?,
701     element right { w_CT_Border }?,
702     element between { w_CT_Border }?,
703     element bar { w_CT_Border }?
704 w_CT_Tabs = element tab { w_CT_TabStop }+
705 w_ST_TextboxTightWrap =
706     string "none"
707     | string "allLines"
708     | string "firstAndLastLine"
709     | string "firstLineOnly"
710     | string "lastLineOnly"
711 w_CT_TextboxTightWrap = attribute w:val { w_ST_TextboxTightWrap }
712 w_CT_PPr =
713     w_CT_PPrBase,
714     element rPr { w_CT_ParaRPr }?,
715     element sectPr { w_CT_SectPr }?,
716     element pPrChange { w_CT_PPrChange }?
717 w_CT_PPrBase =
718     element pStyle { w_CT_String }?,
719     element keepNext { w_CT_OnOff }?,
720     element keepLines { w_CT_OnOff }?,

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721 element pageBreakBefore { w_CT_OnOff }?,
722 element framePr { w_CT_FramePr }?,
723 element widowControl { w_CT_OnOff }?,
724 element numPr { w_CT_NumPr }?,
725 element suppressLineNumbers { w_CT_OnOff }?,
726 element pBdr { w_CT_PBdr }?,
727 element shd { w_CT_Shdt }?,
728 element tabs { w_CT_Tabs }?,
729 element suppressAutoHyphens { w_CT_OnOff }?,
730 element kinsoku { w_CT_OnOff }?,
731 element wordWrap { w_CT_OnOff }?,
732 element overflowPunct { w_CT_OnOff }?,
733 element topLinePunct { w_CT_OnOff }?,
734 element autoSpaceDE { w_CT_OnOff }?,
735 element autoSpaceDN { w_CT_OnOff }?,
736 element bidi { w_CT_OnOff }?,
737 element adjustRightInd { w_CT_OnOff }?,
738 element snapToGrid { w_CT_OnOff }?,
739 element spacing { w_CT_Spacing }?,
740 element ind { w_CT_Ind }?,
741 element contextualSpacing { w_CT_OnOff }?,
742 element mirrorIndents { w_CT_OnOff }?,
743 element suppressOverlap { w_CT_OnOff }?,
744 element jc { w_CT_Jc }?,
745 element textDirection { w_CT_TextDirection }?,
746 element textAlignment { w_CT_TextAlignment }?,
747 element textboxTightWrap { w_CT_TextboxTightWrap }?,
748 element outlineLvl { w_CT_DecimalNumber }?,
749 element divId { w_CT_DecimalNumber }?,
750 element cnfStyle { w_CT_Cnf }?
751 w_CT_PPrGeneral =
752   w_CT_PPrBase,
753   element pPrChange { w_CT_PPrChange }?
754 w_CT_Control =
755   attribute w:name { s_ST_String }?,
756   attribute w:shapeid { s_ST_String }?,
757   r_id?
758 w_CT_Background =
759   attribute w:color { w_ST_HexColor }?,
760   attribute w:themeColor { w_ST_ThemeColor }?,
761   attribute w:themeTint { w_ST_UcharHexNumber }?,
762   attribute w:themeShade { w_ST_UcharHexNumber }?,
763   (w_any_vml_vml*, w_any_vml_office*)+,
764   element drawing { w_CT_Drawing }?
765 w_CT_Rel = r_id
766 w_CT_Object =
767   attribute w:dxaOrig { s_ST_TwipsMeasure }?,
768   attribute w:dyaOrig { s_ST_TwipsMeasure }?,
769   (w_any_vml_vml*, w_any_vml_office*)+,
770   element drawing { w_CT_Drawing }?,
771   (element control { w_CT_Control }
772    | element objectLink { w_CT_ObjectLink }
773    | element objectEmbed { w_CT_ObjectEmbed }

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774 | element movie { w_CT_Rel })?
775 w_CT_Picture =
776 (w_any_vml_vml*, w_any_vml_office*)+,
777 element movie { w_CT_Rel }?,
778 element control { w_CT_Control }?
779 w_CT_ObjectEmbed =
780 attribute w:drawAspect { w_ST_ObjectDrawAspect }?,
781 r_id,
782 attribute w:progId { s_ST_String }?,
783 attribute w:shapeId { s_ST_String }?,
784 attribute w:fieldCodes { s_ST_String }?
785 w_ST_ObjectDrawAspect = string "content" | string "icon"
786 w_CT_ObjectLink =
787 w_CT_ObjectEmbed,
788 attribute w:updateMode { w_ST_ObjectUpdateMode },
789 attribute w:lockedField { s_ST_OnOff }?
790 w_ST_ObjectUpdateMode = string "always" | string "onCall"
791 w_CT_Drawing = (wp_anchor? | wp_inline?)+
792 w_CT_SimpleField =
793 attribute w:instr { s_ST_String },
794 attribute w:fldLock { s_ST_OnOff }?,
795 attribute w:dirty { s_ST_OnOff }?,
796 element fldData { w_CT_Text }?,
797 w_EG_PContent*
798 w_ST_FldCharType = string "begin" | string "separate" | string "end"
799 w_ST_InfoTextType = string "text" | string "autoText"
800 w_ST_FFHelpTextVal = xsd:string { maxLength = "256" }
801 w_ST_FFStatusTextVal = xsd:string { maxLength = "140" }
802 w_ST_FFName = xsd:string { maxLength = "65" }
803 w_ST_FFTextType =
804 string "regular"
805 | string "number"
806 | string "date"
807 | string "currentTime"
808 | string "currentDate"
809 | string "calculated"
810 w_CT_FFTextType = attribute w:val { w_ST_FFTextType }
811 w_CT_FFName = attribute w:val { w_ST_FFName }?
812 w_CT_FldChar =
813 attribute w:fldCharType { w_ST_FldCharType },
814 attribute w:fldLock { s_ST_OnOff }?,
815 attribute w:dirty { s_ST_OnOff }?,
816 (element fldData { w_CT_Text }?
817 | element ffData { w_CT_FFData }?
818 | element numberingChange { w_CT_TrackChangeNumbering }?)
819 w_CT_Hyperlink =
820 attribute w:tgtFrame { s_ST_String }?,
821 attribute w:tooltip { s_ST_String }?,
822 attribute w:docLocation { s_ST_String }?,
823 attribute w:history { s_ST_OnOff }?,
824 attribute w:anchor { s_ST_String }?,
825 r_id?,
826 w_EG_PContent*

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827 w_CT_FFData =
828   (element name { w_CT_FFName }
829     | element label { w_CT_DecimalNumber }?
830     | element tabIndex { w_CT_UnsignedDecimalNumber }?
831     | element enabled { w_CT_OnOff }
832     | element calcOnExit { w_CT_OnOff }
833     | element entryMacro { w_CT_MacroName }?
834     | element exitMacro { w_CT_MacroName }?
835     | element helpText { w_CT_FFHelpText }?
836     | element statusText { w_CT_FFStatusText }?
837     | (element checkBox { w_CT_FFCheckBox }
838       | element ddList { w_CT_FFDDLList }
839       | element textInput { w_CT_FFTextInput }))+
840 w_CT_FFHelpText =
841   attribute w:type { w_ST_InfoTextType }?,
842   attribute w:val { w_ST_FFHelpTextVal }?
843 w_CT_FFStatusText =
844   attribute w:type { w_ST_InfoTextType }?,
845   attribute w:val { w_ST_FFStatusTextVal }?
846 w_CT_FFCheckBox =
847   (element size { w_CT_HpsMeasure }
848     | element sizeAuto { w_CT_OnOff } ),
849   element default { w_CT_OnOff }?,
850   element checked { w_CT_OnOff }?
851 w_CT_FFDDLList =
852   element result { w_CT_DecimalNumber }?,
853   element default { w_CT_DecimalNumber }?,
854   element listEntry { w_CT_String }*
855 w_CT_FFTextInput =
856   element type { w_CT_FFTextType }?,
857   element default { w_CT_String }?,
858   element maxLength { w_CT_DecimalNumber }?,
859   element format { w_CT_String }?
860 w_ST_SectionMark =
861   string "nextPage"
862   | string "nextColumn"
863   | string "continuous"
864   | string "evenPage"
865   | string "oddPage"
866 w_CT_SectType = attribute w:val { w_ST_SectionMark }?
867 w_CT_PaperSource =
868   attribute w:first { w_ST_DecimalNumber }?,
869   attribute w:other { w_ST_DecimalNumber }?
870 w_ST_NumberFormat =
871   string "decimal"
872   | string "upperRoman"
873   | string "lowerRoman"
874   | string "upperLetter"
875   | string "lowerLetter"
876   | string "ordinal"
877   | string "cardinalText"
878   | string "ordinalText"
879   | string "hex"

```

```

880 | string "chicago"
881 | string "ideographDigital"
882 | string "japaneseCounting"
883 | string "aiueo"
884 | string "iroha"
885 | string "decimalFullWidth"
886 | string "decimalHalfWidth"
887 | string "japaneseLegal"
888 | string "japaneseDigitalTenThousand"
889 | string "decimalEnclosedCircle"
890 | string "decimalFullWidth2"
891 | string "aiueoFullWidth"
892 | string "irohaFullWidth"
893 | string "decimalZero"
894 | string "bullet"
895 | string "ganada"
896 | string "chosung"
897 | string "decimalEnclosedFullstop"
898 | string "decimalEnclosedParen"
899 | string "decimalEnclosedCircleChinese"
900 | string "ideographEnclosedCircle"
901 | string "ideographTraditional"
902 | string "ideographZodiac"
903 | string "ideographZodiacTraditional"
904 | string "taiwaneseCounting"
905 | string "ideographLegalTraditional"
906 | string "taiwaneseCountingThousand"
907 | string "taiwaneseDigital"
908 | string "chineseCounting"
909 | string "chineseLegalSimplified"
910 | string "chineseCountingThousand"
911 | string "koreanDigital"
912 | string "koreanCounting"
913 | string "koreanLegal"
914 | string "koreanDigital2"
915 | string "vietnameseCounting"
916 | string "russianLower"
917 | string "russianUpper"
918 | string "none"
919 | string "numberInDash"
920 | string "hebrew1"
921 | string "hebrew2"
922 | string "arabicAlpha"
923 | string "arabicAbjad"
924 | string "hindiVowels"
925 | string "hindiConsonants"
926 | string "hindiNumbers"
927 | string "hindiCounting"
928 | string "thaiLetters"
929 | string "thaiNumbers"
930 | string "thaiCounting"
931 | string "bahtText"
932 | string "dollarText"

```



```

933 | string "custom"
934 w_ST_PageOrientation = string "portrait" | string "landscape"
935 w_CT_PageSz =
936   attribute w:w { s_ST_TwipsMeasure }?,
937   attribute w:h { s_ST_TwipsMeasure }?,
938   attribute w:orient { w_ST_PageOrientation }?,
939   attribute w:code { w_ST_DecimalNumber }?
940 w_CT_PageMar =
941   attribute w:top { w_ST_SignedTwipsMeasure },
942   attribute w:right { s_ST_TwipsMeasure },
943   attribute w:bottom { w_ST_SignedTwipsMeasure },
944   attribute w:left { s_ST_TwipsMeasure },
945   attribute w:header { s_ST_TwipsMeasure },
946   attribute w:footer { s_ST_TwipsMeasure },
947   attribute w:gutter { s_ST_TwipsMeasure }
948 w_ST_PageBorderZOrder = string "front" | string "back"
949 w_ST_PageBorderDisplay =
950   string "allPages" | string "firstPage" | string "notFirstPage"
951 w_ST_PageBorderOffset = string "page" | string "text"
952 w_CT_PageBorders =
953   attribute w:zOrder { w_ST_PageBorderZOrder }?,
954   attribute w:display { w_ST_PageBorderDisplay }?,
955   attribute w:offsetFrom { w_ST_PageBorderOffset }?,
956   element top { w_CT_TopPageBorder }?,
957   element left { w_CT_PageBorder }?,
958   element bottom { w_CT_BottomPageBorder }?,
959   element right { w_CT_PageBorder }?
960 w_CT_PageBorder = w_CT_Border, r_id?
961 w_CT_BottomPageBorder = w_CT_PageBorder, r_bottomLeft?, r_bottomRight?
962 w_CT_TopPageBorder = w_CT_PageBorder, r_topLeft?, r_topRight?
963 w_ST_ChapterSep =
964   string "hyphen"
965   | string "period"
966   | string "colon"
967   | string "emDash"
968   | string "enDash"
969 w_ST_LineNumberRestart =
970   string "newPage" | string "newSection" | string "continuous"
971 w_CT_LineNumber =
972   attribute w:countBy { w_ST_DecimalNumber }?,
973   attribute w:start { w_ST_DecimalNumber }?,
974   attribute w:distance { s_ST_TwipsMeasure }?,
975   attribute w:restart { w_ST_LineNumberRestart }?
976 w_CT_PageNumber =
977   attribute w:fmt { w_ST_NumberFormat }?,
978   attribute w:start { w_ST_DecimalNumber }?,
979   attribute w:chapStyle { w_ST_DecimalNumber }?,
980   attribute w:chapSep { w_ST_ChapterSep }?
981 w_CT_Column =
982   attribute w:w { s_ST_TwipsMeasure }?,
983   attribute w:space { s_ST_TwipsMeasure }?
984 w_CT_Columns =
985   attribute w:equalWidth { s_ST_OnOff }?,

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986     attribute w:space { s_ST_TwipsMeasure }?,
987     attribute w:num { w_ST_DecimalNumber }?,
988     attribute w:sep { s_ST_OnOff }?,
989     element col { w_CT_Column }*
990 w_ST_VerticalJc =
991     string "top" | string "center" | string "both" | string "bottom"
992 w_CT_VerticalJc = attribute w:val { w_ST_VerticalJc }
993 w_ST_DocGrid =
994     string "default"
995     | string "lines"
996     | string "linesAndChars"
997     | string "snapToChars"
998 w_CT_DocGrid =
999     attribute w:type { w_ST_DocGrid }?,
1000     attribute w:linePitch { w_ST_DecimalNumber }?,
1001     attribute w:charSpace { w_ST_DecimalNumber }?
1002 w_ST_HdrFtr = string "even" | string "default" | string "first"
1003 w_ST_FtnEdn =
1004     string "normal"
1005     | string "separator"
1006     | string "continuationSeparator"
1007     | string "continuationNotice"
1008 w_CT_HdrFtrRef =
1009     w_CT_Rel,
1010     attribute w:type { w_ST_HdrFtr }
1011 w_EG_HdrFtrReferences =
1012     element headerReference { w_CT_HdrFtrRef }?
1013     | element footerReference { w_CT_HdrFtrRef }?
1014 w_CT_HdrFtr = w_EG_BlockLevelElts+
1015 w_EG_SectPrContents =
1016     element footnotePr { w_CT_FtnProps }?,
1017     element endnotePr { w_CT_EdnProps }?,
1018     element type { w_CT_SectType }?,
1019     element pgSz { w_CT_PageSz }?,
1020     element pgMar { w_CT_PageMar }?,
1021     element paperSrc { w_CT_PaperSource }?,
1022     element pgBorders { w_CT_PageBorders }?,
1023     element lnNumType { w_CT_LineNumber }?,
1024     element pgNumType { w_CT_PageNumber }?,
1025     element cols { w_CT_Columns }?,
1026     element formProt { w_CT_OnOff }?,
1027     element vAlign { w_CT_VerticalJc }?,
1028     element noEndnote { w_CT_OnOff }?,
1029     element titlePg { w_CT_OnOff }?,
1030     element textDirection { w_CT_TextDirection }?,
1031     element bidi { w_CT_OnOff }?,
1032     element rtlGutter { w_CT_OnOff }?,
1033     element docGrid { w_CT_DocGrid }?,
1034     element printerSettings { w_CT_Rel }?
1035 w_AG_SectPrAttributes =
1036     attribute w:rsidRPr { w_ST_LongHexNumber }?,
1037     attribute w:rsidDel { w_ST_LongHexNumber }?,
1038     attribute w:rsidR { w_ST_LongHexNumber }?,

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1039     attribute w:rsidSect { w_ST_LongHexNumber }?
1040 w_CT_SectPrBase = w_AG_SectPrAttributes, w_EG_SectPrContents?
1041 w_CT_SectPr =
1042     w_AG_SectPrAttributes,
1043     w_EG_HdrFtrReferences*,
1044     w_EG_SectPrContents?,
1045     element sectPrChange { w_CT_SectPrChange }?
1046 w_ST_BrType = string "page" | string "column" | string "textWrapping"
1047 w_ST_BrClear =
1048     string "none" | string "left" | string "right" | string "all"
1049 w_CT_Br =
1050     attribute w:type { w_ST_BrType }?,
1051     attribute w:clear { w_ST_BrClear }?
1052 w_ST_PTabAlignment = string "left" | string "center" | string "right"
1053 w_ST_PTabRelativeTo = string "margin" | string "indent"
1054 w_ST_PTabLeader =
1055     string "none"
1056     | string "dot"
1057     | string "hyphen"
1058     | string "underscore"
1059     | string "middleDot"
1060 w_CT_PTab =
1061     attribute w:alignment { w_ST_PTabAlignment },
1062     attribute w:relativeTo { w_ST_PTabRelativeTo },
1063     attribute w:leader { w_ST_PTabLeader }
1064 w_CT_Sym =
1065     attribute w:font { s_ST_String }?,
1066     attribute w:char { w_ST_ShortHexNumber }?
1067 w_ST_ProofErr =
1068     string "spellStart"
1069     | string "spellEnd"
1070     | string "gramStart"
1071     | string "gramEnd"
1072 w_CT_ProofErr = attribute w:type { w_ST_ProofErr }
1073 w_ST_EdGrp =
1074     string "none"
1075     | string "everyone"
1076     | string "administrators"
1077     | string "contributors"
1078     | string "editors"
1079     | string "owners"
1080     | string "current"
1081 w_CT_Perm =
1082     attribute w:id { s_ST_String },
1083     attribute w:displacedByCustomXml { w_ST_DisplacedByCustomXml }?
1084 w_CT_PermStart =
1085     w_CT_Perm,
1086     attribute w:edGrp { w_ST_EdGrp }?,
1087     attribute w:ed { s_ST_String }?,
1088     attribute w:colFirst { w_ST_DecimalNumber }?,
1089     attribute w:colLast { w_ST_DecimalNumber }?
1090 w_CT_Text = s_ST_String, xml_space?
1091 w_EG_RunInnerContent =

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1092 element br { w_CT_Br }
1093 | element t { w_CT_Text }
1094 | element contentPart { w_CT_Rel }
1095 | element delText { w_CT_Text }
1096 | element instrText { w_CT_Text }
1097 | element delInstrText { w_CT_Text }
1098 | element noBreakHyphen { w_CT_Empty }
1099 | element softHyphen { w_CT_Empty }?
1100 | element dayShort { w_CT_Empty }?
1101 | element monthShort { w_CT_Empty }?
1102 | element yearShort { w_CT_Empty }?
1103 | element dayLong { w_CT_Empty }?
1104 | element monthLong { w_CT_Empty }?
1105 | element yearLong { w_CT_Empty }?
1106 | element annotationRef { w_CT_Empty }?
1107 | element footnoteRef { w_CT_Empty }?
1108 | element endnoteRef { w_CT_Empty }?
1109 | element separator { w_CT_Empty }?
1110 | element continuationSeparator { w_CT_Empty }?
1111 | element sym { w_CT_Sym }?
1112 | element pgNum { w_CT_Empty }?
1113 | element cr { w_CT_Empty }?
1114 | element tab { w_CT_Empty }?
1115 | element object { w_CT_Object }
1116 | element pict { w_CT_Picture }
1117 | element fldChar { w_CT_FldChar }
1118 | element ruby { w_CT_Ruby }
1119 | element footnoteReference { w_CT_FtnEdnRef }
1120 | element endnoteReference { w_CT_FtnEdnRef }
1121 | element commentReference { w_CT_Markup }
1122 | element drawing { w_CT_Drawing }
1123 | element ptab { w_CT_PTab }?
1124 | element lastRenderedPageBreak { w_CT_Empty }?
1125 w_CT_R =
1126   attribute w:rsidRPr { w_ST_LongHexNumber }?,
1127   attribute w:rsidDel { w_ST_LongHexNumber }?,
1128   attribute w:rsidR { w_ST_LongHexNumber }?,
1129   w_EG_RPr?,
1130   w_EG_RunInnerContent*
1131 w_ST_Hint = string "default" | string "eastAsia" | string "cs"
1132 w_ST_Theme =
1133   string "majorEastAsia"
1134   | string "majorBidi"
1135   | string "majorAscii"
1136   | string "majorHAnsi"
1137   | string "minorEastAsia"
1138   | string "minorBidi"
1139   | string "minorAscii"
1140   | string "minorHAnsi"
1141 w_CT_Fonts =
1142   attribute w:hint { w_ST_Hint }?,
1143   attribute w:ascii { s_ST_String }?,
1144   attribute w:hAnsi { s_ST_String }?,

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1145 attribute w:eastAsia { s_ST_String }?,
1146 attribute w:cs { s_ST_String }?,
1147 attribute w:asciiTheme { w_ST_Theme }?,
1148 attribute w:hAnsiTheme { w_ST_Theme }?,
1149 attribute w:eastAsiaTheme { w_ST_Theme }?,
1150 attribute w:cstheme { w_ST_Theme }?
1151 w_EG_RPrBase =
1152   element rStyle { w_CT_String }?,
1153   element rFonts { w_CT_Fonts }?,
1154   element b { w_CT_OnOff }?,
1155   element bCs { w_CT_OnOff }?,
1156   element i { w_CT_OnOff }?,
1157   element iCs { w_CT_OnOff }?,
1158   element caps { w_CT_OnOff }?,
1159   element smallCaps { w_CT_OnOff }?,
1160   element strike { w_CT_OnOff }?,
1161   element dstrike { w_CT_OnOff }?,
1162   element outline { w_CT_OnOff }?,
1163   element shadow { w_CT_OnOff }?,
1164   element emboss { w_CT_OnOff }?,
1165   element imprint { w_CT_OnOff }?,
1166   element noProof { w_CT_OnOff }?,
1167   element snapToGrid { w_CT_OnOff }?,
1168   element vanish { w_CT_OnOff }?,
1169   element webHidden { w_CT_OnOff }?,
1170   element color { w_CT_Color }?,
1171   element spacing { w_CT_SignedTwipsMeasure }?,
1172   element w { w_CT_TextScale }?,
1173   element kern { w_CT_HpsMeasure }?,
1174   element position { w_CT_SignedHpsMeasure }?,
1175   element sz { w_CT_HpsMeasure }?,
1176   element szCs { w_CT_HpsMeasure }?,
1177   element highlight { w_CT_Highlight }?,
1178   element u { w_CT_Underline }?,
1179   element effect { w_CT_TextEffect }?,
1180   element bdr { w_CT_Border }?,
1181   element shd { w_CT_Shadow }?,
1182   element fitText { w_CT_FitText }?,
1183   element vertAlign { w_CT_VerticalAlignRun }?,
1184   element rtl { w_CT_OnOff }?,
1185   element cs { w_CT_OnOff }?,
1186   element em { w_CT_Em }?,
1187   element lang { w_CT_Language }?,
1188   element eastAsianLayout { w_CT_EastAsianLayout }?,
1189   element specVanish { w_CT_OnOff }?,
1190   element oMath { w_CT_OnOff }?
1191 w_EG_RPrContent =
1192   w_EG_RPrBase?,
1193   element rPrChange { w_CT_RPrChange }?
1194 w_CT_RPr = w_EG_RPrContent?
1195 w_EG_RPr = element rPr { w_CT_RPr }?
1196 w_EG_RPrMath =
1197   w_EG_RPr

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1198 | element ins { w_CT_MathCtrlIns }
1199 | element del { w_CT_MathCtrlDel }
1200 w_CT_MathCtrlIns =
1201   w_CT_TrackChange,
1202   (element del { w_CT_RPrChange }
1203     | element rPr { w_CT_RPr })?
1204 w_CT_MathCtrlDel =
1205   w_CT_TrackChange,
1206   (element rPr { w_CT_RPr })?
1207 w_CT_RPrOriginal = w_EG_RPrBase*
1208 w_CT_ParaRPrOriginal = w_EG_ParaRPrTrackChanges?, w_EG_RPrBase*
1209 w_CT_ParaRPr =
1210   w_EG_ParaRPrTrackChanges?,
1211   w_EG_RPrBase?,
1212   element rPrChange { w_CT_ParaRPrChange }?
1213 w_EG_ParaRPrTrackChanges =
1214   element ins { w_CT_TrackChange }?,
1215   element del { w_CT_TrackChange }?,
1216   element moveFrom { w_CT_TrackChange }?,
1217   element moveTo { w_CT_TrackChange }?
1218 w_CT_AltChunk =
1219   r_id?,
1220   element altChunkPr { w_CT_AltChunkPr }?
1221 w_CT_AltChunkPr = element matchSrc { w_CT_OnOff }?
1222 w_ST_RubyAlign =
1223   string "center"
1224   | string "distributeLetter"
1225   | string "distributeSpace"
1226   | string "left"
1227   | string "right"
1228   | string "rightVertical"
1229 w_CT_RubyAlign = attribute w:val { w_ST_RubyAlign }
1230 w_CT_RubyPr =
1231   element rubyAlign { w_CT_RubyAlign },
1232   element hps { w_CT_HpsMeasure },
1233   element hpsRaise { w_CT_HpsMeasure },
1234   element hpsBaseText { w_CT_HpsMeasure },
1235   element lid { w_CT_Lang },
1236   element dirty { w_CT_OnOff }?
1237 w_EG_RubyContent =
1238   element r { w_CT_R }
1239   | w_EG_RunLevelElts*
1240 w_CT_RubyContent = w_EG_RubyContent*
1241 w_CT_Ruby =
1242   element rubyPr { w_CT_RubyPr },
1243   element rt { w_CT_RubyContent },
1244   element rubyBase { w_CT_RubyContent }
1245 w_ST_Lock =
1246   string "sdtLocked"
1247   | string "contentLocked"
1248   | string "unlocked"
1249   | string "sdtContentLocked"
1250 w_CT_Lock = attribute w:val { w_ST_Lock }?

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```

1251 w_CT_SdtListItem =
1252     attribute w:displayText { s_ST_String }?,
1253     attribute w:value { s_ST_String }?
1254 w_ST_SdtDateMappingType =
1255     string "text" | string "date" | string "dateTime"
1256 w_CT_SdtDateMappingType = attribute w:val { w_ST_SdtDateMappingType }?
1257 w_CT_CalendarType = attribute w:val { s_ST_CalendarType }?
1258 w_CT_SdtDate =
1259     attribute w:fullDate { w_ST_DateTime }?,
1260     element dateFormat { w_CT_String }?,
1261     element lid { w_CT_Lang }?,
1262     element storeMappedDataAs { w_CT_SdtDateMappingType }?,
1263     element calendar { w_CT_CalendarType }?
1264 w_CT_SdtComboBox =
1265     attribute w:lastValue { s_ST_String }?,
1266     element listItem { w_CT_SdtListItem }*
1267 w_CT_SdtDocPart =
1268     element docPartGallery { w_CT_String }?,
1269     element docPartCategory { w_CT_String }?,
1270     element docPartUnique { w_CT_OnOff }?
1271 w_CT_SdtDropDownList =
1272     attribute w:lastValue { s_ST_String }?,
1273     element listItem { w_CT_SdtListItem }*
1274 w_CT_Placeholder = element docPart { w_CT_String }
1275 w_CT_SdtText = attribute w:multiline { s_ST_OnOff }?
1276 w_CT_DataBinding =
1277     attribute w:prefixMappings { s_ST_String }?,
1278     attribute w:xpath { s_ST_String },
1279     attribute w:storeItemID { s_ST_String }
1280 w_CT_SdtPr =
1281     (element rPr { w_CT_RPr }?
1282     | element alias { w_CT_String }?
1283     | element label { w_CT_DecimalNumber }?
1284     | element tabIndex { w_CT_UnsignedDecimalNumber }?
1285     | element lock { w_CT_Lock }?
1286     | element placeholder { w_CT_Placeholder }?
1287     | element showingPlcHdr { w_CT_OnOff }?
1288     | element dataBinding { w_CT_DataBinding }?
1289     | element temporary { w_CT_OnOff }?
1290     | element id { w_CT_DecimalNumber }?
1291     | element tag { w_CT_String }?
1292     | (element equation { w_CT_Empty }
1293     | element comboBox { w_CT_SdtComboBox }
1294     | element date { w_CT_SdtDate }
1295     | element docPartObj { w_CT_SdtDocPart }
1296     | element docPartList { w_CT_SdtDocPart }
1297     | element dropDownList { w_CT_SdtDropDownList }
1298     | element picture { w_CT_Empty }
1299     | element richText { w_CT_Empty }
1300     | element text { w_CT_SdtText }
1301     | element citation { w_CT_Empty }
1302     | element group { w_CT_Empty }
1303     | element bibliography { w_CT_Empty }?)+

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1304 w_CT_SdtEndPr = (element rPr { w_CT_RPr }?)+
1305 w_EG_ContentRunContent =
1306     element customXml { w_CT_CustomXmlRun }
1307     | element smartTag { w_CT_SmartTagRun }
1308     | element sdt { w_CT_SdtRun }
1309     | element dir { w_CT_DirContentRun }
1310     | element bdo { w_CT_BdoContentRun }
1311     | element r { w_CT_R }
1312     | w_EG_RunLevelElts*
1313 w_CT_DirContentRun =
1314     attribute w:val { w_ST_Direction }?,
1315     w_EG_PContent*
1316 w_CT_BdoContentRun =
1317     attribute w:val { w_ST_Direction }?,
1318     w_EG_PContent*
1319 w_ST_Direction = string "ltr" | string "rtl"
1320 w_CT_SdtContentRun = w_EG_PContent*
1321 w_EG_ContentBlockContent =
1322     element customXml { w_CT_CustomXmlBlock }
1323     | element sdt { w_CT_SdtBlock }
1324     | element p { w_CT_P }*
1325     | element tbl { w_CT_Tbl }*
1326     | w_EG_RunLevelElts*
1327 w_CT_SdtContentBlock = w_EG_ContentBlockContent*
1328 w_EG_ContentRowContent =
1329     element tr { w_CT_Row }*
1330     | element customXml { w_CT_CustomXmlRow }
1331     | element sdt { w_CT_SdtRow }
1332     | w_EG_RunLevelElts*
1333 w_CT_SdtContentRow = w_EG_ContentRowContent*
1334 w_EG_ContentCellContent =
1335     element tc { w_CT_Tc }*
1336     | element customXml { w_CT_CustomXmlCell }
1337     | element sdt { w_CT_SdtCell }
1338     | w_EG_RunLevelElts*
1339 w_CT_SdtContentCell = w_EG_ContentCellContent*
1340 w_CT_SdtBlock =
1341     element sdtPr { w_CT_SdtPr }?,
1342     element sdtEndPr { w_CT_SdtEndPr }?,
1343     element sdtContent { w_CT_SdtContentBlock }?
1344 w_CT_SdtRun =
1345     element sdtPr { w_CT_SdtPr }?,
1346     element sdtEndPr { w_CT_SdtEndPr }?,
1347     element sdtContent { w_CT_SdtContentRun }?
1348 w_CT_SdtCell =
1349     element sdtPr { w_CT_SdtPr }?,
1350     element sdtEndPr { w_CT_SdtEndPr }?,
1351     element sdtContent { w_CT_SdtContentCell }?
1352 w_CT_SdtRow =
1353     element sdtPr { w_CT_SdtPr }?,
1354     element sdtEndPr { w_CT_SdtEndPr }?,
1355     element sdtContent { w_CT_SdtContentRow }?
1356 w_CT_Attr =

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1357     attribute w:uri { s_ST_String }?,
1358     attribute w:name { s_ST_String },
1359     attribute w:val { s_ST_String }
1360 w_CT_CustomXmlRun =
1361     attribute w:uri { s_ST_String }?,
1362     attribute w:element { s_ST_String },
1363     element customXmlPr { w_CT_CustomXmlPr }?,
1364     w_EG_PContent*
1365 w_CT_SmartTagRun =
1366     attribute w:uri { s_ST_String }?,
1367     attribute w:element { s_ST_String },
1368     element smartTagPr { w_CT_SmartTagPr }?,
1369     w_EG_PContent*
1370 w_CT_CustomXmlBlock =
1371     attribute w:uri { s_ST_String }?,
1372     attribute w:element { s_ST_String },
1373     element customXmlPr { w_CT_CustomXmlPr }?,
1374     w_EG_ContentBlockContent*
1375 w_CT_CustomXmlPr =
1376     element placeholder { w_CT_String }?,
1377     element attr { w_CT_Attr }*
1378 w_CT_CustomXmlRow =
1379     attribute w:uri { s_ST_String }?,
1380     attribute w:element { s_ST_String },
1381     element customXmlPr { w_CT_CustomXmlPr }?,
1382     w_EG_ContentRowContent*
1383 w_CT_CustomXmlCell =
1384     attribute w:uri { s_ST_String }?,
1385     attribute w:element { s_ST_String },
1386     element customXmlPr { w_CT_CustomXmlPr }?,
1387     w_EG_ContentCellContent*
1388 w_CT_SmartTagPr = element attr { w_CT_Attr }*
1389 w_EG_PContent =
1390     w_EG_ContentRunContent*
1391     | element fldSimple { w_CT_SimpleField }*
1392     | element hyperlink { w_CT_Hyperlink }
1393     | element subDoc { w_CT_Rel }
1394 w_CT_P =
1395     attribute w:rsidRPr { w_ST_LongHexNumber }?,
1396     attribute w:rsidR { w_ST_LongHexNumber }?,
1397     attribute w:rsidDel { w_ST_LongHexNumber }?,
1398     attribute w:rsidP { w_ST_LongHexNumber }?,
1399     attribute w:rsidRDefault { w_ST_LongHexNumber }?,
1400     element pPr { w_CT_PPr }?,
1401     w_EG_PContent*
1402 w_ST_TblWidth =
1403     string "nil" | string "pct" | string "dxa" | string "auto"
1404 w_CT_Height =
1405     attribute w:val { s_ST_TwipsMeasure }?,
1406     attribute w:hRule { w_ST_HeightRule }?
1407 w_ST_MeasurementOrPercent = w_ST_DecimalNumberOrPercent | s_ST_UniversalMeasure
1408 w_CT_TblWidth =
1409     attribute w:w { w_ST_MeasurementOrPercent}?,

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1410     attribute w:type { w_ST_TblWidth }?
1411 w_CT_TblGridCol = attribute w:w { s_ST_TwipsMeasure }?
1412 w_CT_TblGridBase = element gridCol { w_CT_TblGridCol }*
1413 w_CT_TblGrid =
1414     w_CT_TblGridBase,
1415     element tblGridChange { w_CT_TblGridChange }?
1416 w_CT_TcBorders =
1417     element top { w_CT_Border }?,
1418     element start { w_CT_Border }?,
1419     element left { w_CT_Border }?,
1420     element bottom { w_CT_Border }?,
1421     element end { w_CT_Border }?,
1422     element right { w_CT_Border }?,
1423     element insideH { w_CT_Border }?,
1424     element insideV { w_CT_Border }?,
1425     element tl2br { w_CT_Border }?,
1426     element tr2bl { w_CT_Border }?
1427 w_CT_TcMar =
1428     element top { w_CT_TblWidth }?,
1429     element start { w_CT_TblWidth }?,
1430     element left { w_CT_TblWidth }?,
1431     element bottom { w_CT_TblWidth }?,
1432     element end { w_CT_TblWidth }?,
1433     element right { w_CT_TblWidth }?
1434 w_ST_Merge = string "continue" | string "restart"
1435 w_CT_VMerge = attribute w:val { w_ST_Merge }?
1436 w_CT_HMerge = attribute w:val { w_ST_Merge }?
1437 w_CT_TcPrBase =
1438     element cnfStyle { w_CT_Cnf }?,
1439     element tcW { w_CT_TblWidth }?,
1440     element gridSpan { w_CT_DecimalNumber }?,
1441     element hMerge { w_CT_HMerge }?,
1442     element vMerge { w_CT_VMerge }?,
1443     element tcBorders { w_CT_TcBorders }?,
1444     element shd { w_CT_Shd }?,
1445     element nowrap { w_CT_OnOff }?,
1446     element tcMar { w_CT_TcMar }?,
1447     element textDirection { w_CT_TextDirection }?,
1448     element tcFitText { w_CT_OnOff }?,
1449     element vAlign { w_CT_VerticalJc }?,
1450     element hideMark { w_CT_OnOff }?,
1451     element headers { w_CT_Headers }?
1452 w_CT_TcPr =
1453     w_CT_TcPrInner,
1454     element tcPrChange { w_CT_TcPrChange }?
1455 w_CT_TcPrInner = w_CT_TcPrBase, w_EG_CellMarkupElements?
1456 w_CT_Tc =
1457     attribute w:id { s_ST_String }?,
1458     element tcPr { w_CT_TcPr }?,
1459     w_EG_BlockLevelElts+
1460 w_ST_Cnf = xsd:string { length = "12" pattern = "[01]*" }
1461 w_CT_Cnf =
1462     attribute w:val { w_ST_Cnf }?,

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1463 attribute w:firstRow { s_ST_OnOff }?,
1464 attribute w:lastRow { s_ST_OnOff }?,
1465 attribute w:firstColumn { s_ST_OnOff }?,
1466 attribute w:lastColumn { s_ST_OnOff }?,
1467 attribute w:oddVBand { s_ST_OnOff }?,
1468 attribute w:evenVBand { s_ST_OnOff }?,
1469 attribute w:oddHBand { s_ST_OnOff }?,
1470 attribute w:evenHBand { s_ST_OnOff }?,
1471 attribute w:firstRowFirstColumn { s_ST_OnOff }?,
1472 attribute w:firstRowLastColumn { s_ST_OnOff }?,
1473 attribute w:lastRowFirstColumn { s_ST_OnOff }?,
1474 attribute w:lastRowLastColumn { s_ST_OnOff }?
1475 w_CT_Headers = element header { w_CT_String }*
1476 w_CT_TrPrBase =
1477   (element cnfStyle { w_CT_Cnf }?
1478     | element divId { w_CT_DecimalNumber }?
1479     | element gridBefore { w_CT_DecimalNumber }?
1480     | element gridAfter { w_CT_DecimalNumber }?
1481     | element wBefore { w_CT_TblWidth }?
1482     | element wAfter { w_CT_TblWidth }?
1483     | element cantSplit { w_CT_OnOff }?
1484     | element trHeight { w_CT_Height }?
1485     | element tblHeader { w_CT_OnOff }?
1486     | element tblCellSpacing { w_CT_TblWidth }?
1487     | element jc { w_CT_JcTable }?
1488     | element hidden { w_CT_OnOff }?)+
1489 w_CT_TrPr =
1490   w_CT_TrPrBase,
1491   element ins { w_CT_TrackChange }?,
1492   element del { w_CT_TrackChange }?,
1493   element trPrChange { w_CT_TrPrChange }?
1494 w_CT_Row =
1495   attribute w:rsidRPr { w_ST_LongHexNumber }?,
1496   attribute w:rsidR { w_ST_LongHexNumber }?,
1497   attribute w:rsidDel { w_ST_LongHexNumber }?,
1498   attribute w:rsidTr { w_ST_LongHexNumber }?,
1499   element tblPrEx { w_CT_TblPrEx }?,
1500   element trPr { w_CT_TrPr }?,
1501   w_EG_ContentCellContent*
1502 w_ST_TblLayoutType = string "fixed" | string "autofit"
1503 w_CT_TblLayoutType = attribute w:type { w_ST_TblLayoutType }?
1504 w_ST_TblOverlap = string "never" | string "overlap"
1505 w_CT_TblOverlap = attribute w:val { w_ST_TblOverlap }
1506 w_CT_TblPPr =
1507   attribute w:leftFromText { s_ST_TwipsMeasure }?,
1508   attribute w:rightFromText { s_ST_TwipsMeasure }?,
1509   attribute w:topFromText { s_ST_TwipsMeasure }?,
1510   attribute w:bottomFromText { s_ST_TwipsMeasure }?,
1511   attribute w:vertAnchor { w_ST_VAnchor }?,
1512   attribute w:horzAnchor { w_ST_HAnchor }?,
1513   attribute w:tblpXSpec { s_ST_XAlign }?,
1514   attribute w:tblpX { w_ST_SignedTwipsMeasure }?,
1515   attribute w:tblpYSpec { s_ST_YAlign }?,

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1516     attribute w:tblpY { w_ST_SignedTwipsMeasure }?
1517 w_CT_TblCellMar =
1518     element top { w_CT_TblWidth }?,
1519     element start { w_CT_TblWidth }?,
1520     element left { w_CT_TblWidth }?,
1521     element bottom { w_CT_TblWidth }?,
1522     element end { w_CT_TblWidth }?,
1523     element right { w_CT_TblWidth }?
1524 w_CT_TblBorders =
1525     element top { w_CT_Border }?,
1526     element start { w_CT_Border }?,
1527     element left { w_CT_Border }?,
1528     element bottom { w_CT_Border }?,
1529     element end { w_CT_Border }?,
1530     element right { w_CT_Border }?,
1531     element insideH { w_CT_Border }?,
1532     element insideV { w_CT_Border }?
1533 w_CT_TblPrBase =
1534     element tblStyle { w_CT_String }?,
1535     element tblpPr { w_CT_TblPPr }?,
1536     element tblOverlap { w_CT_TblOverlap }?,
1537     element bidiVisual { w_CT_OnOff }?,
1538     element tblStyleRowBandSize { w_CT_DecimalNumber }?,
1539     element tblStyleColBandSize { w_CT_DecimalNumber }?,
1540     element tblW { w_CT_TblWidth }?,
1541     element jc { w_CT_JcTable }?,
1542     element tblCellSpacing { w_CT_TblWidth }?,
1543     element tblInd { w_CT_TblWidth }?,
1544     element tblBorders { w_CT_TblBorders }?,
1545     element shd { w_CT_Shd }?,
1546     element tblLayout { w_CT_TblLayoutType }?,
1547     element tblCellMar { w_CT_TblCellMar }?,
1548     element tblLook { w_CT_TblLook }?,
1549     element tblCaption { w_CT_String }?,
1550     element tblDescription { w_CT_String }?
1551 w_CT_TblPr =
1552     w_CT_TblPrBase,
1553     element tblPrChange { w_CT_TblPrChange }?
1554 w_CT_TblPrExBase =
1555     element tblW { w_CT_TblWidth }?,
1556     element jc { w_CT_JcTable }?,
1557     element tblCellSpacing { w_CT_TblWidth }?,
1558     element tblInd { w_CT_TblWidth }?,
1559     element tblBorders { w_CT_TblBorders }?,
1560     element shd { w_CT_Shd }?,
1561     element tblLayout { w_CT_TblLayoutType }?,
1562     element tblCellMar { w_CT_TblCellMar }?,
1563     element tblLook { w_CT_TblLook }?
1564 w_CT_TblPrEx =
1565     w_CT_TblPrExBase,
1566     element tblPrExChange { w_CT_TblPrExChange }?
1567 w_CT_Tbl =
1568     w_EG_RangeMarkupElements*,

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1569     element tblPr { w_CT_TblPr },
1570     element tblGrid { w_CT_TblGrid },
1571     w_EG_ContentRowContent*
1572 w_CT_TblLook =
1573     attribute w:firstRow { s_ST_OnOff }?,
1574     attribute w:lastRow { s_ST_OnOff }?,
1575     attribute w:firstColumn { s_ST_OnOff }?,
1576     attribute w:lastColumn { s_ST_OnOff }?,
1577     attribute w:noHBand { s_ST_OnOff }?,
1578     attribute w:noVBand { s_ST_OnOff }?,
1579     attribute w:val { w_ST_ShortHexNumber }?
1580 w_ST_FtnPos =
1581     string "pageBottom"
1582     | string "beneathText"
1583     | string "sectEnd"
1584     | string "docEnd"
1585 w_CT_FtnPos = attribute w:val { w_ST_FtnPos }
1586 w_ST_EdnPos = string "sectEnd" | string "docEnd"
1587 w_CT_EdnPos = attribute w:val { w_ST_EdnPos }
1588 w_CT_NumFmt =
1589     attribute w:val { w_ST_NumberFormat },
1590     attribute w:format { s_ST_String }?
1591 w_ST_RestartNumber =
1592     string "continuous" | string "eachSect" | string "eachPage"
1593 w_CT_NumRestart = attribute w:val { w_ST_RestartNumber }
1594 w_CT_FtnEdnRef =
1595     attribute w:customMarkFollows { s_ST_OnOff }?,
1596     attribute w:id { w_ST_DecimalNumber }
1597 w_CT_FtnEdnSepRef = attribute w:id { w_ST_DecimalNumber }
1598 w_CT_FtnEdn =
1599     attribute w:type { w_ST_FtnEdn }?,
1600     attribute w:id { w_ST_DecimalNumber },
1601     w_EG_BlockLevelElts+
1602 w_EG_FtnEdnNumProps =
1603     element numStart { w_CT_DecimalNumber }?,
1604     element numRestart { w_CT_NumRestart }?
1605 w_CT_FtnProps =
1606     element pos { w_CT_FtnPos }?,
1607     element numFmt { w_CT_NumFmt }?,
1608     w_EG_FtnEdnNumProps?
1609 w_CT_EdnProps =
1610     element pos { w_CT_EdnPos }?,
1611     element numFmt { w_CT_NumFmt }?,
1612     w_EG_FtnEdnNumProps?
1613 w_CT_FtnDocProps =
1614     w_CT_FtnProps,
1615     element footnote { w_CT_FtnEdnSepRef }*
1616 w_CT_EdnDocProps =
1617     w_CT_EdnProps,
1618     element endnote { w_CT_FtnEdnSepRef }*
1619 w_CT_RecipientData =
1620     element active { w_CT_OnOff }?,
1621     element column { w_CT_DecimalNumber },

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1622     element uniqueTag { w_CT_Base64Binary}
1623 w_CT_Base64Binary = attribute w:val { xsd:base64Binary }
1624 w_CT_Recipients = element recipientData { w_CT_RecipientData }+
1625 w_recipients = element recipients { w_CT_Recipients }
1626 w_CT_OdsoFieldMapData =
1627     element type { w_CT_MailMergeOdsoFMDFieldType }?,
1628     element name { w_CT_String }?,
1629     element mappedName { w_CT_String }?,
1630     element column { w_CT_DecimalNumber }?,
1631     element lid { w_CT_Lang }?,
1632     element dynamicAddress { w_CT_OnOff }?
1633 w_ST_MailMergeSourceType =
1634     string "database"
1635     | string "addressBook"
1636     | string "document1"
1637     | string "document2"
1638     | string "text"
1639     | string "email"
1640     | string "native"
1641     | string "legacy"
1642     | string "master"
1643 w_CT_MailMergeSourceType = attribute w:val { w_ST_MailMergeSourceType }
1644 w_CT_Odso =
1645     element udl { w_CT_String }?,
1646     element table { w_CT_String }?,
1647     element src { w_CT_Rel }?,
1648     element colDelim { w_CT_DecimalNumber }?,
1649     element type { w_CT_MailMergeSourceType }?,
1650     element fHdr { w_CT_OnOff }?,
1651     element fieldMapData { w_CT_OdsoFieldMapData }*,
1652     element recipientData { w_CT_Rel }*
1653 w_CT_MailMerge =
1654     element mainDocumentType { w_CT_MailMergeDocType },
1655     element linkToQuery { w_CT_OnOff }?,
1656     element dataType { w_CT_MailMergeDataType },
1657     element connectString { w_CT_String }?,
1658     element query { w_CT_String }?,
1659     element dataSource { w_CT_Rel }?,
1660     element headerSource { w_CT_Rel }?,
1661     element doNotSuppressBlankLines { w_CT_OnOff }?,
1662     element destination { w_CT_MailMergeDest }?,
1663     element addressFieldName { w_CT_String }?,
1664     element mailSubject { w_CT_String }?,
1665     element mailAsAttachment { w_CT_OnOff }?,
1666     element viewMergedData { w_CT_OnOff }?,
1667     element activeRecord { w_CT_DecimalNumber }?,
1668     element checkErrors { w_CT_DecimalNumber }?,
1669     element odso { w_CT_Odso }?
1670 w_ST_TargetScreenSz =
1671     string "544x376"
1672     | string "640x480"
1673     | string "720x512"
1674     | string "800x600"

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1675 | string "1024x768"
1676 | string "1152x882"
1677 | string "1152x900"
1678 | string "1280x1024"
1679 | string "1600x1200"
1680 | string "1800x1440"
1681 | string "1920x1200"
1682 w_CT_TargetScreenSz = attribute w:val { w_ST_TargetScreenSz }
1683 w_CT_Compat =
1684     element useSingleBorderforContiguousCells { w_CT_OnOff }?,
1685     element wpJustification { w_CT_OnOff }?,
1686     element noTabHangInd { w_CT_OnOff }?,
1687     element noLeading { w_CT_OnOff }?,
1688     element spaceForUL { w_CT_OnOff }?,
1689     element noColumnBalance { w_CT_OnOff }?,
1690     element balanceSingleByteDoubleByteWidth { w_CT_OnOff }?,
1691     element noExtraLineSpacing { w_CT_OnOff }?,
1692     element doNotLeaveBackslashAlone { w_CT_OnOff }?,
1693     element ulTrailSpace { w_CT_OnOff }?,
1694     element doNotExpandShiftReturn { w_CT_OnOff }?,
1695     element spacingInWholePoints { w_CT_OnOff }?,
1696     element lineWrapLikeWord6 { w_CT_OnOff }?,
1697     element printBodyTextBeforeHeader { w_CT_OnOff }?,
1698     element printColBlack { w_CT_OnOff }?,
1699     element wpSpaceWidth { w_CT_OnOff }?,
1700     element showBreaksInFrames { w_CT_OnOff }?,
1701     element subFontBySize { w_CT_OnOff }?,
1702     element suppressBottomSpacing { w_CT_OnOff }?,
1703     element suppressTopSpacing { w_CT_OnOff }?,
1704     element suppressSpacingAtTopOfPage { w_CT_OnOff }?,
1705     element suppressTopSpacingWP { w_CT_OnOff }?,
1706     element suppressSpBfAfterPgBrk { w_CT_OnOff }?,
1707     element swapBordersFacingPages { w_CT_OnOff }?,
1708     element convMailMergeEsc { w_CT_OnOff }?,
1709     element truncateFontHeightsLikeWP6 { w_CT_OnOff }?,
1710     element mwSmallCaps { w_CT_OnOff }?,
1711     element usePrinterMetrics { w_CT_OnOff }?,
1712     element doNotSuppressParagraphBorders { w_CT_OnOff }?,
1713     element wrapTrailSpaces { w_CT_OnOff }?,
1714     element footnoteLayoutLikeWW8 { w_CT_OnOff }?,
1715     element shapeLayoutLikeWW8 { w_CT_OnOff }?,
1716     element alignTablesRowByRow { w_CT_OnOff }?,
1717     element forgetLastTabAlignment { w_CT_OnOff }?,
1718     element adjustLineHeightInTable { w_CT_OnOff }?,
1719     element autoSpaceLikeWord95 { w_CT_OnOff }?,
1720     element noSpaceRaiseLower { w_CT_OnOff }?,
1721     element doNotUseHTMLParagraphAutoSpacing { w_CT_OnOff }?,
1722     element layoutRawTableWidth { w_CT_OnOff }?,
1723     element layoutTableRowsApart { w_CT_OnOff }?,
1724     element useWord97LineBreakRules { w_CT_OnOff }?,
1725     element doNotBreakWrappedTables { w_CT_OnOff }?,
1726     element doNotSnapToGridInCell { w_CT_OnOff }?,
1727     element selectFldWithFirstOrLastChar { w_CT_OnOff }?,

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1728     element applyBreakingRules { w_CT_OnOff }?,
1729     element doNotWrapTextWithPunct { w_CT_OnOff }?,
1730     element doNotUseEastAsianBreakRules { w_CT_OnOff }?,
1731     element useWord2002TableStyleRules { w_CT_OnOff }?,
1732     element growAutofit { w_CT_OnOff }?,
1733     element useFELayout { w_CT_OnOff }?,
1734     element useNormalStyleForList { w_CT_OnOff }?,
1735     element doNotUseIndentAsNumberingTabStop { w_CT_OnOff }?,
1736     element useAltKinsokuLineBreakRules { w_CT_OnOff }?,
1737     element allowSpaceOfSameStyleInTable { w_CT_OnOff }?,
1738     element doNotSuppressIndentation { w_CT_OnOff }?,
1739     element doNotAutofitConstrainedTables { w_CT_OnOff }?,
1740     element autofitToFirstFixedWidthCell { w_CT_OnOff }?,
1741     element underlineTabInNumList { w_CT_OnOff }?,
1742     element displayHangulFixedWidth { w_CT_OnOff }?,
1743     element splitPgBreakAndParaMark { w_CT_OnOff }?,
1744     element doNotVertAlignCellWithSp { w_CT_OnOff }?,
1745     element doNotBreakConstrainedForcedTable { w_CT_OnOff }?,
1746     element doNotVertAlignInTxbx { w_CT_OnOff }?,
1747     element useAnsiKerningPairs { w_CT_OnOff }?,
1748     element cachedColBalance { w_CT_OnOff }?,
1749     element compatSetting { w_CT_CompatSetting }*
1750 w_CT_CompatSetting =
1751     attribute w:name { s_ST_String }?,
1752     attribute w:uri { s_ST_String }?,
1753     attribute w:val { s_ST_String }?
1754 w_CT_DocVar =
1755     attribute w:name { s_ST_String },
1756     attribute w:val { s_ST_String }
1757 w_CT_DocVars = element docVar { w_CT_DocVar }*
1758 w_CT_DocRsids =
1759     element rsidRoot { w_CT_LongHexNumber }?,
1760     element rsid { w_CT_LongHexNumber }*
1761 w_ST_CharacterSpacing =
1762     string "doNotCompress"
1763     | string "compressPunctuation"
1764     | string "compressPunctuationAndJapaneseKana"
1765 w_CT_CharacterSpacing = attribute w:val { w_ST_CharacterSpacing }
1766 w_CT_SaveThroughXslt =
1767     r_id?,
1768     attribute w:solutionID { s_ST_String }?
1769 w_CT_RPrDefault = element rPr { w_CT_RPr }?
1770 w_CT_PPrDefault = element pPr { w_CT_PPrGeneral }?
1771 w_CT_DocDefaults =
1772     element rPrDefault { w_CT_RPrDefault }?,
1773     element pPrDefault { w_CT_PPrDefault }?
1774 w_ST_WmlColorSchemeIndex =
1775     string "dark1"
1776     | string "light1"
1777     | string "dark2"
1778     | string "light2"
1779     | string "accent1"
1780     | string "accent2"

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1781 | string "accent3"
1782 | string "accent4"
1783 | string "accent5"
1784 | string "accent6"
1785 | string "hyperlink"
1786 | string "followedHyperlink"
1787 w_CT_ColorSchemeMapping =
1788   attribute w:bg1 { w_ST_WmlColorSchemeIndex }?,
1789   attribute w:t1 { w_ST_WmlColorSchemeIndex }?,
1790   attribute w:bg2 { w_ST_WmlColorSchemeIndex }?,
1791   attribute w:t2 { w_ST_WmlColorSchemeIndex }?,
1792   attribute w:accent1 { w_ST_WmlColorSchemeIndex }?,
1793   attribute w:accent2 { w_ST_WmlColorSchemeIndex }?,
1794   attribute w:accent3 { w_ST_WmlColorSchemeIndex }?,
1795   attribute w:accent4 { w_ST_WmlColorSchemeIndex }?,
1796   attribute w:accent5 { w_ST_WmlColorSchemeIndex }?,
1797   attribute w:accent6 { w_ST_WmlColorSchemeIndex }?,
1798   attribute w:hyperlink { w_ST_WmlColorSchemeIndex }?,
1799   attribute w:followedHyperlink { w_ST_WmlColorSchemeIndex }?
1800 w_CT_ReadingModeInkLockDown =
1801   attribute w:actualPg { s_ST_OnOff },
1802   attribute w:w { w_ST_PixelsMeasure },
1803   attribute w:h { w_ST_PixelsMeasure },
1804   attribute w:fontSz { w_ST_DecimalNumberOrPercent }
1805 w_CT_WriteProtection =
1806   attribute w:recommended { s_ST_OnOff }?,
1807   w_AG_Password,
1808   w_AG_TransitionalPassword
1809 w_CT_Settings =
1810   element writeProtection { w_CT_WriteProtection }?,
1811   element view { w_CT_View }?,
1812   element zoom { w_CT_Zoom }?,
1813   element removePersonalInformation { w_CT_OnOff }?,
1814   element removeDateAndTime { w_CT_OnOff }?,
1815   element doNotDisplayPageBoundaries { w_CT_OnOff }?,
1816   element displayBackgroundShape { w_CT_OnOff }?,
1817   element printPostScriptOverText { w_CT_OnOff }?,
1818   element printFractionalCharacterWidth { w_CT_OnOff }?,
1819   element printFormsData { w_CT_OnOff }?,
1820   element embedTrueTypeFonts { w_CT_OnOff }?,
1821   element embedSystemFonts { w_CT_OnOff }?,
1822   element saveSubsetFonts { w_CT_OnOff }?,
1823   element saveFormsData { w_CT_OnOff }?,
1824   element mirrorMargins { w_CT_OnOff }?,
1825   element alignBordersAndEdges { w_CT_OnOff }?,
1826   element bordersDoNotSurroundHeader { w_CT_OnOff }?,
1827   element bordersDoNotSurroundFooter { w_CT_OnOff }?,
1828   element gutterAtTop { w_CT_OnOff }?,
1829   element hideSpellingErrors { w_CT_OnOff }?,
1830   element hideGrammaticalErrors { w_CT_OnOff }?,
1831   element activeWritingStyle { w_CT_WritingStyle }*,
1832   element proofState { w_CT_Proof }?,
1833   element formsDesign { w_CT_OnOff }?,

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1834 element attachedTemplate { w_CT_Rel }?,
1835 element linkStyles { w_CT_OnOff }?,
1836 element stylePaneFormatFilter { w_CT_StylePaneFilter }?,
1837 element stylePaneSortMethod { w_CT_StyleSort }?,
1838 element documentType { w_CT_DocType }?,
1839 element mailMerge { w_CT_MailMerge }?,
1840 element revisionView { w_CT_TrackChangesView }?,
1841 element trackRevisions { w_CT_OnOff }?,
1842 element doNotTrackMoves { w_CT_OnOff }?,
1843 element doNotTrackFormatting { w_CT_OnOff }?,
1844 element documentProtection { w_CT_DocProtect }?,
1845 element autoFormatOverride { w_CT_OnOff }?,
1846 element styleLockTheme { w_CT_OnOff }?,
1847 element styleLockQFSet { w_CT_OnOff }?,
1848 element defaultTabStop { w_CT_TwipsMeasure }?,
1849 element autoHyphenation { w_CT_OnOff }?,
1850 element consecutiveHyphenLimit { w_CT_DecimalNumber }?,
1851 element hyphenationZone { w_CT_TwipsMeasure }?,
1852 element doNotHyphenateCaps { w_CT_OnOff }?,
1853 element showEnvelope { w_CT_OnOff }?,
1854 element summaryLength { w_CT_DecimalNumberOrPrecent }?,
1855 element clickAndTypeStyle { w_CT_String }?,
1856 element defaultTableStyle { w_CT_String }?,
1857 element evenAndOddHeaders { w_CT_OnOff }?,
1858 element bookFoldRevPrinting { w_CT_OnOff }?,
1859 element bookFoldPrinting { w_CT_OnOff }?,
1860 element bookFoldPrintingSheets { w_CT_DecimalNumber }?,
1861 element drawingGridHorizontalSpacing { w_CT_TwipsMeasure }?,
1862 element drawingGridVerticalSpacing { w_CT_TwipsMeasure }?,
1863 element displayHorizontalDrawingGridEvery { w_CT_DecimalNumber }?,
1864 element displayVerticalDrawingGridEvery { w_CT_DecimalNumber }?,
1865 element doNotUseMarginsForDrawingGridOrigin { w_CT_OnOff }?,
1866 element drawingGridHorizontalOrigin { w_CT_TwipsMeasure }?,
1867 element drawingGridVerticalOrigin { w_CT_TwipsMeasure }?,
1868 element doNotShadeFormData { w_CT_OnOff }?,
1869 element noPunctuationKerning { w_CT_OnOff }?,
1870 element characterSpacingControl { w_CT_CharacterSpacing }?,
1871 element printTwoOnOne { w_CT_OnOff }?,
1872 element strictFirstAndLastChars { w_CT_OnOff }?,
1873 element noLineBreaksAfter { w_CT_Kinsoku }?,
1874 element noLineBreaksBefore { w_CT_Kinsoku }?,
1875 element savePreviewPicture { w_CT_OnOff }?,
1876 element doNotValidateAgainstSchema { w_CT_OnOff }?,
1877 element saveInvalidXml { w_CT_OnOff }?,
1878 element ignoreMixedContent { w_CT_OnOff }?,
1879 element alwaysShowPlaceholderText { w_CT_OnOff }?,
1880 element doNotDemarcateInvalidXml { w_CT_OnOff }?,
1881 element saveXmlDataOnly { w_CT_OnOff }?,
1882 element useXSLTWhenSaving { w_CT_OnOff }?,
1883 element saveThroughXslt { w_CT_SaveThroughXslt }?,
1884 element showXMLTags { w_CT_OnOff }?,
1885 element alwaysMergeEmptyNamespace { w_CT_OnOff }?,
1886 element updateFields { w_CT_OnOff }?,

```

```

1887 element hdrShapeDefaults { w_CT_ShapeDefaults }?,
1888 element footnotePr { w_CT_FtnDocProps }?,
1889 element endnotePr { w_CT_EdnDocProps }?,
1890 element compat { w_CT_Compat }?,
1891 element docVars { w_CT_DocVars }?,
1892 element rsids { w_CT_DocRsids }?,
1893 m_mathPr?,
1894 element attachedSchema { w_CT_String }*,
1895 element themeFontLang { w_CT_Language }?,
1896 element clrSchemeMapping { w_CT_ColorSchemeMapping }?,
1897 element doNotIncludeSubdocsInStats { w_CT_OnOff }?,
1898 element doNotAutoCompressPictures { w_CT_OnOff }?,
1899 element forceUpgrade { w_CT_Empty }?,
1900 element captions { w_CT_Captions }?,
1901 element readModeInkLockDown { w_CT_ReadingModeInkLockDown }?,
1902 element smartTagType { w_CT_SmartTagType }*,
1903 sl_schemaLibrary?,
1904 element shapeDefaults { w_CT_ShapeDefaults }?,
1905 element doNotEmbedSmartTags { w_CT_OnOff }?,
1906 element decimalSymbol { w_CT_String }?,
1907 element listSeparator { w_CT_String }?
1908 w_CT_StyleSort = attribute w:val { w_ST_StyleSort }
1909 w_CT_StylePaneFilter =
1910 attribute w:allStyles { s_ST_OnOff }?,
1911 attribute w:customStyles { s_ST_OnOff }?,
1912 attribute w:latentStyles { s_ST_OnOff }?,
1913 attribute w:stylesInUse { s_ST_OnOff }?,
1914 attribute w:headingStyles { s_ST_OnOff }?,
1915 attribute w:numberingStyles { s_ST_OnOff }?,
1916 attribute w:tableStyles { s_ST_OnOff }?,
1917 attribute w:directFormattingOnRuns { s_ST_OnOff }?,
1918 attribute w:directFormattingOnParagraphs { s_ST_OnOff }?,
1919 attribute w:directFormattingOnNumbering { s_ST_OnOff }?,
1920 attribute w:directFormattingOnTables { s_ST_OnOff }?,
1921 attribute w:clearFormatting { s_ST_OnOff }?,
1922 attribute w:top3HeadingStyles { s_ST_OnOff }?,
1923 attribute w:visibleStyles { s_ST_OnOff }?,
1924 attribute w:alternateStyleNames { s_ST_OnOff }?,
1925 attribute w:val { w_ST_ShortHexNumber }?
1926 w_ST_StyleSort =
1927 string "name"
1928 | string "priority"
1929 | string "default"
1930 | string "font"
1931 | string "basedOn"
1932 | string "type"
1933 | string "0000"
1934 | string "0001"
1935 | string "0002"
1936 | string "0003"
1937 | string "0004"
1938 | string "0005"
1939 w_CT_WebSettings =

```

```

1940     element frameset { w_CT_Frameset }?,
1941     element divs { w_CT_Divs }?,
1942     element encoding { w_CT_String }?,
1943     element optimizeForBrowser { w_CT_OptimizeForBrowser }?,
1944     element relyOnVML { w_CT_OnOff }?,
1945     element allowPNG { w_CT_OnOff }?,
1946     element doNotRelyOnCSS { w_CT_OnOff }?,
1947     element doNotSaveAsSingleFile { w_CT_OnOff }?,
1948     element doNotOrganizeInFolder { w_CT_OnOff }?,
1949     element doNotUseLongFileNames { w_CT_OnOff }?,
1950     element pixelsPerInch { w_CT_DecimalNumber }?,
1951     element targetScreenSz { w_CT_TargetScreenSz }?,
1952     element saveSmartTagsAsXml { w_CT_OnOff }?
1953 w_ST_FrameScrollbar = string "on" | string "off" | string "auto"
1954 w_CT_FrameScrollbar = attribute w:val { w_ST_FrameScrollbar }
1955 w_CT_OptimizeForBrowser =
1956     w_CT_OnOff,
1957     attribute w:target { s_ST_String }?
1958 w_CT_Frame =
1959     element sz { w_CT_String }?,
1960     element name { w_CT_String }?,
1961     element title { w_CT_String }?,
1962     element longDesc { w_CT_Rel }?,
1963     element sourceFileName { w_CT_Rel }?,
1964     element marW { w_CT_PixelsMeasure }?,
1965     element marH { w_CT_PixelsMeasure }?,
1966     element scrollbar { w_CT_FrameScrollbar }?,
1967     element noResizeAllowed { w_CT_OnOff }?,
1968     element linkedToFile { w_CT_OnOff }?
1969 w_ST_FrameLayout = string "rows" | string "cols" | string "none"
1970 w_CT_FrameLayout = attribute w:val { w_ST_FrameLayout }
1971 w_CT_FramesetSplitbar =
1972     element w { w_CT_TwipsMeasure }?,
1973     element color { w_CT_Color }?,
1974     element noBorder { w_CT_OnOff }?,
1975     element flatBorders { w_CT_OnOff }?
1976 w_CT_Frameset =
1977     element sz { w_CT_String }?,
1978     element framesetSplitbar { w_CT_FramesetSplitbar }?,
1979     element frameLayout { w_CT_FrameLayout }?,
1980     element title { w_CT_String }?,
1981     (element frameset { w_CT_Frameset }*
1982      | element frame { w_CT_Frame }*)*
1983 w_CT_NumPicBullet =
1984     attribute w:numPicBulletId { w_ST_DecimalNumber },
1985     (element pict { w_CT_Picture }
1986      | element drawing { w_CT_Drawing })
1987 w_ST_LevelSuffix = string "tab" | string "space" | string "nothing"
1988 w_CT_LevelSuffix = attribute w:val { w_ST_LevelSuffix }
1989 w_CT_LevelText =
1990     attribute w:val { s_ST_String }?,
1991     attribute w:null { s_ST_OnOff }?
1992 w_CT_LvlLegacy =

```

```

1993   attribute w:legacy { s_ST_OnOff }?,
1994   attribute w:legacySpace { s_ST_TwipsMeasure }?,
1995   attribute w:legacyIndent { w_ST_SignedTwipsMeasure }?
1996 w_CT_Lvl =
1997   attribute w:ilvl { w_ST_DecimalNumber },
1998   attribute w:tplc { w_ST_LongHexNumber }?,
1999   attribute w:tentative { s_ST_OnOff }?,
2000   element start { w_CT_DecimalNumber }?,
2001   element numFmt { w_CT_NumFmt }?,
2002   element lvlRestart { w_CT_DecimalNumber }?,
2003   element pStyle { w_CT_String }?,
2004   element isLgl { w_CT_OnOff }?,
2005   element suff { w_CT_LevelSuffix }?,
2006   element lvlText { w_CT_LevelText }?,
2007   element lvlPicBulletId { w_CT_DecimalNumber }?,
2008   element legacy { w_CT_LvlLegacy }?,
2009   element lvlJc { w_CT_Jc }?,
2010   element pPr { w_CT_PPrGeneral }?,
2011   element rPr { w_CT_RPr }?
2012 w_ST_MultiLevelType =
2013   string "singleLevel" | string "multilevel" | string "hybridMultilevel"
2014 w_CT_MultiLevelType = attribute w:val { w_ST_MultiLevelType }
2015 w_CT_AbstractNum =
2016   attribute w:abstractNumId { w_ST_DecimalNumber },
2017   element nsid { w_CT_LongHexNumber }?,
2018   element multiLevelType { w_CT_MultiLevelType }?,
2019   element tpl { w_CT_LongHexNumber }?,
2020   element name { w_CT_String }?,
2021   element styleLink { w_CT_String }?,
2022   element numStyleLink { w_CT_String }?,
2023   element lvl { w_CT_Lvl }*
2024 w_CT_NumLvl =
2025   attribute w:ilvl { w_ST_DecimalNumber },
2026   element startOverride { w_CT_DecimalNumber }?,
2027   element lvl { w_CT_Lvl }?
2028 w_CT_Num =
2029   attribute w:numId { w_ST_DecimalNumber },
2030   element abstractNumId { w_CT_DecimalNumber },
2031   element lvlOverride { w_CT_NumLvl }*
2032 w_CT_Numbering =
2033   element numPicBullet { w_CT_NumPicBullet }*,
2034   element abstractNum { w_CT_AbstractNum }*,
2035   element num { w_CT_Num }*,
2036   element numIdMacAtCleanup { w_CT_DecimalNumber }?
2037 w_ST_TblStyleOverrideType =
2038   string "wholeTable"
2039   | string "firstRow"
2040   | string "lastRow"
2041   | string "firstCol"
2042   | string "lastCol"
2043   | string "band1Vert"
2044   | string "band2Vert"
2045   | string "band1Horz"

```

```

2046 | string "band2Horz"
2047 | string "neCell"
2048 | string "nwCell"
2049 | string "seCell"
2050 | string "swCell"
2051 w_CT_TblStylePr =
2052   attribute w:type { w_ST_TblStyleOverrideType },
2053   element pPr { w_CT_PPrGeneral }?,
2054   element rPr { w_CT_RPr }?,
2055   element tblPr { w_CT_TblPrBase }?,
2056   element trPr { w_CT_TrPr }?,
2057   element tcPr { w_CT_TcPr }?
2058 w_ST_StyleType =
2059   string "paragraph"
2060   | string "character"
2061   | string "table"
2062   | string "numbering"
2063 w_CT_Style =
2064   attribute w:type { w_ST_StyleType }?,
2065   attribute w:styleId { s_ST_String }?,
2066   attribute w:default { s_ST_OnOff }?,
2067   attribute w:customStyle { s_ST_OnOff }?,
2068   element name { w_CT_String }?,
2069   element aliases { w_CT_String }?,
2070   element basedOn { w_CT_String }?,
2071   element next { w_CT_String }?,
2072   element link { w_CT_String }?,
2073   element autoRedefine { w_CT_OnOff }?,
2074   element hidden { w_CT_OnOff }?,
2075   element uiPriority { w_CT_DecimalNumber }?,
2076   element semiHidden { w_CT_OnOff }?,
2077   element unhideWhenUsed { w_CT_OnOff }?,
2078   element qFormat { w_CT_OnOff }?,
2079   element locked { w_CT_OnOff }?,
2080   element personal { w_CT_OnOff }?,
2081   element personalCompose { w_CT_OnOff }?,
2082   element personalReply { w_CT_OnOff }?,
2083   element rsid { w_CT_LongHexNumber }?,
2084   element pPr { w_CT_PPrGeneral }?,
2085   element rPr { w_CT_RPr }?,
2086   element tblPr { w_CT_TblPrBase }?,
2087   element trPr { w_CT_TrPr }?,
2088   element tcPr { w_CT_TcPr }?,
2089   element tblStylePr { w_CT_TblStylePr }*
2090 w_CT_LsdException =
2091   attribute w:name { s_ST_String },
2092   attribute w:locked { s_ST_OnOff }?,
2093   attribute w:uiPriority { w_ST_DecimalNumber }?,
2094   attribute w:semiHidden { s_ST_OnOff }?,
2095   attribute w:unhideWhenUsed { s_ST_OnOff }?,
2096   attribute w:qFormat { s_ST_OnOff }?
2097 w_CT_LatentStyles =
2098   attribute w:defLockedState { s_ST_OnOff }?,

```

```

2099     attribute w:defUIPriority { w_ST_DecimalNumber }?,
2100     attribute w:defSemiHidden { s_ST_OnOff }?,
2101     attribute w:defUnhideWhenUsed { s_ST_OnOff }?,
2102     attribute w:defQFormat { s_ST_OnOff }?,
2103     attribute w:count { w_ST_DecimalNumber }?,
2104     element lsdException { w_CT_LsdException }*
2105 w_CT_Styles =
2106     element docDefaults { w_CT_DocDefaults }?,
2107     element latentStyles { w_CT_LatentStyles }?,
2108     element style { w_CT_Style }*
2109 w_CT_Panose = attribute w:val { s_ST_Panose }
2110 w_ST_FontFamily =
2111     string "decorative"
2112     | string "modern"
2113     | string "roman"
2114     | string "script"
2115     | string "swiss"
2116     | string "auto"
2117 w_CT_FontFamily = attribute w:val { w_ST_FontFamily }
2118 w_ST_Pitch = string "fixed" | string "variable" | string "default"
2119 w_CT_Pitch = attribute w:val { w_ST_Pitch }
2120 w_CT_FontSig =
2121     attribute w:usb0 { w_ST_LongHexNumber },
2122     attribute w:usb1 { w_ST_LongHexNumber },
2123     attribute w:usb2 { w_ST_LongHexNumber },
2124     attribute w:usb3 { w_ST_LongHexNumber },
2125     attribute w:csb0 { w_ST_LongHexNumber },
2126     attribute w:csb1 { w_ST_LongHexNumber }
2127 w_CT_FontRel =
2128     w_CT_Rel,
2129     attribute w:fontKey { s_ST_Guid }?,
2130     attribute w:subsetting { s_ST_OnOff }?
2131 w_CT_Font =
2132     attribute w:name { s_ST_String },
2133     element altName { w_CT_String }?,
2134     element panose1 { w_CT_Panose }?,
2135     element charset { w_CT_Charset }?,
2136     element family { w_CT_FontFamily }?,
2137     element notTrueType { w_CT_OnOff }?,
2138     element pitch { w_CT_Pitch }?,
2139     element sig { w_CT_FontSig }?,
2140     element embedRegular { w_CT_FontRel }?,
2141     element embedBold { w_CT_FontRel }?,
2142     element embedItalic { w_CT_FontRel }?,
2143     element embedBoldItalic { w_CT_FontRel }?
2144 w_CT_FontsList = element font { w_CT_Font }*
2145 w_CT_DivBdr =
2146     element top { w_CT_Border }?,
2147     element left { w_CT_Border }?,
2148     element bottom { w_CT_Border }?,
2149     element right { w_CT_Border }?
2150 w_CT_Div =
2151     attribute w:id { w_ST_DecimalNumber },

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```

2152     element blockQuote { w_CT_OnOff }?,
2153     element bodyDiv { w_CT_OnOff }?,
2154     element marLeft { w_CT_SignedTwipsMeasure },
2155     element marRight { w_CT_SignedTwipsMeasure },
2156     element marTop { w_CT_SignedTwipsMeasure },
2157     element marBottom { w_CT_SignedTwipsMeasure },
2158     element divBdr { w_CT_DivBdr }?,
2159     element divsChild { w_CT_Divs }*
2160 w_CT_Divs = element div { w_CT_Div }+
2161 w_CT_TxbxContent = w_EG_BlockLevelElts+
2162 w_txbxContent = element txbxContent { w_CT_TxbxContent }
2163 w_EG_MathContent = m_oMathPara | m_oMath
2164 w_EG_BlockLevelChunkElts = w_EG_ContentBlockContent*
2165 w_EG_BlockLevelElts =
2166     w_EG_BlockLevelChunkElts*
2167     | element altChunk { w_CT_AltChunk }*
2168 w_EG_RunLevelElts =
2169     element proofErr { w_CT_ProofErr }?
2170     | element permStart { w_CT_PermStart }?
2171     | element permEnd { w_CT_Perm }?
2172     | w_EG_RangeMarkupElements*
2173     | element ins { w_CT_RunTrackChange }?
2174     | element del { w_CT_RunTrackChange }?
2175     | element moveFrom { w_CT_RunTrackChange }
2176     | element moveTo { w_CT_RunTrackChange }
2177     | w_EG_MathContent*
2178 w_CT_Body =
2179     w_EG_BlockLevelElts*,
2180     element sectPr { w_CT_SectPr }?
2181 w_CT_ShapeDefaults = (w_any_vml_office*)+
2182 w_CT_Comments = element comment { w_CT_Comment }*
2183 w_comments = element comments { w_CT_Comments }
2184 w_CT_Footnotes = element footnote { w_CT_FtnEdn }*
2185 w_footnotes = element footnotes { w_CT_Footnotes }
2186 w_CT_Endnotes = element endnote { w_CT_FtnEdn }*
2187 w_endnotes = element endnotes { w_CT_Endnotes }
2188 w_hdr = element hdr { w_CT_HdrFtr }
2189 w_ftr = element ftr { w_CT_HdrFtr }
2190 w_CT_SmartTagType =
2191     attribute w:namespaceuri { s_ST_String }?,
2192     attribute w:name { s_ST_String }?,
2193     attribute w:url { s_ST_String }?
2194 w_ST_ThemeColor =
2195     string "dark1"
2196     | string "light1"
2197     | string "dark2"
2198     | string "light2"
2199     | string "accent1"
2200     | string "accent2"
2201     | string "accent3"
2202     | string "accent4"
2203     | string "accent5"
2204     | string "accent6"

```



```

2205 | string "hyperlink"
2206 | string "followedHyperlink"
2207 | string "none"
2208 | string "background1"
2209 | string "text1"
2210 | string "background2"
2211 | string "text2"
2212 w_ST_DocPartBehavior = string "content" | string "p" | string "pg"
2213 w_CT_DocPartBehavior = attribute w:val { w_ST_DocPartBehavior }
2214 w_CT_DocPartBehaviors = element behavior { w_CT_DocPartBehavior }+
2215 w_ST_DocPartType =
2216     string "none"
2217     | string "normal"
2218     | string "autoExp"
2219     | string "toolbar"
2220     | string "speller"
2221     | string "formFld"
2222     | string "bbPlcHdr"
2223 w_CT_DocPartType = attribute w:val { w_ST_DocPartType }
2224 w_CT_DocPartTypes =
2225     attribute w:all { s_ST_OnOff }?,
2226     (element type { w_CT_DocPartType }+)
2227 w_ST_DocPartGallery =
2228     string "placeholder"
2229     | string "any"
2230     | string "default"
2231     | string "docParts"
2232     | string "coverPg"
2233     | string "eq"
2234     | string "ftrs"
2235     | string "hdrs"
2236     | string "pgNum"
2237     | string "tbls"
2238     | string "watermarks"
2239     | string "autoTxt"
2240     | string "txtBox"
2241     | string "pgNumT"
2242     | string "pgNumB"
2243     | string "pgNumMargins"
2244     | string "tblOfContents"
2245     | string "bib"
2246     | string "custQuickParts"
2247     | string "custCoverPg"
2248     | string "custEq"
2249     | string "custFtrs"
2250     | string "custHdrs"
2251     | string "custPgNum"
2252     | string "custTbls"
2253     | string "custWatermarks"
2254     | string "custAutoTxt"
2255     | string "custTxtBox"
2256     | string "custPgNumT"
2257     | string "custPgNumB"

```

```

2258 | string "custPgNumMargins"
2259 | string "custTblOfContents"
2260 | string "custBib"
2261 | string "custom1"
2262 | string "custom2"
2263 | string "custom3"
2264 | string "custom4"
2265 | string "custom5"
2266 w_CT_DocPartGallery = attribute w:val { w_ST_DocPartGallery }
2267 w_CT_DocPartCategory =
2268   element name { w_CT_String },
2269   element gallery { w_CT_DocPartGallery }
2270 w_CT_DocPartName =
2271   attribute w:val { s_ST_String },
2272   attribute w:decorated { s_ST_OnOff }?
2273 w_CT_DocPartPr =
2274   (element name { w_CT_DocPartName }
2275     | element style { w_CT_String }
2276     | element category { w_CT_DocPartCategory }
2277     | element types { w_CT_DocPartTypes }
2278     | element behaviors { w_CT_DocPartBehaviors }
2279     | element description { w_CT_String }
2280     | element guid { w_CT_Guid })+
2281 w_CT_DocPart =
2282   element docPartPr { w_CT_DocPartPr }?,
2283   element docPartBody { w_CT_Body }?
2284 w_CT_DocParts = element docPart { w_CT_DocPart }+
2285 w_settings = element settings { w_CT_Settings }
2286 w_webSettings = element webSettings { w_CT_WebSettings }
2287 w_fonts = element fonts { w_CT_FontsList }
2288 w_numbering = element numbering { w_CT_Numbering }
2289 w_styles = element styles { w_CT_Styles }
2290 w_ST_CaptionPos =
2291   string "above" | string "below" | string "left" | string "right"
2292 w_CT_Caption =
2293   attribute w:name { s_ST_String },
2294   attribute w:pos { w_ST_CaptionPos }?,
2295   attribute w:chapNum { s_ST_OnOff }?,
2296   attribute w:heading { w_ST_DecimalNumber }?,
2297   attribute w:noLabel { s_ST_OnOff }?,
2298   attribute w:numFmt { w_ST_NumberFormat }?,
2299   attribute w:sep { w_ST_ChapterSep }?
2300 w_CT_AutoCaption =
2301   attribute w:name { s_ST_String },
2302   attribute w:caption { s_ST_String }
2303 w_CT_AutoCaptions = element autoCaption { w_CT_AutoCaption }+
2304 w_CT_Captions =
2305   element caption { w_CT_Caption }+,
2306   element autoCaptions { w_CT_AutoCaptions }?
2307 w_CT_DocumentBase = element background { w_CT_Background }?
2308 w_CT_Document =
2309   w_CT_DocumentBase,
2310   element body { w_CT_Body }?,

```

```

2311     attribute w:conformance { s_ST_ConformanceClass }?
2312 w_CT_GlossaryDocument =
2313     w_CT_DocumentBase,
2314     element docParts { w_CT_DocParts }?
2315 w_document = element document { w_CT_Document }
2316 w_glossaryDocument = element glossaryDocument { w_CT_GlossaryDocument }
2317 w_any_vml_office =
2318     o_shapedefaults
2319     | o_shapelayout
2320     | o_signatureline
2321     | o_ink
2322     | o_diagram
2323     | o_skew
2324     | o_extrusion
2325     | o_callout
2326     | o_lock
2327     | o_OLEObject
2328     | o_complex
2329     | o_left
2330     | o_top
2331     | o_right
2332     | o_bottom
2333     | o_column
2334     | o_clippath
2335     | o_fill
2336 w_any_vml_vml =
2337     v_shape
2338     | v_shapetype
2339     | v_group
2340     | v_background
2341     | v_fill
2342     | v_formulas
2343     | v_handles
2344     | v_imagedata
2345     | v_path
2346     | v_textbox
2347     | v_shadow
2348     | v_stroke
2349     | v_textpath
2350     | v_arc
2351     | v_curve
2352     | v_image
2353     | v_line
2354     | v_oval
2355     | v_polyline
2356     | v_rect
2357     | v_roundrect

```

B.1.1 Part Schemas

B.1.1.1 Comments Part

This schema is available in the file WordprocessingML_Comments.rnc.

```

1  include "wml.rnc"
2  include "shared-relationshipReference.rnc"
3  include "dml-wordprocessingDrawing.rnc"
4  include "dml-main.rnc"
5  include "dml-diagram.rnc"
6  include "shared-commonSimpleTypes.rnc"
7  include "dml-lockedCanvas.rnc"
8  include "any.rnc"
9  include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 include "vml-presentationDrawing.rnc"
14 include "xml.rnc"
15 include "shared-customXmlSchemaProperties.rnc"
16 include "vml-officeDrawing.rnc"
17 include "vml-main.rnc"
18 include "vml-spreadsheetDrawing.rnc"
19 include "vml-wordprocessingDrawing.rnc"
20 include "shared-math.rnc"
21 start = w_comments

```

B.1.1.2 Document Settings Part

This schema is available in the file WordprocessingML_Document_Settings.rnc.

```

1  include "wml.rnc"
2  include "shared-relationshipReference.rnc"
3  include "dml-wordprocessingDrawing.rnc"
4  include "dml-main.rnc"
5  include "dml-diagram.rnc"
6  include "shared-commonSimpleTypes.rnc"
7  include "dml-lockedCanvas.rnc"
8  include "any.rnc"
9  include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 include "vml-presentationDrawing.rnc"
14 include "xml.rnc"
15 include "shared-customXmlSchemaProperties.rnc"
16 include "vml-officeDrawing.rnc"
17 include "vml-main.rnc"
18 include "vml-spreadsheetDrawing.rnc"
19 include "vml-wordprocessingDrawing.rnc"
20 include "shared-math.rnc"
21 start = w_settings

```

B.1.1.3 Endnotes Part

This schema is available in the file WordprocessingML_Endnotes.rnc.

```

1  include "wml.rnc"
2  include "shared-relationshipReference.rnc"

```

```

3 include "dml-wordprocessingDrawing.rnc"
4 include "dml-main.rnc"
5 include "dml-diagram.rnc"
6 include "shared-commonSimpleTypes.rnc"
7 include "dml-lockedCanvas.rnc"
8 include "any.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 include "vml-presentationDrawing.rnc"
14 include "xml.rnc"
15 include "shared-customXmlSchemaProperties.rnc"
16 include "vml-officeDrawing.rnc"
17 include "vml-main.rnc"
18 include "vml-spreadsheetDrawing.rnc"
19 include "vml-wordprocessingDrawing.rnc"
20 include "shared-math.rnc"
21 start = w_endnotes

```

B.1.1.4 Font Table Part

This schema is available in the file WordprocessingML_Font_Table.rnc.

```

1 include "wml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-wordprocessingDrawing.rnc"
4 include "dml-main.rnc"
5 include "dml-diagram.rnc"
6 include "shared-commonSimpleTypes.rnc"
7 include "dml-lockedCanvas.rnc"
8 include "any.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 include "vml-presentationDrawing.rnc"
14 include "xml.rnc"
15 include "shared-customXmlSchemaProperties.rnc"
16 include "vml-officeDrawing.rnc"
17 include "vml-main.rnc"
18 include "vml-spreadsheetDrawing.rnc"
19 include "vml-wordprocessingDrawing.rnc"
20 include "shared-math.rnc"
21 start = w_fonts

```

B.1.1.5 Footer Part

This schema is available in the file WordprocessingML_Footer.rnc.

```

1 include "wml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-wordprocessingDrawing.rnc"
4 include "dml-main.rnc"

```

```

5 include "dml-diagram.rnc"
6 include "shared-commonSimpleTypes.rnc"
7 include "dml-lockedCanvas.rnc"
8 include "any.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 include "vml-presentationDrawing.rnc"
14 include "xml.rnc"
15 include "shared-customXmlSchemaProperties.rnc"
16 include "vml-officeDrawing.rnc"
17 include "vml-main.rnc"
18 include "vml-spreadsheetDrawing.rnc"
19 include "vml-wordprocessingDrawing.rnc"
20 include "shared-math.rnc"
21 start = w_ftr

```

B.1.1.6 Footnotes Part

This schema is available in the file WordprocessingML_Footnotes.rnc.

```

1 include "wml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-wordprocessingDrawing.rnc"
4 include "dml-main.rnc"
5 include "dml-diagram.rnc"
6 include "shared-commonSimpleTypes.rnc"
7 include "dml-lockedCanvas.rnc"
8 include "any.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 include "vml-presentationDrawing.rnc"
14 include "xml.rnc"
15 include "shared-customXmlSchemaProperties.rnc"
16 include "vml-officeDrawing.rnc"
17 include "vml-main.rnc"
18 include "vml-spreadsheetDrawing.rnc"
19 include "vml-wordprocessingDrawing.rnc"
20 include "shared-math.rnc"
21 start = w_footnotes

```

B.1.1.7 Glossary Document Part

This schema is available in the file WordprocessingML_Glossary_Document.rnc.

```

1 include "wml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-wordprocessingDrawing.rnc"
4 include "dml-main.rnc"
5 include "dml-diagram.rnc"
6 include "shared-commonSimpleTypes.rnc"

```

```

7 include "dml-lockedCanvas.rnc"
8 include "any.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 include "vml-presentationDrawing.rnc"
14 include "xml.rnc"
15 include "shared-customXmlSchemaProperties.rnc"
16 include "vml-officeDrawing.rnc"
17 include "vml-main.rnc"
18 include "vml-spreadsheetDrawing.rnc"
19 include "vml-wordprocessingDrawing.rnc"
20 include "shared-math.rnc"
21 start = w_glossaryDocument

```

B.1.1.8 Header Part

This schema is available in the file WordprocessingML_Header.rnc.

```

1 include "wml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-wordprocessingDrawing.rnc"
4 include "dml-main.rnc"
5 include "dml-diagram.rnc"
6 include "shared-commonSimpleTypes.rnc"
7 include "dml-lockedCanvas.rnc"
8 include "any.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 include "vml-presentationDrawing.rnc"
14 include "xml.rnc"
15 include "shared-customXmlSchemaProperties.rnc"
16 include "vml-officeDrawing.rnc"
17 include "vml-main.rnc"
18 include "vml-spreadsheetDrawing.rnc"
19 include "vml-wordprocessingDrawing.rnc"
20 include "shared-math.rnc"
21 start = w_hdr

```

B.1.1.9 Mail Merge Recipient Data Part

This schema is available in the file WordprocessingML_Mail_Merge_Recipient_Data.rnc.

```

1 include "wml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-wordprocessingDrawing.rnc"
4 include "dml-main.rnc"
5 include "dml-diagram.rnc"
6 include "shared-commonSimpleTypes.rnc"
7 include "dml-lockedCanvas.rnc"
8 include "any.rnc"

```

```

9  include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 include "vml-presentationDrawing.rnc"
14 include "xml.rnc"
15 include "shared-customXmlSchemaProperties.rnc"
16 include "vml-officeDrawing.rnc"
17 include "vml-main.rnc"
18 include "vml-spreadsheetDrawing.rnc"
19 include "vml-wordprocessingDrawing.rnc"
20 include "shared-math.rnc"
21 start = w_recipients

```

B.1.1.10 Main Document Part

This schema is available in the file WordprocessingML_Main_Document.rnc.

```

1  include "wml.rnc"
2  include "shared-relationshipReference.rnc"
3  include "dml-wordprocessingDrawing.rnc"
4  include "dml-main.rnc"
5  include "dml-diagram.rnc"
6  include "shared-commonSimpleTypes.rnc"
7  include "dml-lockedCanvas.rnc"
8  include "any.rnc"
9  include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 include "vml-presentationDrawing.rnc"
14 include "xml.rnc"
15 include "shared-customXmlSchemaProperties.rnc"
16 include "vml-officeDrawing.rnc"
17 include "vml-main.rnc"
18 include "vml-spreadsheetDrawing.rnc"
19 include "vml-wordprocessingDrawing.rnc"
20 include "shared-math.rnc"
21 start = w_document

```

B.1.1.11 Numbering Definitions Part

This schema is available in the file WordprocessingML_Numbering_Definitions.rnc.

```

1  include "wml.rnc"
2  include "shared-relationshipReference.rnc"
3  include "dml-wordprocessingDrawing.rnc"
4  include "dml-main.rnc"
5  include "dml-diagram.rnc"
6  include "shared-commonSimpleTypes.rnc"
7  include "dml-lockedCanvas.rnc"
8  include "any.rnc"
9  include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"

```



```

11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 include "vml-presentationDrawing.rnc"
14 include "xml.rnc"
15 include "shared-customXmlSchemaProperties.rnc"
16 include "vml-officeDrawing.rnc"
17 include "vml-main.rnc"
18 include "vml-spreadsheetDrawing.rnc"
19 include "vml-wordprocessingDrawing.rnc"
20 include "shared-math.rnc"
21 start = w_numbering

```

B.1.1.12 Style Definitions Part

This schema is available in the file WordprocessingML_Style_Definitions.rnc.

```

1 include "wml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-wordprocessingDrawing.rnc"
4 include "dml-main.rnc"
5 include "dml-diagram.rnc"
6 include "shared-commonSimpleTypes.rnc"
7 include "dml-lockedCanvas.rnc"
8 include "any.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 include "vml-presentationDrawing.rnc"
14 include "xml.rnc"
15 include "shared-customXmlSchemaProperties.rnc"
16 include "vml-officeDrawing.rnc"
17 include "vml-main.rnc"
18 include "vml-spreadsheetDrawing.rnc"
19 include "vml-wordprocessingDrawing.rnc"
20 include "shared-math.rnc"
21 start = w_styles

```

B.1.1.13 Web Settings Part

This schema is available in the file WordprocessingML_Web_Settings.rnc.

```

1 include "wml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-wordprocessingDrawing.rnc"
4 include "dml-main.rnc"
5 include "dml-diagram.rnc"
6 include "shared-commonSimpleTypes.rnc"
7 include "dml-lockedCanvas.rnc"
8 include "any.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"

```

```

13 include "vml-presentationDrawing.rnc"
14 include "xml.rnc"
15 include "shared-customXmlSchemaProperties.rnc"
16 include "vml-officeDrawing.rnc"
17 include "vml-main.rnc"
18 include "vml-spreadsheetDrawing.rnc"
19 include "vml-wordprocessingDrawing.rnc"
20 include "shared-math.rnc"
21 start = w_webSettings

```

B.2 SpreadsheetML

This schema is available in the file sml.rnc.

```

1 namespace o = "urn:schemas-microsoft-com:office:office"
2 namespace r =
3   "http://schemas.openxmlformats.org/officeDocument/2006/relationships"
4 namespace s =
5   "http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
6 default namespace sml =
7   "http://schemas.openxmlformats.org/spreadsheetml/2006/main"
8 namespace v = "urn:schemas-microsoft-com:vml"
9 namespace w10 = "urn:schemas-microsoft-com:office:word"
10 namespace x = "urn:schemas-microsoft-com:office:excel"
11 namespace xdr =
12   "http://schemas.openxmlformats.org/drawingml/2006/spreadsheetDrawing"
13
14 sml_CT_AutoFilter =
15   attribute ref { sml_ST_Ref }?,
16   element filterColumn { sml_CT_FilterColumn }*,
17   element sortState { sml_CT_SortState }?,
18   element extLst { sml_CT_ExtensionList }?
19 sml_CT_FilterColumn =
20   attribute colId { xsd:unsignedInt },
21
22   ## default value: false
23   attribute hiddenButton { xsd:boolean }?,
24
25   ## default value: true
26   attribute showButton { xsd:boolean }?,
27   (element filters { sml_CT_Filters }?
28     | element top10 { sml_CT_Top10 }?
29     | element customFilters { sml_CT_CustomFilters }?
30     | element dynamicFilter { sml_CT_DynamicFilter }?
31     | element colorFilter { sml_CT_ColorFilter }?
32     | element iconFilter { sml_CT_IconFilter }?
33     | element extLst { sml_CT_ExtensionList }?)?
34 sml_CT_Filters =
35
36   ## default value: false
37   attribute blank { xsd:boolean }?,
38
39   ## default value: none

```

```

40   attribute calendarType { s_ST_CalendarType }?,
41   element filter { sml_CT_Filter }*,
42   element dateGroupItem { sml_CT_DateGroupItem }*
43 sml_CT_Filter = attribute val { s_ST_Xstring }?
44 sml_CT_CustomFilters =
45
46   ## default value: false
47   attribute and { xsd:boolean }?,
48   element customFilter { sml_CT_CustomFilter }+
49 sml_CT_CustomFilter =
50
51   ## default value: equal
52   attribute operator { sml_ST_FilterOperator }?,
53   attribute val { s_ST_Xstring }?
54 sml_CT_Top10 =
55
56   ## default value: true
57   attribute top { xsd:boolean }?,
58
59   ## default value: false
60   attribute percent { xsd:boolean }?,
61   attribute val { xsd:double },
62   attribute filterVal { xsd:double }?
63 sml_CT_ColorFilter =
64   attribute dxId { sml_ST_DxfId }?,
65
66   ## default value: true
67   attribute cellColor { xsd:boolean }?
68 sml_CT_IconFilter =
69   attribute iconSet { sml_ST_IconSetType },
70   attribute iconId { xsd:unsignedInt }?
71 sml_ST_FilterOperator =
72   string "equal"
73   | string "lessThan"
74   | string "lessThanOrEqual"
75   | string "notEqual"
76   | string "greaterThanOrEqual"
77   | string "greaterThan"
78 sml_CT_DynamicFilter =
79   attribute type { sml_ST_DynamicFilterType },
80   attribute val { xsd:double }?,
81   attribute valIso { xsd:dateTime }?,
82   attribute maxVal { xsd:double }?,
83   attribute maxValIso { xsd:dateTime }?
84 sml_ST_DynamicFilterType =
85   string "null"
86   | string "aboveAverage"
87   | string "belowAverage"
88   | string "tomorrow"
89   | string "today"
90   | string "yesterday"
91   | string "nextWeek"
92   | string "thisWeek"

```

```

93 | string "lastWeek"
94 | string "nextMonth"
95 | string "thisMonth"
96 | string "lastMonth"
97 | string "nextQuarter"
98 | string "thisQuarter"
99 | string "lastQuarter"
100 | string "nextYear"
101 | string "thisYear"
102 | string "lastYear"
103 | string "yearToDate"
104 | string "Q1"
105 | string "Q2"
106 | string "Q3"
107 | string "Q4"
108 | string "M1"
109 | string "M2"
110 | string "M3"
111 | string "M4"
112 | string "M5"
113 | string "M6"
114 | string "M7"
115 | string "M8"
116 | string "M9"
117 | string "M10"
118 | string "M11"
119 | string "M12"
120 sml_ST_IconSetType =
121     string "3Arrows"
122     | string "3ArrowsGray"
123     | string "3Flags"
124     | string "3TrafficLights1"
125     | string "3TrafficLights2"
126     | string "3Signs"
127     | string "3Symbols"
128     | string "3Symbols2"
129     | string "4Arrows"
130     | string "4ArrowsGray"
131     | string "4RedToBlack"
132     | string "4Rating"
133     | string "4TrafficLights"
134     | string "5Arrows"
135     | string "5ArrowsGray"
136     | string "5Rating"
137     | string "5Quarters"
138 sml_CT_SortState =
139
140     ## default value: false
141     attribute columnSort { xsd:boolean }?,
142
143     ## default value: false
144     attribute caseSensitive { xsd:boolean }?,
145

```

```

146  ## default value: none
147  attribute sortMethod { sml_ST_SortMethod }?,
148  attribute ref { sml_ST_Ref },
149  element sortCondition { sml_CT_SortCondition }*,
150  element extLst { sml_CT_ExtensionList }?
151  sml_CT_SortCondition =
152
153  ## default value: false
154  attribute descending { xsd:boolean }?,
155
156  ## default value: value
157  attribute sortBy { sml_ST_SortBy }?,
158  attribute ref { sml_ST_Ref },
159  attribute customList { s_ST_Xstring }?,
160  attribute dxId { sml_ST_DxId }?,
161
162  ## default value: 3Arrows
163  attribute iconSet { sml_ST_IconSetType }?,
164  attribute iconId { xsd:unsignedInt }?
165  sml_ST_SortBy =
166  string "value"
167  | string "cellColor"
168  | string "fontColor"
169  | string "icon"
170  sml_ST_SortMethod = string "stroke" | string "pinYin" | string "none"
171  sml_CT_DateGroupItem =
172  attribute year { xsd:unsignedShort },
173  attribute month { xsd:unsignedShort }?,
174  attribute day { xsd:unsignedShort }?,
175  attribute hour { xsd:unsignedShort }?,
176  attribute minute { xsd:unsignedShort }?,
177  attribute second { xsd:unsignedShort }?,
178  attribute dateTimeGrouping { sml_ST_DateTimeGrouping }
179  sml_ST_DateTimeGrouping =
180  string "year"
181  | string "month"
182  | string "day"
183  | string "hour"
184  | string "minute"
185  | string "second"
186  sml_ST_CellRef = xsd:string
187  sml_ST_Ref = xsd:string
188  sml_ST_RefA = xsd:string
189  sml_ST_Sqref = list { sml_ST_Ref* }
190  sml_ST_Formula = s_ST_Xstring
191  sml_ST_UnsignedIntHex = xsd:hexBinary { length = "4" }
192  sml_ST_UnsignedShortHex = xsd:hexBinary { length = "2" }
193  sml_CT_XStringElement = attribute v { s_ST_Xstring }
194  sml_CT_Extension =
195  attribute uri { xsd:token }?,
196  sml_CT_Extension_any
197  sml_CT_Extension_any =
198  element * - (o:* | v:* | w10:* | x:*) {

```

```

199     anyAttribute*,
200     mixed { anyElement* }
201 }
202 sml_CT_ObjectAnchor =
203
204     ## default value: false
205     attribute moveWithCells { xsd:boolean }?,
206
207     ## default value: false
208     attribute sizeWithCells { xsd:boolean }?,
209     attribute z-order { xsd:unsignedInt }?,
210     xdr_from,
211     xdr_to
212 sml_EG_ExtensionList = element ext { sml_CT_Extension }*
213 sml_CT_ExtensionList = sml_EG_ExtensionList?
214 sml_calcChain = element calcChain { sml_CT_CalcChain }
215 sml_CT_CalcChain =
216     element c { sml_CT_CalcCell }+,
217     element extList { sml_CT_ExtensionList }?
218 sml_CT_CalcCell =
219     attribute ( r | ref ) { sml_ST_CellRef },
220
221     ## default value: 0
222     attribute i { xsd:int }?,
223
224     ## default value: false
225     attribute s { xsd:boolean }?,
226
227     ## default value: false
228     attribute l { xsd:boolean }?,
229
230     ## default value: false
231     attribute t { xsd:boolean }?,
232
233     ## default value: false
234     attribute a { xsd:boolean }?
235 sml_comments = element comments { sml_CT_Comments }
236 sml_CT_Comments =
237     element authors { sml_CT_Authors },
238     element commentList { sml_CT_CommentList },
239     element extList { sml_CT_ExtensionList }?
240 sml_CT_Authors = element author { s_ST_Xstring }*
241 sml_CT_CommentList = element comment { sml_CT_Comment }*
242 sml_CT_Comment =
243     attribute ref { sml_ST_Ref },
244     attribute authorId { xsd:unsignedInt },
245     attribute guid { s_ST_Guid }?,
246     attribute shapeId { xsd:unsignedInt }?,
247     element text { sml_CT_Rst },
248     element commentPr { sml_CT_CommentPr }?
249 sml_CT_CommentPr =
250
251     ## default value: true

```

```

252 attribute locked { xsd:boolean }?,
253
254 ## default value: true
255 attribute defaultSize { xsd:boolean }?,
256
257 ## default value: true
258 attribute print { xsd:boolean }?,
259
260 ## default value: false
261 attribute disabled { xsd:boolean }?,
262
263 ## default value: false
264 attribute uiObject { xsd:boolean }?,
265
266 ## default value: true
267 attribute autoFill { xsd:boolean }?,
268
269 ## default value: true
270 attribute autoLine { xsd:boolean }?,
271 attribute altText { s_ST_Xstring }?,
272
273 ## default value: left
274 attribute textHAlign { sml_ST_TextHAlign }?,
275
276 ## default value: top
277 attribute textVAlign { sml_ST_TextVAlign }?,
278
279 ## default value: true
280 attribute lockText { xsd:boolean }?,
281
282 ## default value: false
283 attribute justLastX { xsd:boolean }?,
284
285 ## default value: false
286 attribute autoScale { xsd:boolean }?,
287
288 ## default value: false
289 attribute rowHidden { xsd:boolean }?,
290
291 ## default value: false
292 attribute colHidden { xsd:boolean }?,
293 element anchor { sml_CT_ObjectAnchor }
294 sml_ST_TextHAlign =
295     string "left"
296     | string "center"
297     | string "right"
298     | string "justify"
299     | string "distributed"
300 sml_ST_TextVAlign =
301     string "top"
302     | string "center"
303     | string "bottom"
304     | string "justify"

```

```

305 | string "distributed"
306 sml_MapInfo = element MapInfo { sml_CT_MapInfo }
307 sml_CT_MapInfo =
308   attribute SelectionNamespaces { xsd:string },
309   element Schema { sml_CT_Schema }+,
310   element Map { sml_CT_Map }+
311 sml_CT_Schema =
312   mixed {
313     attribute ID { xsd:string },
314     attribute SchemaRef { xsd:string }?,
315     attribute Namespace { xsd:string }?,
316     attribute SchemaLanguage { xsd:token }?,
317     sml_CT_Schema_any
318   }
319 sml_CT_Schema_any =
320   element * - (o:* | v:* | w10:* | x:*) {
321     anyAttribute*,
322     mixed { anyElement* }
323   }
324 sml_CT_Map =
325   attribute ID { xsd:unsignedInt },
326   attribute Name { xsd:string },
327   attribute RootElement { xsd:string },
328   attribute SchemaID { xsd:string },
329   attribute ShowImportExportValidationErrors { xsd:boolean },
330   attribute AutoFit { xsd:boolean },
331   attribute Append { xsd:boolean },
332   attribute PreserveSortAFLayout { xsd:boolean },
333   attribute PreserveFormat { xsd:boolean },
334   element DataBinding { sml_CT_DataBinding }?
335 sml_CT_DataBinding =
336   attribute DataBindingName { xsd:string }?,
337   attribute FileBinding { xsd:boolean }?,
338   attribute ConnectionID { xsd:unsignedInt }?,
339   attribute FileBindingName { xsd:string }?,
340   attribute DataBindingLoadMode { xsd:unsignedInt },
341   sml_CT_DataBinding_any
342 sml_CT_DataBinding_any =
343   element * - (o:* | v:* | w10:* | x:*){
344     anyAttribute*,
345     mixed { anyElement* }
346   }
347 sml_connections = element connections { sml_CT_Connections }
348 sml_CT_Connections = element connection { sml_CT_Connection }+
349 sml_CT_Connection =
350   attribute id { xsd:unsignedInt },
351   attribute sourceFile { s_ST_Xstring }?,
352   attribute odcFile { s_ST_Xstring }?,
353
354   ## default value: false
355   attribute keepAlive { xsd:boolean }?,
356
357   ## default value: 0

```



```

358 attribute interval { xsd:unsignedInt }?,
359 attribute name { s_ST_Xstring }?,
360 attribute description { s_ST_Xstring }?,
361 attribute type { xsd:unsignedInt }?,
362
363 ## default value: 1
364 attribute reconnectionMethod { xsd:unsignedInt }?,
365 attribute refreshedVersion { xsd:unsignedByte },
366
367 ## default value: 0
368 attribute minRefreshableVersion { xsd:unsignedByte }?,
369
370 ## default value: false
371 attribute savePassword { xsd:boolean }?,
372
373 ## default value: false
374 attribute new { xsd:boolean }?,
375
376 ## default value: false
377 attribute deleted { xsd:boolean }?,
378
379 ## default value: false
380 attribute onlyUseConnectionFile { xsd:boolean }?,
381
382 ## default value: false
383 attribute background { xsd:boolean }?,
384
385 ## default value: false
386 attribute refreshOnLoad { xsd:boolean }?,
387
388 ## default value: false
389 attribute saveData { xsd:boolean }?,
390
391 ## default value: integrated
392 attribute credentials { sml_ST_CredMethod }?,
393 attribute singleSignOnId { s_ST_Xstring }?,
394 element dbPr { sml_CT_DbPr }?,
395 element olapPr { sml_CT_OlapPr }?,
396 element webPr { sml_CT_WebPr }?,
397 element textPr { sml_CT_TextPr }?,
398 element parameters { sml_CT_Parameters }?,
399 element extLst { sml_CT_ExtensionList }?
400 sml_ST_CredMethod =
401     string "integrated"
402     | string "none"
403     | string "stored"
404     | string "prompt"
405 sml_CT_DbPr =
406     attribute connection { s_ST_Xstring },
407     attribute command { s_ST_Xstring }?,
408     attribute serverCommand { s_ST_Xstring }?,
409
410 ## default value: 2

```

```

411     attribute commandType { xsd:unsignedInt }?
412 sml_CT_OlapPr =
413
414     ## default value: false
415     attribute local { xsd:boolean }?,
416     attribute localConnection { s_ST_Xstring }?,
417
418     ## default value: true
419     attribute localRefresh { xsd:boolean }?,
420
421     ## default value: false
422     attribute sendLocale { xsd:boolean }?,
423     attribute rowDrillCount { xsd:unsignedInt }?,
424
425     ## default value: true
426     attribute serverFill { xsd:boolean }?,
427
428     ## default value: true
429     attribute serverNumberFormat { xsd:boolean }?,
430
431     ## default value: true
432     attribute serverFont { xsd:boolean }?,
433
434     ## default value: true
435     attribute serverFontColor { xsd:boolean }?
436 sml_CT_WebPr =
437
438     ## default value: false
439     attribute xml { xsd:boolean }?,
440
441     ## default value: false
442     attribute sourceData { xsd:boolean }?,
443
444     ## default value: false
445     attribute parsePre { xsd:boolean }?,
446
447     ## default value: false
448     attribute consecutive { xsd:boolean }?,
449
450     ## default value: false
451     attribute firstRow { xsd:boolean }?,
452
453     ## default value: false
454     attribute xl97 { xsd:boolean }?,
455
456     ## default value: false
457     attribute textDates { xsd:boolean }?,
458
459     ## default value: false
460     attribute xl2000 { xsd:boolean }?,
461     attribute url { s_ST_Xstring }?,
462     attribute post { s_ST_Xstring }?,
463

```

```

464 ## default value: false
465 attribute htmlTables { xsd:boolean }?,
466
467 ## default value: none
468 attribute htmlFormat { sml_ST_HtmlFmt }?,
469 attribute editPage { s_ST_Xstring }?,
470 element tables { sml_CT_Tables }?
471 sml_ST_HtmlFmt = string "none" | string "rtf" | string "all"
472 sml_CT_Parameters =
473   attribute count { xsd:unsignedInt }?,
474   element parameter { sml_CT_Parameter }+
475 sml_CT_Parameter =
476   attribute name { s_ST_Xstring }?,
477
478 ## default value: 0
479 attribute sqlType { xsd:int }?,
480
481 ## default value: prompt
482 attribute parameterType { sml_ST_ParameterType }?,
483
484 ## default value: false
485 attribute refreshOnChange { xsd:boolean }?,
486 attribute prompt { s_ST_Xstring }?,
487 attribute boolean { xsd:boolean }?,
488 attribute double { xsd:double }?,
489 attribute integer { xsd:int }?,
490 attribute string { s_ST_Xstring }?,
491 attribute cell { s_ST_Xstring }?
492 sml_ST_ParameterType = string "prompt" | string "value" | string "cell"
493 sml_CT_Tables =
494   attribute count { xsd:unsignedInt }?,
495   (element m { sml_CT_TableMissing }
496    | element s { sml_CT_XStringElement }
497    | element x { sml_CT_Index })+
498 sml_CT_TableMissing = empty
499 sml_CT_TextPr =
500
501 ## default value: true
502 attribute prompt { xsd:boolean }?,
503
504 ## default value: win
505 attribute fileType { sml_ST_FileType }?,
506
507 ## default value: 1252
508 attribute codePage { xsd:unsignedInt }?,
509 attribute characterSet { xsd:string }?,
510
511 ## default value: 1
512 attribute firstRow { xsd:unsignedInt }?,
513 attribute sourceFile { s_ST_Xstring }?,
514
515 ## default value: true
516 attribute delimited { xsd:boolean }?,

```

```

517
518   ## default value: .
519   attribute decimal { s_ST_Xstring }?,
520
521   ## default value: ,
522   attribute thousands { s_ST_Xstring }?,
523
524   ## default value: true
525   attribute tab { xsd:boolean }?,
526
527   ## default value: false
528   attribute space { xsd:boolean }?,
529
530   ## default value: false
531   attribute comma { xsd:boolean }?,
532
533   ## default value: false
534   attribute semicolon { xsd:boolean }?,
535
536   ## default value: false
537   attribute consecutive { xsd:boolean }?,
538
539   ## default value: doubleQuote
540   attribute qualifier { sml_ST_Qualifier }?,
541   attribute delimiter { s_ST_Xstring }?,
542   element textFields { sml_CT_TextFields }?
543 sml_ST_FileType =
544     string "mac"
545     | string "win"
546     | string "dos"
547     | string "lin"
548     | string "other"
549 sml_ST_Qualifier =
550     string "doubleQuote" | string "singleQuote" | string "none"
551 sml_CT_TextFields =
552
553     ## default value: 1
554     attribute count { xsd:unsignedInt }?,
555     element textField { sml_CT_TextField }+
556 sml_CT_TextField =
557
558     ## default value: general
559     attribute type { sml_ST_ExternalConnectionType }?,
560
561     ## default value: 0
562     attribute position { xsd:unsignedInt }?
563 sml_ST_ExternalConnectionType =
564     string "general"
565     | string "text"
566     | string "MDY"
567     | string "DMY"
568     | string "YMD"
569     | string "MYD"

```

```

570 | string "DYM"
571 | string "YDM"
572 | string "skip"
573 | string "EMD"
574 sml_pivotCacheDefinition =
575     element pivotCacheDefinition { sml_CT_PivotCacheDefinition }
576 sml_pivotCacheRecords =
577     element pivotCacheRecords { sml_CT_PivotCacheRecords }
578 sml_pivotTableDefinition =
579     element pivotTableDefinition { sml_CT_pivotTableDefinition }
580 sml_CT_PivotCacheDefinition =
581     r_id?,
582
583     ## default value: false
584     attribute invalid { xsd:boolean }?,
585
586     ## default value: true
587     attribute saveData { xsd:boolean }?,
588
589     ## default value: false
590     attribute refreshOnLoad { xsd:boolean }?,
591
592     ## default value: false
593     attribute optimizeMemory { xsd:boolean }?,
594
595     ## default value: true
596     attribute enableRefresh { xsd:boolean }?,
597     attribute refreshedBy { s_ST_Xstring }?,
598     attribute refreshedDate { xsd:double }?,
599     attribute refreshedDateIso { xsd:dateTime }?,
600
601     ## default value: false
602     attribute backgroundQuery { xsd:boolean }?,
603     attribute missingItemsLimit { xsd:unsignedInt }?,
604
605     ## default value: 0
606     attribute createdVersion { xsd:unsignedByte }?,
607
608     ## default value: 0
609     attribute refreshedVersion { xsd:unsignedByte }?,
610
611     ## default value: 0
612     attribute minRefreshableVersion { xsd:unsignedByte }?,
613     attribute recordCount { xsd:unsignedInt }?,
614
615     ## default value: false
616     attribute upgradeOnRefresh { xsd:boolean }?,
617
618     ## default value: false
619     attribute tupleCache { xsd:boolean }?,
620
621     ## default value: false
622     attribute supportSubquery { xsd:boolean }?,

```

```

623
624   ## default value: false
625   attribute supportAdvancedDrill { xsd:boolean }?,
626   element cacheSource { sml_CT_CacheSource },
627   element cacheFields { sml_CT_CacheFields },
628   element cacheHierarchies { sml_CT_CacheHierarchies }?,
629   element kpis { sml_CT_PCDKPIs }?,
630   element tupleCache { sml_CT_TupleCache }?,
631   element calculatedItems { sml_CT_CalculatedItems }?,
632   element calculatedMembers { sml_CT_CalculatedMembers }?,
633   element dimensions { sml_CT_Dimensions }?,
634   element measureGroups { sml_CT_MeasureGroups }?,
635   element maps { sml_CT_MeasureDimensionMaps }?,
636   element extLst { sml_CT_ExtensionList }?
637 sml_CT_CacheFields =
638   attribute count { xsd:unsignedInt }?,
639   element cacheField { sml_CT_CacheField }*
640 sml_CT_CacheField =
641   attribute name { s_ST_Xstring },
642   attribute caption { s_ST_Xstring }?,
643   attribute propertyName { s_ST_Xstring }?,
644
645   ## default value: false
646   attribute serverField { xsd:boolean }?,
647
648   ## default value: true
649   attribute uniqueList { xsd:boolean }?,
650   attribute numFmtId { sml_ST_NumFmtId }?,
651   attribute formula { s_ST_Xstring }?,
652
653   ## default value: 0
654   attribute sqlType { xsd:int }?,
655
656   ## default value: 0
657   attribute hierarchy { xsd:int }?,
658
659   ## default value: 0
660   attribute level { xsd:unsignedInt }?,
661
662   ## default value: true
663   attribute databaseField { xsd:boolean }?,
664   attribute mappingCount { xsd:unsignedInt }?,
665
666   ## default value: false
667   attribute memberPropertyField { xsd:boolean }?,
668   element sharedItems { sml_CT_SharedItems }?,
669   element fieldGroup { sml_CT_FieldGroup }?,
670   element mpMap { sml_CT_X }*,
671   element extLst { sml_CT_ExtensionList }?
672 sml_CT_CacheSource =
673   attribute type { sml_ST_SourceType },
674
675   ## default value: 0

```

```

676     attribute connectionId { xsd:unsignedInt }?,
677     (element worksheetSource { sml_CT_WorksheetSource }
678       | element consolidation { sml_CT_Consolidation }
679       | element extLst { sml_CT_ExtensionList }?)?
680 sml_ST_SourceType =
681     string "worksheet"
682     | string "external"
683     | string "consolidation"
684     | string "scenario"
685 sml_CT_WorksheetSource =
686     attribute ref { sml_ST_Ref }?,
687     attribute name { s_ST_Xstring }?,
688     attribute sheet { s_ST_Xstring }?,
689     r_id?
690 sml_CT_Consolidation =
691
692     ## default value: true
693     attribute autoPage { xsd:boolean }?,
694     element pages { sml_CT_Pages }?,
695     element rangeSets { sml_CT_RangeSets }
696 sml_CT_Pages =
697     attribute count { xsd:unsignedInt }?,
698     element page { sml_CT_PCDSCPage }+
699 sml_CT_PCDSCPage =
700     attribute count { xsd:unsignedInt }?,
701     element pageItem { sml_CT_PageItem }*
702 sml_CT_PageItem = attribute name { s_ST_Xstring }
703 sml_CT_RangeSets =
704     attribute count { xsd:unsignedInt }?,
705     element rangeSet { sml_CT_RangeSet }+
706 sml_CT_RangeSet =
707     attribute i1 { xsd:unsignedInt }?,
708     attribute i2 { xsd:unsignedInt }?,
709     attribute i3 { xsd:unsignedInt }?,
710     attribute i4 { xsd:unsignedInt }?,
711     attribute ref { sml_ST_Ref }?,
712     attribute name { s_ST_Xstring }?,
713     attribute sheet { s_ST_Xstring }?,
714     r_id?
715 sml_CT_SharedItems =
716
717     ## default value: true
718     attribute containsSemiMixedTypes { xsd:boolean }?,
719
720     ## default value: true
721     attribute containsNonDate { xsd:boolean }?,
722
723     ## default value: false
724     attribute containsDate { xsd:boolean }?,
725
726     ## default value: true
727     attribute containsString { xsd:boolean }?,
728

```

```

729 ## default value: false
730 attribute containsBlank { xsd:boolean }?,
731
732 ## default value: false
733 attribute containsMixedTypes { xsd:boolean }?,
734
735 ## default value: false
736 attribute containsNumber { xsd:boolean }?,
737
738 ## default value: false
739 attribute containsInteger { xsd:boolean }?,
740 attribute minValue { xsd:double }?,
741 attribute maxValue { xsd:double }?,
742 attribute minDate { xsd:dateTime }?,
743 attribute maxDate { xsd:dateTime }?,
744 attribute count { xsd:unsignedInt }?,
745
746 ## default value: false
747 attribute longText { xsd:boolean }?,
748 (element m { sml_CT_Missing }
749   | element n { sml_CT_Number }
750   | element b { sml_CT_Boolean }
751   | element e { sml_CT_Error }
752   | element s { sml_CT_String }
753   | element d { sml_CT_DateTime })*
754 sml_CT_Missing =
755   attribute u { xsd:boolean }?,
756   attribute f { xsd:boolean }?,
757   attribute c { s_ST_Xstring }?,
758   attribute cp { xsd:unsignedInt }?,
759   attribute in { xsd:unsignedInt }?,
760   attribute bc { sml_ST_UnsignedIntHex }?,
761   attribute fc { sml_ST_UnsignedIntHex }?,
762
763 ## default value: false
764 attribute i { xsd:boolean }?,
765
766 ## default value: false
767 attribute un { xsd:boolean }?,
768
769 ## default value: false
770 attribute st { xsd:boolean }?,
771
772 ## default value: false
773 attribute b { xsd:boolean }?,
774 element tpls { sml_CT_Tuples }*,
775 element x { sml_CT_X }*
776 sml_CT_Number =
777   attribute v { xsd:double },
778   attribute u { xsd:boolean }?,
779   attribute f { xsd:boolean }?,
780   attribute c { s_ST_Xstring }?,
781   attribute cp { xsd:unsignedInt }?,

```



```

782 attribute in { xsd:unsignedInt }?,
783 attribute bc { sml_ST_UnsignedIntHex }?,
784 attribute fc { sml_ST_UnsignedIntHex }?,
785
786 ## default value: false
787 attribute i { xsd:boolean }?,
788
789 ## default value: false
790 attribute un { xsd:boolean }?,
791
792 ## default value: false
793 attribute st { xsd:boolean }?,
794
795 ## default value: false
796 attribute b { xsd:boolean }?,
797 element tpls { sml_CT_Tuples }*,
798 element x { sml_CT_X }*
799 sml_CT_Boolean =
800 attribute v { xsd:boolean },
801 attribute u { xsd:boolean }?,
802 attribute f { xsd:boolean }?,
803 attribute c { s_ST_Xstring }?,
804 attribute cp { xsd:unsignedInt }?,
805 element x { sml_CT_X }*
806 sml_CT_Error =
807 attribute v { s_ST_Xstring },
808 attribute u { xsd:boolean }?,
809 attribute f { xsd:boolean }?,
810 attribute c { s_ST_Xstring }?,
811 attribute cp { xsd:unsignedInt }?,
812 attribute in { xsd:unsignedInt }?,
813 attribute bc { sml_ST_UnsignedIntHex }?,
814 attribute fc { sml_ST_UnsignedIntHex }?,
815
816 ## default value: false
817 attribute i { xsd:boolean }?,
818
819 ## default value: false
820 attribute un { xsd:boolean }?,
821
822 ## default value: false
823 attribute st { xsd:boolean }?,
824
825 ## default value: false
826 attribute b { xsd:boolean }?,
827 element tpls { sml_CT_Tuples }?,
828 element x { sml_CT_X }*
829 sml_CT_String =
830 attribute v { s_ST_Xstring },
831 attribute u { xsd:boolean }?,
832 attribute f { xsd:boolean }?,
833 attribute c { s_ST_Xstring }?,
834 attribute cp { xsd:unsignedInt }?,

```

```

835 attribute in { xsd:unsignedInt }?,
836 attribute bc { sml_ST_UnsignedIntHex }?,
837 attribute fc { sml_ST_UnsignedIntHex }?,
838
839 ## default value: false
840 attribute i { xsd:boolean }?,
841
842 ## default value: false
843 attribute un { xsd:boolean }?,
844
845 ## default value: false
846 attribute st { xsd:boolean }?,
847
848 ## default value: false
849 attribute b { xsd:boolean }?,
850 element tpls { sml_CT_Tuples }*,
851 element x { sml_CT_X }*
852 sml_CT_DateTime =
853   attribute v { xsd:dateTime },
854   attribute u { xsd:boolean }?,
855   attribute f { xsd:boolean }?,
856   attribute c { s_ST_Xstring }?,
857   attribute cp { xsd:unsignedInt }?,
858   element x { sml_CT_X }*
859 sml_CT_FieldGroup =
860   attribute par { xsd:unsignedInt }?,
861   attribute base { xsd:unsignedInt }?,
862   element rangePr { sml_CT_RangePr }?,
863   element discretePr { sml_CT_DiscretePr }?,
864   element groupItems { sml_CT_GroupItems }?
865 sml_CT_RangePr =
866
867 ## default value: true
868 attribute autoStart { xsd:boolean }?,
869
870 ## default value: true
871 attribute autoEnd { xsd:boolean }?,
872
873 ## default value: range
874 attribute groupBy { sml_ST_GroupBy }?,
875 attribute startNum { xsd:double }?,
876 attribute endNum { xsd:double }?,
877 attribute startDate { xsd:dateTime }?,
878 attribute endDate { xsd:dateTime }?,
879
880 ## default value: 1
881 attribute groupInterval { xsd:double }?
882 sml_ST_GroupBy =
883   string "range"
884   | string "seconds"
885   | string "minutes"
886   | string "hours"
887   | string "days"

```

```

888 | string "months"
889 | string "quarters"
890 | string "years"
891 sml_CT_DiscretePr =
892   attribute count { xsd:unsignedInt }?,
893   element x { sml_CT_Index }+
894 sml_CT_GroupItems =
895   attribute count { xsd:unsignedInt }?,
896   (element m { sml_CT_Missing }
897     | element n { sml_CT_Number }
898     | element b { sml_CT_Boolean }
899     | element e { sml_CT_Error }
900     | element s { sml_CT_String }
901     | element d { sml_CT_DateTime })+
902 sml_CT_PivotCacheRecords =
903   attribute count { xsd:unsignedInt }?,
904   element r { sml_CT_Record }*,
905   element extLst { sml_CT_ExtensionList }?
906 sml_CT_Record =
907   (element m { sml_CT_Missing }
908     | element n { sml_CT_Number }
909     | element b { sml_CT_Boolean }
910     | element e { sml_CT_Error }
911     | element s { sml_CT_String }
912     | element d { sml_CT_DateTime }
913     | element x { sml_CT_Index })+
914 sml_CT_PCDKPIs =
915   attribute count { xsd:unsignedInt }?,
916   element kpi { sml_CT_PCDKPI }*
917 sml_CT_PCDKPI =
918   attribute uniqueName { s_ST_Xstring },
919   attribute caption { s_ST_Xstring }?,
920   attribute displayFolder { s_ST_Xstring }?,
921   attribute measureGroup { s_ST_Xstring }?,
922   attribute parent { s_ST_Xstring }?,
923   attribute value { s_ST_Xstring },
924   attribute goal { s_ST_Xstring }?,
925   attribute status { s_ST_Xstring }?,
926   attribute trend { s_ST_Xstring }?,
927   attribute weight { s_ST_Xstring }?,
928   attribute time { s_ST_Xstring }?
929 sml_CT_CacheHierarchies =
930   attribute count { xsd:unsignedInt }?,
931   element cacheHierarchy { sml_CT_CacheHierarchy }*
932 sml_CT_CacheHierarchy =
933   attribute uniqueName { s_ST_Xstring },
934   attribute caption { s_ST_Xstring }?,
935
936   ## default value: false
937   attribute measure { xsd:boolean }?,
938
939   ## default value: false
940   attribute set { xsd:boolean }?,

```

```

941 attribute parentSet { xsd:unsignedInt }?,
942
943 ## default value: 0
944 attribute iconSet { xsd:int }?,
945
946 ## default value: false
947 attribute attribute { xsd:boolean }?,
948
949 ## default value: false
950 attribute time { xsd:boolean }?,
951
952 ## default value: false
953 attribute keyAttribute { xsd:boolean }?,
954 attribute defaultMemberUniqueName { s_ST_Xstring }?,
955 attribute allUniqueName { s_ST_Xstring }?,
956 attribute allCaption { s_ST_Xstring }?,
957 attribute dimensionUniqueName { s_ST_Xstring }?,
958 attribute displayFolder { s_ST_Xstring }?,
959 attribute measureGroup { s_ST_Xstring }?,
960
961 ## default value: false
962 attribute measures { xsd:boolean }?,
963 attribute count { xsd:unsignedInt },
964
965 ## default value: false
966 attribute oneField { xsd:boolean }?,
967 attribute memberValueDatatype { xsd:unsignedShort }?,
968 attribute unbalanced { xsd:boolean }?,
969 attribute unbalancedGroup { xsd:boolean }?,
970
971 ## default value: false
972 attribute hidden { xsd:boolean }?,
973 element fieldsUsage { sml_CT_FieldsUsage }?,
974 element groupLevels { sml_CT_GroupLevels }?,
975 element extLst { sml_CT_ExtensionList }?
976 sml_CT_FieldsUsage =
977     attribute count { xsd:unsignedInt }?,
978     element fieldUsage { sml_CT_FieldUsage }*
979 sml_CT_FieldUsage = attribute x { xsd:int }
980 sml_CT_GroupLevels =
981     attribute count { xsd:unsignedInt }?,
982     element groupLevel { sml_CT_GroupLevel }+
983 sml_CT_GroupLevel =
984     attribute uniqueName { s_ST_Xstring },
985     attribute caption { s_ST_Xstring },
986
987 ## default value: false
988 attribute user { xsd:boolean }?,
989
990 ## default value: false
991 attribute customRollUp { xsd:boolean }?,
992 element groups { sml_CT_Groups }?,
993 element extLst { sml_CT_ExtensionList }?

```

```

994 sml_CT_Groups =
995     attribute count { xsd:unsignedInt }?,
996     element group { sml_CT_LevelGroup }+
997 sml_CT_LevelGroup =
998     attribute name { s_ST_Xstring },
999     attribute uniqueName { s_ST_Xstring },
1000     attribute caption { s_ST_Xstring },
1001     attribute uniqueParent { s_ST_Xstring }?,
1002     attribute id { xsd:int }?,
1003     element groupMembers { sml_CT_GroupMembers }
1004 sml_CT_GroupMembers =
1005     attribute count { xsd:unsignedInt }?,
1006     element groupMember { sml_CT_GroupMember }+
1007 sml_CT_GroupMember =
1008     attribute uniqueName { s_ST_Xstring },
1009
1010     ## default value: false
1011     attribute group { xsd:boolean }?
1012 sml_CT_TupleCache =
1013     element entries { sml_CT_PCDSDTCEntries }?,
1014     element sets { sml_CT_Sets }?,
1015     element queryCache { sml_CT_QueryCache }?,
1016     element serverFormats { sml_CT_ServerFormats }?,
1017     element extLst { sml_CT_ExtensionList }?
1018 sml_CT_ServerFormat =
1019     attribute culture { s_ST_Xstring }?,
1020     attribute format { s_ST_Xstring }?
1021 sml_CT_ServerFormats =
1022     attribute count { xsd:unsignedInt }?,
1023     element serverFormat { sml_CT_ServerFormat }*
1024 sml_CT_PCDSDTCEntries =
1025     attribute count { xsd:unsignedInt }?,
1026     (element m { sml_CT_Missing }
1027      | element n { sml_CT_Number }
1028      | element e { sml_CT_Error }
1029      | element s { sml_CT_String })+
1030 sml_CT_Tuples =
1031     attribute c { xsd:unsignedInt }?,
1032     element tpl { sml_CT_Tuple }+
1033 sml_CT_Tuple =
1034     attribute fld { xsd:unsignedInt }?,
1035     attribute hier { xsd:unsignedInt }?,
1036     attribute item { xsd:unsignedInt }
1037 sml_CT_Sets =
1038     attribute count { xsd:unsignedInt }?,
1039     element set { sml_CT_Set }+
1040 sml_CT_Set =
1041     attribute count { xsd:unsignedInt }?,
1042     attribute maxRank { xsd:int },
1043     attribute setDefinition { s_ST_Xstring },
1044
1045     ## default value: none
1046     attribute sortType { sml_ST_SortType }?,

```

```

1047
1048     ## default value: false
1049     attribute queryFailed { xsd:boolean }?,
1050     element tpls { sml_CT_Tuples }*,
1051     element sortByTuple { sml_CT_Tuples }?
1052 sml_ST_SortType =
1053     string "none"
1054     | string "ascending"
1055     | string "descending"
1056     | string "ascendingAlpha"
1057     | string "descendingAlpha"
1058     | string "ascendingNatural"
1059     | string "descendingNatural"
1060 sml_CT_QueryCache =
1061     attribute count { xsd:unsignedInt }?,
1062     element query { sml_CT_Query }+
1063 sml_CT_Query =
1064     attribute mdx { s_ST_Xstring },
1065     element tpls { sml_CT_Tuples }?
1066 sml_CT_CalculatedItems =
1067     attribute count { xsd:unsignedInt }?,
1068     element calculatedItem { sml_CT_CalculatedItem }+
1069 sml_CT_CalculatedItem =
1070     attribute field { xsd:unsignedInt }?,
1071     attribute formula { s_ST_Xstring }?,
1072     element pivotArea { sml_CT_PivotArea },
1073     element extLst { sml_CT_ExtensionList }?
1074 sml_CT_CalculatedMembers =
1075     attribute count { xsd:unsignedInt }?,
1076     element calculatedMember { sml_CT_CalculatedMember }+
1077 sml_CT_CalculatedMember =
1078     attribute name { s_ST_Xstring },
1079     attribute mdx { s_ST_Xstring },
1080     attribute memberName { s_ST_Xstring }?,
1081     attribute hierarchy { s_ST_Xstring }?,
1082     attribute parent { s_ST_Xstring }?,
1083
1084     ## default value: 0
1085     attribute solveOrder { xsd:int }?,
1086
1087     ## default value: false
1088     attribute set { xsd:boolean }?,
1089     element extLst { sml_CT_ExtensionList }?
1090 sml_CT_pivotTableDefinition =
1091     attribute name { s_ST_Xstring },
1092     attribute cacheId { xsd:unsignedInt },
1093
1094     ## default value: false
1095     attribute dataOnRows { xsd:boolean }?,
1096     attribute dataPosition { xsd:unsignedInt }?,
1097     sml_AG_AutoFormat,
1098     attribute dataCaption { s_ST_Xstring },
1099     attribute grandTotalCaption { s_ST_Xstring }?,

```

```

1100 attribute errorCaption { s_ST_Xstring }?,
1101
1102 ## default value: false
1103 attribute showError { xsd:boolean }?,
1104 attribute missingCaption { s_ST_Xstring }?,
1105
1106 ## default value: true
1107 attribute showMissing { xsd:boolean }?,
1108 attribute pageStyle { s_ST_Xstring }?,
1109 attribute pivotTableStyle { s_ST_Xstring }?,
1110 attribute vacatedStyle { s_ST_Xstring }?,
1111 attribute tag { s_ST_Xstring }?,
1112
1113 ## default value: 0
1114 attribute updatedVersion { xsd:unsignedByte }?,
1115
1116 ## default value: 0
1117 attribute minRefreshableVersion { xsd:unsignedByte }?,
1118
1119 ## default value: false
1120 attribute asteriskTotals { xsd:boolean }?,
1121
1122 ## default value: true
1123 attribute showItems { xsd:boolean }?,
1124
1125 ## default value: false
1126 attribute editData { xsd:boolean }?,
1127
1128 ## default value: false
1129 attribute disableFieldList { xsd:boolean }?,
1130
1131 ## default value: true
1132 attribute showCalcMbrs { xsd:boolean }?,
1133
1134 ## default value: true
1135 attribute visualTotals { xsd:boolean }?,
1136
1137 ## default value: true
1138 attribute showMultipleLabel { xsd:boolean }?,
1139
1140 ## default value: true
1141 attribute showDataDropDown { xsd:boolean }?,
1142
1143 ## default value: true
1144 attribute showDrill { xsd:boolean }?,
1145
1146 ## default value: false
1147 attribute printDrill { xsd:boolean }?,
1148
1149 ## default value: true
1150 attribute showMemberPropertyTips { xsd:boolean }?,
1151
1152 ## default value: true

```

```

1153 attribute showDataTips { xsd:boolean }?,
1154
1155 ## default value: true
1156 attribute enableWizard { xsd:boolean }?,
1157
1158 ## default value: true
1159 attribute enableDrill { xsd:boolean }?,
1160
1161 ## default value: true
1162 attribute enableFieldProperties { xsd:boolean }?,
1163
1164 ## default value: true
1165 attribute preserveFormatting { xsd:boolean }?,
1166
1167 ## default value: false
1168 attribute useAutoFormatting { xsd:boolean }?,
1169
1170 ## default value: 0
1171 attribute pageWrap { xsd:unsignedInt }?,
1172
1173 ## default value: false
1174 attribute pageOverThenDown { xsd:boolean }?,
1175
1176 ## default value: false
1177 attribute subtotalHiddenItems { xsd:boolean }?,
1178
1179 ## default value: true
1180 attribute rowGrandTotals { xsd:boolean }?,
1181
1182 ## default value: true
1183 attribute colGrandTotals { xsd:boolean }?,
1184
1185 ## default value: false
1186 attribute fieldPrintTitles { xsd:boolean }?,
1187
1188 ## default value: false
1189 attribute itemPrintTitles { xsd:boolean }?,
1190
1191 ## default value: false
1192 attribute mergeItem { xsd:boolean }?,
1193
1194 ## default value: true
1195 attribute showDropZones { xsd:boolean }?,
1196
1197 ## default value: 0
1198 attribute createdVersion { xsd:unsignedByte }?,
1199
1200 ## default value: 1
1201 attribute indent { xsd:unsignedInt }?,
1202
1203 ## default value: false
1204 attribute showEmptyRow { xsd:boolean }?,
1205

```



```

1206 ## default value: false
1207 attribute showEmptyCol { xsd:boolean }?,
1208
1209 ## default value: true
1210 attribute showHeaders { xsd:boolean }?,
1211
1212 ## default value: true
1213 attribute compact { xsd:boolean }?,
1214
1215 ## default value: false
1216 attribute outline { xsd:boolean }?,
1217
1218 ## default value: false
1219 attribute outlineData { xsd:boolean }?,
1220
1221 ## default value: true
1222 attribute compactData { xsd:boolean }?,
1223
1224 ## default value: false
1225 attribute published { xsd:boolean }?,
1226
1227 ## default value: false
1228 attribute gridDropZones { xsd:boolean }?,
1229
1230 ## default value: true
1231 attribute immersive { xsd:boolean }?,
1232
1233 ## default value: true
1234 attribute multipleFieldFilters { xsd:boolean }?,
1235
1236 ## default value: 0
1237 attribute chartFormat { xsd:unsignedInt }?,
1238 attribute rowHeaderCaption { s_ST_Xstring }?,
1239 attribute colHeaderCaption { s_ST_Xstring }?,
1240
1241 ## default value: false
1242 attribute fieldListSortAscending { xsd:boolean }?,
1243
1244 ## default value: false
1245 attribute mdxSubqueries { xsd:boolean }?,
1246
1247 ## default value: true
1248 attribute customListSort { xsd:boolean }?,
1249 element location { sml_CT_Location },
1250 element pivotFields { sml_CT_PivotFields }?,
1251 element rowFields { sml_CT_RowFields }?,
1252 element rowItems { sml_CT_rowItems }?,
1253 element colFields { sml_CT_ColFields }?,
1254 element colItems { sml_CT_colItems }?,
1255 element pageFields { sml_CT_PageFields }?,
1256 element dataFields { sml_CT_DataFields }?,
1257 element formats { sml_CT_Formats }?,
1258 element conditionalFormats { sml_CT_ConditionalFormats }?,

```

```

1259     element chartFormats { sml_CT_ChartFormats }?,
1260     element pivotHierarchies { sml_CT_PivotHierarchies }?,
1261     element pivotTableStyleInfo { sml_CT_PivotTableStyle }?,
1262     element filters { sml_CT_PivotFilters }?,
1263     element rowHierarchiesUsage { sml_CT_RowHierarchiesUsage }?,
1264     element colHierarchiesUsage { sml_CT_ColHierarchiesUsage }?,
1265     element extLst { sml_CT_ExtensionList }?
1266 sml_CT_Location =
1267     attribute ref { sml_ST_Ref },
1268     attribute firstHeaderRow { xsd:unsignedInt },
1269     attribute firstDataRow { xsd:unsignedInt },
1270     attribute firstDataCol { xsd:unsignedInt },
1271
1272     ## default value: 0
1273     attribute rowPageCount { xsd:unsignedInt }?,
1274
1275     ## default value: 0
1276     attribute colPageCount { xsd:unsignedInt }?
1277 sml_CT_PivotFields =
1278     attribute count { xsd:unsignedInt }?,
1279     element pivotField { sml_CT_PivotField }+
1280 sml_CT_PivotField =
1281     attribute name { s_ST_Xstring }?,
1282     attribute axis { sml_ST_Axis }?,
1283
1284     ## default value: false
1285     attribute dataField { xsd:boolean }?,
1286     attribute subtotalCaption { s_ST_Xstring }?,
1287
1288     ## default value: true
1289     attribute showDropDowns { xsd:boolean }?,
1290
1291     ## default value: false
1292     attribute hiddenLevel { xsd:boolean }?,
1293     attribute uniqueMemberProperty { s_ST_Xstring }?,
1294
1295     ## default value: true
1296     attribute compact { xsd:boolean }?,
1297
1298     ## default value: false
1299     attribute allDrilled { xsd:boolean }?,
1300     attribute numFmtId { sml_ST_NumFmtId }?,
1301
1302     ## default value: true
1303     attribute outline { xsd:boolean }?,
1304
1305     ## default value: true
1306     attribute subtotalTop { xsd:boolean }?,
1307
1308     ## default value: true
1309     attribute dragToRow { xsd:boolean }?,
1310
1311     ## default value: true

```

```

1312 attribute dragToCol { xsd:boolean }?,
1313
1314 ## default value: false
1315 attribute multipleItemSelectionAllowed { xsd:boolean }?,
1316
1317 ## default value: true
1318 attribute dragToPage { xsd:boolean }?,
1319
1320 ## default value: true
1321 attribute dragToData { xsd:boolean }?,
1322
1323 ## default value: true
1324 attribute dragOff { xsd:boolean }?,
1325
1326 ## default value: true
1327 attribute showAll { xsd:boolean }?,
1328
1329 ## default value: false
1330 attribute insertBlankRow { xsd:boolean }?,
1331
1332 ## default value: false
1333 attribute serverField { xsd:boolean }?,
1334
1335 ## default value: false
1336 attribute insertPageBreak { xsd:boolean }?,
1337
1338 ## default value: false
1339 attribute autoShow { xsd:boolean }?,
1340
1341 ## default value: true
1342 attribute topAutoShow { xsd:boolean }?,
1343
1344 ## default value: false
1345 attribute hideNewItems { xsd:boolean }?,
1346
1347 ## default value: false
1348 attribute measureFilter { xsd:boolean }?,
1349
1350 ## default value: false
1351 attribute includeNewItemsInFilter { xsd:boolean }?,
1352
1353 ## default value: 10
1354 attribute itemPageCount { xsd:unsignedInt }?,
1355
1356 ## default value: manual
1357 attribute sortType { sml_ST_FieldSortType }?,
1358 attribute dataSourceSort { xsd:boolean }?,
1359
1360 ## default value: false
1361 attribute nonAutoSortDefault { xsd:boolean }?,
1362 attribute rankBy { xsd:unsignedInt }?,
1363
1364 ## default value: true

```

```

1365     attribute defaultSubtotal { xsd:boolean }?,
1366
1367     ## default value: false
1368     attribute sumSubtotal { xsd:boolean }?,
1369
1370     ## default value: false
1371     attribute countASubtotal { xsd:boolean }?,
1372
1373     ## default value: false
1374     attribute avgSubtotal { xsd:boolean }?,
1375
1376     ## default value: false
1377     attribute maxSubtotal { xsd:boolean }?,
1378
1379     ## default value: false
1380     attribute minSubtotal { xsd:boolean }?,
1381
1382     ## default value: false
1383     attribute productSubtotal { xsd:boolean }?,
1384
1385     ## default value: false
1386     attribute countSubtotal { xsd:boolean }?,
1387
1388     ## default value: false
1389     attribute stdDevSubtotal { xsd:boolean }?,
1390
1391     ## default value: false
1392     attribute stdDevPSubtotal { xsd:boolean }?,
1393
1394     ## default value: false
1395     attribute varSubtotal { xsd:boolean }?,
1396
1397     ## default value: false
1398     attribute varPSubtotal { xsd:boolean }?,
1399
1400     ## default value: false
1401     attribute showPropCell { xsd:boolean }?,
1402
1403     ## default value: false
1404     attribute showPropTip { xsd:boolean }?,
1405
1406     ## default value: false
1407     attribute showPropAsCaption { xsd:boolean }?,
1408
1409     ## default value: false
1410     attribute defaultAttributeDrillState { xsd:boolean }?,
1411     element items { sml_CT_Items }?,
1412     element autoSortScope { sml_CT_AutoSortScope }?,
1413     element extLst { sml_CT_ExtensionList }?
1414 sml_CT_AutoSortScope = element pivotArea { sml_CT_PivotArea }
1415 sml_CT_Items =
1416     attribute count { xsd:unsignedInt }?,
1417     element item { sml_CT_Item }+

```

```

1418 sml_CT_Item =
1419     attribute n { s_ST_Xstring }?,
1420
1421     ## default value: data
1422     attribute t { sml_ST_ItemType }?,
1423
1424     ## default value: false
1425     attribute h { xsd:boolean }?,
1426
1427     ## default value: false
1428     attribute s { xsd:boolean }?,
1429
1430     ## default value: true
1431     attribute sd { xsd:boolean }?,
1432
1433     ## default value: false
1434     attribute f { xsd:boolean }?,
1435
1436     ## default value: false
1437     attribute m { xsd:boolean }?,
1438
1439     ## default value: false
1440     attribute c { xsd:boolean }?,
1441     attribute x { xsd:unsignedInt }?,
1442
1443     ## default value: false
1444     attribute d { xsd:boolean }?,
1445
1446     ## default value: true
1447     attribute e { xsd:boolean }?
1448 sml_CT_PageFields =
1449     attribute count { xsd:unsignedInt }?,
1450     element pageField { sml_CT_PageField }+
1451 sml_CT_PageField =
1452     attribute fld { xsd:int },
1453     attribute item { xsd:unsignedInt }?,
1454     attribute hier { xsd:int }?,
1455     attribute name { s_ST_Xstring }?,
1456     attribute cap { s_ST_Xstring }?,
1457     element extLst { sml_CT_ExtensionList }?
1458 sml_CT_DataFields =
1459     attribute count { xsd:unsignedInt }?,
1460     element dataField { sml_CT_DataField }+
1461 sml_CT_DataField =
1462     attribute name { s_ST_Xstring }?,
1463     attribute fld { xsd:unsignedInt },
1464
1465     ## default value: sum
1466     attribute subtotal { sml_ST_DataConsolidateFunction }?,
1467
1468     ## default value: normal
1469     attribute showDataAs { sml_ST_ShowDataAs }?,
1470

```

```

1471  ## default value: -1
1472  attribute baseField { xsd:int }?,
1473
1474  ## default value: 1048832
1475  attribute baseItem { xsd:unsignedInt }?,
1476  attribute numFmtId { sml_ST_NumFmtId }?,
1477  element extLst { sml_CT_ExtensionList }?
1478 sml_CT_rowItems =
1479   attribute count { xsd:unsignedInt }?,
1480   element i { sml_CT_I }+
1481 sml_CT_colItems =
1482   attribute count { xsd:unsignedInt }?,
1483   element i { sml_CT_I }+
1484 sml_CT_I =
1485
1486  ## default value: data
1487  attribute t { sml_ST_ItemType }?,
1488
1489  ## default value: 0
1490  attribute r { xsd:unsignedInt }?,
1491
1492  ## default value: 0
1493  attribute i { xsd:unsignedInt }?,
1494  element x { sml_CT_X }*
1495 sml_CT_X =
1496
1497  ## default value: 0
1498  attribute v { xsd:int }?
1499 sml_CT_RowFields =
1500
1501  ## default value: 0
1502  attribute count { xsd:unsignedInt }?,
1503  element field { sml_CT_Field }+
1504 sml_CT_ColFields =
1505
1506  ## default value: 0
1507  attribute count { xsd:unsignedInt }?,
1508  element field { sml_CT_Field }+
1509 sml_CT_Field = attribute x { xsd:int }
1510 sml_CT_Formats =
1511
1512  ## default value: 0
1513  attribute count { xsd:unsignedInt }?,
1514  element format { sml_CT_Format }+
1515 sml_CT_Format =
1516
1517  ## default value: formatting
1518  attribute action { sml_ST_FormatAction }?,
1519  attribute dxId { sml_ST_DxfId }?,
1520  element pivotArea { sml_CT_PivotArea },
1521  element extLst { sml_CT_ExtensionList }?
1522 sml_CT_ConditionalFormats =
1523

```

```

1524  ## default value: 0
1525  attribute count { xsd:unsignedInt }?,
1526  element conditionalFormat { sml_CT_ConditionalFormat }+
1527  sml_CT_ConditionalFormat =
1528
1529  ## default value: selection
1530  attribute scope { sml_ST_Scope }?,
1531
1532  ## default value: none
1533  attribute type { sml_ST_Type }?,
1534  attribute priority { xsd:unsignedInt },
1535  element pivotAreas { sml_CT_PivotAreas },
1536  element extLst { sml_CT_ExtensionList }?
1537  sml_CT_PivotAreas =
1538  attribute count { xsd:unsignedInt }?,
1539  element pivotArea { sml_CT_PivotArea }*
1540  sml_ST_Scope = string "selection" | string "data" | string "field"
1541  sml_ST_Type =
1542  string "none" | string "all" | string "row" | string "column"
1543  sml_CT_ChartFormats =
1544
1545  ## default value: 0
1546  attribute count { xsd:unsignedInt }?,
1547  element chartFormat { sml_CT_ChartFormat }+
1548  sml_CT_ChartFormat =
1549  attribute chart { xsd:unsignedInt },
1550  attribute format { xsd:unsignedInt },
1551
1552  ## default value: false
1553  attribute series { xsd:boolean }?,
1554  element pivotArea { sml_CT_PivotArea }
1555  sml_CT_PivotHierarchies =
1556  attribute count { xsd:unsignedInt }?,
1557  element pivotHierarchy { sml_CT_PivotHierarchy }+
1558  sml_CT_PivotHierarchy =
1559
1560  ## default value: false
1561  attribute outline { xsd:boolean }?,
1562
1563  ## default value: false
1564  attribute multipleItemSelectionAllowed { xsd:boolean }?,
1565
1566  ## default value: false
1567  attribute subtotalTop { xsd:boolean }?,
1568
1569  ## default value: true
1570  attribute showInFieldList { xsd:boolean }?,
1571
1572  ## default value: true
1573  attribute dragToRow { xsd:boolean }?,
1574
1575  ## default value: true
1576  attribute dragToCol { xsd:boolean }?,

```

```

1577
1578   ## default value: true
1579   attribute dragToPage { xsd:boolean }?,
1580
1581   ## default value: false
1582   attribute dragToData { xsd:boolean }?,
1583
1584   ## default value: true
1585   attribute dragOff { xsd:boolean }?,
1586
1587   ## default value: false
1588   attribute includeNewItemInFilter { xsd:boolean }?,
1589   attribute caption { s_ST_Xstring }?,
1590   element mps { sml_CT_MemberProperties }?,
1591   element members { sml_CT_Members }*,
1592   element extLst { sml_CT_ExtensionList }?
1593 sml_CT_RowHierarchiesUsage =
1594   attribute count { xsd:unsignedInt }?,
1595   element rowHierarchyUsage { sml_CT_HierarchyUsage }+
1596 sml_CT_ColHierarchiesUsage =
1597   attribute count { xsd:unsignedInt }?,
1598   element colHierarchyUsage { sml_CT_HierarchyUsage }+
1599 sml_CT_HierarchyUsage = attribute hierarchyUsage { xsd:int }
1600 sml_CT_MemberProperties =
1601   attribute count { xsd:unsignedInt }?,
1602   element mp { sml_CT_MemberProperty }+
1603 sml_CT_MemberProperty =
1604   attribute name { s_ST_Xstring }?,
1605
1606   ## default value: false
1607   attribute showCell { xsd:boolean }?,
1608
1609   ## default value: false
1610   attribute showTip { xsd:boolean }?,
1611
1612   ## default value: false
1613   attribute showAsCaption { xsd:boolean }?,
1614   attribute nameLen { xsd:unsignedInt }?,
1615   attribute pPos { xsd:unsignedInt }?,
1616   attribute pLen { xsd:unsignedInt }?,
1617   attribute level { xsd:unsignedInt }?,
1618   attribute field { xsd:unsignedInt }
1619 sml_CT_Members =
1620   attribute count { xsd:unsignedInt }?,
1621   attribute level { xsd:unsignedInt }?,
1622   element member { sml_CT_Member }+
1623 sml_CT_Member = attribute name { s_ST_Xstring }
1624 sml_CT_Dimensions =
1625   attribute count { xsd:unsignedInt }?,
1626   element dimension { sml_CT_PivotDimension }*
1627 sml_CT_PivotDimension =
1628
1629   ## default value: false

```



```

1630     attribute measure { xsd:boolean }?,
1631     attribute name { s_ST_Xstring },
1632     attribute uniqueName { s_ST_Xstring },
1633     attribute caption { s_ST_Xstring }
1634 sml_CT_MeasureGroups =
1635     attribute count { xsd:unsignedInt }?,
1636     element measureGroup { sml_CT_MeasureGroup }*
1637 sml_CT_MeasureDimensionMaps =
1638     attribute count { xsd:unsignedInt }?,
1639     element map { sml_CT_MeasureDimensionMap }*
1640 sml_CT_MeasureGroup =
1641     attribute name { s_ST_Xstring },
1642     attribute caption { s_ST_Xstring }
1643 sml_CT_MeasureDimensionMap =
1644     attribute measureGroup { xsd:unsignedInt }?,
1645     attribute dimension { xsd:unsignedInt }?
1646 sml_CT_PivotTableStyle =
1647     attribute name { xsd:string }?,
1648     attribute showRowHeaders { xsd:boolean }?,
1649     attribute showColHeaders { xsd:boolean }?,
1650     attribute showRowStripes { xsd:boolean }?,
1651     attribute showColStripes { xsd:boolean }?,
1652     attribute showLastColumn { xsd:boolean }?
1653 sml_CT_PivotFilters =
1654
1655     ## default value: 0
1656     attribute count { xsd:unsignedInt }?,
1657     element filter { sml_CT_PivotFilter }*
1658 sml_CT_PivotFilter =
1659     attribute fld { xsd:unsignedInt },
1660     attribute mpFld { xsd:unsignedInt }?,
1661     attribute type { sml_ST_PivotFilterType },
1662
1663     ## default value: 0
1664     attribute evalOrder { xsd:int }?,
1665     attribute id { xsd:unsignedInt },
1666     attribute iMeasureHier { xsd:unsignedInt }?,
1667     attribute iMeasureFld { xsd:unsignedInt }?,
1668     attribute name { s_ST_Xstring }?,
1669     attribute description { s_ST_Xstring }?,
1670     attribute stringValue1 { s_ST_Xstring }?,
1671     attribute stringValue2 { s_ST_Xstring }?,
1672     element autoFilter { sml_CT_AutoFilter },
1673     element extLst { sml_CT_ExtensionList }?
1674 sml_ST_ShowDataAs =
1675     string "normal"
1676     | string "difference"
1677     | string "percent"
1678     | string "percentDiff"
1679     | string "runTotal"
1680     | string "percentOfRow"
1681     | string "percentOfCol"
1682     | string "percentOfTotal"

```

```

1683 | string "index"
1684 sml_ST_ItemType =
1685     string "data"
1686     | string "default"
1687     | string "sum"
1688     | string "countA"
1689     | string "avg"
1690     | string "max"
1691     | string "min"
1692     | string "product"
1693     | string "count"
1694     | string "stdDev"
1695     | string "stdDevP"
1696     | string "var"
1697     | string "varP"
1698     | string "grand"
1699     | string "blank"
1700 sml_ST_FormatAction =
1701     string "blank"
1702     | string "formatting"
1703     | string "drill"
1704     | string "formula"
1705 sml_ST_FieldSortType =
1706     string "manual" | string "ascending" | string "descending"
1707 sml_ST_PivotFilterType =
1708     string "unknown"
1709     | string "count"
1710     | string "percent"
1711     | string "sum"
1712     | string "captionEqual"
1713     | string "captionNotEqual"
1714     | string "captionBeginsWith"
1715     | string "captionNotBeginsWith"
1716     | string "captionEndsWith"
1717     | string "captionNotEndsWith"
1718     | string "captionContains"
1719     | string "captionNotContains"
1720     | string "captionGreaterThan"
1721     | string "captionGreaterThanOrEqual"
1722     | string "captionLessThan"
1723     | string "captionLessThanOrEqual"
1724     | string "captionBetween"
1725     | string "captionNotBetween"
1726     | string "valueEqual"
1727     | string "valueNotEqual"
1728     | string "valueGreaterThan"
1729     | string "valueGreaterThanOrEqual"
1730     | string "valueLessThan"
1731     | string "valueLessThanOrEqual"
1732     | string "valueBetween"
1733     | string "valueNotBetween"
1734     | string "dateEqual"
1735     | string "dateNotEqual"

```

```

1736 | string "dateOlderThan"
1737 | string "dateOlderThanOrEqual"
1738 | string "dateNewerThan"
1739 | string "dateNewerThanOrEqual"
1740 | string "dateBetween"
1741 | string "dateNotBetween"
1742 | string "tomorrow"
1743 | string "today"
1744 | string "yesterday"
1745 | string "nextWeek"
1746 | string "thisWeek"
1747 | string "lastWeek"
1748 | string "nextMonth"
1749 | string "thisMonth"
1750 | string "lastMonth"
1751 | string "nextQuarter"
1752 | string "thisQuarter"
1753 | string "lastQuarter"
1754 | string "nextYear"
1755 | string "thisYear"
1756 | string "lastYear"
1757 | string "yearToDate"
1758 | string "Q1"
1759 | string "Q2"
1760 | string "Q3"
1761 | string "Q4"
1762 | string "M1"
1763 | string "M2"
1764 | string "M3"
1765 | string "M4"
1766 | string "M5"
1767 | string "M6"
1768 | string "M7"
1769 | string "M8"
1770 | string "M9"
1771 | string "M10"
1772 | string "M11"
1773 | string "M12"
1774 sml_CT_PivotArea =
1775     attribute field { xsd:int }?,
1776
1777     ## default value: normal
1778     attribute type { sml_ST_PivotAreaType }?,
1779
1780     ## default value: true
1781     attribute dataOnly { xsd:boolean }?,
1782
1783     ## default value: false
1784     attribute labelOnly { xsd:boolean }?,
1785
1786     ## default value: false
1787     attribute grandRow { xsd:boolean }?,
1788

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1789 ## default value: false
1790 attribute grandCol { xsd:boolean }?,
1791
1792 ## default value: false
1793 attribute cacheIndex { xsd:boolean }?,
1794
1795 ## default value: true
1796 attribute outline { xsd:boolean }?,
1797 attribute offset { sml_ST_Ref }?,
1798
1799 ## default value: false
1800 attribute collapsedLevelsAreSubtotals { xsd:boolean }?,
1801 attribute axis { sml_ST_Axis }?,
1802 attribute fieldPosition { xsd:unsignedInt }?,
1803 element references { sml_CT_PivotAreaReferences }?,
1804 element extList { sml_CT_ExtensionList }?
1805 sml_ST_PivotAreaType =
1806     string "none"
1807     | string "normal"
1808     | string "data"
1809     | string "all"
1810     | string "origin"
1811     | string "button"
1812     | string "topEnd"
1813     | string "topRight"
1814 sml_CT_PivotAreaReferences =
1815     attribute count { xsd:unsignedInt }?,
1816     element reference { sml_CT_PivotAreaReference }+
1817 sml_CT_PivotAreaReference =
1818     attribute field { xsd:unsignedInt }?,
1819     attribute count { xsd:unsignedInt }?,
1820
1821 ## default value: true
1822 attribute selected { xsd:boolean }?,
1823
1824 ## default value: false
1825 attribute byPosition { xsd:boolean }?,
1826
1827 ## default value: false
1828 attribute relative { xsd:boolean }?,
1829
1830 ## default value: false
1831 attribute defaultSubtotal { xsd:boolean }?,
1832
1833 ## default value: false
1834 attribute sumSubtotal { xsd:boolean }?,
1835
1836 ## default value: false
1837 attribute countASubtotal { xsd:boolean }?,
1838
1839 ## default value: false
1840 attribute avgSubtotal { xsd:boolean }?,
1841

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1842 ## default value: false
1843 attribute maxSubtotal { xsd:boolean }?,
1844
1845 ## default value: false
1846 attribute minSubtotal { xsd:boolean }?,
1847
1848 ## default value: false
1849 attribute productSubtotal { xsd:boolean }?,
1850
1851 ## default value: false
1852 attribute countSubtotal { xsd:boolean }?,
1853
1854 ## default value: false
1855 attribute stdDevSubtotal { xsd:boolean }?,
1856
1857 ## default value: false
1858 attribute stdDevPSubtotal { xsd:boolean }?,
1859
1860 ## default value: false
1861 attribute varSubtotal { xsd:boolean }?,
1862
1863 ## default value: false
1864 attribute varPSubtotal { xsd:boolean }?,
1865 element x { sml_CT_Index }*,
1866 element extLst { sml_CT_ExtensionList }?
1867 sml_CT_Index = attribute v { xsd:unsignedInt }
1868 sml_ST_Axis =
1869     string "axisRow"
1870     | string "axisCol"
1871     | string "axisPage"
1872     | string "axisValues"
1873 sml_queryTable = element queryTable { sml_CT_QueryTable }
1874 sml_CT_QueryTable =
1875     attribute name { s_ST_Xstring },
1876
1877 ## default value: true
1878 attribute headers { xsd:boolean }?,
1879
1880 ## default value: false
1881 attribute rowNumbers { xsd:boolean }?,
1882
1883 ## default value: false
1884 attribute disableRefresh { xsd:boolean }?,
1885
1886 ## default value: true
1887 attribute backgroundRefresh { xsd:boolean }?,
1888
1889 ## default value: false
1890 attribute firstBackgroundRefresh { xsd:boolean }?,
1891
1892 ## default value: false
1893 attribute refreshOnLoad { xsd:boolean }?,
1894

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1895 ## default value: insertDelete
1896 attribute growShrinkType { sml_ST_GrowShrinkType }?,
1897
1898 ## default value: false
1899 attribute fillFormulas { xsd:boolean }?,
1900
1901 ## default value: false
1902 attribute removeDataOnSave { xsd:boolean }?,
1903
1904 ## default value: false
1905 attribute disableEdit { xsd:boolean }?,
1906
1907 ## default value: true
1908 attribute preserveFormatting { xsd:boolean }?,
1909
1910 ## default value: true
1911 attribute adjustColumnWidth { xsd:boolean }?,
1912
1913 ## default value: false
1914 attribute intermediate { xsd:boolean }?,
1915 attribute connectionId { xsd:unsignedInt },
1916 sml_AG_AutoFormat,
1917 element queryTableRefresh { sml_CT_QueryTableRefresh }?,
1918 element extLst { sml_CT_ExtensionList }?
1919 sml_CT_QueryTableRefresh =
1920
1921 ## default value: true
1922 attribute preserveSortFilterLayout { xsd:boolean }?,
1923
1924 ## default value: false
1925 attribute fieldIdWrapped { xsd:boolean }?,
1926
1927 ## default value: true
1928 attribute headersInLastRefresh { xsd:boolean }?,
1929
1930 ## default value: 0
1931 attribute minimumVersion { xsd:unsignedByte }?,
1932
1933 ## default value: 1
1934 attribute nextId { xsd:unsignedInt }?,
1935
1936 ## default value: 0
1937 attribute unboundColumnsLeft { xsd:unsignedInt }?,
1938
1939 ## default value: 0
1940 attribute unboundColumnsRight { xsd:unsignedInt }?,
1941 element queryTableFields { sml_CT_QueryTableFields },
1942 element queryTableDeletedFields { sml_CT_QueryTableDeletedFields }?,
1943 element sortState { sml_CT_SortState }?,
1944 element extLst { sml_CT_ExtensionList }?
1945 sml_CT_QueryTableDeletedFields =
1946 attribute count { xsd:unsignedInt }?,
1947 element deletedField { sml_CT_DeletedField }+

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1948 sml_CT_DeletedField = attribute name { s_ST_Xstring }
1949 sml_CT_QueryTableFields =
1950
1951     ## default value: 0
1952     attribute count { xsd:unsignedInt }?,
1953     element queryTableField { sml_CT_QueryTableField }*
1954 sml_CT_QueryTableField =
1955     attribute id { xsd:unsignedInt },
1956     attribute name { s_ST_Xstring }?,
1957
1958     ## default value: true
1959     attribute dataBound { xsd:boolean }?,
1960
1961     ## default value: false
1962     attribute rowNumbers { xsd:boolean }?,
1963
1964     ## default value: false
1965     attribute fillFormulas { xsd:boolean }?,
1966
1967     ## default value: false
1968     attribute clipped { xsd:boolean }?,
1969
1970     ## default value: 0
1971     attribute tableColumnId { xsd:unsignedInt }?,
1972     element extLst { sml_CT_ExtensionList }?
1973 sml_ST_GrowShrinkType =
1974     string "insertDelete" | string "insertClear" | string "overwriteClear"
1975 sml_sst = element sst { sml_CT_Sst }
1976 sml_CT_Sst =
1977     attribute count { xsd:unsignedInt }?,
1978     attribute uniqueCount { xsd:unsignedInt }?,
1979     element si { sml_CT_Rst }*,
1980     element extLst { sml_CT_ExtensionList }?
1981 sml_ST_PhoneticType =
1982     string "halfwidthKatakana"
1983     | string "fullwidthKatakana"
1984     | string "Hiragana"
1985     | string "noConversion"
1986 sml_ST_PhoneticAlignment =
1987     string "noControl"
1988     | string "left"
1989     | string "center"
1990     | string "distributed"
1991 sml_CT_PhoneticRun =
1992     attribute sb { xsd:unsignedInt },
1993     attribute eb { xsd:unsignedInt },
1994     element t { s_ST_Xstring }
1995 sml_CT_RElt =
1996     element rPr { sml_CT_RPrElt }?,
1997     element t { s_ST_Xstring }
1998 sml_CT_RPrElt =
1999     (element rFont { sml_CT_FontName }?
2000     | element charset { sml_CT_IntProperty }?)

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2001 | element family { sml_CT_IntProperty }?
2002 | element b { sml_CT_BooleanProperty }?
2003 | element i { sml_CT_BooleanProperty }?
2004 | element strike { sml_CT_BooleanProperty }?
2005 | element outline { sml_CT_BooleanProperty }?
2006 | element shadow { sml_CT_BooleanProperty }?
2007 | element condense { sml_CT_BooleanProperty }?
2008 | element extend { sml_CT_BooleanProperty }?
2009 | element color { sml_CT_Color }?
2010 | element sz { sml_CT_FontSize }?
2011 | element u { sml_CT_UnderlineProperty }?
2012 | element vertAlign { sml_CT_VerticalAlignFontProperty }?
2013 | element scheme { sml_CT_FontScheme }?)+
2014 sml_CT_Rst =
2015     element t { s_ST_Xstring }?,
2016     element r { sml_CT_RElt }*,
2017     element rPh { sml_CT_PhoneticRun }*,
2018     element phoneticPr { sml_CT_PhoneticPr }?
2019 sml_CT_PhoneticPr =
2020     attribute fontId { sml_ST_FontId },
2021
2022     ## default value: fullwidthKatakana
2023     attribute type { sml_ST_PhoneticType }?,
2024
2025     ## default value: left
2026     attribute alignment { sml_ST_PhoneticAlignment }?
2027 sml_headers = element headers { sml_CT_RevisionHeaders }
2028 sml_revisions = element revisions { sml_CT_Revisions }
2029 sml_CT_RevisionHeaders =
2030     attribute guid { s_ST_Guid },
2031     attribute lastGuid { s_ST_Guid }?,
2032
2033     ## default value: true
2034     attribute shared { xsd:boolean }?,
2035
2036     ## default value: false
2037     attribute diskRevisions { xsd:boolean }?,
2038
2039     ## default value: true
2040     attribute history { xsd:boolean }?,
2041
2042     ## default value: true
2043     attribute trackRevisions { xsd:boolean }?,
2044
2045     ## default value: false
2046     attribute exclusive { xsd:boolean }?,
2047
2048     ## default value: 0
2049     attribute revisionId { xsd:unsignedInt }?,
2050
2051     ## default value: 1
2052     attribute version { xsd:int }?,
2053

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2054 ## default value: true
2055 attribute keepChangeHistory { xsd:boolean }?,
2056
2057 ## default value: false
2058 attribute protected { xsd:boolean }?,
2059
2060 ## default value: 30
2061 attribute preserveHistory { xsd:unsignedInt }?,
2062 element header { sml_CT_RevisionHeader }+
2063 sml_CT_Revisions =
2064 (element rrc { sml_CT_RevisionRowColumn }*
2065 | element rm { sml_CT_RevisionMove }*
2066 | element rcv { sml_CT_RevisionCustomView }*
2067 | element rsnm { sml_CT_RevisionSheetRename }*
2068 | element ris { sml_CT_RevisionInsertSheet }*
2069 | element rcc { sml_CT_RevisionCellChange }*
2070 | element rfmt { sml_CT_RevisionFormatting }*
2071 | element raf { sml_CT_RevisionAutoFormatting }*
2072 | element rdn { sml_CT_RevisionDefinedName }*
2073 | element rcmt { sml_CT_RevisionComment }*
2074 | element rqt { sml_CT_RevisionQueryTableField }*
2075 | element rcft { sml_CT_RevisionConflict }*)+
2076 sml_AG_RevData =
2077 attribute rId { xsd:unsignedInt },
2078
2079 ## default value: false
2080 attribute ua { xsd:boolean }?,
2081
2082 ## default value: false
2083 attribute ra { xsd:boolean }?
2084 sml_CT_RevisionHeader =
2085 attribute guid { s_ST_Guid },
2086 attribute dateTime { xsd:dateTime },
2087 attribute maxSheetId { xsd:unsignedInt },
2088 attribute userName { s_ST_Xstring },
2089 r_id,
2090 attribute minRId { xsd:unsignedInt }?,
2091 attribute maxRId { xsd:unsignedInt }?,
2092 element sheetIdMap { sml_CT_SheetIdMap },
2093 element reviewedList { sml_CT_ReviewedRevisions }?,
2094 element extLst { sml_CT_ExtensionList }?
2095 sml_CT_SheetIdMap =
2096 attribute count { xsd:unsignedInt }?,
2097 element sheetId { sml_CT_SheetId }+
2098 sml_CT_SheetId = attribute val { xsd:unsignedInt }
2099 sml_CT_ReviewedRevisions =
2100 attribute count { xsd:unsignedInt }?,
2101 element reviewed { sml_CT_Reviewed }+
2102 sml_CT_Reviewed = attribute rId { xsd:unsignedInt }
2103 sml_CT_UndoInfo =
2104 attribute index { xsd:unsignedInt },
2105 attribute exp { sml_ST_FormulaExpression },
2106

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```

2107  ## default value: false
2108  attribute ref3D { xsd:boolean }?,
2109
2110  ## default value: false
2111  attribute array { xsd:boolean }?,
2112
2113  ## default value: false
2114  attribute v { xsd:boolean }?,
2115
2116  ## default value: false
2117  attribute nf { xsd:boolean }?,
2118
2119  ## default value: false
2120  attribute cs { xsd:boolean }?,
2121  attribute dr { sml_ST_RefA },
2122  attribute dn { s_ST_Xstring }?,
2123  attribute r { sml_ST_CellRef }?,
2124  attribute sId { xsd:unsignedInt }?
2125 sml_CT_RevisionRowColumn =
2126   sml_AG_RevData,
2127   attribute sId { xsd:unsignedInt },
2128
2129  ## default value: false
2130  attribute eol { xsd:boolean }?,
2131  attribute ref { sml_ST_Ref },
2132  attribute action { sml_ST_rwColActionType },
2133
2134  ## default value: false
2135  attribute edge { xsd:boolean }?,
2136  (element undo { sml_CT_UndoInfo }*
2137   | element rcc { sml_CT_RevisionCellChange }*
2138   | element rfmt { sml_CT_RevisionFormatting }*)*
2139 sml_CT_RevisionMove =
2140   sml_AG_RevData,
2141   attribute sheetId { xsd:unsignedInt },
2142   attribute source { sml_ST_Ref },
2143   attribute destination { sml_ST_Ref },
2144
2145  ## default value: 0
2146  attribute sourceSheetId { xsd:unsignedInt }?,
2147  (element undo { sml_CT_UndoInfo }*
2148   | element rcc { sml_CT_RevisionCellChange }*
2149   | element rfmt { sml_CT_RevisionFormatting }*)*
2150 sml_CT_RevisionCustomView =
2151   attribute guid { s_ST_Guid },
2152   attribute action { sml_ST_RevisionAction }
2153 sml_CT_RevisionSheetRename =
2154   sml_AG_RevData,
2155   attribute sheetId { xsd:unsignedInt },
2156   attribute oldName { s_ST_Xstring },
2157   attribute newName { s_ST_Xstring },
2158   element extLst { sml_CT_ExtensionList }?
2159 sml_CT_RevisionInsertSheet =

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2160     sml_AG_RevData,
2161     attribute sheetId { xsd:unsignedInt },
2162     attribute name { s_ST_Xstring },
2163     attribute sheetPosition { xsd:unsignedInt }
2164 sml_CT_RevisionCellChange =
2165     sml_AG_RevData,
2166     attribute sId { xsd:unsignedInt },
2167
2168     ## default value: false
2169     attribute oDxf { xsd:boolean }?,
2170
2171     ## default value: false
2172     attribute xFDxf { xsd:boolean }?,
2173
2174     ## default value: false
2175     attribute s { xsd:boolean }?,
2176
2177     ## default value: false
2178     attribute dxf { xsd:boolean }?,
2179     attribute numFmtId { sml_ST_NumFmtId }?,
2180
2181     ## default value: false
2182     attribute quotePrefix { xsd:boolean }?,
2183
2184     ## default value: false
2185     attribute oldQuotePrefix { xsd:boolean }?,
2186
2187     ## default value: false
2188     attribute ph { xsd:boolean }?,
2189
2190     ## default value: false
2191     attribute oldPh { xsd:boolean }?,
2192
2193     ## default value: false
2194     attribute endOfListFormulaUpdate { xsd:boolean }?,
2195     element oc { sml_CT_Cell }?,
2196     element nc { sml_CT_Cell },
2197     element oDxf { sml_CT_Dxf }?,
2198     element nDxf { sml_CT_Dxf }?,
2199     element extLst { sml_CT_ExtensionList }?
2200 sml_CT_RevisionFormatting =
2201     attribute sheetId { xsd:unsignedInt },
2202
2203     ## default value: false
2204     attribute xFDxf { xsd:boolean }?,
2205
2206     ## default value: false
2207     attribute s { xsd:boolean }?,
2208     attribute sqref { sml_ST_Sqref },
2209     attribute start { xsd:unsignedInt }?,
2210     attribute length { xsd:unsignedInt }?,
2211     element dxf { sml_CT_Dxf }?,
2212     element extLst { sml_CT_ExtensionList }?

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2213 sml_CT_RevisionAutoFormatting =
2214     attribute sheetId { xsd:unsignedInt },
2215     sml_AG_AutoFormat,
2216     attribute ref { sml_ST_Ref }
2217 sml_CT_RevisionComment =
2218     attribute sheetId { xsd:unsignedInt },
2219     attribute cell { sml_ST_CellRef },
2220     attribute guid { s_ST_Guid },
2221
2222     ## default value: add
2223     attribute action { sml_ST_RevisionAction }?,
2224
2225     ## default value: false
2226     attribute alwaysShow { xsd:boolean }?,
2227
2228     ## default value: false
2229     attribute old { xsd:boolean }?,
2230
2231     ## default value: false
2232     attribute hiddenRow { xsd:boolean }?,
2233
2234     ## default value: false
2235     attribute hiddenColumn { xsd:boolean }?,
2236     attribute author { s_ST_Xstring },
2237
2238     ## default value: 0
2239     attribute oldLength { xsd:unsignedInt }?,
2240
2241     ## default value: 0
2242     attribute newLength { xsd:unsignedInt }?
2243 sml_CT_RevisionDefinedName =
2244     sml_AG_RevData,
2245     attribute localSheetId { xsd:unsignedInt }?,
2246
2247     ## default value: false
2248     attribute customView { xsd:boolean }?,
2249     attribute name { s_ST_Xstring },
2250
2251     ## default value: false
2252     attribute function { xsd:boolean }?,
2253
2254     ## default value: false
2255     attribute oldFunction { xsd:boolean }?,
2256     attribute functionGroupId { xsd:unsignedByte }?,
2257     attribute oldFunctionGroupId { xsd:unsignedByte }?,
2258     attribute shortcutKey { xsd:unsignedByte }?,
2259     attribute oldShortcutKey { xsd:unsignedByte }?,
2260
2261     ## default value: false
2262     attribute hidden { xsd:boolean }?,
2263
2264     ## default value: false
2265     attribute oldHidden { xsd:boolean }?,

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2266     attribute customMenu { s_ST_Xstring }?,
2267     attribute oldCustomMenu { s_ST_Xstring }?,
2268     attribute description { s_ST_Xstring }?,
2269     attribute oldDescription { s_ST_Xstring }?,
2270     attribute help { s_ST_Xstring }?,
2271     attribute oldHelp { s_ST_Xstring }?,
2272     attribute statusBar { s_ST_Xstring }?,
2273     attribute oldStatusBar { s_ST_Xstring }?,
2274     attribute comment { s_ST_Xstring }?,
2275     attribute oldComment { s_ST_Xstring }?,
2276     element formula { sml_ST_Formula }?,
2277     element oldFormula { sml_ST_Formula }?,
2278     element extLst { sml_CT_ExtensionList }?
2279 sml_CT_RevisionConflict =
2280     sml_AG_RevData,
2281     attribute sheetId { xsd:unsignedInt }?
2282 sml_CT_RevisionQueryTableField =
2283     attribute sheetId { xsd:unsignedInt },
2284     attribute ref { sml_ST_Ref },
2285     attribute fieldId { xsd:unsignedInt }
2286 sml_ST_rwColActionType =
2287     string "insertRow"
2288     | string "deleteRow"
2289     | string "insertCol"
2290     | string "deleteCol"
2291 sml_ST_RevisionAction = string "add" | string "delete"
2292 sml_ST_FormulaExpression =
2293     string "ref"
2294     | string "refError"
2295     | string "area"
2296     | string "areaError"
2297     | string "computedArea"
2298 sml_users = element users { sml_CT_Users }
2299 sml_CT_Users =
2300     attribute count { xsd:unsignedInt }?,
2301     element userInfo { sml_CT_SharedUser }*
2302 sml_CT_SharedUser =
2303     attribute guid { s_ST_Guid },
2304     attribute name { s_ST_Xstring },
2305     attribute id { xsd:int },
2306     attribute dateTime { xsd:dateTime },
2307     element extLst { sml_CT_ExtensionList }?
2308 sml_worksheet = element worksheet { sml_CT_Worksheet }
2309 sml_chartsheet = element chartsheet { sml_CT_Chartsheet }
2310 sml_dialogsheet = element dialogsheet { sml_CT_Dialogsheet }
2311 sml_CT_Macrosheet =
2312     element sheetPr { sml_CT_SheetPr }?,
2313     element dimension { sml_CT_SheetDimension }?,
2314     element sheetViews { sml_CT_SheetViews }?,
2315     element sheetFormatPr { sml_CT_SheetFormatPr }?,
2316     element cols { sml_CT_Cols }*,
2317     element sheetData { sml_CT_SheetData },
2318     element sheetProtection { sml_CT_SheetProtection }?,

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2319     element autoFilter { sml_CT_AutoFilter }?,
2320     element sortState { sml_CT_SortState }?,
2321     element dataConsolidate { sml_CT_DataConsolidate }?,
2322     element customSheetViews { sml_CT_CustomSheetViews }?,
2323     element phoneticPr { sml_CT_PhoneticPr }?,
2324     element conditionalFormatting { sml_CT_ConditionalFormatting }*,
2325     element printOptions { sml_CT_PrintOptions }?,
2326     element pageMargins { sml_CT_PageMargins }?,
2327     element pageSetup { sml_CT_PageSetup }?,
2328     element headerFooter { sml_CT_HeaderFooter }?,
2329     element rowBreaks { sml_CT_PageBreak }?,
2330     element colBreaks { sml_CT_PageBreak }?,
2331     element customProperties { sml_CT_CustomProperties }?,
2332     element drawing { sml_CT_Drawing }?,
2333     element legacyDrawing { sml_CT_LegacyDrawing }?,
2334     element legacyDrawingHF { sml_CT_LegacyDrawing }?,
2335     element drawingHF { sml_CT_DrawingHF }?,
2336     element picture { sml_CT_SheetBackgroundPicture }?,
2337     element oleObjects { sml_CT_OleObjects }?,
2338     element extLst { sml_CT_ExtensionList }?
2339 sml_CT_Dialogsheet =
2340     element sheetPr { sml_CT_SheetPr }?,
2341     element sheetViews { sml_CT_SheetViews }?,
2342     element sheetFormatPr { sml_CT_SheetFormatPr }?,
2343     element sheetProtection { sml_CT_SheetProtection }?,
2344     element customSheetViews { sml_CT_CustomSheetViews }?,
2345     element printOptions { sml_CT_PrintOptions }?,
2346     element pageMargins { sml_CT_PageMargins }?,
2347     element pageSetup { sml_CT_PageSetup }?,
2348     element headerFooter { sml_CT_HeaderFooter }?,
2349     element drawing { sml_CT_Drawing }?,
2350     element legacyDrawing { sml_CT_LegacyDrawing }?,
2351     element legacyDrawingHF { sml_CT_LegacyDrawing }?,
2352     element drawingHF { sml_CT_DrawingHF }?,
2353     element oleObjects { sml_CT_OleObjects }?,
2354     element extLst { sml_CT_ExtensionList }?
2355 sml_CT_Worksheet =
2356     element sheetPr { sml_CT_SheetPr }?,
2357     element dimension { sml_CT_SheetDimension }?,
2358     element sheetViews { sml_CT_SheetViews }?,
2359     element sheetFormatPr { sml_CT_SheetFormatPr }?,
2360     element cols { sml_CT_Cols }*,
2361     element sheetData { sml_CT_SheetData },
2362     element sheetCalcPr { sml_CT_SheetCalcPr }?,
2363     element sheetProtection { sml_CT_SheetProtection }?,
2364     element protectedRanges { sml_CT_ProtectedRanges }?,
2365     element scenarios { sml_CT_Scenarios }?,
2366     element autoFilter { sml_CT_AutoFilter }?,
2367     element sortState { sml_CT_SortState }?,
2368     element dataConsolidate { sml_CT_DataConsolidate }?,
2369     element customSheetViews { sml_CT_CustomSheetViews }?,
2370     element mergeCells { sml_CT_MergeCells }?,
2371     element phoneticPr { sml_CT_PhoneticPr }?,

```

```

2372 element conditionalFormatting { sml_CT_ConditionalFormatting }*,
2373 element dataValidations { sml_CT_DataValidations }?,
2374 element hyperlinks { sml_CT_Hyperlinks }?,
2375 element printOptions { sml_CT_PrintOptions }?,
2376 element pageMargins { sml_CT_PageMargins }?,
2377 element pageSetup { sml_CT_PageSetup }?,
2378 element headerFooter { sml_CT_HeaderFooter }?,
2379 element rowBreaks { sml_CT_PageBreak }?,
2380 element colBreaks { sml_CT_PageBreak }?,
2381 element customProperties { sml_CT_CustomProperties }?,
2382 element cellWatches { sml_CT_CellWatches }?,
2383 element ignoredErrors { sml_CT_IgnoredErrors }?,
2384 element smartTags { sml_CT_SmartTags }?,
2385 element drawing { sml_CT_Drawing }?,
2386 element legacyDrawing { sml_CT_LegacyDrawing }?,
2387 element legacyDrawingHF { sml_CT_LegacyDrawing }?,
2388 element drawingHF { sml_CT_DrawingHF }?,
2389 element picture { sml_CT_SheetBackgroundPicture }?,
2390 element oleObjects { sml_CT_OleObjects }?,
2391 element controls { sml_CT_Controls }?,
2392 element webPublishItems { sml_CT_WebPublishItems }?,
2393 element tableParts { sml_CT_TableParts }?,
2394 element extLst { sml_CT_ExtensionList }?
2395 sml_CT_SheetData = element row { sml_CT_Row }*
2396 sml_CT_SheetCalcPr =
2397
2398     ## default value: false
2399     attribute fullCalcOnLoad { xsd:boolean }?
2400 sml_CT_SheetFormatPr =
2401
2402     ## default value: 8
2403     attribute baseColWidth { xsd:unsignedInt }?,
2404     attribute defaultColWidth { xsd:double }?,
2405     attribute defaultRowHeight { xsd:double },
2406
2407     ## default value: false
2408     attribute customHeight { xsd:boolean }?,
2409
2410     ## default value: false
2411     attribute zeroHeight { xsd:boolean }?,
2412
2413     ## default value: false
2414     attribute thickTop { xsd:boolean }?,
2415
2416     ## default value: false
2417     attribute thickBottom { xsd:boolean }?,
2418
2419     ## default value: 0
2420     attribute outlineLevelRow { xsd:unsignedByte }?,
2421
2422     ## default value: 0
2423     attribute outlineLevelCol { xsd:unsignedByte }?
2424 sml_CT_Cols = element col { sml_CT_Col }+

```

```

2425 sml_CT_Col =
2426     attribute min { xsd:unsignedInt },
2427     attribute max { xsd:unsignedInt },
2428     attribute width { xsd:double }?,
2429
2430     ## default value: 0
2431     attribute style { xsd:unsignedInt }?,
2432
2433     ## default value: false
2434     attribute hidden { xsd:boolean }?,
2435
2436     ## default value: false
2437     attribute bestFit { xsd:boolean }?,
2438
2439     ## default value: false
2440     attribute customWidth { xsd:boolean }?,
2441
2442     ## default value: false
2443     attribute phonetic { xsd:boolean }?,
2444
2445     ## default value: 0
2446     attribute outlineLevel { xsd:unsignedByte }?,
2447
2448     ## default value: false
2449     attribute collapsed { xsd:boolean }?
2450 sml_ST_CellSpan = xsd:string
2451 sml_ST_CellSpans = list { sml_ST_CellSpan* }
2452 sml_CT_Row =
2453     attribute r { xsd:unsignedInt }?,
2454     attribute spans { sml_ST_CellSpans }?,
2455
2456     ## default value: 0
2457     attribute s { xsd:unsignedInt }?,
2458
2459     ## default value: false
2460     attribute customFormat { xsd:boolean }?,
2461     attribute ht { xsd:double }?,
2462
2463     ## default value: false
2464     attribute hidden { xsd:boolean }?,
2465
2466     ## default value: false
2467     attribute customHeight { xsd:boolean }?,
2468
2469     ## default value: 0
2470     attribute outlineLevel { xsd:unsignedByte }?,
2471
2472     ## default value: false
2473     attribute collapsed { xsd:boolean }?,
2474
2475     ## default value: false
2476     attribute thickTop { xsd:boolean }?,
2477

```



```

2478 ## default value: false
2479 attribute thickBot { xsd:boolean }?,
2480
2481 ## default value: false
2482 attribute ph { xsd:boolean }?,
2483 element c { sml_CT_Cell }*,
2484 element extLst { sml_CT_ExtensionList }?
2485 sml_CT_Cell =
2486   attribute r { sml_ST_CellRef }?,
2487
2488 ## default value: 0
2489 attribute s { xsd:unsignedInt }?,
2490
2491 ## default value: n
2492 attribute t { sml_ST_CellType }?,
2493
2494 ## default value: 0
2495 attribute cm { xsd:unsignedInt }?,
2496
2497 ## default value: 0
2498 attribute vm { xsd:unsignedInt }?,
2499
2500 ## default value: false
2501 attribute ph { xsd:boolean }?,
2502 element f { sml_CT_CellFormula }?,
2503 element v { s_ST_Xstring }?,
2504 element is { sml_CT_Rst }?,
2505 element extLst { sml_CT_ExtensionList }?
2506 sml_ST_CellType =
2507   string "b"
2508   | string "d"
2509   | string "n"
2510   | string "e"
2511   | string "s"
2512   | string "str"
2513   | string "inlineStr"
2514 sml_ST_CellFormulaType =
2515   string "normal"
2516   | string "array"
2517   | string "dataTable"
2518   | string "shared"
2519 sml_CT_SheetPr =
2520
2521 ## default value: false
2522 attribute syncHorizontal { xsd:boolean }?,
2523
2524 ## default value: false
2525 attribute syncVertical { xsd:boolean }?,
2526 attribute syncRef { sml_ST_Ref }?,
2527
2528 ## default value: false
2529 attribute transitionEvaluation { xsd:boolean }?,
2530

```

```

2531  ## default value: false
2532  attribute transitionEntry { xsd:boolean }?,
2533
2534  ## default value: true
2535  attribute published { xsd:boolean }?,
2536  attribute codeName { xsd:string }?,
2537
2538  ## default value: false
2539  attribute filterMode { xsd:boolean }?,
2540
2541  ## default value: true
2542  attribute enableFormatConditionsCalculation { xsd:boolean }?,
2543  element tabColor { sml_CT_Color }?,
2544  element outlinePr { sml_CT_OutlinePr }?,
2545  element pageSetUpPr { sml_CT_PageSetUpPr }?
2546  sml_CT_SheetDimension = attribute ref { sml_ST_Ref }
2547  sml_CT_SheetViews =
2548    element sheetView { sml_CT_SheetView }+,
2549    element extLst { sml_CT_ExtensionList }?
2550  sml_CT_SheetView =
2551
2552  ## default value: false
2553  attribute windowProtection { xsd:boolean }?,
2554
2555  ## default value: false
2556  attribute showFormulas { xsd:boolean }?,
2557
2558  ## default value: true
2559  attribute showGridLines { xsd:boolean }?,
2560
2561  ## default value: true
2562  attribute showRowColHeaders { xsd:boolean }?,
2563
2564  ## default value: true
2565  attribute showZeros { xsd:boolean }?,
2566
2567  ## default value: false
2568  attribute rightToLeft { xsd:boolean }?,
2569
2570  ## default value: false
2571  attribute tabSelected { xsd:boolean }?,
2572
2573  ## default value: true
2574  attribute showRuler { xsd:boolean }?,
2575
2576  ## default value: true
2577  attribute showOutlineSymbols { xsd:boolean }?,
2578
2579  ## default value: true
2580  attribute defaultGridColor { xsd:boolean }?,
2581
2582  ## default value: true
2583  attribute showWhiteSpace { xsd:boolean }?,

```

```

2584
2585 ## default value: normal
2586 attribute view { sml_ST_SheetViewType }?,
2587 attribute topLeftCell { sml_ST_CellRef }?,
2588
2589 ## default value: 64
2590 attribute colorId { xsd:unsignedInt }?,
2591
2592 ## default value: 100
2593 attribute zoomScale { xsd:unsignedInt }?,
2594
2595 ## default value: 0
2596 attribute zoomScaleNormal { xsd:unsignedInt }?,
2597
2598 ## default value: 0
2599 attribute zoomScaleSheetLayoutView { xsd:unsignedInt }?,
2600
2601 ## default value: 0
2602 attribute zoomScalePageLayoutView { xsd:unsignedInt }?,
2603 attribute workbookViewId { xsd:unsignedInt },
2604 element pane { sml_CT_Pane }?,
2605 element selection { sml_CT_Selection }*,
2606 element pivotSelection { sml_CT_PivotSelection }*,
2607 element extLst { sml_CT_ExtensionList }?
2608 sml_CT_Pane =
2609
2610 ## default value: 0
2611 attribute xSplit { xsd:double }?,
2612
2613 ## default value: 0
2614 attribute ySplit { xsd:double }?,
2615 attribute topLeftCell { sml_ST_CellRef }?,
2616
2617 ## default value: topLeft
2618 attribute activePane { sml_ST_Pane }?,
2619
2620 ## default value: split
2621 attribute state { sml_ST_PaneState }?
2622 sml_CT_PivotSelection =
2623
2624 ## default value: topLeft
2625 attribute pane { sml_ST_Pane }?,
2626
2627 ## default value: false
2628 attribute showHeader { xsd:boolean }?,
2629
2630 ## default value: false
2631 attribute label { xsd:boolean }?,
2632
2633 ## default value: false
2634 attribute data { xsd:boolean }?,
2635
2636 ## default value: false

```

```

2637     attribute extendable { xsd:boolean }?,
2638
2639     ## default value: 0
2640     attribute count { xsd:unsignedInt }?,
2641     attribute axis { sml_ST_Axis }?,
2642
2643     ## default value: 0
2644     attribute dimension { xsd:unsignedInt }?,
2645
2646     ## default value: 0
2647     attribute start { xsd:unsignedInt }?,
2648
2649     ## default value: 0
2650     attribute min { xsd:unsignedInt }?,
2651
2652     ## default value: 0
2653     attribute max { xsd:unsignedInt }?,
2654
2655     ## default value: 0
2656     attribute activeRow { xsd:unsignedInt }?,
2657
2658     ## default value: 0
2659     attribute activeCol { xsd:unsignedInt }?,
2660
2661     ## default value: 0
2662     attribute previousRow { xsd:unsignedInt }?,
2663
2664     ## default value: 0
2665     attribute previousCol { xsd:unsignedInt }?,
2666
2667     ## default value: 0
2668     attribute click { xsd:unsignedInt }?,
2669     r_id?,
2670     element pivotArea { sml_CT_PivotArea }
2671 sml_CT_Selection =
2672
2673     ## default value: topLeft
2674     attribute pane { sml_ST_Pane }?,
2675     attribute activeCell { sml_ST_CellRef }?,
2676
2677     ## default value: 0
2678     attribute activeCellId { xsd:unsignedInt }?,
2679
2680     ## default value: A1
2681     attribute sqref { sml_ST_Sqref }?
2682 sml_ST_Pane =
2683     string "bottomRight"
2684     | string "topRight"
2685     | string "bottomLeft"
2686     | string "topLeft"
2687 sml_CT_PageBreak =
2688
2689     ## default value: 0

```

```

2690 attribute count { xsd:unsignedInt }?,
2691
2692 ## default value: 0
2693 attribute manualBreakCount { xsd:unsignedInt }?,
2694 element brk { sml_CT_Break }*
2695 sml_CT_Break =
2696
2697 ## default value: 0
2698 attribute id { xsd:unsignedInt }?,
2699
2700 ## default value: 0
2701 attribute min { xsd:unsignedInt }?,
2702
2703 ## default value: 0
2704 attribute max { xsd:unsignedInt }?,
2705
2706 ## default value: false
2707 attribute man { xsd:boolean }?,
2708
2709 ## default value: false
2710 attribute pt { xsd:boolean }?
2711 sml_ST_SheetViewType =
2712 string "normal" | string "pageBreakPreview" | string "pageLayout"
2713 sml_CT_OutlinePr =
2714
2715 ## default value: false
2716 attribute applyStyles { xsd:boolean }?,
2717
2718 ## default value: true
2719 attribute summaryBelow { xsd:boolean }?,
2720
2721 ## default value: true
2722 attribute summaryRight { xsd:boolean }?,
2723
2724 ## default value: true
2725 attribute showOutlineSymbols { xsd:boolean }?
2726 sml_CT_PageSetUpPr =
2727
2728 ## default value: true
2729 attribute autoPageBreaks { xsd:boolean }?,
2730
2731 ## default value: false
2732 attribute fitToPage { xsd:boolean }?
2733 sml_CT_DataConsolidate =
2734
2735 ## default value: sum
2736 attribute function { sml_ST_DataConsolidateFunction }?,
2737
2738 ## default value: false
2739 attribute startLabels { xsd:boolean }?,
2740
2741 ## default value: false
2742 attribute leftLabels { xsd:boolean }?,

```

```

2743
2744   ## default value: false
2745   attribute topLabels { xsd:boolean }?,
2746
2747   ## default value: false
2748   attribute link { xsd:boolean }?,
2749   element dataRefs { sml_CT_DataRefs }?
2750 sml_ST_DataConsolidateFunction =
2751   string "average"
2752   | string "count"
2753   | string "countNums"
2754   | string "max"
2755   | string "min"
2756   | string "product"
2757   | string "stdDev"
2758   | string "stdDevp"
2759   | string "sum"
2760   | string "var"
2761   | string "varp"
2762 sml_CT_DataRefs =
2763   attribute count { xsd:unsignedInt }?,
2764   element dataRef { sml_CT_DataRef }*
2765 sml_CT_DataRef =
2766   attribute ref { sml_ST_Ref }?,
2767   attribute name { s_ST_Xstring }?,
2768   attribute sheet { s_ST_Xstring }?,
2769   r_id?
2770 sml_CT_MergeCells =
2771   attribute count { xsd:unsignedInt }?,
2772   element mergeCell { sml_CT_MergeCell }+
2773 sml_CT_MergeCell = attribute ref { sml_ST_Ref }
2774 sml_CT_SmartTags = element cellSmartTags { sml_CT_CellSmartTags }+
2775 sml_CT_CellSmartTags =
2776   attribute r { sml_ST_CellRef },
2777   element cellSmartTag { sml_CT_CellSmartTag }+
2778 sml_CT_CellSmartTag =
2779   attribute type { xsd:unsignedInt },
2780
2781   ## default value: false
2782   attribute deleted { xsd:boolean }?,
2783
2784   ## default value: false
2785   attribute xmlBased { xsd:boolean }?,
2786   element cellSmartTagPr { sml_CT_CellSmartTagPr }*
2787 sml_CT_CellSmartTagPr =
2788   attribute key { s_ST_Xstring },
2789   attribute val { s_ST_Xstring }
2790 sml_CT_Drawing = r_id
2791 sml_CT_LegacyDrawing = r_id
2792 sml_CT_DrawingHF =
2793   r_id,
2794   attribute lho { xsd:unsignedInt }?,
2795   attribute lhe { xsd:unsignedInt }?,

```

```

2796 attribute lhf { xsd:unsignedInt }?,
2797 attribute cho { xsd:unsignedInt }?,
2798 attribute che { xsd:unsignedInt }?,
2799 attribute chf { xsd:unsignedInt }?,
2800 attribute rho { xsd:unsignedInt }?,
2801 attribute rhe { xsd:unsignedInt }?,
2802 attribute rhf { xsd:unsignedInt }?,
2803 attribute lfo { xsd:unsignedInt }?,
2804 attribute lfe { xsd:unsignedInt }?,
2805 attribute lff { xsd:unsignedInt }?,
2806 attribute cfo { xsd:unsignedInt }?,
2807 attribute cfe { xsd:unsignedInt }?,
2808 attribute cff { xsd:unsignedInt }?,
2809 attribute rfo { xsd:unsignedInt }?,
2810 attribute rfe { xsd:unsignedInt }?,
2811 attribute rff { xsd:unsignedInt }?
2812 sml_CT_CustomSheetViews =
2813   element customSheetView { sml_CT_CustomSheetView }+
2814 sml_CT_CustomSheetView =
2815   attribute guid { s_ST_Guid },
2816
2817   ## default value: 100
2818   attribute scale { xsd:unsignedInt }?,
2819
2820   ## default value: 64
2821   attribute colorId { xsd:unsignedInt }?,
2822
2823   ## default value: false
2824   attribute showPageBreaks { xsd:boolean }?,
2825
2826   ## default value: false
2827   attribute showFormulas { xsd:boolean }?,
2828
2829   ## default value: true
2830   attribute showGridLines { xsd:boolean }?,
2831
2832   ## default value: true
2833   attribute showRowCol { xsd:boolean }?,
2834
2835   ## default value: true
2836   attribute outlineSymbols { xsd:boolean }?,
2837
2838   ## default value: true
2839   attribute zeroValues { xsd:boolean }?,
2840
2841   ## default value: false
2842   attribute fitToPage { xsd:boolean }?,
2843
2844   ## default value: false
2845   attribute printArea { xsd:boolean }?,
2846
2847   ## default value: false
2848   attribute filter { xsd:boolean }?,

```

```

2849
2850   ## default value: false
2851   attribute showAutoFilter { xsd:boolean }?,
2852
2853   ## default value: false
2854   attribute hiddenRows { xsd:boolean }?,
2855
2856   ## default value: false
2857   attribute hiddenColumns { xsd:boolean }?,
2858
2859   ## default value: visible
2860   attribute state { sml_ST_SheetState }?,
2861
2862   ## default value: false
2863   attribute filterUnique { xsd:boolean }?,
2864
2865   ## default value: normal
2866   attribute view { sml_ST_SheetViewType }?,
2867
2868   ## default value: true
2869   attribute showRuler { xsd:boolean }?,
2870   attribute topLeftCell { sml_ST_CellRef }?,
2871   element pane { sml_CT_Pane }?,
2872   element selection { sml_CT_Selection }?,
2873   element rowBreaks { sml_CT_PageBreak }?,
2874   element colBreaks { sml_CT_PageBreak }?,
2875   element pageMargins { sml_CT_PageMargins }?,
2876   element printOptions { sml_CT_PrintOptions }?,
2877   element pageSetup { sml_CT_PageSetup }?,
2878   element headerFooter { sml_CT_HeaderFooter }?,
2879   element autoFilter { sml_CT_AutoFilter }?,
2880   element extLst { sml_CT_ExtensionList }?
2881 sml_CT_DataValidations =
2882
2883   ## default value: false
2884   attribute disablePrompts { xsd:boolean }?,
2885   attribute xWindow { xsd:unsignedInt }?,
2886   attribute yWindow { xsd:unsignedInt }?,
2887   attribute count { xsd:unsignedInt }?,
2888   element dataValidation { sml_CT_DataValidation }+
2889 sml_CT_DataValidation =
2890
2891   ## default value: none
2892   attribute type { sml_ST_DataValidationType }?,
2893
2894   ## default value: stop
2895   attribute errorStyle { sml_ST_DataValidationErrorStyle }?,
2896
2897   ## default value: noControl
2898   attribute imeMode { sml_ST_DataValidationImeMode }?,
2899
2900   ## default value: between
2901   attribute operator { sml_ST_DataValidationOperator }?,

```



```

2902
2903   ## default value: false
2904   attribute allowBlank { xsd:boolean }?,
2905
2906   ## default value: false
2907   attribute showDropDown { xsd:boolean }?,
2908
2909   ## default value: false
2910   attribute showInputMessage { xsd:boolean }?,
2911
2912   ## default value: false
2913   attribute showErrorMessage { xsd:boolean }?,
2914   attribute errorTitle { s_ST_Xstring }?,
2915   attribute error { s_ST_Xstring }?,
2916   attribute promptTitle { s_ST_Xstring }?,
2917   attribute prompt { s_ST_Xstring }?,
2918   attribute sqref { sml_ST_Sqref },
2919   element formula1 { sml_ST_Formula }?,
2920   element formula2 { sml_ST_Formula }?
2921 sml_ST_DataValidationType =
2922   string "none"
2923   | string "whole"
2924   | string "decimal"
2925   | string "list"
2926   | string "date"
2927   | string "time"
2928   | string "textLength"
2929   | string "custom"
2930 sml_ST_DataValidationOperator =
2931   string "between"
2932   | string "notBetween"
2933   | string "equal"
2934   | string "notEqual"
2935   | string "lessThan"
2936   | string "lessThanOrEqual"
2937   | string "greaterThan"
2938   | string "greaterThanOrEqual"
2939 sml_ST_DataValidationErrorStyle =
2940   string "stop" | string "warning" | string "information"
2941 sml_ST_DataValidationImeMode =
2942   string "noControl"
2943   | string "off"
2944   | string "on"
2945   | string "disabled"
2946   | string "hiragana"
2947   | string "fullKatakana"
2948   | string "halfKatakana"
2949   | string "fullAlpha"
2950   | string "halfAlpha"
2951   | string "fullHangul"
2952   | string "halfHangul"
2953 sml_ST_CfType =
2954   string "expression"

```

```

2955 | string "cellIs"
2956 | string "colorScale"
2957 | string "dataBar"
2958 | string "iconSet"
2959 | string "top10"
2960 | string "uniqueValues"
2961 | string "duplicateValues"
2962 | string "containsText"
2963 | string "notContainsText"
2964 | string "beginsWith"
2965 | string "endsWith"
2966 | string "containsBlanks"
2967 | string "notContainsBlanks"
2968 | string "containsErrors"
2969 | string "notContainsErrors"
2970 | string "timePeriod"
2971 | string "aboveAverage"
2972 sml_ST_TimePeriod =
2973     string "today"
2974     | string "yesterday"
2975     | string "tomorrow"
2976     | string "last7Days"
2977     | string "thisMonth"
2978     | string "lastMonth"
2979     | string "nextMonth"
2980     | string "thisWeek"
2981     | string "lastWeek"
2982     | string "nextWeek"
2983 sml_ST_ConditionalFormattingOperator =
2984     string "lessThan"
2985     | string "lessThanOrEqual"
2986     | string "equal"
2987     | string "notEqual"
2988     | string "greaterThanOrEqual"
2989     | string "greaterThan"
2990     | string "between"
2991     | string "notBetween"
2992     | string "containsText"
2993     | string "notContains"
2994     | string "beginsWith"
2995     | string "endsWith"
2996 sml_ST_CfvoType =
2997     string "num"
2998     | string "percent"
2999     | string "max"
3000     | string "min"
3001     | string "formula"
3002     | string "percentile"
3003 sml_CT_ConditionalFormatting =
3004
3005     ## default value: false
3006     attribute pivot { xsd:boolean }?,
3007     attribute sqref { sml_ST_Sqref }?,

```

```

3008     element cfRule { sml_CT_CfRule }+,
3009     element extLst { sml_CT_ExtensionList }?
3010 sml_CT_CfRule =
3011     attribute type { sml_ST_CfType }?,
3012     attribute dxId { sml_ST_DxId }?,
3013     attribute priority { xsd:int },
3014
3015     ## default value: false
3016     attribute stopIfTrue { xsd:boolean }?,
3017
3018     ## default value: true
3019     attribute aboveAverage { xsd:boolean }?,
3020
3021     ## default value: false
3022     attribute percent { xsd:boolean }?,
3023
3024     ## default value: false
3025     attribute bottom { xsd:boolean }?,
3026     attribute operator { sml_ST_ConditionalFormattingOperator }?,
3027     attribute text { xsd:string }?,
3028     attribute timePeriod { sml_ST_TimePeriod }?,
3029     attribute rank { xsd:unsignedInt }?,
3030     attribute stdDev { xsd:int }?,
3031
3032     ## default value: false
3033     attribute equalAverage { xsd:boolean }?,
3034     element formula { sml_ST_Formula }*,
3035     element colorScale { sml_CT_ColorScale }?,
3036     element dataBar { sml_CT_DataBar }?,
3037     element iconSet { sml_CT_IconSet }?,
3038     element extLst { sml_CT_ExtensionList }?
3039 sml_CT_Hyperlinks = element hyperlink { sml_CT_Hyperlink }+
3040 sml_CT_Hyperlink =
3041     attribute ref { sml_ST_Ref },
3042     r_id?,
3043     attribute location { s_ST_Xstring }?,
3044     attribute tooltip { s_ST_Xstring }?,
3045     attribute display { s_ST_Xstring }?
3046 sml_CT_CellFormula =
3047     sml_ST_Formula,
3048
3049     ## default value: normal
3050     attribute t { sml_ST_CellFormulaType }?,
3051
3052     ## default value: false
3053     attribute aca { xsd:boolean }?,
3054     attribute ref { sml_ST_Ref }?,
3055
3056     ## default value: false
3057     attribute dt2D { xsd:boolean }?,
3058
3059     ## default value: false
3060     attribute dtr { xsd:boolean }?,

```

```

3061
3062   ## default value: false
3063   attribute del1 { xsd:boolean }?,
3064
3065   ## default value: false
3066   attribute del2 { xsd:boolean }?,
3067   attribute r1 { sml_ST_CellRef }?,
3068   attribute r2 { sml_ST_CellRef }?,
3069
3070   ## default value: false
3071   attribute ca { xsd:boolean }?,
3072   attribute si { xsd:unsignedInt }?,
3073
3074   ## default value: false
3075   attribute bx { xsd:boolean }?
3076 sml_CT_ColorScale =
3077   element cfvo { sml_CT_Cfvo }+,
3078   element color { sml_CT_Color }+
3079 sml_CT_DataBar =
3080
3081   ## default value: 10
3082   attribute minLength { xsd:unsignedInt }?,
3083
3084   ## default value: 90
3085   attribute maxLength { xsd:unsignedInt }?,
3086
3087   ## default value: true
3088   attribute showValue { xsd:boolean }?,
3089   element cfvo { sml_CT_Cfvo }+,
3090   element color { sml_CT_Color }
3091 sml_CT_IconSet =
3092
3093   ## default value: 3TrafficLights1
3094   attribute iconSet { sml_ST_IconSetType }?,
3095
3096   ## default value: true
3097   attribute showValue { xsd:boolean }?,
3098
3099   ## default value: true
3100   attribute percent { xsd:boolean }?,
3101
3102   ## default value: false
3103   attribute reverse { xsd:boolean }?,
3104   element cfvo { sml_CT_Cfvo }+
3105 sml_CT_Cfvo =
3106   attribute type { sml_ST_CfvoType },
3107   attribute val { s_ST_Xstring }?,
3108
3109   ## default value: true
3110   attribute gte { xsd:boolean }?,
3111   element extLst { sml_CT_ExtensionList }?
3112 sml_CT_PageMargins =
3113   attribute left { xsd:double },

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3114     attribute right { xsd:double },
3115     attribute top { xsd:double },
3116     attribute bottom { xsd:double },
3117     attribute header { xsd:double },
3118     attribute footer { xsd:double }
3119 sml_CT_PrintOptions =
3120
3121     ## default value: false
3122     attribute horizontalCentered { xsd:boolean }?,
3123
3124     ## default value: false
3125     attribute verticalCentered { xsd:boolean }?,
3126
3127     ## default value: false
3128     attribute headings { xsd:boolean }?,
3129
3130     ## default value: false
3131     attribute gridLines { xsd:boolean }?,
3132
3133     ## default value: true
3134     attribute gridLinesSet { xsd:boolean }?
3135 sml_CT_PageSetup =
3136
3137     ## default value: 1
3138     attribute paperSize { xsd:unsignedInt }?,
3139     attribute paperHeight { s_ST_PositiveUniversalMeasure }?,
3140     attribute paperWidth { s_ST_PositiveUniversalMeasure }?,
3141
3142     ## default value: 100
3143     attribute scale { xsd:unsignedInt }?,
3144
3145     ## default value: 1
3146     attribute firstPageNumber { xsd:unsignedInt }?,
3147
3148     ## default value: 1
3149     attribute fitToWidth { xsd:unsignedInt }?,
3150
3151     ## default value: 1
3152     attribute fitToHeight { xsd:unsignedInt }?,
3153
3154     ## default value: downThenOver
3155     attribute pageOrder { sml_ST_PageOrder }?,
3156
3157     ## default value: default
3158     attribute orientation { sml_ST_Orientation }?,
3159
3160     ## default value: true
3161     attribute usePrinterDefaults { xsd:boolean }?,
3162
3163     ## default value: false
3164     attribute blackAndWhite { xsd:boolean }?,
3165
3166     ## default value: false

```

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3167     attribute draft { xsd:boolean }?,
3168
3169     ## default value: none
3170     attribute cellComments { sml_ST_CellComments }?,
3171
3172     ## default value: false
3173     attribute useFirstPageNumber { xsd:boolean }?,
3174
3175     ## default value: displayed
3176     attribute errors { sml_ST_PrintError }?,
3177
3178     ## default value: 600
3179     attribute horizontalDpi { xsd:unsignedInt }?,
3180
3181     ## default value: 600
3182     attribute verticalDpi { xsd:unsignedInt }?,
3183
3184     ## default value: 1
3185     attribute copies { xsd:unsignedInt }?,
3186     r_id?
3187 sml_ST_PageOrder = string "downThenOver" | string "overThenDown"
3188 sml_ST_Orientation =
3189     string "default" | string "portrait" | string "landscape"
3190 sml_ST_CellComments =
3191     string "none" | string "asDisplayed" | string "atEnd"
3192 sml_CT_HeaderFooter =
3193
3194     ## default value: false
3195     attribute differentOddEven { xsd:boolean }?,
3196
3197     ## default value: false
3198     attribute differentFirst { xsd:boolean }?,
3199
3200     ## default value: true
3201     attribute scaleWithDoc { xsd:boolean }?,
3202
3203     ## default value: true
3204     attribute alignWithMargins { xsd:boolean }?,
3205     element oddHeader { s_ST_Xstring }?,
3206     element oddFooter { s_ST_Xstring }?,
3207     element evenHeader { s_ST_Xstring }?,
3208     element evenFooter { s_ST_Xstring }?,
3209     element firstHeader { s_ST_Xstring }?,
3210     element firstFooter { s_ST_Xstring }?
3211 sml_ST_PrintError =
3212     string "displayed" | string "blank" | string "dash" | string "NA"
3213 sml_CT_Scenarios =
3214     attribute current { xsd:unsignedInt }?,
3215     attribute show { xsd:unsignedInt }?,
3216     attribute sqref { sml_ST_Sqref }?,
3217     element scenario { sml_CT_Scenario }+
3218 sml_CT_SheetProtection =
3219     attribute password { sml_ST_UnsignedShortHex }?,

```

```

3220 attribute algorithmName { s_ST_Xstring }?,
3221 attribute hashValue { xsd:base64Binary }?,
3222 attribute saltValue { xsd:base64Binary }?,
3223 attribute spinCount { xsd:unsignedInt }?,
3224
3225 ## default value: false
3226 attribute sheet { xsd:boolean }?,
3227
3228 ## default value: false
3229 attribute objects { xsd:boolean }?,
3230
3231 ## default value: false
3232 attribute scenarios { xsd:boolean }?,
3233
3234 ## default value: true
3235 attribute formatCells { xsd:boolean }?,
3236
3237 ## default value: true
3238 attribute formatColumns { xsd:boolean }?,
3239
3240 ## default value: true
3241 attribute formatRows { xsd:boolean }?,
3242
3243 ## default value: true
3244 attribute insertColumns { xsd:boolean }?,
3245
3246 ## default value: true
3247 attribute insertRows { xsd:boolean }?,
3248
3249 ## default value: true
3250 attribute insertHyperlinks { xsd:boolean }?,
3251
3252 ## default value: true
3253 attribute deleteColumns { xsd:boolean }?,
3254
3255 ## default value: true
3256 attribute deleteRows { xsd:boolean }?,
3257
3258 ## default value: false
3259 attribute selectLockedCells { xsd:boolean }?,
3260
3261 ## default value: true
3262 attribute sort { xsd:boolean }?,
3263
3264 ## default value: true
3265 attribute autoFilter { xsd:boolean }?,
3266
3267 ## default value: true
3268 attribute pivotTables { xsd:boolean }?,
3269
3270 ## default value: false
3271 attribute selectUnlockedCells { xsd:boolean }?
3272 sml_CT_ProtectedRanges =

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3273     element protectedRange { sml_CT_ProtectedRange }+
3274 sml_CT_ProtectedRange =
3275     attribute password { sml_ST_UnsignedShortHex }?,
3276     attribute sqref { sml_ST_Sqref },
3277     attribute name { s_ST_Xstring },
3278     attribute securityDescriptor { xsd:string }?,
3279     attribute algorithmName { s_ST_Xstring }?,
3280     attribute hashValue { xsd:base64Binary }?,
3281     attribute saltValue { xsd:base64Binary }?,
3282     attribute spinCount { xsd:unsignedInt }?,
3283     element securityDescriptor { xsd:string }*
3284 sml_CT_Scenario =
3285     attribute name { s_ST_Xstring },
3286
3287     ## default value: false
3288     attribute locked { xsd:boolean }?,
3289
3290     ## default value: false
3291     attribute hidden { xsd:boolean }?,
3292     attribute count { xsd:unsignedInt }?,
3293     attribute user { s_ST_Xstring }?,
3294     attribute comment { s_ST_Xstring }?,
3295     element inputCells { sml_CT_InputCells }+
3296 sml_CT_InputCells =
3297     attribute r { sml_ST_CellRef },
3298
3299     ## default value: false
3300     attribute deleted { xsd:boolean }?,
3301
3302     ## default value: false
3303     attribute undone { xsd:boolean }?,
3304     attribute val { s_ST_Xstring },
3305     attribute numFmtId { sml_ST_NumFmtId }?
3306 sml_CT_CellWatches = element cellWatch { sml_CT_CellWatch }+
3307 sml_CT_CellWatch = attribute r { sml_ST_CellRef }
3308 sml_CT_Chartsheet =
3309     element sheetPr { sml_CT_ChartsheetPr }?,
3310     element sheetViews { sml_CT_ChartsheetViews },
3311     element sheetProtection { sml_CT_ChartsheetProtection }?,
3312     element customSheetViews { sml_CT_CustomChartsheetViews }?,
3313     element pageMargins { sml_CT_PageMargins }?,
3314     element pageSetup { sml_CT-CsPageSetup }?,
3315     element headerFooter { sml_CT_HeaderFooter }?,
3316     element drawing { sml_CT_Drawing },
3317     element legacyDrawing { sml_CT_LegacyDrawing }?,
3318     element legacyDrawingHF { sml_CT_LegacyDrawing }?,
3319     element drawingHF { sml_CT_DrawingHF }?,
3320     element picture { sml_CT_SheetBackgroundPicture }?,
3321     element webPublishItems { sml_CT_WebPublishItems }?,
3322     element extLst { sml_CT_ExtensionList }?
3323 sml_CT_ChartsheetPr =
3324
3325     ## default value: true

```



```

3326     attribute published { xsd:boolean }?,
3327     attribute codeName { xsd:string }?,
3328     element tabColor { sml_CT_Color }?
3329 sml_CT_ChartsheetViews =
3330     element sheetView { sml_CT_ChartsheetView }+,
3331     element extLst { sml_CT_ExtensionList }?
3332 sml_CT_ChartsheetView =
3333
3334     ## default value: false
3335     attribute tabSelected { xsd:boolean }?,
3336
3337     ## default value: 100
3338     attribute zoomScale { xsd:unsignedInt }?,
3339     attribute workbookViewId { xsd:unsignedInt },
3340
3341     ## default value: false
3342     attribute zoomToFit { xsd:boolean }?,
3343     element extLst { sml_CT_ExtensionList }?
3344 sml_CT_ChartsheetProtection =
3345     attribute password { sml_ST_UnsignedShortHex }?,
3346     attribute algorithmName { s_ST_Xstring }?,
3347     attribute hashValue { xsd:base64Binary }?,
3348     attribute saltValue { xsd:base64Binary }?,
3349     attribute spinCount { xsd:unsignedInt }?,
3350
3351     ## default value: false
3352     attribute content { xsd:boolean }?,
3353
3354     ## default value: false
3355     attribute objects { xsd:boolean }?
3356 sml_CT_CsPageSetup =
3357
3358     ## default value: 1
3359     attribute paperSize { xsd:unsignedInt }?,
3360     attribute paperHeight { s_ST_PositiveUniversalMeasure }?,
3361     attribute paperWidth { s_ST_PositiveUniversalMeasure }?,
3362
3363     ## default value: 1
3364     attribute firstPageNumber { xsd:unsignedInt }?,
3365
3366     ## default value: default
3367     attribute orientation { sml_ST_Orientation }?,
3368
3369     ## default value: true
3370     attribute usePrinterDefaults { xsd:boolean }?,
3371
3372     ## default value: false
3373     attribute blackAndWhite { xsd:boolean }?,
3374
3375     ## default value: false
3376     attribute draft { xsd:boolean }?,
3377
3378     ## default value: false

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3379     attribute useFirstPageNumber { xsd:boolean }?,
3380
3381     ## default value: 600
3382     attribute horizontalDpi { xsd:unsignedInt }?,
3383
3384     ## default value: 600
3385     attribute verticalDpi { xsd:unsignedInt }?,
3386
3387     ## default value: 1
3388     attribute copies { xsd:unsignedInt }?,
3389     r_id?
3390 sml_CT_CustomChartsheetViews =
3391     element customSheetView { sml_CT_CustomChartsheetView }*
3392 sml_CT_CustomChartsheetView =
3393     attribute guid { s_ST_Guid },
3394
3395     ## default value: 100
3396     attribute scale { xsd:unsignedInt }?,
3397
3398     ## default value: visible
3399     attribute state { sml_ST_SheetState }?,
3400
3401     ## default value: false
3402     attribute zoomToFit { xsd:boolean }?,
3403     element pageMargins { sml_CT_PageMargins }?,
3404     element pageSetup { sml_CT_CsPageSetup }?,
3405     element headerFooter { sml_CT_HeaderFooter }?
3406 sml_CT_CustomProperties = element customPr { sml_CT_CustomProperty }+
3407 sml_CT_CustomProperty =
3408     attribute name { s_ST_Xstring },
3409     r_id
3410 sml_CT_OleObjects = element oleObject { sml_CT_OleObject }+
3411 sml_CT_OleObject =
3412     attribute progId { xsd:string }?,
3413
3414     ## default value: DVASPECT_CONTENT
3415     attribute dvAspect { sml_ST_DvAspect }?,
3416     attribute link { s_ST_Xstring }?,
3417     attribute oleUpdate { sml_ST_OleUpdate }?,
3418
3419     ## default value: false
3420     attribute autoLoad { xsd:boolean }?,
3421     attribute shapeId { xsd:unsignedInt },
3422     r_id?,
3423     element objectPr { sml_CT_ObjectPr }?
3424 sml_CT_ObjectPr =
3425
3426     ## default value: true
3427     attribute locked { xsd:boolean }?,
3428
3429     ## default value: true
3430     attribute defaultSize { xsd:boolean }?,
3431

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```

3432 ## default value: true
3433 attribute print { xsd:boolean }?,
3434
3435 ## default value: false
3436 attribute disabled { xsd:boolean }?,
3437
3438 ## default value: false
3439 attribute uiObject { xsd:boolean }?,
3440
3441 ## default value: true
3442 attribute autoFill { xsd:boolean }?,
3443
3444 ## default value: true
3445 attribute autoLine { xsd:boolean }?,
3446
3447 ## default value: true
3448 attribute autoPict { xsd:boolean }?,
3449 attribute macro { sml_ST_Formula }?,
3450 attribute altText { s_ST_Xstring }?,
3451
3452 ## default value: false
3453 attribute dde { xsd:boolean }?,
3454 r_id?,
3455 element anchor { sml_CT_ObjectAnchor }
3456 sml_ST_DvAspect = string "DVASPECT_CONTENT" | string "DVASPECT_ICON"
3457 sml_ST_OleUpdate = string "OLEUPDATE_ALWAYS" | string "OLEUPDATE_ONCALL"
3458 sml_CT_WebPublishItems =
3459     attribute count { xsd:unsignedInt }?,
3460     element webPublishItem { sml_CT_WebPublishItem }+
3461 sml_CT_WebPublishItem =
3462     attribute id { xsd:unsignedInt },
3463     attribute divId { s_ST_Xstring },
3464     attribute sourceType { sml_ST_WebSourceType },
3465     attribute sourceRef { sml_ST_Ref }?,
3466     attribute sourceObject { s_ST_Xstring }?,
3467     attribute destinationFile { s_ST_Xstring },
3468     attribute title { s_ST_Xstring }?,
3469
3470 ## default value: false
3471 attribute autoRepublish { xsd:boolean }?
3472 sml_CT_Controls = element control { sml_CT_Control }+
3473 sml_CT_Control =
3474     attribute shapeId { xsd:unsignedInt },
3475     r_id,
3476     attribute name { xsd:string }?,
3477     element controlPr { sml_CT_ControlPr }?
3478 sml_CT_ControlPr =
3479
3480 ## default value: true
3481 attribute locked { xsd:boolean }?,
3482
3483 ## default value: true
3484 attribute defaultSize { xsd:boolean }?,

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3485
3486   ## default value: true
3487   attribute print { xsd:boolean }?,
3488
3489   ## default value: false
3490   attribute disabled { xsd:boolean }?,
3491
3492   ## default value: false
3493   attribute recalcAlways { xsd:boolean }?,
3494
3495   ## default value: false
3496   attribute uiObject { xsd:boolean }?,
3497
3498   ## default value: true
3499   attribute autoFill { xsd:boolean }?,
3500
3501   ## default value: true
3502   attribute autoLine { xsd:boolean }?,
3503
3504   ## default value: true
3505   attribute autoPict { xsd:boolean }?,
3506   attribute macro { sml_ST_Formula }?,
3507   attribute altText { s_ST_Xstring }?,
3508   attribute linkedCell { sml_ST_Formula }?,
3509   attribute listFillRange { sml_ST_Formula }?,
3510
3511   ## default value: pict
3512   attribute cf { s_ST_Xstring }?,
3513   r_id?,
3514   element anchor { sml_CT_ObjectAnchor }
3515 sml_ST_WebSourceType =
3516   string "sheet"
3517   | string "printArea"
3518   | string "autoFilter"
3519   | string "range"
3520   | string "chart"
3521   | string "pivotTable"
3522   | string "query"
3523   | string "label"
3524 sml_CT_IgnoredErrors =
3525   element ignoredError { sml_CT_IgnoredError }+,
3526   element extLst { sml_CT_ExtensionList }?
3527 sml_CT_IgnoredError =
3528   attribute sqref { sml_ST_Sqref },
3529
3530   ## default value: false
3531   attribute evalError { xsd:boolean }?,
3532
3533   ## default value: false
3534   attribute twoDigitTextYear { xsd:boolean }?,
3535
3536   ## default value: false
3537   attribute numberStoredAsText { xsd:boolean }?,

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3538
3539   ## default value: false
3540   attribute formula { xsd:boolean }?,
3541
3542   ## default value: false
3543   attribute formulaRange { xsd:boolean }?,
3544
3545   ## default value: false
3546   attribute unlockedFormula { xsd:boolean }?,
3547
3548   ## default value: false
3549   attribute emptyCellReference { xsd:boolean }?,
3550
3551   ## default value: false
3552   attribute listDataValidation { xsd:boolean }?,
3553
3554   ## default value: false
3555   attribute calculatedColumn { xsd:boolean }?
3556 sml_ST_PaneState =
3557     string "split" | string "frozen" | string "frozenSplit"
3558 sml_CT_TableParts =
3559     attribute count { xsd:unsignedInt }?,
3560     element tablePart { sml_CT_TablePart }*
3561 sml_CT_TablePart = r_id
3562 sml_metadata = element metadata { sml_CT_Metadata }
3563 sml_CT_Metadata =
3564     element metadataTypes { sml_CT_MetadataTypes }?,
3565     element metadataStrings { sml_CT_MetadataStrings }?,
3566     element mdxMetadata { sml_CT_MdxMetadata }?,
3567     element futureMetadata { sml_CT_FutureMetadata }*,
3568     element cellMetadata { sml_CT_MetadataBlocks }?,
3569     element valueMetadata { sml_CT_MetadataBlocks }?,
3570     element extLst { sml_CT_ExtensionList }?
3571 sml_CT_MetadataTypes =
3572
3573     ## default value: 0
3574     attribute count { xsd:unsignedInt }?,
3575     element metadataType { sml_CT_MetadataType }+
3576 sml_CT_MetadataType =
3577     attribute name { s_ST_Xstring },
3578     attribute minSupportedVersion { xsd:unsignedInt },
3579
3580     ## default value: false
3581     attribute ghostRow { xsd:boolean }?,
3582
3583     ## default value: false
3584     attribute ghostCol { xsd:boolean }?,
3585
3586     ## default value: false
3587     attribute edit { xsd:boolean }?,
3588
3589     ## default value: false
3590     attribute delete { xsd:boolean }?,

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```
3591
3592   ## default value: false
3593   attribute copy { xsd:boolean }?,
3594
3595   ## default value: false
3596   attribute pasteAll { xsd:boolean }?,
3597
3598   ## default value: false
3599   attribute pasteFormulas { xsd:boolean }?,
3600
3601   ## default value: false
3602   attribute pasteValues { xsd:boolean }?,
3603
3604   ## default value: false
3605   attribute pasteFormats { xsd:boolean }?,
3606
3607   ## default value: false
3608   attribute pasteComments { xsd:boolean }?,
3609
3610   ## default value: false
3611   attribute pasteDataValidation { xsd:boolean }?,
3612
3613   ## default value: false
3614   attribute pasteBorders { xsd:boolean }?,
3615
3616   ## default value: false
3617   attribute pasteColWidths { xsd:boolean }?,
3618
3619   ## default value: false
3620   attribute pasteNumberFormats { xsd:boolean }?,
3621
3622   ## default value: false
3623   attribute merge { xsd:boolean }?,
3624
3625   ## default value: false
3626   attribute splitFirst { xsd:boolean }?,
3627
3628   ## default value: false
3629   attribute splitAll { xsd:boolean }?,
3630
3631   ## default value: false
3632   attribute rowColShift { xsd:boolean }?,
3633
3634   ## default value: false
3635   attribute clearAll { xsd:boolean }?,
3636
3637   ## default value: false
3638   attribute clearFormats { xsd:boolean }?,
3639
3640   ## default value: false
3641   attribute clearContents { xsd:boolean }?,
3642
3643   ## default value: false
```

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3644 attribute clearComments { xsd:boolean }?,
3645
3646 ## default value: false
3647 attribute assign { xsd:boolean }?,
3648
3649 ## default value: false
3650 attribute coerce { xsd:boolean }?,
3651
3652 ## default value: false
3653 attribute adjust { xsd:boolean }?,
3654
3655 ## default value: false
3656 attribute cellMeta { xsd:boolean }?
3657 sml_CT_MetadataBlocks =
3658
3659 ## default value: 0
3660 attribute count { xsd:unsignedInt }?,
3661 element bk { sml_CT_MetadataBlock }+
3662 sml_CT_MetadataBlock = element rc { sml_CT_MetadataRecord }+
3663 sml_CT_MetadataRecord =
3664   attribute t { xsd:unsignedInt },
3665   attribute v { xsd:unsignedInt }
3666 sml_CT_FutureMetadata =
3667   attribute name { s_ST_Xstring },
3668
3669 ## default value: 0
3670 attribute count { xsd:unsignedInt }?,
3671 element bk { sml_CT_FutureMetadataBlock }*,
3672 element extLst { sml_CT_ExtensionList }?
3673 sml_CT_FutureMetadataBlock = element extLst { sml_CT_ExtensionList }?
3674 sml_CT_MdxMetadata =
3675
3676 ## default value: 0
3677 attribute count { xsd:unsignedInt }?,
3678 element mdx { sml_CT_Mdx }+
3679 sml_CT_Mdx =
3680   attribute n { xsd:unsignedInt },
3681   attribute f { sml_ST_MdxFunctionType },
3682   (element t { sml_CT_MdxTuple }
3683     | element ms { sml_CT_MdxSet }
3684     | element p { sml_CT_MdxMemeberProp }
3685     | element k { sml_CT_MdxKPI })
3686 sml_ST_MdxFunctionType =
3687   string "m"
3688   | string "v"
3689   | string "s"
3690   | string "c"
3691   | string "r"
3692   | string "p"
3693   | string "k"
3694 sml_CT_MdxTuple =
3695
3696 ## default value: 0

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```

3697     attribute c { xsd:unsignedInt }?,
3698     attribute ct { s_ST_Xstring }?,
3699     attribute si { xsd:unsignedInt }?,
3700     attribute fi { xsd:unsignedInt }?,
3701     attribute bc { sml_ST_UnsignedIntHex }?,
3702     attribute fc { sml_ST_UnsignedIntHex }?,
3703
3704     ## default value: false
3705     attribute i { xsd:boolean }?,
3706
3707     ## default value: false
3708     attribute u { xsd:boolean }?,
3709
3710     ## default value: false
3711     attribute st { xsd:boolean }?,
3712
3713     ## default value: false
3714     attribute b { xsd:boolean }?,
3715     element n { sml_CT_MetadadataStringIndex }*
3716 sml_CT_MdxSet =
3717     attribute ns { xsd:unsignedInt },
3718
3719     ## default value: 0
3720     attribute c { xsd:unsignedInt }?,
3721
3722     ## default value: u
3723     attribute o { sml_ST_MdxSetOrder }?,
3724     element n { sml_CT_MetadadataStringIndex }*
3725 sml_ST_MdxSetOrder =
3726     string "u"
3727     | string "a"
3728     | string "d"
3729     | string "aa"
3730     | string "ad"
3731     | string "na"
3732     | string "nd"
3733 sml_CT_MdxMemeberProp =
3734     attribute n { xsd:unsignedInt },
3735     attribute np { xsd:unsignedInt }
3736 sml_CT_MdxKPI =
3737     attribute n { xsd:unsignedInt },
3738     attribute np { xsd:unsignedInt },
3739     attribute p { sml_ST_MdxKPIProperty }
3740 sml_ST_MdxKPIProperty =
3741     string "v"
3742     | string "g"
3743     | string "s"
3744     | string "t"
3745     | string "w"
3746     | string "m"
3747 sml_CT_MetadadataStringIndex =
3748     attribute x { xsd:unsignedInt },
3749

```



```

3750  ## default value: false
3751  attribute s { xsd:boolean }?
3752  sml_CT_MetadataStrings =
3753
3754  ## default value: 0
3755  attribute count { xsd:unsignedInt }?,
3756  element s { sml_CT_XStringElement }+
3757  sml_singleXmlCells = element singleXmlCells { sml_CT_SingleXmlCells }
3758  sml_CT_SingleXmlCells = element singleXmlCell { sml_CT_SingleXmlCell }+
3759  sml_CT_SingleXmlCell =
3760  attribute id { xsd:unsignedInt },
3761  attribute r { sml_ST_CellRef },
3762  attribute connectionId { xsd:unsignedInt },
3763  element xmlCellPr { sml_CT_XmlCellPr },
3764  element extLst { sml_CT_ExtensionList }?
3765  sml_CT_XmlCellPr =
3766  attribute id { xsd:unsignedInt },
3767  attribute uniqueName { s_ST_Xstring }?,
3768  element xmlPr { sml_CT_XmlPr },
3769  element extLst { sml_CT_ExtensionList }?
3770  sml_CT_XmlPr =
3771  attribute mapId { xsd:unsignedInt },
3772  attribute xpath { s_ST_Xstring },
3773  attribute xmlDataType { sml_ST_XmlDataType },
3774  element extLst { sml_CT_ExtensionList }?
3775  sml_styleSheet = element styleSheet { sml_CT_Stylesheet }
3776  sml_CT_Stylesheet =
3777  element numFmts { sml_CT_NumFmts }?,
3778  element fonts { sml_CT_Fonts }?,
3779  element fills { sml_CT_Fills }?,
3780  element borders { sml_CT_Borders }?,
3781  element cellStyleXfs { sml_CT_CellStyleXfs }?,
3782  element cellXfs { sml_CT_CellXfs }?,
3783  element cellStyles { sml_CT_CellStyles }?,
3784  element dxfs { sml_CT_Dxfs }?,
3785  element tableStyles { sml_CT_TableStyles }?,
3786  element colors { sml_CT_Colors }?,
3787  element extLst { sml_CT_ExtensionList }?
3788  sml_CT_CellAlignment =
3789  attribute horizontal { sml_ST_HorizontalAlignment }?,
3790  attribute vertical { sml_ST_VerticalAlignment }?,
3791  attribute textRotation { xsd:unsignedInt }?,
3792  attribute wrapText { xsd:boolean }?,
3793  attribute indent { xsd:unsignedInt }?,
3794  attribute relativeIndent { xsd:int }?,
3795  attribute justifyLastLine { xsd:boolean }?,
3796  attribute shrinkToFit { xsd:boolean }?,
3797  attribute readingOrder { xsd:unsignedInt }?
3798  sml_ST_BorderStyle =
3799  string "none"
3800  | string "thin"
3801  | string "medium"
3802  | string "dashed"

```

```

3803 | string "dotted"
3804 | string "thick"
3805 | string "double"
3806 | string "hair"
3807 | string "mediumDashed"
3808 | string "dashDot"
3809 | string "mediumDashDot"
3810 | string "dashDotDot"
3811 | string "mediumDashDotDot"
3812 | string "slantDashDot"
3813 sml_CT_Borders =
3814     attribute count { xsd:unsignedInt }?,
3815     element border { sml_CT_Border }*
3816 sml_CT_Border =
3817     attribute diagonalUp { xsd:boolean }?,
3818     attribute diagonalDown { xsd:boolean }?,
3819
3820     ## default value: true
3821     attribute outline { xsd:boolean }?,
3822     element start { sml_CT_BorderPr }?,
3823     element end { sml_CT_BorderPr }?,
3824     element left { sml_CT_BorderPr }?,
3825     element right { sml_CT_BorderPr }?,
3826     element top { sml_CT_BorderPr }?,
3827     element bottom { sml_CT_BorderPr }?,
3828     element diagonal { sml_CT_BorderPr }?,
3829     element vertical { sml_CT_BorderPr }?,
3830     element horizontal { sml_CT_BorderPr }?
3831 sml_CT_BorderPr =
3832
3833     ## default value: none
3834     attribute style { sml_ST_BorderStyle }?,
3835     element color { sml_CT_Color }?
3836 sml_CT_CellProtection =
3837     attribute locked { xsd:boolean }?,
3838     attribute hidden { xsd:boolean }?
3839 sml_CT_Fonts =
3840     attribute count { xsd:unsignedInt }?,
3841     element font { sml_CT_Font }*
3842 sml_CT_Fills =
3843     attribute count { xsd:unsignedInt }?,
3844     element fill { sml_CT_Fill }*
3845 sml_CT_Fill =
3846     element patternFill { sml_CT_PatternFill }?
3847     | element gradientFill { sml_CT_GradientFill }?
3848 sml_CT_PatternFill =
3849     attribute patternType { sml_ST_PatternType }?,
3850     element fgColor { sml_CT_Color }?,
3851     element bgColor { sml_CT_Color }?
3852 sml_CT_Color =
3853     attribute auto { xsd:boolean }?,
3854     attribute indexed { xsd:unsignedInt }?,
3855     attribute rgb { sml_ST_UnsignedIntHex }?,

```

```

3856     attribute theme { xsd:unsignedInt }?,
3857
3858     ## default value: 0.0
3859     attribute tint { xsd:double }?
3860 sml_ST_PatternType =
3861     string "none"
3862     | string "solid"
3863     | string "mediumGray"
3864     | string "darkGray"
3865     | string "lightGray"
3866     | string "darkHorizontal"
3867     | string "darkVertical"
3868     | string "darkDown"
3869     | string "darkUp"
3870     | string "darkGrid"
3871     | string "darkTrellis"
3872     | string "lightHorizontal"
3873     | string "lightVertical"
3874     | string "lightDown"
3875     | string "lightUp"
3876     | string "lightGrid"
3877     | string "lightTrellis"
3878     | string "gray125"
3879     | string "gray0625"
3880 sml_CT_GradientFill =
3881
3882     ## default value: linear
3883     attribute type { sml_ST_GradientType }?,
3884
3885     ## default value: 0
3886     attribute degree { xsd:double }?,
3887
3888     ## default value: 0
3889     attribute left { xsd:double }?,
3890
3891     ## default value: 0
3892     attribute right { xsd:double }?,
3893
3894     ## default value: 0
3895     attribute top { xsd:double }?,
3896
3897     ## default value: 0
3898     attribute bottom { xsd:double }?,
3899     element stop { sml_CT_GradientStop }*
3900 sml_CT_GradientStop =
3901     attribute position { xsd:double },
3902     element color { sml_CT_Color }
3903 sml_ST_GradientType = string "linear" | string "path"
3904 sml_ST_HorizontalAlignment =
3905     string "general"
3906     | string "left"
3907     | string "center"
3908     | string "right"

```

```

3909 | string "fill"
3910 | string "justify"
3911 | string "centerContinuous"
3912 | string "distributed"
3913 sml_ST_VerticalAlignment =
3914     string "top"
3915     | string "center"
3916     | string "bottom"
3917     | string "justify"
3918     | string "distributed"
3919 sml_CT_NumFmts =
3920     attribute count { xsd:unsignedInt }?,
3921     element numFmt { sml_CT_NumFmt }*
3922 sml_CT_NumFmt =
3923     attribute numFmtId { sml_ST_NumFmtId },
3924     attribute formatCode { s_ST_Xstring }
3925 sml_CT_CellStyleXfs =
3926     attribute count { xsd:unsignedInt }?,
3927     element xf { sml_CT_Xf }+
3928 sml_CT_CellXfs =
3929     attribute count { xsd:unsignedInt }?,
3930     element xf { sml_CT_Xf }+
3931 sml_CT_Xf =
3932     attribute numFmtId { sml_ST_NumFmtId }?,
3933     attribute fontId { sml_ST_FontId }?,
3934     attribute fillId { sml_ST_FillId }?,
3935     attribute borderId { sml_ST_BorderId }?,
3936     attribute xfId { sml_ST_CellStyleXfId }?,
3937
3938     ## default value: false
3939     attribute quotePrefix { xsd:boolean }?,
3940
3941     ## default value: false
3942     attribute pivotButton { xsd:boolean }?,
3943     attribute applyNumberFormat { xsd:boolean }?,
3944     attribute applyFont { xsd:boolean }?,
3945     attribute applyFill { xsd:boolean }?,
3946     attribute applyBorder { xsd:boolean }?,
3947     attribute applyAlignment { xsd:boolean }?,
3948     attribute applyProtection { xsd:boolean }?,
3949     element alignment { sml_CT_CellAlignment }?,
3950     element protection { sml_CT_CellProtection }?,
3951     element extLst { sml_CT_ExtensionList }?
3952 sml_CT_CellStyles =
3953     attribute count { xsd:unsignedInt }?,
3954     element cellStyle { sml_CT_CellStyle }+
3955 sml_CT_CellStyle =
3956     attribute name { s_ST_Xstring }?,
3957     attribute xfId { sml_ST_CellStyleXfId },
3958     attribute builtinId { xsd:unsignedInt }?,
3959     attribute iLevel { xsd:unsignedInt }?,
3960     attribute hidden { xsd:boolean }?,
3961     attribute customBuiltin { xsd:boolean }?,

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```

3962     element extlst { sml_CT_ExtensionList }?
3963 sml_CT_Dxfs =
3964     attribute count { xsd:unsignedInt }?,
3965     element dxf { sml_CT_Dxf }*
3966 sml_CT_Dxf =
3967     element font { sml_CT_Font }?,
3968     element numFmt { sml_CT_NumFmt }?,
3969     element fill { sml_CT_Fill }?,
3970     element alignment { sml_CT_CellAlignment }?,
3971     element border { sml_CT_Border }?,
3972     element protection { sml_CT_CellProtection }?,
3973     element extlst { sml_CT_ExtensionList }?
3974 sml_ST_NumFmtId = xsd:unsignedInt
3975 sml_ST_FontId = xsd:unsignedInt
3976 sml_ST_FillId = xsd:unsignedInt
3977 sml_ST_BorderId = xsd:unsignedInt
3978 sml_ST_CellStyleXfId = xsd:unsignedInt
3979 sml_ST_DxfId = xsd:unsignedInt
3980 sml_CT_Colors =
3981     element indexedColors { sml_CT_IndexedColors }?,
3982     element mruColors { sml_CT_MRUColors }?
3983 sml_CT_IndexedColors = element rgbColor { sml_CT_RgbColor }+
3984 sml_CT_MRUColors = element color { sml_CT_Color }+
3985 sml_CT_RgbColor = attribute rgb { sml_ST_UnsignedIntHex }?
3986 sml_CT_TableStyles =
3987     attribute count { xsd:unsignedInt }?,
3988     attribute defaultTableStyle { xsd:string }?,
3989     attribute defaultPivotStyle { xsd:string }?,
3990     element tableStyle { sml_CT_TableStyle }*
3991 sml_CT_TableStyle =
3992     attribute name { xsd:string },
3993
3994     ## default value: true
3995     attribute pivot { xsd:boolean }?,
3996
3997     ## default value: true
3998     attribute table { xsd:boolean }?,
3999     attribute count { xsd:unsignedInt }?,
4000     element tableStyleElement { sml_CT_TableStyleElement }*
4001 sml_CT_TableStyleElement =
4002     attribute type { sml_ST_TableStyleType },
4003
4004     ## default value: 1
4005     attribute size { xsd:unsignedInt }?,
4006     attribute dxfId { sml_ST_DxfId }?
4007 sml_ST_TableStyleType =
4008     string "wholeTable"
4009     | string "headerRow"
4010     | string "totalRow"
4011     | string "firstColumn"
4012     | string "lastColumn"
4013     | string "firstRowStripe"
4014     | string "secondRowStripe"

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```

4015 | string "firstColumnStripe"
4016 | string "secondColumnStripe"
4017 | string "firstHeaderCell"
4018 | string "lastHeaderCell"
4019 | string "firstTotalCell"
4020 | string "lastTotalCell"
4021 | string "firstSubtotalColumn"
4022 | string "secondSubtotalColumn"
4023 | string "thirdSubtotalColumn"
4024 | string "firstSubtotalRow"
4025 | string "secondSubtotalRow"
4026 | string "thirdSubtotalRow"
4027 | string "blankRow"
4028 | string "firstColumnSubheading"
4029 | string "secondColumnSubheading"
4030 | string "thirdColumnSubheading"
4031 | string "firstRowSubheading"
4032 | string "secondRowSubheading"
4033 | string "thirdRowSubheading"
4034 | string "pageFieldLabels"
4035 | string "pageFieldValues"
4036 sml_CT_BooleanProperty =
4037
4038     ## default value: true
4039     attribute val { xsd:boolean }?
4040 sml_CT_FontSize = attribute val { xsd:double }
4041 sml_CT_IntProperty = attribute val { xsd:int }
4042 sml_CT_FontName = attribute val { s_ST_Xstring }
4043 sml_CT_VerticalAlignFontProperty =
4044     attribute val { s_ST_VerticalAlignRun }
4045 sml_CT_FontScheme = attribute val { sml_ST_FontScheme }
4046 sml_ST_FontScheme = string "none" | string "major" | string "minor"
4047 sml_CT_UnderlineProperty =
4048
4049     ## default value: single
4050     attribute val { sml_ST_UnderlineValues }?
4051 sml_ST_UnderlineValues =
4052     string "single"
4053     | string "double"
4054     | string "singleAccounting"
4055     | string "doubleAccounting"
4056     | string "none"
4057 sml_CT_Font =
4058     (element name { sml_CT_FontName }?
4059     | element charset { sml_CT_IntProperty }?
4060     | element family { sml_CT_FontFamily}?
4061     | element b { sml_CT_BooleanProperty }?
4062     | element i { sml_CT_BooleanProperty }?
4063     | element strike { sml_CT_BooleanProperty }?
4064     | element outline { sml_CT_BooleanProperty }?
4065     | element shadow { sml_CT_BooleanProperty }?
4066     | element condense { sml_CT_BooleanProperty }?
4067     | element extend { sml_CT_BooleanProperty }?

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4068 | element color { sml_CT_Color }?
4069 | element sz { sml_CT_FontSize }?
4070 | element u { sml_CT_UnderlineProperty }?
4071 | element vertAlign { sml_CT_VerticalAlignFontProperty }?
4072 | element scheme { sml_CT_FontScheme }?)+
4073 sml_CT_FontFamily = attribute val { sml_ST_FontFamily }
4074 sml_ST_FontFamily = xsd:integer { minInclusive = "0" maxInclusive = "14" }
4075 sml_AG_AutoFormat =
4076   attribute autoFormatId { xsd:unsignedInt }?,
4077   attribute applyNumberFormats { xsd:boolean }?,
4078   attribute applyBorderFormats { xsd:boolean }?,
4079   attribute applyFontFormats { xsd:boolean }?,
4080   attribute applyPatternFormats { xsd:boolean }?,
4081   attribute applyAlignmentFormats { xsd:boolean }?,
4082   attribute applyWidthHeightFormats { xsd:boolean }?
4083 sml_externallink = element externalLink { sml_CT_ExternalLink }
4084 sml_CT_ExternalLink =
4085   (element externalBook { sml_CT_ExternalBook }?
4086   | element ddeLink { sml_CT_DdeLink }?
4087   | element oleLink { sml_CT_OleLink }?),
4088   element extLst { sml_CT_ExtensionList }?
4089 sml_CT_ExternalBook =
4090   r_id,
4091   element sheetNames { sml_CT_ExternalSheetNames }?,
4092   element definedNames { sml_CT_ExternalDefinedNames }?,
4093   element sheetDataSet { sml_CT_ExternalSheetDataSet }?
4094 sml_CT_ExternalSheetNames =
4095   element sheetName { sml_CT_ExternalSheetName }+
4096 sml_CT_ExternalSheetName = attribute val { s_ST_Xstring }?
4097 sml_CT_ExternalDefinedNames =
4098   element definedName { sml_CT_ExternalDefinedName }*
4099 sml_CT_ExternalDefinedName =
4100   attribute name { s_ST_Xstring },
4101   attribute refersTo { s_ST_Xstring }?,
4102   attribute sheetId { xsd:unsignedInt }?
4103 sml_CT_ExternalSheetDataSet =
4104   element sheetData { sml_CT_ExternalSheetData }+
4105 sml_CT_ExternalSheetData =
4106   attribute sheetId { xsd:unsignedInt },
4107
4108   ## default value: false
4109   attribute refreshError { xsd:boolean }?,
4110   element row { sml_CT_ExternalRow }*
4111 sml_CT_ExternalRow =
4112   attribute r { xsd:unsignedInt },
4113   element cell { sml_CT_ExternalCell }*
4114 sml_CT_ExternalCell =
4115   attribute r { sml_ST_CellRef }?,
4116
4117   ## default value: n
4118   attribute t { sml_ST_CellType }?,
4119
4120   ## default value: 0

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```

4121     attribute vm { xsd:unsignedInt }?,
4122     element v { s_ST_Xstring }?
4123 sml_CT_DdeLink =
4124     attribute ddeService { s_ST_Xstring },
4125     attribute ddeTopic { s_ST_Xstring },
4126     element ddeItems { sml_CT_DdeItems }?
4127 sml_CT_DdeItems = element ddeItem { sml_CT_DdeItem }*
4128 sml_CT_DdeItem =
4129
4130     ## default value: 0
4131     attribute name { s_ST_Xstring }?,
4132
4133     ## default value: false
4134     attribute ole { xsd:boolean }?,
4135
4136     ## default value: false
4137     attribute advise { xsd:boolean }?,
4138
4139     ## default value: false
4140     attribute preferPic { xsd:boolean }?,
4141     element values { sml_CT_DdeValues }?
4142 sml_CT_DdeValues =
4143
4144     ## default value: 1
4145     attribute rows { xsd:unsignedInt }?,
4146
4147     ## default value: 1
4148     attribute cols { xsd:unsignedInt }?,
4149     element value { sml_CT_DdeValue }+
4150 sml_CT_DdeValue =
4151
4152     ## default value: n
4153     attribute t { sml_ST_DdeValueType }?,
4154     element val { s_ST_Xstring }
4155 sml_ST_DdeValueType =
4156     string "nil" | string "b" | string "n" | string "e" | string "str"
4157 sml_CT_OleLink =
4158     r_id,
4159     attribute progId { s_ST_Xstring },
4160     element oleItems { sml_CT_OleItems }?
4161 sml_CT_OleItems = element oleItem { sml_CT_OleItem }*
4162 sml_CT_OleItem =
4163     attribute name { s_ST_Xstring },
4164
4165     ## default value: false
4166     attribute icon { xsd:boolean }?,
4167
4168     ## default value: false
4169     attribute advise { xsd:boolean }?,
4170
4171     ## default value: false
4172     attribute preferPic { xsd:boolean }?
4173 sml_table = element table { sml_CT_Table }

```



```

4174 sml_CT_Table =
4175     attribute id { xsd:unsignedInt },
4176     attribute name { s_ST_Xstring }?,
4177     attribute displayName { s_ST_Xstring },
4178     attribute comment { s_ST_Xstring }?,
4179     attribute ref { sml_ST_Ref },
4180
4181     ## default value: worksheet
4182     attribute tableType { sml_ST_TableType }?,
4183
4184     ## default value: 1
4185     attribute headerRowCount { xsd:unsignedInt }?,
4186
4187     ## default value: false
4188     attribute insertRow { xsd:boolean }?,
4189
4190     ## default value: false
4191     attribute insertRowShift { xsd:boolean }?,
4192
4193     ## default value: 0
4194     attribute totalsRowCount { xsd:unsignedInt }?,
4195
4196     ## default value: true
4197     attribute totalsRowShown { xsd:boolean }?,
4198
4199     ## default value: false
4200     attribute published { xsd:boolean }?,
4201     attribute headerRowDxfId { sml_ST_DxfId }?,
4202     attribute dataDxfId { sml_ST_DxfId }?,
4203     attribute totalsRowDxfId { sml_ST_DxfId }?,
4204     attribute headerRowBorderDxfId { sml_ST_DxfId }?,
4205     attribute tableBorderDxfId { sml_ST_DxfId }?,
4206     attribute totalsRowBorderDxfId { sml_ST_DxfId }?,
4207     attribute headerRowCellStyle { s_ST_Xstring }?,
4208     attribute dataCellStyle { s_ST_Xstring }?,
4209     attribute totalsRowCellStyle { s_ST_Xstring }?,
4210     attribute connectionId { xsd:unsignedInt }?,
4211     element autoFilter { sml_CT_AutoFilter }?,
4212     element sortState { sml_CT_SortState }?,
4213     element tableColumns { sml_CT_TableColumns },
4214     element tableStyleInfo { sml_CT_TableStyleInfo }?,
4215     element extLst { sml_CT_ExtensionList }?
4216 sml_ST_TableType =
4217     string "worksheet" | string "xml" | string "queryTable"
4218 sml_CT_TableStyleInfo =
4219     attribute name { s_ST_Xstring }?,
4220     attribute showFirstColumn { xsd:boolean }?,
4221     attribute showLastColumn { xsd:boolean }?,
4222     attribute showRowStripes { xsd:boolean }?,
4223     attribute showColumnStripes { xsd:boolean }?
4224 sml_CT_TableColumns =
4225     attribute count { xsd:unsignedInt }?,
4226     element tableColumn { sml_CT_TableColumn }+

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```

4227 sml_CT_TableColumn =
4228     attribute id { xsd:unsignedInt },
4229     attribute uniqueName { s_ST_Xstring }?,
4230     attribute name { s_ST_Xstring },
4231
4232     ## default value: none
4233     attribute totalsRowFunction { sml_ST_TotalsRowFunction }?,
4234     attribute totalsRowLabel { s_ST_Xstring }?,
4235     attribute queryTableFieldId { xsd:unsignedInt }?,
4236     attribute headerRowDxfId { sml_ST_DxfId }?,
4237     attribute dataDxfId { sml_ST_DxfId }?,
4238     attribute totalsRowDxfId { sml_ST_DxfId }?,
4239     attribute headerRowCellStyle { s_ST_Xstring }?,
4240     attribute dataCellStyle { s_ST_Xstring }?,
4241     attribute totalsRowCellStyle { s_ST_Xstring }?,
4242     element calculatedColumnFormula { sml_CT_TableFormula }?,
4243     element totalsRowFormula { sml_CT_TableFormula }?,
4244     element xmlColumnPr { sml_CT_XmlColumnPr }?,
4245     element extLst { sml_CT_ExtensionList }?
4246 sml_CT_TableFormula =
4247     sml_ST_Formula,
4248
4249     ## default value: false
4250     attribute array { xsd:boolean }?
4251 sml_ST_TotalsRowFunction =
4252     string "none"
4253     | string "sum"
4254     | string "min"
4255     | string "max"
4256     | string "average"
4257     | string "count"
4258     | string "countNums"
4259     | string "stdDev"
4260     | string "var"
4261     | string "custom"
4262 sml_CT_XmlColumnPr =
4263     attribute mapId { xsd:unsignedInt },
4264     attribute xpath { s_ST_Xstring },
4265
4266     ## default value: false
4267     attribute denormalized { xsd:boolean }?,
4268     attribute xmlDataType { sml_ST_XmlDataType },
4269     element extLst { sml_CT_ExtensionList }?
4270 sml_ST_XmlDataType = xsd:string
4271 sml_volTypes = element volTypes { sml_CT_VolTypes }
4272 sml_CT_VolTypes =
4273     element volType { sml_CT_VolType }+,
4274     element extLst { sml_CT_ExtensionList }?
4275 sml_CT_VolType =
4276     attribute type { sml_ST_VolDepType },
4277     element main { sml_CT_VolMain }+
4278 sml_CT_VolMain =
4279     attribute first { s_ST_Xstring },

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4280     element tp { sml_CT_VolTopic }+
4281 sml_CT_VolTopic =
4282
4283     ## default value: n
4284     attribute t { sml_ST_VolValueType }?,
4285     element v { s_ST_Xstring },
4286     element stp { s_ST_Xstring }*,
4287     element tr { sml_CT_VolTopicRef }+
4288 sml_CT_VolTopicRef =
4289     attribute r { sml_ST_CellRef },
4290     attribute s { xsd:unsignedInt }
4291 sml_ST_VolDepType = string "realTimeData" | string "olapFunctions"
4292 sml_ST_VolValueType = string "b" | string "n" | string "e" | string "s"
4293 sml_workbook = element workbook { sml_CT_Workbook }
4294 sml_CT_Workbook =
4295     attribute conformance { s_ST_ConformanceClass }?,
4296     element fileVersion { sml_CT_FileVersion }?,
4297     element fileSharing { sml_CT_FileSharing }?,
4298     element workbookPr { sml_CT_WorkbookPr }?,
4299     element workbookProtection { sml_CT_WorkbookProtection }?,
4300     element bookViews { sml_CT_BookViews }?,
4301     element sheets { sml_CT_Sheets },
4302     element functionGroups { sml_CT_FunctionGroups }?,
4303     element externalReferences { sml_CT_ExternalReferences }?,
4304     element definedNames { sml_CT_DefinedNames }?,
4305     element calcPr { sml_CT_CalcPr }?,
4306     element oleSize { sml_CT_OleSize }?,
4307     element customWorkbookViews { sml_CT_CustomWorkbookViews }?,
4308     element pivotCaches { sml_CT_PivotCaches }?,
4309     element smartTagPr { sml_CT_SmartTagPr }?,
4310     element smartTagTypes { sml_CT_SmartTagTypes }?,
4311     element webPublishing { sml_CT_WebPublishing }?,
4312     element fileRecoveryPr { sml_CT_FileRecoveryPr }*,
4313     element webPublishObjects { sml_CT_WebPublishObjects }?,
4314     element extLst { sml_CT_ExtensionList }?
4315 sml_CT_FileVersion =
4316     attribute appName { xsd:string }?,
4317     attribute lastEdited { xsd:string }?,
4318     attribute lowestEdited { xsd:string }?,
4319     attribute rupBuild { xsd:string }?,
4320     attribute codeName { s_ST_Guid }?
4321 sml_CT_BookViews = element workbookView { sml_CT_BookView }+
4322 sml_CT_BookView =
4323
4324     ## default value: visible
4325     attribute visibility { sml_ST_Visibility }?,
4326
4327     ## default value: false
4328     attribute minimized { xsd:boolean }?,
4329
4330     ## default value: true
4331     attribute showHorizontalScroll { xsd:boolean }?,
4332

```

```

4333 ## default value: true
4334 attribute showVerticalScroll { xsd:boolean }?,
4335
4336 ## default value: true
4337 attribute showSheetTabs { xsd:boolean }?,
4338 attribute xWindow { xsd:int }?,
4339 attribute yWindow { xsd:int }?,
4340 attribute windowWidth { xsd:unsignedInt }?,
4341 attribute windowHeight { xsd:unsignedInt }?,
4342
4343 ## default value: 600
4344 attribute tabRatio { xsd:unsignedInt }?,
4345
4346 ## default value: 0
4347 attribute firstSheet { xsd:unsignedInt }?,
4348
4349 ## default value: 0
4350 attribute activeTab { xsd:unsignedInt }?,
4351
4352 ## default value: true
4353 attribute autoFilterDateGrouping { xsd:boolean }?,
4354 element extLst { sml_CT_ExtensionList }?
4355 sml_ST_Visibility =
4356     string "visible" | string "hidden" | string "veryHidden"
4357 sml_CT_CustomWorkbookViews =
4358     element customWorkbookView { sml_CT_CustomWorkbookView }+
4359 sml_CT_CustomWorkbookView =
4360     attribute name { s_ST_Xstring },
4361     attribute guid { s_ST_Guid },
4362
4363 ## default value: false
4364 attribute autoUpdate { xsd:boolean }?,
4365 attribute mergeInterval { xsd:unsignedInt }?,
4366
4367 ## default value: false
4368 attribute changesSavedWin { xsd:boolean }?,
4369
4370 ## default value: false
4371 attribute onlySync { xsd:boolean }?,
4372
4373 ## default value: false
4374 attribute personalView { xsd:boolean }?,
4375
4376 ## default value: true
4377 attribute includePrintSettings { xsd:boolean }?,
4378
4379 ## default value: true
4380 attribute includeHiddenRowCol { xsd:boolean }?,
4381
4382 ## default value: false
4383 attribute maximized { xsd:boolean }?,
4384
4385 ## default value: false

```

```

4386 attribute minimized { xsd:boolean }?,
4387
4388 ## default value: true
4389 attribute showHorizontalScroll { xsd:boolean }?,
4390
4391 ## default value: true
4392 attribute showVerticalScroll { xsd:boolean }?,
4393
4394 ## default value: true
4395 attribute showSheetTabs { xsd:boolean }?,
4396
4397 ## default value: 0
4398 attribute xWindow { xsd:int }?,
4399
4400 ## default value: 0
4401 attribute yWindow { xsd:int }?,
4402 attribute windowWidth { xsd:unsignedInt },
4403 attribute windowHeight { xsd:unsignedInt },
4404
4405 ## default value: 600
4406 attribute tabRatio { xsd:unsignedInt }?,
4407 attribute activeSheetId { xsd:unsignedInt },
4408
4409 ## default value: true
4410 attribute showFormulaBar { xsd:boolean }?,
4411
4412 ## default value: true
4413 attribute showStatusbar { xsd:boolean }?,
4414
4415 ## default value: commIndicator
4416 attribute showComments { sml_ST_Comments }?,
4417
4418 ## default value: all
4419 attribute showObjects { sml_ST_Objects }?,
4420 element extLst { sml_CT_ExtensionList }?
4421 sml_ST_Comments =
4422     string "commNone"
4423     | string "commIndicator"
4424     | string "commIndAndComment"
4425 sml_ST_Objects = string "all" | string "placeholders" | string "none"
4426 sml_CT_Sheets = element sheet { sml_CT_Sheet }+
4427 sml_CT_Sheet =
4428     attribute name { s_ST_Xstring },
4429     attribute sheetId { xsd:unsignedInt },
4430
4431 ## default value: visible
4432 attribute state { sml_ST_SheetState }?,
4433 r_id
4434 sml_ST_SheetState =
4435     string "visible" | string "hidden" | string "veryHidden"
4436 sml_CT_WorkbookPr =
4437
4438 ## default value: false

```

```

4439 attribute date1904 { xsd:boolean }?,
4440
4441 ## default value: true
4442 attribute dateCompatibility { xsd:boolean }?,
4443
4444 ## default value: all
4445 attribute showObjects { sml_ST_Objects }?,
4446
4447 ## default value: true
4448 attribute showBorderUnselectedTables { xsd:boolean }?,
4449
4450 ## default value: false
4451 attribute filterPrivacy { xsd:boolean }?,
4452
4453 ## default value: false
4454 attribute promptedSolutions { xsd:boolean }?,
4455
4456 ## default value: true
4457 attribute showInkAnnotation { xsd:boolean }?,
4458
4459 ## default value: false
4460 attribute backupFile { xsd:boolean }?,
4461
4462 ## default value: true
4463 attribute saveExternalLinkValues { xsd:boolean }?,
4464
4465 ## default value: userSet
4466 attribute updateLinks { sml_ST_UpdateLinks }?,
4467 attribute codeName { xsd:string }?,
4468
4469 ## default value: false
4470 attribute hidePivotFieldList { xsd:boolean }?,
4471
4472 ## default value: false
4473 attribute showPivotChartFilter { xsd:boolean }?,
4474
4475 ## default value: false
4476 attribute allowRefreshQuery { xsd:boolean }?,
4477
4478 ## default value: false
4479 attribute publishItems { xsd:boolean }?,
4480
4481 ## default value: false
4482 attribute checkCompatibility { xsd:boolean }?,
4483
4484 ## default value: true
4485 attribute autoCompressPictures { xsd:boolean }?,
4486
4487 ## default value: false
4488 attribute refreshAllConnections { xsd:boolean }?,
4489 attribute defaultThemeVersion { xsd:unsignedInt }?
4490 sml_ST_UpdateLinks = string "userSet" | string "never" | string "always"
4491 sml_CT_SmartTagPr =

```

```

4492
4493     ## default value: false
4494     attribute embed { xsd:boolean }?,
4495
4496     ## default value: all
4497     attribute show { sml_ST_SmartTagShow }?
4498 sml_ST_SmartTagShow =
4499     string "all" | string "none" | string "noIndicator"
4500 sml_CT_SmartTagTypes = element smartTagType { sml_CT_SmartTagType }*
4501 sml_CT_SmartTagType =
4502     attribute namespaceUri { s_ST_Xstring }?,
4503     attribute name { s_ST_Xstring }?,
4504     attribute url { s_ST_Xstring }?
4505 sml_CT_FileRecoveryPr =
4506
4507     ## default value: true
4508     attribute autoRecover { xsd:boolean }?,
4509
4510     ## default value: false
4511     attribute crashSave { xsd:boolean }?,
4512
4513     ## default value: false
4514     attribute dataExtractLoad { xsd:boolean }?,
4515
4516     ## default value: false
4517     attribute repairLoad { xsd:boolean }?
4518 sml_CT_CalcPr =
4519     attribute calcId { xsd:unsignedInt }?,
4520
4521     ## default value: auto
4522     attribute calcMode { sml_ST_CalcMode }?,
4523
4524     ## default value: false
4525     attribute fullCalcOnLoad { xsd:boolean }?,
4526
4527     ## default value: A1
4528     attribute refMode { sml_ST_RefMode }?,
4529
4530     ## default value: false
4531     attribute iterate { xsd:boolean }?,
4532
4533     ## default value: 100
4534     attribute iterateCount { xsd:unsignedInt }?,
4535
4536     ## default value: 0.001
4537     attribute iterateDelta { xsd:double }?,
4538
4539     ## default value: true
4540     attribute fullPrecision { xsd:boolean }?,
4541
4542     ## default value: true
4543     attribute calcCompleted { xsd:boolean }?,
4544

```

```

4545  ## default value: true
4546  attribute calcOnSave { xsd:boolean }?,
4547
4548  ## default value: true
4549  attribute concurrentCalc { xsd:boolean }?,
4550  attribute concurrentManualCount { xsd:unsignedInt }?,
4551  attribute forceFullCalc { xsd:boolean }?
4552  sml_ST_CalcMode = string "manual" | string "auto" | string "autoNoTable"
4553  sml_ST_RefMode = string "A1" | string "R1C1"
4554  sml_CT_DefinedNames = element definedName { sml_CT_DefinedName }*
4555  sml_CT_DefinedName =
4556    sml_ST_Formula,
4557    attribute name { s_ST_Xstring },
4558    attribute comment { s_ST_Xstring }?,
4559    attribute customMenu { s_ST_Xstring }?,
4560    attribute description { s_ST_Xstring }?,
4561    attribute help { s_ST_Xstring }?,
4562    attribute statusBar { s_ST_Xstring }?,
4563    attribute localSheetId { xsd:unsignedInt }?,
4564
4565  ## default value: false
4566  attribute hidden { xsd:boolean }?,
4567
4568  ## default value: false
4569  attribute function { xsd:boolean }?,
4570
4571  ## default value: false
4572  attribute vbProcedure { xsd:boolean }?,
4573
4574  ## default value: false
4575  attribute xlm { xsd:boolean }?,
4576  attribute functionGroupId { xsd:unsignedInt }?,
4577  attribute shortcutKey { s_ST_Xstring }?,
4578
4579  ## default value: false
4580  attribute publishToServer { xsd:boolean }?,
4581
4582  ## default value: false
4583  attribute workbookParameter { xsd:boolean }?
4584  sml_CT_ExternalReferences =
4585    element externalReference { sml_CT_ExternalReference }+
4586  sml_CT_ExternalReference = r_id
4587  sml_CT_SheetBackgroundPicture = r_id
4588  sml_CT_PivotCaches = element pivotCache { sml_CT_PivotCache }+
4589  sml_CT_PivotCache =
4590    attribute cacheId { xsd:unsignedInt },
4591    r_id
4592  sml_CT_FileSharing =
4593
4594  ## default value: false
4595  attribute readOnlyRecommended { xsd:boolean }?,
4596  attribute userName { s_ST_Xstring }?,
4597  attribute reservationPassword { sml_ST_UnsignedShortHex }?,

```



```

4598     attribute algorithmName { s_ST_Xstring }?,
4599     attribute hashValue { xsd:base64Binary }?,
4600     attribute saltValue { xsd:base64Binary }?,
4601     attribute spinCount { xsd:unsignedInt }?
4602 sml_CT_OleSize = attribute ref { sml_ST_Ref }
4603 sml_CT_WorkbookProtection =
4604     attribute workbookPassword { sml_ST_UnsignedShortHex }?,
4605     attribute workbookPasswordCharacterSet { xsd:string }?,
4606     attribute revisionsPassword { sml_ST_UnsignedShortHex }?,
4607     attribute revisionsPasswordCharacterSet { xsd:string }?,
4608
4609     ## default value: false
4610     attribute lockStructure { xsd:boolean }?,
4611
4612     ## default value: false
4613     attribute lockWindows { xsd:boolean }?,
4614
4615     ## default value: false
4616     attribute lockRevision { xsd:boolean }?,
4617     attribute revisionsAlgorithmName { s_ST_Xstring }?,
4618     attribute revisionsHashValue { xsd:base64Binary }?,
4619     attribute revisionsSaltValue { xsd:base64Binary }?,
4620     attribute revisionsSpinCount { xsd:unsignedInt }?,
4621     attribute workbookAlgorithmName { s_ST_Xstring }?,
4622     attribute workbookHashValue { xsd:base64Binary }?,
4623     attribute workbookSaltValue { xsd:base64Binary }?,
4624     attribute workbookSpinCount { xsd:unsignedInt }?
4625 sml_CT_WebPublishing =
4626
4627     ## default value: true
4628     attribute css { xsd:boolean }?,
4629
4630     ## default value: true
4631     attribute thicket { xsd:boolean }?,
4632
4633     ## default value: true
4634     attribute longFileNames { xsd:boolean }?,
4635
4636     ## default value: false
4637     attribute vml { xsd:boolean }?,
4638
4639     ## default value: false
4640     attribute allowPng { xsd:boolean }?,
4641
4642     ## default value: 800x600
4643     attribute targetScreenSize { sml_ST_TargetScreenSize }?,
4644
4645     ## default value: 96
4646     attribute dpi { xsd:unsignedInt }?,
4647     attribute codePage { xsd:unsignedInt }?,
4648     attribute characterSet { xsd:string }?
4649 sml_ST_TargetScreenSize =
4650     string "544x376"

```

```

4651 | string "640x480"
4652 | string "720x512"
4653 | string "800x600"
4654 | string "1024x768"
4655 | string "1152x882"
4656 | string "1152x900"
4657 | string "1280x1024"
4658 | string "1600x1200"
4659 | string "1800x1440"
4660 | string "1920x1200"
4661 sml_CT_FunctionGroups =
4662
4663   ## default value: 16
4664   attribute builtInGroupCount { xsd:unsignedInt }?,
4665   element functionGroup { sml_CT_FunctionGroup }*
4666 sml_CT_FunctionGroup = attribute name { s_ST_Xstring }?
4667 sml_CT_WebPublishObjects =
4668   attribute count { xsd:unsignedInt }?,
4669   element webPublishObject { sml_CT_WebPublishObject }+
4670 sml_CT_WebPublishObject =
4671   attribute id { xsd:unsignedInt },
4672   attribute divId { s_ST_Xstring },
4673   attribute sourceObject { s_ST_Xstring }?,
4674   attribute destinationFile { s_ST_Xstring },
4675   attribute title { s_ST_Xstring }?,
4676
4677   ## default value: false
4678   attribute autoRepublish { xsd:boolean }?

```

B.2.1 Part Schemas

B.2.1.1 Calculation Chain Part

This schema is available in the file SpreadsheetML_Calculation_Chain.rnc.

```

1 include "sml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "any.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-spreadsheetDrawing.rnc"
6 include "dml-main.rnc"
7 include "dml-diagram.rnc"
8 include "dml-lockedCanvas.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_calcChain

```

B.2.1.2 Chartsheet Part

This schema is available in the file SpreadsheetML_Chartsheet.rnc.

```

1 include "sml.rnc"

```

```

2 include "shared-relationshipReference.rnc"
3 include "any.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-spreadsheetDrawing.rnc"
6 include "dml-main.rnc"
7 include "dml-diagram.rnc"
8 include "dml-lockedCanvas.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_chartsheet

```

B.2.1.3 Comments Part

This schema is available in the file SpreadsheetML_Comments.rnc.

```

1 include "sml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "any.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-spreadsheetDrawing.rnc"
6 include "dml-main.rnc"
7 include "dml-diagram.rnc"
8 include "dml-lockedCanvas.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_comments

```

B.2.1.4 Connections Part

This schema is available in the file SpreadsheetML_Connections.rnc.

```

1 include "sml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "any.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-spreadsheetDrawing.rnc"
6 include "dml-main.rnc"
7 include "dml-diagram.rnc"
8 include "dml-lockedCanvas.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_connections

```

B.2.1.5 Custom XML Mappings Part

This schema is available in the file SpreadsheetML_Custom_XML_Mappings.rnc.

```

1 include "sml.rnc"

```

```

2 include "shared-relationshipReference.rnc"
3 include "any.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-spreadsheetDrawing.rnc"
6 include "dml-main.rnc"
7 include "dml-diagram.rnc"
8 include "dml-lockedCanvas.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_MapInfo

```

B.2.1.6 Dialogsheet Part

This schema is available in the file SpreadsheetML_Dialogsheet.rnc.

```

1 include "sml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "any.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-spreadsheetDrawing.rnc"
6 include "dml-main.rnc"
7 include "dml-diagram.rnc"
8 include "dml-lockedCanvas.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_dialogsheet

```

B.2.1.7 Drawing Part

This schema is available in the file SpreadsheetML_Drawing.rnc.

```

1 include "dml-spreadsheetDrawing.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"
4 include "dml-diagram.rnc"
5 include "shared-commonSimpleTypes.rnc"
6 include "dml-lockedCanvas.rnc"
7 include "any.rnc"
8 include "dml-chart.rnc"
9 include "dml-chartDrawing.rnc"
10 include "dml-picture.rnc"
11 include "dml-compatibility.rnc"
12 start = xdr_wsDr

```

B.2.1.8 External Workbook References Part

This schema is available in the file SpreadsheetML_External_Workbook_References.rnc.

```

1 include "sml.rnc"
2 include "shared-relationshipReference.rnc"

```

```

3 include "any.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-spreadsheetDrawing.rnc"
6 include "dml-main.rnc"
7 include "dml-diagram.rnc"
8 include "dml-lockedCanvas.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_externallink

```

B.2.1.9 Metadata Part

This schema is available in the file SpreadsheetML_Metadata.rnc.

```

1 include "sml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "any.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-spreadsheetDrawing.rnc"
6 include "dml-main.rnc"
7 include "dml-diagram.rnc"
8 include "dml-lockedCanvas.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_metadata

```

B.2.1.10 Pivot Table Part

This schema is available in the file SpreadsheetML_Pivot_Table.rnc.

```

1 include "sml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "any.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-spreadsheetDrawing.rnc"
6 include "dml-main.rnc"
7 include "dml-diagram.rnc"
8 include "dml-lockedCanvas.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_pivotTableDefinition

```

B.2.1.11 Pivot Table Cache Definition Part

This schema is available in the file SpreadsheetML_Pivot_Table_Cache_Definition.rnc.

```

1 include "sml.rnc"
2 include "shared-relationshipReference.rnc"

```

```

3  include "any.rnc"
4  include "shared-commonSimpleTypes.rnc"
5  include "dml-spreadsheetDrawing.rnc"
6  include "dml-main.rnc"
7  include "dml-diagram.rnc"
8  include "dml-lockedCanvas.rnc"
9  include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_pivotCacheDefinition

```

B.2.1.12 Pivot Table Cache Records Part

This schema is available in the file SpreadsheetML_Pivot_Table_Cache_Records.rnc.

```

1  include "sml.rnc"
2  include "shared-relationshipReference.rnc"
3  include "any.rnc"
4  include "shared-commonSimpleTypes.rnc"
5  include "dml-spreadsheetDrawing.rnc"
6  include "dml-main.rnc"
7  include "dml-diagram.rnc"
8  include "dml-lockedCanvas.rnc"
9  include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_pivotCacheRecords

```

B.2.1.13 Query Table Part

This schema is available in the file SpreadsheetML_Query_Table.rnc.

```

1  include "sml.rnc"
2  include "shared-relationshipReference.rnc"
3  include "any.rnc"
4  include "shared-commonSimpleTypes.rnc"
5  include "dml-spreadsheetDrawing.rnc"
6  include "dml-main.rnc"
7  include "dml-diagram.rnc"
8  include "dml-lockedCanvas.rnc"
9  include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_queryTable

```

B.2.1.14 Shared String Table Part

This schema is available in the file SpreadsheetML_Shared_String_Table.rnc.

```

16 include "sml.rnc"
17 include "shared-relationshipReference.rnc"

```

```

18 include "any.rnc"
19 include "shared-commonSimpleTypes.rnc"
20 include "dml-spreadsheetDrawing.rnc"
21 include "dml-main.rnc"
22 include "dml-diagram.rnc"
23 include "dml-lockedCanvas.rnc"
24 include "dml-chart.rnc"
25 include "dml-chartDrawing.rnc"
26 include "dml-picture.rnc"
27 include "dml-compatibility.rnc"
28 start = sml_sst

```

B.2.1.15 Shared Workbook Revision Headers Part

This schema is available in the file SpreadsheetML_Shared_Workbook_Revision_Headers.rnc.

```

1 include "sml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "any.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-spreadsheetDrawing.rnc"
6 include "dml-main.rnc"
7 include "dml-diagram.rnc"
8 include "dml-lockedCanvas.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_headers

```

B.2.1.16 Shared Workbook Revision Log Part

This schema is available in the file SpreadsheetML_Shared_Workbook_Revision_Log.rnc.

```

1 include "sml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "any.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-spreadsheetDrawing.rnc"
6 include "dml-main.rnc"
7 include "dml-diagram.rnc"
8 include "dml-lockedCanvas.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_revisions

```

B.2.1.17 Shared Workbook User Data Part

This schema is available in the file SpreadsheetML_Shared_Workbook_User_Data.rnc.

```

1 include "sml.rnc"
2 include "shared-relationshipReference.rnc"

```

```

3 include "any.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-spreadsheetDrawing.rnc"
6 include "dml-main.rnc"
7 include "dml-diagram.rnc"
8 include "dml-lockedCanvas.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_users

```

B.2.1.18 Single Cell Table Definitions Part

This schema is available in the file SpreadsheetML_Single_Cell_Table_Definitions.rnc.

```

1 include "sml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "any.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-spreadsheetDrawing.rnc"
6 include "dml-main.rnc"
7 include "dml-diagram.rnc"
8 include "dml-lockedCanvas.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_singleXmlCells

```

B.2.1.19 Styles Part

This schema is available in the file SpreadsheetML_Styles.rnc.

```

1 include "sml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "any.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-spreadsheetDrawing.rnc"
6 include "dml-main.rnc"
7 include "dml-diagram.rnc"
8 include "dml-lockedCanvas.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_styleSheet

```

B.2.1.20 Table Definitions Part

This schema is available in the file SpreadsheetML_Table_Definitions.rnc.

```

1 include "sml.rnc"
2 include "shared-relationshipReference.rnc"

```



```

3 include "any.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-spreadsheetDrawing.rnc"
6 include "dml-main.rnc"
7 include "dml-diagram.rnc"
8 include "dml-lockedCanvas.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_table

```

B.2.1.21 Volatile Dependencies Part

This schema is available in the file SpreadsheetML_Volatile_Dependencies.rnc.

```

1 include "sml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "any.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-spreadsheetDrawing.rnc"
6 include "dml-main.rnc"
7 include "dml-diagram.rnc"
8 include "dml-lockedCanvas.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_volTypes

```

B.2.1.22 Workbook Part

This schema is available in the file SpreadsheetML_Workbook.rnc.

```

1 include "sml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "any.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-spreadsheetDrawing.rnc"
6 include "dml-main.rnc"
7 include "dml-diagram.rnc"
8 include "dml-lockedCanvas.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_workbook

```

B.2.1.23 Worksheet Part

This schema is available in the file SpreadsheetML_Worksheet.rnc.

```

1 include "sml.rnc"
2 include "shared-relationshipReference.rnc"

```

```

3 include "any.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-spreadsheetDrawing.rnc"
6 include "dml-main.rnc"
7 include "dml-diagram.rnc"
8 include "dml-lockedCanvas.rnc"
9 include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 start = sml_worksheet

```

B.3 PresentationML

This schema is available in the file pml.rnc.

```

1 default namespace =
2   "http://schemas.openxmlformats.org/presentationml/2006/main"
3 namespace a = "http://schemas.openxmlformats.org/drawingml/2006/main"
4 namespace o = "urn:schemas-microsoft-com:office:office"
5 namespace p =
6   "http://schemas.openxmlformats.org/presentationml/2006/main"
7 namespace r =
8   "http://schemas.openxmlformats.org/officeDocument/2006/relationships"
9 namespace s =
10  "http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
11 namespace v = "urn:schemas-microsoft-com:vml"
12 namespace w10 = "urn:schemas-microsoft-com:office:word"
13 namespace x = "urn:schemas-microsoft-com:office:excel"
14
15 p_ST_TransitionSideDirectionType = "l" | "u" | "r" | "d"
16 p_ST_TransitionCornerDirectionType = "lu" | "ru" | "ld" | "rd"
17 p_ST_TransitionInOutDirectionType = "out" | "in"
18 p_CT_SideDirectionTransition =
19
20   ## default value: l
21   attribute dir { p_ST_TransitionSideDirectionType }?
22 p_CT_CornerDirectionTransition =
23
24   ## default value: lu
25   attribute dir { p_ST_TransitionCornerDirectionType }?
26 p_ST_TransitionEightDirectionType =
27   p_ST_TransitionSideDirectionType | p_ST_TransitionCornerDirectionType
28 p_CT_EightDirectionTransition =
29
30   ## default value: l
31   attribute dir { p_ST_TransitionEightDirectionType }?
32 p_CT_OrientationTransition =
33
34   ## default value: horz
35   attribute dir { p_ST_Direction }?
36 p_CT_InOutTransition =
37

```

```

38  ## default value: out
39  attribute dir { p_ST_TransitionInOutDirectionType }?
40  p_CT_OptionalBlackTransition =
41
42  ## default value: false
43  attribute thruBlk { xsd:boolean }?
44  p_CT_SplitTransition =
45
46  ## default value: horz
47  attribute orient { p_ST_Direction }?,
48
49  ## default value: out
50  attribute dir { p_ST_TransitionInOutDirectionType }?
51  p_CT_WheelTransition =
52
53  ## default value: 4
54  attribute spokes { xsd:unsignedInt }?
55  p_CT_TransitionStartSoundAction =
56
57  ## default value: false
58  attribute loop { xsd:boolean }?,
59  element snd { a_CT_EmbeddedWAVAudioFile }
60  p_CT_TransitionSoundAction =
61  | element stSnd { p_CT_TransitionStartSoundAction }
62  | element endSnd { p_CT_Empty }
63  p_ST_TransitionSpeed = "slow" | "med" | "fast"
64  p_CT_SlideTransition =
65
66  ## default value: fast
67  attribute spd { p_ST_TransitionSpeed }?,
68
69  ## default value: true
70  attribute advClick { xsd:boolean }?,
71  attribute advTm { xsd:unsignedInt }?,
72  (element blinds { p_CT_OrientationTransition }
73  | element checker { p_CT_OrientationTransition }
74  | element circle { p_CT_Empty }
75  | element dissolve { p_CT_Empty }
76  | element comb { p_CT_OrientationTransition }
77  | element cover { p_CT_EightDirectionTransition }
78  | element cut { p_CT_OptionalBlackTransition }
79  | element diamond { p_CT_Empty }
80  | element fade { p_CT_OptionalBlackTransition }
81  | element newsflash { p_CT_Empty }
82  | element plus { p_CT_Empty }
83  | element pull { p_CT_EightDirectionTransition }
84  | element push { p_CT_SideDirectionTransition }
85  | element random { p_CT_Empty }
86  | element randomBar { p_CT_OrientationTransition }
87  | element split { p_CT_SplitTransition }
88  | element strips { p_CT_CornerDirectionTransition }
89  | element wedge { p_CT_Empty }
90  | element wheel { p_CT_WheelTransition }

```

```

91 | element wipe { p_CT_SideDirectionTransition }
92 | element zoom { p_CT_InOutTransition }}?,
93 element sndAc { p_CT_TransitionSoundAction }}?,
94 element extLst { p_CT_ExtensionListModify }}?
95 p_ST_TLTimeIndefinite = "indefinite"
96 p_ST_TLTime = xsd:unsignedInt | p_ST_TLTimeIndefinite
97 p_ST_TLTimeNodeID = xsd:unsignedInt
98 p_CT_TLIterateIntervalTime = attribute val { p_ST_TLTime }
99 p_CT_TLIterateIntervalPercentage =
100 attribute val { a_ST_PositivePercentage }
101 p_ST_IterateType = "el" | "wd" | "lt"
102 p_CT_TLIterateData =
103
104 ## default value: el
105 attribute type { p_ST_IterateType }}?,
106
107 ## default value: false
108 attribute backwards { xsd:boolean }}?,
109 (element tmAbs { p_CT_TLIterateIntervalTime }
110 | element tmPct { p_CT_TLIterateIntervalPercentage })
111 p_CT_TLSubShapeId = attribute spid { a_ST_ShapeID }
112 p_CT_TLTextTargetElement =
113 (element charRg { p_CT_IndexRange }
114 | element pRg { p_CT_IndexRange }})?
115 p_ST_TLChartSubelementType =
116 "gridLegend" | "series" | "category" | "ptInSeries" | "ptInCategory"
117 p_CT_TLOleChartTargetElement =
118 attribute type { p_ST_TLChartSubelementType },
119
120 ## default value: 0
121 attribute lvl { xsd:unsignedInt }}?
122 p_CT_TLShapeTargetElement =
123 attribute spid { a_ST_ShapeID },
124 (element bg { p_CT_Empty }
125 | element subSp { p_CT_TLSubShapeId }
126 | element oleChartEl { p_CT_TLOleChartTargetElement }
127 | element txEl { p_CT_TLTextTargetElement }
128 | element graphicEl { a_CT_AnimationElementChoice }})?
129 p_CT_TLTimeTargetElement =
130 element sldTgt { p_CT_Empty }
131 | element sndTgt { a_CT_EmbeddedWAVAudioFile }
132 | element spTgt { p_CT_TLShapeTargetElement }
133 | element inkTgt { p_CT_TLSubShapeId }
134 p_CT_TLTriggerTimeNodeID = attribute val { p_ST_TLTimeNodeID }
135 p_ST_TLTriggerRuntimeNode = "first" | "last" | "all"
136 p_CT_TLTriggerRuntimeNode = attribute val { p_ST_TLTriggerRuntimeNode }
137 p_ST_TLTriggerEvent =
138 "onBegin"
139 | "onEnd"
140 | "begin"
141 | "end"
142 | "onClick"
143 | "onDbClick"

```

```

144 | "onMouseOver"
145 | "onMouseOut"
146 | "onNext"
147 | "onPrev"
148 | "onStopAudio"
149 p_CT_TLTimeCondition =
150   attribute evt { p_ST_TLTriggerEvent }?,
151   attribute delay { p_ST_TLTime }?,
152   (element tgtEl { p_CT_TLTimeTargetElement }
153     | element tn { p_CT_TLTriggerTimeNodeID }
154     | element rtn { p_CT_TLTriggerRuntimeNode })?
155 p_CT_TLTimeConditionList = element cond { p_CT_TLTimeCondition }+
156 p_CT_TimeNodeList =
157   (element par { p_CT_TLTimeNodeParallel }
158     | element seq { p_CT_TLTimeNodeSequence }
159     | element excl { p_CT_TLTimeNodeExclusive }
160     | element anim { p_CT_TLAnimateBehavior }
161     | element animClr { p_CT_TLAnimateColorBehavior }
162     | element animEffect { p_CT_TLAnimateEffectBehavior }
163     | element animMotion { p_CT_TLAnimateMotionBehavior }
164     | element animRot { p_CT_TLAnimateRotationBehavior }
165     | element animScale { p_CT_TLAnimateScaleBehavior }
166     | element cmd { p_CT_TLCommandBehavior }
167     | element set { p_CT_TLSetBehavior }
168     | element audio { p_CT_TLMediaNodeAudio }
169     | element video { p_CT_TLMediaNodeVideo } )+
170 p_ST_TLTimeNodePresetClassType =
171   "entr" | "exit" | "emph" | "path" | "verb" | "mediacall"
172 p_ST_TLTimeNodeRestartType = "always" | "whenNotActive" | "never"
173 p_ST_TLTimeNodeFillType = "remove" | "freeze" | "hold" | "transition"
174 p_ST_TLTimeNodeSyncType = "canSlip" | "locked"
175 p_ST_TLTimeNodeMasterRelation = "sameClick" | "lastClick" | "nextClick"
176 p_ST_TLTimeNodeType =
177   "clickEffect"
178   | "withEffect"
179   | "afterEffect"
180   | "mainSeq"
181   | "interactiveSeq"
182   | "clickPar"
183   | "withGroup"
184   | "afterGroup"
185   | "tmRoot"
186 p_CT_TLCommonTimeNodeData =
187   attribute id { p_ST_TLTimeNodeID }?,
188   attribute presetID { xsd:int }?,
189   attribute presetClass { p_ST_TLTimeNodePresetClassType }?,
190   attribute presetSubtype { xsd:int }?,
191   attribute dur { p_ST_TLTime }?,
192
193   ## default value: 1000
194   attribute repeatCount { p_ST_TLTime }?,
195   attribute repeatDur { p_ST_TLTime }?,

```

```

197  ## default value: 100%
198  attribute spd { a_ST_Percentage }?,
199
200  ## default value: 0%
201  attribute accel { a_ST_PositiveFixedPercentage }?,
202
203  ## default value: 0%
204  attribute decel { a_ST_PositiveFixedPercentage }?,
205
206  ## default value: false
207  attribute autoRev { xsd:boolean }?,
208  attribute restart { p_ST_TLTimeNodeRestartType }?,
209  attribute fill { p_ST_TLTimeNodeFillType }?,
210  attribute syncBehavior { p_ST_TLTimeNodeSyncType }?,
211  attribute tmFilter { xsd:string }?,
212  attribute evtFilter { xsd:string }?,
213  attribute display { xsd:boolean }?,
214  attribute masterRel { p_ST_TLTimeNodeMasterRelation }?,
215  attribute bldLvl { xsd:int }?,
216  attribute grpId { xsd:unsignedInt }?,
217  attribute afterEffect { xsd:boolean }?,
218  attribute nodeType { p_ST_TLTimeNodeType }?,
219  attribute nodePh { xsd:boolean }?,
220  element stCondLst { p_CT_TLTimeConditionList }?,
221  element endCondLst { p_CT_TLTimeConditionList }?,
222  element endSync { p_CT_TLTimeCondition }?,
223  element iterate { p_CT_TLIterateData }?,
224  element childTnLst { p_CT_TimeNodeList }?,
225  element subTnLst { p_CT_TimeNodeList }?
226  p_CT_TLTimeNodeParallel = element cTn { p_CT_TLCommonTimeNodeData }
227  p_ST_TLNextActionType = "none" | "seek"
228  p_ST_TLPreviousActionType = "none" | "skipTimed"
229  p_CT_TLTimeNodeSequence =
230    attribute concurrent { xsd:boolean }?,
231    attribute prevAc { p_ST_TLPreviousActionType }?,
232    attribute nextAc { p_ST_TLNextActionType }?,
233    element cTn { p_CT_TLCommonTimeNodeData },
234    element prevCondLst { p_CT_TLTimeConditionList }?,
235    element nextCondLst { p_CT_TLTimeConditionList }?
236  p_CT_TLTimeNodeExclusive = element cTn { p_CT_TLCommonTimeNodeData }
237  p_CT_TLBehaviorAttributeNameList = element attrName { xsd:string }+
238  p_ST_TLBehaviorAdditiveType = "base" | "sum" | "repl" | "mult" | "none"
239  p_ST_TLBehaviorAccumulateType = "none" | "always"
240  p_ST_TLBehaviorTransformType = "pt" | "img"
241  p_ST_TLBehaviorOverrideType = "normal" | "childStyle"
242  p_CT_TLCommonBehaviorData =
243    attribute additive { p_ST_TLBehaviorAdditiveType }?,
244    attribute accumulate { p_ST_TLBehaviorAccumulateType }?,
245    attribute xfrmType { p_ST_TLBehaviorTransformType }?,
246    attribute from { xsd:string }?,
247    attribute to { xsd:string }?,
248    attribute by { xsd:string }?,
249  attribute rctx { xsd:string }?,

```

```

250   attribute override { p_ST_TLBehaviorOverrideType }?,
251   element cTn { p_CT_TLCommonTimeNodeData },
252   element tgtEl { p_CT_TLTimeTargetElement },
253   element attrNameLst { p_CT_TLBehaviorAttributeNameList }?
254 p_CT_TLAnimVariantBooleanVal = attribute val { xsd:boolean }
255 p_CT_TLAnimVariantIntegerVal = attribute val { xsd:int }
256 p_CT_TLAnimVariantFloatVal = attribute val { xsd:float }
257 p_CT_TLAnimVariantStringVal = attribute val { xsd:string }
258 p_CT_TLAnimVariant =
259     element boolVal { p_CT_TLAnimVariantBooleanVal }
260     | element intVal { p_CT_TLAnimVariantIntegerVal }
261     | element fltVal { p_CT_TLAnimVariantFloatVal }
262     | element strVal { p_CT_TLAnimVariantStringVal }
263     | element clrVal { a_CT_Color }
264 p_ST_TLTimeAnimateValueType =
265     a_ST_PositiveFixedPercentage | p_ST_TLTimeIndefinite
266 p_CT_TLTimeAnimateValue =
267
268     ## default value: indefinite
269     attribute tm { p_ST_TLTimeAnimateValueType }?,
270     attribute fmla { xsd:string }?,
271     element val { p_CT_TLAnimVariant }?
272 p_CT_TLTimeAnimateValueList = element tav { p_CT_TLTimeAnimateValue }*
273 p_ST_TLAnimateBehaviorCalcMode = "discrete" | "lin" | "fmla"
274 p_ST_TLAnimateBehaviorValueType = "str" | "num" | "clr"
275 p_CT_TLAnimateBehavior =
276     attribute by { xsd:string }?,
277     attribute from { xsd:string }?,
278     attribute to { xsd:string }?,
279     attribute calcmode { p_ST_TLAnimateBehaviorCalcMode }?,
280     attribute valueType { p_ST_TLAnimateBehaviorValueType }?,
281     element cBhvr { p_CT_TLCommonBehaviorData },
282     element tavLst { p_CT_TLTimeAnimateValueList }?
283 p_CT_TLByRgbColorTransform =
284     attribute r { a_ST_FixedPercentage },
285     attribute g { a_ST_FixedPercentage },
286     attribute b { a_ST_FixedPercentage }
287 p_CT_TLByHslColorTransform =
288     attribute h { a_ST_Angle },
289     attribute s { a_ST_FixedPercentage },
290     attribute l { a_ST_FixedPercentage }
291 p_CT_TLByAnimateColorTransform =
292     element rgb { p_CT_TLByRgbColorTransform }
293     | element hsl { p_CT_TLByHslColorTransform }
294 p_ST_TLAnimateColorSpace = "rgb" | "hsl"
295 p_ST_TLAnimateColorDirection = "cw" | "ccw"
296 p_CT_TLAnimateColorBehavior =
297     attribute clrSpc { p_ST_TLAnimateColorSpace }?,
298     attribute dir { p_ST_TLAnimateColorDirection }?,
299     element cBhvr { p_CT_TLCommonBehaviorData },
300     element by { p_CT_TLByAnimateColorTransform }?,
301     element from { a_CT_Color }?,
302     element to { a_CT_Color }?

```

```

303 p_ST_TLAnimateEffectTransition = "in" | "out" | "none"
304 p_CT_TLAnimateEffectBehavior =
305     attribute transition { p_ST_TLAnimateEffectTransition }?,
306     attribute filter { xsd:string }?,
307     attribute prLst { xsd:string }?,
308     element cBhvr { p_CT_TLCommonBehaviorData },
309     element progress { p_CT_TLAnimVariant }?
310 p_ST_TLAnimateMotionBehaviorOrigin = "parent" | "layout"
311 p_ST_TLAnimateMotionPathEditMode = "relative" | "fixed"
312 p_CT_TLPoint =
313     attribute x { a_ST_Percentage },
314     attribute y { a_ST_Percentage }
315 p_CT_TLAnimateMotionBehavior =
316     attribute origin { p_ST_TLAnimateMotionBehaviorOrigin }?,
317     attribute path { xsd:string }?,
318     attribute pathEditMode { p_ST_TLAnimateMotionPathEditMode }?,
319     attribute rAng { a_ST_Angle }?,
320     attribute ptsTypes { xsd:string }?,
321     element cBhvr { p_CT_TLCommonBehaviorData },
322     element by { p_CT_TLPoint }?,
323     element from { p_CT_TLPoint }?,
324     element to { p_CT_TLPoint }?,
325     element rCtr { p_CT_TLPoint }?
326 p_CT_TLAnimateRotationBehavior =
327     attribute by { a_ST_Angle }?,
328     attribute from { a_ST_Angle }?,
329     attribute to { a_ST_Angle }?,
330     element cBhvr { p_CT_TLCommonBehaviorData }
331 p_CT_TLAnimateScaleBehavior =
332     attribute zoomContents { xsd:boolean }?,
333     element cBhvr { p_CT_TLCommonBehaviorData },
334     element by { p_CT_TLPoint }?,
335     element from { p_CT_TLPoint }?,
336     element to { p_CT_TLPoint }?
337 p_ST_TLCommandType = "evt" | "call" | "verb"
338 p_CT_TLCommandBehavior =
339     attribute type { p_ST_TLCommandType }?,
340     attribute cmd { xsd:string }?,
341     element cBhvr { p_CT_TLCommonBehaviorData }
342 p_CT_TLSetBehavior =
343     element cBhvr { p_CT_TLCommonBehaviorData },
344     element to { p_CT_TLAnimVariant }?
345 p_CT_TLCommonMediaNodeData =
346
347     ## default value: 50%
348     attribute vol { a_ST_PositiveFixedPercentage }?,
349
350     ## default value: false
351     attribute mute { xsd:boolean }?,
352
353     ## default value: 1
354     attribute numSld { xsd:unsignedInt }?,

```



```

356  ## default value: true
357  attribute showWhenStopped { xsd:boolean }?,
358  element cTn { p_CT_TLCommonTimeNodeData },
359  element tgtEl { p_CT_TLTimeTargetElement }
360  p_CT_TLMediaNodeAudio =
361
362  ## default value: false
363  attribute isNarration { xsd:boolean }?,
364  element cMediaNode { p_CT_TLCommonMediaNodeData }
365  p_CT_TLMediaNodeVideo =
366
367  ## default value: false
368  attribute fullScrn { xsd:boolean }?,
369  element cMediaNode { p_CT_TLCommonMediaNodeData }
370  p_AG_TLBuild =
371  attribute spid { a_ST_ShapeID },
372  attribute grpId { xsd:unsignedInt },
373
374  ## default value: false
375  attribute uiExpand { xsd:boolean }?
376  p_CT_TLTemplate =
377
378  ## default value: 0
379  attribute lvl { xsd:unsignedInt }?,
380  element tnLst { p_CT_TimeNodeList }
381  p_CT_TLTemplateList = element tpl { p_CT_TLTemplate }*
382  p_ST_TLParaBuildType = "allAtOnce" | "p" | "cust" | "whole"
383  p_CT_TLBuildParagraph =
384  p_AG_TLBuild,
385
386  ## default value: whole
387  attribute build { p_ST_TLParaBuildType }?,
388
389  ## default value: 1
390  attribute bldLvl { xsd:unsignedInt }?,
391
392  ## default value: false
393  attribute animBg { xsd:boolean }?,
394
395  ## default value: true
396  attribute autoUpdateAnimBg { xsd:boolean }?,
397
398  ## default value: false
399  attribute rev { xsd:boolean }?,
400
401  ## default value: indefinite
402  attribute advAuto { p_ST_TLTime }?,
403  element tplLst { p_CT_TLTemplateList }?
404  p_ST_TLDiagramBuildType =
405  "whole"
406  | "depthByNode"
407  | "depthByBranch"
408  | "breadthByNode"

```

```

409 | "breadthByLvl"
410 | "cw"
411 | "cwIn"
412 | "cwOut"
413 | "ccw"
414 | "ccwIn"
415 | "ccwOut"
416 | "inByRing"
417 | "outByRing"
418 | "up"
419 | "down"
420 | "allAtOnce"
421 | "cust"
422 p_CT_TLBuildDiagram =
423   p_AG_TLBuild,
424
425   ## default value: whole
426   attribute bld { p_ST_TLDiagramBuildType }?
427 p_ST_TLOleChartBuildType =
428   "allAtOnce" | "series" | "category" | "seriesEl" | "categoryEl"
429 p_CT_TLOleBuildChart =
430   p_AG_TLBuild,
431
432   ## default value: allAtOnce
433   attribute bld { p_ST_TLOleChartBuildType }?,
434
435   ## default value: true
436   attribute animBg { xsd:boolean }?
437 p_CT_TLGraphicalObjectBuild =
438   p_AG_TLBuild,
439   (element bldAsOne { p_CT_Empty }
440   | element bldSub { a_CT_AnimationGraphicalObjectBuildProperties })
441 p_CT_BuildList =
442   (element bldP { p_CT_TLBuildParagraph }
443   | element bldDgm { p_CT_TLBuildDiagram }
444   | element bldOleChart { p_CT_TLOleBuildChart }
445   | element bldGraphic { p_CT_TLGraphicalObjectBuild })+
446 p_CT_SlideTiming =
447   element tnLst { p_CT_TimeNodeList }?,
448   element bldLst { p_CT_BuildList }?,
449   element extLst { p_CT_ExtensionListModify }?
450 p_CT_Empty = empty
451 p_ST_Name = xsd:string
452 p_ST_Direction = "horz" | "vert"
453 p_ST_Index = xsd:unsignedInt
454 p_CT_IndexRange =
455   attribute st { p_ST_Index },
456   attribute end { p_ST_Index }
457 p_CT_SlideRelationshipListEntry = r_id
458 p_CT_SlideRelationshipList =
459   element sld { p_CT_SlideRelationshipListEntry }*
460 p_CT_CustomShowId = attribute id { xsd:unsignedInt }
461 p_EG_SlideListChoice =

```

```

462     element sldAll { p_CT_Empty }
463     | element sldRg { p_CT_IndexRange }
464     | element custShow { p_CT_CustomShowId }
465 p_CT_CustomerData = r_id
466 p_CT_TagsData = r_id
467 p_CT_CustomerDataList =
468     (element custData { p_CT_CustomerData }*,
469     element tags { p_CT_TagsData }?)?
470 p_CT_Extension =
471     attribute uri { xsd:token },
472     p_CT_Extension_any*
473 p_CT_Extension_any =
474     element * - (o:* | v:* | w10:* | x:*) {
475         anyAttribute*,
476         mixed { anyElement* }
477     }
478 p_EG_ExtensionList = element ext { p_CT_Extension }*
479 p_CT_ExtensionList = p_EG_ExtensionList?
480 p_CT_ExtensionListModify =
481
482     ## default value: false
483     attribute mod { xsd:boolean }?,
484     p_EG_ExtensionList?
485 p_CT_CommentAuthor =
486     attribute id { xsd:unsignedInt },
487     attribute name { p_ST_Name },
488     attribute initials { p_ST_Name },
489     attribute lastIdx { xsd:unsignedInt },
490     attribute clrIdx { xsd:unsignedInt },
491     element extLst { p_CT_ExtensionList }?
492 p_CT_CommentAuthorList = element cmAuthor { p_CT_CommentAuthor }*
493 p_cmAuthorLst = element cmAuthorLst { p_CT_CommentAuthorList }
494 p_CT_Comment =
495     attribute authorId { xsd:unsignedInt },
496     attribute dt { xsd:dateTime }?,
497     attribute idx { p_ST_Index },
498     element pos { a_CT_Point2D },
499     element text { xsd:string },
500     element extLst { p_CT_ExtensionListModify }?
501 p_CT_CommentList = element cm { p_CT_Comment }*
502 p_cmLst = element cmLst { p_CT_CommentList }
503 p_AG_Ole =
504     attribute spid { a_ST_ShapeID },
505     attribute name { xsd:string }?,
506
507     ## default value: false
508     attribute showAsIcon { xsd:boolean }?,
509     r_id?,
510     attribute imgW { a_ST_PositiveCoordinate32 }?,
511     attribute imgH { a_ST_PositiveCoordinate32 }?
512 p_ST_OleObjectFollowColorScheme = "none" | "full" | "textAndBackground"
513 p_CT_OleObjectEmbed =

```

```

515  ## default value: none
516  attribute followColorScheme { p_ST_OleObjectFollowColorScheme }?,
517  element extLst { p_CT_ExtensionList }?
518  p_CT_OleObjectLink =
519
520  ## default value: false
521  attribute updateAutomatic { xsd:boolean }?,
522  element extLst { p_CT_ExtensionList }?
523  p_CT_OleObject =
524  p_AG_Ole,
525  attribute progId { xsd:string }?,
526  (element embed { p_CT_OleObjectEmbed }
527   | element link { p_CT_OleObjectLink }
528  ),
529  element pic { p_CT_Picture }?
530  p_oleObj = element oleObj { p_CT_OleObject }
531  p_CT_Control =
532  p_AG_Ole,
533  element extLst { p_CT_ExtensionList }?,
534  element pic { p_CT_Picture }?
535  p_CT_ControlList = element control { p_CT_Control }*
536  p_ST_SlideId =
537  xsd:unsignedInt { minInclusive = "256" maxExclusive = "2147483648" }
538  p_CT_SlideIdListEntry =
539  attribute id { p_ST_SlideId },
540  r_id,
541  element extLst { p_CT_ExtensionList }?
542  p_CT_SlideIdList = element sldId { p_CT_SlideIdListEntry }*
543  p_ST_SlideMasterId = xsd:unsignedInt { minInclusive = "2147483648" }
544  p_CT_SlideMasterIdListEntry =
545  attribute id { p_ST_SlideMasterId }?,
546  r_id,
547  element extLst { p_CT_ExtensionList }?
548  p_CT_SlideMasterIdList =
549  element sldMasterId { p_CT_SlideMasterIdListEntry }*
550  p_CT_NotesMasterIdListEntry =
551  r_id,
552  element extLst { p_CT_ExtensionList }?
553  p_CT_NotesMasterIdList =
554  element notesMasterId { p_CT_NotesMasterIdListEntry }?
555  p_CT_HandoutMasterIdListEntry =
556  r_id,
557  element extLst { p_CT_ExtensionList }?
558  p_CT_HandoutMasterIdList =
559  element handoutMasterId { p_CT_HandoutMasterIdListEntry }?
560  p_CT_EmbeddedFontDataId = r_id
561  p_CT_EmbeddedFontListEntry =
562  element font { a_CT_TextFont },
563  element regular { p_CT_EmbeddedFontDataId }?,
564  element bold { p_CT_EmbeddedFontDataId }?,
565  element italic { p_CT_EmbeddedFontDataId }?,
566  element boldItalic { p_CT_EmbeddedFontDataId }?
567  p_CT_EmbeddedFontList =

```

```

568     element embeddedFont { p_CT_EmbeddedFontListEntry }*
569 p_CT_SmartTags = r_id
570 p_CT_CustomShow =
571     attribute name { p_ST_Name },
572     attribute id { xsd:unsignedInt },
573     element sldLst { p_CT_SlideRelationshipList },
574     element extLst { p_CT_ExtensionList }?
575 p_CT_CustomShowList = element custShow { p_CT_CustomShow }*
576 p_ST_PhotoAlbumLayout =
577     "fitToSlide"
578     | "1pic"
579     | "2pic"
580     | "4pic"
581     | "1picTitle"
582     | "2picTitle"
583     | "4picTitle"
584 p_ST_PhotoAlbumFrameShape =
585     "frameStyle1"
586     | "frameStyle2"
587     | "frameStyle3"
588     | "frameStyle4"
589     | "frameStyle5"
590     | "frameStyle6"
591     | "frameStyle7"
592 p_CT_PhotoAlbum =
593
594     ## default value: false
595     attribute bw { xsd:boolean }?,
596
597     ## default value: false
598     attribute showCaptions { xsd:boolean }?,
599
600     ## default value: fitToSlide
601     attribute layout { p_ST_PhotoAlbumLayout }?,
602
603     ## default value: frameStyle1
604     attribute frame { p_ST_PhotoAlbumFrameShape }?,
605     element extLst { p_CT_ExtensionList }?
606 p_ST_SlideSizeCoordinate =
607     xsd:int {
608         minInclusive = "914400"
609         maxInclusive = "51206400"
610     }
611 p_ST_SlideSizeType =
612     "screen4x3"
613     | "letter"
614     | "A4"
615     | "35mm"
616     | "overhead"
617     | "banner"
618     | "custom"
619     | "ledger"
620     | "A3"

```

```

621 | "B4ISO"
622 | "B5ISO"
623 | "B4JIS"
624 | "B5JIS"
625 | "hagakiCard"
626 | "screen16x9"
627 | "screen16x10"
628 p_CT_SlideSize =
629     attribute cx { p_ST_SlideSizeCoordinate },
630     attribute cy { p_ST_SlideSizeCoordinate },
631
632     ## default value: custom
633     attribute type { p_ST_SlideSizeType }?
634 p_CT_Kinsoku =
635     attribute lang { xsd:string }?,
636     attribute invalStChars { xsd:string },
637     attribute invalEndChars { xsd:string }
638 p_ST_BookmarkIdSeed =
639     xsd:unsignedInt { minInclusive = "1" maxExclusive = "2147483648" }
640 p_CT_ModifyVerifier =
641     attribute algorithmName { xsd:string }?,
642     attribute hashValue { xsd:base64Binary }?,
643     attribute saltValue { xsd:base64Binary }?,
644     attribute spinValue { xsd:unsignedInt }?,
645     attribute cryptProviderType { s_ST_CryptProv }?,
646     attribute cryptAlgorithmClass { s_ST_AlgorithmClass }?,
647     attribute cryptAlgorithmType { s_ST_AlgorithmType }?,
648     attribute cryptAlgorithmSid { xsd:unsignedInt }?,
649     attribute spinCount { xsd:unsignedInt }?,
650     attribute saltData { xsd:base64Binary }?,
651     attribute hashData { xsd:base64Binary }?,
652     attribute cryptProvider { xsd:string }?,
653     attribute algIdExt { xsd:unsignedInt }?,
654     attribute algIdExtSource { xsd:string }?,
655     attribute cryptProviderTypeExt { xsd:unsignedInt }?,
656     attribute cryptProviderTypeExtSource { xsd:string }?
657 p_CT_Presentation =
658
659     ## default value: 50%
660     attribute serverZoom { a_ST_Percentage }?,
661
662     ## default value: 1
663     attribute firstSlideNum { xsd:int }?,
664
665     ## default value: true
666     attribute showSpecialPlsOnTitleSld { xsd:boolean }?,
667
668     ## default value: false
669     attribute rtl { xsd:boolean }?,
670
671     ## default value: false
672     attribute removePersonalInfoOnSave { xsd:boolean }?,
673

```

```

674  ## default value: false
675  attribute compatMode { xsd:boolean }?,
676
677  ## default value: true
678  attribute strictFirstAndLastChars { xsd:boolean }?,
679
680  ## default value: false
681  attribute embedTrueTypeFonts { xsd:boolean }?,
682
683  ## default value: false
684  attribute saveSubsetFonts { xsd:boolean }?,
685
686  ## default value: true
687  attribute autoCompressPictures { xsd:boolean }?,
688
689  ## default value: 1
690  attribute bookmarkIdSeed { p_ST_BookmarkIdSeed }?,
691  attribute conformance { s_ST_ConformanceClass }?,
692  element sldMasterIdLst { p_CT_SlideMasterIdList }?,
693  element notesMasterIdLst { p_CT_NotesMasterIdList }?,
694  element handoutMasterIdLst { p_CT_HandoutMasterIdList }?,
695  element sldIdLst { p_CT_SlideIdList }?,
696  element sldSz { p_CT_SlideSize }?,
697  element notesSz { a_CT_PositiveSize2D },
698  element smartTags { p_CT_SmartTags }?,
699  element embeddedFontLst { p_CT_EmbeddedFontList }?,
700  element custShowLst { p_CT_CustomShowList }?,
701  element photoAlbum { p_CT_PhotoAlbum }?,
702  element custDataLst { p_CT_CustomerDataList }?,
703  element kinsoku { p_CT_Kinsoku }?,
704  element defaultTextStyle { a_CT_TextListStyle }?,
705  element modifyVerifier { p_CT_ModifyVerifier }?,
706  element extLst { p_CT_ExtensionList }?
707  p_presentation = element presentation { p_CT_Presentation }
708  p_CT_HtmlPublishProperties =
709
710  ## default value: true
711  attribute showSpeakerNotes { xsd:boolean }?,
712  attribute target { xsd:string }?,
713  attribute title { xsd:string }?,
714  r_id,
715  p_EG_SlideListChoice,
716  element extLst { p_CT_ExtensionList }?
717  p_ST_WebColorType =
718  "none"
719  | "browser"
720  | "presentationText"
721  | "presentationAccent"
722  | "whiteTextOnBlack"
723  | "blackTextOnWhite"
724  p_ST_WebScreenSize =
725  "544x376"
726  | "640x480"

```

```

727 | "720x512"
728 | "800x600"
729 | "1024x768"
730 | "1152x882"
731 | "1152x900"
732 | "1280x1024"
733 | "1600x1200"
734 | "1800x1400"
735 | "1920x1200"
736 p_ST_WebEncoding = xsd:string
737 p_CT_WebProperties =
738
739   ## default value: false
740   attribute showAnimation { xsd:boolean }?,
741
742   ## default value: true
743   attribute resizeGraphics { xsd:boolean }?,
744
745   ## default value: false
746   attribute allowPng { xsd:boolean }?,
747
748   ## default value: false
749   attribute relyOnVm1 { xsd:boolean }?,
750
751   ## default value: true
752   attribute organizeInFolders { xsd:boolean }?,
753
754   ## default value: true
755   attribute useLongFileNames { xsd:boolean }?,
756
757   ## default value: 800x600
758   attribute imgSz { p_ST_WebScreenSize }?,
759   attribute encoding { p_ST_WebEncoding }?,
760
761   ## default value: whiteTextOnBlack
762   attribute clr { p_ST_WebColorType }?,
763   element extLst { p_CT_ExtensionList }?
764 p_ST_PrintWhat =
765   "slides"
766   | "handouts1"
767   | "handouts2"
768   | "handouts3"
769   | "handouts4"
770   | "handouts6"
771   | "handouts9"
772   | "notes"
773   | "outline"
774 p_ST_PrintColorMode = "bw" | "gray" | "clr"
775 p_CT_PrintProperties =
776
777   ## default value: slides
778   attribute prnWhat { p_ST_PrintWhat }?,
779

```



```

780  ## default value: clr
781  attribute clrMode { p_ST_PrintColorMode }?,
782
783  ## default value: false
784  attribute hiddenSlides { xsd:boolean }?,
785
786  ## default value: false
787  attribute scaleToFitPaper { xsd:boolean }?,
788
789  ## default value: false
790  attribute framesSlides { xsd:boolean }?,
791  element extLst { p_CT_ExtensionList }?
792 p_CT_ShowInfoBrowse =
793
794  ## default value: true
795  attribute showScrollbar { xsd:boolean }?
796 p_CT_ShowInfoKiosk =
797
798  ## default value: 300000
799  attribute restart { xsd:unsignedInt }?
800 p_EG_ShowType =
801  element present { p_CT_Empty }
802  | element browse { p_CT_ShowInfoBrowse }
803  | element kiosk { p_CT_ShowInfoKiosk }
804 p_CT_ShowProperties =
805
806  ## default value: false
807  attribute loop { xsd:boolean }?,
808
809  ## default value: false
810  attribute showNarration { xsd:boolean }?,
811
812  ## default value: true
813  attribute showAnimation { xsd:boolean }?,
814
815  ## default value: true
816  attribute useTimings { xsd:boolean }?,
817  (p_EG_ShowType?,
818  p_EG_SlideListChoice?,
819  element penClr { a_CT_Color }?,
820  element extLst { p_CT_ExtensionList }?)?
821 p_CT_PresentationProperties =
822  element htmlPubPr { p_CT_HtmlPublishProperties }?,
823  element webPr { p_CT_WebProperties }?,
824  element prnPr { p_CT_PrintProperties }?,
825  element showPr { p_CT_ShowProperties }?,
826  element clrMru { a_CT_ColorMRU }?,
827  element extLst { p_CT_ExtensionList }?
828 p_presentationPr =
829  element presentationPr { p_CT_PresentationProperties }
830 p_CT_HeaderFooter =
831
832  ## default value: true

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```

833     attribute sldNum { xsd:boolean }?,
834
835     ## default value: true
836     attribute hdr { xsd:boolean }?,
837
838     ## default value: true
839     attribute ftr { xsd:boolean }?,
840
841     ## default value: true
842     attribute dt { xsd:boolean }?,
843     element extLst { p_CT_ExtensionListModify }?
844 p_ST_PlaceholderType =
845     "title"
846     | "body"
847     | "ctrTitle"
848     | "subTitle"
849     | "dt"
850     | "sldNum"
851     | "ftr"
852     | "hdr"
853     | "obj"
854     | "chart"
855     | "tbl"
856     | "clipArt"
857     | "dgm"
858     | "media"
859     | "sldImg"
860     | "pic"
861 p_ST_PlaceholderSize = "full" | "half" | "quarter"
862 p_CT_Placeholder =
863
864     ## default value: obj
865     attribute type { p_ST_PlaceholderType }?,
866
867     ## default value: horz
868     attribute orient { p_ST_Direction }?,
869
870     ## default value: full
871     attribute sz { p_ST_PlaceholderSize }?,
872
873     ## default value: 0
874     attribute idx { xsd:unsignedInt }?,
875
876     ## default value: false
877     attribute hasCustomPrompt { xsd:boolean }?,
878     element extLst { p_CT_ExtensionListModify }?
879 p_CT_ApplicationNonVisualDrawingProps =
880
881     ## default value: false
882     attribute isPhoto { xsd:boolean }?,
883
884     ## default value: false
885     attribute userDrawn { xsd:boolean }?,

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```

886     element ph { p_CT_Placeholder }?,
887     a_EG_Media?,
888     element custDataLst { p_CT_CustomerDataList }?,
889     element extLst { p_CT_ExtensionList }?
890 p_CT_ShapeNonVisual =
891     element cNvPr { a_CT_NonVisualDrawingProps },
892     element cNvSpPr { a_CT_NonVisualDrawingShapeProps },
893     element nvPr { p_CT_ApplicationNonVisualDrawingProps }
894 p_CT_Shape =
895
896     ## default value: false
897     attribute useBgFill { xsd:boolean }?,
898     element nvSpPr { p_CT_ShapeNonVisual },
899     element spPr { a_CT_ShapeProperties },
900     element style { a_CT_ShapeStyle }?,
901     element txBody { a_CT_TextBody }?,
902     element extLst { p_CT_ExtensionListModify }?
903 p_CT_ConnectorNonVisual =
904     element cNvPr { a_CT_NonVisualDrawingProps },
905     element cNvCxnSpPr { a_CT_NonVisualConnectorProperties },
906     element nvPr { p_CT_ApplicationNonVisualDrawingProps }
907 p_CT_Connector =
908     element nvCxnSpPr { p_CT_ConnectorNonVisual },
909     element spPr { a_CT_ShapeProperties },
910     element style { a_CT_ShapeStyle }?,
911     element extLst { p_CT_ExtensionListModify }?
912 p_CT_PictureNonVisual =
913     element cNvPr { a_CT_NonVisualDrawingProps },
914     element cNvPicPr { a_CT_NonVisualPictureProperties },
915     element nvPr { p_CT_ApplicationNonVisualDrawingProps }
916 p_CT_Picture =
917     element nvPicPr { p_CT_PictureNonVisual },
918     element blipFill { a_CT_BlipFillProperties },
919     element spPr { a_CT_ShapeProperties },
920     element style { a_CT_ShapeStyle }?,
921     element extLst { p_CT_ExtensionListModify }?
922 p_CT_GraphicalObjectFrameNonVisual =
923     element cNvPr { a_CT_NonVisualDrawingProps },
924     element cNvGraphicFramePr { a_CT_NonVisualGraphicFrameProperties },
925     element nvPr { p_CT_ApplicationNonVisualDrawingProps }
926 p_CT_GraphicalObjectFrame =
927     attribute bwMode { a_ST_BlackWhiteMode }?,
928     element nvGraphicFramePr { p_CT_GraphicalObjectFrameNonVisual },
929     element xfrm { a_CT_Transform2D },
930     a_graphic,
931     element extLst { p_CT_ExtensionListModify }?
932 p_CT_GroupShapeNonVisual =
933     element cNvPr { a_CT_NonVisualDrawingProps },
934     element cNvGrpSpPr { a_CT_NonVisualGroupDrawingShapeProps },
935     element nvPr { p_CT_ApplicationNonVisualDrawingProps }
936 p_CT_GroupShape =
937     element nvGrpSpPr { p_CT_GroupShapeNonVisual },
938     element grpSpPr { a_CT_GroupShapeProperties },

```

```

939 (element sp { p_CT_Shape }
940   | element grpSp { p_CT_GroupShape }
941   | element graphicFrame { p_CT_GraphicalObjectFrame }
942   | element cxnSp { p_CT_Connector }
943   | element pic { p_CT_Picture }
944   | element contentPart { p_CT_Rel })*,
945   element extLst { p_CT_ExtensionListModify }?
946 p_CT_Rel = r_id
947 p_EG_TopLevelSlide = element clrMap { a_CT_ColorMapping }
948 p_EG_ChildSlide = element clrMapOvr { a_CT_ColorMappingOverride }?
949 p_AG_ChildSlide =
950
951   ## default value: true
952   attribute showMasterSp { xsd:boolean }?,
953
954   ## default value: true
955   attribute showMasterPhAnim { xsd:boolean }?
956 p_CT_BackgroundProperties =
957
958   ## default value: false
959   attribute shadeToTitle { xsd:boolean }?,
960   a_EG_FillProperties,
961   a_EG_EffectProperties?,
962   element extLst { p_CT_ExtensionList }?
963 p_EG_Background =
964   element bgPr { p_CT_BackgroundProperties }
965   | element bgRef { a_CT_StyleMatrixReference }
966 p_CT_Background =
967
968   ## default value: white
969   attribute bwMode { a_ST_BlackWhiteMode }?,
970   p_EG_Background
971 p_CT_CommonSlideData =
972   attribute name { xsd:string }?,
973   element bg { p_CT_Background }?,
974   element spTree { p_CT_GroupShape },
975   element custDataLst { p_CT_CustomerDataList }?,
976   element controls { p_CT_ControlList }?,
977   element extLst { p_CT_ExtensionList }?
978 p_CT_Slide =
979   p_AG_ChildSlide,
980
981   ## default value: true
982   attribute show { xsd:boolean }?,
983   element cSld { p_CT_CommonSlideData },
984   p_EG_ChildSlide?,
985   element transition { p_CT_SlideTransition }?,
986   element timing { p_CT_SlideTiming }?,
987   element extLst { p_CT_ExtensionListModify }?
988 p_sld = element sld { p_CT_Slide }
989 p_ST_SlideLayoutType =
990   "title"
991   | "tx"

```

```

992 | "twoColTx"
993 | "tbl"
994 | "txAndChart"
995 | "chartAndTx"
996 | "dgm"
997 | "chart"
998 | "txAndClipArt"
999 | "clipArtAndTx"
1000 | "titleOnly"
1001 | "blank"
1002 | "txAndObj"
1003 | "objAndTx"
1004 | "objOnly"
1005 | "obj"
1006 | "txAndMedia"
1007 | "mediaAndTx"
1008 | "objOverTx"
1009 | "txOverObj"
1010 | "txAndTwoObj"
1011 | "twoObjAndTx"
1012 | "twoObjOverTx"
1013 | "fourObj"
1014 | "vertTx"
1015 | "clipArtAndVertTx"
1016 | "vertTitleAndTx"
1017 | "vertTitleAndTxOverChart"
1018 | "twoObj"
1019 | "objAndTwoObj"
1020 | "twoObjAndObj"
1021 | "cust"
1022 | "secHead"
1023 | "twoTxTwoObj"
1024 | "objTx"
1025 | "picTx"
1026 p_CT_SlideLayout =
1027   p_AG_ChildSlide,
1028   attribute matchingName { xsd:string }?,
1029
1030   ## default value: cust
1031   attribute type { p_ST_SlideLayoutType }?,
1032
1033   ## default value: false
1034   attribute preserve { xsd:boolean }?,
1035
1036   ## default value: false
1037   attribute userDrawn { xsd:boolean }?,
1038   element cSld { p_CT_CommonSlideData },
1039   p_EG_ChildSlide?,
1040   element transition { p_CT_SlideTransition }?,
1041   element timing { p_CT_SlideTiming }?,
1042   element hf { p_CT_HeaderFooter }?,
1043   element extLst { p_CT_ExtensionListModify }?
1044 p_sldLayout = element sldLayout { p_CT_SlideLayout }

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```

1045 p_CT_SlideMasterTextStyles =
1046     element titleStyle { a_CT_TextListStyle }?,
1047     element bodyStyle { a_CT_TextListStyle }?,
1048     element otherStyle { a_CT_TextListStyle }?,
1049     element extLst { p_CT_ExtensionList }?
1050 p_ST_SlideLayoutId = xsd:unsignedInt { minInclusive = "2147483648" }
1051 p_CT_SlideLayoutIdListEntry =
1052     attribute id { p_ST_SlideLayoutId }?,
1053     r_id,
1054     element extLst { p_CT_ExtensionList }?
1055 p_CT_SlideLayoutIdList =
1056     element sldLayoutId { p_CT_SlideLayoutIdListEntry }*
1057 p_CT_SlideMaster =
1058
1059     ## default value: false
1060     attribute preserve { xsd:boolean }?,
1061     element cSld { p_CT_CommonSlideData },
1062     p_EG_TopLevelSlide,
1063     element sldLayoutIdLst { p_CT_SlideLayoutIdList }?,
1064     element transition { p_CT_SlideTransition }?,
1065     element timing { p_CT_SlideTiming }?,
1066     element hf { p_CT_HeaderFooter }?,
1067     element txStyles { p_CT_SlideMasterTextStyles }?,
1068     element extLst { p_CT_ExtensionListModify }?
1069 p_sldMaster = element sldMaster { p_CT_SlideMaster }
1070 p_CT_HandoutMaster =
1071     element cSld { p_CT_CommonSlideData },
1072     p_EG_TopLevelSlide,
1073     element hf { p_CT_HeaderFooter }?,
1074     element extLst { p_CT_ExtensionListModify }?
1075 p_handoutMaster = element handoutMaster { p_CT_HandoutMaster }
1076 p_CT_NotesMaster =
1077     element cSld { p_CT_CommonSlideData },
1078     p_EG_TopLevelSlide,
1079     element hf { p_CT_HeaderFooter }?,
1080     element notesStyle { a_CT_TextListStyle }?,
1081     element extLst { p_CT_ExtensionListModify }?
1082 p_notesMaster = element notesMaster { p_CT_NotesMaster }
1083 p_CT_NotesSlide =
1084     p_AG_ChildSlide,
1085     element cSld { p_CT_CommonSlideData },
1086     p_EG_ChildSlide?,
1087     element extLst { p_CT_ExtensionListModify }?
1088 p_notes = element notes { p_CT_NotesSlide }
1089 p_CT_SlideSyncProperties =
1090     attribute serverSldId { xsd:string },
1091     attribute serverSldModifiedTime { xsd:dateTime },
1092     attribute clientInsertedTime { xsd:dateTime },
1093     element extLst { p_CT_ExtensionList }?
1094 p_sldSyncPr = element sldSyncPr { p_CT_SlideSyncProperties }
1095 p_CT_StringTag =
1096     attribute name { xsd:string },
1097     attribute val { xsd:string }

```

```

1098 p_CT_TagList = element tag { p_CT_StringTag }*
1099 p_tagLst = element tagLst { p_CT_TagList }
1100 p_ST_SplitterBarState = "minimized" | "restored" | "maximized"
1101 p_ST_ViewType =
1102     "sldView"
1103     | "sldMasterView"
1104     | "notesView"
1105     | "handoutView"
1106     | "notesMasterView"
1107     | "outlineView"
1108     | "sldSorterView"
1109     | "sldThumbnailView"
1110 p_CT_NormalViewPortion =
1111     attribute sz { a_ST_PositiveFixedPercentage },
1112
1113     ## default value: true
1114     attribute autoAdjust { xsd:boolean }?,
1115 p_CT_NormalViewProperties =
1116
1117     ## default value: true
1118     attribute showOutlineIcons { xsd:boolean }?,
1119
1120     ## default value: false
1121     attribute snapVertSplitter { xsd:boolean }?,
1122
1123     ## default value: restored
1124     attribute vertBarState { p_ST_SplitterBarState }?,
1125
1126     ## default value: restored
1127     attribute horzBarState { p_ST_SplitterBarState }?,
1128
1129     ## default value: false
1130     attribute preferSingleView { xsd:boolean }?,
1131     element restoredLeft { p_CT_NormalViewPortion },
1132     element restoredTop { p_CT_NormalViewPortion },
1133     element extLst { p_CT_ExtensionList }?
1134 p_CT_CommonViewProperties =
1135
1136     ## default value: false
1137     attribute varScale { xsd:boolean }?,
1138     element scale { a_CT_Scale2D },
1139     element origin { a_CT_Point2D }
1140 p_CT_NotesTextViewProperties =
1141     element cViewPr { p_CT_CommonViewProperties },
1142     element extLst { p_CT_ExtensionList }?
1143 p_CT_OutlineViewSlideEntry =
1144     r_id,
1145
1146     ## default value: false
1147     attribute collapse { xsd:boolean }?
1148 p_CT_OutlineViewSlideList = element sld { p_CT_OutlineViewSlideEntry }*
1149 p_CT_OutlineViewProperties =
1150     element cViewPr { p_CT_CommonViewProperties },

```

```

1151     element sldLst { p_CT_OutlineViewSlideList }?,
1152     element extLst { p_CT_ExtensionList }?
1153 p_CT_SlideSorterViewProperties =
1154
1155     ## default value: true
1156     attribute showFormatting { xsd:boolean }?,
1157     element cViewPr { p_CT_CommonViewProperties },
1158     element extLst { p_CT_ExtensionList }?
1159 p_CT_Guide =
1160
1161     ## default value: vert
1162     attribute orient { p_ST_Direction }?,
1163
1164     ## default value: 0
1165     attribute pos { a_ST_Coordinate32 }?
1166 p_CT_GuideList = element guide { p_CT_Guide }*
1167 p_CT_CommonSlideViewProperties =
1168
1169     ## default value: true
1170     attribute snapToGrid { xsd:boolean }?,
1171
1172     ## default value: false
1173     attribute snapToObjects { xsd:boolean }?,
1174
1175     ## default value: false
1176     attribute showGuides { xsd:boolean }?,
1177     element cViewPr { p_CT_CommonViewProperties },
1178     element guideLst { p_CT_GuideList }?
1179 p_CT_SlideViewProperties =
1180     element cSldViewPr { p_CT_CommonSlideViewProperties },
1181     element extLst { p_CT_ExtensionList }?
1182 p_CT_NotesViewProperties =
1183     element cSldViewPr { p_CT_CommonSlideViewProperties },
1184     element extLst { p_CT_ExtensionList }?
1185 p_CT_ViewProperties =
1186
1187     ## default value: sldView
1188     attribute lastView { p_ST_ViewType }?,
1189
1190     ## default value: true
1191     attribute showComments { xsd:boolean }?,
1192     (element normalViewPr { p_CT_NormalViewProperties }?,
1193     element slideViewPr { p_CT_SlideViewProperties }?,
1194     element outlineViewPr { p_CT_OutlineViewProperties }?,
1195     element notesTextViewPr { p_CT_NotesTextViewProperties }?,
1196     element sorterViewPr { p_CT_SlideSorterViewProperties }?,
1197     element notesViewPr { p_CT_NotesViewProperties }?,
1198     element gridSpacing { a_CT_PositiveSize2D }?,
1199     element extLst { p_CT_ExtensionList }?)?
1200 p_viewPr = element viewPr { p_CT_ViewProperties }

```


B.3.1 Part Schemas

B.3.1.1 Comment Authors Part

This schema is available in the file PresentationML_Comment_Authors.rnc.

```

1 include "pml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"
4 include "dml-diagram.rnc"
5 include "shared-commonSimpleTypes.rnc"
6 include "dml-lockedCanvas.rnc"
7 include "any.rnc"
8 include "dml-chart.rnc"
9 include "dml-chartDrawing.rnc"
10 include "dml-picture.rnc"
11 include "dml-compatibility.rnc"
12 start = p_cmAuthorLst

```

B.3.1.2 Comments Part

This schema is available in the file PresentationML_Comments.rnc.

```

1 include "pml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"
4 include "dml-diagram.rnc"
5 include "shared-commonSimpleTypes.rnc"
6 include "dml-lockedCanvas.rnc"
7 include "any.rnc"
8 include "dml-chart.rnc"
9 include "dml-chartDrawing.rnc"
10 include "dml-picture.rnc"
11 include "dml-compatibility.rnc"
12 start = p_cmlst

```

B.3.1.3 Handout Master Part

This schema is available in the file PresentationML_Handout_Master.rnc.

```

1 include "pml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"
4 include "dml-diagram.rnc"
5 include "shared-commonSimpleTypes.rnc"
6 include "dml-lockedCanvas.rnc"
7 include "any.rnc"
8 include "dml-chart.rnc"
9 include "dml-chartDrawing.rnc"
10 include "dml-picture.rnc"
11 include "dml-compatibility.rnc"
12 start = p_handoutMaster

```

B.3.1.4 Notes Master Part

This schema is available in the file PresentationML_Notes_Master.rnc.

```

1 include "pml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"
4 include "dml-diagram.rnc"
5 include "shared-commonSimpleTypes.rnc"
6 include "dml-lockedCanvas.rnc"
7 include "any.rnc"
8 include "dml-chart.rnc"
9 include "dml-chartDrawing.rnc"
10 include "dml-picture.rnc"
11 include "dml-compatibility.rnc"
12 start = p_notesMaster

```

B.3.1.5 Notes Slide Part

This schema is available in the file PresentationML_Notes_Slide.rnc.

```

1 include "pml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"
4 include "dml-diagram.rnc"
5 include "shared-commonSimpleTypes.rnc"
6 include "dml-lockedCanvas.rnc"
7 include "any.rnc"
8 include "dml-chart.rnc"
9 include "dml-chartDrawing.rnc"
10 include "dml-picture.rnc"
11 include "dml-compatibility.rnc"
12 start = p_notes

```

B.3.1.6 Presentation Part

This schema is available in the file PresentationML_Presentation.rnc.

```

1 include "pml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"
4 include "dml-diagram.rnc"
5 include "shared-commonSimpleTypes.rnc"
6 include "dml-lockedCanvas.rnc"
7 include "any.rnc"
8 include "dml-chart.rnc"
9 include "dml-chartDrawing.rnc"
10 include "dml-picture.rnc"
11 include "dml-compatibility.rnc"
12 start = p_presentation

```

B.3.1.7 Presentation Properties Part

This schema is available in the file PresentationML_Presentation_Properties.rnc.

```

1 include "pml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"
4 include "dml-diagram.rnc"
5 include "shared-commonSimpleTypes.rnc"
6 include "dml-lockedCanvas.rnc"
7 include "any.rnc"
8 include "dml-chart.rnc"
9 include "dml-chartDrawing.rnc"
10 include "dml-picture.rnc"
11 include "dml-compatibility.rnc"
12 start = p_presentationPr

```

B.3.1.8 Slide Part

This schema is available in the file PresentationML_Slide.rnc.

```

1 include "pml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"
4 include "dml-diagram.rnc"
5 include "shared-commonSimpleTypes.rnc"
6 include "dml-lockedCanvas.rnc"
7 include "any.rnc"
8 include "dml-chart.rnc"
9 include "dml-chartDrawing.rnc"
10 include "dml-picture.rnc"
11 include "dml-compatibility.rnc"
12 start = p_sld

```

B.3.1.9 Slide Layout Part

This schema is available in the file PresentationML_Slide_Layout.rnc.

```

1 include "pml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"
4 include "dml-diagram.rnc"
5 include "shared-commonSimpleTypes.rnc"
6 include "dml-lockedCanvas.rnc"
7 include "any.rnc"
8 include "dml-chart.rnc"
9 include "dml-chartDrawing.rnc"
10 include "dml-picture.rnc"
11 include "dml-compatibility.rnc"
12 start = p_sldLayout

```

B.3.1.10 Slide Master Part

This schema is available in the file PresentationML_Slide_Master.rnc.

```

1 include "pml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"

```

```

4 include "dml-diagram.rnc"
5 include "shared-commonSimpleTypes.rnc"
6 include "dml-lockedCanvas.rnc"
7 include "any.rnc"
8 include "dml-chart.rnc"
9 include "dml-chartDrawing.rnc"
10 include "dml-picture.rnc"
11 include "dml-compatibility.rnc"
12 start = p_sldMaster

```

B.3.1.11 Slide Synchronization Data Part

This schema is available in the file PresentationML_Slide_Synchronization_Data.rnc.

```

1 include "pml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"
4 include "dml-diagram.rnc"
5 include "shared-commonSimpleTypes.rnc"
6 include "dml-lockedCanvas.rnc"
7 include "any.rnc"
8 include "dml-chart.rnc"
9 include "dml-chartDrawing.rnc"
10 include "dml-picture.rnc"
11 include "dml-compatibility.rnc"
12 start = p_sldSyncPr

```

B.3.1.12 User Defined Tags Part

This schema is available in the file PresentationML_User-Defined_Tags.rnc.

```

1 include "pml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"
4 include "dml-diagram.rnc"
5 include "shared-commonSimpleTypes.rnc"
6 include "dml-lockedCanvas.rnc"
7 include "any.rnc"
8 include "dml-chart.rnc"
9 include "dml-chartDrawing.rnc"
10 include "dml-picture.rnc"
11 include "dml-compatibility.rnc"
12 start = p_tagLst

```

B.3.1.13 View Properties Part

This schema is available in the file PresentationML_View_Properties.rnc.

```

1 include "pml.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"
4 include "dml-diagram.rnc"
5 include "shared-commonSimpleTypes.rnc"
6 include "dml-lockedCanvas.rnc"

```

```

7 include "any.rnc"
8 include "dml-chart.rnc"
9 include "dml-chartDrawing.rnc"
10 include "dml-picture.rnc"
11 include "dml-compatibility.rnc"
12 start = p_viewPr

```

B.4 DrawingML - Framework

B.4.1 DrawingML - Main

This schema is available in the file dml-main.rnc.

```

1 default namespace =
2   "http://schemas.openxmlformats.org/drawingml/2006/main"
3 namespace a = "http://schemas.openxmlformats.org/drawingml/2006/main"
4 namespace o = "urn:schemas-microsoft-com:office:office"
5 namespace r =
6   "http://schemas.openxmlformats.org/officeDocument/2006/relationships"
7 namespace s =
8   "http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
9 namespace v = "urn:schemas-microsoft-com:vml"
10 namespace w10 = "urn:schemas-microsoft-com:office:word"
11 namespace x = "urn:schemas-microsoft-com:office:excel"
12
13 a_CT_AudioFile =
14   r_link,
15   attribute contentType { xsd:string }?,
16   element extLst { a_CT_OfficeArtExtensionList }?
17 a_CT_VideoFile =
18   r_link,
19   attribute contentType { xsd:string }?,
20   element extLst { a_CT_OfficeArtExtensionList }?
21 a_CT_QuickTimeFile =
22   r_link,
23   element extLst { a_CT_OfficeArtExtensionList }?
24 a_CT_AudioCDTime =
25   attribute track { xsd:unsignedByte },
26
27   ## default value: 0
28   attribute time { xsd:unsignedInt }?
29 a_CT_AudioCD =
30   element st { a_CT_AudioCDTime },
31   element end { a_CT_AudioCDTime },
32   element extLst { a_CT_OfficeArtExtensionList }?
33 a_EG_Media =
34   element audioCd { a_CT_AudioCD }
35   | element wavAudioFile { a_CT_EmbeddedWAVAudioFile }
36   | element audioFile { a_CT_AudioFile }
37   | element videoFile { a_CT_VideoFile }
38   | element quickTimeFile { a_CT_QuickTimeFile }
39 a_videoFile = element videoFile { a_CT_VideoFile }
40 a_ST_StyleMatrixColumnIndex = xsd:unsignedInt

```

```

41 a_ST_FontCollectionIndex = "major" | "minor" | "none"
42 a_ST_ColorSchemeIndex =
43     "dk1"
44     | "lt1"
45     | "dk2"
46     | "lt2"
47     | "accent1"
48     | "accent2"
49     | "accent3"
50     | "accent4"
51     | "accent5"
52     | "accent6"
53     | "hlink"
54     | "folHlink"
55 a_CT_ColorScheme =
56     attribute name { xsd:string },
57     element dk1 { a_CT_Color },
58     element lt1 { a_CT_Color },
59     element dk2 { a_CT_Color },
60     element lt2 { a_CT_Color },
61     element accent1 { a_CT_Color },
62     element accent2 { a_CT_Color },
63     element accent3 { a_CT_Color },
64     element accent4 { a_CT_Color },
65     element accent5 { a_CT_Color },
66     element accent6 { a_CT_Color },
67     element hlink { a_CT_Color },
68     element folHlink { a_CT_Color },
69     element extLst { a_CT_OfficeArtExtensionList }?
70 a_CT_CustomColor =
71     attribute name { xsd:string }?,
72     a_EG_ColorChoice
73 a_CT_SupplementalFont =
74     attribute script { xsd:string },
75     attribute typeface { a_ST_TextTypeface }
76 a_CT_CustomColorList = element custClr { a_CT_CustomColor }*
77 a_CT_FontCollection =
78     element latin { a_CT_TextFont },
79     element ea { a_CT_TextFont },
80     element cs { a_CT_TextFont },
81     element font { a_CT_SupplementalFont }*,
82     element extLst { a_CT_OfficeArtExtensionList }?
83 a_CT_EffectStyleItem =
84     a_EG_EffectProperties,
85     element scene3d { a_CT_Scene3D }?,
86     element sp3d { a_CT_Shape3D }?
87 a_CT_FontScheme =
88     attribute name { xsd:string },
89     element majorFont { a_CT_FontCollection },
90     element minorFont { a_CT_FontCollection },
91     element extLst { a_CT_OfficeArtExtensionList }?
92 a_CT_FillStyleList = a_EG_FillProperties+
93 a_CT_LineStyleList = element ln { a_CT_LineProperties }+

```

```

94 a_CT_EffectStyleList = element effectStyle { a_CT_EffectStyleItem }+
95 a_CT_BackgroundFillStyleList = a_EG_FillProperties+
96 a_CT_StyleMatrix =
97   attribute name { xsd:string }?,
98   element fillStyleLst { a_CT_FillStyleList },
99   element lnStyleLst { a_CT_LineStyleList },
100  element effectStyleLst { a_CT_EffectStyleList },
101  element bgFillStyleLst { a_CT_BackgroundFillStyleList }
102 a_CT_BaseStyles =
103   element clrScheme { a_CT_ColorScheme },
104   element fontScheme { a_CT_FontScheme },
105   element fmtScheme { a_CT_StyleMatrix },
106   element extLst { a_CT_OfficeArtExtensionList }?
107 a_CT_OfficeArtExtension =
108   attribute uri { xsd:token },
109   a_CT_OfficeArtExtension_any*
110 a_CT_OfficeArtExtension_any =
111   element * - (o:* | v:* | w10:* | x:*) {
112     anyAttribute*,
113     mixed { anyElement* }
114   }
115 a_ST_Coordinate = a_ST_CoordinateUnqualified | s_ST_UniversalMeasure
116 a_ST_CoordinateUnqualified =
117   xsd:long {
118     minInclusive = "-27273042329600"
119     maxInclusive = "27273042316900"
120   }
121 a_ST_Coordinate32 = a_ST_Coordinate32Unqualified | s_ST_UniversalMeasure
122 a_ST_Coordinate32Unqualified = xsd:int
123 a_ST_PositiveCoordinate =
124   xsd:long { minInclusive = "0" maxInclusive = "27273042316900" }
125 a_ST_PositiveCoordinate32 = xsd:int { minInclusive = "0" }
126 a_ST_Angle = xsd:int
127 a_CT_Angle = attribute val { a_ST_Angle }
128 a_ST_FixedAngle =
129   xsd:int { minExclusive = "-5400000" maxExclusive = "5400000" }
130 a_ST_PositiveFixedAngle =
131   xsd:int { minInclusive = "0" maxExclusive = "21600000" }
132 a_CT_PositiveFixedAngle = attribute val { a_ST_PositiveFixedAngle }
133 a_ST_Percentage = a_ST_PercentageDecimal | s_ST_Percentage
134 a_ST_PercentageDecimal = xsd:int
135 a_CT_Percentage = attribute val { a_ST_Percentage }
136 a_ST_PositivePercentage =
137   a_ST_PositivePercentageDecimal | s_ST_PositivePercentage
138 a_ST_PositivePercentageDecimal = xsd:int { minInclusive = "0" }
139 a_CT_PositivePercentage = attribute val { a_ST_PositivePercentage }
140 a_ST_FixedPercentage =
141   a_ST_FixedPercentageDecimal | s_ST_FixedPercentage
142 a_ST_FixedPercentageDecimal =
143   xsd:int { minInclusive = "-100000" maxInclusive = "100000" }
144 a_CT_FixedPercentage = attribute val { a_ST_FixedPercentage }
145 a_ST_PositiveFixedPercentage =
146   a_ST_PositiveFixedPercentageDecimal | s_ST_PositiveFixedPercentage

```

```

147 a_ST_PositiveFixedPercentageDecimal =
148   xsd:int { minInclusive = "0" maxInclusive = "100000" }
149 a_CT_PositiveFixedPercentage =
150   attribute val { a_ST_PositiveFixedPercentage }
151 a_CT_Ratio =
152   attribute n { xsd:long },
153   attribute d { xsd:long }
154 a_CT_Point2D =
155   attribute x { a_ST_Coordinate },
156   attribute y { a_ST_Coordinate }
157 a_CT_PositiveSize2D =
158   attribute cx { a_ST_PositiveCoordinate },
159   attribute cy { a_ST_PositiveCoordinate }
160 a_CT_ComplementTransform = empty
161 a_CT_InverseTransform = empty
162 a_CT_GrayscaleTransform = empty
163 a_CT_GammaTransform = empty
164 a_CT_InverseGammaTransform = empty
165 a_EG_ColorTransform =
166   element tint { a_CT_PositiveFixedPercentage }
167   | element shade { a_CT_PositiveFixedPercentage }
168   | element comp { a_CT_ComplementTransform }
169   | element inv { a_CT_InverseTransform }
170   | element gray { a_CT_GrayscaleTransform }
171   | element alpha { a_CT_PositiveFixedPercentage }
172   | element alphaOff { a_CT_FixedPercentage }
173   | element alphaMod { a_CT_PositivePercentage }
174   | element hue { a_CT_PositiveFixedAngle }
175   | element hueOff { a_CT_Angle }
176   | element hueMod { a_CT_PositivePercentage }
177   | element sat { a_CT_Percentage }
178   | element satOff { a_CT_Percentage }
179   | element satMod { a_CT_Percentage }
180   | element lum { a_CT_Percentage }
181   | element lumOff { a_CT_Percentage }
182   | element lumMod { a_CT_Percentage }
183   | element red { a_CT_Percentage }
184   | element redOff { a_CT_Percentage }
185   | element redMod { a_CT_Percentage }
186   | element green { a_CT_Percentage }
187   | element greenOff { a_CT_Percentage }
188   | element greenMod { a_CT_Percentage }
189   | element blue { a_CT_Percentage }
190   | element blueOff { a_CT_Percentage }
191   | element blueMod { a_CT_Percentage }
192   | element gamma { a_CT_GammaTransform }
193   | element invGamma { a_CT_InverseGammaTransform }
194 a_CT_ScRgbColor =
195   attribute r { a_ST_Percentage },
196   attribute g { a_ST_Percentage },
197   attribute b { a_ST_Percentage },
198   a_EG_ColorTransform*
199 a_CT_SRgbColor =

```



```

200     attribute val { s_ST_HexColorRGB },
201     a_EG_ColorTransform*
202 a_CT_HslColor =
203     attribute hue { a_ST_PositiveFixedAngle },
204     attribute sat { a_ST_Percentage },
205     attribute lum { a_ST_Percentage },
206     a_EG_ColorTransform*
207 a_ST_SystemColorVal =
208     "scrollBar"
209     | "background"
210     | "activeCaption"
211     | "inactiveCaption"
212     | "menu"
213     | "window"
214     | "windowFrame"
215     | "menuText"
216     | "windowText"
217     | "captionText"
218     | "activeBorder"
219     | "inactiveBorder"
220     | "appWorkspace"
221     | "highlight"
222     | "highlightText"
223     | "btnFace"
224     | "btnShadow"
225     | "grayText"
226     | "btnText"
227     | "inactiveCaptionText"
228     | "btnHighlight"
229     | "3dDkShadow"
230     | "3dLight"
231     | "infoText"
232     | "infoBk"
233     | "hotLight"
234     | "gradientActiveCaption"
235     | "gradientInactiveCaption"
236     | "menuHighlight"
237     | "menuBar"
238 a_CT_SystemColor =
239     attribute val { a_ST_SystemColorVal },
240     attribute lastClr { s_ST_HexColorRGB }?,
241     a_EG_ColorTransform*
242 a_ST_SchemeColorVal =
243     "bg1"
244     | "tx1"
245     | "bg2"
246     | "tx2"
247     | "accent1"
248     | "accent2"
249     | "accent3"
250     | "accent4"
251     | "accent5"
252     | "accent6"

```

```

253 | "hlink"
254 | "folHlink"
255 | "phClr"
256 | "dk1"
257 | "lt1"
258 | "dk2"
259 | "lt2"
260 a_CT_SchemeColor =
261   attribute val { a_ST_SchemeColorVal },
262   a_EG_ColorTransform*
263 a_ST_PresetColorVal =
264   "aliceBlue"
265   | "antiqueWhite"
266   | "aqua"
267   | "aquamarine"
268   | "azure"
269   | "beige"
270   | "bisque"
271   | "black"
272   | "blanchedAlmond"
273   | "blue"
274   | "blueViolet"
275   | "brown"
276   | "burlyWood"
277   | "cadetBlue"
278   | "chartreuse"
279   | "chocolate"
280   | "coral"
281   | "cornflowerBlue"
282   | "cornsilk"
283   | "crimson"
284   | "cyan"
285   | "darkBlue"
286   | "darkCyan"
287   | "darkGoldenrod"
288   | "darkGray"
289   | "darkGrey"
290   | "darkGreen"
291   | "darkKhaki"
292   | "darkMagenta"
293   | "darkOliveGreen"
294   | "darkOrange"
295   | "darkOrchid"
296   | "darkRed"
297   | "darkSalmon"
298   | "darkSeaGreen"
299   | "darkSlateBlue"
300   | "darkSlateGray"
301   | "darkSlateGrey"
302   | "darkTurquoise"
303   | "darkViolet"
304   | "dkBlue"
305   | "dkCyan"

```

```

306 | "dkGoldenrod"
307 | "dkGray"
308 | "dkGrey"
309 | "dkGreen"
310 | "dkKhaki"
311 | "dkMagenta"
312 | "dkOliveGreen"
313 | "dkOrange"
314 | "dkOrchid"
315 | "dkRed"
316 | "dkSalmon"
317 | "dkSeaGreen"
318 | "dkSlateBlue"
319 | "dkSlateGray"
320 | "dkSlateGrey"
321 | "dkTurquoise"
322 | "dkViolet"
323 | "deepPink"
324 | "deepSkyBlue"
325 | "dimGray"
326 | "dimGrey"
327 | "dodgerBlue"
328 | "firebrick"
329 | "floralWhite"
330 | "forestGreen"
331 | "fuchsia"
332 | "gainsboro"
333 | "ghostWhite"
334 | "gold"
335 | "goldenrod"
336 | "gray"
337 | "grey"
338 | "green"
339 | "greenYellow"
340 | "honeydew"
341 | "hotPink"
342 | "indianRed"
343 | "indigo"
344 | "ivory"
345 | "khaki"
346 | "lavender"
347 | "lavenderBlush"
348 | "lawnGreen"
349 | "lemonChiffon"
350 | "lightBlue"
351 | "lightCoral"
352 | "lightCyan"
353 | "lightGoldenrodYellow"
354 | "lightGray"
355 | "lightGrey"
356 | "lightGreen"
357 | "lightPink"
358 | "lightSalmon"

```

359	"lightSeaGreen"
360	"lightSkyBlue"
361	"lightSlateGray"
362	"lightSlateGrey"
363	"lightSteelBlue"
364	"lightYellow"
365	"ltBlue"
366	"ltCoral"
367	"ltCyan"
368	"ltGoldenrodYellow"
369	"ltGray"
370	"ltGrey"
371	"ltGreen"
372	"ltPink"
373	"ltSalmon"
374	"ltSeaGreen"
375	"ltSkyBlue"
376	"ltSlateGray"
377	"ltSlateGrey"
378	"ltSteelBlue"
379	"ltYellow"
380	"lime"
381	"limeGreen"
382	"linen"
383	"magenta"
384	"maroon"
385	"medAquamarine"
386	"medBlue"
387	"medOrchid"
388	"medPurple"
389	"medSeaGreen"
390	"medSlateBlue"
391	"medSpringGreen"
392	"medTurquoise"
393	"medVioletRed"
394	"mediumAquamarine"
395	"mediumBlue"
396	"mediumOrchid"
397	"mediumPurple"
398	"mediumSeaGreen"
399	"mediumSlateBlue"
400	"mediumSpringGreen"
401	"mediumTurquoise"
402	"mediumVioletRed"
403	"midnightBlue"
404	"mintCream"
405	"mistyRose"
406	"moccasin"
407	"navajoWhite"
408	"navy"
409	"oldLace"
410	"olive"
411	"oliveDrab"

```

412 | "orange"
413 | "orangeRed"
414 | "orchid"
415 | "paleGoldenrod"
416 | "paleGreen"
417 | "paleTurquoise"
418 | "paleVioletRed"
419 | "papayaWhip"
420 | "peachPuff"
421 | "peru"
422 | "pink"
423 | "plum"
424 | "powderBlue"
425 | "purple"
426 | "red"
427 | "rosyBrown"
428 | "royalBlue"
429 | "saddleBrown"
430 | "salmon"
431 | "sandyBrown"
432 | "seaGreen"
433 | "seaShell"
434 | "sienna"
435 | "silver"
436 | "skyBlue"
437 | "slateBlue"
438 | "slateGray"
439 | "slateGrey"
440 | "snow"
441 | "springGreen"
442 | "steelBlue"
443 | "tan"
444 | "teal"
445 | "thistle"
446 | "tomato"
447 | "turquoise"
448 | "violet"
449 | "wheat"
450 | "white"
451 | "whiteSmoke"
452 | "yellow"
453 | "yellowGreen"
454 a_CT_PresetColor =
455   attribute val { a_ST_PresetColorVal },
456   a_EG_ColorTransform*
457 a_EG_OfficeArtExtensionList = element ext { a_CT_OfficeArtExtension }*
458 a_CT_OfficeArtExtensionList = a_EG_OfficeArtExtensionList
459 a_CT_Scale2D =
460   element sx { a_CT_Ratio },
461   element sy { a_CT_Ratio }
462 a_CT_Transform2D =
463
464   ## default value: 0

```

```

465     attribute rot { a_ST_Angle }?,
466
467     ## default value: false
468     attribute flipH { xsd:boolean }?,
469
470     ## default value: false
471     attribute flipV { xsd:boolean }?,
472     element off { a_CT_Point2D }?,
473     element ext { a_CT_PositiveSize2D }?
474 a_CT_GroupTransform2D =
475
476     ## default value: 0
477     attribute rot { a_ST_Angle }?,
478
479     ## default value: false
480     attribute flipH { xsd:boolean }?,
481
482     ## default value: false
483     attribute flipV { xsd:boolean }?,
484     element off { a_CT_Point2D }?,
485     element ext { a_CT_PositiveSize2D }?,
486     element chOff { a_CT_Point2D }?,
487     element chExt { a_CT_PositiveSize2D }?
488 a_CT_Point3D =
489     attribute x { a_ST_Coordinate },
490     attribute y { a_ST_Coordinate },
491     attribute z { a_ST_Coordinate }
492 a_CT_Vector3D =
493     attribute dx { a_ST_Coordinate },
494     attribute dy { a_ST_Coordinate },
495     attribute dz { a_ST_Coordinate }
496 a_CT_SphereCoords =
497     attribute lat { a_ST_PositiveFixedAngle },
498     attribute lon { a_ST_PositiveFixedAngle },
499     attribute rev { a_ST_PositiveFixedAngle }
500 a_CT_RelativeRect =
501
502     ## default value: 0%
503     attribute l { a_ST_Percentage }?,
504
505     ## default value: 0%
506     attribute t { a_ST_Percentage }?,
507
508     ## default value: 0%
509     attribute r { a_ST_Percentage }?,
510
511     ## default value: 0%
512     attribute b { a_ST_Percentage }?
513 a_ST_RectAlignment =
514     "tl" | "t" | "tr" | "l" | "ctr" | "r" | "bl" | "b" | "br"
515 a_EG_ColorChoice =
516     element scrgbClr { a_CT_ScRgbColor }
517     | element srgbClr { a_CT_SRgbColor }

```

```

518 | element hslClr { a_CT_HslColor }
519 | element sysClr { a_CT_SystemColor }
520 | element schemeClr { a_CT_SchemeColor }
521 | element prstClr { a_CT_PresetColor }
522 a_CT_Color = a_EG_ColorChoice
523 a_CT_ColorMRU = a_EG_ColorChoice*
524 a_ST_BlackWhiteMode =
525     "clr"
526     | "auto"
527     | "gray"
528     | "ltGray"
529     | "invGray"
530     | "grayWhite"
531     | "blackGray"
532     | "blackWhite"
533     | "black"
534     | "white"
535     | "hidden"
536 a_AG_Blob = r_embed?, r_link?
537 a_CT_EmbeddedWAVAudioFile =
538     r_embed,
539     attribute name { xsd:string }?
540 a_CT_Hyperlink =
541     r_id?,
542     attribute invalidUrl { xsd:string }?,
543     attribute action { xsd:string }?,
544     attribute tgtFrame { xsd:string }?,
545     attribute tooltip { xsd:string }?,
546
547     ## default value: true
548     attribute history { xsd:boolean }?,
549
550     ## default value: false
551     attribute highlightClick { xsd:boolean }?,
552
553     ## default value: false
554     attribute endSnd { xsd:boolean }?,
555     element snd { a_CT_EmbeddedWAVAudioFile }?,
556     element extLst { a_CT_OfficeArtExtensionList }?
557 a_ST_DrawingElementId = xsd:unsignedInt
558 a_AG_Locking =
559
560     ## default value: false
561     attribute noGrp { xsd:boolean }?,
562
563     ## default value: false
564     attribute noSelect { xsd:boolean }?,
565
566     ## default value: false
567     attribute noRot { xsd:boolean }?,
568
569     ## default value: false
570     attribute noChangeAspect { xsd:boolean }?,

```

```

571
572   ## default value: false
573   attribute noMove { xsd:boolean }?,
574
575   ## default value: false
576   attribute noResize { xsd:boolean }?,
577
578   ## default value: false
579   attribute noEditPoints { xsd:boolean }?,
580
581   ## default value: false
582   attribute noAdjustHandles { xsd:boolean }?,
583
584   ## default value: false
585   attribute noChangeArrowheads { xsd:boolean }?,
586
587   ## default value: false
588   attribute noChangeShapeType { xsd:boolean }?
589 a_CT_ConnectorLocking =
590   a_AG_Locking,
591   element extLst { a_CT_OfficeArtExtensionList }?
592 a_CT_ShapeLocking =
593   a_AG_Locking,
594
595   ## default value: false
596   attribute noTextEdit { xsd:boolean }?,
597   element extLst { a_CT_OfficeArtExtensionList }?
598 a_CT_PictureLocking =
599   a_AG_Locking,
600
601   ## default value: false
602   attribute noCrop { xsd:boolean }?,
603   element extLst { a_CT_OfficeArtExtensionList }?
604 a_CT_GroupLocking =
605
606   ## default value: false
607   attribute noGrp { xsd:boolean }?,
608
609   ## default value: false
610   attribute noUngroup { xsd:boolean }?,
611
612   ## default value: false
613   attribute noSelect { xsd:boolean }?,
614
615   ## default value: false
616   attribute noRot { xsd:boolean }?,
617
618   ## default value: false
619   attribute noChangeAspect { xsd:boolean }?,
620
621   ## default value: false
622   attribute noMove { xsd:boolean }?,
623

```



```

624  ## default value: false
625  attribute noResize { xsd:boolean }?,
626  element extLst { a_CT_OfficeArtExtensionList }?
627  a_CT_GraphicalObjectFrameLocking =
628
629  ## default value: false
630  attribute noGrp { xsd:boolean }?,
631
632  ## default value: false
633  attribute noDrilldown { xsd:boolean }?,
634
635  ## default value: false
636  attribute noSelect { xsd:boolean }?,
637
638  ## default value: false
639  attribute noChangeAspect { xsd:boolean }?,
640
641  ## default value: false
642  attribute noMove { xsd:boolean }?,
643
644  ## default value: false
645  attribute noResize { xsd:boolean }?,
646  element extLst { a_CT_OfficeArtExtensionList }?
647  a_CT_NonVisualDrawingProps =
648  attribute id { a_ST_DrawingElementId },
649  attribute name { xsd:string },
650  attribute descr { xsd:string }?,
651
652  ## default value: false
653  attribute hidden { xsd:boolean }?,
654  attribute title { xsd:string }?,
655  element hlinkClick { a_CT_Hyperlink }?,
656  element hlinkHover { a_CT_Hyperlink }?,
657  element extLst { a_CT_OfficeArtExtensionList }?
658  a_CT_NonVisualDrawingShapeProps =
659
660  ## default value: false
661  attribute txBox { xsd:boolean }?,
662  element spLocks { a_CT_ShapeLocking }?,
663  element extLst { a_CT_OfficeArtExtensionList }?
664  a_CT_NonVisualConnectorProperties =
665  element cxnSpLocks { a_CT_ConnectorLocking }?,
666  element stCxn { a_CT_Connection }?,
667  element endCxn { a_CT_Connection }?,
668  element extLst { a_CT_OfficeArtExtensionList }?
669  a_CT_NonVisualPictureProperties =
670
671  ## default value: true
672  attribute preferRelativeResize { xsd:boolean }?,
673  element picLocks { a_CT_PictureLocking }?,
674  element extLst { a_CT_OfficeArtExtensionList }?
675  a_CT_NonVisualGroupDrawingShapeProps =
676  element grpSpLocks { a_CT_GroupLocking }?,

```

```

677     element extLst { a_CT_OfficeArtExtensionList }?
678 a_CT_NonVisualGraphicFrameProperties =
679     element graphicFrameLocks { a_CT_GraphicalObjectFrameLocking }?,
680     element extLst { a_CT_OfficeArtExtensionList }?
681 a_CT_GraphicalObjectData =
682     attribute uri { xsd:token },
683     a_CT_GraphicalObjectData_any*
684 a_CT_GraphicalObjectData_any =
685     element * - (o:* | v:* | w10:* | x:*) {
686         anyAttribute*,
687         mixed { anyElement* }
688     }
689 a_CT_GraphicalObject = element graphicData { a_CT_GraphicalObjectData }
690 a_graphic = element graphic { a_CT_GraphicalObject }
691 a_ST_ChartBuildStep =
692     "category"
693     | "ptInCategory"
694     | "series"
695     | "ptInSeries"
696     | "allPts"
697     | "gridLegend"
698 a_ST_DgmBuildStep = "sp" | "bg"
699 a_CT_AnimationDgmElement =
700
701     ## default value: {00000000-0000-0000-0000-000000000000}
702     attribute id { s_ST_Guid }?,
703
704     ## default value: sp
705     attribute bldStep { a_ST_DgmBuildStep }?
706 a_CT_AnimationChartElement =
707
708     ## default value: -1
709     attribute seriesIdx { xsd:int }?,
710
711     ## default value: -1
712     attribute categoryIdx { xsd:int }?,
713     attribute bldStep { a_ST_ChartBuildStep }
714 a_CT_AnimationElementChoice =
715     element dgm { a_CT_AnimationDgmElement }
716     | element chart { a_CT_AnimationChartElement }
717 a_ST_AnimationBuildType = "allAtOnce"
718 a_ST_AnimationDgmOnlyBuildType = "one" | "lvlOne" | "lvlAtOnce"
719 a_ST_AnimationDgmBuildType =
720     a_ST_AnimationBuildType | a_ST_AnimationDgmOnlyBuildType
721 a_CT_AnimationDgmBuildProperties =
722
723     ## default value: allAtOnce
724     attribute bld { a_ST_AnimationDgmBuildType }?,
725
726     ## default value: false
727     attribute rev { xsd:boolean }?
728 a_ST_AnimationChartOnlyBuildType =
729     "series" | "category" | "seriesEl" | "categoryEl"

```

```

730 a_ST_AnimationChartBuildType =
731   a_ST_AnimationBuildType | a_ST_AnimationChartOnlyBuildType
732 a_CT_AnimationChartBuildProperties =
733
734   ## default value: allAtOnce
735   attribute bld { a_ST_AnimationChartBuildType }?,
736
737   ## default value: true
738   attribute animBg { xsd:boolean }?
739 a_CT_AnimationGraphicalObjectBuildProperties =
740   element bldDgm { a_CT_AnimationDgmBuildProperties }
741   | element bldChart { a_CT_AnimationChartBuildProperties }
742 a_CT_BackgroundFormatting = a_EG_FillProperties?, a_EG_EffectProperties?
743 a_CT_WholeE2oFormatting =
744   element ln { a_CT_LineProperties }?,
745   a_EG_EffectProperties?
746 a_CT_GvmlUseShapeRectangle = empty
747 a_CT_GvmlTextShape =
748   element txBody { a_CT_TextBody },
749   (element useSpRect { a_CT_GvmlUseShapeRectangle }
750    | element xfrm { a_CT_Transform2D } ),
751   element extLst { a_CT_OfficeArtExtensionList }?
752 a_CT_GvmlShapeNonVisual =
753   element cNvPr { a_CT_NonVisualDrawingProps },
754   element cNvSpPr { a_CT_NonVisualDrawingShapeProps }
755 a_CT_GvmlShape =
756   element nvSpPr { a_CT_GvmlShapeNonVisual },
757   element spPr { a_CT_ShapeProperties },
758   element txSp { a_CT_GvmlTextShape }?,
759   element style { a_CT_ShapeStyle }?,
760   element extLst { a_CT_OfficeArtExtensionList }?
761 a_CT_GvmlConnectorNonVisual =
762   element cNvPr { a_CT_NonVisualDrawingProps },
763   element cNvCxnSpPr { a_CT_NonVisualConnectorProperties }
764 a_CT_GvmlConnector =
765   element nvCxnSpPr { a_CT_GvmlConnectorNonVisual },
766   element spPr { a_CT_ShapeProperties },
767   element style { a_CT_ShapeStyle }?,
768   element extLst { a_CT_OfficeArtExtensionList }?
769 a_CT_GvmlPictureNonVisual =
770   element cNvPr { a_CT_NonVisualDrawingProps },
771   element cNvPicPr { a_CT_NonVisualPictureProperties }
772 a_CT_GvmlPicture =
773   element nvPicPr { a_CT_GvmlPictureNonVisual },
774   element blipFill { a_CT_BlipFillProperties },
775   element spPr { a_CT_ShapeProperties },
776   element style { a_CT_ShapeStyle }?,
777   element extLst { a_CT_OfficeArtExtensionList }?
778 a_CT_GvmlGraphicFrameNonVisual =
779   element cNvPr { a_CT_NonVisualDrawingProps },
780   element cNvGraphicFramePr { a_CT_NonVisualGraphicFrameProperties }
781 a_CT_GvmlGraphicalObjectFrame =
782   element nvGraphicFramePr { a_CT_GvmlGraphicFrameNonVisual },

```

```

783   a_graphic,
784   element xfrm { a_CT_Transform2D },
785   element extLst { a_CT_OfficeArtExtensionList }?
786 a_CT_GvmlGroupShapeNonVisual =
787   element cNvPr { a_CT_NonVisualDrawingProps },
788   element cNvGrpSpPr { a_CT_NonVisualGroupDrawingShapeProps }
789 a_CT_GvmlGroupShape =
790   element nvGrpSpPr { a_CT_GvmlGroupShapeNonVisual },
791   element grpSpPr { a_CT_GroupShapeProperties },
792   (element txSp { a_CT_GvmlTextShape }
793   | element sp { a_CT_GvmlShape }
794   | element cxnSp { a_CT_GvmlConnector }
795   | element pic { a_CT_GvmlPicture }
796   | element graphicFrame { a_CT_GvmlGraphicalObjectFrame }
797   | element grpSp { a_CT_GvmlGroupShape })*,
798   element extLst { a_CT_OfficeArtExtensionList }?
799 a_ST_PresetCameraType =
800   "legacyObliqueTopLeft"
801   | "legacyObliqueTop"
802   | "legacyObliqueTopRight"
803   | "legacyObliqueLeft"
804   | "legacyObliqueFront"
805   | "legacyObliqueRight"
806   | "legacyObliqueBottomLeft"
807   | "legacyObliqueBottom"
808   | "legacyObliqueBottomRight"
809   | "legacyPerspectiveTopLeft"
810   | "legacyPerspectiveTop"
811   | "legacyPerspectiveTopRight"
812   | "legacyPerspectiveLeft"
813   | "legacyPerspectiveFront"
814   | "legacyPerspectiveRight"
815   | "legacyPerspectiveBottomLeft"
816   | "legacyPerspectiveBottom"
817   | "legacyPerspectiveBottomRight"
818   | "orthographicFront"
819   | "isometricTopUp"
820   | "isometricTopDown"
821   | "isometricBottomUp"
822   | "isometricBottomDown"
823   | "isometricLeftUp"
824   | "isometricLeftDown"
825   | "isometricRightUp"
826   | "isometricRightDown"
827   | "isometricOffAxis1Left"
828   | "isometricOffAxis1Right"
829   | "isometricOffAxis1Top"
830   | "isometricOffAxis2Left"
831   | "isometricOffAxis2Right"
832   | "isometricOffAxis2Top"
833   | "isometricOffAxis3Left"
834   | "isometricOffAxis3Right"
835   | "isometricOffAxis3Bottom"

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```

836 | "isometricOffAxis4Left"
837 | "isometricOffAxis4Right"
838 | "isometricOffAxis4Bottom"
839 | "obliqueTopLeft"
840 | "obliqueTop"
841 | "obliqueTopRight"
842 | "obliqueLeft"
843 | "obliqueRight"
844 | "obliqueBottomLeft"
845 | "obliqueBottom"
846 | "obliqueBottomRight"
847 | "perspectiveFront"
848 | "perspectiveLeft"
849 | "perspectiveRight"
850 | "perspectiveAbove"
851 | "perspectiveBelow"
852 | "perspectiveAboveLeftFacing"
853 | "perspectiveAboveRightFacing"
854 | "perspectiveContrastingLeftFacing"
855 | "perspectiveContrastingRightFacing"
856 | "perspectiveHeroicLeftFacing"
857 | "perspectiveHeroicRightFacing"
858 | "perspectiveHeroicExtremeLeftFacing"
859 | "perspectiveHeroicExtremeRightFacing"
860 | "perspectiveRelaxed"
861 | "perspectiveRelaxedModerately"
862 a_ST_FOVAngle = xsd:int { minInclusive = "0" maxInclusive = "10800000" }
863 a_CT_Camera =
864     attribute prst { a_ST_PresetCameraType },
865     attribute fov { a_ST_FOVAngle }?,
866
867     ## default value: 100%
868     attribute zoom { a_ST_PositivePercentage }?,
869     element rot { a_CT_SphereCoords }?
870 a_ST_LightRigDirection =
871     "tl" | "t" | "tr" | "l" | "r" | "bl" | "b" | "br"
872 a_ST_LightRigType =
873     "legacyFlat1"
874     | "legacyFlat2"
875     | "legacyFlat3"
876     | "legacyFlat4"
877     | "legacyNormal1"
878     | "legacyNormal2"
879     | "legacyNormal3"
880     | "legacyNormal4"
881     | "legacyHarsh1"
882     | "legacyHarsh2"
883     | "legacyHarsh3"
884     | "legacyHarsh4"
885     | "threePt"
886     | "balanced"
887     | "soft"
888     | "harsh"

```

```

889 | "flood"
890 | "contrasting"
891 | "morning"
892 | "sunrise"
893 | "sunset"
894 | "chilly"
895 | "freezing"
896 | "flat"
897 | "twoPt"
898 | "glow"
899 | "brightRoom"
900 a_CT_LightRig =
901   attribute rig { a_ST_LightRigType },
902   attribute dir { a_ST_LightRigDirection },
903   element rot { a_CT_SphereCoords }?
904 a_CT_Scene3D =
905   element camera { a_CT_Camera },
906   element lightRig { a_CT_LightRig },
907   element backdrop { a_CT_Backdrop }?,
908   element extLst { a_CT_OfficeArtExtensionList }?
909 a_CT_Backdrop =
910   element anchor { a_CT_Point3D },
911   element norm { a_CT_Vector3D },
912   element up { a_CT_Vector3D },
913   element extLst { a_CT_OfficeArtExtensionList }?
914 a_ST_BevelPresetType =
915   "relaxedInset"
916   | "circle"
917   | "slope"
918   | "cross"
919   | "angle"
920   | "softRound"
921   | "convex"
922   | "coolSlant"
923   | "divot"
924   | "ribblet"
925   | "hardEdge"
926   | "artDeco"
927 a_CT_Bevel =
928
929   ## default value: 76200
930   attribute w { a_ST_PositiveCoordinate }?,
931
932   ## default value: 76200
933   attribute h { a_ST_PositiveCoordinate }?,
934
935   ## default value: circle
936   attribute prst { a_ST_BevelPresetType }?
937 a_ST_PresetMaterialType =
938   "legacyMatte"
939   | "legacyPlastic"
940   | "legacyMetal"
941   | "legacyWireframe"

```

```

942 | "matte"
943 | "plastic"
944 | "metal"
945 | "warmMatte"
946 | "translucentPowder"
947 | "powder"
948 | "dkEdge"
949 | "softEdge"
950 | "clear"
951 | "flat"
952 | "softmetal"
953 a_CT_Shape3D =
954
955   ## default value: 0
956   attribute z { a_ST_Coordinate }?,
957
958   ## default value: 0
959   attribute extrusionH { a_ST_PositiveCoordinate }?,
960
961   ## default value: 0
962   attribute contourW { a_ST_PositiveCoordinate }?,
963
964   ## default value: warmMatte
965   attribute prstMaterial { a_ST_PresetMaterialType }?,
966   element bevelT { a_CT_Bevel }?,
967   element bevelB { a_CT_Bevel }?,
968   element extrusionClr { a_CT_Color }?,
969   element contourClr { a_CT_Color }?,
970   element extLst { a_CT_OfficeArtExtensionList }?
971 a_CT_FlatText =
972
973   ## default value: 0
974   attribute z { a_ST_Coordinate }?
975 a_EG_Text3D =
976   element sp3d { a_CT_Shape3D }
977   | element flatTx { a_CT_FlatText }
978 a_CT_AlphaBiLevelEffect =
979   attribute thresh { a_ST_PositiveFixedPercentage }
980 a_CT_AlphaCeilingEffect = empty
981 a_CT_AlphaFloorEffect = empty
982 a_CT_AlphaInverseEffect = a_EG_ColorChoice?
983 a_CT_AlphaModulateFixedEffect =
984
985   ## default value: 100%
986   attribute amt { a_ST_PositivePercentage }?
987 a_CT_AlphaOutsetEffect =
988
989   ## default value: 0
990   attribute rad { a_ST_Coordinate }?
991 a_CT_AlphaReplaceEffect = attribute a { a_ST_PositiveFixedPercentage }
992 a_CT_BiLevelEffect = attribute thresh { a_ST_PositiveFixedPercentage }
993 a_CT_BlurEffect =
994

```

```

995     ## default value: 0
996     attribute rad { a_ST_PositiveCoordinate }?,
997
998     ## default value: true
999     attribute grow { xsd:boolean }?
1000 a_CT_ColorChangeEffect =
1001
1002     ## default value: true
1003     attribute useA { xsd:boolean }?,
1004     element clrFrom { a_CT_Color },
1005     element clrTo { a_CT_Color }
1006 a_CT_ColorReplaceEffect = a_EG_ColorChoice
1007 a_CT_DuotoneEffect = a_EG_ColorChoice+
1008 a_CT_GlowEffect =
1009
1010     ## default value: 0
1011     attribute rad { a_ST_PositiveCoordinate }?,
1012     a_EG_ColorChoice
1013 a_CT_GrayscaleEffect = empty
1014 a_CT_HSLEffect =
1015
1016     ## default value: 0
1017     attribute hue { a_ST_PositiveFixedAngle }?,
1018
1019     ## default value: 0%
1020     attribute sat { a_ST_FixedPercentage }?,
1021
1022     ## default value: 0%
1023     attribute lum { a_ST_FixedPercentage }?
1024 a_CT_InnerShadowEffect =
1025
1026     ## default value: 0
1027     attribute blurRad { a_ST_PositiveCoordinate }?,
1028
1029     ## default value: 0
1030     attribute dist { a_ST_PositiveCoordinate }?,
1031
1032     ## default value: 0
1033     attribute dir { a_ST_PositiveFixedAngle }?,
1034     a_EG_ColorChoice
1035 a_CT_LuminanceEffect =
1036
1037     ## default value: 0%
1038     attribute bright { a_ST_FixedPercentage }?,
1039
1040     ## default value: 0%
1041     attribute contrast { a_ST_FixedPercentage }?
1042 a_CT_OuterShadowEffect =
1043
1044     ## default value: 0
1045     attribute blurRad { a_ST_PositiveCoordinate }?,
1046
1047     ## default value: 0

```



```

1048 attribute dist { a_ST_PositiveCoordinate }?,
1049
1050 ## default value: 0
1051 attribute dir { a_ST_PositiveFixedAngle }?,
1052
1053 ## default value: 100%
1054 attribute sx { a_ST_Percentage }?,
1055
1056 ## default value: 100%
1057 attribute sy { a_ST_Percentage }?,
1058
1059 ## default value: 0
1060 attribute kx { a_ST_FixedAngle }?,
1061
1062 ## default value: 0
1063 attribute ky { a_ST_FixedAngle }?,
1064
1065 ## default value: b
1066 attribute algn { a_ST_RectAlignment }?,
1067
1068 ## default value: true
1069 attribute rotWithShape { xsd:boolean }?,
1070 a_EG_ColorChoice
1071 a_ST_PresetShadowVal =
1072 "shdw1"
1073 | "shdw2"
1074 | "shdw3"
1075 | "shdw4"
1076 | "shdw5"
1077 | "shdw6"
1078 | "shdw7"
1079 | "shdw8"
1080 | "shdw9"
1081 | "shdw10"
1082 | "shdw11"
1083 | "shdw12"
1084 | "shdw13"
1085 | "shdw14"
1086 | "shdw15"
1087 | "shdw16"
1088 | "shdw17"
1089 | "shdw18"
1090 | "shdw19"
1091 | "shdw20"
1092 a_CT_PresetShadowEffect =
1093 attribute prst { a_ST_PresetShadowVal },
1094
1095 ## default value: 0
1096 attribute dist { a_ST_PositiveCoordinate }?,
1097
1098 ## default value: 0
1099 attribute dir { a_ST_PositiveFixedAngle }?,
1100 a_EG_ColorChoice

```

```

1101 a_CT_ReflectionEffect =
1102
1103     ## default value: 0
1104     attribute blurRad { a_ST_PositiveCoordinate }?,
1105
1106     ## default value: 100%
1107     attribute stA { a_ST_PositiveFixedPercentage }?,
1108
1109     ## default value: 0%
1110     attribute stPos { a_ST_PositiveFixedPercentage }?,
1111
1112     ## default value: 0%
1113     attribute endA { a_ST_PositiveFixedPercentage }?,
1114
1115     ## default value: 100%
1116     attribute endPos { a_ST_PositiveFixedPercentage }?,
1117
1118     ## default value: 0
1119     attribute dist { a_ST_PositiveCoordinate }?,
1120
1121     ## default value: 0
1122     attribute dir { a_ST_PositiveFixedAngle }?,
1123
1124     ## default value: 5400000
1125     attribute fadeDir { a_ST_PositiveFixedAngle }?,
1126
1127     ## default value: 100%
1128     attribute sx { a_ST_Percentage }?,
1129
1130     ## default value: 100%
1131     attribute sy { a_ST_Percentage }?,
1132
1133     ## default value: 0
1134     attribute kx { a_ST_FixedAngle }?,
1135
1136     ## default value: 0
1137     attribute ky { a_ST_FixedAngle }?,
1138
1139     ## default value: b
1140     attribute algn { a_ST_RectAlignment }?,
1141
1142     ## default value: true
1143     attribute rotWithShape { xsd:boolean }?
1144 a_CT_RelativeOffsetEffect =
1145
1146     ## default value: 0%
1147     attribute tx { a_ST_Percentage }?,
1148
1149     ## default value: 0%
1150     attribute ty { a_ST_Percentage }?
1151 a_CT_SoftEdgesEffect = attribute rad { a_ST_PositiveCoordinate }
1152 a_CT_TintEffect =
1153

```

```

1154 ## default value: 0
1155 attribute hue { a_ST_PositiveFixedAngle }?,
1156
1157 ## default value: 0%
1158 attribute amt { a_ST_FixedPercentage }?
1159 a_CT_TransformEffect =
1160
1161 ## default value: 100%
1162 attribute sx { a_ST_Percentage }?,
1163
1164 ## default value: 100%
1165 attribute sy { a_ST_Percentage }?,
1166
1167 ## default value: 0
1168 attribute kx { a_ST_FixedAngle }?,
1169
1170 ## default value: 0
1171 attribute ky { a_ST_FixedAngle }?,
1172
1173 ## default value: 0
1174 attribute tx { a_ST_Coordinate }?,
1175
1176 ## default value: 0
1177 attribute ty { a_ST_Coordinate }?
1178 a_CT_NoFillProperties = empty
1179 a_CT_SolidColorFillProperties = a_EG_ColorChoice?
1180 a_CT_LinearShadeProperties =
1181     attribute ang { a_ST_PositiveFixedAngle }?,
1182     attribute scaled { xsd:boolean }?
1183 a_ST_PathShadeType = "shape" | "circle" | "rect"
1184 a_CT_PathShadeProperties =
1185     attribute path { a_ST_PathShadeType }?,
1186     element fillToRect { a_CT_RelativeRect }?
1187 a_EG_ShadeProperties =
1188     element lin { a_CT_LinearShadeProperties }
1189     | element path { a_CT_PathShadeProperties }
1190 a_ST_TileFlipMode = "none" | "x" | "y" | "xy"
1191 a_CT_GradientStop =
1192     attribute pos { a_ST_PositiveFixedPercentage },
1193     a_EG_ColorChoice
1194 a_CT_GradientStopList = element gs { a_CT_GradientStop }+
1195 a_CT_GradientFillProperties =
1196     attribute flip { a_ST_TileFlipMode }?,
1197     attribute rotWithShape { xsd:boolean }?,
1198     element gsLst { a_CT_GradientStopList }?,
1199     a_EG_ShadeProperties?,
1200     element tileRect { a_CT_RelativeRect }?
1201 a_CT_TileInfoProperties =
1202     attribute tx { a_ST_Coordinate }?,
1203     attribute ty { a_ST_Coordinate }?,
1204     attribute sx { a_ST_Percentage }?,
1205     attribute sy { a_ST_Percentage }?,
1206     attribute flip { a_ST_TileFlipMode }?,

```

```

1207     attribute align { a_ST_RectAlignment }?
1208 a_CT_StretchInfoProperties = element fillRect { a_CT_RelativeRect }?
1209 a_EG_FillModeProperties =
1210     element tile { a_CT_TileInfoProperties }
1211     | element stretch { a_CT_StretchInfoProperties }
1212 a_ST_BlipCompression = "email" | "screen" | "print" | "hqprint" | "none"
1213 a_CT_Blip =
1214     a_AG_Blob,
1215
1216     ## default value: none
1217     attribute cstate { a_ST_BlipCompression }?,
1218     (element alphaBiLevel { a_CT_AlphaBiLevelEffect }
1219     | element alphaCeiling { a_CT_AlphaCeilingEffect }
1220     | element alphaFloor { a_CT_AlphaFloorEffect }
1221     | element alphaInv { a_CT_AlphaInverseEffect }
1222     | element alphaMod { a_CT_AlphaModulateEffect }
1223     | element alphaModFix { a_CT_AlphaModulateFixedEffect }
1224     | element alphaRepl { a_CT_AlphaReplaceEffect }
1225     | element biLevel { a_CT_BiLevelEffect }
1226     | element blur { a_CT_BlurEffect }
1227     | element clrChange { a_CT_ColorChangeEffect }
1228     | element clrRepl { a_CT_ColorReplaceEffect }
1229     | element duotone { a_CT_DuotoneEffect }
1230     | element fillOverlay { a_CT_FillOverlayEffect }
1231     | element grayscl { a_CT_GrayscaleEffect }
1232     | element hsl { a_CT_HSLEffect }
1233     | element lum { a_CT_LuminanceEffect }
1234     | element tint { a_CT_TintEffect })*,
1235     element extLst { a_CT_OfficeArtExtensionList }?
1236 a_CT_BlipFillProperties =
1237     attribute dpi { xsd:unsignedInt }?,
1238     attribute rotWithShape { xsd:boolean }?,
1239     element blip { a_CT_Blip }?,
1240     element srcRect { a_CT_RelativeRect }?,
1241     a_EG_FillModeProperties?
1242 a_ST_PresetPatternVal =
1243     "pct5"
1244     | "pct10"
1245     | "pct20"
1246     | "pct25"
1247     | "pct30"
1248     | "pct40"
1249     | "pct50"
1250     | "pct60"
1251     | "pct70"
1252     | "pct75"
1253     | "pct80"
1254     | "pct90"
1255     | "horz"
1256     | "vert"
1257     | "ltHorz"
1258     | "ltVert"
1259     | "dkHorz"

```

```

1260 | "dkVert"
1261 | "narHorz"
1262 | "narVert"
1263 | "dashHorz"
1264 | "dashVert"
1265 | "cross"
1266 | "dnDiag"
1267 | "upDiag"
1268 | "ltDnDiag"
1269 | "ltUpDiag"
1270 | "dkDnDiag"
1271 | "dkUpDiag"
1272 | "wdDnDiag"
1273 | "wdUpDiag"
1274 | "dashDnDiag"
1275 | "dashUpDiag"
1276 | "diagCross"
1277 | "smCheck"
1278 | "lgCheck"
1279 | "smGrid"
1280 | "lgGrid"
1281 | "dotGrid"
1282 | "smConfetti"
1283 | "lgConfetti"
1284 | "horzBrick"
1285 | "diagBrick"
1286 | "solidDmnd"
1287 | "openDmnd"
1288 | "dotDmnd"
1289 | "plaid"
1290 | "sphere"
1291 | "weave"
1292 | "divot"
1293 | "shingle"
1294 | "wave"
1295 | "trellis"
1296 | "zigZag"
1297 a_CT_PatternFillProperties =
1298   attribute prst { a_ST_PresetPatternVal }?,
1299   element fgClr { a_CT_Color }?,
1300   element bgClr { a_CT_Color }?
1301 a_CT_GroupFillProperties = empty
1302 a_EG_FillProperties =
1303   element noFill { a_CT_NoFillProperties }
1304   | element solidFill { a_CT_SolidColorFillProperties }
1305   | element gradFill { a_CT_GradientFillProperties }
1306   | element blipFill { a_CT_BlipFillProperties }
1307   | element pattFill { a_CT_PatternFillProperties }
1308   | element grpFill { a_CT_GroupFillProperties }
1309 a_CT_FillProperties = a_EG_FillProperties
1310 a_CT_FillEffect = a_EG_FillProperties
1311 a_ST_BlendMode = "over" | "mult" | "screen" | "darken" | "lighten"
1312 a_CT_FillOverlayEffect =

```

```

1313     attribute blend { a_ST_BlendMode },
1314     a_EG_FillProperties
1315 a_CT_EffectReference = attribute ref { xsd:token }
1316 a_EG_Effect =
1317     element cont { a_CT_EffectContainer }
1318     | element effect { a_CT_EffectReference }
1319     | element alphaBiLevel { a_CT_AlphaBiLevelEffect }
1320     | element alphaCeiling { a_CT_AlphaCeilingEffect }
1321     | element alphaFloor { a_CT_AlphaFloorEffect }
1322     | element alphaInv { a_CT_AlphaInverseEffect }
1323     | element alphaMod { a_CT_AlphaModulateEffect }
1324     | element alphaModFix { a_CT_AlphaModulateFixedEffect }
1325     | element alphaOutset { a_CT_AlphaOutsetEffect }
1326     | element alphaRepl { a_CT_AlphaReplaceEffect }
1327     | element biLevel { a_CT_BiLevelEffect }
1328     | element blend { a_CT_BlendEffect }
1329     | element blur { a_CT_BlurEffect }
1330     | element clrChange { a_CT_ColorChangeEffect }
1331     | element clrRepl { a_CT_ColorReplaceEffect }
1332     | element duotone { a_CT_DuotoneEffect }
1333     | element fill { a_CT_FillEffect }
1334     | element fillOverlay { a_CT_FillOverlayEffect }
1335     | element glow { a_CT_GlowEffect }
1336     | element grayscl { a_CT_GrayscaleEffect }
1337     | element hsl { a_CT_HSLEffect }
1338     | element innerShdw { a_CT_InnerShadowEffect }
1339     | element lum { a_CT_LuminanceEffect }
1340     | element outerShdw { a_CT_OuterShadowEffect }
1341     | element prstShdw { a_CT_PresetShadowEffect }
1342     | element reflection { a_CT_ReflectionEffect }
1343     | element relOff { a_CT_RelativeOffsetEffect }
1344     | element softEdge { a_CT_SoftEdgesEffect }
1345     | element tint { a_CT_TintEffect }
1346     | element xfrm { a_CT_TransformEffect }
1347 a_ST_EffectContainerType = "sib" | "tree"
1348 a_CT_EffectContainer =
1349
1350     ## default value: sib
1351     attribute type { a_ST_EffectContainerType }?,
1352     attribute name { xsd:token }?,
1353     a_EG_Effect*
1354 a_CT_AlphaModulateEffect = element cont { a_CT_EffectContainer }
1355 a_CT_BlendEffect =
1356     attribute blend { a_ST_BlendMode },
1357     element cont { a_CT_EffectContainer }
1358 a_CT_EffectList =
1359     element blur { a_CT_BlurEffect }?,
1360     element fillOverlay { a_CT_FillOverlayEffect }?,
1361     element glow { a_CT_GlowEffect }?,
1362     element innerShdw { a_CT_InnerShadowEffect }?,
1363     element outerShdw { a_CT_OuterShadowEffect }?,
1364     element prstShdw { a_CT_PresetShadowEffect }?,
1365     element reflection { a_CT_ReflectionEffect }?,

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1366     element softEdge { a_CT_SoftEdgesEffect }?
1367 a_EG_EffectProperties =
1368     element effectLst { a_CT_EffectList }
1369     | element effectDag { a_CT_EffectContainer }
1370 a_CT_EffectProperties = a_EG_EffectProperties
1371 a_blip = element blip { a_CT_Blip }
1372 a_ST_ShapeType =
1373     "line"
1374     | "lineInv"
1375     | "triangle"
1376     | "rtTriangle"
1377     | "rect"
1378     | "diamond"
1379     | "parallelogram"
1380     | "trapezoid"
1381     | "nonIsoscelesTrapezoid"
1382     | "pentagon"
1383     | "hexagon"
1384     | "heptagon"
1385     | "octagon"
1386     | "decagon"
1387     | "dodecagon"
1388     | "star4"
1389     | "star5"
1390     | "star6"
1391     | "star7"
1392     | "star8"
1393     | "star10"
1394     | "star12"
1395     | "star16"
1396     | "star24"
1397     | "star32"
1398     | "roundRect"
1399     | "round1Rect"
1400     | "round2SameRect"
1401     | "round2DiagRect"
1402     | "snipRoundRect"
1403     | "snip1Rect"
1404     | "snip2SameRect"
1405     | "snip2DiagRect"
1406     | "plaque"
1407     | "ellipse"
1408     | "teardrop"
1409     | "homePlate"
1410     | "chevron"
1411     | "pieWedge"
1412     | "pie"
1413     | "blockArc"
1414     | "donut"
1415     | "noSmoking"
1416     | "rightArrow"
1417     | "leftArrow"
1418     | "upArrow"

```

1419	"downArrow"
1420	"stripedRightArrow"
1421	"notchedRightArrow"
1422	"bentUpArrow"
1423	"leftRightArrow"
1424	"upDownArrow"
1425	"leftUpArrow"
1426	"leftRightUpArrow"
1427	"quadArrow"
1428	"leftArrowCallout"
1429	"rightArrowCallout"
1430	"upArrowCallout"
1431	"downArrowCallout"
1432	"leftRightArrowCallout"
1433	"upDownArrowCallout"
1434	"quadArrowCallout"
1435	"bentArrow"
1436	"uturnArrow"
1437	"circularArrow"
1438	"leftCircularArrow"
1439	"leftRightCircularArrow"
1440	"curvedRightArrow"
1441	"curvedLeftArrow"
1442	"curvedUpArrow"
1443	"curvedDownArrow"
1444	"swooshArrow"
1445	"cube"
1446	"can"
1447	"lightningBolt"
1448	"heart"
1449	"sun"
1450	"moon"
1451	"smileyFace"
1452	"irregularSeal1"
1453	"irregularSeal2"
1454	"foldedCorner"
1455	"bevel"
1456	"frame"
1457	"halfFrame"
1458	"corner"
1459	"diagStripe"
1460	"chord"
1461	"arc"
1462	"leftBracket"
1463	"rightBracket"
1464	"leftBrace"
1465	"rightBrace"
1466	"bracketPair"
1467	"bracePair"
1468	"straightConnector1"
1469	"bentConnector2"
1470	"bentConnector3"
1471	"bentConnector4"

1472	"bentConnector5"
1473	"curvedConnector2"
1474	"curvedConnector3"
1475	"curvedConnector4"
1476	"curvedConnector5"
1477	"callout1"
1478	"callout2"
1479	"callout3"
1480	"accentCallout1"
1481	"accentCallout2"
1482	"accentCallout3"
1483	"borderCallout1"
1484	"borderCallout2"
1485	"borderCallout3"
1486	"accentBorderCallout1"
1487	"accentBorderCallout2"
1488	"accentBorderCallout3"
1489	"wedgeRectCallout"
1490	"wedgeRoundRectCallout"
1491	"wedgeEllipseCallout"
1492	"cloudCallout"
1493	"cloud"
1494	"ribbon"
1495	"ribbon2"
1496	"ellipseRibbon"
1497	"ellipseRibbon2"
1498	"leftRightRibbon"
1499	"verticalScroll"
1500	"horizontalScroll"
1501	"wave"
1502	"doubleWave"
1503	"plus"
1504	"flowChartProcess"
1505	"flowChartDecision"
1506	"flowChartInputOutput"
1507	"flowChartPredefinedProcess"
1508	"flowChartInternalStorage"
1509	"flowChartDocument"
1510	"flowChartMultidocument"
1511	"flowChartTerminator"
1512	"flowChartPreparation"
1513	"flowChartManualInput"
1514	"flowChartManualOperation"
1515	"flowChartConnector"
1516	"flowChartPunchedCard"
1517	"flowChartPunchedTape"
1518	"flowChartSummingJunction"
1519	"flowChartOr"
1520	"flowChartCollate"
1521	"flowChartSort"
1522	"flowChartExtract"
1523	"flowChartMerge"
1524	"flowChartOfflineStorage"

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1525 | "flowChartOnlineStorage"
1526 | "flowChartMagneticTape"
1527 | "flowChartMagneticDisk"
1528 | "flowChartMagneticDrum"
1529 | "flowChartDisplay"
1530 | "flowChartDelay"
1531 | "flowChartAlternateProcess"
1532 | "flowChartOffpageConnector"
1533 | "actionButtonBlank"
1534 | "actionButtonHome"
1535 | "actionButtonHelp"
1536 | "actionButtonInformation"
1537 | "actionButtonForwardNext"
1538 | "actionButtonBackPrevious"
1539 | "actionButtonEnd"
1540 | "actionButtonBeginning"
1541 | "actionButtonReturn"
1542 | "actionButtonDocument"
1543 | "actionButtonSound"
1544 | "actionButtonMovie"
1545 | "gear6"
1546 | "gear9"
1547 | "funnel"
1548 | "mathPlus"
1549 | "mathMinus"
1550 | "mathMultiply"
1551 | "mathDivide"
1552 | "mathEqual"
1553 | "mathNotEqual"
1554 | "cornerTabs"
1555 | "squareTabs"
1556 | "plaqueTabs"
1557 | "chartX"
1558 | "chartStar"
1559 | "chartPlus"
1560 a_ST_TextShapeType =
1561   "textNoShape"
1562   | "textPlain"
1563   | "textStop"
1564   | "textTriangle"
1565   | "textTriangleInverted"
1566   | "textChevron"
1567   | "textChevronInverted"
1568   | "textRingInside"
1569   | "textRingOutside"
1570   | "textArchUp"
1571   | "textArchDown"
1572   | "textCircle"
1573   | "textButton"
1574   | "textArchUpPour"
1575   | "textArchDownPour"
1576   | "textCirclePour"
1577   | "textButtonPour"

```

```

1578 | "textCurveUp"
1579 | "textCurveDown"
1580 | "textCanUp"
1581 | "textCanDown"
1582 | "textWave1"
1583 | "textWave2"
1584 | "textDoubleWave1"
1585 | "textWave4"
1586 | "textInflate"
1587 | "textDeflate"
1588 | "textInflateBottom"
1589 | "textDeflateBottom"
1590 | "textInflateTop"
1591 | "textDeflateTop"
1592 | "textDeflateInflate"
1593 | "textDeflateInflateDeflate"
1594 | "textFadeRight"
1595 | "textFadeLeft"
1596 | "textFadeUp"
1597 | "textFadeDown"
1598 | "textSlantUp"
1599 | "textSlantDown"
1600 | "textCascadeUp"
1601 | "textCascadeDown"
1602 a_ST_GeomGuideName = xsd:token
1603 a_ST_GeomGuideFormula = xsd:string
1604 a_CT_GeomGuide =
1605     attribute name { a_ST_GeomGuideName },
1606     attribute fmla { a_ST_GeomGuideFormula }
1607 a_CT_GeomGuideList = element gd { a_CT_GeomGuide }*
1608 a_ST_AdjCoordinate = a_ST_Coordinate | a_ST_GeomGuideName
1609 a_ST_AdjAngle = a_ST_Angle | a_ST_GeomGuideName
1610 a_CT_AdjPoint2D =
1611     attribute x { a_ST_AdjCoordinate },
1612     attribute y { a_ST_AdjCoordinate }
1613 a_CT_GeomRect =
1614     attribute l { a_ST_AdjCoordinate },
1615     attribute t { a_ST_AdjCoordinate },
1616     attribute r { a_ST_AdjCoordinate },
1617     attribute b { a_ST_AdjCoordinate }
1618 a_CT_XYAdjustHandle =
1619     attribute gdRefX { a_ST_GeomGuideName }?,
1620     attribute minX { a_ST_AdjCoordinate }?,
1621     attribute maxX { a_ST_AdjCoordinate }?,
1622     attribute gdRefY { a_ST_GeomGuideName }?,
1623     attribute minY { a_ST_AdjCoordinate }?,
1624     attribute maxY { a_ST_AdjCoordinate }?,
1625     element pos { a_CT_AdjPoint2D }
1626 a_CT_PolarAdjustHandle =
1627     attribute gdRefR { a_ST_GeomGuideName }?,
1628     attribute minR { a_ST_AdjCoordinate }?,
1629     attribute maxR { a_ST_AdjCoordinate }?,
1630     attribute gdRefAng { a_ST_GeomGuideName }?,

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```

1631     attribute minAng { a_ST_AdjAngle }?,
1632     attribute maxAng { a_ST_AdjAngle }?,
1633     element pos { a_CT_AdjPoint2D }
1634 a_CT_ConnectionSite =
1635     attribute ang { a_ST_AdjAngle },
1636     element pos { a_CT_AdjPoint2D }
1637 a_CT_AdjustHandleList =
1638     (element ahXY { a_CT_XYAdjustHandle }
1639      | element ahPolar { a_CT_PolarAdjustHandle })*
1640 a_CT_ConnectionSiteList = element cxn { a_CT_ConnectionSite }*
1641 a_CT_Connection =
1642     attribute id { a_ST_DrawingElementId },
1643     attribute idx { xsd:unsignedInt }
1644 a_CT_Path2DMoveTo = element pt { a_CT_AdjPoint2D }
1645 a_CT_Path2DLineTo = element pt { a_CT_AdjPoint2D }
1646 a_CT_Path2DArcTo =
1647     attribute wR { a_ST_AdjCoordinate },
1648     attribute hR { a_ST_AdjCoordinate },
1649     attribute stAng { a_ST_AdjAngle },
1650     attribute swAng { a_ST_AdjAngle }
1651 a_CT_Path2DQuadBezierTo = element pt { a_CT_AdjPoint2D }+
1652 a_CT_Path2DCubicBezierTo = element pt { a_CT_AdjPoint2D }+
1653 a_CT_Path2DClose = empty
1654 a_ST_PathFillMode =
1655     "none" | "norm" | "lighten" | "lightenLess" | "darken" | "darkenLess"
1656 a_CT_Path2D =
1657
1658     ## default value: 0
1659     attribute w { a_ST_PositiveCoordinate }?,
1660
1661     ## default value: 0
1662     attribute h { a_ST_PositiveCoordinate }?,
1663
1664     ## default value: norm
1665     attribute fill { a_ST_PathFillMode }?,
1666
1667     ## default value: true
1668     attribute stroke { xsd:boolean }?,
1669
1670     ## default value: true
1671     attribute extrusionOk { xsd:boolean }?,
1672     (element close { a_CT_Path2DClose }
1673      | element moveTo { a_CT_Path2DMoveTo }
1674      | element lnTo { a_CT_Path2DLineTo }
1675      | element arcTo { a_CT_Path2DArcTo }
1676      | element quadBezTo { a_CT_Path2DQuadBezierTo }
1677      | element cubicBezTo { a_CT_Path2DCubicBezierTo })*
1678 a_CT_Path2DList = element path { a_CT_Path2D }*
1679 a_CT_PresetGeometry2D =
1680     attribute prst { a_ST_ShapeType },
1681     element avLst { a_CT_GeomGuideList }?
1682 a_CT_PresetTextShape =
1683     attribute prst { a_ST_TextShapeType },

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1684     element avLst { a_CT_GeomGuideList }?
1685 a_CT_CustomGeometry2D =
1686     element avLst { a_CT_GeomGuideList }?,
1687     element gdLst { a_CT_GeomGuideList }?,
1688     element ahLst { a_CT_AdjustHandleList }?,
1689     element cxnLst { a_CT_ConnectionSiteList }?,
1690     element rect { a_CT_GeomRect }?,
1691     element pathLst { a_CT_Path2DList }
1692 a_EG_Geometry =
1693     element custGeom { a_CT_CustomGeometry2D }
1694     | element prstGeom { a_CT_PresetGeometry2D }
1695 a_EG_TextGeometry =
1696     element custGeom { a_CT_CustomGeometry2D }
1697     | element prstTxWarp { a_CT_PresetTextShape }
1698 a_ST_LineEndType =
1699     "none" | "triangle" | "stealth" | "diamond" | "oval" | "arrow"
1700 a_ST_LineEndWidth = "sm" | "med" | "lg"
1701 a_ST_LineEndLength = "sm" | "med" | "lg"
1702 a_CT_LineEndProperties =
1703     attribute type { a_ST_LineEndType }?,
1704     attribute w { a_ST_LineEndWidth }?,
1705     attribute len { a_ST_LineEndLength }?
1706 a_EG_LineFillProperties =
1707     element noFill { a_CT_NoFillProperties }
1708     | element solidFill { a_CT_SolidColorFillProperties }
1709     | element gradFill { a_CT_GradientFillProperties }
1710     | element pattFill { a_CT_PatternFillProperties }
1711 a_CT_LineJoinBevel = empty
1712 a_CT_LineJoinRound = empty
1713 a_CT_LineJoinMiterProperties =
1714     attribute lim { a_ST_PositivePercentage }?
1715 a_EG_LineJoinProperties =
1716     element round { a_CT_LineJoinRound }
1717     | element bevel { a_CT_LineJoinBevel }
1718     | element miter { a_CT_LineJoinMiterProperties }
1719 a_ST_PresetLineDashVal =
1720     "solid"
1721     | "dot"
1722     | "dash"
1723     | "lgDash"
1724     | "dashDot"
1725     | "lgDashDot"
1726     | "lgDashDotDot"
1727     | "sysDash"
1728     | "sysDot"
1729     | "sysDashDot"
1730     | "sysDashDotDot"
1731 a_CT_PresetLineDashProperties =
1732     attribute val { a_ST_PresetLineDashVal }?
1733 a_CT_DashStop =
1734     attribute d { a_ST_PositivePercentage },
1735     attribute sp { a_ST_PositivePercentage }
1736 a_CT_DashStopList = element ds { a_CT_DashStop }*
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1737 a_EG_LineDashProperties =
1738     element prstDash { a_CT_PresetLineDashProperties }
1739     | element custDash { a_CT_DashStopList }
1740 a_ST_LineCap = "rnd" | "sq" | "flat"
1741 a_ST_LineWidth =
1742     xsd:int { minInclusive = "0" maxInclusive = "20116800" }
1743 a_ST_PenAlignment = "ctr" | "in"
1744 a_ST_CompoundLine = "sng" | "dbl" | "thickThin" | "thinThick" | "tri"
1745 a_CT_LineProperties =
1746     attribute w { a_ST_LineWidth }?,
1747     attribute cap { a_ST_LineCap }?,
1748     attribute compd { a_ST_CompoundLine }?,
1749     attribute algn { a_ST_PenAlignment }?,
1750     a_EG_LineFillProperties?,
1751     a_EG_LineDashProperties?,
1752     a_EG_LineJoinProperties?,
1753     element headEnd { a_CT_LineEndProperties }?,
1754     element tailEnd { a_CT_LineEndProperties }?,
1755     element extLst { a_CT_OfficeArtExtensionList }?
1756 a_ST_ShapeID = xsd:token
1757 a_CT_ShapeProperties =
1758     attribute bwMode { a_ST_BlackWhiteMode }?,
1759     element xfrm { a_CT_Transform2D }?,
1760     a_EG_Geometry?,
1761     a_EG_FillProperties?,
1762     element ln { a_CT_LineProperties }?,
1763     a_EG_EffectProperties?,
1764     element scene3d { a_CT_Scene3D }?,
1765     element sp3d { a_CT_Shape3D }?,
1766     element extLst { a_CT_OfficeArtExtensionList }?
1767 a_CT_GroupShapeProperties =
1768     attribute bwMode { a_ST_BlackWhiteMode }?,
1769     element xfrm { a_CT_GroupTransform2D }?,
1770     a_EG_FillProperties?,
1771     a_EG_EffectProperties?,
1772     element scene3d { a_CT_Scene3D }?,
1773     element extLst { a_CT_OfficeArtExtensionList }?
1774 a_CT_StyleMatrixReference =
1775     attribute idx { a_ST_StyleMatrixColumnIndex },
1776     a_EG_ColorChoice?
1777 a_CT_FontReference =
1778     attribute idx { a_ST_FontCollectionIndex },
1779     a_EG_ColorChoice?
1780 a_CT_ShapeStyle =
1781     element lnRef { a_CT_StyleMatrixReference },
1782     element fillRef { a_CT_StyleMatrixReference },
1783     element effectRef { a_CT_StyleMatrixReference },
1784     element fontRef { a_CT_FontReference }
1785 a_CT_DefaultShapeDefinition =
1786     element spPr { a_CT_ShapeProperties },
1787     element bodyPr { a_CT_TextBodyProperties },
1788     element lstStyle { a_CT_TextListStyle },
1789     element style { a_CT_ShapeStyle }?,

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1790     element extLst { a_CT_OfficeArtExtensionList }?
1791 a_CT_ObjectStyleDefaults =
1792     element spDef { a_CT_DefaultShapeDefinition }?,
1793     element lnDef { a_CT_DefaultShapeDefinition }?,
1794     element txDef { a_CT_DefaultShapeDefinition }?,
1795     element extLst { a_CT_OfficeArtExtensionList }?
1796 a_CT_EmptyElement = empty
1797 a_CT_ColorMapping =
1798     attribute bg1 { a_ST_ColorSchemeIndex },
1799     attribute tx1 { a_ST_ColorSchemeIndex },
1800     attribute bg2 { a_ST_ColorSchemeIndex },
1801     attribute tx2 { a_ST_ColorSchemeIndex },
1802     attribute accent1 { a_ST_ColorSchemeIndex },
1803     attribute accent2 { a_ST_ColorSchemeIndex },
1804     attribute accent3 { a_ST_ColorSchemeIndex },
1805     attribute accent4 { a_ST_ColorSchemeIndex },
1806     attribute accent5 { a_ST_ColorSchemeIndex },
1807     attribute accent6 { a_ST_ColorSchemeIndex },
1808     attribute hlink { a_ST_ColorSchemeIndex },
1809     attribute folHlink { a_ST_ColorSchemeIndex },
1810     element extLst { a_CT_OfficeArtExtensionList }?
1811 a_CT_ColorMappingOverride =
1812     element masterClrMapping { a_CT_EmptyElement }
1813     | element overrideClrMapping { a_CT_ColorMapping }
1814 a_CT_ColorSchemeAndMapping =
1815     element clrScheme { a_CT_ColorScheme },
1816     element clrMap { a_CT_ColorMapping }?
1817 a_CT_ColorSchemeList =
1818     element extraClrScheme { a_CT_ColorSchemeAndMapping }*
1819 a_CT_OfficeStyleSheet =
1820     attribute name { xsd:string }?,
1821     element themeElements { a_CT_BaseStyles },
1822     element objectDefaults { a_CT_ObjectStyleDefaults }?,
1823     element extraClrSchemeLst { a_CT_ColorSchemeList }?,
1824     element custClrLst { a_CT_CustomColorList }?,
1825     element extLst { a_CT_OfficeArtExtensionList }?
1826 a_CT_BaseStylesOverride =
1827     element clrScheme { a_CT_ColorScheme }?,
1828     element fontScheme { a_CT_FontScheme }?,
1829     element fmtScheme { a_CT_StyleMatrix }?
1830 a_CT_ClipboardStyleSheet =
1831     element themeElements { a_CT_BaseStyles },
1832     element clrMap { a_CT_ColorMapping }
1833 a_theme = element theme { a_CT_OfficeStyleSheet }
1834 a_themeOverride = element themeOverride { a_CT_BaseStylesOverride }
1835 a_themeManager = element themeManager { a_CT_EmptyElement }
1836 a_CT_TableCellProperties =
1837
1838     ## default value: 91440
1839     attribute marL { a_ST_Coordinate32 }?,
1840
1841     ## default value: 91440
1842     attribute marR { a_ST_Coordinate32 }?,

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1843
1844   ## default value: 45720
1845   attribute marT { a_ST_Coordinate32 }?,
1846
1847   ## default value: 45720
1848   attribute marB { a_ST_Coordinate32 }?,
1849
1850   ## default value: horz
1851   attribute vert { a_ST_TextVerticalType }?,
1852
1853   ## default value: t
1854   attribute anchor { a_ST_TextAnchoringType }?,
1855
1856   ## default value: false
1857   attribute anchorCtr { xsd:boolean }?,
1858
1859   ## default value: clip
1860   attribute horzOverflow { a_ST_TextHorzOverflowType }?,
1861   element lnL { a_CT_LineProperties }?,
1862   element lnR { a_CT_LineProperties }?,
1863   element lnT { a_CT_LineProperties }?,
1864   element lnB { a_CT_LineProperties }?,
1865   element lnTlToBr { a_CT_LineProperties }?,
1866   element lnBlToTr { a_CT_LineProperties }?,
1867   element cell3D { a_CT_Cell3D }?,
1868   a_EG_FillProperties?,
1869   element headers { a_CT_Headers }?,
1870   element extLst { a_CT_OfficeArtExtensionList }?
1871 a_CT_Headers = element header { xsd:string }*
1872 a_CT_TableCol =
1873   attribute w { a_ST_Coordinate },
1874   element extLst { a_CT_OfficeArtExtensionList }?
1875 a_CT_TableGrid = element gridCol { a_CT_TableCol }*
1876 a_CT_TableCell =
1877
1878   ## default value: 1
1879   attribute rowSpan { xsd:int }?,
1880
1881   ## default value: 1
1882   attribute gridSpan { xsd:int }?,
1883
1884   ## default value: false
1885   attribute hMerge { xsd:boolean }?,
1886
1887   ## default value: false
1888   attribute vMerge { xsd:boolean }?,
1889   attribute id { xsd:string }?,
1890   element txBdy { a_CT_TextBody }?,
1891   element tcPr { a_CT_TableCellProperties }?,
1892   element extLst { a_CT_OfficeArtExtensionList }?
1893 a_CT_TableRow =
1894   attribute h { a_ST_Coordinate },
1895   element tc { a_CT_TableCell }*,

```



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1896     element extLst { a_CT_OfficeArtExtensionList }?
1897 a_CT_TableProperties =
1898
1899     ## default value: false
1900     attribute rtl { xsd:boolean }?,
1901
1902     ## default value: false
1903     attribute firstRow { xsd:boolean }?,
1904
1905     ## default value: false
1906     attribute firstCol { xsd:boolean }?,
1907
1908     ## default value: false
1909     attribute lastRow { xsd:boolean }?,
1910
1911     ## default value: false
1912     attribute lastCol { xsd:boolean }?,
1913
1914     ## default value: false
1915     attribute bandRow { xsd:boolean }?,
1916
1917     ## default value: false
1918     attribute bandCol { xsd:boolean }?,
1919     a_EG_FillProperties?,
1920     a_EG_EffectProperties?,
1921     (element tableStyle { a_CT_TableStyle }
1922       | element tableStyleId { s_ST_Guid })?,
1923     element extLst { a_CT_OfficeArtExtensionList }?
1924 a_CT_Table =
1925     element tblPr { a_CT_TableProperties }?,
1926     element tblGrid { a_CT_TableGrid },
1927     element tr { a_CT_TableRow }*
1928 a_tbl = element tbl { a_CT_Table }
1929 a_CT_Cell3D =
1930
1931     ## default value: plastic
1932     attribute prstMaterial { a_ST_PresetMaterialType }?,
1933     element bevel { a_CT_Bevel },
1934     element lightRig { a_CT_LightRig }?,
1935     element extLst { a_CT_OfficeArtExtensionList }?
1936 a_EG_ThemeableFillStyle =
1937     element fill { a_CT_FillProperties }
1938     | element fillRef { a_CT_StyleMatrixReference }
1939 a_CT_ThemeableLineStyle =
1940     element ln { a_CT_LineProperties }
1941     | element lnRef { a_CT_StyleMatrixReference }
1942 a_EG_ThemeableEffectStyle =
1943     element effect { a_CT_EffectProperties }
1944     | element effectRef { a_CT_StyleMatrixReference }
1945 a_EG_ThemeableFontStyles =
1946     element font { a_CT_FontCollection }
1947     | element fontRef { a_CT_FontReference }
1948 a_ST_OnOffStyleType = "on" | "off" | "def"

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1949 a_CT_TableStyleTextStyle =
1950
1951   ## default value: def
1952   attribute b { a_ST_OnOffStyleType }?,
1953
1954   ## default value: def
1955   attribute i { a_ST_OnOffStyleType }?,
1956   a_EG_ThemeableFontStyles?,
1957   a_EG_ColorChoice?,
1958   element extLst { a_CT_OfficeArtExtensionList }?
1959 a_CT_TableCellStyle =
1960   element left { a_CT_ThemeableLineStyle }?,
1961   element right { a_CT_ThemeableLineStyle }?,
1962   element top { a_CT_ThemeableLineStyle }?,
1963   element bottom { a_CT_ThemeableLineStyle }?,
1964   element insideH { a_CT_ThemeableLineStyle }?,
1965   element insideV { a_CT_ThemeableLineStyle }?,
1966   element tl2br { a_CT_ThemeableLineStyle }?,
1967   element tr2bl { a_CT_ThemeableLineStyle }?,
1968   element extLst { a_CT_OfficeArtExtensionList }?
1969 a_CT_TableBackgroundStyle =
1970   a_EG_ThemeableFillStyle?, a_EG_ThemeableEffectStyle?
1971 a_CT_TableStyleCellStyle =
1972   element tcBdr { a_CT_TableCellStyle }?,
1973   a_EG_ThemeableFillStyle?,
1974   element cell3D { a_CT_Cell3D }?
1975 a_CT_TablePartStyle =
1976   element tcTxStyle { a_CT_TableStyleTextStyle }?,
1977   element tcStyle { a_CT_TableStyleCellStyle }?
1978 a_CT_TableStyle =
1979   attribute styleId { s_ST_Guid },
1980   attribute styleName { xsd:string },
1981   element tblBg { a_CT_TableBackgroundStyle }?,
1982   element wholeTbl { a_CT_TablePartStyle }?,
1983   element band1H { a_CT_TablePartStyle }?,
1984   element band2H { a_CT_TablePartStyle }?,
1985   element band1V { a_CT_TablePartStyle }?,
1986   element band2V { a_CT_TablePartStyle }?,
1987   element lastCol { a_CT_TablePartStyle }?,
1988   element firstCol { a_CT_TablePartStyle }?,
1989   element lastRow { a_CT_TablePartStyle }?,
1990   element seCell { a_CT_TablePartStyle }?,
1991   element swCell { a_CT_TablePartStyle }?,
1992   element firstRow { a_CT_TablePartStyle }?,
1993   element neCell { a_CT_TablePartStyle }?,
1994   element nwCell { a_CT_TablePartStyle }?,
1995   element extLst { a_CT_OfficeArtExtensionList }?
1996 a_CT_TableStyleList =
1997   attribute def { s_ST_Guid },
1998   element tblStyle { a_CT_TableStyle }*
1999 a_tblStyleLst = element tblStyleLst { a_CT_TableStyleList }
2000 a_CT_TextParagraph =
2001   element pPr { a_CT_TextParagraphProperties }?,

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2002     a_EG_TextRun*,
2003     element endParaRPr { a_CT_TextCharacterProperties }?
2004 a_ST_TextAnchoringType = "t" | "ctr" | "b" | "just" | "dist"
2005 a_ST_TextVertOverflowType = "overflow" | "ellipsis" | "clip"
2006 a_ST_TextHorzOverflowType = "overflow" | "clip"
2007 a_ST_TextVerticalType =
2008     "horz"
2009     | "vert"
2010     | "vert270"
2011     | "wordArtVert"
2012     | "eaVert"
2013     | "mongolianVert"
2014     | "wordArtVertRtl"
2015 a_ST_TextWrappingType = "none" | "square"
2016 a_ST_TextColumnCount =
2017     xsd:int { minInclusive = "1" maxInclusive = "16" }
2018 a_CT_TextListStyle =
2019     element defPPr { a_CT_TextParagraphProperties }?,
2020     element lvl1pPr { a_CT_TextParagraphProperties }?,
2021     element lvl2pPr { a_CT_TextParagraphProperties }?,
2022     element lvl3pPr { a_CT_TextParagraphProperties }?,
2023     element lvl4pPr { a_CT_TextParagraphProperties }?,
2024     element lvl5pPr { a_CT_TextParagraphProperties }?,
2025     element lvl6pPr { a_CT_TextParagraphProperties }?,
2026     element lvl7pPr { a_CT_TextParagraphProperties }?,
2027     element lvl8pPr { a_CT_TextParagraphProperties }?,
2028     element lvl9pPr { a_CT_TextParagraphProperties }?,
2029     element extLst { a_CT_OfficeArtExtensionList }?
2030 a_ST_TextFontScalePercentOrPercentString =
2031     a_ST_TextFontScalePercent | s_ST_Percentage
2032 a_ST_TextFontScalePercent =
2033     xsd:int { minInclusive = "1000" maxInclusive = "100000" }
2034 a_CT_TextNormalAutofit =
2035
2036     ## default value: 100%
2037     attribute fontScale { a_ST_TextFontScalePercentOrPercentString }?,
2038
2039     ## default value: 0%
2040     attribute lnSpcReduction { a_ST_TextSpacingPercentOrPercentString }?
2041 a_CT_TextShapeAutofit = empty
2042 a_CT_TextNoAutofit = empty
2043 a_EG_TextAutofit =
2044     element noAutofit { a_CT_TextNoAutofit }
2045     | element normAutofit { a_CT_TextNormalAutofit }
2046     | element spAutoFit { a_CT_TextShapeAutofit }
2047 a_CT_TextBodyProperties =
2048     attribute rot { a_ST_Angle }?,
2049     attribute spcFirstLastPara { xsd:boolean }?,
2050     attribute vertOverflow { a_ST_TextVertOverflowType }?,
2051     attribute horzOverflow { a_ST_TextHorzOverflowType }?,
2052     attribute vert { a_ST_TextVerticalType }?,
2053     attribute wrap { a_ST_TextWrappingType }?,
2054     attribute lIns { a_ST_Coordinate32 }?,

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2055     attribute tIns { a_ST_Coordinate32 }?,
2056     attribute rIns { a_ST_Coordinate32 }?,
2057     attribute bIns { a_ST_Coordinate32 }?,
2058     attribute numCol { a_ST_TextColumnCount }?,
2059     attribute spcCol { a_ST_PositiveCoordinate32 }?,
2060     attribute rtlCol { xsd:boolean }?,
2061     attribute fromWordArt { xsd:boolean }?,
2062     attribute anchor { a_ST_TextAnchoringType }?,
2063     attribute anchorCtr { xsd:boolean }?,
2064     attribute forceAA { xsd:boolean }?,
2065
2066     ## default value: false
2067     attribute upright { xsd:boolean }?,
2068     attribute compatLnSpc { xsd:boolean }?,
2069     element prstTxWarp { a_CT_PresetTextShape }?,
2070     a_EG_TextAutofit?,
2071     element scene3d { a_CT_Scene3D }?,
2072     a_EG_Text3D?,
2073     element extLst { a_CT_OfficeArtExtensionList }?
2074 a_CT_TextBody =
2075     element bodyPr { a_CT_TextBodyProperties },
2076     element lstStyle { a_CT_TextListStyle }?,
2077     element p { a_CT_TextParagraph }+
2078 a_ST_TextBulletStartAtNum =
2079     xsd:int { minInclusive = "1" maxInclusive = "32767" }
2080 a_ST_TextAutonumberScheme =
2081     "alphaLcParenBoth"
2082     | "alphaUcParenBoth"
2083     | "alphaLcParenR"
2084     | "alphaUcParenR"
2085     | "alphaLcPeriod"
2086     | "alphaUcPeriod"
2087     | "arabicParenBoth"
2088     | "arabicParenR"
2089     | "arabicPeriod"
2090     | "arabicPlain"
2091     | "romanLcParenBoth"
2092     | "romanUcParenBoth"
2093     | "romanLcParenR"
2094     | "romanUcParenR"
2095     | "romanLcPeriod"
2096     | "romanUcPeriod"
2097     | "circleNumDbPlain"
2098     | "circleNumWdBlackPlain"
2099     | "circleNumWdWhitePlain"
2100     | "arabicDbPeriod"
2101     | "arabicDbPlain"
2102     | "ea1ChsPeriod"
2103     | "ea1ChsPlain"
2104     | "ea1ChtPeriod"
2105     | "ea1ChtPlain"
2106     | "ea1JpnChsDbPeriod"
2107     | "ea1JpnKorPlain"

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2108 | "ea1JpnKorPeriod"
2109 | "arabic1Minus"
2110 | "arabic2Minus"
2111 | "hebrew2Minus"
2112 | "thaiAlphaPeriod"
2113 | "thaiAlphaParenR"
2114 | "thaiAlphaParenBoth"
2115 | "thaiNumPeriod"
2116 | "thaiNumParenR"
2117 | "thaiNumParenBoth"
2118 | "hindiAlphaPeriod"
2119 | "hindiNumPeriod"
2120 | "hindiNumParenR"
2121 | "hindiAlpha1Period"
2122 a_CT_TextBulletColorFollowText = empty
2123 a_EG_TextBulletColor =
2124   element buClrTx { a_CT_TextBulletColorFollowText }
2125   | element buClr { a_CT_Color }
2126 a_ST_TextBulletSize = a_ST_TextBulletSizePercent | a_ST_TextBulletSizeDecimal
2127 a_ST_TextBulletSizePercent =
2128   xsd:string {
2129     pattern = "0*((2[5-9])|([3-9][0-9])|([1-3][0-9][0-9])|400)%"
2130   }
2131 a_ST_TextBulletSizeDecimal = xsd:int { minInclusive = "25000" maxInclusive = "400000" }
2132 a_CT_TextBulletSizeFollowText = empty
2133 a_CT_TextBulletSizePercent =
2134   attribute val { a_ST_TextBulletSizePercent }
2135 a_CT_TextBulletSizePoint = attribute val { a_ST_TextFontSize }
2136 a_EG_TextBulletSize =
2137   element buSzTx { a_CT_TextBulletSizeFollowText }
2138   | element buSzPct { a_CT_TextBulletSizePercent }
2139   | element buSzPts { a_CT_TextBulletSizePoint }
2140 a_CT_TextBulletTypefaceFollowText = empty
2141 a_EG_TextBulletTypeface =
2142   element buFontTx { a_CT_TextBulletTypefaceFollowText }
2143   | element buFont { a_CT_TextFont }
2144 a_CT_TextAutonumberBullet =
2145   attribute type { a_ST_TextAutonumberScheme },
2146
2147   ## default value: 1
2148   attribute startAt { a_ST_TextBulletStartAtNum }?
2149 a_CT_TextCharBullet = attribute char { xsd:string }
2150 a_CT_TextBlipBullet = element blip { a_CT_Blip }
2151 a_CT_TextNoBullet = empty
2152 a_EG_TextBullet =
2153   element buNone { a_CT_TextNoBullet }
2154   | element buAutoNum { a_CT_TextAutonumberBullet }
2155   | element buChar { a_CT_TextCharBullet }
2156   | element buBlip { a_CT_TextBlipBullet }
2157 a_ST_TextPoint = a_ST_TextPointUnqualified | s_ST_UniversalMeasure
2158 a_ST_TextPointUnqualified =
2159   xsd:int { minInclusive = "-400000" maxInclusive = "400000" }
2160 a_ST_TextNonNegativePoint =

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2161     xsd:int { minInclusive = "0" maxInclusive = "400000" }
2162 a_ST_TextFontSize =
2163     xsd:int { minInclusive = "100" maxInclusive = "400000" }
2164 a_ST_TextTypeface = xsd:string
2165 a_CT_TextFont =
2166     attribute typeface { a_ST_TextTypeface },
2167     attribute panose { s_ST_Panose }?,
2168
2169     ## default value: 0
2170     attribute pitchFamily { xsd:byte }?,
2171
2172     ## default value: 1
2173     attribute charset { xsd:byte }?
2174 a_ST_TextUnderlineType =
2175     "none"
2176     | "words"
2177     | "sng"
2178     | "dbl"
2179     | "heavy"
2180     | "dotted"
2181     | "dottedHeavy"
2182     | "dash"
2183     | "dashHeavy"
2184     | "dashLong"
2185     | "dashLongHeavy"
2186     | "dotDash"
2187     | "dotDashHeavy"
2188     | "dotDotDash"
2189     | "dotDotDashHeavy"
2190     | "wavy"
2191     | "wavyHeavy"
2192     | "wavyDb1"
2193 a_CT_TextUnderlineLineFollowText = empty
2194 a_CT_TextUnderlineFillFollowText = empty
2195 a_CT_TextUnderlineFillGroupWrapper = a_EG_FillProperties
2196 a_EG_TextUnderlineLine =
2197     element uLnTx { a_CT_TextUnderlineLineFollowText }
2198     | element uLn { a_CT_LineProperties }?
2199 a_EG_TextUnderlineFill =
2200     element uFillTx { a_CT_TextUnderlineFillFollowText }
2201     | element uFill { a_CT_TextUnderlineFillGroupWrapper }
2202 a_ST_TextStrikeType = "noStrike" | "sngStrike" | "dblStrike"
2203 a_ST_TextCapsType = "none" | "small" | "all"
2204 a_CT_TextCharacterProperties =
2205     attribute kumimoji { xsd:boolean }?,
2206     attribute lang { s_ST_Lang }?,
2207     attribute altLang { s_ST_Lang }?,
2208     attribute sz { a_ST_TextFontSize }?,
2209     attribute b { xsd:boolean }?,
2210     attribute i { xsd:boolean }?,
2211     attribute u { a_ST_TextUnderlineType }?,
2212     attribute strike { a_ST_TextStrikeType }?,
2213     attribute kern { a_ST_TextNonNegativePoint }?,

```

```

2214 attribute cap { a_ST_TextCapsType }?,
2215 attribute spc { a_ST_TextPoint }?,
2216 attribute normalizeH { xsd:boolean }?,
2217 attribute baseline { a_ST_Percentage }?,
2218 attribute noProof { xsd:boolean }?,
2219
2220 ## default value: true
2221 attribute dirty { xsd:boolean }?,
2222
2223 ## default value: false
2224 attribute err { xsd:boolean }?,
2225
2226 ## default value: true
2227 attribute smtClean { xsd:boolean }?,
2228
2229 ## default value: 0
2230 attribute smtId { xsd:unsignedInt }?,
2231 attribute bmk { xsd:string }?,
2232 element ln { a_CT_LineProperties }?,
2233 a_EG_FillProperties?,
2234 a_EG_EffectProperties?,
2235 element highlight { a_CT_Color }?,
2236 a_EG_TextUnderlineLine?,
2237 a_EG_TextUnderlineFill?,
2238 element latin { a_CT_TextFont }?,
2239 element ea { a_CT_TextFont }?,
2240 element cs { a_CT_TextFont }?,
2241 element sym { a_CT_TextFont }?,
2242 element hlinkClick { a_CT_Hyperlink }?,
2243 element hlinkMouseOver { a_CT_Hyperlink }?,
2244 element rtl { a_CT_Boolean }?,
2245 element extLst { a_CT_OfficeArtExtensionList }?
2246 a_CT_Boolean =
2247
2248 ## default value: 0
2249 attribute val { s_ST_OnOff }?
2250 a_ST_TextSpacingPoint =
2251 xsd:int { minInclusive = "0" maxInclusive = "158400" }
2252 a_ST_TextSpacingPercentOrPercentString =
2253 a_ST_TextSpacingPercent | s_ST_Percentage
2254 a_ST_TextSpacingPercent =
2255 xsd:int { minInclusive = "0" maxInclusive = "13200000" }
2256 a_CT_TextSpacingPercent =
2257 attribute val { a_ST_TextSpacingPercentOrPercentString }
2258 a_CT_TextSpacingPoint = attribute val { a_ST_TextSpacingPoint }
2259 a_ST_TextMargin =
2260 xsd:int { minInclusive = "0" maxInclusive = "51206400" }
2261 a_ST_TextIndent =
2262 xsd:int { minInclusive = "-51206400" maxInclusive = "51206400" }
2263 a_ST_TextTabAlignType = "l" | "ctr" | "r" | "dec"
2264 a_CT_TextTabStop =
2265 attribute pos { a_ST_Coordinate32 }?,
2266 attribute algn { a_ST_TextTabAlignType }?

```

```

2267 a_CT_TextTabStopList = element tab { a_CT_TextTabStop }*
2268 a_CT_TextLineBreak = element rPr { a_CT_TextCharacterProperties }?
2269 a_CT_TextSpacing =
2270   element spcPct { a_CT_TextSpacingPercent }
2271   | element spcPts { a_CT_TextSpacingPoint }
2272 a_ST_TextAlignType =
2273   "l" | "ctr" | "r" | "just" | "justLow" | "dist" | "thaiDist"
2274 a_ST_TextFontAlignType = "auto" | "t" | "ctr" | "base" | "b"
2275 a_ST_TextIndentLevelType =
2276   xsd:int { minInclusive = "0" maxInclusive = "8" }
2277 a_CT_TextParagraphProperties =
2278   attribute marL { a_ST_TextMargin }?,
2279   attribute marR { a_ST_TextMargin }?,
2280   attribute lvl { a_ST_TextIndentLevelType }?,
2281   attribute indent { a_ST_TextIndent }?,
2282   attribute algn { a_ST_TextAlignType }?,
2283   attribute defTabSz { a_ST_Coordinate32 }?,
2284   attribute rtl { xsd:boolean }?,
2285   attribute eaLnBrk { xsd:boolean }?,
2286   attribute fontAlgn { a_ST_TextFontAlignType }?,
2287   attribute latinLnBrk { xsd:boolean }?,
2288   attribute hangingPunct { xsd:boolean }?,
2289   element lnSpc { a_CT_TextSpacing }?,
2290   element spcBef { a_CT_TextSpacing }?,
2291   element spcAft { a_CT_TextSpacing }?,
2292   a_EG_TextBulletColor?,
2293   a_EG_TextBulletSize?,
2294   a_EG_TextBulletTypeface?,
2295   a_EG_TextBullet?,
2296   element tabLst { a_CT_TextTabStopList }?,
2297   element defRPr { a_CT_TextCharacterProperties }?,
2298   element extLst { a_CT_OfficeArtExtensionList }?
2299 a_CT_TextField =
2300   attribute id { s_ST_Guid },
2301   attribute type { xsd:string }?,
2302   element rPr { a_CT_TextCharacterProperties }?,
2303   element pPr { a_CT_TextParagraphProperties }?,
2304   element t { xsd:string }?
2305 a_EG_TextRun =
2306   element r { a_CT_RegularTextRun }
2307   | element br { a_CT_TextLineBreak }
2308   | element fld { a_CT_TextField }
2309 a_CT_RegularTextRun =
2310   element rPr { a_CT_TextCharacterProperties }?,
2311   element t { xsd:string }

```

B.4.1.1 Part Schemas

B.4.1.1.1 Table Styles Part

This schema is available in the file DrawingML_Table_Styles.rnc.

```
1 include "dml-main.rnc"
```



```

2 include "shared-relationshipReference.rnc"
3 include "dml-diagram.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-lockedCanvas.rnc"
6 include "any.rnc"
7 include "dml-chart.rnc"
8 include "dml-chartDrawing.rnc"
9 include "dml-picture.rnc"
10 include "dml-compatibility.rnc"
11 start = a_tblStyleLst

```

B.4.1.1.2 Theme Part

This schema is available in the file DrawingML_Theme.rnc.

```

1 include "dml-main.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-diagram.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-lockedCanvas.rnc"
6 include "any.rnc"
7 include "dml-chart.rnc"
8 include "dml-chartDrawing.rnc"
9 include "dml-picture.rnc"
10 include "dml-compatibility.rnc"
11 start = a_theme

```

B.4.1.1.3 Theme Override Part

This schema is available in the file DrawingML_Theme_Override.rnc.

```

1 include "dml-main.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-diagram.rnc"
4 include "shared-commonSimpleTypes.rnc"
5 include "dml-lockedCanvas.rnc"
6 include "any.rnc"
7 include "dml-chart.rnc"
8 include "dml-chartDrawing.rnc"
9 include "dml-picture.rnc"
10 include "dml-compatibility.rnc"
11 start = a_themeOverride

```

B.4.1.1.4 DrawingML – Compatibility

This schema is available in the file dml-compatibility.rnc.

```

1 default namespace =
2   "http://schemas.openxmlformats.org/drawingml/2006/compatibility"
3 namespace a = "http://schemas.openxmlformats.org/drawingml/2006/main"
4 namespace dcmt =
5   "http://schemas.openxmlformats.org/drawingml/2006/compatibility"
6 namespace o = "urn:schemas-microsoft-com:office:office"
7 namespace r =

```

```

8  "http://schemas.openxmlformats.org/officeDocument/2006/relationships"
9  namespace v = "urn:schemas-microsoft-com:vml"
10 namespace w10 = "urn:schemas-microsoft-com:office:word"
11 namespace x = "urn:schemas-microsoft-com:office:excel"
12
13 dcmt_CT_Compat = attribute spid { a_ST_ShapeID }
14 dcmt_legacyDrawing = element legacyDrawing { dcmt_CT_Compat }

```

B.4.2 DrawingML - Picture

This schema is available in the file dml-picture.rnc.

```

1  default namespace =
2    "http://schemas.openxmlformats.org/drawingml/2006/picture"
3  namespace a = "http://schemas.openxmlformats.org/drawingml/2006/main"
4  namespace dpct =
5    "http://schemas.openxmlformats.org/drawingml/2006/picture"
6  namespace o = "urn:schemas-microsoft-com:office:office"
7  namespace v = "urn:schemas-microsoft-com:vml"
8  namespace w10 = "urn:schemas-microsoft-com:office:word"
9  namespace x = "urn:schemas-microsoft-com:office:excel"
10
11 dpct_CT_PictureNonVisual =
12   element cNvPr { a_CT_NonVisualDrawingProps },
13   element cNvPicPr { a_CT_NonVisualPictureProperties }
14 dpct_CT_Picture =
15   element nvPicPr { dpct_CT_PictureNonVisual },
16   element blipFill { a_CT_BlipFillProperties },
17   element spPr { a_CT_ShapeProperties }
18 dpct_pic = element pic { dpct_CT_Picture }

```

B.4.3 DrawingML - Locked Canvas

This schema is available in the file dml-lockedCanvas.rnc.

```

1  default namespace =
2    "http://schemas.openxmlformats.org/drawingml/2006/lockedCanvas"
3  namespace a = "http://schemas.openxmlformats.org/drawingml/2006/main"
4  namespace dlckcnv =
5    "http://schemas.openxmlformats.org/drawingml/2006/lockedCanvas"
6  namespace o = "urn:schemas-microsoft-com:office:office"
7  namespace r =
8    "http://schemas.openxmlformats.org/officeDocument/2006/relationships"
9  namespace v = "urn:schemas-microsoft-com:vml"
10 namespace w10 = "urn:schemas-microsoft-com:office:word"
11 namespace x = "urn:schemas-microsoft-com:office:excel"
12
13 dlckcnv_lockedCanvas = element lockedCanvas { a_CT_GvmlGroupShape }

```

B.4.4 DrawingML - Wordprocessing Drawing

This schema is available in the file dml-wordprocessingDrawing.rnc.

```

1  default namespace =

```

```

2  "http://schemas.openxmlformats.org/drawingml/2006/wordprocessingDrawing"
3  namespace a = "http://schemas.openxmlformats.org/drawingml/2006/main"
4  namespace o = "urn:schemas-microsoft-com:office:office"
5  namespace v = "urn:schemas-microsoft-com:vml"
6  namespace w =
7      "http://schemas.openxmlformats.org/wordprocessingml/2006/main"
8  namespace w10 = "urn:schemas-microsoft-com:office:word"
9  namespace wp =
10     "http://schemas.openxmlformats.org/drawingml/2006/wordprocessingDrawing"
11  namespace x = "urn:schemas-microsoft-com:office:excel"
12
13  wp_CT_EffectExtent =
14      attribute l { a_ST_Coordinate },
15      attribute t { a_ST_Coordinate },
16      attribute r { a_ST_Coordinate },
17      attribute b { a_ST_Coordinate }
18  wp_ST_WrapDistance = xsd:unsignedInt
19  wp_CT_Inline =
20      attribute distT { wp_ST_WrapDistance }?,
21      attribute distB { wp_ST_WrapDistance }?,
22      attribute distL { wp_ST_WrapDistance }?,
23      attribute distR { wp_ST_WrapDistance }?,
24      element extent { a_CT_PositiveSize2D },
25      element effectExtent { wp_CT_EffectExtent }?,
26      element docPr { a_CT_NonVisualDrawingProps },
27      element cNvGraphicFramePr { a_CT_NonVisualGraphicFrameProperties }?,
28      a_graphic
29  wp_ST_WrapText = "bothSides" | "left" | "right" | "largest"
30  wp_CT_WrapPath =
31      attribute edited { xsd:boolean }?,
32      element start { a_CT_Point2D },
33      element lineTo { a_CT_Point2D }+
34  wp_CT_WrapNone = empty
35  wp_CT_WrapSquare =
36      attribute wrapText { wp_ST_WrapText },
37      attribute distT { wp_ST_WrapDistance }?,
38      attribute distB { wp_ST_WrapDistance }?,
39      attribute distL { wp_ST_WrapDistance }?,
40      attribute distR { wp_ST_WrapDistance }?,
41      element effectExtent { wp_CT_EffectExtent }?
42  wp_CT_WrapTight =
43      attribute wrapText { wp_ST_WrapText },
44      attribute distL { wp_ST_WrapDistance }?,
45      attribute distR { wp_ST_WrapDistance }?,
46      element wrapPolygon { wp_CT_WrapPath }
47  wp_CT_WrapThrough =
48      attribute wrapText { wp_ST_WrapText },
49      attribute distL { wp_ST_WrapDistance }?,
50      attribute distR { wp_ST_WrapDistance }?,
51      element wrapPolygon { wp_CT_WrapPath }
52  wp_CT_WrapTopBottom =
53      attribute distT { wp_ST_WrapDistance }?,
54      attribute distB { wp_ST_WrapDistance }?,

```

```

55     element effectExtent { wp_CT_EffectExtent }?
56 wp_EG_WrapType =
57     element wrapNone { wp_CT_WrapNone }
58     | element wrapSquare { wp_CT_WrapSquare }
59     | element wrapTight { wp_CT_WrapTight }
60     | element wrapThrough { wp_CT_WrapThrough }
61     | element wrapTopAndBottom { wp_CT_WrapTopBottom }
62 wp_ST_PositionOffset = xsd:int
63 wp_ST_AlignH = "left" | "right" | "center" | "inside" | "outside"
64 wp_ST_RelFromH =
65     "margin"
66     | "page"
67     | "column"
68     | "character"
69     | "leftMargin"
70     | "rightMargin"
71     | "insideMargin"
72     | "outsideMargin"
73 wp_CT_PosH =
74     attribute relativeFrom { wp_ST_RelFromH },
75     (element align { wp_ST_AlignH }
76      | element posOffset { wp_ST_PositionOffset })
77 wp_ST_AlignV = "top" | "bottom" | "center" | "inside" | "outside"
78 wp_ST_RelFromV =
79     "margin"
80     | "page"
81     | "paragraph"
82     | "line"
83     | "topMargin"
84     | "bottomMargin"
85     | "insideMargin"
86     | "outsideMargin"
87 wp_CT_PosV =
88     attribute relativeFrom { wp_ST_RelFromV },
89     (element align { wp_ST_AlignV }
90      | element posOffset { wp_ST_PositionOffset })
91 wp_CT_Anchor =
92     attribute distT { wp_ST_WrapDistance }?,
93     attribute distB { wp_ST_WrapDistance }?,
94     attribute distL { wp_ST_WrapDistance }?,
95     attribute distR { wp_ST_WrapDistance }?,
96     attribute simplePos { xsd:boolean }?,
97     attribute relativeHeight { xsd:unsignedInt },
98     attribute behindDoc { xsd:boolean },
99     attribute locked { xsd:boolean },
100    attribute layoutInCell { xsd:boolean },
101    attribute hidden { xsd:boolean }?,
102    attribute allowOverlap { xsd:boolean },
103    element simplePos { a_CT_Point2D },
104    element positionH { wp_CT_PosH },
105    element positionV { wp_CT_PosV },
106    element extent { a_CT_PositiveSize2D },
107    element effectExtent { wp_CT_EffectExtent }?,

```

```

108 wp_EG_WrapType,
109 element docPr { a_CT_NonVisualDrawingProps },
110 element cNvGraphicFramePr { a_CT_NonVisualGraphicFrameProperties }?,
111 a_graphic
112 wp_inline = element inline { wp_CT_Inline }
113 wp_anchor = element anchor { wp_CT_Anchor }

```

B.4.5 DrawingML - Spreadsheet Drawing

This schema is available in the file dml-spreadsheetDrawing.rnc.

```

1 default namespace =
2   "http://schemas.openxmlformats.org/drawingml/2006/spreadsheetDrawing"
3 namespace a = "http://schemas.openxmlformats.org/drawingml/2006/main"
4 namespace o = "urn:schemas-microsoft-com:office:office"
5 namespace r =
6   "http://schemas.openxmlformats.org/officeDocument/2006/relationships"
7 namespace v = "urn:schemas-microsoft-com:vml"
8 namespace w10 = "urn:schemas-microsoft-com:office:word"
9 namespace x = "urn:schemas-microsoft-com:office:excel"
10 namespace xdr =
11   "http://schemas.openxmlformats.org/drawingml/2006/spreadsheetDrawing"
12
13 xdr_from = element from { xdr_CT_Marker }
14 xdr_to = element to { xdr_CT_Marker }
15 xdr_CT_AnchorClientData =
16
17   ## default value: true
18   attribute fLocksWithSheet { xsd:boolean }?,
19
20   ## default value: true
21   attribute fPrintsWithSheet { xsd:boolean }?
22 xdr_CT_ShapeNonVisual =
23   element cNvPr { a_CT_NonVisualDrawingProps },
24   element cNvSpPr { a_CT_NonVisualDrawingShapeProps }
25 xdr_CT_Shape =
26   attribute macro { xsd:string }?,
27   attribute textlink { xsd:string }?,
28
29   ## default value: true
30   attribute fLocksText { xsd:boolean }?,
31
32   ## default value: false
33   attribute fPublished { xsd:boolean }?,
34   element nvSpPr { xdr_CT_ShapeNonVisual },
35   element spPr { a_CT_ShapeProperties },
36   element style { a_CT_ShapeStyle }?,
37   element txBody { a_CT_TextBody }?
38 xdr_CT_ConnectorNonVisual =
39   element cNvPr { a_CT_NonVisualDrawingProps },
40   element cNvCxnSpPr { a_CT_NonVisualConnectorProperties }
41 xdr_CT_Connector =
42   attribute macro { xsd:string }?,

```

```

43
44   ## default value: false
45   attribute fPublished { xsd:boolean }?,
46   element nvCxnSpPr { xdr_CT_ConnectorNonVisual },
47   element spPr { a_CT_ShapeProperties },
48   element style { a_CT_ShapeStyle }?
49 xdr_CT_PictureNonVisual =
50   element cNvPr { a_CT_NonVisualDrawingProps },
51   element cNvPicPr { a_CT_NonVisualPictureProperties }
52 xdr_CT_Picture =
53   attribute macro { xsd:string }?,
54
55   ## default value: false
56   attribute fPublished { xsd:boolean }?,
57   element nvPicPr { xdr_CT_PictureNonVisual },
58   element blipFill { a_CT_BlipFillProperties },
59   element spPr { a_CT_ShapeProperties },
60   element style { a_CT_ShapeStyle }?
61 xdr_CT_GraphicalObjectFrameNonVisual =
62   element cNvPr { a_CT_NonVisualDrawingProps },
63   element cNvGraphicFramePr { a_CT_NonVisualGraphicFrameProperties }
64 xdr_CT_GraphicalObjectFrame =
65   attribute macro { xsd:string }?,
66
67   ## default value: false
68   attribute fPublished { xsd:boolean }?,
69   element nvGraphicFramePr { xdr_CT_GraphicalObjectFrameNonVisual },
70   element xfrm { a_CT_Transform2D },
71   a_graphic
72 xdr_CT_GroupShapeNonVisual =
73   element cNvPr { a_CT_NonVisualDrawingProps },
74   element cNvGrpSpPr { a_CT_NonVisualGroupDrawingShapeProps }
75 xdr_CT_GroupShape =
76   element nvGrpSpPr { xdr_CT_GroupShapeNonVisual },
77   element grpSpPr { a_CT_GroupShapeProperties },
78   (element sp { xdr_CT_Shape }
79    | element grpSp { xdr_CT_GroupShape }
80    | element graphicFrame { xdr_CT_GraphicalObjectFrame }
81    | element cxnSp { xdr_CT_Connector }
82    | element pic { xdr_CT_Picture })*
83 xdr_EG_ObjectChoices =
84   element sp { xdr_CT_Shape }
85   | element grpSp { xdr_CT_GroupShape }
86   | element graphicFrame { xdr_CT_GraphicalObjectFrame }
87   | element cxnSp { xdr_CT_Connector }
88   | element pic { xdr_CT_Picture }
89   | element contentPart { xdr_CT_Rel }
90 xdr_CT_Rel = r_id
91 xdr_ST_ColID = xsd:int { minInclusive = "0" }
92 xdr_ST_RowID = xsd:int { minInclusive = "0" }
93 xdr_CT_Marker =
94   element col { xdr_ST_ColID },
95   element colOff { a_ST_Coordinate },

```

```

96   element row { xdr_ST_RowID },
97   element rowOff { a_ST_Coordinate }
98 xdr_ST_EditAs = "twoCell" | "oneCell" | "absolute"
99 xdr_CT_TwoCellAnchor =
100
101   ## default value: twoCell
102   attribute editAs { xdr_ST_EditAs }?,
103   element from { xdr_CT_Marker },
104   element to { xdr_CT_Marker },
105   xdr_EG_ObjectChoices,
106   element clientData { xdr_CT_AnchorClientData }
107 xdr_CT_OneCellAnchor =
108   element from { xdr_CT_Marker },
109   element ext { a_CT_PositiveSize2D },
110   xdr_EG_ObjectChoices,
111   element clientData { xdr_CT_AnchorClientData }
112 xdr_CT_AbsoluteAnchor =
113   element pos { a_CT_Point2D },
114   element ext { a_CT_PositiveSize2D },
115   xdr_EG_ObjectChoices,
116   element clientData { xdr_CT_AnchorClientData }
117 xdr_EG_Anchor =
118   element twoCellAnchor { xdr_CT_TwoCellAnchor }
119   | element oneCellAnchor { xdr_CT_OneCellAnchor }
120   | element absoluteAnchor { xdr_CT_AbsoluteAnchor }
121 xdr_CT_Drawing = xdr_EG_Anchor*
122 xdr_wsDr = element wsDr { xdr_CT_Drawing }

```

B.5 DrawingML - Components

B.5.1 DrawingML - Chart

This schema is available in the file dml-chart.rnc.

```

1  default namespace =
2    "http://schemas.openxmlformats.org/drawingml/2006/chart"
3  namespace a = "http://schemas.openxmlformats.org/drawingml/2006/main"
4  namespace cdr =
5    "http://schemas.openxmlformats.org/drawingml/2006/chartDrawing"
6  namespace dchrt =
7    "http://schemas.openxmlformats.org/drawingml/2006/chart"
8  namespace o = "urn:schemas-microsoft-com:office:office"
9  namespace r =
10    "http://schemas.openxmlformats.org/officeDocument/2006/relationships"
11  namespace s =
12    "http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
13  namespace v = "urn:schemas-microsoft-com:vml"
14  namespace w10 = "urn:schemas-microsoft-com:office:word"
15  namespace x = "urn:schemas-microsoft-com:office:excel"
16
17  dchrt_CT_Boolean =
18
19    ## default value: true

```

```

20     attribute val { xsd:boolean }?
21 dchrt_CT_Double = attribute val { xsd:double }
22 dchrt_CT_UnsignedInt = attribute val { xsd:unsignedInt }
23 dchrt_CT_RelId = r_id
24 dchrt_CT_Extension =
25     attribute uri { xsd:token }?,
26     dchrt_CT_Extension_any
27 dchrt_CT_Extension_any =
28     element * - (o:* | v:* | w10:* | x:*) {
29         anyAttribute*,
30         mixed { anyElement* }
31     }
32 dchrt_CT_ExtensionList = element ext { dchrt_CT_Extension }*
33 dchrt_CT_NumVal =
34     attribute idx { xsd:unsignedInt },
35     attribute formatCode { s_ST_Xstring }?,
36     element v { s_ST_Xstring }
37 dchrt_CT_NumData =
38     element formatCode { s_ST_Xstring }?,
39     element ptCount { dchrt_CT_UnsignedInt }?,
40     element pt { dchrt_CT_NumVal }*,
41     element extLst { dchrt_CT_ExtensionList }?
42 dchrt_CT_NumRef =
43     element f { xsd:string },
44     element numCache { dchrt_CT_NumData }?,
45     element extLst { dchrt_CT_ExtensionList }?
46 dchrt_CT_NumDataSource =
47     element numRef { dchrt_CT_NumRef }
48     | element numLit { dchrt_CT_NumData }
49 dchrt_CT_StrVal =
50     attribute idx { xsd:unsignedInt },
51     element v { s_ST_Xstring }
52 dchrt_CT_StrData =
53     element ptCount { dchrt_CT_UnsignedInt }?,
54     element pt { dchrt_CT_StrVal }*,
55     element extLst { dchrt_CT_ExtensionList }?
56 dchrt_CT_StrRef =
57     element f { xsd:string },
58     element strCache { dchrt_CT_StrData }?,
59     element extLst { dchrt_CT_ExtensionList }?
60 dchrt_CT_Tx =
61     element strRef { dchrt_CT_StrRef }
62     | element rich { a_CT_TextBody }
63 dchrt_CT_TextLanguageID = attribute val { s_ST_Lang }
64 dchrt_CT_Lvl = element pt { dchrt_CT_StrVal }*
65 dchrt_CT_MultiLvlStrData =
66     element ptCount { dchrt_CT_UnsignedInt }?,
67     element lvl { dchrt_CT_Lvl }*,
68     element extLst { dchrt_CT_ExtensionList }?
69 dchrt_CT_MultiLvlStrRef =
70     element f { xsd:string },
71     element multiLvlStrCache { dchrt_CT_MultiLvlStrData }?,
72     element extLst { dchrt_CT_ExtensionList }?

```



```

73 dchrt_CT_AxDataSource =
74   element multiLvlStrRef { dchrt_CT_MultiLvlStrRef }
75   | element numRef { dchrt_CT_NumRef }
76   | element numLit { dchrt_CT_NumData }
77   | element strRef { dchrt_CT_StrRef }
78   | element strLit { dchrt_CT_StrData }
79 dchrt_CT_SerTx =
80   element strRef { dchrt_CT_StrRef }
81   | element v { s_ST_Xstring }
82 dchrt_ST_LayoutTarget = string "inner" | string "outer"
83 dchrt_CT_LayoutTarget =
84
85   ## default value: outer
86   attribute val { dchrt_ST_LayoutTarget }?
87 dchrt_ST_LayoutMode = string "edge" | string "factor"
88 dchrt_CT_LayoutMode =
89
90   ## default value: factor
91   attribute val { dchrt_ST_LayoutMode }?
92 dchrt_CT_ManualLayout =
93   element layoutTarget { dchrt_CT_LayoutTarget }?,
94   element xMode { dchrt_CT_LayoutMode }?,
95   element yMode { dchrt_CT_LayoutMode }?,
96   element wMode { dchrt_CT_LayoutMode }?,
97   element hMode { dchrt_CT_LayoutMode }?,
98   element x { dchrt_CT_Double }?,
99   element y { dchrt_CT_Double }?,
100  element w { dchrt_CT_Double }?,
101  element h { dchrt_CT_Double }?,
102  element extLst { dchrt_CT_ExtensionList }?
103 dchrt_CT_Layout =
104   element manualLayout { dchrt_CT_ManualLayout }?,
105   element extLst { dchrt_CT_ExtensionList }?
106 dchrt_CT_Title =
107   element tx { dchrt_CT_Tx }?,
108   element layout { dchrt_CT_Layout }?,
109   element overlay { dchrt_CT_Boolean }?,
110   element spPr { a_CT_ShapeProperties }?,
111   element txPr { a_CT_TextBody }?,
112   element extLst { dchrt_CT_ExtensionList }?
113 dchrt_ST_RotX = xsd:byte { minInclusive = "-90" maxInclusive = "90" }
114 dchrt_CT_RotX =
115
116   ## default value: 0
117   attribute val { dchrt_ST_RotX }?
118 dchrt_ST_HPercent =
119 dchrt_ST_HPercentWithSymbol | dchrt_ST_HPercentUShort
120 dchrt_ST_HPercentWithSymbol =
121   xsd:string {
122     pattern = "0*(([5-9])|([1-9][0-9])|([1-4][0-9][0-9])|500)%"
123   }
124 dchrt_ST_HPercentUShort =
125   xsd:unsignedShort { minInclusive = "5" maxInclusive = "500" }

```

```

126 dchrt_CT_HPercent =
127
128     ## default value: 100%
129     attribute val { dchrt_ST_HPercent }?
130 dchrt_ST_RotY =
131     xsd:unsignedShort { minInclusive = "0" maxInclusive = "360" }
132 dchrt_CT_RotY =
133
134     ## default value: 0
135     attribute val { dchrt_ST_RotY }?
136 dchrt_ST_DepthPercent =
137 dchrt_ST_DepthPercentWithSymbol | dchrt_ST_DepthPercentUShort
138 dchrt_ST_DepthPercentWithSymbol =
139     xsd:string {
140         pattern = "0*(([2-9][0-9])|([1-9][0-9][0-9])|(1[0-9][0-9][0-9])|2000)%"
141     }
142 dchrt_ST_DepthPercentUShort =
143     xsd:unsignedShort { minInclusive = "20" maxInclusive = "2000" }
144 dchrt_CT_DepthPercent =
145
146     ## default value: 100%
147     attribute val { dchrt_ST_DepthPercent }?
148 dchrt_ST_Perspective =
149     xsd:unsignedByte { minInclusive = "0" maxInclusive = "240" }
150 dchrt_CT_Perspective =
151
152     ## default value: 30
153     attribute val { dchrt_ST_Perspective }?
154 dchrt_CT_View3D =
155     element rotX { dchrt_CT_RotX }?,
156     element hPercent { dchrt_CT_HPercent }?,
157     element rotY { dchrt_CT_RotY }?,
158     element depthPercent { dchrt_CT_DepthPercent }?,
159     element rAngAx { dchrt_CT_Boolean }?,
160     element perspective { dchrt_CT_Perspective }?,
161     element extLst { dchrt_CT_ExtensionList }?
162 dchrt_CT_Surface =
163     element thickness { dchrt_CT_Thickness }?,
164     element spPr { a_CT_ShapeProperties }?,
165     element pictureOptions { dchrt_CT_PictureOptions }?,
166     element extLst { dchrt_CT_ExtensionList }?
167 dchrt_ST_Thickness = dchrt_ST_ThicknessPercent | xsd:unsignedInt
168 dchrt_ST_ThicknessPercent = xsd:string { pattern = "([0-9]+)%" }
169 dchrt_CT_Thickness = attribute val { dchrt_ST_Thickness }
170 dchrt_CT_DTable =
171     element showHorzBorder { dchrt_CT_Boolean }?,
172     element showVertBorder { dchrt_CT_Boolean }?,
173     element showOutline { dchrt_CT_Boolean }?,
174     element showKeys { dchrt_CT_Boolean }?,
175     element spPr { a_CT_ShapeProperties }?,
176     element txPr { a_CT_TextBody }?,
177     element extLst { dchrt_CT_ExtensionList }?
178 dchrt_ST_GapAmount =

```

```

179 dchrt_ST_GapAmountPercent | dchrt_ST_GapAmountUShort
180 dchrt_ST_GapAmountPercent =
181     xsd:string {
182         pattern = "0*([0-9])|([1-9][0-9])|([1-4][0-9][0-9])|500)%"
183     }
184 dchrt_ST_GapAmountUShort =
185     xsd:unsignedShort { minInclusive = "0" maxInclusive = "500" }
186 dchrt_CT_GapAmount =
187
188     ## default value: 150%
189     attribute val { dchrt_ST_GapAmount }?
190 dchrt_ST_Overlap =
191     dchrt_ST_OverlapPercent | dchrt_ST_OverlapByte
192 dchrt_ST_OverlapPercent =
193     xsd:string { pattern = "(-?0*([0-9])|([1-9][0-9])|100))%" }
194 dchrt_ST_OverlapByte =
195     xsd:byte { minInclusive = "-100" maxInclusive = "100" }
196 dchrt_CT_Overlap =
197
198     ## default value: 0%
199     attribute val { dchrt_ST_Overlap }?
200 dchrt_ST_BubbleScale =
201     dchrt_ST_BubbleScalePercent | dchrt_ST_BubbleScaleUInt
202 dchrt_ST_BubbleScalePercent =
203     xsd:string {
204         pattern = "0*([0-9])|([1-9][0-9])|([1-2][0-9][0-9])|300)%"
205     }
206 dchrt_ST_BubbleScaleUInt =
207     xsd:unsignedInt { minInclusive = "0" maxInclusive = "300" }
208 dchrt_CT_BubbleScale =
209
210     ## default value: 100%
211     attribute val { dchrt_ST_BubbleScale }?
212 dchrt_ST_SizeRepresents = string "area" | string "w"
213 dchrt_CT_SizeRepresents =
214
215     ## default value: area
216     attribute val { dchrt_ST_SizeRepresents }?
217 dchrt_ST_FirstSliceAng =
218     xsd:unsignedShort { minInclusive = "0" maxInclusive = "360" }
219 dchrt_CT_FirstSliceAng =
220
221     ## default value: 0
222     attribute val { dchrt_ST_FirstSliceAng }?
223 dchrt_ST_HoleSize =
224     dchrt_ST_HoleSizePercent | dchrt_ST_HoleSizeUByte
225 dchrt_ST_HoleSizePercent = xsd:string { pattern = "0*([1-9]|([1-8][0-9])|90)%" }
226 dchrt_ST_HoleSizeUByte = xsd:unsignedByte { minInclusive = "1" maxInclusive = "90" }
227 dchrt_CT_HoleSize =
228
229     ## default value: 10%
230     attribute val { dchrt_ST_HoleSize }?
231 dchrt_ST_SplitType =

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```

232     string "auto"
233     | string "cust"
234     | string "percent"
235     | string "pos"
236     | string "val"
237 dchrt_CT_SplitType =
238
239     ## default value: auto
240     attribute val { dchrt_ST_SplitType }?
241 dchrt_CT_CustSplit = element secondPiePt { dchrt_CT_UnsignedInt }*
242 dchrt_ST_SecondPieSize =
243 dchrt_ST_SecondPieSizePercent | dchrt_ST_SecondPieSizeUShort
244 dchrt_ST_SecondPieSizePercent =
245     xsd:string { pattern = "0*(([5-9])|([1-9][0-9])|(1[0-9][0-9])|200)%" }
246 dchrt_ST_SecondPieSizeUShort =
247     xsd:unsignedShort { minInclusive = "5" maxInclusive = "200" }
248 dchrt_CT_SecondPieSize =
249
250     ## default value: 75%
251     attribute val { dchrt_ST_SecondPieSize }?
252 dchrt_CT_NumFmt =
253     attribute formatCode { s_ST_Xstring },
254     attribute sourceLinked { xsd:boolean }?
255 dchrt_ST_LblAlign = string "ctr" | string "l" | string "r"
256 dchrt_CT_LblAlign = attribute val { dchrt_ST_LblAlign }
257 dchrt_ST_DLblPos =
258     string "bestFit"
259     | string "b"
260     | string "ctr"
261     | string "inBase"
262     | string "inEnd"
263     | string "l"
264     | string "outEnd"
265     | string "r"
266     | string "t"
267 dchrt_CT_DLblPos = attribute val { dchrt_ST_DLblPos }
268 dchrt_EG_DLblShared =
269     element numFmt { dchrt_CT_NumFmt }?,
270     element spPr { a_CT_ShapeProperties }?,
271     element txPr { a_CT_TextBody }?,
272     element dLblPos { dchrt_CT_DLblPos }?,
273     element showLegendKey { dchrt_CT_Boolean }?,
274     element showVal { dchrt_CT_Boolean }?,
275     element showCatName { dchrt_CT_Boolean }?,
276     element showSerName { dchrt_CT_Boolean }?,
277     element showPercent { dchrt_CT_Boolean }?,
278     element showBubbleSize { dchrt_CT_Boolean }?,
279     element separator { xsd:string }?
280 dchrt_Group_DLbl =
281     element layout { dchrt_CT_Layout }?,
282     element tx { dchrt_CT_Tx }?,
283     dchrt_EG_DLblShared
284 dchrt_CT_DLbl =

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```

285     element idx { dchrt_CT_UnsignedInt },
286     (element delete { dchrt_CT_Boolean }
287       | dchrt_Group_DLbl),
288     element extLst { dchrt_CT_ExtensionList }?
289 dchrt_Group_DLbls =
290     dchrt_EG_DLblShared,
291     element showLeaderLines { dchrt_CT_Boolean }?,
292     element leaderLines { dchrt_CT_ChartLines }?
293 dchrt_CT_DLbls =
294     element dLbl { dchrt_CT_DLbl }*,
295     (element delete { dchrt_CT_Boolean }
296       | dchrt_Group_DLbls),
297     element extLst { dchrt_CT_ExtensionList }?
298 dchrt_ST_MarkerStyle =
299     string "circle"
300     | string "dash"
301     | string "diamond"
302     | string "dot"
303     | string "none"
304     | string "picture"
305     | string "plus"
306     | string "square"
307     | string "star"
308     | string "triangle"
309     | string "x"
310     | string "auto"
311 dchrt_CT_MarkerStyle = attribute val { dchrt_ST_MarkerStyle }
312 dchrt_ST_MarkerSize =
313     xsd:unsignedByte { minInclusive = "2" maxInclusive = "72" }
314 dchrt_CT_MarkerSize =
315
316     ## default value: 5
317     attribute val { dchrt_ST_MarkerSize }?
318 dchrt_CT_Marker =
319     element symbol { dchrt_CT_MarkerStyle }?,
320     element size { dchrt_CT_MarkerSize }?,
321     element spPr { a_CT_ShapeProperties }?,
322     element extLst { dchrt_CT_ExtensionList }?
323 dchrt_CT_DPt =
324     element idx { dchrt_CT_UnsignedInt },
325     element invertIfNegative { dchrt_CT_Boolean }?,
326     element marker { dchrt_CT_Marker }?,
327     element bubble3D { dchrt_CT_Boolean }?,
328     element explosion { dchrt_CT_UnsignedInt }?,
329     element spPr { a_CT_ShapeProperties }?,
330     element pictureOptions { dchrt_CT_PictureOptions }?,
331     element extLst { dchrt_CT_ExtensionList }?
332 dchrt_ST_TrendlineType =
333     string "exp"
334     | string "linear"
335     | string "log"
336     | string "movingAvg"
337     | string "poly"

```

```

338 | string "power"
339 dchrt_CT_TrendlineType =
340
341   ## default value: linear
342   attribute val { dchrt_ST_TrendlineType }?
343 dchrt_ST_Order =
344   xsd:unsignedByte { minInclusive = "2" maxInclusive = "6" }
345 dchrt_CT_Order =
346
347   ## default value: 2
348   attribute val { dchrt_ST_Order }?
349 dchrt_ST_Period =
350   xsd:unsignedInt { minInclusive = "2" }
351 dchrt_CT_Period =
352
353   ## default value: 2
354   attribute val { dchrt_ST_Period }?
355 dchrt_CT_TrendlineLbl =
356   element layout { dchrt_CT_Layout }?,
357   element tx { dchrt_CT_Tx }?,
358   element numFmt { dchrt_CT_NumFmt }?,
359   element spPr { a_CT_ShapeProperties }?,
360   element txPr { a_CT_TextBody }?,
361   element extLst { dchrt_CT_ExtensionList }?
362 dchrt_CT_Trendline =
363   element name { xsd:string }?,
364   element spPr { a_CT_ShapeProperties }?,
365   element trendlineType { dchrt_CT_TrendlineType },
366   element order { dchrt_CT_Order }?,
367   element period { dchrt_CT_Period }?,
368   element forward { dchrt_CT_Double }?,
369   element backward { dchrt_CT_Double }?,
370   element intercept { dchrt_CT_Double }?,
371   element dispRSqr { dchrt_CT_Boolean }?,
372   element dispEq { dchrt_CT_Boolean }?,
373   element trendlineLbl { dchrt_CT_TrendlineLbl }?,
374   element extLst { dchrt_CT_ExtensionList }?
375 dchrt_ST_ErrDir = string "x" | string "y"
376 dchrt_CT_ErrDir = attribute val { dchrt_ST_ErrDir }
377 dchrt_ST_ErrBarType = string "both" | string "minus" | string "plus"
378 dchrt_CT_ErrBarType =
379
380   ## default value: both
381   attribute val { dchrt_ST_ErrBarType }?
382 dchrt_ST_ErrValType =
383   string "cust"
384   | string "fixedVal"
385   | string "percentage"
386   | string "stdDev"
387   | string "stdErr"
388 dchrt_CT_ErrValType =
389
390   ## default value: fixedVal

```

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391     attribute val { dchrt_ST_ErrValType }?
392 dchrt_CT_ErrBars =
393     element errDir { dchrt_CT_ErrDir }?,
394     element errBarType { dchrt_CT_ErrBarType },
395     element errValType { dchrt_CT_ErrValType },
396     element noEndCap { dchrt_CT_Boolean }?,
397     element plus { dchrt_CT_NumDataSource }?,
398     element minus { dchrt_CT_NumDataSource }?,
399     element val { dchrt_CT_Double }?,
400     element spPr { a_CT_ShapeProperties }?,
401     element extLst { dchrt_CT_ExtensionList }?
402 dchrt_CT_UpDownBar = element spPr { a_CT_ShapeProperties }?
403 dchrt_CT_UpDownBars =
404     element gapWidth { dchrt_CT_GapAmount }?,
405     element upBars { dchrt_CT_UpDownBar }?,
406     element downBars { dchrt_CT_UpDownBar }?,
407     element extLst { dchrt_CT_ExtensionList }?
408 dchrt_EG_SerShared =
409     element idx { dchrt_CT_UnsignedInt },
410     element order { dchrt_CT_UnsignedInt },
411     element tx { dchrt_CT_SerTx }?,
412     element spPr { a_CT_ShapeProperties }?
413 dchrt_CT_LineSer =
414     dchrt_EG_SerShared,
415     element marker { dchrt_CT_Marker }?,
416     element dPt { dchrt_CT_DPt }*,
417     element dLbls { dchrt_CT_DLbls }?,
418     element trendline { dchrt_CT_Trendline }*,
419     element errBars { dchrt_CT_ErrBars }?,
420     element cat { dchrt_CT_AxDataSource }?,
421     element val { dchrt_CT_NumDataSource }?,
422     element smooth { dchrt_CT_Boolean }?,
423     element extLst { dchrt_CT_ExtensionList }?
424 dchrt_CT_ScatterSer =
425     dchrt_EG_SerShared,
426     element marker { dchrt_CT_Marker }?,
427     element dPt { dchrt_CT_DPt }*,
428     element dLbls { dchrt_CT_DLbls }?,
429     element trendline { dchrt_CT_Trendline }*,
430     element errBars { dchrt_CT_ErrBars }*,
431     element xVal { dchrt_CT_AxDataSource }?,
432     element yVal { dchrt_CT_NumDataSource }?,
433     element smooth { dchrt_CT_Boolean }?,
434     element extLst { dchrt_CT_ExtensionList }?
435 dchrt_CT_RadarSer =
436     dchrt_EG_SerShared,
437     element marker { dchrt_CT_Marker }?,
438     element dPt { dchrt_CT_DPt }*,
439     element dLbls { dchrt_CT_DLbls }?,
440     element cat { dchrt_CT_AxDataSource }?,
441     element val { dchrt_CT_NumDataSource }?,
442     element extLst { dchrt_CT_ExtensionList }?
443 dchrt_CT_BarSer =

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444     dchrt_EG_SerShared,
445     element invertIfNegative { dchrt_CT_Boolean }?,
446     element pictureOptions { dchrt_CT_PictureOptions }?,
447     element dPt { dchrt_CT_DPt }*,
448     element dLbls { dchrt_CT_DLbls }?,
449     element trendline { dchrt_CT_Trendline }*,
450     element errBars { dchrt_CT_ErrBars }?,
451     element cat { dchrt_CT_AxDataSource }?,
452     element val { dchrt_CT_NumDataSource }?,
453     element shape { dchrt_CT_Shape }?,
454     element extLst { dchrt_CT_ExtensionList }?
455 dchrt_CT_AreaSer =
456     dchrt_EG_SerShared,
457     element pictureOptions { dchrt_CT_PictureOptions }?,
458     element dPt { dchrt_CT_DPt }*,
459     element dLbls { dchrt_CT_DLbls }?,
460     element trendline { dchrt_CT_Trendline }*,
461     element errBars { dchrt_CT_ErrBars }*,
462     element cat { dchrt_CT_AxDataSource }?,
463     element val { dchrt_CT_NumDataSource }?,
464     element extLst { dchrt_CT_ExtensionList }?
465 dchrt_CT_PieSer =
466     dchrt_EG_SerShared,
467     element explosion { dchrt_CT_UnsignedInt }?,
468     element dPt { dchrt_CT_DPt }*,
469     element dLbls { dchrt_CT_DLbls }?,
470     element cat { dchrt_CT_AxDataSource }?,
471     element val { dchrt_CT_NumDataSource }?,
472     element extLst { dchrt_CT_ExtensionList }?
473 dchrt_CT_BubbleSer =
474     dchrt_EG_SerShared,
475     element invertIfNegative { dchrt_CT_Boolean }?,
476     element dPt { dchrt_CT_DPt }*,
477     element dLbls { dchrt_CT_DLbls }?,
478     element trendline { dchrt_CT_Trendline }*,
479     element errBars { dchrt_CT_ErrBars }*,
480     element xVal { dchrt_CT_AxDataSource }?,
481     element yVal { dchrt_CT_NumDataSource }?,
482     element bubbleSize { dchrt_CT_NumDataSource }?,
483     element bubble3D { dchrt_CT_Boolean }?,
484     element extLst { dchrt_CT_ExtensionList }?
485 dchrt_CT_SurfaceSer =
486     dchrt_EG_SerShared,
487     element cat { dchrt_CT_AxDataSource }?,
488     element val { dchrt_CT_NumDataSource }?,
489     element extLst { dchrt_CT_ExtensionList }?
490 dchrt_ST_Grouping =
491     string "percentStacked" | string "standard" | string "stacked"
492 dchrt_CT_Grouping =
493
494     ## default value: standard
495     attribute val { dchrt_ST_Grouping }?
496 dchrt_CT_ChartLines = element spPr { a_CT_ShapeProperties }?

```



```

497 dchrt_EG_LineChartShared =
498     element grouping { dchrt_CT_Grouping },
499     element varyColors { dchrt_CT_Boolean }?,
500     element ser { dchrt_CT_LineSer }*,
501     element dLbIs { dchrt_CT_DLbIs }?,
502     element dropLines { dchrt_CT_ChartLines }?
503 dchrt_CT_LineChart =
504     dchrt_EG_LineChartShared,
505     element hiLowLines { dchrt_CT_ChartLines }?,
506     element upDownBars { dchrt_CT_UpDownBars }?,
507     element marker { dchrt_CT_Boolean }?,
508     element smooth { dchrt_CT_Boolean }?,
509     element axId { dchrt_CT_UnsignedInt }+,
510     element extLst { dchrt_CT_ExtensionList }?
511 dchrt_CT_Line3DChart =
512     dchrt_EG_LineChartShared,
513     element gapDepth { dchrt_CT_GapAmount }?,
514     element axId { dchrt_CT_UnsignedInt }+,
515     element extLst { dchrt_CT_ExtensionList }?
516 dchrt_CT_StockChart =
517     element ser { dchrt_CT_LineSer }+,
518     element dLbIs { dchrt_CT_DLbIs }?,
519     element dropLines { dchrt_CT_ChartLines }?,
520     element hiLowLines { dchrt_CT_ChartLines }?,
521     element upDownBars { dchrt_CT_UpDownBars }?,
522     element axId { dchrt_CT_UnsignedInt }+,
523     element extLst { dchrt_CT_ExtensionList }?
524 dchrt_ST_ScatterStyle =
525     string "none"
526     | string "line"
527     | string "lineMarker"
528     | string "marker"
529     | string "smooth"
530     | string "smoothMarker"
531 dchrt_CT_ScatterStyle =
532
533     ## default value: marker
534     attribute val { dchrt_ST_ScatterStyle }?
535 dchrt_CT_ScatterChart =
536     element scatterStyle { dchrt_CT_ScatterStyle },
537     element varyColors { dchrt_CT_Boolean }?,
538     element ser { dchrt_CT_ScatterSer }*,
539     element dLbIs { dchrt_CT_DLbIs }?,
540     element axId { dchrt_CT_UnsignedInt }+,
541     element extLst { dchrt_CT_ExtensionList }?
542 dchrt_ST_RadarStyle =
543     string "standard" | string "marker" | string "filled"
544 dchrt_CT_RadarStyle =
545
546     ## default value: standard
547     attribute val { dchrt_ST_RadarStyle }?
548 dchrt_CT_RadarChart =
549     element radarStyle { dchrt_CT_RadarStyle },

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550     element varyColors { dchrt_CT_Boolean }?,
551     element ser { dchrt_CT_RadarSer }*,
552     element dLbIs { dchrt_CT_DLbIs }?,
553     element axId { dchrt_CT_UnsignedInt }+,
554     element extLst { dchrt_CT_ExtensionList }?
555 dchrt_ST_BarGrouping =
556     string "percentStacked"
557     | string "clustered"
558     | string "standard"
559     | string "stacked"
560 dchrt_CT_BarGrouping =
561
562     ## default value: clustered
563     attribute val { dchrt_ST_BarGrouping }?
564 dchrt_ST_BarDir = string "bar" | string "col"
565 dchrt_CT_BarDir =
566
567     ## default value: col
568     attribute val { dchrt_ST_BarDir }?
569 dchrt_ST_Shape =
570     string "cone"
571     | string "coneToMax"
572     | string "box"
573     | string "cylinder"
574     | string "pyramid"
575     | string "pyramidToMax"
576 dchrt_CT_Shape =
577
578     ## default value: box
579     attribute val { dchrt_ST_Shape }?
580 dchrt_EG_BarChartShared =
581     element barDir { dchrt_CT_BarDir },
582     element grouping { dchrt_CT_BarGrouping }?,
583     element varyColors { dchrt_CT_Boolean }?,
584     element ser { dchrt_CT_BarSer }*,
585     element dLbIs { dchrt_CT_DLbIs }?
586 dchrt_CT_BarChart =
587     dchrt_EG_BarChartShared,
588     element gapWidth { dchrt_CT_GapAmount }?,
589     element overlap { dchrt_CT_Overlap }?,
590     element serLines { dchrt_CT_ChartLines }*,
591     element axId { dchrt_CT_UnsignedInt }+,
592     element extLst { dchrt_CT_ExtensionList }?
593 dchrt_CT_Bar3DChart =
594     dchrt_EG_BarChartShared,
595     element gapWidth { dchrt_CT_GapAmount }?,
596     element gapDepth { dchrt_CT_GapAmount }?,
597     element shape { dchrt_CT_Shape }?,
598     element axId { dchrt_CT_UnsignedInt }+,
599     element extLst { dchrt_CT_ExtensionList }?
600 dchrt_EG_AreaChartShared =
601     element grouping { dchrt_CT_Grouping }?,
602     element varyColors { dchrt_CT_Boolean }?,

```

```

603     element ser { dchrt_CT_AreaSer }*,
604     element dLbIs { dchrt_CT_DLbIs }?,
605     element dropLines { dchrt_CT_ChartLines }?
606 dchrt_CT_AreaChart =
607     dchrt_EG_AreaChartShared,
608     element axId { dchrt_CT_UnsignedInt }+,
609     element extLst { dchrt_CT_ExtensionList }?
610 dchrt_CT_Area3DChart =
611     dchrt_EG_AreaChartShared,
612     element gapDepth { dchrt_CT_GapAmount }?,
613     element axId { dchrt_CT_UnsignedInt }+,
614     element extLst { dchrt_CT_ExtensionList }?
615 dchrt_EG_PieChartShared =
616     element varyColors { dchrt_CT_Boolean }?,
617     element ser { dchrt_CT_PieSer }*,
618     element dLbIs { dchrt_CT_DLbIs }?
619 dchrt_CT_PieChart =
620     dchrt_EG_PieChartShared,
621     element firstSliceAng { dchrt_CT_FirstSliceAng }?,
622     element extLst { dchrt_CT_ExtensionList }?
623 dchrt_CT_Pie3DChart =
624     dchrt_EG_PieChartShared,
625     element extLst { dchrt_CT_ExtensionList }?
626 dchrt_CT_DoughnutChart =
627     dchrt_EG_PieChartShared,
628     element firstSliceAng { dchrt_CT_FirstSliceAng }?,
629     element holeSize { dchrt_CT_HoleSize }?,
630     element extLst { dchrt_CT_ExtensionList }?
631 dchrt_ST_OfPieType = string "pie" | string "bar"
632 dchrt_CT_OfPieType =
633
634     ## default value: pie
635     attribute val { dchrt_ST_OfPieType }?
636 dchrt_CT_OfPieChart =
637     element ofPieType { dchrt_CT_OfPieType },
638     dchrt_EG_PieChartShared,
639     element gapWidth { dchrt_CT_GapAmount }?,
640     element splitType { dchrt_CT_SplitType }?,
641     element splitPos { dchrt_CT_Double }?,
642     element custSplit { dchrt_CT_CustSplit }?,
643     element secondPieSize { dchrt_CT_SecondPieSize }?,
644     element serLines { dchrt_CT_ChartLines }*,
645     element extLst { dchrt_CT_ExtensionList }?
646 dchrt_CT_BubbleChart =
647     element varyColors { dchrt_CT_Boolean }?,
648     element ser { dchrt_CT_BubbleSer }*,
649     element dLbIs { dchrt_CT_DLbIs }?,
650     element bubble3D { dchrt_CT_Boolean }?,
651     element bubbleScale { dchrt_CT_BubbleScale }?,
652     element showNegBubbles { dchrt_CT_Boolean }?,
653     element sizeRepresents { dchrt_CT_SizeRepresents }?,
654     element axId { dchrt_CT_UnsignedInt }+,
655     element extLst { dchrt_CT_ExtensionList }?

```

```

656 dchrt_CT_BandFmt =
657     element idx { dchrt_CT_UnsignedInt },
658     element spPr { a_CT_ShapeProperties }?
659 dchrt_CT_BandFmts = element bandFmt { dchrt_CT_BandFmt }*
660 dchrt_EG_SurfaceChartShared =
661     element wireframe { dchrt_CT_Boolean }?,
662     element ser { dchrt_CT_SurfaceSer }*,
663     element bandFmts { dchrt_CT_BandFmts }?
664 dchrt_CT_SurfaceChart =
665     dchrt_EG_SurfaceChartShared,
666     element axId { dchrt_CT_UnsignedInt }+,
667     element extLst { dchrt_CT_ExtensionList }?
668 dchrt_CT_Surface3DChart =
669     dchrt_EG_SurfaceChartShared,
670     element axId { dchrt_CT_UnsignedInt }+,
671     element extLst { dchrt_CT_ExtensionList }?
672 dchrt_ST_AxPos = string "b" | string "l" | string "r" | string "t"
673 dchrt_CT_AxPos = attribute val { dchrt_ST_AxPos }
674 dchrt_ST_Crosses = string "autoZero" | string "max" | string "min"
675 dchrt_CT_Crosses = attribute val { dchrt_ST_Crosses }
676 dchrt_ST_CrossBetween = string "between" | string "midCat"
677 dchrt_CT_CrossBetween = attribute val { dchrt_ST_CrossBetween }
678 dchrt_ST_TickMark =
679     string "cross" | string "in" | string "none" | string "out"
680 dchrt_CT_TickMark =
681
682     ## default value: cross
683     attribute val { dchrt_ST_TickMark }?
684 dchrt_ST_TickLblPos =
685     string "high" | string "low" | string "nextTo" | string "none"
686 dchrt_CT_TickLblPos =
687
688     ## default value: nextTo
689     attribute val { dchrt_ST_TickLblPos }?
690 dchrt_ST_Skip = xsd:unsignedInt { minInclusive = "1" }
691 dchrt_CT_Skip = attribute val { dchrt_ST_Skip }
692 dchrt_ST_TimeUnit = string "days" | string "months" | string "years"
693 dchrt_CT_TimeUnit =
694
695     ## default value: days
696     attribute val { dchrt_ST_TimeUnit }?
697 dchrt_ST_AxisUnit = xsd:double { minExclusive = "0" }
698 dchrt_CT_AxisUnit = attribute val { dchrt_ST_AxisUnit }
699 dchrt_ST_BuiltInUnit =
700     string "hundreds"
701     | string "thousands"
702     | string "tenThousands"
703     | string "hundredThousands"
704     | string "millions"
705     | string "tenMillions"
706     | string "hundredMillions"
707     | string "billions"
708     | string "trillions"

```

```

709 dchrt_CT_BuiltInUnit =
710
711     ## default value: thousands
712     attribute val { dchrt_ST_BuiltInUnit }?
713 dchrt_ST_PictureFormat =
714     string "stretch" | string "stack" | string "stackScale"
715 dchrt_CT_PictureFormat = attribute val { dchrt_ST_PictureFormat }
716 dchrt_ST_PictureStackUnit = xsd:double { minExclusive = "0" }
717 dchrt_CT_PictureStackUnit = attribute val { dchrt_ST_PictureStackUnit }
718 dchrt_CT_PictureOptions =
719     element applyToFront { dchrt_CT_Boolean }?,
720     element applyToSides { dchrt_CT_Boolean }?,
721     element applyToEnd { dchrt_CT_Boolean }?,
722     element pictureFormat { dchrt_CT_PictureFormat }?,
723     element pictureStackUnit { dchrt_CT_PictureStackUnit }?
724 dchrt_CT_DispUnitsLbl =
725     element layout { dchrt_CT_Layout }?,
726     element tx { dchrt_CT_Tx }?,
727     element spPr { a_CT_ShapeProperties }?,
728     element txPr { a_CT_TextBody }?
729 dchrt_CT_DispUnits =
730     (element custUnit { dchrt_CT_Double }
731     | element builtInUnit { dchrt_CT_BuiltInUnit } ),
732     element dispUnitsLbl { dchrt_CT_DispUnitsLbl }?,
733     element extLst { dchrt_CT_ExtensionList }?
734 dchrt_ST_Orientation = string "maxMin" | string "minMax"
735 dchrt_CT_Orientation =
736
737     ## default value: minMax
738     attribute val { dchrt_ST_Orientation }?
739 dchrt_ST_LogBase =
740     xsd:double { minInclusive = "2" maxInclusive = "1000" }
741 dchrt_CT_LogBase = attribute val { dchrt_ST_LogBase }
742 dchrt_CT_Scaling =
743     element logBase { dchrt_CT_LogBase }?,
744     element orientation { dchrt_CT_Orientation }?,
745     element max { dchrt_CT_Double }?,
746     element min { dchrt_CT_Double }?,
747     element extLst { dchrt_CT_ExtensionList }?
748 dchrt_ST_LblOffset =
749 dchrt_ST_LblOffsetPercent | dchrt_ST_LblOffsetUShort
750 dchrt_ST_LblOffsetPercent =
751     xsd:string {
752         pattern = "0*(([0-9])|([1-9][0-9])|([1-9][0-9][0-9])|1000)%"
753     }
754 dchrt_ST_LblOffsetUShort =
755     xsd:unsignedShort { minInclusive = "0" maxInclusive = "1000" }
756 dchrt_CT_LblOffset =
757
758     ## default value: 100%
759     attribute val { dchrt_ST_LblOffset }?
760 dchrt_EG_AxShared =
761     element axId { dchrt_CT_UnsignedInt },

```

```

762   element scaling { dchrt_CT_Scaling },
763   element delete { dchrt_CT_Boolean }?,
764   element axPos { dchrt_CT_AxPos },
765   element majorGridlines { dchrt_CT_ChartLines }?,
766   element minorGridlines { dchrt_CT_ChartLines }?,
767   element title { dchrt_CT_Title }?,
768   element numFmt { dchrt_CT_NumFmt }?,
769   element majorTickMark { dchrt_CT_TickMark }?,
770   element minorTickMark { dchrt_CT_TickMark }?,
771   element tickLblPos { dchrt_CT_TickLblPos }?,
772   element spPr { a_CT_ShapeProperties }?,
773   element txPr { a_CT_TextBody }?,
774   element crossAx { dchrt_CT_UnsignedInt },
775   (element crosses { dchrt_CT_Crosses }
776    | element crossesAt { dchrt_CT_Double })?
777 dchrt_CT_CatAx =
778   dchrt_EG_AxShared,
779   element auto { dchrt_CT_Boolean }?,
780   element lblAlgn { dchrt_CT_LblAlgn }?,
781   element lblOffset { dchrt_CT_LblOffset }?,
782   element tickLblSkip { dchrt_CT_Skip }?,
783   element tickMarkSkip { dchrt_CT_Skip }?,
784   element noMultiLvlLbl { dchrt_CT_Boolean }?,
785   element extLst { dchrt_CT_ExtensionList }?
786 dchrt_CT_DateAx =
787   dchrt_EG_AxShared,
788   element auto { dchrt_CT_Boolean }?,
789   element lblOffset { dchrt_CT_LblOffset }?,
790   element baseTimeUnit { dchrt_CT_TimeUnit }?,
791   element majorUnit { dchrt_CT_AxisUnit }?,
792   element majorTimeUnit { dchrt_CT_TimeUnit }?,
793   element minorUnit { dchrt_CT_AxisUnit }?,
794   element minorTimeUnit { dchrt_CT_TimeUnit }?,
795   element extLst { dchrt_CT_ExtensionList }?
796 dchrt_CT_SerAx =
797   dchrt_EG_AxShared,
798   element tickLblSkip { dchrt_CT_Skip }?,
799   element tickMarkSkip { dchrt_CT_Skip }?,
800   element extLst { dchrt_CT_ExtensionList }?
801 dchrt_CT_ValAx =
802   dchrt_EG_AxShared,
803   element crossBetween { dchrt_CT_CrossBetween }?,
804   element majorUnit { dchrt_CT_AxisUnit }?,
805   element minorUnit { dchrt_CT_AxisUnit }?,
806   element dispUnits { dchrt_CT_DisUnits }?,
807   element extLst { dchrt_CT_ExtensionList }?
808 dchrt_CT_PlotArea =
809   element layout { dchrt_CT_Layout }?,
810   (element areaChart { dchrt_CT_AreaChart }
811    | element area3DChart { dchrt_CT_Area3DChart }
812    | element lineChart { dchrt_CT_LineChart }
813    | element line3DChart { dchrt_CT_Line3DChart }
814    | element stockChart { dchrt_CT_StockChart }

```

```

815 | element radarChart { dchrt_CT_RadarChart }
816 | element scatterChart { dchrt_CT_ScatterChart }
817 | element pieChart { dchrt_CT_PieChart }
818 | element pie3DChart { dchrt_CT_Pie3DChart }
819 | element doughnutChart { dchrt_CT_DoughnutChart }
820 | element barChart { dchrt_CT_BarChart }
821 | element bar3DChart { dchrt_CT_Bar3DChart }
822 | element ofPieChart { dchrt_CT_OfPieChart }
823 | element surfaceChart { dchrt_CT_SurfaceChart }
824 | element surface3DChart { dchrt_CT_Surface3DChart }
825 | element bubbleChart { dchrt_CT_BubbleChart }},
826 (element valAx { dchrt_CT_ValAx }
827 | element catAx { dchrt_CT_CatAx }
828 | element dateAx { dchrt_CT_DateAx }
829 | element serAx { dchrt_CT_SerAx })*,
830 element dTable { dchrt_CT_DTable }?,
831 element spPr { a_CT_ShapeProperties }?,
832 element extLst { dchrt_CT_ExtensionList }?
833 dchrt_CT_PivotFmt =
834 | element idx { dchrt_CT_UnsignedInt },
835 | element spPr { a_CT_ShapeProperties }?,
836 | element txPr { a_CT_TextBody }?,
837 | element marker { dchrt_CT_Marker }?,
838 | element dLbl { dchrt_CT_DLbl }?,
839 | element extLst { dchrt_CT_ExtensionList }?
840 dchrt_CT_PivotFmts = element pivotFmt { dchrt_CT_PivotFmt }*
841 dchrt_ST_LegendPos =
842 | string "b" | string "tr" | string "l" | string "r" | string "t"
843 dchrt_CT_LegendPos =
844
845 ## default value: r
846 attribute val { dchrt_ST_LegendPos }?
847 dchrt_EG_LegendEntryData = element txPr { a_CT_TextBody }?
848 dchrt_CT_LegendEntry =
849 | element idx { dchrt_CT_UnsignedInt },
850 | (element delete { dchrt_CT_Boolean }
851 | dchrt_EG_LegendEntryData),
852 | element extLst { dchrt_CT_ExtensionList }?
853 dchrt_CT_Legend =
854 | element legendPos { dchrt_CT_LegendPos }?,
855 | element legendEntry { dchrt_CT_LegendEntry }*,
856 | element layout { dchrt_CT_Layout }?,
857 | element overlay { dchrt_CT_Boolean }?,
858 | element spPr { a_CT_ShapeProperties }?,
859 | element txPr { a_CT_TextBody }?,
860 | element extLst { dchrt_CT_ExtensionList }?
861 dchrt_ST_DisbBlanksAs = string "span" | string "gap" | string "zero"
862 dchrt_CT_DisbBlanksAs =
863
864 ## default value: zero
865 attribute val { dchrt_ST_DisbBlanksAs }?
866 dchrt_CT_Chart =
867 | element title { dchrt_CT_Title }?,

```

```

868     element autoTitleDeleted { dchrt_CT_Boolean }?,
869     element pivotFmts { dchrt_CT_PivotFmts }?,
870     element view3D { dchrt_CT_View3D }?,
871     element floor { dchrt_CT_Surface }?,
872     element sideWall { dchrt_CT_Surface }?,
873     element backWall { dchrt_CT_Surface }?,
874     element plotArea { dchrt_CT_PlotArea },
875     element legend { dchrt_CT_Legend }?,
876     element plotVisOnly { dchrt_CT_Boolean }?,
877     element dispBlanksAs { dchrt_CT_DispBlanksAs }?,
878     element showDLblsOverMax { dchrt_CT_Boolean }?,
879     element extLst { dchrt_CT_ExtensionList }?
880 dchrt_ST_Style =
881     xsd:unsignedByte { minInclusive = "1" maxInclusive = "48" }
882 dchrt_CT_Style = attribute val { dchrt_ST_Style }
883 dchrt_CT_PivotSource =
884     element name { s_ST_Xstring },
885     element fmtId { dchrt_CT_UnsignedInt },
886     element extLst { dchrt_CT_ExtensionList }*
887 dchrt_CT_Protection =
888     element chartObject { dchrt_CT_Boolean }?,
889     element data { dchrt_CT_Boolean }?,
890     element formatting { dchrt_CT_Boolean }?,
891     element selection { dchrt_CT_Boolean }?,
892     element userInterface { dchrt_CT_Boolean }?
893 dchrt_CT_HeaderFooter =
894
895     ## default value: true
896     attribute alignWithMargins { xsd:boolean }?,
897
898     ## default value: false
899     attribute differentOddEven { xsd:boolean }?,
900
901     ## default value: false
902     attribute differentFirst { xsd:boolean }?,
903     element oddHeader { s_ST_Xstring }?,
904     element oddFooter { s_ST_Xstring }?,
905     element evenHeader { s_ST_Xstring }?,
906     element evenFooter { s_ST_Xstring }?,
907     element firstHeader { s_ST_Xstring }?,
908     element firstFooter { s_ST_Xstring }?
909 dchrt_CT_PageMargins =
910     attribute l { xsd:double },
911     attribute r { xsd:double },
912     attribute t { xsd:double },
913     attribute b { xsd:double },
914     attribute header { xsd:double },
915     attribute footer { xsd:double }
916 dchrt_ST_PageSetupOrientation =
917     string "default" | string "portrait" | string "landscape"
918 dchrt_CT_ExternalData =
919     r_id,
920     element autoUpdate { dchrt_CT_Boolean }?

```



```

921 dchrt_CT_PageSetup =
922
923   ## default value: 1
924   attribute paperSize { xsd:unsignedInt }?,
925   attribute paperHeight { s_ST_PositiveUniversalMeasure }?,
926   attribute paperWidth { s_ST_PositiveUniversalMeasure }?,
927
928   ## default value: 1
929   attribute firstPageNumber { xsd:unsignedInt }?,
930
931   ## default value: default
932   attribute orientation { dchrt_ST_PageSetupOrientation }?,
933
934   ## default value: false
935   attribute blackAndWhite { xsd:boolean }?,
936
937   ## default value: false
938   attribute draft { xsd:boolean }?,
939
940   ## default value: false
941   attribute useFirstPageNumber { xsd:boolean }?,
942
943   ## default value: 600
944   attribute horizontalDpi { xsd:int }?,
945
946   ## default value: 600
947   attribute verticalDpi { xsd:int }?,
948
949   ## default value: 1
950   attribute copies { xsd:unsignedInt }?
951 dchrt_CT_PrintSettings =
952   element headerFooter { dchrt_CT_HeaderFooter }?,
953   element pageMargins { dchrt_CT_PageMargins }?,
954   element pageSetup { dchrt_CT_PageSetup }?,
955   element legacyDrawingHT { dchrt_CT_RelId }?
956 dchrt_CT_ChartSpace =
957   element date1904 { dchrt_CT_Boolean }?,
958   element lang { dchrt_CT_TextLanguageID }?,
959   element roundedCorners { dchrt_CT_Boolean }?,
960   element style { dchrt_CT_Style }?,
961   element clrMapOvr { a_CT_ColorMapping }?,
962   element pivotSource { dchrt_CT_PivotSource }?,
963   element protection { dchrt_CT_Protection }?,
964   element chart { dchrt_CT_Chart },
965   element spPr { a_CT_ShapeProperties }?,
966   element txPr { a_CT_TextBody }?,
967   element externalData { dchrt_CT_ExternalData }?,
968   element printSettings { dchrt_CT_PrintSettings }?,
969   element userShapes { dchrt_CT_RelId }?,
970   element extLst { dchrt_CT_ExtensionList }?
971 dchrt_chartSpace = element chartSpace { dchrt_CT_ChartSpace }
972 dchrt_userShapes = element userShapes { cdr_CT_Drawing }
973 dchrt_chart = element chart { dchrt_CT_RelId }

```

B.5.1.1 Part Schemas

B.5.1.1.1 Chart Part

This schema is available in the file DrawingML_Chart.rnc.

```

1 include "dml-chart.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"
4 include "dml-diagram.rnc"
5 include "shared-commonSimpleTypes.rnc"
6 include "dml-lockedCanvas.rnc"
7 include "any.rnc"
8 include "dml-picture.rnc"
9 include "dml-compatibility.rnc"
10 include "dml-chartDrawing.rnc"
11 start = dchrt_chartSpace

```

B.5.1.1.2 Chart Drawing Part

This schema is available in the file DrawingML_Chart_Drawing.rnc.

```

1 include "dml-chart.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"
4 include "dml-diagram.rnc"
5 include "shared-commonSimpleTypes.rnc"
6 include "dml-lockedCanvas.rnc"
7 include "any.rnc"
8 include "dml-picture.rnc"
9 include "dml-compatibility.rnc"
10 include "dml-chartDrawing.rnc"
11 start = dchrt_userShapes

```

B.5.2 DrawingML - Chart Drawing

This schema is available in the file dml-chartDrawing.rnc.

```

1 default namespace =
2   "http://schemas.openxmlformats.org/drawingml/2006/chartDrawing"
3 namespace a = "http://schemas.openxmlformats.org/drawingml/2006/main"
4 namespace cdr =
5   "http://schemas.openxmlformats.org/drawingml/2006/chartDrawing"
6 namespace o = "urn:schemas-microsoft-com:office:office"
7 namespace v = "urn:schemas-microsoft-com:vm1"
8 namespace w10 = "urn:schemas-microsoft-com:office:word"
9 namespace x = "urn:schemas-microsoft-com:office:excel"
10
11 cdr_CT_ShapeNonVisual =
12   element cNvPr { a_CT_NonVisualDrawingProps },
13   element cNvSpPr { a_CT_NonVisualDrawingShapeProps }
14 cdr_CT_Shape =
15   attribute macro { xsd:string }?,

```

```

16 attribute textlink { xsd:string }?,
17
18 ## default value: true
19 attribute fLocksText { xsd:boolean }?,
20
21 ## default value: false
22 attribute fPublished { xsd:boolean }?,
23 element nvSpPr { cdr_CT_ShapeNonVisual },
24 element spPr { a_CT_ShapeProperties },
25 element style { a_CT_ShapeStyle }?,
26 element txBody { a_CT_TextBody }?
27 cdr_CT_ConnectorNonVisual =
28   element cNvPr { a_CT_NonVisualDrawingProps },
29   element cNvCxnSpPr { a_CT_NonVisualConnectorProperties }
30 cdr_CT_Connector =
31   attribute macro { xsd:string }?,
32
33 ## default value: false
34 attribute fPublished { xsd:boolean }?,
35 element nvCxnSpPr { cdr_CT_ConnectorNonVisual },
36 element spPr { a_CT_ShapeProperties },
37 element style { a_CT_ShapeStyle }?
38 cdr_CT_PictureNonVisual =
39   element cNvPr { a_CT_NonVisualDrawingProps },
40   element cNvPicPr { a_CT_NonVisualPictureProperties }
41 cdr_CT_Picture =
42   attribute macro { xsd:string }?,
43
44 ## default value: false
45 attribute fPublished { xsd:boolean }?,
46 element nvPicPr { cdr_CT_PictureNonVisual },
47 element blipFill { a_CT_BlipFillProperties },
48 element spPr { a_CT_ShapeProperties },
49 element style { a_CT_ShapeStyle }?
50 cdr_CT_GraphicFrameNonVisual =
51   element cNvPr { a_CT_NonVisualDrawingProps },
52   element cNvGraphicFramePr { a_CT_NonVisualGraphicFrameProperties }
53 cdr_CT_GraphicFrame =
54   attribute macro { xsd:string }?,
55
56 ## default value: false
57 attribute fPublished { xsd:boolean }?,
58 element nvGraphicFramePr { cdr_CT_GraphicFrameNonVisual },
59 element xfrm { a_CT_Transform2D },
60 a_graphic
61 cdr_CT_GroupShapeNonVisual =
62   element cNvPr { a_CT_NonVisualDrawingProps },
63   element cNvGrpSpPr { a_CT_NonVisualGroupDrawingShapeProps }
64 cdr_CT_GroupShape =
65   element nvGrpSpPr { cdr_CT_GroupShapeNonVisual },
66   element grpSpPr { a_CT_GroupShapeProperties },
67   (element sp { cdr_CT_Shape }
68     | element grpSp { cdr_CT_GroupShape }

```

```

69 | element graphicFrame { cdr_CT_GraphicFrame }
70 | element cxnSp { cdr_CT_Connector }
71 | element pic { cdr_CT_Picture })*
72 cdr_EG_ObjectChoices =
73   element sp { cdr_CT_Shape }
74   | element grpSp { cdr_CT_GroupShape }
75   | element graphicFrame { cdr_CT_GraphicFrame }
76   | element cxnSp { cdr_CT_Connector }
77   | element pic { cdr_CT_Picture }
78 cdr_ST_MarkerCoordinate =
79   xsd:double { minInclusive = "0.0" maxInclusive = "1.0" }
80 cdr_CT_Marker =
81   element x { cdr_ST_MarkerCoordinate },
82   element y { cdr_ST_MarkerCoordinate }
83 cdr_CT_RelSizeAnchor =
84   element from { cdr_CT_Marker },
85   element to { cdr_CT_Marker },
86   cdr_EG_ObjectChoices
87 cdr_CT_AbsSizeAnchor =
88   element from { cdr_CT_Marker },
89   element ext { a_CT_PositiveSize2D },
90   cdr_EG_ObjectChoices
91 cdr_EG_Anchor =
92   element relSizeAnchor { cdr_CT_RelSizeAnchor }
93   | element absSizeAnchor { cdr_CT_AbsSizeAnchor }
94 cdr_CT_Drawing = cdr_EG_Anchor*

```

B.5.3 DrawingML - Diagrams

This schema is available in the file dml-diagram.rnc.

```

1 default namespace =
2   "http://schemas.openxmlformats.org/drawingml/2006/diagram"
3 namespace a = "http://schemas.openxmlformats.org/drawingml/2006/main"
4 namespace ddgrm =
5   "http://schemas.openxmlformats.org/drawingml/2006/diagram"
6 namespace o = "urn:schemas-microsoft-com:office:office"
7 namespace r =
8   "http://schemas.openxmlformats.org/officeDocument/2006/relationships"
9 namespace s =
10  "http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
11 namespace v = "urn:schemas-microsoft-com:vml"
12 namespace w10 = "urn:schemas-microsoft-com:office:word"
13 namespace x = "urn:schemas-microsoft-com:office:excel"
14
15 ddgrm_CT_CTName =
16   attribute lang { xsd:string }?,
17   attribute val { xsd:string }
18 ddgrm_CT_CTDescription =
19   attribute lang { xsd:string }?,
20   attribute val { xsd:string }
21 ddgrm_CT_CTCategory =
22   attribute type { xsd:anyURI },

```

```

23     attribute pri { xsd:unsignedInt }
24 ddgrm_CT_CTCategories = element cat { ddgrm_CT_CTCategory }*
25 ddgrm_ST_ClrAppMethod = "span" | "cycle" | "repeat"
26 ddgrm_ST_HueDir = "cw" | "ccw"
27 ddgrm_CT_Colors =
28
29     ## default value: span
30     attribute meth { ddgrm_ST_ClrAppMethod }?,
31
32     ## default value: cw
33     attribute hueDir { ddgrm_ST_HueDir }?,
34     a_EG_ColorChoice*
35 ddgrm_CT_CTStyleLabel =
36     attribute name { xsd:string },
37     element fillClrLst { ddgrm_CT_Colors }?,
38     element linClrLst { ddgrm_CT_Colors }?,
39     element effectClrLst { ddgrm_CT_Colors }?,
40     element txLinClrLst { ddgrm_CT_Colors }?,
41     element txFillClrLst { ddgrm_CT_Colors }?,
42     element txEffectClrLst { ddgrm_CT_Colors }?,
43     element extLst { a_CT_OfficeArtExtensionList }?
44 ddgrm_CT_ColorTransform =
45     attribute uniqueId { xsd:string }?,
46
47     ## default value: http://schemas.openxmlformats.org/drawingml/2006/diagram
48     attribute minVer { xsd:string }?,
49     element title { ddgrm_CT_CTName }*,
50     element desc { ddgrm_CT_CTDescription }*,
51     element catLst { ddgrm_CT_CTCategories }?,
52     element styleLbl { ddgrm_CT_CTStyleLabel }*,
53     element extLst { a_CT_OfficeArtExtensionList }?
54 ddgrm_colorsDef = element colorsDef { ddgrm_CT_ColorTransform }
55 ddgrm_CT_ColorTransformHeader =
56     attribute uniqueId { xsd:string },
57
58     ## default value: http://schemas.openxmlformats.org/drawingml/2006/diagram
59     attribute minVer { xsd:string }?,
60
61     ## default value: 0
62     attribute resId { xsd:int }?,
63     element title { ddgrm_CT_CTName }+,
64     element desc { ddgrm_CT_CTDescription }+,
65     element catLst { ddgrm_CT_CTCategories }?,
66     element extLst { a_CT_OfficeArtExtensionList }?
67 ddgrm_colorsDefHdr =
68     element colorsDefHdr { ddgrm_CT_ColorTransformHeader }
69 ddgrm_CT_ColorTransformHeaderLst =
70     element colorsDefHdr { ddgrm_CT_ColorTransformHeader }*
71 ddgrm_colorsDefHdrLst =
72     element colorsDefHdrLst { ddgrm_CT_ColorTransformHeaderLst }
73 ddgrm_ST_PtType =
74     "node" | "asst" | "doc" | "pres" | "parTrans" | "sibTrans"
75 ddgrm_CT_Pt =

```

```

76     attribute modelId { ddgrm_ST_ModelId },
77
78     ## default value: node
79     attribute type { ddgrm_ST_PtType }?,
80
81     ## default value: 0
82     attribute cxnId { ddgrm_ST_ModelId }?,
83     element prSet { ddgrm_CT_ElemPropSet }?,
84     element spPr { a_CT_ShapeProperties }?,
85     element t { a_CT_TextBody }?,
86     element extLst { a_CT_OfficeArtExtensionList }?
87 ddgrm_CT_PtList = element pt { ddgrm_CT_Pt }*
88 ddgrm_ST_CxnType =
89     "parOf" | "presOf" | "presParOf" | "unknownRelationship"
90 ddgrm_CT_Cxn =
91     attribute modelId { ddgrm_ST_ModelId },
92
93     ## default value: parOf
94     attribute type { ddgrm_ST_CxnType }?,
95     attribute srcId { ddgrm_ST_ModelId },
96     attribute destId { ddgrm_ST_ModelId },
97     attribute srcOrd { xsd:unsignedInt },
98     attribute destOrd { xsd:unsignedInt },
99
100    ## default value: 0
101    attribute parTransId { ddgrm_ST_ModelId }?,
102
103    ## default value: 0
104    attribute sibTransId { ddgrm_ST_ModelId }?,
105    attribute presId { xsd:string }?,
106    element extLst { a_CT_OfficeArtExtensionList }?
107 ddgrm_CT_CxnList = element cxn { ddgrm_CT_Cxn }*
108 ddgrm_CT_DataModel =
109     element ptLst { ddgrm_CT_PtList },
110     element cxnLst { ddgrm_CT_CxnList }?,
111     element bg { a_CT_BackgroundFormatting }?,
112     element whole { a_CT_WholeE2oFormatting }?,
113     element extLst { a_CT_OfficeArtExtensionList }?
114 ddgrm_dataModel = element dataModel { ddgrm_CT_DataModel }
115 ddgrm_AG_IteratorAttributes =
116
117     ## default value: none
118     attribute axis { ddgrm_ST_AxisTypes }?,
119
120     ## default value: all
121     attribute ptType { ddgrm_ST_ElementTypes }?,
122
123     ## default value: true
124     attribute hideLastTrans { ddgrm_ST_Booleans }?,
125
126     ## default value: 1
127     attribute st { ddgrm_ST_Ints }?,
128

```

```

129  ## default value: 0
130  attribute cnt { ddgrm_ST_UnsignedInts }?,
131
132  ## default value: 1
133  attribute step { ddgrm_ST_Ints }?
134  ddgrm_AG_ConstraintAttributes =
135  attribute type { ddgrm_ST_ConstraintType },
136
137  ## default value: self
138  attribute for { ddgrm_ST_ConstraintRelationship }?,
139  attribute forName { xsd:string }?,
140
141  ## default value: all
142  attribute ptType { ddgrm_ST_ElementType }?
143  ddgrm_AG_ConstraintRefAttributes =
144
145  ## default value: none
146  attribute refType { ddgrm_ST_ConstraintType }?,
147
148  ## default value: self
149  attribute refFor { ddgrm_ST_ConstraintRelationship }?,
150  attribute refForName { xsd:string }?,
151
152  ## default value: all
153  attribute refPtType { ddgrm_ST_ElementType }?
154  ddgrm_CT_Constraint =
155  ddgrm_AG_ConstraintAttributes,
156  ddgrm_AG_ConstraintRefAttributes,
157
158  ## default value: none
159  attribute op { ddgrm_ST_BoolOperator }?,
160
161  ## default value: 0
162  attribute val { xsd:double }?,
163
164  ## default value: 1
165  attribute fact { xsd:double }?,
166  element extLst { a_CT_OfficeArtExtensionList }?
167  ddgrm_CT_Constraints = element constr { ddgrm_CT_Constraint }*
168  ddgrm_CT_NumericRule =
169  ddgrm_AG_ConstraintAttributes,
170
171  ## default value: NaN
172  attribute val { xsd:double }?,
173
174  ## default value: NaN
175  attribute fact { xsd:double }?,
176
177  ## default value: NaN
178  attribute max { xsd:double }?,
179  element extLst { a_CT_OfficeArtExtensionList }?
180  ddgrm_CT_Rules = element rule { ddgrm_CT_NumericRule }*
181  ddgrm_CT_PresentationOf =

```

```

182     ddgrm_AG_IteratorAttributes,
183     element extLst { a_CT_OfficeArtExtensionList }?
184 ddgrm_ST_LayoutShapeType = a_ST_ShapeType | ddgrm_ST_OutputShapeType
185 ddgrm_ST_Index1 = xsd:unsignedInt { minInclusive = "1" }
186 ddgrm_CT_Adj =
187     attribute idx { ddgrm_ST_Index1 },
188     attribute val { xsd:double }
189 ddgrm_CT_AdjLst = element adj { ddgrm_CT_Adj }*
190 ddgrm_CT_Shape =
191
192     ## default value: 0
193     attribute rot { xsd:double }?,
194
195     ## default value: none
196     attribute type { ddgrm_ST_LayoutShapeType }?,
197     r_blip?,
198
199     ## default value: 0
200     attribute zOrderOff { xsd:int }?,
201
202     ## default value: false
203     attribute hideGeom { xsd:boolean }?,
204
205     ## default value: false
206     attribute lkTxEntry { xsd:boolean }?,
207
208     ## default value: false
209     attribute blipPhldr { xsd:boolean }?,
210     element adjLst { ddgrm_CT_AdjLst }?,
211     element extLst { a_CT_OfficeArtExtensionList }?
212 ddgrm_CT_Parameter =
213     attribute type { ddgrm_ST_ParameterId },
214     attribute val { ddgrm_ST_ParameterVal }
215 ddgrm_CT_Algorithm =
216     attribute type { ddgrm_ST_AlgorithmType },
217
218     ## default value: 0
219     attribute rev { xsd:unsignedInt }?,
220     element param { ddgrm_CT_Parameter }*,
221     element extLst { a_CT_OfficeArtExtensionList }?
222 ddgrm_CT_LayoutNode =
223     attribute name { xsd:string }?,
224     attribute styleLbl { xsd:string }?,
225
226     ## default value: b
227     attribute chOrder { ddgrm_ST_ChildOrderType }?,
228     attribute moveWith { xsd:string }?,
229     (element alg { ddgrm_CT_Algorithm }?
230     | element shape { ddgrm_CT_Shape }?
231     | element presOf { ddgrm_CT_PresentationOf }?
232     | element constrLst { ddgrm_CT_Constraints }?
233     | element ruleLst { ddgrm_CT_Rules }?
234     | element varLst { ddgrm_CT_LayoutVariablePropertySet }?

```



```

235 | element forEach { ddgrm_CT_ForEach }
236 | element layoutNode { ddgrm_CT_LayoutNode }
237 | element choose { ddgrm_CT_Choose }
238 | element extLst { a_CT_OfficeArtExtensionList }?)*
239 ddgrm_CT_ForEach =
240   attribute name { xsd:string }?,
241   attribute ref { xsd:string }?,
242   ddgrm_AG_IteratorAttributes,
243   (element alg { ddgrm_CT_Algorithm }?
244     | element shape { ddgrm_CT_Shape }?
245     | element presOf { ddgrm_CT_PresentationOf }?
246     | element constrLst { ddgrm_CT_Constraints }?
247     | element ruleLst { ddgrm_CT_Rules }?
248     | element forEach { ddgrm_CT_ForEach }
249     | element layoutNode { ddgrm_CT_LayoutNode }
250     | element choose { ddgrm_CT_Choose }
251     | element extLst { a_CT_OfficeArtExtensionList }?)*
252 ddgrm_CT_When =
253   attribute name { xsd:string }?,
254   ddgrm_AG_IteratorAttributes,
255   attribute func { ddgrm_ST_FunctionType },
256
257   ## default value: none
258   attribute arg { ddgrm_ST_FunctionArgument }?,
259   attribute op { ddgrm_ST_FunctionOperator },
260   attribute val { ddgrm_ST_FunctionValue },
261   (element alg { ddgrm_CT_Algorithm }?
262     | element shape { ddgrm_CT_Shape }?
263     | element presOf { ddgrm_CT_PresentationOf }?
264     | element constrLst { ddgrm_CT_Constraints }?
265     | element ruleLst { ddgrm_CT_Rules }?
266     | element forEach { ddgrm_CT_ForEach }
267     | element layoutNode { ddgrm_CT_LayoutNode }
268     | element choose { ddgrm_CT_Choose }
269     | element extLst { a_CT_OfficeArtExtensionList }?)*
270 ddgrm_CT_Otherwise =
271   attribute name { xsd:string }?,
272   (element alg { ddgrm_CT_Algorithm }?
273     | element shape { ddgrm_CT_Shape }?
274     | element presOf { ddgrm_CT_PresentationOf }?
275     | element constrLst { ddgrm_CT_Constraints }?
276     | element ruleLst { ddgrm_CT_Rules }?
277     | element forEach { ddgrm_CT_ForEach }
278     | element layoutNode { ddgrm_CT_LayoutNode }
279     | element choose { ddgrm_CT_Choose }
280     | element extLst { a_CT_OfficeArtExtensionList }?)*
281 ddgrm_CT_Choose =
282   attribute name { xsd:string }?,
283   element if { ddgrm_CT_When }+,
284   element else { ddgrm_CT_Otherwise }?
285 ddgrm_CT_SampleData =
286
287   ## default value: false

```

```

288     attribute useDef { xsd:boolean }?,
289     element dataModel { ddgrm_CT_DataModel }?
290 ddgrm_CT_Category =
291     attribute type { xsd:anyURI },
292     attribute pri { xsd:unsignedInt }
293 ddgrm_CT_Categories = element cat { ddgrm_CT_Category }*
294 ddgrm_CT_Name =
295     attribute lang { xsd:string }?,
296     attribute val { xsd:string }
297 ddgrm_CT_Description =
298     attribute lang { xsd:string }?,
299     attribute val { xsd:string }
300 ddgrm_CT_DiagramDefinition =
301     attribute uniqueId { xsd:string }?,
302
303     ## default value: http://schemas.openxmlformats.org/drawingml/2006/diagram
304     attribute minVer { xsd:string }?,
305     attribute defStyle { xsd:string }?,
306     element title { ddgrm_CT_Name }*,
307     element desc { ddgrm_CT_Description }*,
308     element catLst { ddgrm_CT_Categories }?,
309     element sampData { ddgrm_CT_SampleData }?,
310     element styleData { ddgrm_CT_SampleData }?,
311     element clrData { ddgrm_CT_SampleData }?,
312     element layoutNode { ddgrm_CT_LayoutNode },
313     element extLst { a_CT_OfficeArtExtensionList }?
314 ddgrm_layoutDef = element layoutDef { ddgrm_CT_DiagramDefinition }
315 ddgrm_CT_DiagramDefinitionHeader =
316     attribute uniqueId { xsd:string },
317
318     ## default value: http://schemas.openxmlformats.org/drawingml/2006/diagram
319     attribute minVer { xsd:string }?,
320     attribute defStyle { xsd:string }?,
321
322     ## default value: 0
323     attribute resId { xsd:int }?,
324     element title { ddgrm_CT_Name }+,
325     element desc { ddgrm_CT_Description }+,
326     element catLst { ddgrm_CT_Categories }?,
327     element extLst { a_CT_OfficeArtExtensionList }?
328 ddgrm_layoutDefHdr =
329     element layoutDefHdr { ddgrm_CT_DiagramDefinitionHeader }
330 ddgrm_CT_DiagramDefinitionHeaderLst =
331     element layoutDefHdr { ddgrm_CT_DiagramDefinitionHeader }*
332 ddgrm_layoutDefHdrLst =
333     element layoutDefHdrLst { ddgrm_CT_DiagramDefinitionHeaderLst }
334 ddgrm_CT_RelIds = r_dm, r_lo, r_qs, r_cs
335 ddgrm_relIds = element relIds { ddgrm_CT_RelIds }
336 ddgrm_ST_ParameterVal =
337     ddgrm_ST_DiagramHorizontalAlignment
338     | ddgrm_ST_VerticalAlignment
339     | ddgrm_ST_ChildDirection
340     | ddgrm_ST_ChildAlignment

```

```

341 | ddgrm_ST_SecondaryChildAlignment
342 | ddgrm_ST_LinearDirection
343 | ddgrm_ST_SecondaryLinearDirection
344 | ddgrm_ST_StartingElement
345 | ddgrm_ST_BendPoint
346 | ddgrm_ST_ConnectorRouting
347 | ddgrm_ST_ArrowheadStyle
348 | ddgrm_ST_ConnectorDimension
349 | ddgrm_ST_RotationPath
350 | ddgrm_ST_CenterShapeMapping
351 | ddgrm_ST_NodeHorizontalAlignment
352 | ddgrm_ST_NodeVerticalAlignment
353 | ddgrm_ST_FallbackDimension
354 | ddgrm_ST_TextDirection
355 | ddgrm_ST_PyramidAccentPosition
356 | ddgrm_ST_PyramidAccentTextMargin
357 | ddgrm_ST_TextBlockDirection
358 | ddgrm_ST_TextAnchorHorizontal
359 | ddgrm_ST_TextAnchorVertical
360 | ddgrm_ST_DiagramTextAlignment
361 | ddgrm_ST_AutoTextRotation
362 | ddgrm_ST_GrowDirection
363 | ddgrm_ST_FlowDirection
364 | ddgrm_ST_ContinueDirection
365 | ddgrm_ST_Breakpoint
366 | ddgrm_ST_Offset
367 | ddgrm_ST_HierarchyAlignment
368 | xsd:int
369 | xsd:double
370 | xsd:boolean
371 | xsd:string
372 | ddgrm_ST_ConnectorPoint
373 ddgrm_ST_ModelId = xsd:int | s_ST_Guid
374 ddgrm_ST_PrSetCustVal = s_ST_Percentage | xsd:int
375 ddgrm_CT_ElemPropSet =
376   attribute presAssocID { ddgrm_ST_ModelId }?,
377   attribute presName { xsd:string }?,
378   attribute presStyleLbl { xsd:string }?,
379   attribute presStyleIdx { xsd:int }?,
380   attribute presStyleCnt { xsd:int }?,
381   attribute loTypeId { xsd:string }?,
382   attribute loCatId { xsd:string }?,
383   attribute qsTypeId { xsd:string }?,
384   attribute qsCatId { xsd:string }?,
385   attribute csTypeId { xsd:string }?,
386   attribute csCatId { xsd:string }?,
387   attribute coherent3DOff { xsd:boolean }?,
388   attribute phldrT { xsd:string }?,
389   attribute phldr { xsd:boolean }?,
390   attribute custAng { xsd:int }?,
391   attribute custFlipVert { xsd:boolean }?,
392   attribute custFlipHor { xsd:boolean }?,
393   attribute custSzX { xsd:int }?,

```

```

394 attribute custSzY { xsd:int }?,
395 attribute custScaleX { ddgrm_ST_PrSetCustVal}?,
396 attribute custScaleY { ddgrm_ST_PrSetCustVal}?,
397 attribute custT { xsd:boolean }?,
398 attribute custLinFactX { ddgrm_ST_PrSetCustVal}?,
399 attribute custLinFactY { ddgrm_ST_PrSetCustVal}?,
400 attribute custLinFactNeighborX { ddgrm_ST_PrSetCustVal}?,
401 attribute custLinFactNeighborY { ddgrm_ST_PrSetCustVal}?,
402 attribute custRadScaleRad { ddgrm_ST_PrSetCustVal}?,
403 attribute custRadScaleInc { ddgrm_ST_PrSetCustVal}?,
404 element presLayoutVars { ddgrm_CT_LayoutVariablePropertySet }?,
405 element style { a_CT_ShapeStyle }?
406 ddgrm_ST_Direction = "norm" | "rev"
407 ddgrm_ST_HierBranchStyle = "l" | "r" | "hang" | "std" | "init"
408 ddgrm_ST_AnimOneStr = "none" | "one" | "branch"
409 ddgrm_ST_AnimLvlStr = "none" | "lvl" | "ctr"
410 ddgrm_CT_OrgChart =
411
412     ## default value: false
413     attribute val { xsd:boolean }?
414 ddgrm_ST_NodeCount = xsd:int { minInclusive = "-1" }
415 ddgrm_CT_ChildMax =
416
417     ## default value: -1
418     attribute val { ddgrm_ST_NodeCount }?
419 ddgrm_CT_ChildPref =
420
421     ## default value: -1
422     attribute val { ddgrm_ST_NodeCount }?
423 ddgrm_CT_BulletEnabled =
424
425     ## default value: false
426     attribute val { xsd:boolean }?
427 ddgrm_CT_Direction =
428
429     ## default value: norm
430     attribute val { ddgrm_ST_Direction }?
431 ddgrm_CT_HierBranchStyle =
432
433     ## default value: std
434     attribute val { ddgrm_ST_HierBranchStyle }?
435 ddgrm_CT_AnimOne =
436
437     ## default value: one
438     attribute val { ddgrm_ST_AnimOneStr }?
439 ddgrm_CT_AnimLvl =
440
441     ## default value: none
442     attribute val { ddgrm_ST_AnimLvlStr }?
443 ddgrm_ST_ResizeHandlesStr = "exact" | "rel"
444 ddgrm_CT_ResizeHandles =
445
446     ## default value: rel

```

```

447     attribute val { ddgrm_ST_ResizeHandlesStr }?
448 ddgrm_CT_LayoutVariablePropertySet =
449     element orgChart { ddgrm_CT_OrgChart }?,
450     element chMax { ddgrm_CT_ChildMax }?,
451     element chPref { ddgrm_CT_ChildPref }?,
452     element bulletEnabled { ddgrm_CT_BulletEnabled }?,
453     element dir { ddgrm_CT_Direction }?,
454     element hierBranch { ddgrm_CT_HierBranchStyle }?,
455     element animOne { ddgrm_CT_AnimOne }?,
456     element animLvl { ddgrm_CT_AnimLvl }?,
457     element resizeHandles { ddgrm_CT_ResizeHandles }?
458 ddgrm_CT_SDName =
459     attribute lang { xsd:string }?,
460     attribute val { xsd:string }
461 ddgrm_CT_SDDescription =
462     attribute lang { xsd:string }?,
463     attribute val { xsd:string }
464 ddgrm_CT_SDCategory =
465     attribute type { xsd:anyURI },
466     attribute pri { xsd:unsignedInt }
467 ddgrm_CT_SDCategories = element cat { ddgrm_CT_SDCategory }*
468 ddgrm_CT_TextProps = a_EG_Text3D?
469 ddgrm_CT_StyleLabel =
470     attribute name { xsd:string },
471     element scene3d { a_CT_Scene3D }?,
472     element sp3d { a_CT_Shape3D }?,
473     element txPr { ddgrm_CT_TextProps }?,
474     element style { a_CT_ShapeStyle }?,
475     element extLst { a_CT_OfficeArtExtensionList }?
476 ddgrm_CT_StyleDefinition =
477     attribute uniqueId { xsd:string }?,
478
479     ## default value: http://schemas.openxmlformats.org/drawingml/2006/diagram
480     attribute minVer { xsd:string }?,
481     element title { ddgrm_CT_SDName }*,
482     element desc { ddgrm_CT_SDDescription }*,
483     element catLst { ddgrm_CT_SDCategories }?,
484     element scene3d { a_CT_Scene3D }?,
485     element styleLbl { ddgrm_CT_StyleLabel }+,
486     element extLst { a_CT_OfficeArtExtensionList }?
487 ddgrm_styleDef = element styleDef { ddgrm_CT_StyleDefinition }
488 ddgrm_CT_StyleDefinitionHeader =
489     attribute uniqueId { xsd:string },
490
491     ## default value: http://schemas.openxmlformats.org/drawingml/2006/diagram
492     attribute minVer { xsd:string }?,
493
494     ## default value: 0
495     attribute resId { xsd:int }?,
496     element title { ddgrm_CT_SDName }+,
497     element desc { ddgrm_CT_SDDescription }+,
498     element catLst { ddgrm_CT_SDCategories }?,
499     element extLst { a_CT_OfficeArtExtensionList }?

```

```

500 ddgrm_styleDefHdr =
501     element styleDefHdr { ddgrm_CT_StyleDefinitionHeader }
502 ddgrm_CT_StyleDefinitionHeaderLst =
503     element styleDefHdr { ddgrm_CT_StyleDefinitionHeader }*
504 ddgrm_styleDefHdrLst =
505     element styleDefHdrLst { ddgrm_CT_StyleDefinitionHeaderLst }
506 ddgrm_ST_AlgorithmType =
507     "composite"
508     | "conn"
509     | "cycle"
510     | "hierChild"
511     | "hierRoot"
512     | "pyra"
513     | "lin"
514     | "sp"
515     | "tx"
516     | "snake"
517 ddgrm_ST_AxisType =
518     "self"
519     | "ch"
520     | "des"
521     | "desOrSelf"
522     | "par"
523     | "ancst"
524     | "ancstOrSelf"
525     | "followSib"
526     | "precedSib"
527     | "follow"
528     | "preced"
529     | "root"
530     | "none"
531 ddgrm_ST_AxisTypes = list { ddgrm_ST_AxisType* }
532 ddgrm_ST_BoolOperator = "none" | "equ" | "gte" | "lte"
533 ddgrm_ST_ChildOrderType = "b" | "t"
534 ddgrm_ST_ConstraintType =
535     "none"
536     | "alignOff"
537     | "begMarg"
538     | "bendDist"
539     | "begPad"
540     | "b"
541     | "bMarg"
542     | "bOff"
543     | "ctrX"
544     | "ctrXOff"
545     | "ctrY"
546     | "ctrYOff"
547     | "connDist"
548     | "diam"
549     | "endMarg"
550     | "endPad"
551     | "h"
552     | "hArH"

```

```

553 | "hOff"
554 | "l"
555 | "lMarg"
556 | "lOff"
557 | "r"
558 | "rMarg"
559 | "rOff"
560 | "primFontSz"
561 | "pyraAcctRatio"
562 | "secFontSz"
563 | "sibSp"
564 | "secSibSp"
565 | "sp"
566 | "stemThick"
567 | "t"
568 | "tMarg"
569 | "tOff"
570 | "userA"
571 | "userB"
572 | "userC"
573 | "userD"
574 | "userE"
575 | "userF"
576 | "userG"
577 | "userH"
578 | "userI"
579 | "userJ"
580 | "userK"
581 | "userL"
582 | "userM"
583 | "userN"
584 | "userO"
585 | "userP"
586 | "userQ"
587 | "userR"
588 | "userS"
589 | "userT"
590 | "userU"
591 | "userV"
592 | "userW"
593 | "userX"
594 | "userY"
595 | "userZ"
596 | "w"
597 | "wArH"
598 | "wOff"
599 ddgrm_ST_ConstraintRelationship = "self" | "ch" | "des"
600 ddgrm_ST_ElementType =
601     "all"
602     | "doc"
603     | "node"
604     | "norm"
605     | "nonNorm"

```

```

606 | "asst"
607 | "nonAsst"
608 | "parTrans"
609 | "pres"
610 | "sibTrans"
611 ddgrm_ST_ElementTypes = list { ddgrm_ST_ElementType* }
612 ddgrm_ST_ParameterId =
613     "horzAlign"
614     | "vertAlign"
615     | "chDir"
616     | "chAlign"
617     | "secChAlign"
618     | "linDir"
619     | "secLinDir"
620     | "stElem"
621     | "bendPt"
622     | "connRout"
623     | "begSty"
624     | "endSty"
625     | "dim"
626     | "rotPath"
627     | "ctrShpMap"
628     | "nodeHorzAlign"
629     | "nodeVertAlign"
630     | "fallback"
631     | "txDir"
632     | "pyraAcctPos"
633     | "pyraAcctTxMar"
634     | "txBldir"
635     | "txAnchorHorz"
636     | "txAnchorVert"
637     | "txAnchorHorzCh"
638     | "txAnchorVertCh"
639     | "parTxLTRAlign"
640     | "parTxRTLAlign"
641     | "shpTxLTRAlignCh"
642     | "shpTxRTLAlignCh"
643     | "autoTxRot"
644     | "grDir"
645     | "flowDir"
646     | "contDir"
647     | "bkpt"
648     | "off"
649     | "hierAlign"
650     | "bkPtFixedVal"
651     | "stBulletLvl"
652     | "stAng"
653     | "spanAng"
654     | "ar"
655     | "lnSpPar"
656     | "lnSpAfParP"
657     | "lnSpCh"
658     | "lnSpAfChP"

```



```

659 | "rtShortDist"
660 | "alignTx"
661 | "pyraLvlNode"
662 | "pyraAcctBkgdNode"
663 | "pyraAcctTxNode"
664 | "srcNode"
665 | "dstNode"
666 | "begPts"
667 | "endPts"
668 ddgrm_ST_Ints = list { xsd:int* }
669 ddgrm_ST_UnsignedInts = list { xsd:unsignedInt* }
670 ddgrm_ST_Booleans = list { xsd:boolean* }
671 ddgrm_ST_FunctionType =
672     "cnt"
673     | "pos"
674     | "revPos"
675     | "posEven"
676     | "posOdd"
677     | "var"
678     | "depth"
679     | "maxDepth"
680 ddgrm_ST_FunctionOperator = "equ" | "neq" | "gt" | "lt" | "gte" | "lte"
681 ddgrm_ST_DiagramHorizontalAlignment = "l" | "ctr" | "r" | "none"
682 ddgrm_ST_VerticalAlignment = "t" | "mid" | "b" | "none"
683 ddgrm_ST_ChildDirection = "horz" | "vert"
684 ddgrm_ST_ChildAlignment = "t" | "b" | "l" | "r"
685 ddgrm_ST_SecondaryChildAlignment = "none" | "t" | "b" | "l" | "r"
686 ddgrm_ST_LinearDirection = "fromL" | "fromR" | "fromT" | "fromB"
687 ddgrm_ST_SecondaryLinearDirection =
688     "none" | "fromL" | "fromR" | "fromT" | "fromB"
689 ddgrm_ST_StartingElement = "node" | "trans"
690 ddgrm_ST_RotationPath = "none" | "alongPath"
691 ddgrm_ST_CenterShapeMapping = "none" | "fNode"
692 ddgrm_ST_BendPoint = "beg" | "def" | "end"
693 ddgrm_ST_ConnectorRouting = "stra" | "bend" | "curve" | "longCurve"
694 ddgrm_ST_ArrowheadStyle = "auto" | "arr" | "noArr"
695 ddgrm_ST_ConnectorDimension = "1D" | "2D" | "cust"
696 ddgrm_ST_ConnectorPoint =
697     "auto"
698     | "bCtr"
699     | "ctr"
700     | "midL"
701     | "midR"
702     | "tCtr"
703     | "bL"
704     | "bR"
705     | "tL"
706     | "tR"
707     | "radial"
708 ddgrm_ST_NodeHorizontalAlignment = "l" | "ctr" | "r"
709 ddgrm_ST_NodeVerticalAlignment = "t" | "mid" | "b"
710 ddgrm_ST_FallbackDimension = "1D" | "2D"
711 ddgrm_ST_TextDirection = "fromT" | "fromB"

```

```

712 ddgrm_ST_PyramidAccentPosition = "bef" | "aft"
713 ddgrm_ST_PyramidAccentTextMargin = "step" | "stack"
714 ddgrm_ST_TextBlockDirection = "horz" | "vert"
715 ddgrm_ST_TextAnchorHorizontal = "none" | "ctr"
716 ddgrm_ST_TextAnchorVertical = "t" | "mid" | "b"
717 ddgrm_ST_DiagramTextAlignment = "l" | "ctr" | "r"
718 ddgrm_ST_AutoTextRotation = "none" | "upr" | "grav"
719 ddgrm_ST_GrowDirection = "tL" | "tR" | "bL" | "bR"
720 ddgrm_ST_FlowDirection = "row" | "col"
721 ddgrm_ST_ContinueDirection = "revDir" | "sameDir"
722 ddgrm_ST_Breakpoint = "endCnv" | "bal" | "fixed"
723 ddgrm_ST_Offset = "ctr" | "off"
724 ddgrm_ST_HierarchyAlignment =
725     "tL"
726     | "tR"
727     | "tCtrCh"
728     | "tCtrDes"
729     | "bL"
730     | "bR"
731     | "bCtrCh"
732     | "bCtrDes"
733     | "lT"
734     | "lB"
735     | "lCtrCh"
736     | "lCtrDes"
737     | "rT"
738     | "rB"
739     | "rCtrCh"
740     | "rCtrDes"
741 ddgrm_ST_FunctionValue =
742     xsd:int
743     | xsd:boolean
744     | ddgrm_ST_Direction
745     | ddgrm_ST_HierBranchStyle
746     | ddgrm_ST_AnimOneStr
747     | ddgrm_ST_AnimLvlStr
748     | ddgrm_ST_ResizeHandlesStr
749 ddgrm_ST_VariableType =
750     "none"
751     | "orgChart"
752     | "chMax"
753     | "chPref"
754     | "bulEnabled"
755     | "dir"
756     | "hierBranch"
757     | "animOne"
758     | "animLvl"
759     | "resizeHandles"
760 ddgrm_ST_FunctionArgument = ddgrm_ST_VariableType
761 ddgrm_ST_OutputShapeType = "none" | "conn"

```

B.5.3.1 Part Schemas

B.5.3.1.1 Diagram Colors Part

This schema is available in the file DrawingML_Diagram_Colors.rnc.

```

1 include "dml-diagram.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"
4 include "dml-lockedCanvas.rnc"
5 include "any.rnc"
6 include "shared-commonSimpleTypes.rnc"
7 include "dml-chart.rnc"
8 include "dml-chartDrawing.rnc"
9 include "dml-picture.rnc"
10 include "dml-compatibility.rnc"
11 start = ddgrm_colorsDef

```

B.5.3.1.2 Diagram Data Part

This schema is available in the file DrawingML_Diagram_Data.rnc.

```

1 include "dml-diagram.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"
4 include "dml-lockedCanvas.rnc"
5 include "any.rnc"
6 include "shared-commonSimpleTypes.rnc"
7 include "dml-chart.rnc"
8 include "dml-chartDrawing.rnc"
9 include "dml-picture.rnc"
10 include "dml-compatibility.rnc"
11 start = ddgrm_dataModel

```

B.5.3.1.3 Diagram Layout Definitions Part

This schema is available in the file DrawingML_Diagram_Layout_Definition.rnc.

```

1 include "dml-diagram.rnc"
2 include "shared-relationshipReference.rnc"
3 include "dml-main.rnc"
4 include "dml-lockedCanvas.rnc"
5 include "any.rnc"
6 include "shared-commonSimpleTypes.rnc"
7 include "dml-chart.rnc"
8 include "dml-chartDrawing.rnc"
9 include "dml-picture.rnc"
10 include "dml-compatibility.rnc"
11 start = ddgrm_layoutDef

```

B.5.3.1.4 Diagram Style Part

This schema is available in the file DrawingML_Diagram_Style.rnc.

```

include "dml-diagram.rnc"
include "shared-relationshipReference.rnc"
include "dml-main.rnc"
include "dml-lockedCanvas.rnc"
include "any.rnc"
include "shared-commonSimpleTypes.rnc"
include "dml-chart.rnc"
include "dml-chartDrawing.rnc"
include "dml-picture.rnc"
include "dml-compatibility.rnc"
start = ddgrm_styleDef

```

B.6 VML

B.6.1 VML - Main

This schema is available in the file vml-main.rnc.

```

1 namespace o = "urn:schemas-microsoft-com:office:office"
2 namespace pvml = "urn:schemas-microsoft-com:office:powerpoint"
3 namespace r =
4   "http://schemas.openxmlformats.org/officeDocument/2006/relationships"
5 namespace s =
6   "http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
7 default namespace v = "urn:schemas-microsoft-com:vml"
8 namespace w =
9   "http://schemas.openxmlformats.org/wordprocessingml/2006/main"
10 namespace w10 = "urn:schemas-microsoft-com:office:word"
11 namespace x = "urn:schemas-microsoft-com:office:excel"
12
13 v_AG_Id = attribute id { xsd:string }?
14 v_AG_Style = attribute style { xsd:string }?
15 v_AG_Type = attribute type { xsd:string }?
16 v_AG_Adj = attribute adj { xsd:string }?
17 v_AG_Path = attribute path { xsd:string }?
18 v_AG_Fill =
19   attribute filled { s_ST_TrueFalse }?,
20   attribute fillcolor { s_ST_ColorType }?
21 v_AG_Chromakey = attribute chromakey { s_ST_ColorType }?
22 v_AG_Ext = attribute v:ext { v_ST_Ext }?
23 v_AG_CoreAttributes =
24   v_AG_Id,
25   v_AG_Style,
26   attribute href { xsd:string }?,
27   attribute target { xsd:string }?,
28   attribute class { xsd:string }?,
29   attribute title { xsd:string }?,
30   attribute alt { xsd:string }?,
31   attribute coordsize { xsd:string }?,
32   attribute coordorigin { xsd:string }?,
33   attribute wrapcoords { xsd:string }?,
34   attribute print { s_ST_TrueFalse }?
35 v_AG_ShapeAttributes =

```

```

36  v_AG_ChromaKey,
37  v_AG_Fill,
38  attribute opacity { xsd:string }?,
39  attribute stroked { s_ST_TrueFalse }?,
40  attribute strokecolor { s_ST_ColorType }?,
41  attribute strokeweight { xsd:string }?,
42  attribute insetpen { s_ST_TrueFalse }?
43  v_AG_OfficeCoreAttributes =
44    o_spid?,
45    o_oned?,
46    o_regroupid?,
47    o_doubleclicknotify?,
48    o_button?,
49    o_userhidden?,
50    o_bullet?,
51    o_hr?,
52    o_hrstd?,
53    o_hrnoshade?,
54    o_hrpct?,
55    o_hralign?,
56    o_allowincell?,
57    o_allowoverlap?,
58    o_userdrawn?,
59    o_bordertopcolor?,
60    o_borderleftcolor?,
61    o_borderbottomcolor?,
62    o_borderrightcolor?,
63    o_dgmlayout?,
64    o_dgmnodekind?,
65    o_dgmlayoutmru?,
66    o_insetmode?
67  v_AG_OfficeShapeAttributes =
68    o_spt?,
69    o_connectortype?,
70    o_bwmode?,
71    o_bwpure?,
72    o_bwnormal?,
73    o_forcedash?,
74    o_oleicon?,
75    o_ole?,
76    o_preferrelative?,
77    o_cliptowrap?,
78    o_clip?
79  v_AG_AllCoreAttributes = v_AG_CoreAttributes, v_AG_OfficeCoreAttributes
80  v_AG_AllShapeAttributes =
81    v_AG_ShapeAttributes, v_AG_OfficeShapeAttributes
82  v_AG_ImageAttributes =
83    attribute src { xsd:string }?,
84    attribute cropleft { xsd:string }?,
85    attribute croptop { xsd:string }?,
86    attribute cropright { xsd:string }?,
87    attribute cropbottom { xsd:string }?,
88    attribute gain { xsd:string }?,

```

```

89     attribute blacklevel { xsd:string }?,
90     attribute gamma { xsd:string }?,
91     attribute grayscale { s_ST_TrueFalse }?,
92     attribute bilevel { s_ST_TrueFalse }?
93 v_AG_StrokeAttributes =
94     attribute on { s_ST_TrueFalse }?,
95     attribute weight { xsd:string }?,
96     attribute color { s_ST_ColorType }?,
97     attribute opacity { xsd:string }?,
98     attribute linestyle { v_ST_StrokeLineStyle }?,
99     attribute miterlimit { xsd:decimal }?,
100    attribute jointstyle { v_ST_StrokeJoinStyle }?,
101    attribute endcap { v_ST_StrokeEndCap }?,
102    attribute dashstyle { xsd:string }?,
103    attribute filltype { v_ST_FillType }?,
104    attribute src { xsd:string }?,
105    attribute imageaspect { v_ST_ImageAspect }?,
106    attribute imagesize { xsd:string }?,
107    attribute imagealignshape { s_ST_TrueFalse }?,
108    attribute color2 { s_ST_ColorType }?,
109    attribute startarrow { v_ST_StrokeArrowType }?,
110    attribute startarrowwidth { v_ST_StrokeArrowWidth }?,
111    attribute startarrowlength { v_ST_StrokeArrowLength }?,
112    attribute endarrow { v_ST_StrokeArrowType }?,
113    attribute endarrowwidth { v_ST_StrokeArrowWidth }?,
114    attribute endarrowlength { v_ST_StrokeArrowLength }?,
115    o_href?,
116    o_althref?,
117    o_title?,
118    o_forcedash?,
119    r_id?,
120    attribute insetpen { s_ST_TrueFalse }?,
121    o_relid?
122 v_EG_ShapeElements =
123     v_path
124     | v_formulas
125     | v_handles
126     | v_fill
127     | v_stroke
128     | v_shadow
129     | v_textbox
130     | v_textpath
131     | v_imagedata
132     | o_skew
133     | o_extrusion
134     | o_callout
135     | o_lock
136     | o_clippath
137     | o_signatureline
138     | w10_wrap
139     | w10_anchorlock
140     | w10_bordertop
141     | w10_borderbottom

```

```

142 | w10_borderleft
143 | w10_borderright
144 | x_ClientData?
145 | pvml_textdata?
146 v_shape = element shape { v_CT_Shape }
147 v_shapetype = element shapetype { v_CT_Shapetype }
148 v_group = element group { v_CT_Group }
149 v_background = element background { v_CT_Background }
150 v_CT_Shape =
151     v_AG_AllCoreAttributes,
152     v_AG_AllShapeAttributes,
153     v_AG_Type,
154     v_AG_Adj,
155     v_AG_Path,
156     o_gfxdata?,
157     attribute equationxml { xsd:string }?,
158     (v_EG_ShapeElements | o_ink | pvml_iscomment | o_equationxml)+
159 v_CT_Shapetype =
160     v_AG_AllCoreAttributes,
161     v_AG_AllShapeAttributes,
162     v_AG_Adj,
163     v_AG_Path,
164     o_master?,
165     v_EG_ShapeElements*,
166     o_complex?
167 v_CT_Group =
168     v_AG_AllCoreAttributes,
169     v_AG_Fill,
170     attribute editas { v_ST_EditAs }?,
171     o_tableproperties?,
172     o_tablelimits?,
173     (v_EG_ShapeElements
174         | v_group
175         | v_shape
176         | v_shapetype
177         | v_arc
178         | v_curve
179         | v_image
180         | v_line
181         | v_oval
182         | v_polyline
183         | v_rect
184         | v_roundrect
185         | o_diagram)+
186 v_CT_Background =
187     v_AG_Id,
188     v_AG_Fill,
189     o_bwmode?,
190     o_bwpure?,
191     o_bwnormal?,
192     o_targetssize?,
193     v_fill?
194 v_fill = element fill { v_CT_Fill }

```

```

195 v_formulas = element formulas { v_CT_Formulas }
196 v_handles = element handles { v_CT_Handles }
197 v_imagedata = element imagedata { v_CT_ImageData }
198 v_path = element path { v_CT_Path }
199 v_textbox = element textbox { v_CT_Textbox }
200 v_shadow = element shadow { v_CT_Shadow }
201 v_stroke = element stroke { v_CT_Stroke }
202 v_textpath = element textpath { v_CT_TextPath }
203 v_CT_Fill =
204     v_AG_Id,
205     attribute type { v_ST_FillType }?,
206     attribute on { s_ST_TrueFalse }?,
207     attribute color { s_ST_ColorType }?,
208     attribute opacity { xsd:string }?,
209     attribute color2 { s_ST_ColorType }?,
210     attribute src { xsd:string }?,
211     o_href?,
212     o_althref?,
213     attribute size { xsd:string }?,
214     attribute origin { xsd:string }?,
215     attribute position { xsd:string }?,
216     attribute aspect { v_ST_ImageAspect }?,
217     attribute colors { xsd:string }?,
218     attribute angle { xsd:decimal }?,
219     attribute alignshape { s_ST_TrueFalse }?,
220     attribute focus { xsd:string }?,
221     attribute focussize { xsd:string }?,
222     attribute focusposition { xsd:string }?,
223     attribute method { v_ST_FillMethod }?,
224     o_detectmouseclick?,
225     o_title?,
226     o_opacity2?,
227     attribute recolor { s_ST_TrueFalse }?,
228     attribute rotate { s_ST_TrueFalse }?,
229     r_id?,
230     o_relid?,
231     o_fill?
232 v_CT_Formulas = element f { v_CT_F }*
233 v_CT_F = attribute eqn { xsd:string }?
234 v_CT_Handles = element h { v_CT_H }*
235 v_CT_H =
236     attribute position { xsd:string }?,
237     attribute polar { xsd:string }?,
238     attribute map { xsd:string }?,
239     attribute invx { s_ST_TrueFalse }?,
240     attribute invy { s_ST_TrueFalse }?,
241     attribute switch { s_ST_TrueFalseBlank }?,
242     attribute xrange { xsd:string }?,
243     attribute yrange { xsd:string }?,
244     attribute radiusrange { xsd:string }?
245 v_CT_ImageData =
246     v_AG_Id,
247     v_AG_ImageAttributes,

```



```

248 v_AG_ChromaKey,
249 attribute embosscolor { s_ST_ColorType }?,
250 attribute recolortarget { s_ST_ColorType }?,
251 o_href?,
252 o_althref?,
253 o_title?,
254 o_oleid?,
255 o_detectmouseclick?,
256 o_movie?,
257 o_relid?,
258 r_id?,
259 r_pict?,
260 r_href?
261 v_CT_Path =
262 v_AG_Id,
263 attribute v { xsd:string }?,
264 attribute limo { xsd:string }?,
265 attribute textboxrect { xsd:string }?,
266 attribute fillok { s_ST_TrueFalse }?,
267 attribute strokeok { s_ST_TrueFalse }?,
268 attribute shadowok { s_ST_TrueFalse }?,
269 attribute arrowok { s_ST_TrueFalse }?,
270 attribute gradientshapeok { s_ST_TrueFalse }?,
271 attribute textpathok { s_ST_TrueFalse }?,
272 attribute insetpenok { s_ST_TrueFalse }?,
273 o_connecttype?,
274 o_connectlocs?,
275 o_connectangles?,
276 o_extrusionok?
277 v_CT_Shadow =
278 v_AG_Id,
279 attribute on { s_ST_TrueFalse }?,
280 attribute type { v_ST_ShadowType }?,
281 attribute obscured { s_ST_TrueFalse }?,
282 attribute color { s_ST_ColorType }?,
283 attribute opacity { xsd:string }?,
284 attribute offset { xsd:string }?,
285 attribute color2 { s_ST_ColorType }?,
286 attribute offset2 { xsd:string }?,
287 attribute origin { xsd:string }?,
288 attribute matrix { xsd:string }?
289 v_CT_Stroke =
290 v_AG_Id,
291 v_AG_StrokeAttributes,
292 o_left?,
293 o_top?,
294 o_right?,
295 o_bottom?,
296 o_column?
297 v_CT_Textbox =
298 v_AG_Id,
299 v_AG_Style,
300 attribute inset { xsd:string }?,

```

```

301     o_singleclick?,
302     o_insetmode?,
303     (w_txbxContent?)
304 v_CT_TextPath =
305     v_AG_Id,
306     v_AG_Style,
307     attribute on { s_ST_TrueFalse }?,
308     attribute fitshape { s_ST_TrueFalse }?,
309     attribute fitpath { s_ST_TrueFalse }?,
310     attribute trim { s_ST_TrueFalse }?,
311     attribute xscale { s_ST_TrueFalse }?,
312     attribute string { xsd:string }?
313 v_arc = element arc { v_CT_Arc }
314 v_curve = element curve { v_CT_Curve }
315 v_image = element image { v_CT_Image }
316 v_line = element line { v_CT_Line }
317 v_oval = element oval { v_CT_Oval }
318 v_polyline = element polyline { v_CT_PolyLine }
319 v_rect = element rect { v_CT_Rect }
320 v_roundrect = element roundrect { v_CT_RoundRect }
321 v_CT_Arc =
322     v_AG_AllCoreAttributes,
323     v_AG_AllShapeAttributes,
324     attribute startAngle { xsd:decimal }?,
325     attribute endAngle { xsd:decimal }?,
326     v_EG_ShapeElements*
327 v_CT_Curve =
328     v_AG_AllCoreAttributes,
329     v_AG_AllShapeAttributes,
330     attribute from { xsd:string }?,
331     attribute control1 { xsd:string }?,
332     attribute control2 { xsd:string }?,
333     attribute to { xsd:string }?,
334     v_EG_ShapeElements*
335 v_CT_Image =
336     v_AG_AllCoreAttributes,
337     v_AG_AllShapeAttributes,
338     v_AG_ImageAttributes,
339     v_EG_ShapeElements*
340 v_CT_Line =
341     v_AG_AllCoreAttributes,
342     v_AG_AllShapeAttributes,
343     attribute from { xsd:string }?,
344     attribute to { xsd:string }?,
345     v_EG_ShapeElements*
346 v_CT_Oval =
347     v_AG_AllCoreAttributes,
348     v_AG_AllShapeAttributes,
349     (v_EG_ShapeElements*)+
350 v_CT_PolyLine =
351     v_AG_AllCoreAttributes,
352     v_AG_AllShapeAttributes,
353     attribute points { xsd:string }?,

```

```

354 (v_EG_ShapeElements | o_ink)*
355 v_CT_Rect =
356   v_AG_AllCoreAttributes,
357   v_AG_AllShapeAttributes,
358   (v_EG_ShapeElements*)+
359 v_CT_RoundRect =
360   v_AG_AllCoreAttributes,
361   v_AG_AllShapeAttributes,
362   attribute arcsize { xsd:string }?,
363   (v_EG_ShapeElements*)+
364 v_ST_Ext = string "view" | string "edit" | string "backwardCompatible"
365 v_ST_FillType =
366   string "solid"
367   | string "gradient"
368   | string "gradientRadial"
369   | string "tile"
370   | string "pattern"
371   | string "frame"
372 v_ST_FillMethod =
373   string "none"
374   | string "linear"
375   | string "sigma"
376   | string "any"
377   | string "linear sigma"
378 v_ST_ShadowType =
379   string "single"
380   | string "double"
381   | string "emboss"
382   | string "perspective"
383 v_ST_StrokeLineStyle =
384   string "single"
385   | string "thinThin"
386   | string "thinThick"
387   | string "thickThin"
388   | string "thickBetweenThin"
389 v_ST_StrokeJoinStyle = string "round" | string "bevel" | string "miter"
390 v_ST_StrokeEndCap = string "flat" | string "square" | string "round"
391 v_ST_StrokeArrowLength =
392   string "short" | string "medium" | string "long"
393 v_ST_StrokeArrowWidth =
394   string "narrow" | string "medium" | string "wide"
395 v_ST_StrokeArrowType =
396   string "none"
397   | string "block"
398   | string "classic"
399   | string "oval"
400   | string "diamond"
401   | string "open"
402 v_ST_ImageAspect = string "ignore" | string "atMost" | string "atLeast"
403 v_ST_EditAs =
404   string "canvas"
405   | string "orgchart"
406   | string "radial"

```

```

407 | string "cycle"
408 | string "stacked"
409 | string "venn"
410 | string "bullseye"

```

B.6.2 VML - Office Drawing

This schema is available in the file vml-officeDrawing.rnc.

```

1  default namespace o = "urn:schemas-microsoft-com:office:office"
2  namespace r =
3    "http://schemas.openxmlformats.org/officeDocument/2006/relationships"
4  namespace s =
5    "http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
6  namespace v = "urn:schemas-microsoft-com:vml"
7  namespace w10 = "urn:schemas-microsoft-com:office:word"
8  namespace x = "urn:schemas-microsoft-com:office:excel"
9
10 o_bwmode = attribute o:bwmode { o_ST_BWMode }
11 o_bwpure = attribute o:bwpure { o_ST_BWMode }
12 o_bwnormal = attribute o:bwnormal { o_ST_BWMode }
13 o_targetscreenSize = attribute o:targetscreenSize { o_ST_ScreenSize }
14 o_insetmode =
15
16   ## default value: custom
17   attribute o:insetmode { o_ST_InsetMode }
18 o_spt = attribute o:spt { xsd:float }
19 o_wrapcoords = attribute o:wrapcoords { xsd:string }
20 o_oned = attribute o:oned { s_ST_TrueFalse }
21 o_regroupid = attribute o:regroupid { xsd:integer }
22 o_doubleclicknotify = attribute o:doubleclicknotify { s_ST_TrueFalse }
23 o_connectortype =
24
25   ## default value: straight
26   attribute o:connectortype { o_ST_ConnectorType }
27 o_button = attribute o:button { s_ST_TrueFalse }
28 o_userhidden = attribute o:userhidden { s_ST_TrueFalse }
29 o_forcedash = attribute o:forcedash { s_ST_TrueFalse }
30 o_oleicon = attribute o:oleicon { s_ST_TrueFalse }
31 o_ole = attribute o:ole { s_ST_TrueFalseBlank }
32 o_preferrelative = attribute o:preferrelative { s_ST_TrueFalse }
33 o_cliptowrap = attribute o:cliptowrap { s_ST_TrueFalse }
34 o_clip = attribute o:clip { s_ST_TrueFalse }
35 o_bullet = attribute o:bullet { s_ST_TrueFalse }
36 o_hr = attribute o:hr { s_ST_TrueFalse }
37 o_hrstd = attribute o:hrstd { s_ST_TrueFalse }
38 o_hrnoshade = attribute o:hrnoshade { s_ST_TrueFalse }
39 o_hrpct = attribute o:hrpct { xsd:float }
40 o_hralign =
41
42   ## default value: left
43   attribute o:hralign { o_ST_HrAlign }
44 o_allowincell = attribute o:allowincell { s_ST_TrueFalse }

```

```

45 o_allowoverlap = attribute o:allowoverlap { s_ST_TrueFalse }
46 o_userdrawn = attribute o:userdrawn { s_ST_TrueFalse }
47 o_bordertopcolor = attribute o:bordertopcolor { xsd:string }
48 o_borderleftcolor = attribute o:borderleftcolor { xsd:string }
49 o_borderbottomcolor = attribute o:borderbottomcolor { xsd:string }
50 o_borderrightcolor = attribute o:borderrightcolor { xsd:string }
51 o_connecttype = attribute o:connecttype { o_ST_ConnectType }
52 o_connectlocs = attribute o:connectlocs { xsd:string }
53 o_connectangles = attribute o:connectangles { xsd:string }
54 o_master = attribute o:master { xsd:string }
55 o_extrusionok = attribute o:extrusionok { s_ST_TrueFalse }
56 o_href = attribute o:href { xsd:string }
57 o_althref = attribute o:althref { xsd:string }
58 o_title = attribute o:title { xsd:string }
59 o_singleclick = attribute o:singleclick { s_ST_TrueFalse }
60 o_oleid = attribute o:oleid { xsd:float }
61 o_detectmouseclick = attribute o:detectmouseclick { s_ST_TrueFalse }
62 o_movie = attribute o:movie { xsd:float }
63 o_spid = attribute o:spid { xsd:string }
64 o_opacity2 = attribute o:opacity2 { xsd:string }
65 o_relid = attribute o:relid { r_ST_RelationshipId }
66 o_dgmlayout = attribute o:dgmlayout { o_ST_DiagramLayout }
67 o_dgmnodekind = attribute o:dgmnodekind { xsd:integer }
68 o_dgmlayoutmru = attribute o:dgmlayoutmru { o_ST_DiagramLayout }
69 o_gfxdata = attribute o:gfxdata { xsd:base64Binary }
70 o_tableproperties = attribute o:tableproperties { xsd:string }
71 o_tablelimits = attribute o:tablelimits { xsd:string }
72 o_shapedefaults = element shapedefaults { o_CT_ShapeDefaults }
73 o_shapelayout = element shapelayout { o_CT_ShapeLayout }
74 o_signatureline = element signatureline { o_CT_SignatureLine }
75 o_ink = element ink { o_CT_Ink }
76 o_diagram = element diagram { o_CT_Diagram }
77 o_equationxml = element equationxml { o_CT_EquationXml }
78 o_CT_ShapeDefaults =
79     v_AG_Ext,
80     attribute spidmax { xsd:integer }?,
81     attribute style { xsd:string }?,
82     attribute fill { s_ST_TrueFalse }?,
83     attribute fillcolor { s_ST_ColorType }?,
84     attribute stroke { s_ST_TrueFalse }?,
85     attribute strokecolor { s_ST_ColorType }?,
86     attribute o:allowincell { s_ST_TrueFalse }?,
87     (v_fill?
88         & v_stroke?
89         & v_textbox?
90         & v_shadow?
91         & o_skew?
92         & o_extrusion?
93         & o_callout?
94         & o_lock?
95         & element colormru { o_CT_ColorMru }?
96         & element colormenu { o_CT_ColorMenu }?)?
97 o_CT_Ink =

```

```

98     attribute i { xsd:string }?,
99     attribute annotation { s_ST_TrueFalse }?,
100    attribute contentType { o_ST_ContentType }?,
101    empty
102  o_CT_SignatureLine =
103    v_AG_Ext,
104    attribute issignatureline { s_ST_TrueFalse }?,
105    attribute id { s_ST_Guid }?,
106    attribute provid { s_ST_Guid }?,
107    attribute signinginstructionsset { s_ST_TrueFalse }?,
108    attribute allowcomments { s_ST_TrueFalse }?,
109    attribute showsigndate { s_ST_TrueFalse }?,
110    attribute o:suggestedesigner { xsd:string }?,
111    attribute o:suggestedesigner2 { xsd:string }?,
112    attribute o:suggestedesigneremail { xsd:string }?,
113    attribute signinginstructions { xsd:string }?,
114    attribute addlxml { xsd:string }?,
115    attribute sigprovurl { xsd:string }?
116  o_CT_ShapeLayout =
117    v_AG_Ext,
118    (element idmap { o_CT_IdMap }?
119     & element regrouptable { o_CT_RegroupTable }?
120     & element rules { o_CT_Rules }?)
121  o_CT_IdMap =
122    v_AG_Ext,
123    attribute data { xsd:string }?
124  o_CT_RegroupTable =
125    v_AG_Ext,
126    element entry { o_CT_Entry }*
127  o_CT_Entry =
128    attribute new { xsd:int }?,
129    attribute old { xsd:int }?
130  o_CT_Rules =
131    v_AG_Ext,
132    element r { o_CT_R }*
133  o_CT_R =
134    attribute id { xsd:string },
135    attribute type { o_ST_RType }?,
136    attribute how { o_ST_How }?,
137    attribute idref { xsd:string }?,
138    element proxy { o_CT_Proxy }*
139  o_CT_Proxy =
140
141    ## default value: false
142    attribute start { s_ST_TrueFalseBlank }?,
143
144    ## default value: false
145    attribute end { s_ST_TrueFalseBlank }?,
146    attribute idref { xsd:string }?,
147    attribute connectloc { xsd:int }?
148  o_CT_Diagram =
149    v_AG_Ext,
150    attribute dgmstyle { xsd:integer }?,

```

```

151   attribute autoformat { s_ST_TrueFalse }?,
152   attribute reverse { s_ST_TrueFalse }?,
153   attribute autolayout { s_ST_TrueFalse }?,
154   attribute dgmscalex { xsd:integer }?,
155   attribute dgmscaley { xsd:integer }?,
156   attribute dgmfontsize { xsd:integer }?,
157   attribute constrainbounds { xsd:string }?,
158   attribute dgmbasetextscale { xsd:integer }?,
159   element relationtable { o_CT_RelationTable }?
160 o_CT_EquationXml =
161   attribute contentType { o_ST_AlternateMathContentType }?,
162   o_CT_EquationXml_any
163 o_CT_EquationXml_any =
164   element * - (o:* | v:* | w10:* | x:*) {
165     anyAttribute*,
166     mixed { anyElement* }
167   }
168 o_ST_AlternateMathContentType = xsd:string
169 o_CT_RelationTable =
170   v_AG_Ext,
171   element rel { o_CT_Relation }*
172 o_CT_Relation =
173   v_AG_Ext,
174   attribute idsrc { xsd:string }?,
175   attribute iddest { xsd:string }?,
176   attribute idcntr { xsd:string }?
177 o_CT_ColorMru =
178   v_AG_Ext,
179   attribute colors { xsd:string }?
180 o_CT_ColorMenu =
181   v_AG_Ext,
182   attribute strokecolor { s_ST_ColorType }?,
183   attribute fillcolor { s_ST_ColorType }?,
184   attribute shadowcolor { s_ST_ColorType }?,
185   attribute extrusioncolor { s_ST_ColorType }?
186 o_skew = element skew { o_CT_Skew }
187 o_extrusion = element extrusion { o_CT_Extrusion }
188 o_callout = element callout { o_CT_Callout }
189 o_lock = element lock { o_CT_Lock }
190 o_OLEObject = element OLEObject { o_CT_OLEObject }
191 o_complex = element complex { o_CT_Complex }
192 o_left = element left { o_CT_StrokeChild }
193 o_top = element top { o_CT_StrokeChild }
194 o_right = element right { o_CT_StrokeChild }
195 o_bottom = element bottom { o_CT_StrokeChild }
196 o_column = element column { o_CT_StrokeChild }
197 o_clippath = element clippath { o_CT_ClipPath }
198 o_fill = element fill { o_CT_Fill }
199 o_CT_Skew =
200   v_AG_Ext,
201   attribute id { xsd:string }?,
202   attribute on { s_ST_TrueFalse }?,
203   attribute offset { xsd:string }?,

```

```

204     attribute origin { xsd:string }?,
205     attribute matrix { xsd:string }?
206 o_CT_Extrusion =
207     v_AG_Ext,
208     attribute on { s_ST_TrueFalse }?,
209
210     ## default value: parallel
211     attribute type { o_ST_ExtrusionType }?,
212
213     ## default value: solid
214     attribute render { o_ST_ExtrusionRender }?,
215     attribute viewpointorigin { xsd:string }?,
216     attribute viewpoint { xsd:string }?,
217
218     ## default value: XY
219     attribute plane { o_ST_ExtrusionPlane }?,
220     attribute skewangle { xsd:float }?,
221     attribute skewamt { xsd:string }?,
222     attribute foredepth { xsd:string }?,
223     attribute backdepth { xsd:string }?,
224     attribute orientation { xsd:string }?,
225     attribute orientationangle { xsd:float }?,
226     attribute lockrotationcenter { s_ST_TrueFalse }?,
227     attribute autorotationcenter { s_ST_TrueFalse }?,
228     attribute rotationcenter { xsd:string }?,
229     attribute rotationangle { xsd:string }?,
230     attribute colormode { o_ST_ColorMode }?,
231     attribute color { s_ST_ColorType }?,
232     attribute shininess { xsd:float }?,
233     attribute specularity { xsd:string }?,
234     attribute diffusivity { xsd:string }?,
235     attribute metal { s_ST_TrueFalse }?,
236     attribute edge { xsd:string }?,
237     attribute facet { xsd:string }?,
238     attribute lightface { s_ST_TrueFalse }?,
239     attribute brightness { xsd:string }?,
240     attribute lightposition { xsd:string }?,
241     attribute lightlevel { xsd:string }?,
242     attribute lightharsh { s_ST_TrueFalse }?,
243     attribute lightposition2 { xsd:string }?,
244     attribute lightlevel2 { xsd:string }?,
245     attribute lightharsh2 { s_ST_TrueFalse }?
246 o_CT_Callout =
247     v_AG_Ext,
248     attribute on { s_ST_TrueFalse }?,
249     attribute type { xsd:string }?,
250     attribute gap { xsd:string }?,
251     attribute angle { o_ST_Angle }?,
252     attribute dropauto { s_ST_TrueFalse }?,
253     attribute drop { o_ST_CalloutDrop }?,
254     attribute distance { xsd:string }?,
255
256     ## default value: f

```



```

257     attribute lengthspecified { s_ST_TrueFalse }?,
258     attribute length { xsd:string }?,
259     attribute accentbar { s_ST_TrueFalse }?,
260     attribute textborder { s_ST_TrueFalse }?,
261     attribute minusx { s_ST_TrueFalse }?,
262     attribute minusy { s_ST_TrueFalse }?
263 o_CT_Lock =
264     v_AG_Ext,
265     attribute position { s_ST_TrueFalse }?,
266     attribute selection { s_ST_TrueFalse }?,
267     attribute grouping { s_ST_TrueFalse }?,
268     attribute ungrouping { s_ST_TrueFalse }?,
269     attribute rotation { s_ST_TrueFalse }?,
270     attribute cropping { s_ST_TrueFalse }?,
271     attribute verticies { s_ST_TrueFalse }?,
272     attribute adjusthandles { s_ST_TrueFalse }?,
273     attribute text { s_ST_TrueFalse }?,
274     attribute aspectratio { s_ST_TrueFalse }?,
275     attribute shapetype { s_ST_TrueFalse }?
276 o_CT_OLEObject =
277     attribute Type { o_ST_OLEType }?,
278     attribute ProgID { xsd:string }?,
279     attribute ShapeID { xsd:string }?,
280     attribute DrawAspect { o_ST_OLEDrawAspect }?,
281     attribute ObjectID { xsd:string }?,
282     r_id?,
283     attribute UpdateMode { o_ST_OLEUpdateMode }?,
284     element LinkType { o_ST_OLELinkType }?,
285     element LockedField { s_ST_TrueFalseBlank }?,
286     element FieldCodes { xsd:string }?
287 o_CT_Complex = v_AG_Ext
288 o_CT_StrokeChild =
289     v_AG_Ext,
290     attribute on { s_ST_TrueFalse }?,
291     attribute weight { xsd:string }?,
292     attribute color { s_ST_ColorType }?,
293     attribute color2 { s_ST_ColorType }?,
294     attribute opacity { xsd:string }?,
295     attribute linestyle { v_ST_StrokeLineStyle }?,
296     attribute miterlimit { xsd:decimal }?,
297     attribute joinstyle { v_ST_StrokeJoinStyle }?,
298     attribute endcap { v_ST_StrokeEndCap }?,
299     attribute dashstyle { xsd:string }?,
300     attribute insetpen { s_ST_TrueFalse }?,
301     attribute filltype { v_ST_FillType }?,
302     attribute src { xsd:string }?,
303     attribute imageaspect { v_ST_ImageAspect }?,
304     attribute imagesize { xsd:string }?,
305     attribute imagealignshape { s_ST_TrueFalse }?,
306     attribute startarrow { v_ST_StrokeArrowType }?,
307     attribute startarrowwidth { v_ST_StrokeArrowWidth }?,
308     attribute startarrowlength { v_ST_StrokeArrowLength }?,
309     attribute endarrow { v_ST_StrokeArrowType }?,

```

```

310     attribute endarrowwidth { v_ST_StrokeArrowWidth }?,
311     attribute endarrowlength { v_ST_StrokeArrowLength }?,
312     o_href?,
313     o_althref?,
314     o_title?,
315     o_forcedash?
316 o_CT_ClipPath = attribute o:v { xsd:string }
317 o_CT_Fill =
318     v_AG_Ext,
319     attribute type { o_ST_FillType }?
320 o_ST_RType =
321     string "arc" | string "callout" | string "connector" | string "align"
322 o_ST_How =
323     string "top"
324     | string "middle"
325     | string "bottom"
326     | string "left"
327     | string "center"
328     | string "right"
329 o_ST_BWMode =
330     string "color"
331     | string "auto"
332     | string "grayScale"
333     | string "lightGrayscale"
334     | string "inverseGray"
335     | string "grayOutline"
336     | string "highContrast"
337     | string "black"
338     | string "white"
339     | string "hide"
340     | string "undrawn"
341     | string "blackTextAndLines"
342 o_ST_ScreenSize =
343     string "544,376"
344     | string "640,480"
345     | string "720,512"
346     | string "800,600"
347     | string "1024,768"
348     | string "1152,862"
349 o_ST_InsetMode = string "auto" | string "custom"
350 o_ST_ColorMode = string "auto" | string "custom"
351 o_ST_ContentType = xsd:string
352 o_ST_DiagramLayout = "0" | "1" | "2" | "3"
353 o_ST_ExtrusionType = string "perspective" | string "parallel"
354 o_ST_ExtrusionRender =
355     string "solid" | string "wireFrame" | string "boundingCube"
356 o_ST_ExtrusionPlane = string "XY" | string "ZX" | string "YZ"
357 o_ST_Angle =
358     string "any"
359     | string "30"
360     | string "45"
361     | string "60"
362     | string "90"

```

```

363 | string "auto"
364 o_ST_CalloutDrop = xsd:string
365 o_ST_CalloutPlacement =
366     string "top" | string "center" | string "bottom" | string "user"
367 o_ST_ConnectorType =
368     string "none" | string "straight" | string "elbow" | string "curved"
369 o_ST_HrAlign = string "left" | string "right" | string "center"
370 o_ST_ConnectType =
371     string "none" | string "rect" | string "segments" | string "custom"
372 o_ST_OLELinkType = xsd:string
373 o_ST_OLEType = string "Embed" | string "Link"
374 o_ST_OLEDrawAspect = string "Content" | string "Icon"
375 o_ST_OLEUpdateMode = string "Always" | string "OnCall"
376 o_ST_FillType =
377     string "gradientCenter"
378     | string "solid"
379     | string "pattern"
380     | string "tile"
381     | string "frame"
382     | string "gradientUnscaled"
383     | string "gradientRadial"
384     | string "gradient"
385     | string "background"
386 o_any_vml_vml =
387     v_shape
388     | v_shapetype
389     | v_group
390     | v_background
391     | v_fill
392     | v_formulas
393     | v_handles
394     | v_imagedata
395     | v_path
396     | v_textbox
397     | v_shadow
398     | v_stroke
399     | v_textpath
400     | v_arc
401     | v_curve
402     | v_image
403     | v_line
404     | v_oval
405     | v_polyline
406     | v_rect
407     | v_roundrect

```

B.6.3 VML - Wordprocessing Drawing

This schema is available in the file vml-wordprocessingDrawing.rnc.

```

1 default namespace = "urn:schemas-microsoft-com:office:word"
2 namespace o = "urn:schemas-microsoft-com:office:office"
3 namespace v = "urn:schemas-microsoft-com:vml"

```

```

4 namespace w10 = "urn:schemas-microsoft-com:office:word"
5 namespace x = "urn:schemas-microsoft-com:office:excel"
6
7 w10_bordertop = element bordertop { w10_CT_Border }
8 w10_borderleft = element borderleft { w10_CT_Border }
9 w10_borderright = element borderright { w10_CT_Border }
10 w10_borderbottom = element borderbottom { w10_CT_Border }
11 w10_CT_Border =
12     attribute type { w10_ST_BorderType }?,
13     attribute width { xsd:positiveInteger }?,
14     attribute shadow { w10_ST_BorderShadow }?
15 w10_wrap = element wrap { w10_CT_Wrap }
16 w10_CT_Wrap =
17     attribute type { w10_ST_WrapType }?,
18     attribute side { w10_ST_WrapSide }?,
19     attribute anchorx { w10_ST_HorizontalAnchor }?,
20     attribute anchory { w10_ST_VerticalAnchor }?
21 w10_anchorlock = element anchorlock { w10_CT_AnchorLock }
22 w10_CT_AnchorLock = empty
23 w10_ST_BorderType =
24     string "none"
25     | string "single"
26     | string "thick"
27     | string "double"
28     | string "hairline"
29     | string "dot"
30     | string "dash"
31     | string "dotDash"
32     | string "dashDotDot"
33     | string "triple"
34     | string "thinThickSmall"
35     | string "thickThinSmall"
36     | string "thickBetweenThinSmall"
37     | string "thinThick"
38     | string "thickThin"
39     | string "thickBetweenThin"
40     | string "thinThickLarge"
41     | string "thickThinLarge"
42     | string "thickBetweenThinLarge"
43     | string "wave"
44     | string "doubleWave"
45     | string "dashedSmall"
46     | string "dashDotStroked"
47     | string "threeDEmboss"
48     | string "threeDEngrave"
49     | string "HTMLOutset"
50     | string "HTMLInset"
51 w10_ST_BorderShadow =
52     string "t" | string "true" | string "f" | string "false"
53 w10_ST_WrapType =
54     string "topAndBottom"
55     | string "square"
56     | string "none"

```

```

57 | string "tight"
58 | string "through"
59 w10_ST_WrapSide =
60   string "both" | string "left" | string "right" | string "largest"
61 w10_ST_HorizontalAnchor =
62   string "margin" | string "page" | string "text" | string "char"
63 w10_ST_VerticalAnchor =
64   string "margin" | string "page" | string "text" | string "line"

```

B.6.4 VML - Spreadsheet Drawing

This schema is available in the file vml-spreadsheetDrawing.rnc.

```

1  default namespace = "urn:schemas-microsoft-com:office:excel"
2  namespace o = "urn:schemas-microsoft-com:office:office"
3  namespace s =
4    "http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
5  namespace v = "urn:schemas-microsoft-com:vml"
6  namespace w10 = "urn:schemas-microsoft-com:office:word"
7  namespace x = "urn:schemas-microsoft-com:office:excel"
8
9  x_ClientData = element ClientData { x_CT_ClientData }
10 x_CT_ClientData =
11   attribute ObjectType { x_ST_ObjectType },
12   (element MoveWithCells { s_ST_TrueFalseBlank }
13     | element SizeWithCells { s_ST_TrueFalseBlank }
14     | element Anchor { xsd:string }
15     | element Locked { s_ST_TrueFalseBlank }
16     | element DefaultSize { s_ST_TrueFalseBlank }
17     | element PrintObject { s_ST_TrueFalseBlank }
18     | element Disabled { s_ST_TrueFalseBlank }
19     | element AutoFill { s_ST_TrueFalseBlank }
20     | element AutoLine { s_ST_TrueFalseBlank }
21     | element AutoPict { s_ST_TrueFalseBlank }
22     | element FmlaMacro { xsd:string }
23     | element TextHAlign { xsd:string }
24     | element TextVAlign { xsd:string }
25     | element LockText { s_ST_TrueFalseBlank }
26     | element JustLastX { s_ST_TrueFalseBlank }
27     | element SecretEdit { s_ST_TrueFalseBlank }
28     | element Default { s_ST_TrueFalseBlank }
29     | element Help { s_ST_TrueFalseBlank }
30     | element Cancel { s_ST_TrueFalseBlank }
31     | element Dismiss { s_ST_TrueFalseBlank }
32     | element Accel { xsd:integer }
33     | element Accel2 { xsd:integer }
34     | element Row { xsd:integer }
35     | element Column { xsd:integer }
36     | element Visible { s_ST_TrueFalseBlank }
37     | element RowHidden { s_ST_TrueFalseBlank }
38     | element ColHidden { s_ST_TrueFalseBlank }
39     | element VTEdit { xsd:integer }
40     | element MultiLine { s_ST_TrueFalseBlank }

```

```

41 | element VScroll { s_ST_TrueFalseBlank }
42 | element ValidIds { s_ST_TrueFalseBlank }
43 | element FmlaRange { xsd:string }
44 | element WidthMin { xsd:integer }
45 | element Sel { xsd:integer }
46 | element NoThreeD2 { s_ST_TrueFalseBlank }
47 | element SelType { xsd:string }
48 | element MultiSel { xsd:string }
49 | element LCT { xsd:string }
50 | element ListItem { xsd:string }
51 | element DropStyle { xsd:string }
52 | element Colored { s_ST_TrueFalseBlank }
53 | element DropLines { xsd:integer }
54 | element Checked { xsd:integer }
55 | element FmlaLink { xsd:string }
56 | element FmlaPict { xsd:string }
57 | element NoThreeD { s_ST_TrueFalseBlank }
58 | element FirstButton { s_ST_TrueFalseBlank }
59 | element FmlaGroup { xsd:string }
60 | element Val { xsd:integer }
61 | element Min { xsd:integer }
62 | element Max { xsd:integer }
63 | element Inc { xsd:integer }
64 | element Page { xsd:integer }
65 | element Horiz { s_ST_TrueFalseBlank }
66 | element Dx { xsd:integer }
67 | element MapOCX { s_ST_TrueFalseBlank }
68 | element CF { x_ST_CF }
69 | element Camera { s_ST_TrueFalseBlank }
70 | element RecalcAlways { s_ST_TrueFalseBlank }
71 | element AutoScale { s_ST_TrueFalseBlank }
72 | element DDE { s_ST_TrueFalseBlank }
73 | element UIObj { s_ST_TrueFalseBlank }
74 | element ScriptText { xsd:string }
75 | element ScriptExtended { xsd:string }
76 | element ScriptLanguage { xsd:nonNegativeInteger }
77 | element ScriptLocation { xsd:nonNegativeInteger }
78 | element FmlaTxbx { xsd:string })*
79 x_ST_CF = xsd:string
80 x_ST_ObjectType =
81   string "Button"
82   | string "Checkbox"
83   | string "Dialog"
84   | string "Drop"
85   | string "Edit"
86   | string "GBox"
87   | string "Label"
88   | string "LineA"
89   | string "List"
90   | string "Movie"
91   | string "Note"
92   | string "Pict"
93   | string "Radio"

```

```

94 | string "RectA"
95 | string "Scroll"
96 | string "Spin"
97 | string "Shape"
98 | string "Group"
99 | string "Rect"

```

B.6.5 VML - Presentation Drawing

This schema is available in the file vml-presentationDrawing.rnc.

```

1  default namespace = "urn:schemas-microsoft-com:office:powerpoint"
2  namespace o = "urn:schemas-microsoft-com:office:office"
3  namespace pvml = "urn:schemas-microsoft-com:office:powerpoint"
4  namespace v = "urn:schemas-microsoft-com:vml"
5  namespace w10 = "urn:schemas-microsoft-com:office:word"
6  namespace x = "urn:schemas-microsoft-com:office:excel"
7
8  pvml_iscomment = element iscomment { pvml_CT_Empty }
9  pvml_textdata = element textdata { pvml_CT_Rel }
10 pvml_CT_Empty = empty
11 pvml_CT_Rel = attribute id { xsd:string }?

```

B.6.6 Part Schemas

This schema is available in the file VML_Drawing.rnc.

```

1  include "wml.rnc"
2  include "shared-relationshipReference.rnc"
3  include "dml-wordprocessingDrawing.rnc"
4  include "dml-main.rnc"
5  include "dml-diagram.rnc"
6  include "shared-commonSimpleTypes.rnc"
7  include "dml-lockedCanvas.rnc"
8  include "any.rnc"
9  include "dml-chart.rnc"
10 include "dml-chartDrawing.rnc"
11 include "dml-picture.rnc"
12 include "dml-compatibility.rnc"
13 include "vml-presentationDrawing.rnc"
14 include "xml.rnc"
15 include "shared-customXmlSchemaProperties.rnc"
16 include "vml-officeDrawing.rnc"
17 include "vml-main.rnc"
18 include "vml-spreadsheetDrawing.rnc"
19 include "vml-wordprocessingDrawing.rnc"
20 include "shared-math.rnc"
21 start = element xml {(vml-main | vml-officeDrawing | vml-spreadsheetDrawing |
22   vml-presentationDrawing)* }
23
24 vml-main =
25   v_shape
26   | v_shapetype

```

```

27 | v_group
28 | v_background
29 | v_fill
30 | v_formulas
31 | v_handles
32 | v_imagedata
33 | v_path
34 | v_textbox
35 | v_shadow
36 | v_stroke
37 | v_textpath
38 | v_arc
39 | v_curve
40 | v_image
41 | v_line
42 | v_oval
43 | v_polyline
44 | v_rect
45 | v_roundrect
46
47 vml-officeDrawing =
48   o_shapedefaults
49   | o_shapelayout
50   | o_signatureline
51   | o_ink
52   | o_diagram
53   | o_equationxml
54   | o_skew
55   | o_extrusion
56   | o_callout
57   | o_lock
58   | o_OLEObject
59   | o_complex
60   | o_left
61   | o_top
62   | o_right
63   | o_bottom
64   | o_column
65   | o_clippath
66   | o_fill
67
68 vml-wordprocessingDrawing =
69   w10_bordertop
70   | w10_borderleft
71   | w10_borderright
72   | w10_borderbottom
73   | w10_wrap
74   | w10_anchorlock
75
76 vml-spreadsheetDrawing = x_ClientData
77 vml-presentationDrawing = pvml_iscomment | pvml_textdata

```


B.7 Shared MLs

B.7.1 Math

This schema is available in the file shared-math.rnc.

```

1  default namespace m =
2    "http://schemas.openxmlformats.org/officeDocument/2006/math"
3  namespace o = "urn:schemas-microsoft-com:office:office"
4  namespace s =
5    "http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
6  namespace v = "urn:schemas-microsoft-com:vm1"
7  namespace w =
8    "http://schemas.openxmlformats.org/wordprocessingml/2006/main"
9  namespace w10 = "urn:schemas-microsoft-com:office:word"
10 namespace x = "urn:schemas-microsoft-com:office:excel"
11
12 m_ST_Integer255 =
13   xsd:integer { minInclusive = "1" maxInclusive = "255" }
14 m_CT_Integer255 = attribute m:val { m_ST_Integer255 }
15 m_ST_Integer2 = xsd:integer { minInclusive = "-2" maxInclusive = "2" }
16 m_CT_Integer2 = attribute m:val { m_ST_Integer2 }
17 m_ST_SpacingRule = xsd:integer { minInclusive = "0" maxInclusive = "4" }
18 m_CT_SpacingRule = attribute m:val { m_ST_SpacingRule }
19 m_ST_UnSignedInteger = xsd:unsignedInt
20 m_CT_UnSignedInteger = attribute m:val { m_ST_UnSignedInteger }
21 m_ST_Char = xsd:string { maxLength = "1" }
22 m_CT_Char = attribute m:val { m_ST_Char }
23 m_CT_OnOff = attribute m:val { s_ST_OnOff }?
24 m_CT_String = attribute m:val { s_ST_String }?
25 m_CT_XAlign = attribute m:val { s_ST_XAlign }
26 m_CT_YAlign = attribute m:val { s_ST_YAlign }
27 m_ST_Shp = string "centered" | string "match"
28 m_CT_Shp = attribute m:val { m_ST_Shp }
29 m_ST_FType = string "bar" | string "skw" | string "lin" | string "noBar"
30 m_CT_FType = attribute m:val { m_ST_FType }
31 m_ST_LimLoc = string "undOvr" | string "subSup"
32 m_CT_LimLoc = attribute m:val { m_ST_LimLoc }
33 m_ST_TopBot = string "top" | string "bot"
34 m_CT_TopBot = attribute m:val { m_ST_TopBot }
35 m_ST_Script =
36   string "roman"
37   | string "script"
38   | string "fraktur"
39   | string "double-struck"
40   | string "sans-serif"
41   | string "monospace"
42 m_CT_Script = attribute m:val { m_ST_Script }?
43 m_ST_Style = string "p" | string "b" | string "i" | string "bi"
44 m_CT_Style = attribute m:val { m_ST_Style }?
45 m_CT_ManualBreak = attribute m:alnAt { m_ST_Integer255 }?
46 m_EG_ScriptStyle =

```

```

47     element scr { m_CT_Script }?,
48     element sty { m_CT_Style }?
49 m_CT_RPR =
50     element lit { m_CT_OnOff }?,
51     (element nor { m_CT_OnOff }?
52      | m_EG_ScriptStyle),
53     element brk { m_CT_ManualBreak }?,
54     element aln { m_CT_OnOff }?
55 m_CT_Text = s_ST_String, xml_space?
56 m_CT_R =
57     element rPr { m_CT_RPR }?,
58     w_EG_RPr?,
59     (w_EG_RunInnerContent
60      | element t { m_CT_Text }?)*
61 m_CT_CtrlPr = w_EG_RPrMath?
62 m_CT_AccPr =
63     element chr { m_CT_Char }?,
64     element ctrlPr { m_CT_CtrlPr }?
65 m_CT_Acc =
66     element accPr { m_CT_AccPr }?,
67     element e { m_CT_OMathArg }
68 m_CT_BarPr =
69     element pos { m_CT_TopBot }?,
70     element ctrlPr { m_CT_CtrlPr }?
71 m_CT_Bar =
72     element barPr { m_CT_BarPr }?,
73     element e { m_CT_OMathArg }
74 m_CT_BoxPr =
75     element opEmu { m_CT_OnOff }?,
76     element noBreak { m_CT_OnOff }?,
77     element diff { m_CT_OnOff }?,
78     element brk { m_CT_ManualBreak }?,
79     element aln { m_CT_OnOff }?,
80     element ctrlPr { m_CT_CtrlPr }?
81 m_CT_Box =
82     element boxPr { m_CT_BoxPr }?,
83     element e { m_CT_OMathArg }
84 m_CT_BorderBoxPr =
85     element hideTop { m_CT_OnOff }?,
86     element hideBot { m_CT_OnOff }?,
87     element hideLeft { m_CT_OnOff }?,
88     element hideRight { m_CT_OnOff }?,
89     element strikeH { m_CT_OnOff }?,
90     element strikeV { m_CT_OnOff }?,
91     element strikeBLTR { m_CT_OnOff }?,
92     element strikeTLBR { m_CT_OnOff }?,
93     element ctrlPr { m_CT_CtrlPr }?
94 m_CT_BorderBox =
95     element borderBoxPr { m_CT_BorderBoxPr }?,
96     element e { m_CT_OMathArg }
97 m_CT_DPr =
98     element begChr { m_CT_Char }?,
99     element sepChr { m_CT_Char }?,

```

```

100   element endChr { m_CT_Char }?,
101   element grow { m_CT_OnOff }?,
102   element shp { m_CT_Shp }?,
103   element ctrlPr { m_CT_CtrlPr }?
104 m_CT_D =
105   element dPr { m_CT_DPr }?,
106   element e { m_CT_OMathArg }+
107 m_CT_EqArrPr =
108   element baseJc { m_CT_YAlign }?,
109   element maxDist { m_CT_OnOff }?,
110   element objDist { m_CT_OnOff }?,
111   element rSpRule { m_CT_SpacingRule }?,
112   element rSp { m_CT_UnSignedInteger }?,
113   element ctrlPr { m_CT_CtrlPr }?
114 m_CT_EqArr =
115   element eqArrPr { m_CT_EqArrPr }?,
116   element e { m_CT_OMathArg }+
117 m_CT_FPr =
118   element type { m_CT_FType }?,
119   element ctrlPr { m_CT_CtrlPr }?
120 m_CT_F =
121   element fPr { m_CT_FPr }?,
122   element num { m_CT_OMathArg },
123   element den { m_CT_OMathArg }
124 m_CT_FuncPr = element ctrlPr { m_CT_CtrlPr }?
125 m_CT_Func =
126   element funcPr { m_CT_FuncPr }?,
127   element fName { m_CT_OMathArg },
128   element e { m_CT_OMathArg }
129 m_CT_GroupChrPr =
130   element chr { m_CT_Char }?,
131   element pos { m_CT_TopBot }?,
132   element vertJc { m_CT_TopBot }?,
133   element ctrlPr { m_CT_CtrlPr }?
134 m_CT_GroupChr =
135   element groupChrPr { m_CT_GroupChrPr }?,
136   element e { m_CT_OMathArg }
137 m_CT_LimLowPr = element ctrlPr { m_CT_CtrlPr }?
138 m_CT_LimLow =
139   element limLowPr { m_CT_LimLowPr }?,
140   element e { m_CT_OMathArg },
141   element lim { m_CT_OMathArg }
142 m_CT_LimUppPr = element ctrlPr { m_CT_CtrlPr }?
143 m_CT_LimUpp =
144   element limUppPr { m_CT_LimUppPr }?,
145   element e { m_CT_OMathArg },
146   element lim { m_CT_OMathArg }
147 m_CT_MCPr =
148   element count { m_CT_Integer255 }?,
149   element mcJc { m_CT_XAlign }?
150 m_CT_MC = element mcPr { m_CT_MCPr }?
151 m_CT_MCS = element mc { m_CT_MC }+
152 m_CT_MPr =

```

```

153     element baseJc { m_CT_YAlign }?,
154     element plcHide { m_CT_OnOff }?,
155     element rSpRule { m_CT_SpacingRule }?,
156     element cGpRule { m_CT_SpacingRule }?,
157     element rSp { m_CT_UnSignedInteger }?,
158     element cSp { m_CT_UnSignedInteger }?,
159     element cGp { m_CT_UnSignedInteger }?,
160     element mcs { m_CT_MCS }?,
161     element ctrlPr { m_CT_CtrlPr }?
162 m_CT_MR = element e { m_CT_OMathArg }+
163 m_CT_M =
164     element mPr { m_CT_MPr }?,
165     element mr { m_CT_MR }+
166 m_CT_NaryPr =
167     element chr { m_CT_Char }?,
168     element limLoc { m_CT_LimLoc }?,
169     element grow { m_CT_OnOff }?,
170     element subHide { m_CT_OnOff }?,
171     element supHide { m_CT_OnOff }?,
172     element ctrlPr { m_CT_CtrlPr }?
173 m_CT_Nary =
174     element naryPr { m_CT_NaryPr }?,
175     element sub { m_CT_OMathArg },
176     element sup { m_CT_OMathArg },
177     element e { m_CT_OMathArg }
178 m_CT_PhantPr =
179     element show { m_CT_OnOff }?,
180     element zeroWid { m_CT_OnOff }?,
181     element zeroAsc { m_CT_OnOff }?,
182     element zeroDesc { m_CT_OnOff }?,
183     element transp { m_CT_OnOff }?,
184     element ctrlPr { m_CT_CtrlPr }?
185 m_CT_Phant =
186     element phantPr { m_CT_PhantPr }?,
187     element e { m_CT_OMathArg }
188 m_CT_RadPr =
189     element degHide { m_CT_OnOff }?,
190     element ctrlPr { m_CT_CtrlPr }?
191 m_CT_Rad =
192     element radPr { m_CT_RadPr }?,
193     element deg { m_CT_OMathArg },
194     element e { m_CT_OMathArg }
195 m_CT_SPrePr = element ctrlPr { m_CT_CtrlPr }?
196 m_CT_SPre =
197     element sPrePr { m_CT_SPrePr }?,
198     element sub { m_CT_OMathArg },
199     element sup { m_CT_OMathArg },
200     element e { m_CT_OMathArg }
201 m_CT_SSubPr = element ctrlPr { m_CT_CtrlPr }?
202 m_CT_SSub =
203     element sSubPr { m_CT_SSubPr }?,
204     element e { m_CT_OMathArg },
205     element sub { m_CT_OMathArg }

```

```

206 m_CT_SSubSupPr =
207     element alnScr { m_CT_OnOff }?,
208     element ctrlPr { m_CT_CtrlPr }?
209 m_CT_SSubSup =
210     element sSubSupPr { m_CT_SSubSupPr }?,
211     element e { m_CT_OMathArg },
212     element sub { m_CT_OMathArg },
213     element sup { m_CT_OMathArg }
214 m_CT_SSupPr = element ctrlPr { m_CT_CtrlPr }?
215 m_CT_SSup =
216     element sSupPr { m_CT_SSupPr }?,
217     element e { m_CT_OMathArg },
218     element sup { m_CT_OMathArg }
219 m_EG_OMathMathElements =
220     element acc { m_CT_Acc }
221     | element bar { m_CT_Bar }
222     | element box { m_CT_Box }
223     | element borderBox { m_CT_BorderBox }
224     | element d { m_CT_D }
225     | element eqArr { m_CT_EqArr }
226     | element f { m_CT_F }
227     | element func { m_CT_Func }
228     | element groupChr { m_CT_GroupChr }
229     | element limLow { m_CT_LimLow }
230     | element limUpp { m_CT_LimUpp }
231     | element m { m_CT_M }
232     | element nary { m_CT_Nary }
233     | element phant { m_CT_Phant }
234     | element rad { m_CT_Rad }
235     | element sPre { m_CT_SPre }
236     | element sSub { m_CT_SSub }
237     | element sSubSup { m_CT_SSubSup }
238     | element sSup { m_CT_SSup }
239     | element r { m_CT_R }
240 m_EG_OMathElements = m_EG_OMathMathElements | w_EG_PContentMath
241 m_CT_OMathArgPr = element argSz { m_CT_Integer2 }?
242 m_CT_OMathArg =
243     element argPr { m_CT_OMathArgPr }?,
244     m_EG_OMathElements*,
245     element ctrlPr { m_CT_CtrlPr }?
246 m_ST_Jc =
247     string "left"
248     | string "right"
249     | string "center"
250     | string "centerGroup"
251 m_CT_OMathJc = attribute m:val { m_ST_Jc }?
252 m_CT_OMathParaPr = element jc { m_CT_OMathJc }?
253 m_CT_TwipsMeasure = attribute m:val { s_ST_TwipsMeasure }
254 m_ST_BreakBin = string "before" | string "after" | string "repeat"
255 m_CT_BreakBin = attribute m:val { m_ST_BreakBin }?
256 m_ST_BreakBinSub = string "--" | string "-+" | string "+-"
257 m_CT_BreakBinSub = attribute m:val { m_ST_BreakBinSub }?
258 m_CT_MathPr =

```

```

259 element mathFont { m_CT_String }?,
260 element brkBin { m_CT_BreakBin }?,
261 element brkBinSub { m_CT_BreakBinSub }?,
262 element smallFrac { m_CT_OnOff }?,
263 element dispDef { m_CT_OnOff }?,
264 element lMargin { m_CT_TwipsMeasure }?,
265 element rMargin { m_CT_TwipsMeasure }?,
266 element defJc { m_CT_OMathJc }?,
267 element preSp { m_CT_TwipsMeasure }?,
268 element postSp { m_CT_TwipsMeasure }?,
269 element interSp { m_CT_TwipsMeasure }?,
270 element intraSp { m_CT_TwipsMeasure }?,
271 (element wrapIndent { m_CT_TwipsMeasure }
272   | element wrapRight { m_CT_OnOff }?)?,
273 element intLim { m_CT_LimLoc }?,
274 element naryLim { m_CT_LimLoc }?
275 m_mathPr = element mathPr { m_CT_MathPr }
276 m_CT_OMathPara =
277   element oMathParaPr { m_CT_OMathParaPr }?,
278   element oMath { m_CT_OMath }+
279 m_CT_OMath = m_EG_OMathElements*
280 m_oMathPara = element oMathPara { m_CT_OMathPara }
281 m_oMath = element oMath { m_CT_OMath }

```

B.7.2 Extended Properties

This schema is available in the file shared-documentPropertiesExtended.rnc.

```

1 default namespace =
2   "http://schemas.openxmlformats.org/officeDocument/2006/extended-properties"
3 namespace o = "urn:schemas-microsoft-com:office:office"
4 namespace shdDcEP =
5   "http://schemas.openxmlformats.org/officeDocument/2006/extended-properties"
6 namespace v = "urn:schemas-microsoft-com:vml"
7 namespace vt =
8   "http://schemas.openxmlformats.org/officeDocument/2006/docPropsVTypes"
9 namespace w10 = "urn:schemas-microsoft-com:office:word"
10 namespace x = "urn:schemas-microsoft-com:office:excel"
11
12 shdDcEP_Properties = element Properties { shdDcEP_CT_Properties }
13 shdDcEP_CT_Properties =
14   element Template { xsd:string }?
15   & element Manager { xsd:string }?
16   & element Company { xsd:string }?
17   & element Pages { xsd:int }?
18   & element Words { xsd:int }?
19   & element Characters { xsd:int }?
20   & element PresentationFormat { xsd:string }?
21   & element Lines { xsd:int }?
22   & element Paragraphs { xsd:int }?
23   & element Slides { xsd:int }?
24   & element Notes { xsd:int }?
25   & element TotalTime { xsd:int }?

```

```

26 & element HiddenSlides { xsd:int }?
27 & element MMClips { xsd:int }?
28 & element ScaleCrop { xsd:boolean }?
29 & element HeadingPairs { shdDcEP_CT_VectorVariant }?
30 & element TitlesOfParts { shdDcEP_CT_VectorLpstr }?
31 & element LinksUpToDate { xsd:boolean }?
32 & element CharactersWithSpaces { xsd:int }?
33 & element SharedDoc { xsd:boolean }?
34 & element HyperlinkBase { xsd:string }?
35 & element HLinks { shdDcEP_CT_VectorVariant }?
36 & element HyperlinksChanged { xsd:boolean }?
37 & element DigSig { shdDcEP_CT_DigSigBlob }?
38 & element Application { xsd:string }?
39 & element AppVersion { xsd:string }?
40 & element DocSecurity { xsd:int }?
41 shdDcEP_CT_VectorVariant = vt_vector
42 shdDcEP_CT_VectorLpstr = vt_vector
43 shdDcEP_CT_DigSigBlob = vt_blob

```

B.7.2.1 Part Schemas

B.7.2.1.1 Extended File Properties Part

This schema is available in the file Shared_Extended_File_Properties.rnc.

```

1 include "shared-documentPropertiesExtended.rnc"
2 include "shared-documentPropertiesVariantTypes.rnc"
3 include "shared-commonSimpleTypes.rnc"
4 start = shdDcEP_Properties

```

B.7.3 Custom Properties

This schema is available in the file shared-documentPropertiesCustom.rnc.

```

1 default namespace =
2   "http://schemas.openxmlformats.org/officeDocument/2006/custom-properties"
3 namespace o = "urn:schemas-microsoft-com:office:office"
4 namespace s =
5   "http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
6 namespace shdCstm =
7   "http://schemas.openxmlformats.org/officeDocument/2006/custom-properties"
8 namespace v = "urn:schemas-microsoft-com:xml"
9 namespace vt =
10  "http://schemas.openxmlformats.org/officeDocument/2006/docPropsVTypes"
11 namespace w10 = "urn:schemas-microsoft-com:office:word"
12 namespace x = "urn:schemas-microsoft-com:office:excel"
13
14 shdCstm_Properties = element Properties { shdCstm_CT_Properties }
15 shdCstm_CT_Properties = element property { shdCstm_CT_Property }*
16 shdCstm_CT_Property =
17   attribute fmtid { s_ST_Guid },
18   attribute pid { xsd:int },
19   attribute name { xsd:string }?,

```

```

20 attribute linkTarget { xsd:string }?,
21 (vt_vector
22   | vt_array
23   | vt_blob
24   | vt_oblob
25   | vt_empty
26   | vt_null
27   | vt_i1
28   | vt_i2
29   | vt_i4
30   | vt_i8
31   | vt_int
32   | vt_ui1
33   | vt_ui2
34   | vt_ui4
35   | vt_ui8
36   | vt_uint
37   | vt_r4
38   | vt_r8
39   | vt_decimal
40   | vt_lpstr
41   | vt_lpwstr
42   | vt_bstr
43   | vt_date
44   | vt_filetime
45   | vt_bool
46   | vt_cy
47   | vt_error
48   | vt_stream
49   | vt_ostream
50   | vt_storage
51   | vt_ostorage
52   | vt_vstream
53   | vt_clsid)

```

B.7.3.1 Part Schemas

B.7.3.1.1 Custom File Properties Part

This schema is available in the file Shared_Custom_File_Properties.rnc.

```

1 include "shared-documentPropertiesCustom.rnc"
2 include "shared-documentPropertiesVariantTypes.rnc"
3 include "shared-commonSimpleTypes.rnc"
4 start = shdCstm_Properties

```

B.7.4 Variant Types

This schema is available in the file shared-documentPropertiesVariantTypes.rnc.

```

1 default namespace =
2   "http://schemas.openxmlformats.org/officeDocument/2006/docPropsVTypes"
3 namespace o = "urn:schemas-microsoft-com:office:office"

```



```

4 namespace s =
5     "http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
6 namespace v = "urn:schemas-microsoft-com:vm1"
7 namespace vt =
8     "http://schemas.openxmlformats.org/officeDocument/2006/docPropsVTypes"
9 namespace w10 = "urn:schemas-microsoft-com:office:word"
10 namespace x = "urn:schemas-microsoft-com:office:excel"
11
12 vt_ST_VectorBaseType =
13     string "variant"
14     | string "i1"
15     | string "i2"
16     | string "i4"
17     | string "i8"
18     | string "ui1"
19     | string "ui2"
20     | string "ui4"
21     | string "ui8"
22     | string "r4"
23     | string "r8"
24     | string "lpstr"
25     | string "lpwstr"
26     | string "bstr"
27     | string "date"
28     | string "filetime"
29     | string "bool"
30     | string "cy"
31     | string "error"
32     | string "clsid"
33 vt_ST_ArrayBaseType =
34     string "variant"
35     | string "i1"
36     | string "i2"
37     | string "i4"
38     | string "int"
39     | string "ui1"
40     | string "ui2"
41     | string "ui4"
42     | string "uint"
43     | string "r4"
44     | string "r8"
45     | string "decimal"
46     | string "bstr"
47     | string "date"
48     | string "bool"
49     | string "cy"
50     | string "error"
51 vt_ST_Cy = xsd:string { pattern = "\s*[0-9]*\.[0-9]{4}\s*" }
52 vt_ST_Error = xsd:string { pattern = "\s*0x[0-9A-Za-z]{8}\s*" }
53 vt_CT_Empty = empty
54 vt_CT_Null = empty
55 vt_CT_Vector =
56     attribute baseType { vt_ST_VectorBaseType },

```

```

57     attribute size { xsd:unsignedInt },
58     (vt_variant
59     | vt_i1
60     | vt_i2
61     | vt_i4
62     | vt_i8
63     | vt_ui1
64     | vt_ui2
65     | vt_ui4
66     | vt_ui8
67     | vt_r4
68     | vt_r8
69     | vt_lpstr
70     | vt_lpwstr
71     | vt_bstr
72     | vt_date
73     | vt_filetime
74     | vt_bool
75     | vt_cy
76     | vt_error
77     | vt_clsid)+
78 vt_CT_Array =
79     attribute lBounds { xsd:int },
80     attribute uBounds { xsd:int },
81     attribute baseType { vt_ST_ArrayBaseType },
82     (vt_variant
83     | vt_i1
84     | vt_i2
85     | vt_i4
86     | vt_int
87     | vt_ui1
88     | vt_ui2
89     | vt_ui4
90     | vt_uint
91     | vt_r4
92     | vt_r8
93     | vt_decimal
94     | vt_bstr
95     | vt_date
96     | vt_bool
97     | vt_error
98     | vt_cy)+
99 vt_CT_Variant =
100 vt_variant
101 | vt_vector
102 | vt_array
103 | vt_blob
104 | vt_oblob
105 | vt_empty
106 | vt_null
107 | vt_i1
108 | vt_i2
109 | vt_i4

```

```

110 | vt_i8
111 | vt_int
112 | vt_ui1
113 | vt_ui2
114 | vt_ui4
115 | vt_ui8
116 | vt_uint
117 | vt_r4
118 | vt_r8
119 | vt_decimal
120 | vt_lpstr
121 | vt_lpwstr
122 | vt_bstr
123 | vt_date
124 | vt_filetime
125 | vt_bool
126 | vt_cy
127 | vt_error
128 | vt_stream
129 | vt_ostream
130 | vt_storage
131 | vt_ostorage
132 | vt_vstream
133 | vt_clsid
134 vt_CT_Vstream =
135     xsd:base64Binary,
136     attribute version { s_ST_Guid }?
137 vt_variant = element variant { vt_CT_Variant }
138 vt_vector = element vector { vt_CT_Vector }
139 vt_array = element array { vt_CT_Array }
140 vt_blob = element blob { xsd:base64Binary }
141 vt_oblob = element oblob { xsd:base64Binary }
142 vt_empty = element empty { vt_CT_Empty }
143 vt_null = element null { vt_CT_Null }
144 vt_i1 = element i1 { xsd:byte }
145 vt_i2 = element i2 { xsd:short }
146 vt_i4 = element i4 { xsd:int }
147 vt_i8 = element i8 { xsd:long }
148 vt_int = element int { xsd:int }
149 vt_ui1 = element ui1 { xsd:unsignedByte }
150 vt_ui2 = element ui2 { xsd:unsignedShort }
151 vt_ui4 = element ui4 { xsd:unsignedInt }
152 vt_ui8 = element ui8 { xsd:unsignedLong }
153 vt_uint = element uint { xsd:unsignedInt }
154 vt_r4 = element r4 { xsd:float }
155 vt_r8 = element r8 { xsd:double }
156 vt_decimal = element decimal { xsd:decimal }
157 vt_lpstr = element lpstr { xsd:string }
158 vt_lpwstr = element lpwstr { xsd:string }
159 vt_bstr = element bstr { xsd:string }
160 vt_date = element date { xsd:dateTime }
161 vt_filetime = element filetime { xsd:dateTime }
162 vt_bool = element bool { xsd:boolean }

```

```

163 vt_cy = element cy { vt_ST_Cy }
164 vt_error = element error { vt_ST_Error }
165 vt_stream = element stream { xsd:base64Binary }
166 vt_ostream = element ostream { xsd:base64Binary }
167 vt_storage = element storage { xsd:base64Binary }
168 vt_ostorage = element ostorage { xsd:base64Binary }
169 vt_vstream = element vstream { vt_CT_Vstream }
170 vt_clsid = element clsid { s_ST_Guid }

```

B.7.5 Custom XML Data Properties

This schema is available in the file shared-customXmlDataProperties.rnc.

```

1 default namespace ds =
2   "http://schemas.openxmlformats.org/officeDocument/2006/customXml"
3 namespace o = "urn:schemas-microsoft-com:office:office"
4 namespace s =
5   "http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
6 namespace v = "urn:schemas-microsoft-com:xml"
7 namespace w10 = "urn:schemas-microsoft-com:office:word"
8 namespace x = "urn:schemas-microsoft-com:office:excel"
9
10 ds_CT_DatastoreSchemaRef = attribute ds:uri { xsd:string }
11 ds_CT_DatastoreSchemaRefs =
12   element schemaRef { ds_CT_DatastoreSchemaRef }*
13 ds_CT_DatastoreItem =
14   attribute ds:itemID { s_ST_Guid },
15   element schemaRefs { ds_CT_DatastoreSchemaRefs }?
16 ds_datastoreItem = element datastoreItem { ds_CT_DatastoreItem }

```

B.7.5.1 Part Schemas

B.7.5.1.1 Custom XML Data Properties Part

This schema is available in the file Shared_Custom_XML_Data_Storage_Properties.rnc.

```

1 include "shared-customXmlDataProperties.rnc"
2 include "shared-commonSimpleTypes.rnc"
3 start = ds_datastoreItem

```

B.7.6 Bibliography

This schema is available in the file shared-bibliography.rnc.

```

1 default namespace =
2   "http://schemas.openxmlformats.org/officeDocument/2006/bibliography"
3 namespace o = "urn:schemas-microsoft-com:office:office"
4 namespace s =
5   "http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
6 namespace shrdBib =
7   "http://schemas.openxmlformats.org/officeDocument/2006/bibliography"
8 namespace v = "urn:schemas-microsoft-com:xml"
9 namespace w10 = "urn:schemas-microsoft-com:office:word"
10 namespace x = "urn:schemas-microsoft-com:office:excel"

```

```

11
12 shrdBib_ST_SourceType =
13     "ArticleInAPeriodical"
14     | "Book"
15     | "BookSection"
16     | "JournalArticle"
17     | "ConferenceProceedings"
18     | "Report"
19     | "SoundRecording"
20     | "Performance"
21     | "Art"
22     | "DocumentFromInternetSite"
23     | "InternetSite"
24     | "Film"
25     | "Interview"
26     | "Patent"
27     | "ElectronicSource"
28     | "Case"
29     | "Misc"
30 shrdBib_CT_NameListType = element Person { shrdBib_CT_PersonType }+
31 shrdBib_CT_PersonType =
32     element Last { s_ST_String }*,
33     element First { s_ST_String }*,
34     element Middle { s_ST_String }*
35 shrdBib_CT_NameType = element NameList { shrdBib_CT_NameListType }
36 shrdBib_CT_NameOrCorporateType =
37     (element NameList { shrdBib_CT_NameListType }
38      | element Corporate { s_ST_String })?
39 shrdBib_CT_AuthorType =
40     (element Artist { shrdBib_CT_NameType }
41      | element Author { shrdBib_CT_NameOrCorporateType }
42      | element BookAuthor { shrdBib_CT_NameType }
43      | element Compiler { shrdBib_CT_NameType }
44      | element Composer { shrdBib_CT_NameType }
45      | element Conductor { shrdBib_CT_NameType }
46      | element Counsel { shrdBib_CT_NameType }
47      | element Director { shrdBib_CT_NameType }
48      | element Editor { shrdBib_CT_NameType }
49      | element Interviewee { shrdBib_CT_NameType }
50      | element Interviewer { shrdBib_CT_NameType }
51      | element Inventor { shrdBib_CT_NameType }
52      | element Performer { shrdBib_CT_NameOrCorporateType }
53      | element ProducerName { shrdBib_CT_NameType }
54      | element Translator { shrdBib_CT_NameType }
55      | element Writer { shrdBib_CT_NameType })*
56 shrdBib_CT_SourceType =
57     (element AbbreviatedCaseNumber { s_ST_String }
58      | element AlbumTitle { s_ST_String }
59      | element Author { shrdBib_CT_AuthorType }
60      | element BookTitle { s_ST_String }
61      | element Broadcaster { s_ST_String }
62      | element BroadcastTitle { s_ST_String }
63      | element CaseNumber { s_ST_String }

```

```

64 | element ChapterNumber { s_ST_String }
65 | element City { s_ST_String }
66 | element Comments { s_ST_String }
67 | element ConferenceName { s_ST_String }
68 | element CountryRegion { s_ST_String }
69 | element Court { s_ST_String }
70 | element Day { s_ST_String }
71 | element DayAccessed { s_ST_String }
72 | element Department { s_ST_String }
73 | element Distributor { s_ST_String }
74 | element Edition { s_ST_String }
75 | element Guid { s_ST_String }
76 | element Institution { s_ST_String }
77 | element InternetSiteTitle { s_ST_String }
78 | element Issue { s_ST_String }
79 | element JournalName { s_ST_String }
80 | element LCID { s_ST_Lang }
81 | element Medium { s_ST_String }
82 | element Month { s_ST_String }
83 | element MonthAccessed { s_ST_String }
84 | element NumberVolumes { s_ST_String }
85 | element Pages { s_ST_String }
86 | element PatentNumber { s_ST_String }
87 | element PeriodicalTitle { s_ST_String }
88 | element ProductionCompany { s_ST_String }
89 | element PublicationTitle { s_ST_String }
90 | element Publisher { s_ST_String }
91 | element RecordingNumber { s_ST_String }
92 | element RefOrder { s_ST_String }
93 | element Reporter { s_ST_String }
94 | element SourceType { shrdBib_ST_SourceType }
95 | element ShortTitle { s_ST_String }
96 | element StandardNumber { s_ST_String }
97 | element StateProvince { s_ST_String }
98 | element Station { s_ST_String }
99 | element Tag { s_ST_String }
100 | element Theater { s_ST_String }
101 | element ThesisType { s_ST_String }
102 | element Title { s_ST_String }
103 | element Type { s_ST_String }
104 | element URL { s_ST_String }
105 | element Version { s_ST_String }
106 | element Volume { s_ST_String }
107 | element Year { s_ST_String }
108 | element YearAccessed { s_ST_String })*
109 shrdBib_Sources = element Sources { shrdBib_CT_Sources }
110 shrdBib_CT_Sources =
111     attribute SelectedStyle { s_ST_String }?,
112     attribute StyleName { s_ST_String }?,
113     attribute URI { s_ST_String }?,
114     element Source { shrdBib_CT_SourceType }*

```

B.7.6.1 Part Schemas

B.7.6.1.1 Bibliography Part

This schema is available in the file Shared_Bibliography.rnc.

```

1 include "shared-bibliography.rnc"
2 include "shared-commonSimpleTypes.rnc"
3 start = shrdBib_Sources

```

B.7.7 Additional Characteristics

This schema is available in the file shared-additionalCharacteristics.rnc.

```

1 default namespace =
2   "http://schemas.openxmlformats.org/officeDocument/2006/characteristics"
3 namespace o = "urn:schemas-microsoft-com:office:office"
4 namespace shrdChr =
5   "http://schemas.openxmlformats.org/officeDocument/2006/characteristics"
6 namespace v = "urn:schemas-microsoft-com:vml"
7 namespace w10 = "urn:schemas-microsoft-com:office:word"
8 namespace x = "urn:schemas-microsoft-com:office:excel"
9
10 shrdChr_CT_AdditionalCharacteristics =
11   element characteristic { shrdChr_CT_Characteristic }*
12 shrdChr_CT_Characteristic =
13   attribute name { xsd:string },
14   attribute relation { shrdChr_ST_Relation },
15   attribute val { xsd:string },
16   attribute vocabulary { xsd:anyURI }?
17 shrdChr_ST_Relation =
18   string "ge" | string "le" | string "gt" | string "lt" | string "eq"
19 shrdChr_additionalCharacteristics =
20   element additionalCharacteristics {
21     shrdChr_CT_AdditionalCharacteristics
22   }

```

B.7.7.1 Part Schemas

B.7.7.1.1 Additional Characteristics Part

This schema is available in the file Shared_Additional_Characteristics.rnc.

```

1 include "shared-additionalCharacteristics.rnc"
2 start = shrdChr_additionalCharacteristics

```

B.7.8 Office Document Relationships

This schema is available in the file shared-relationshipReference.rnc.

```

1 namespace o = "urn:schemas-microsoft-com:office:office"
2 namespace r =
3   "http://schemas.openxmlformats.org/officeDocument/2006/relationships"

```

```

4 namespace v = "urn:schemas-microsoft-com:vml"
5 namespace w10 = "urn:schemas-microsoft-com:office:word"
6 namespace x = "urn:schemas-microsoft-com:office:excel"
7
8 r_ST_RelationshipId = xsd:string
9 r_id = attribute r:id { r_ST_RelationshipId }
10 r_embed = attribute r:embed { r_ST_RelationshipId }
11 r_link = attribute r:link { r_ST_RelationshipId }
12 r_dm = attribute r:dm { r_ST_RelationshipId }
13 r_lo = attribute r:lo { r_ST_RelationshipId }
14 r_qs = attribute r:qs { r_ST_RelationshipId }
15 r_cs = attribute r:cs { r_ST_RelationshipId }
16 r_blip = attribute r:blip { r_ST_RelationshipId }
17 r_pict = attribute r:pict { r_ST_RelationshipId }
18 r_href = attribute r:href { r_ST_RelationshipId }
19 r_topLeft = attribute r:topLeft { r_ST_RelationshipId }
20 r_topRight = attribute r:topRight { r_ST_RelationshipId }
21 r_bottomLeft = attribute r:bottomLeft { r_ST_RelationshipId }
22 r_bottomRight = attribute r:bottomRight { r_ST_RelationshipId }

```

B.7.9 Shared Simple Types

This schema is available in the file shared-commonSimpleTypes.rnc.

```

1 namespace o = "urn:schemas-microsoft-com:office:office"
2 namespace s =
3   "http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
4 namespace v = "urn:schemas-microsoft-com:vml"
5 namespace w10 = "urn:schemas-microsoft-com:office:word"
6 namespace x = "urn:schemas-microsoft-com:office:excel"
7
8 s_ST_Lang = xsd:string
9 s_ST_HexColorRGB = xsd:hexBinary { length = "3" }
10 s_ST_Panose = xsd:hexBinary { length = "10" }
11 s_ST_CalendarType =
12   string "gregorian"
13   | string "gregorianUs"
14   | string "gregorianMeFrench"
15   | string "gregorianArabic"
16   | string "hijri"
17   | string "hebrew"
18   | string "taiwan"
19   | string "japan"
20   | string "thai"
21   | string "korea"
22   | string "saka"
23   | string "gregorianXlitEnglish"
24   | string "gregorianXlitFrench"
25   | string "none"
26 s_ST_Algorithm = string "hash" | string "custom"
27 s_ST_CryptProv = string "rsaAES" | string "rsaFull" | string "custom"
28 s_ST_AlgorithmType = string "typeAny" | string "custom"
29 s_ST_ColorType = xsd:string

```



```

30 s_ST_Guid =
31     xsd:token {
32         pattern =
33             "\{[0-9A-F]{8}-[0-9A-F]{4}-[0-9A-F]{4}-[0-9A-F]{4}-[0-9A-F]{12}\}"
34     }
35 s_ST_OnOff = xsd:boolean | s_ST_OnOff1
36 s_ST_OnOff1 = string "on" | string "off"
37 s_ST_String = xsd:string
38 s_ST_TrueFalse =
39     string "t" | string "f" | string "true" | string "false"
40 s_ST_TrueFalseBlank =
41     string "t"
42     | string "f"
43     | string "true"
44     | string "false"
45     | string ""
46     | string "True"
47     | string "False"
48 s_ST_UnsignedDecimalNumber = xsd:unsignedLong
49 s_ST_TwipsMeasure =
50     s_ST_UnsignedDecimalNumber | s_ST_PositiveUniversalMeasure
51 s_ST_VerticalAlignRun =
52     string "baseline" | string "superscript" | string "subscript"
53 s_ST_Xstring = xsd:string
54 s_ST_XAlign =
55     string "left"
56     | string "center"
57     | string "right"
58     | string "inside"
59     | string "outside"
60 s_ST_YAlign =
61     string "inline"
62     | string "top"
63     | string "center"
64     | string "bottom"
65     | string "inside"
66     | string "outside"
67 s_ST_ConformanceClass = string "strict" | string "transitional"
68 s_ST_UniversalMeasure =
69     xsd:string { pattern = "-?[0-9]+(\\.[0-9]+)?(mm|cm|in|pt|pc|pi)" }
70 s_ST_PositiveUniversalMeasure =
71     xsd:string {
72         pattern = "-?[0-9]+(\\.[0-9]+)?(mm|cm|in|pt|pc|pi)"
73         pattern = "[0-9]+(\\.[0-9]+)?(mm|cm|in|pt|pc|pi)"
74     }
75 s_ST_Percentage = xsd:string { pattern = "-?[0-9]+(\\.[0-9]+)%" }
76 s_ST_FixedPercentage =
77     xsd:string {
78         pattern = "-?[0-9]+(\\.[0-9]+)%"
79         pattern = "-?((100)|([0-9][0-9]?))(\\.[0-9][0-9]?)%"
80     }
81 s_ST_PositivePercentage =
82     xsd:string {

```

```

83     pattern = "-?[0-9]+(\.[0-9]+)?%"
84     pattern = "[0-9]+(\.[0-9]+)?%"
85 }
86 s_ST_PositiveFixedPercentage =
87   xsd:string {
88     pattern = "-?[0-9]+(\.[0-9]+)?%"
89     pattern = "((100)|([0-9][0-9]?))(\.[0-9][0-9]?)?%"
90   }

```

B.8 Custom XML Schema References

This schema is available in the file shared-customXmlSchemaProperties.rnc.

```

1  namespace o = "urn:schemas-microsoft-com:office:office"
2  default namespace sl =
3    "http://schemas.openxmlformats.org/schemaLibrary/2006/main"
4  namespace v = "urn:schemas-microsoft-com:vml"
5  namespace w10 = "urn:schemas-microsoft-com:office:word"
6  namespace x = "urn:schemas-microsoft-com:office:excel"
7
8  sl_CT_Schema =
9    attribute sl:uri { xsd:string }?,
10   attribute sl:manifestLocation { xsd:string }?,
11   attribute sl:schemaLocation { xsd:string }?,
12   attribute sl:schemaLanguage { xsd:token }?
13  sl_CT_SchemaLibrary = element schema { sl_CT_Schema }*
14  sl_schemaLibrary = element schemaLibrary { sl_CT_SchemaLibrary }

```

B.9 Additional Resources

B.9.1 Any

This schema is available in the file any.rnc.

```

1  anyElement = element * { anyAttribute*, text?, anyElement* }
2  anyAttribute = attribute * { text }

```

B.9.2 XML

This schema is available in the file xml.rnc.

```

1  xml_lang = attribute xml:lang { xsd:language | xsd:string "" }
2  xml_space = attribute xml:space { "default" | "preserve" }
3  xml_base = attribute xml:base { xsd:anyURI }
4  xml_id = attribute xml:id { xsd:ID }
5  xml_specialAttrs = xml_base?, xml_lang?, xml_space?, xml_id?

```

End of informative text.

Annex C.

(informative)

Namespace Prefix Mapping in Examples

This Annex is informative.

Throughout ECMA-376, XML syntax is provided to illustrate the concepts being documented. These examples leverage XML namespace prefixes, and, typically, for brevity, do not show the actual namespace mappings. This Annex lists the namespace prefix mappings that are used within these examples.

Prefix	Namespace
a	http://schemas.openxmlformats.org/drawingml/2006/main
b	http://schemas.openxmlformats.org/officeDocument/2006/bibliography
cp	http://schemas.openxmlformats.org/package/2006/metadata/core-properties
cdr	http://schemas.openxmlformats.org/drawingml/2006/chartDrawing
dc	http://purl.org/dc/elements/1.1/
dcmitype	http://purl.org/dc/dcmitype/
dcterms	http://purl.org/dc/terms/
ds	http://schemas.openxmlformats.org/officeDocument/2006/customXml
m	http://schemas.openxmlformats.org/officeDocument/2006/math
o	urn:schemas-microsoft-com:office:office
p	http://schemas.openxmlformats.org/presentationml/2006/main
pic	http://schemas.openxmlformats.org/drawingml/2006/picture
pvml	urn:schemas-microsoft-com:office:powerpoint
r	http://schemas.openxmlformats.org/officeDocument/2006/relationships
sl	http://schemas.openxmlformats.org/schemaLibrary/2006/main
v	urn:schemas-microsoft-com:vml
ve	http://schemas.openxmlformats.org/markup-compatibility/2006
vt	http://schemas.openxmlformats.org/officeDocument/2006/docPropsVTypes
w	http://schemas.openxmlformats.org/wordprocessingml/2006/main
w10	urn:schemas-microsoft-com:office:word

Prefix	Namespace
wp	http://schemas.openxmlformats.org/drawingml/2006/wordprocessingDrawing
x	urn:schemas-microsoft-com:office:excel
xdr	http://schemas.openxmlformats.org/drawingml/2006/spreadsheetDrawing
xsd	http://www.w3.org/2001/XMLSchema
xsi	http://www.w3.org/2001/XMLSchema-instance

If no namespace prefix is specified, it should be assumed that that element or attribute is contained within the namespace defined by the parent subclause. For example, unprefix elements in Part 1, §18 are contained in the <http://schemas.openxmlformats.org/spreadsheetml/2006/main> namespace.

End informative Annex.

Annex D. (informative) Differences Between ECMA-376:2011 and ECMA-376:2006

This annex is informative.

This annex highlights the differences between the versions of the Transitional form of the Office Open XML schemas, as defined in ECMA-376:2011 and the schemas as defined by ECMA-376:2006.

D.1 WordprocessingML

The following changes occurred to the WordprocessingML schema:

- The algorithmName, hashValue, saltValue, and spinCount attributes were added to documentProtection (Part 1, §17.15.1.29) and writeProtection (Part 1, §17.15.1.93)
- The allStyles, customStyles, latentStyles, stylesInUse, headingStyles, numberingStyles, tableStyles, directFormattingOnRuns, directFormattingOnParagraphs, directFormattingOnNumbering, directFormattingOnTables, clearFormatting, top3HeadingStyles, and visibleStyles attributes were added to the stylePaneFormatFilter element (Part 1, §17.15.1.85)
- The bdo element (Part 1, §17.3.2.3) was added
- The characterSet attribute was added to the charset element (Part 1, §17.8.3.2)
- The compatSetting element (Part 1, §17.15.3.4) was added
- The conformance attribute was added to document (Part 1, §17.2.3)
- The content model of ST_HpsMeasure (Part 1, §17.18.42) was modified to allow ST_PositiveUniversalMeasure (Part 1, §22.9.2.12)
- The content model of ST_OnOff (Part 1, §22.9.2.7) was changed to an xsd:boolean, removing the values on and off
- The content model of ST_SignedHpsMeasure (Part 1, §17.18.80) was modified to allow ST_UniversalMeasure (Part 1, §22.9.2.15)
- The content model of ST_SignedTwipsMeasure (Part 1, §17.18.81) was modified to allow ST_UniversalMeasure (Part 1, §22.9.2.15)
- The contentPart element (Part 1, §17.3.3.2) was added
- The dir element (Part 1, §17.3.2.8) was added
- The end element (Part 1, §17.4.10) was added
- The end element (Part 1, §17.4.11) was added
- The end element (Part 1, §17.4.12) was added

- The end element (Part 1, §17.4.13) was added
- The firstRow, lastRow, firstColumn, lastColumn, noHBand, and noVBand attributes were added to the tblLook element (Part 1, §17.4.55; Part 1, §17.4.56)
- The firstRow, lastRow, firstColumn, lastColumn, oddVBand, evenVBand, oddHBand, evenHBand, firstRowFirstColumn, firstRowLastColumn, lastRowFirstColumn, and lastRowLastColumn attributes were added to the cnfStyle element (Part 1, §17.3.1.8; Part 1, §17.4.8; Part 1, §17.4.7)
- The following enumeration values were added to the ST_Border simple type (Part 1, §17.18.2): earth3, triangle1, triangle2, triangleCircle1, triangleCircle2, shapes1, shapes2, custom
- The following enumeration values were added to the ST_CalendarType simple type (Part 1, §22.9.2.1): gregorianArabic, gregorianMeFrench, and gregorianUs.
- The following enumeration values were added to the ST_Jc simple type (Part 1, §17.18.44): start, end
- The following enumeration values were added to the ST_NumberFormat simple type (Part 1, §17.18.59): bahtText, dollarText, custom
- The following enumeration values were added to the ST_TabJc simple type (Part 1, §17.18.84): start, end
- The following enumeration values were added to the ST_TextDirection simple type (Part 1, §17.18.93): tb, r1, lr, tbV, r1V, and lrV.
- The following enumeration values were removed from the ST_Border simple type (Part 1, §17.18.2): tribal1, tribal2, tribal3, tribal4, tribal5, tribal6
- The fontSz attribute on the readModeInkLockDown element (Part 1, §17.15.1.66) was modified to use ST_DecimalNumberOrPercent (Part 1, §17.18.11)
- The format attribute was added to the numFmt element (Part 1, §17.9.18)
- The header element (Part 1, §17.4.18) was added
- The headers element (Part 1, §17.4.19) was added
- The id attribute was added to the left element (Part 1, §17.6.7) and right element (Part 1, §17.6.15)
- The id attribute was added to the tc element (Part 1, §17.4.66)
- The id, bottomLeft, and bottomRight attributes were added to the bottom element (Part 1, §17.6.2)
- The id, topLeft, and topRight attributes were added to the top element (Part 1, §17.6.21)
- The jc element (Part 1, §17.4.29) was modified to use the ST_JcTable simple type (Part 1, §17.18.45)
- The label element (Part 1, §17.5.2.19) was added
- The longDesc element (Part 1, §17.15.2.23) was added
- The objectEmbed element (Part 1, §17.3.3.20) was added
- The objectLink element (Part 1, §17.3.3.21) was added
- The percent attribute on the zoom element (Part 1, §17.15.1.94) was modified to use ST_DecimalNumberOrPercent (Part 1, §17.18.11)
- The ST_ColorSchemeIndex simple type was renamed to ST_WmlColorSchemeIndex (Part 1, §17.18.103)
- The ST_DecimalNumberOrPercent (Part 1, §17.18.11) simple type was added
- The ST_Direction simple type (Part 1, §17.18.12) was added
- The ST_DocType simple type (Part 1, §17.18.19) was modified to allow any xsd:string
- The ST_JcTable simple type (Part 1, §17.18.45) was added

- The ST_LangCode simple type was removed
- The ST_MailMergeDataType simple type (Part 1, §17.18.54) was modified to allow any xsd:string
- The ST_ObjectDrawAspect simple type (Part 1, §17.18.60) was added
- The ST_ObjectUpdateMode simple type (Part 1, §17.18.61) was added
- The ST_StyleSort simple type (Part 1, §17.18.82) was added
- The ST_UnqualifiedPercentage simple type (§14.10.10) was added
- The start element (Part 1, §17.4.34) was added
- The start element (Part 1, §17.4.35) was added
- The start element (Part 1, §17.4.36) was added
- The start element (Part 1, §17.4.37) was added
- The start, startChars, end, endChars attributes were added to the ind element (Part 1, §17.3.1.12)
- The tabIndex element (Part 1, §17.5.2.41) was added
- The target attribute was added to the optimizeForBrowser element (Part 1, §17.15.2.33)
- The tblCaption element (Part 1, §17.4.41) was added
- The tblDescription element (Part 1, §17.4.47) was added
- The title element (Part 1, §17.15.2.43) was added
- The uiCompat97To2003 element was removed
- The vendorID and dllVersions attributes on the activeWritingStyle element (Part 1, §17.15.1.1) was modified to use ST_String (Part 1, §22.9.2.13)

D.2 SpreadsheetML

The following changes occurred to the SpreadsheetML schema:

- The algorithmName, hashValue, saltValue, and spinCount attributes were added to sheetProtection (Part 1, §18.3.1.85; Part 1, §18.3.1.84), protectedRange (Part 1, §18.3.1.71), sheetProtection (Part 1, §18.3.1.85), and fileSharing (Part 1, §18.2.12)
- The anchor element (Part 1, §18.3.1.1) was added
- The characterSet attribute was added to the textPr element (Part 1, §18.13.12) and the webPublishing element (Part 1, §18.2.24)
- The commentPr element (Part 1, §18.7.5) was added
- The conformance attribute was added to the workbook element (Part 1, §18.2.27)
- The controlPr element (Part 1, §18.3.1.20) was added
- The dateCompatibility attribute was added to the workbookPr element (Part 1, §18.2.28)
- The drawingHF element (Part 1, §18.3.1.37) was added
- The end element (Part 1, §18.8.16) was added
- The objectPr element (Part 1, §18.3.1.56) was added
- The paperHeight and paperWidth attributes were added to the pageSetup element (Part 1, §18.3.1.63)
- The paperHeight and paperWidth attributes were added to the pageSetup element (Part 1, §18.3.1.64)
- The refreshedDateIso attribute was added to the pivotCacheDefinition element (Part 1, §18.10.1.67)
- The Schema element (Part 1, §18.16.4) now allows mixed content
- The SchemaLanguage attribute was added to the schema element (Part 1, §18.16.4)

- The securityDescriptor element (Part 1, §18.3.1.77) was added
- The shapeId attribute was added to the comment element (Part 1, §18.7.3)
- The ST_CalendarType simple type (Part 1, §22.9.2.1) now allows an enumeration value of saka
- The ST_CellType simple type (Part 1, §18.18.11) now allows an enumeration value of d
- The ST_FileType simple type (Part 1, §18.18.29) now allows enumeration values of lin and other
- The ST_PivotAreaType simple type (Part 1, §18.18.58) now allows an enumeration value of topEnd
- The ST_TextHAlign simple type (Part 1, §18.18.80) was added
- The ST_TextVAlign simple type (Part 1, §18.18.81) was added
- The ST_XmlDataType simple type (Part 1, §18.18.93) was modified to allow any xsd:string
- The start element (Part 1, §18.8.37) was added
- The startLabels attribute was added to the dataConsolidate element (Part 1, §18.3.1.29)
- The vallso and maxVallso attributes were added to the dynamicFilter element (Part 1, §18.3.2.5)
- The workbookPasswordCharacterSet, revisionsPasswordCharacterSet, revisionsAlgorithmName, revisionsHashValue, revisionsSaltValue, revisionsSpinCount, workbookAlgorithmName, workbookHashValue, workbookSaltValue, and workbookSpinCount attributes were added to the workbookProtection element (Part 1, §18.2.29)

D.3 PresentationML

The following changes occurred to the PresentationML schema:

- The algorithmName, hashValue, saltValue, and spinCount attributes were added to the modifyVerifier element (Part 1, §19.2.1.19)
- The conformance attribute was added to the presentation element (Part 1, §19.2.1.26)
- The contentPart element was added (Part 1, §19.3.1.14)
- The pubBrowser attribute on the htmlPubPr element (§16.2.1.1) was renamed target
- The ST_HtmlPublishWebBrowserSupport simple type was removed and replaced by xsd:string

D.4 DrawingML

D.4.1 DrawingML – Main

The following changes occurred to the DrawingML Main schema:

- The builtIn attribute was removed from the snd element (Part 1, §19.5.68)
- The content model of ST_Coordinate (Part 1, §20.1.10.16) was modified to allow ST_UniversalMeasure (Part 1, §22.9.2.15)
- The content model of ST_Coordinate32 (Part 1, §20.1.10.17) was modified to allow ST_UniversalMeasure (Part 1, §22.9.2.15)
- The content model of ST_FixedPercentage (Part 1, §20.1.10.24) was modified to allow ST_FixedPercentage (Part 1, §22.9.2.3)
- The content model of ST_Percentage (Part 1, §20.1.10.40) was modified to allow ST_Percentage (Part 1, §22.9.2.9)

- The content model of ST_PositiveFixedPercentage (Part 1, §20.1.10.45) was modified to allow ST_PositiveFixedPercentage (Part 1, §22.9.2.10)
- The content model of ST_PositivePercentage (Part 1, §20.1.10.46) was modified to allow ST_PositivePercentage (Part 1, §22.9.2.11)
- The contentType attribute was added to the videoFile (Part 1, §20.1.3.6) and audioFile elements (Part 1, §20.1.3.2)
- The header element (Part 1, §21.1.3.3) was added
- The headers element (Part 1, §21.1.3.4) was added
- The id attribute was added to the tc element (Part 1, §21.1.3.16)
- The rtl element (Part 1, §21.1.2.2.8) was added
- The ST_PresetColorVal simple type (Part 1, §20.1.10.48) now allows enumeration values of: darkBlue, darkCyan, darkGoldenrod, darkGray, darkGrey, darkGreen, darkKhaki, darkMagenta, darkOliveGreen, darkOrange, darkOrchid, darkRed, darkSalmon, darkSeaGreen, darkSlateBlue, darkSlateGray, darkSlateGrey, darkTurquoise, darkViolet, dkGrey, dkSlateGrey, dimGrey, grey, lightBlue, lightCoral, lightCyan, lightGoldenrodYellow, lightGray, lightGrey, lightGreen, lightPink, lightSalmon, lightSeaGreen, lightSkyBlue, lightSlateGray, lightSlateGrey, lightSteelBlue, lightYellow, ltGrey, ltSlateGrey, mediumAquamarine, mediumBlue, mediumOrchid, mediumPurple, mediumSeaGreen, mediumSlateBlue, mediumSpringGreen, mediumTurquoise, mediumVioletRed, slateGrey
- The ST_TextFontScalePercent simple type was renamed to ST_TextFontScalePercentOrPercentString (Part 1, §20.1.10.67) and modified to allow ST_Percentage (Part 1, §22.9.2.9)
- The ST_TextPoint simple type (Part 1, §20.1.10.74) was modified to allow ST_UniversalMeasure (Part 1, §22.9.2.15)
- The ST_TextSpacingPercent simple type was renamed to ST_TextSpacingPercentOrPercentString (Part 1, §20.1.10.77) and modified to allow ST_Percentage (Part 1, §22.9.2.9)
- The title attribute was added to the cNvPr element (Part 1, §20.1.2.2.8)

D.4.2 DrawingML – Chart

The following changes occurred to the Chart schema:

- The paperHeight and paperWidth attributes were added to the pageSetup element (Part 1, §21.2.2.134)

D.4.3 DrawingML – Diagrams

The following changes occurred to the Diagram schema:

- The ST_HorizontalAlignment simple type was renamed to ST_DiagramHorizontalAlignment (Part 1, §21.4.7.24)
- The ST_TextAlignment simple type was renamed to ST_DiagramTextAlignment (Part 1, §21.4.7.25)

D.4.4 DrawingML – Spreadsheet Drawing

The following changes occurred to the Spreadsheet Drawing schema:

- The contentPart element (Part 1, §20.5.2.12) was added

D.5 VML

D.5.1 VML

The following changes occurred to the VML schema:

- The ST_TrueFalseBlank simple type (§20.1.2.6) now allows enumeration values of True and False

D.5.2 VML – Office Drawing

The following changes occurred to the Office Drawing schema:

- The ST_DiagramLayout simple type (§19.2.3.10) was added
- The equationxml element (§19.2.2.10) was added
- The contentType attribute was added to the ink element (§19.2.2.15)
- The ST_AlternateMathContentType simple type (§19.2.3.1) was added
- The ST_OLELinkType simple type (§19.2.3.19) was modified to allow any xsd:string
- The ST_TrueFalseBlank simple type (§20.1.2.6) now allows enumeration values of True and False

D.5.3 VML – Spreadsheet Drawing

The following changes occurred to the Spreadsheet Drawing schema:

- The ST_CF simple type (§19.4.3.1) was modified to allow any xsd:string
- The ST_TrueFalseBlank simple type (§20.1.2.6) now allows enumeration values of true and false

D.6 Shared

D.6.1 Shared – Bibliography

The following changes occurred to the Bibliography schema:

- The ST_String255 simple type was removed and replaced by ST_String (Part 1, §22.9.2.13)

D.6.2 Shared – Custom Properties Variant Types

The following changes occurred to the Custom Properties Variant Types schema:

- The cf element was removed
- The ST_Cf simple type was removed

D.6.3 Shared – Math

The following changes occurred to the Math schema:

- The ST_YAlign simple type (Part 1, §22.9.2.20) now uses an enumeration value of bottom in place of bot, and allows values inside and outside

- The ST_XAlign simple type (Part 1, §22.9.2.18) now allows values inside and outside
- The content model of ST_OnOff (Part 1, §22.9.2.7) was changed to an xsd:boolean, removing the values on and off

D.6.4 Shared Simple Types

The following changes occurred to shared simple types:

- The ST_UniversalMeasure simple type (Part 1, §22.9.2.15) was added
- The ST_Align simple type (§20.1.2.1) now uses an enumeration value of custom in place of invalid
- The ST_AlignType simple type (§20.1.2.2) now uses an enumeration value of custom in place of invalid
- The ST_CryptProv simple type (§20.1.2.4) now uses an enumeration value of custom in place of invalid
- The content model of ST_OnOff (Part 1, §22.9.2.7) was changed to an xsd:boolean, removing the values on and off
- The content model of ST_TwipsMeasure (Part 1, §22.9.2.14) was modified to allow ST_PositiveUniversalMeasure (Part 1, §22.9.2.12)
- The ST_PositiveUniversalMeasure simple type (Part 1, §22.9.2.12) was added
- The ST_Percentage simple type (Part 1, §22.9.2.9) was added
- The ST_FixedPercentage simple type (Part 1, §22.9.2.3) was added
- The ST_PositivePercentage simple type (Part 1, §22.9.2.11) was added
- The ST_PositiveFixedPercentage simple type (Part 1, §22.9.2.10) was added

D.7 Custom XML Schema References

The following changes occurred to the Custom XML Schema References schema:

- The schemaLanguage attribute was added to the schema element (Part 1, §23.2.1)

End informative annex.