



BF Admin Module Product Loader.doc

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1 Modification History

Date	Who	Comments
25-Apr-12	Solveda	Split Product-Loader specific functions from BF-Admin-Module-Admin spec.
18-Jun-12	Solveda	Added SequenceNum and BF-Inventory to product feed. Expanded selectable-features and descriptive-features from 3 to 5.
20-Jun-12	Solveda	Added BF-Inventory-Warehouse
24-Jul-12	Solveda	Many changes to reflect that the input file can be in XLS or XML format. Similarly for file creation functions.
20-Mar-13	Solveda	Product name validation limited to 100 characters. Internal Name (formerly Item#) validation limited to 255 characters.
3-Apr-13	Solveda	Enhanced Error and Warning messaging, includes the actual data
11-Jun-13	Solveda	Validation: cannot have duplicate "selectable" and "descriptive" features
17-Jun-13	Solveda	Allowed some special characters in Selectable/Descriptive Features
20-Jun-13	Solveda	Removed ability to delete all Products prior to loading a new file. Function moved to " <i>BF Admin Module Tools.doc</i> ".
20-Jun-13	Solveda	Added complete definition for XLS file upload
24-Jun-13	Solveda	Added a warning for a non-unique Product Name (causes potential problems with Friendly-URL processing)
1-Jul-13	Solveda	Default "alpha" sequencing for SOLR Groups and Values
9-Oct-13	Solveda	Added attributes PDP_QTY_MIN, PDP_QTY_MAX and PDP_QTY_DEFAULT that will act as overrides to the system parameters.
21-Oct-13	Solveda	Added Feature-Tooltips tab / XML file
23-Oct-13	Solveda	Consolidated Feature-Swatches and Feature-Tooltips into two new sections: Facet Groups and Facet Values
14-Nov-13	Solveda	Added Country to Manufacturer Tab, validations for State, Province, Country.
20-Dec-13	Solveda	Updated Product Manufacturer: CityTown and Country are now optional
6-Jan-14	Solveda	Changed from ERROR to WARNING: If Virtual does not have any Variants
6-Jan-14	Solveda	At least 1 category ID membership is required for Virtual-Finished products.
10-Jan-14	Solveda	Extended Product feeds to include the "In Store Only" attribute
10-Feb-14	Solveda	Product Validation: Changing Product definition FINISHED, VIRTUAL, VARIANT) not allowed
11-Mar-14	Solveda	Category Description and Long Description are optional (warnings only)
20-Mar-14	Solveda	Removed validation to product tab from Facet Group (7.10)
14-Apr-14	Solveda	Only extract "active" categories
16-Jul-14	Solveda	Added Product Attachments (up to 3 to accommodate spec sheets, MSDS etc.)

2 Product Loader Functions

2.1 Technical Note

- Multi-Store Consideration:
 - For “Multi Store” implementations, the Product Loader function needs to consider the “active store”
- See spec *BF-Admin-Module-Feeds* for general processing and UI guidance

2.2 Validating an “ID” value

- See spec “BF Admin Module General.doc” for general validation rules of an “ID” attribute
- Messages, where appropriate, should be displayed as follows:

“The [ID Field] [ID DATA] attribute must be alphanumeric. It may contain hyphens or underscores. Spaces and other special characters are not permitted.”
- For example:

“The Master-Product-ID [10011-\$\$] attribute must be alphanumeric. It may contain hyphens or underscores. Spaces and other special characters are not permitted.”

2.3 Date Formats and Validation

- Date Fields
 - Validation should consider various formats that could be used for date attributes
 - Valid generic formats are:
 - YYYYMMDD
 - YYYY-MM-DD
 - YYYY/MM/DD
 - Generic Error Message
 - The system validates From and Thru dates in many situations, if the date is invalid the following error message is displayed

ERROR Row n: [ID_DATA] has an invalid xxx-Date [DATE_DATA]. Formats supported are YYYYMMDD, YYYY-MM-DD and YYYY/MM/DD

2.4 Image File Names and References

IMPORTANT

The actual image names (loaded separately from this Product Loader function) and the references

to the images should match by case.

On Windows (used for testing at Solveda) this is not an issue since Windows will match a reference to a physical file name regardless of case.

On Unix (typically used for Production), matching is exact.

3 File Format

3.1 XLS vs XML File Load

- The Product Loader accepts two formats:
 - XML
 - is validated
 - if errors, then the file is NOT processed, errors are logged/displayed
 - if no errors, then products are loaded
 - XLS
 - is NOT validated
 - is converted to XML format
 - the XML is then used for the load (see above)
- The XLS file is a BigFish format file with multiple tabs
 - Product Category
 - Products
 - Associated Products
 - Facet Group
 - Facet Value
 - Manufacturer
- The XML file is a BigFish format file with multiple primary sections (Category, Product, Assoc, Facet-Group, Facet-Value, Manufacturer)

3.2 Virtual / Variant Product Setup

- The Product Loader should provide many ways for Clients to setup Virtual and Variant combinations depending on their business requirements
- Example #1: separate rows for Virtual and each Variant Product (best practice)

Master Product ID	Product ID	Selectable Feature #1	Selectable Feature #2
P-123	P-123		
P-123	P-123-A	Color:red	Size:small
P-123	P-123-B	Color:red	Size:medium
P-123	P-123-C	Color:red	Size:large
P-123	P-123-D	Color:blue	Size:small
P-123	P-123-E	Color:blue	Size:medium
P-123	P-123-F	Color:blue	Size:large

- This will create ONE Virtual Product and SIZE Variants
- Benefits are:
 - Product-ID can be defined in the feed file
 - Images can be uploaded for each specific Variant
 - Inventory can be managed for each specific Variant
- Example #2: minimal definition

Master Product ID	Product ID	Selectable Feature #1	Selectable Feature #2
P-123	P-123		
P-123	P-123-V	Color:red, blue	Size:small,medium,large

- This will also create ONE Virtual Product and SIZE Variants
- Restrictions are:
 - Product-ID will be generated (P123-V-01 thru P123-V-06). So, this format should only be used if this isn't a problem.
 - Only one set of images can be uploaded. So, this format should only be used if the images are used for all Variant combinations.
 - Inventory cannot be managed.

■ Example #3: hybrid definition

Master Product ID	Product ID	Selectable Feature #1	Selectable Feature #2
P-123	P-123		
P-123	P-123-R	Color:red	Size:small,medium,large
P-123	P-123-B	Color:blue	Size:small,medium,large

- This will also create ONE Virtual Product and SIZE Variants
- Benefits are:
 - Images: the "red" and "blue" set of Variants are separated, so a different set of images can be uploaded for the primary differentiator.
- Drawbacks are:
 - Product-ID will be generated (P123-R-01 thru P123-R-03 and P123-B-01 thru P123-B-03).
 - Inventory cannot be managed

■ Processing

- the XLS format will allow for multiple Selective or Descriptive features to be defined on a single XLS "row", using comma separated values
- since the first step of processing an XLS file is to create the equivalent BigFish XML format the pre-processing will need to "explode" the rows if this situation occurs
- Example:
 - Example of one row in XLS:
 - Selectable-Feature#1 = blue, red
 - Selectable-Feature#2 = small, medium, large
 - Conversion to XML should result in 6 XML "rows"
 - In this example, all descriptions, price and other appropriate attributes should be left "blank" (or undefined) in the Variant rows
- For XML files, comma separated values will **NOT** be supported

3.3 High Level XML Structure

- The XML structure is as follows:

```
<BigFishProductFeed>

    <ProductCategory>
        Product Category Details go here
    </ProductCategory>

    <Product>
        Product Details go here
    </Product>

    <ProductAssociation>
        Product Association go here
    </ProductAssociation>

    <ProductFacetGroup>
        Facet Group Details go here
    </ProductFacetGroup>

    <ProductFacetValue>
        Facet Value Details go here
    </ProductFacetValue>

    <ProductManufacturer>
        Manufacturer Details go here
    </ProductManufacturer>

</BigFishProductFeed>
```

3.4 Product Feed details

Attribute Name	O / R	Comment
MasterProductId	Req	Virtual Product ID
ProductId	Req	Variant Product ID If ProductId = MasterProductId VIRTUAL product descriptor entry VIRTUAL = "Y" VARIANT = "N" If ProductId <> MasterProductId VARIANT product descriptor entry VIRTUAL = "N" VARIANT = "Y" If ProductId is blank

		Finished Good, sellable without variants VIRTUAL = "N" VARIANT = "N"
InternalName	Opt	See <i>BF-Admin-Module-Catalog</i>
ProductName	Opt	See <i>BF-Admin-Module-Catalog</i>
SalesPitch	Opt	See <i>BF-Admin-Module-Catalog</i>
LongDescription	Opt	See <i>BF-Admin-Module-Catalog</i>
SpecialInstructions	Opt	See <i>BF-Admin-Module-Catalog</i>
DeliveryInfo	Opt	See <i>BF-Admin-Module-Catalog</i>
Directions	Opt	See <i>BF-Admin-Module-Catalog</i>
TermsAndConds	Opt	See <i>BF-Admin-Module-Catalog</i>
Ingredients	Opt	See <i>BF-Admin-Module-Catalog</i>
Warnings	Opt	See <i>BF-Admin-Module-Catalog</i>
PlpLabel	Opt	See <i>BF-Admin-Module-Catalog</i>
PdpLabel	Opt	See <i>BF-Admin-Module-Catalog</i>
ProductWidth	Opt	PRODUCT.PRODUCT_WIDTH
ProductDepth	Opt	PRODUCT.PRODUCT_DEPTH
ProductHeight	Opt	PRODUCT.PRODUCT_HEIGHT
ProductWeight	Opt	PRODUCT.WEIGHT
Returnable	Opt	PRODUCT.RETURNABLE
Taxable	Opt	PRODUCT.TAXABLE
ChargeShipping	Opt	PRODUCT.CHARGE_SHIPPING
IntroDate	Opt	PRODUCT.INTRODUCTION_DATE
DiscoDate	Opt	PRODUCT.SALES_DISCONTINUATION_DATE
ManufacturerId	Opt	PARTY.PARTY_ID
ProductPrice	Opt	
ListPrice	Req	See <i>BF-Admin-Module-Catalog</i>
Price	Opt	See <i>BF-Admin-Module-Catalog</i>
Currency	Req	
FromDate	Opt	Default to current system date if not provided.
ThruDate	Opt	Default to null if not provided.
SalesPrice	Req	See <i>BF-Admin-Module-Catalog</i>
Price	Opt	See <i>BF-Admin-Module-Catalog</i>
Currency	Req	
FromDate	Opt	Default to current system date if not provided.
ThruDate	Opt	Default to null if not provided.
ProductCategoryMember	Opt	
CategoryId	Req	PRODUCT_CATEGORY_MEMBER.PRODUCT_CATEGORY_ID
SequenceNum	Req	PRODUCT_CATEGORY_MEMBER.SEQUENCE_NUM
FromDate	Opt	Default to current system date if not provided.
ThruDate	Opt	Default to null if not provided.
ProductSelectableFeature	Opt	PRODUCT_FEATURE, unlimited number
FeatureId	Req	
Value	Req	
Description	Opt	
SequenceNum	Opt	PRODUCT_FEATURE_APPL.SEQUENCE_NUM
FromDate	Opt	PRODUCT_FEATURE_APPL.FROM_DATE. Default to current system date if not provided.
ThruDate	Opt	PRODUCT_FEATURE_APPL.THRU_DATE. Default to null if not provided.
ProductDescriptiveFeature	Opt	PRODUCT_FEATURE, unlimited number
FeatureId	Req	
Value	Req	
Description		

SequenceNum	Opt	PRODUCT_FEATURE_APPL.SEQUENCE_NUM
FromDate	Opt	PRODUCT_FEATURE_APPL.FROM_DATE. Default to current system date if not provided.
ThruDate	Opt	PRODUCT_FEATURE_APPL.THRU_DATE. Default to null if not provided.
ProductImage		
PlpSwatch	Opt	
Url	Req	Content PLP_SWATCH_IMAGE
ThruDate	Opt	
PdpSwatch	Opt	
Url	Req	Content PDP_SWATCH_IMAGE
ThruDate	Opt	
PlpSmallImage	Opt	
Url	Req	Content SMALL_IMAGE_URL
ThruDate	Opt	
PlpSmallAltImage	Opt	
Url	Req	Content SMALL_IMAGE_ALT_URL
ThruDate	Opt	
PdpThumbnailImage	Opt	
Url	Req	Content THUMBNAIL_IMAGE_URL
ThruDate	Opt	
PdpLargeImage	Opt	
Url	Req	Content LARGE_IMAGE_URL
ThruDate	Opt	
PdpDetailImage	Opt	
Url	Req	Content DETAIL_IMAGE_URL
ThruDate	Opt	
PdpVideoImage	Opt	
Url	Req	Content PDP_VIDEO_URL
ThruDate	Opt	
PdpVideo360Image	Opt	
Url	Req	Content PDP_VIDEO_360_URL
ThruDate	Opt	
PdpAlternateImage	Opt	
PdpAdditionalImage	Opt	
PdpAdditionalThumbImage		
Url	Req	Content ADDITIONAL_IMAGE_n
ThruDate	Opt	
PdpAdditionalLargeImage	Opt	
Url	Req	Content XTRA_IMG_n_LARGE
ThruDate	Opt	
PdpAdditionalDetailImage	Opt	
Url	Req	Content XTRA_IMG_n_DETAIL
ThruDate	Opt	
ProductGoodIdentification	Opt	
Sku	Opt	GOOD_IDENTIFICATION.SKU
GoogleId	Opt	GOOD_IDENTIFICATION.GOOGLEID
Isbn	Opt	GOOD_IDENTIFICATION.ISBN
ManuId	Opt	GOOD_IDENTIFICATION.MANU_ID
ProductInventory	Opt	
BigfishInventoryTotal	Req	PRODUCT_ATTRIBUTE, attr_name of "BF_INVENTORY_TOT"
BigfishInventoryWarehouse	Opt	PRODUCT_ATTRIBUTE, attr_name of "BF_INVENTORY_WHS"
ProductAttachments	Opt	
ProductAttach	Req	
Url	Req	Content ATTACH_URL_nn

ThruDate	Opt	
ProductAttribute	Opt	
PdpSelectMultiVariant	Opt	PRODUCT_ATTRIBUTE attr_name: "PDP_SELECT_MULTI_VARIANT" attr_value: "NONE", "QTY" or "CHECKBOX" Applicable only to VARIANT products
PdpCheckoutGiftMessage	Opt	PRODUCT_ATTRIBUTE attr_name: "CHECKOUT_GIFT_MESSAGE" attr_value: TRUE or FALSE If blank or not available then no processing required Applicable only to buyable products (Variant or Finished Goods). Acts as a Product level override to the system parameter.
PdpQtyMin	Opt	PRODUCT_ATTRIBUTE attr_name: "PDP_QTY_MIN" attr_value: integer If blank or not available then no processing required Applicable only to buyable products (Variant or Finished Goods). Acts as a Product level override to the system parameter.
PdpQtyMax	Opt	PRODUCT_ATTRIBUTE attr_name: "PDP_QTY_MAX" attr_value: integer If blank or not available then no processing required Applicable only to buyable products (Variant or Finished Goods). Acts as a Product level override to the system parameter.
PdpQtyDefault	Opt	PRODUCT_ATTRIBUTE attr_name: "PDP_QTY_DEFAULT" attr_value: integer If blank or not available then no processing required Applicable only to buyable products (Variant or Finished Goods). Acts as a Product level override to the system parameter.
PdpInStoreOnly	Opt	PRODUCT_ATTRIBUTE attr_name: "PDP_IN_STORE_ONLY" attr_value: indicator (Y/N) If blank or not available then no processing required. If blank or not available then no processing required Can be applicable to all product types.

3.5 Product Category Feed Details

Attribute Name	O / R	Comment
CategoryId	Req	PRODUCT_CATEGORY.PRODUCT_CATEGORY_ID
ParentCategoryId	Req	PRODUCT_CATEGORY.PRIMARY_PARENT_CATEGORY_ID
CategoryName	Req	PRODUCT_CATEGORY.CATEGORY_NAME
Description	Req	PRODUCT_CATEGORY.DESCRPTION
LongDescription	Opt	PRODUCT_CATEGORY.LONG_DESCRIPTION
AdditionalPlpText	Opt	PRODUCT_CATEGORY_CONTENT_TYPE.PLP_ESPOT_CONTENT
AdditionalPdpText	Opt	PRODUCT_CATEGORY_CONTENT_TYPE.PDP_ADDITIONAL
PlpImage	Opt	
Url		PRODUCT_CATEGORY.CATEGORY_IMAGE_URL

FromDate	Req	PRODUCT_CATEGORY_ROLLUP.FROM_DATE
ThruDate	Opt	PRODUCT_CATEGORY_ROLLUP.THRU_DATE

3.6 Product Association

Attribute Name	O / R	Comment
MasterProductId	Req	PRODUCT_ASSOC.PRODUCT_ID_TO
MasterProductIdTo	Req	PRODUCT_ASSOC.PRODUCT_ID
ProductAssocType	Opt	PRODUCT_ASSOC.PRODUCT_ASSOC_TYPE_ID Valid values are COMPLEMENT or ACCESSORY. Default is COMPLEMENT
FromDate	Req	PRODUCT_CATEGORY_ROLLUP.FROM_DATE
ThruDate	Opt	PRODUCT_CATEGORY_ROLLUP.THRU_DATE

3.7 Facet Group

☐

Attribute Name	O / R	Comment
FacetGroup	Req	☐
☐ FacetGroupId	Req	PRODUCT_FEATURE_CAT_GRP_APPL.PRODUCT_FEATURE_GROUP_ID
☐ Description	Opt	PRODUCT_FEATURE_GROUP.DESCRPTION
☐ ProductCategoryId	Opt	PRODUCT_FEATURE_CAT_GRP_APPL.PRODUCT_CATEGORY_ID If left blank then apply all attribute settings to all Categories. Can be overridden by a subsequent specific entry.
☐ SequenceNum	Opt	PRODUCT_FEATURE_CAT_GRP_APPL.SEQUENCE_NUM
☐ Tooltip	Opt	PRODUCT_FEATURE_CAT_GRP_APPL.FACET_TOOLTIP
☐ MinDisplay	Opt	PRODUCT_FEATURE_CAT_GRP_APPL.FACET_VALUE_MAX
☐ MaxDisplay	Opt	PRODUCT_FEATURE_CAT_GRP_APPL.FACET_VALUE_MAX
☐ FromDate	Opt	PRODUCT_FEATURE_CAT_GRP_APPL.FROM_DATE Default to System Date if empty
☐ ThruDate	Opt	PRODUCT_FEATURE_CAT_GRP_APPL.THRU_DATE

☐

3.8 Facet Value

☐

Attribute Name	O / R	Comment
FacetValue	Req	☐
☐ FacetGroupId	Req	PRODUCT_FEATURE_GROUP_APPL.PRODUCT_FEATURE_GROUP_ID
☐ FacetValueId	Req	PRODUCT_FEATURE_GROUP_APPL.PRODUCT_FEATURE_ID
☐ Description	Opt	PRODUCT_FEATURE.DESCRPTION
☐ SequenceNum	Req	PRODUCT_FEATURE_GROUP_APPL.SEQUENCE_NUM
☐ PlpSwatchUrl	Opt	PRODUCT_FEATURE_DATARESOURCE_TYPE.PLP_SWATCH_IMAGE_URL
☐ PdpSwatchUrl	Opt	PRODUCT_FEATURE_DATARESOURCE_TYPE.PDP_SWATCH_IMAGE_URL
☐ FromDate	Opt	PRODUCT_FEATURE_GROUP_APPL.FROM_DATE Default to System Date if empty
☐ ThruDate	Opt	PRODUCT_FEATURE_GROUP_APPL.THRU_DATE

3.9 Product Manufacturer

Attribute Name	O / R	Comment
----------------	-------	---------

ManufacturerId	Req	PARTY.PARTY_ID
ManufacturerName	Req	PARTY_GROUP.GROUP_NAME; PARTY_CONTENT_TYPE.PROFILE_NAME
Description	Opt	PARTY_CONTENT_TYPE.DESCRPTION
LongDescription	Opt	PARTY_CONTENT_TYPE.LONG_DESCRIPTION
ManufacturerImage	Opt	
Url		PARTY_CONTENT_TYPE.PROFILE_IMAGE_URL
ThruDate	Opt	
Address	Opt	Address is optional, if provided then the following attributes are required
Address1	Req	POSTAL_ADDRESS.ADDRESS1
CityTown	Opt	POSTAL_ADDRESS.CITY
StateProvince	Req	POSTAL_ADDRESS.STATE_PROVINCE_GEO_ID
ZipPostCode	Req	POSTAL_ADDRESS.POSTAL_CODE
Country	Opt	POSTAL_ADDRESS.COUNTRY_GEO_ID

4 Images

4.1 Overview

- The Product Load input file contains many images for both Category and Product images
- BigFish will support either XLS or XML input file formats
- These images are assumed to be available, either within a directory structure or as a valid URL link
- For file based image resources, the starting directory structure is defined in the "Image-Location-Preferences" XML file. The default setting will be:

DEFAULT_IMAGE_DIRECTORY = /osafe_theme/images/catalog

- The input file contains a relative sub-directory reference that indicates where the images are already located. For example:

SMALL_IMAGE_URL = small/some-image.jpg

This indicates that for a specific product row the SMALL_IMAGE_URL is located at /osafe_theme/images/catalog/products/small/some-image.jpg

- URL Locations: any image reference in the input file that begins with "http" will use the full URL reference as the file location. For example:

SMALL_IMAGE_URL = http://www.myimages.com/products/some-image.jpg

This indicates that the complete reference, without modification or appends, should be used as the file locator.

4.2 Images and "ThruDate"

- All images should be controlled via a single "row set" within OFBiz (one resource, one content etc.)
 - All images have an option for the client to provide a "ThruDate", this can be blank
 - All images will have a system generated "FromDate", it will be set to the "system date" the first time the image is loaded via a feed
- For example:
 - Initial Load Cycle#1:
 - Product = 123
 - Image = small / product_image.jpg
 - FromDate will be set to "system date"

- ThruDate will be set to "blank"
- This is an "active" image
- Subsequent Load Cycle#2
 - Product = 123
 - Image = small / product_image.jpg (maybe blank)
 - ThruDate = "yesterday"
 - Load process will find the row-set from the Initial Load
 - FromDate will still be set to "system date"
 - ThruDate will be set to "yesterday"
 - Image is effectively expired / removed
- Subsequent Load Cycle#3
 - Product = 123
 - Image = small / new_product_image.jpg
 - ThruDate = blank
 - Load process will find the row-set from the Initial Load
 - FromDate will still be set to "system date"
 - ThruDate will be reset to "blank"
 - Image is effectively expired / removed

4.3 Admin Module Considerations

- The above section describes a solution for the Product Loader
 - Images are assumed to be already located in the references given in the input file
 - The input file can reference exactly where the file is located
- The Admin Module needs similar knowledge in order to understand where certain images are already located.
- MORE IMPORTANTLY, the Admin Module needs knowledge of where new images should be located.
 - Consider a Product that already has 2 sets of "additional / alternate" images
 - Assume these were originally loaded into the "additional/" sub-directory
 - The business user needs to add a 3rd set of images
 - These also need to be added to the "additional/" sub directory
- To solve this problem a new XML "Image-Location-Preference" file will indicate which sub-directory should be used for all specific images

5 XLS File Definition

5.1 Category Tab

XLS Column	Attribute
A	Category ID
B	Parent Category ID
C	Category Name
D	Description
E	Long Description
F	CLP Image Name
G	Additional PLP Text
H	Additional PDP Text
I	From Date
J	Thru Date

5.2 Product Tab

XLS Column	Attribute
A	Master Product ID
B	Product ID
C	Category ID
D	Internal Name
E	Product Name
F	Sales Pitch
G	Long Desc
H	Special Instr
I	Delivery Info
J	Directions
K	Terms and Cond
L	Ingredients
M	Warnings
N	PLP Label
O	PDP Label
P	List Price
Q	Sales Price
R	Selectable Features #1
S	PLP Swatch Image
T	PDP Swatch Image
U	Selectable Features #2
V	Selectable Features #3
W	Selectable Features #4
X	Selectable Features #5
Y	Descriptive Features #1
Z	Descriptive Features #2
AA	Descriptive Features #3
AB	Descriptive Features #4
AC	Descriptive Features #5

AD	PLP Image
AE	PLP Image Alt
AF	PDP Thumbnail Image
AG	PDP Regular Image
AH	PDP Large Image
AI thru BL	Alternate PDP Image Sets #1 thru #10: PDP Alt-n Thumbnail Image PDP Alt-n Regular Image PDP Alt-n Large Image
BM	Product Height
BN	Product Width
BO	Product Depth
BP	Returnable
BQ	Taxable
BR	Charge Shipping
BS	Introduction Date
BT	Discontinued Date
BU	Manufacturer ID (Xref to Manufacturer tab)
BV	SKU# (Good Identification)
BW	Google-ID (Good Identification)
BX	ISBN (Good Identification)
BY	Manufacturer Number (Good Identification)
BZ	Product Video
CA	Product 360 Video
CB	Sequence Number
CC	BF Inventory Total
CD	BF Inventory Warehouse
CE	PDP Select Multi Variant
CF	Product Weight
CG	Check Out Gift Message
CH	PDP Qty Min
CI	PDP Qty Max
CJ	PDP Qty Default
CK	PDP In Store Only (Y/N)
CL	Product Attachment #1
CM	Product Attachment #2
CN	Product Attachment #3

5.3 **Product Assoc Tab**

XLS Column	Attribute
A	Product ID
B	TO Product ID
C	Association Type
D	From Date
E	Thru Date

5.4 **Facet Group**

XLS Column	Attribute
A	Facet Group ID
B	Description
C	Product Category ID
D	Sequence Num
E	Tooltip
F	Min Display
G	Max Display
H	From Date
I	Thru Date

5.5 Facet Value

XLS Column	Attribute
A	Facet Group ID
B	Facet Value ID
C	Description
D	Sequence Num
E	PLP Swatch URL
F	PDP Swatch URL
G	From Date
H	Thru Date

5.6 Manufacturer Tab

XLS Column	Attribute
A	Manufacturer ID
B	Name
C	Address
D	City/Town
E	State/Province
F	ZipPostCode
G	Country
H	Short Description
I	Long Description
J	Manufacturer Image

6 XML Feed Example

```
<BigFishProductFeed>

  <Products>

    <!-- VIRTUAL PRODUCT -->
    <Product>
      <MasterProductId>ERIC</MasterProductId>
      <ProductId>ERIC</ProductId>
      <InternalName>V2051</InternalName>
      <ProductName>Short Sleeve Tunic</ProductName>
      <SalesPitch></SalesPitch>
      <LongDescription>Long Description</LongDescription>
      <SpecialInstructions></SpecialInstructions>
      <DeliveryInfo></DeliveryInfo>
      <Directions></Directions>
      <TermsAndConds></TermsAndConds>
      <Ingredients></Ingredients>
      <Warnings></Warnings>
      <PlpLabel></PlpLabel>
      <PlpLabel></PlpLabel>
      <ProductWidth></ProductWidth>
      <ProductDepth></ProductDepth>
      <ProductHeight></ProductHeight>
      <ProductWeight></ProductWeight>
      <Returnable>Y</Returnable>
      <Taxable>N</Taxable>
      <ChargeShipping>Y</ChargeShipping>
      <ManufacturerId>STELLA</ManufacturerId>
      <IntroDate>2011-10-12 00:00:00</IntroDate>
      <DiscoDate></DiscoDate>

      <ProductPrice>
        <ListPrice>
          <Price>23.56</Price>
          <Currency>USD</Currency>
          <FromDate>2011-10-12 00:00:00</FromDate>
          <ThruDate></ThruDate>
        </ListPrice>
        <SalesPrice>
          <Price>23.56</Price>
          <Currency>USD</Currency>
          <FromDate>2011-10-12 00:00:00</FromDate>
          <ThruDate></ThruDate>
        </SalesPrice>
      </ProductPrice>

      <ProductCategoryMember>
```

```

<Category>
  <CategoryId>DRESSES</CategoryId>
  <SequenceNum>101</SequenceNum>
  <FromDate>2011-10-12 00:00:00</FromDate>
  <ThruDate></ThruDate>
</Category>

<Category>
  <CategoryId>SHOES<CategoryId>
  <SequenceNum>101</SequenceNum>
  <FromDate>2011-10-12 00:00:00</FromDate>
  <ThruDate></ThruDate>
</Category>

</ProductCategoryMember>

<ProductImage>
  <PlpSwatch>
    <Url></Url>
    <ThruDate></ThruDate>
  </PlpSwatch>
  <PdpSwatch>
    <Url></Url>
    <ThruDate></ThruDate>
  </PdpSwatch>
  <PlpSmallImage>
    <Url>products/small/tunic_1_100002-000006.jpg</Url>
    <ThruDate></ThruDate>
  </PlpSmallImage>
  <PlpSmallAltImage>
    <Url>products/small/tunic_2_100002-000006.jpg</Url>
    <ThruDate></ThruDate>
  </PlpSmallAltImage>
  <PdpThumbnailImage>
    <Url>products/thumb/tunic_1_100002- 00006.jpg</Url>
    <ThruDate></ThruDate>
  </PdpThumbnailImage>
  <PdpLargeImage>
    <Url>products/large/tunic_1_100002-000006.jpg</Url>
    <ThruDate></ThruDate>
  </PdpLargeImage>
  <PdpDetailImage>
    <Url>products/detail/tunic_1_100002-000006.jpg</Url>
    <ThruDate></ThruDate>
  </PdpDetailImage>
  <PdpVideo>
    <Url>products/video/tunic_2_100002-000006.swf</Url>
    <ThruDate></ThruDate>

```

```

</PdpVideo>
<PdpVideo360>
  <Url>products/video/tunic_2_100002-000006_360.swf</Url>
  <ThruDate></ThruDate>
</PdpVideo360>

<PdpAlternateImage>

  <PdpAdditionalImage>
    <PdpAdditionalThumbImage>
      <Url>products/additional/tunic_1.jpg</Url>
      <ThruDate></ThruDate>
    </PdpAdditionalThumbImage>
    <PdpAdditionalLargeImage>
      <Url>products/Large/tunic_1.jpg</Url>
      <ThruDate></ThruDate>
    </PdpAdditionalLargeImage>
    <PdpAdditionalDetailImage>
      <Url>products/Detail/tunic_1.jpg</Url>
      <ThruDate></ThruDate>
    </PdpAdditionalDetailImage>
  </PdpAdditionalImage>

  <PdpAdditionalImage>
    <Url>products/additional/tunic_2.jpg</Url>
    <PdpAdditionalLargeImage>
      <Url>products/Large/tunic_2.jpg</Url>
      <ThruDate></ThruDate>
    </PdpAdditionalLargeImage>
    <PdpAdditionalDetailImage>
      <Url>products/Detail/tunic_2.jpg</Url>
      <ThruDate></ThruDate>
    </PdpAdditionalDetailImage>
  </PdpAdditionalImage>

  <PdpAdditionalImage>
    <Url>products/additional/tunic_3.jpg</Url>
    <PdpAdditionalLargeImage>
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      <ThruDate></ThruDate>
    </PdpAdditionalLargeImage>
    <PdpAdditionalDetailImage>
      <Url>products/Detail/tunic_3.jpg</Url>
      <ThruDate></ThruDate>
    </PdpAdditionalDetailImage>
  </PdpAdditionalImage>

</PdpAlternateImage>

```

```

</ProductImage>

<GoodIdentification>
  <Sku>SKU123</Sku>
  <GoogleId>GOOGLE123</GoogleId>
  <Isbn></Isbn>
  <ManuId></ManuId>
</GoodIdentification>

<ProductInventory>
  <BigfishInventoryTotal>6</BigfishInventoryTotal>
  <BigfishInventoryWarehouse>1</BigfishInventoryWarehouse>
</ProductInventory>

<ProductAttachments>
  <ProductAttach>
    <Url>products/attach/tunic_1_spec_sheet.pdf</Url>
    <ThruDate></ThruDate>
  </ProductAttach>
  <ProductAttach>
    <Url>products/attach/tunic_1_safety_details.pdf</Url>
    <ThruDate></ThruDate>
  </ProductAttach>
</ProductAttachments>

<ProductAttribute>
  <PdpSelectMultiVariant>QTY</PdpSelectMultiVariant>
</ProductAttribute>

</Product>

<-- VARIANT #1 Color:Red, Size:3 -->
<Product>
  <MasterProductId>ERIC</MasterProductId>
  <ProductId>ERIC-Red-Three</ProductId>
  <InternalName>V2051</InternalName>

  <ProductPrice>          <-- Not Required, uses pricing from VIRTUAL -->
</ProductPrice>

  <ProductSelectableFeature>
    <Feature>
      <FeatureId>COLOR</FeatureId>
      <Value>Red</Value>
      <Description>Color</Description>
      <SequenceNum>10</SequenceNum>
    </Feature>

    <Feature>

```

```

        <FeatureId>SIZE</FeatureId>
        <Value>3</Value>
        <Description>Size</Description>
        <SequenceNum>10</SequenceNum>
    </Feature>

</ProductSelectableFeature>

<ProductDescriptiveFeature>

    <Feature>
        <FeatureId>MATERIALS</FeatureId>
        <Value>Silk</Value>
        <Description>Material</Description>
        <FromDate>2011-10-12 00:00:00</FromDate>
    </Feature>

    <Feature>
        <FeatureId>STYLE</FeatureId>
        <Value>Wide neck</Value>
        <Description>Style</Description>
    </Feature>

</ProductDescriptiveFeature>

<ProductAttribute>
    <PdpCheckoutGiftMessage>FALSE</PdpCheckoutGiftMessage>
    <PdpQtyMin>1</PdpQtyMin>
    <PdpQtyMax>99</PdpQtyMax>
    <PdpQtyDefault>2</PdpQtyDefault>
</ProductAttribute>

</Product>

<-- VARIANT #2 Color:Blue Size:7 -->
<Product>
    <MasterProductId>ERIC</MasterProductId>
    <ProductId>ERIC-Blue-Seven</ProductId>
    <InternalName>V2051</InternalName>

    <ProductPrice>
        <SalesPrice>
            <Price>99.99</Price>
            <Currency>USD</Currency>
        </SalesPrice>
    </ProductPrice>

    <ProductSelectableFeature>
        <Feature>

```

```

        <FeatureId>COLOR</FeatureId>
        <Value>Blue</Value>
        <Description>Color</Description>
        <SequenceNum>20</SequenceNum>
    </Feature>

    <Feature>
        <FeatureId>SIZE</FeatureId>
        <Value>7</Value>
        <Description>Size</Description>
        <SequenceNum>20</SequenceNum>
    </Feature>
</ProductSelectableFeature>

<ProductDescriptiveFeature>

    <Feature>
        <FeatureId>MATERIALS</FeatureId>
        <Value>Pure Silk with Real Gold</Value>
        <Description>Material</Description>
    </Feature>

    <Feature>
        <FeatureId>STYLE</FeatureId>
        <Value>Very wide neck</Value>
        <Description>Style</Description>
    </Feature>

</ProductDescriptiveFeature>

</Product>

<-- VARIANT #3 Color:Blue, Size:8, Materials: Silk, Lace-->
<-- Example of multiple values in MATERIALS Descriptive Feature -->
<Product>
    <MasterProductId>ERIC</MasterProductId>
    <ProductId>ERIC-Blue-Eight</ProductId>
    <InternalName>V2052</InternalName>

    <ProductPrice>                <-- Not Required, uses pricing from VIRTUAL -->
</ProductPrice>

    <ProductSelectableFeature>
        <Feature>
            <FeatureId>COLOR</FeatureId>
            <Value>Blue</Value>
            <Description>Color</Description>
            <SequenceNum>20</SequenceNum>
        </Feature>

```

```

        <Feature>
            <FeatureId>SIZE</FeatureId>
            <Value>7</Value>
            <Description>Size</Description>
            <SequenceNum>20</SequenceNum>
        </Feature>
    </ProductSelectableFeature>

    <ProductDescriptiveFeature>

        <Feature>
            <FeatureId>MATERIALS</FeatureId>
            <Value>Silk</Value>
            <Description>Material</Description>
        </Feature>

        <Feature>
            <FeatureId>MATERIALS</FeatureId>
            <Value>Lace</Value>
            <Description>Material</Description>
        </Feature>

        <Feature>
            <FeatureId>STYLE</FeatureId>
            <Value>Very wide neck</Value>
            <Description>Style</Description>
        </Feature>

    </ProductDescriptiveFeature>

</Product>

</Products>

/* ----- */

<ProductCategory>
    <Category>
        <CategoryId>DRESSES</CategoryId>
        <ParentCategoryId>CATEGORY_ROOT</ParentCategoryId>
        <CategoryName></CategoryName>
        <Description></Description>
        <LongDescription></LongDescription>
        <AdditionalPlpText></AdditionalPlpText>
        <AdditionalPdpText></AdditionalPdpText>
        <PlpImage>
            <Url>categories/cat.jpg</Url>
        </PlpImage>
    </Category>

```

```

        <FromDate>2011-10-12 00:00:00</FromDate>
        <ThruDate></ThruDate>
    </Category>
</ProductCategory>

/* ----- */

<ProductAssociation>
    <Association>
        <MasterProductId>123456</MasterProductId>
        <MasterProductIdTo>98765</MasterProductIdTo>
        <ProductAssocType>COMPLEMENT</ProductAssocType>
        <FromDate>2011-10-12 00:00:00</FromDate>
        <ThruDate></ThruDate>
    </Association>

    <Association>
        <MasterProductId>223344</MasterProductId>
        <MasterProductIdTo>5678998765</MasterProductIdTo>
        <ProductAssocType>COMPLEMENT</ProductAssocType>
        <FromDate>2012-01-01 00:00:00</FromDate>
        <ThruDate></ThruDate>
    </Association>

</ProductAssociation>

/* ----- */

<ProductFacetGroup>

□□□□□□ <FacetCatGroup>
□□□□□□□□□□ <ProductCategoryId>DENIM</ProductCategoryId>
□□□□□□□□□□ <SequenceNum>30</SequenceNum>
□□□□□□□□□□ <FromDate>2011-10-12 00:00:00</FromDate>
□□□□□□□□□□ <ThruDate></ThruDate>
□□□□□□□□□□ <MinDisplay>5</MinDisplay>
□□□□□□□□□□ <MaxDisplay>15</MaxDisplay>
□□□□□□□□□□ <Tooltip>Colors appear as seen on screen</Tooltip>
□□□□□□□□□□ <FacetGroup>
□□□□□□□□□□□□□□ <FacetGroupId>COLOR</FacetGroupId>
□□□□□□□□□□□□□□ <Description>Color</Description>
□□□□□□□□□□ </FacetGroup>
□□□□□□□□ </FacetCatGroup>

□□□ </ProductFacetGroup>

/* ----- */

<ProductFacetValue>

□□□□□□ <FacetValue>
□□□□□□□□□□ <ProductFeatureGroupId>COLOR</ProductFeatureGroupId>
□□□□□□□□□□ <ProductFeatureId>COLOR:White</ProductFeatureId>

```

```

<Description>White</Description>
<FromDate>2011-10-12 00:00:00</FromDate>
<ThruDate></ThruDate>
<SequenceNum>10</SequenceNum>
<PlpSwatch>
<Url>URL of PLP Swatch for this Facet Value </Url>
</PlpSwatch>
<PdpSwatch>
<Url>URL of PDP Swatch for this Facet Value</Url>
</PdpSwatch>
</FacetValue>

</ProductFacetValue>

/* ----- */

<ProductManufacturer>

  <Manufacturer>
    <ManufacturerId>STELLA</ManufacturerId>
    <ManufacturerName>Stella Designs</ManufacturerName>
    <Description></Description>
    <LongDescription></LongDescription>
    <ManufacturerImage>
      <Url>manufacturer/stella.jpg</Url>
    </ManufacturerImage>
    <Address>
      <Address1>16622 Manufacturer Drive</Address1>
      <CityTown>Man Hill</CityTown>
      <StateProvince>VA</StateProvince>
      <ZipPostCode>20141</ZipPostCode>
      <Country>USA</Country>
    </Address>
  </Manufacturer>

</ProductManufacturer>

</BigFishProductFeed>

```

7 Product Loader

7.1 UI Guidelines

- This tool will load Product data from either an Excel or an XML file

product loader

[message-area]

Product Loader

This function will read an XLS or XML import file that defines Product Information and load into the current

Product File (XLS or XML):

Back **Product Loader**

- Validation:
 - Check that an entry has been made
 - Error "You must identify a Product File"
 - Check that the Product File exists
 - Error "The Product File does not exist, please check the file name and try again"
 - Must be an XLS or XML file:
 - Error "The Product Loader uses XLS or XML format files, please check the file name and try again"

7.2 Processing Rules

- The first step is to read the file, perform validation on all inputs and display the details before updating the database
- The Preview function will display the data in the file and each helper button will allow for preview of the associated "tab" in the file
- It is understood that the columns displayed will likely be wider than the page width – the display should have horizontal scrolling to accommodate full viewing
- The data preview lists will have a Row# column. This will be used to indicate which row is in error when errors/warnings are displayed
- File Validation
 - Upon the initial load, validation for all the tabs should be performed and errors/warnings, if any, should be ready for display within each of the tabs

- The buttons should indicate an error by having a large “!” displayed within the button name, as illustrated below in the Product-Association button
- The buttons should indicate a warning by having a large “X” displayed within the button name, as illustrated below in the Manufacturer button
- If there are ANY errors in a specific area, then the “!” will be displayed. The “X” for warnings will only be displayed if there are warnings only
- A file can only be uploaded if there are zero errors

product loader preview

[errors and warnings]

Product Loader Preview			
Processing Options	Product Category	Products	! Product Assoc
			Facet Groups
			Facet Values
			X Manufacturer
Row#	Caption1	Caption2	Caption3
1	Data	Data	Data
2	Data	Data	Data
3	Data	Data	Data

Back

Load Products

7.3 Processing Options

Product Loader Preview: Processing Options						
Processing Options	Product Category	Products	! Product Assoc	Facet Groups	Facet Values	X Manufacturer
Processing Options						
Product File: C:\load-files\my-products.xls						

Back

Load Products

7.4 Product Category

Product Loader Preview: Product Category						
Processing Options	Product Category	Products	Product Assoc	Facet Groups	Facet Values	Manufacturers
Row#	Category ID	Parent Category ID	Category Name	Description	Long Desc	PLP Image
1	APPAREL	RNY_CAT_ROOT	Apparel	Apparel		

2	ACTIVE	APPAREL	Active	Active	☐	vest 1 100002-000007.jpg
3	BLOUSES	APPAREL	Blouses	Blouses	☐	taupe blouse 1 100002-000000
4	DENIM	APPAREL	Denim	Denim	☐	bootdenim1 100002-000026.j

Back

Load Products

7.5 Category Validation

- Parent Category ID Must have a corresponding Category-ID
 - ERROR Row n: A Parent-Category-ID [PARENT_ID_DATA] must have a corresponding Category-ID
 - ERROR Row n: A Parent-Category-ID [PARENT_ID_DATA] must match to a new or existing Category-ID
- Category Name cannot be blank
 - ERROR Row n: The Category-Name cannot be blank
 - ERROR Row n: Category Name [CATEGORY_NAME_DATA] cannot exceed 100 characters in length
- Description cannot exceed 255 characters
 - ERROR Row n: Category Description [DESCRIPTION_DATA] cannot exceed 255 characters in length.
- PLP Image is not found
 - WARNING Row n: The PLP Image [PLP_IMAGE_DATA] is not found
- Category ID and Parent Category ID
 - ERROR Row n: Category ID [CATEGORY_ID_DATA] cannot exceed 20 characters in length
 - ERROR Row n: Parent Category ID must be specified and cannot be blank or empty
 - ERROR Row n: Category ID [CATEGORY_ID_DATA] and Parent Category ID [PARENT_ID_DATA] cannot be same.
- From and Thru Date (if non blank)
 - ERROR Row n: Category ID [CATEGORY_ID_DATA] has an invalid From Date [DATE_DATA]. Formats supported are YYYYMMDD, YYYY-MM-DD and YYYY/MM/DD
 - ERROR Row n: Category ID [CATEGORY_ID_DATA] has an invalid Thru Date [DATE_DATA]. Formats supported are YYYYMMDD, YYYY-MM-DD and YYYY/MM/DD
- Warnings
 - WARNING Row n: The Category Description is blank. It is used to the Meta Keywords SEO page tag.
 - WARNING Row n: The Category Long Description is blank. It can be used to display additional information on the CLP.

7.6 Products

- The Product List will be similar to the Category list display
- ALL AVAILABLE ATTRIBUTES SHOULD BE DISPLAYED:

- Master Product ID (Virtual or Finished-Good)
- Product ID (Variant)
- Category ID
- Internal Name
- Product Name
- Sales Pitch
- Long Desc
- Special Instr
- Delivery Info
- Directions
- Terms and Cond
- Ingredients
- Warnings
- PLP Label
- PDP Label
- List Price
- Sales Price
- Selectable Features n iterate as appropriate
- Descriptive Features n iterate as appropriate
- PLP Swatch Image
- PDP Swatch Image
- PLP Image [SMALL_IMAGE_URL]
- PLP Image Alt [SMALL_IMAGE_ALT_URL]
- PDP Thumbnail Image [THUMBNAIL_IMAGE_URL]
- PDP Regular Image [LARGE_IMAGE_URL]
- PDP Large Image [DETAIL_IMAGE_URL]
- Alternate PDP Image Sets reiterate as appropriate
 - PDP Alt-n Thumbnail Image [ADDITIONAL_IMAGE_n]
 - PDP Alt-n Regular Image [XTRA_IMAGE_n_LARGE]
 - PDP Alt-n Large Image [XTRA_IMAGE_n_DETAIL]
- Product Height
- Product Width
- Product Depth
- Product Weight
- Returnable
- Taxable
- Charge Shipping
- Intro Date
- Disco Date
- Manufacturer (relationship to manufacturer tab)
- Good Identifications
 - SKU#
 - Google-ID
 - ISBN
 - Manufacturer ID (simple ID)
- Product Video [PDP_VIDEO_URL]
- Product 360 Video [PDP_VIDEO_360_URL]
- Sequence Number
- BF Inventory Total
- BF Inventory Warehouse
- PDP Select Multi Variant [PRODUCT_ATTRIBUTE "PDP_SELECT_MULTI_VARIANT"]

- NOTE: Only applicable for VIRTUAL products but will get loaded to any product that contains this data on a Product Load File
- PDP Check Out Gift Message [PRODUCT_ATTRIBUTE "CHECKOUT_GIFT_MESSAGE"]
- PDP Qty Min [PRODUCT_ATTRIBUTE "PDP_QTY_MIN"]
- PDP Qty Max [PRODUCT_ATTRIBUTE "PDP_QTY_MAX"]
- PDP Qty Default [PRODUCT_ATTRIBUTE "PDP_QTY_DEFAULT"]
- PDP In Store Only [PRODUCT_ATTRIBUTE "PDP_IN_STORE_ONLY"]

7.7 Master ID and Product ID

■ Definitions

- **FINISHED GOOD:** this is a stand-alone product that does not have any variations (like Color). For example: a one-size-fits-all Shirt that is only available in White. The customer is NOT prompted for options when adding to cart.

OFBiz: IS_VIRTUAL = "N", IS_VARIANT = "N"

- **VIRTUAL:** this is a master definition for subsequent Variant products. For example: a shirt is available in different colors and sizes that are prompted on the PDP. The VIRTUAL product defines the master level details that can include descriptions, prices etc.

OFBiz: IS_VIRTUAL = "Y", IS_VARIANT = "N"

- **VARIANT:** must be associated to a Virtual product, this defines the specific item that can be purchased. For example, RED shirt in size MEDIUM.

OFBiz: IS_VIRTUAL = "N", IS_VARIANT = "Y"

■ Rules:

- Master-Product-ID is [some-value] and Product-ID is blank, then FINISHED GOOD
- Master-Product-ID = Product-ID, then VIRTUAL
- Master-Product-ID is [some-value] and Product-ID = [another-value], then VARIANT, where Master-Product-ID is the reference to the VIRTUAL product

7.8 Product Validation

■ Product definition cannot be changed:

- Applies to an attempt to modify a Product from "VIRTUAL" to "FINISHED_GOOD"
- Error:

"Master Product ID [MASTER_PRODUCT_ID] Product Id [PRODUCT_ID] is already defined as [PRODUCT_DEFINITION] and cannot be changed to [PRODUCT_DEFINITION] product."

■ Duplicate Product, example:

Row	Master Product ID	Product ID	Comment
1	P-123	P-123	Create a Virtual Product P-123
2	P-123	P-123-A	Creates Variant P-123-A
3	P-123	P-123-B	Creates Variant P-123-B
4	P-123	"blank"	Create a FINISHED_GOOD
5	P-123	P-123	Create Virtual Product P-123

- Rows #4 and #5 are both duplicates of Row #1.
- Error:

"Master-Product-ID [P-123] and Product-ID [P-123] are duplicates of another entry in this file."

■ Virtual or Finished-Good Product has Selectable Features, example:

Row	Master Product ID	Product ID	Selectable Feature #1
1	P-123	P-123	Material:Leather

- Row #1 is a Virtual product with Selectable Features defined
- ERROR Row n:
 - [VIRTUAL / FINISHED-GOOD] Master Product ID [MASTER_ID_DATA] has Selectable-Features defined, they are only valid for Variant products

■ Virtual product defined with NO Variants

Row	Master Product ID	Product ID	Selectable Feature #1
1	P-123	P-123	
2	P-654	P-654	
3	P-654	P-654-A	Color:Red

- Rows #1 is a Virtual product with No Variant products defined.
- WARNING Row n:
 - VIRTUAL Master Product ID [MASTER_ID_DATA] does NOT have any Variant products defined
 - NOTE: it is possible that a load file is attempting to update an existing Virtual product so associated Variants may NOT be on file. So, the load process needs to consider if Variants are on the file or already available in the database

■ Selectable / Descriptive Feature Duplicate

- Example:

Row	Master Product ID	Product ID	Selectable Feature	Descriptive Feature
1	P-123	P-123-A	Color: Blue	Material: Leather
2	P-123	P-123-B	Color: Red	Material: Leather
3	P-123	P-123-C	Color: Yellow	Material: Leather

4	P-123	P-123-D	Color: Green	Color: Red
5	P-123	P-123-E	Color: Purple	Material: Leather

- In the above example:
 - All Features use the same db entity
 - The Selectable Feature will create a row for "Color"
 - The Descriptive feature for Row-4 will attempt to do the same, and cause a db key violation
- ERROR Row n: Product ID [PRODUCT_ID_DATA] has a duplicate Selective or Descriptive Feature
- Selectable / Descriptive Feature Technical Note
 - Based on the Selectable or Descriptive feature value the system will generate a "FEATURE_ID" to uniquely identify the feature
 - The load process should use the Features provided and lookup the PRODUCT_FEATURE entity matching to attributes PRODUCT_FEATURE_TYPE_ID and DESCRIPTION
 - If an existing row exists then use the PRODUCT_FEATURE_ID
 - If a row does not already exist then generate a unique ID from the SEQUENCE_VALUE_ITEM (ProductFeature) entity
- Feature ID (Selectable or Descriptive)
 - ERROR Row n: Feature ID [FEATURE_ID_DATA] cannot contain special characters '<' or '>' or ','
- Category ID
 - ERROR Row n: Category ID [CATEGORY_ID_DATA] must match to a new or existing Category ID
- Product / Category Membership
 - ERROR Row n: Master Product [MASTER_ID_DATA] must be a member of at least one Category. This applies to FINISHED-GOODS and VIRTUAL products.
- Master Product ID
 - max length is 20 characters
 - ERROR Row n: Master Product ID [MASTER_ID_DATA] cannot exceed 20 characters in length
 - Variant must have a valid reference to a existing Virtual Product
 - If processing a Variant Product (MasterProductId not equal to ProductId) then the referenced Virtual Product in the <MasterProductId> tag must exist.
 - This must check for the existence of the Virtual in the current XML file, or as a database entry
 - ERROR Row n: Variant [PRODUCT_ID_DATA] must have a valid reference to a existing Virtual Product [MASTER_ID_DATA]
- Product ID, max length is 20 characters
 - ERROR Row n: Product ID [PRODUCT_ID_DATA] cannot exceed 20 characters in length
- Product Name, simple validation
 - ERROR Row n: Product Name is limited to 100 characters

- ERROR Row n: Product Name is invalid, name fields are limited to alphanumeric and some special characters (! @ # \$ % ? , - _ : ; . / ")
- Product Name, must be unique
 - ERROR Row n: Product ID [MASTER_ID_DATA] must have an unique Product Name
 - Tech Notes:
 - Validate product name uniqueness on Virtual and Finished Goods only since this will break URL-Friendly if non-unique.
 - This check should be applied to both products *within* the feed and any *existing* products in the database
- Internal Name
 - ERROR Row n: Internal Name is limited to 255 characters
 - ERROR Row n: Internal Name is invalid, name fields are limited to alphanumeric and some special characters (! @ # \$ % ? , - _ : ; . /)
 - WARNING Row n: Internal Name [INTERNAL_NAME_DATA] is not unique
- Long Description
 - ERROR Row n: Long-Description is required for [VIRTUAL / FINISHED-GOOD] Product ID [MASTER_ID_DATA]
- Sales Price
 - ERROR Row n: Sales-Price is required for [VIRTUAL / FINISHED_GOOD] Product ID [MASTER_ID_DATA]
 - ERROR Row n: Sales-Price [SALES_PRICE_DATA] must be a valid number for Product ID [MASTER_ID_DATA]
- List Price
 - ERROR Row n: List-Price [LIST_PRICE_DATA], when provided, must be a valid number for Product ID [MASTER_ID_DATA]
- Manufacturer ID
 - ERROR Row n: The Manufacturer-ID [MANU_ID_DATA] must match to a new or existing Manufacturer
 - WARNING Row n: Image [IMAGE_URL_DATA] is not found
- Intro and Disco Date (if non blank)
 - ERROR Row n: Product ID [PRODUCT_ID_DATA] has an invalid Intro-Date [DATE_DATA]. Formats supported are YYYYMMDD, YYYY-MM-DD and YYYY/MM/DD.
 - ERROR Row n: Product ID [PRODUCT_ID_DATA] has an invalid Disco-Date [DATE_DATA]. Formats supported are YYYYMMDD, YYYY-MM-DD and YYYY/MM/DD.
- PDP Select Multi Variant (if non blank and value is other than NONE, CHECKBOX or QTY).
 - ERROR Row n: For PDP Select Multi Variant [PRODUCT-ID-DATA], valid values are NONE, CHECKBOX and QTY.
- Product Height, Width, Depth, Weight
 - ERROR Row n: Product XXXX [XXXX_DATA], when provided, must be a valid number.
- PDP Qty Min, Max
 - ERROR Row n: PDP-Qty XXXX [XXXX_DATA], when provided, must be a whole number and greater than zero

- ERROR Row n: If one of PDP-Qty-Min or PDP-Qty-Max has a value then both must have a value
- ERROR Row n: PDP-Qty-Max must be greater than or equal to PDP-Qty-Min
- PDP Qty Default
 - ERROR Row n: PDP-Qty-Default [DATA], when provided, must be a whole number
- PDP In Store Only
 - ERROR Row n: PDP-In-Store-Only [DATA], when provided, must be Y or N
- PDP Attachment
 - ERROR Row n: Product Attachment File Name is limited to 100 characters

7.9 **Product Associations**

- the Product Associations List will be similar to the Category list display
- the following columns will be displayed from the Product tab:
 - From MASTER Product ID
 - To MASTER Product ID
 - From Date
 - Thru Date
- Technical Note: Primary Key consideration and reducing the number of unnecessary rows added to the database
 - The PRODUCT_ASSOC entity has a Primary Key of PRODUCT_ID, PRODUCT_ID_TO, PRODUCT_ASSOC_TYPE_ID and FROM_DATE
 - in order to reduce the number of potential rows added to the database:
 - if FROM-DATE is empty
 - read all PRODUCT_ASSOC rows where PRODUCT_ID = [FROM-MASTER-PRODUCT-ID] and PRODUCT_ID_TO = [TO-MASTER-PRODUCT-ID]
 - if no rows found, then set FROM-DATE to "system-date-time"
 - if rows found then UPDATE the row with the most recent FROM_DATE
- Validation
 - ERROR Row n: The FROM-MASTER-Product-ID [FROM_MASTER_ID_DATA] must match to a new or existing VIRTUAL or FINISHED_GOOD Product
 - ERROR Row n: The TO-MASTER-Product-ID [TO_MASTER_ID_DATA] must match to a new or existing VIRTUAL or FINISHED_GOOD Product
 - From and Thru Date (if non blank)
 - ERROR Row n: Master Product ID [MASTER_PRODUCT_ID_DATA] has an invalid From Date [DATE_DATA]. Formats supported are YYYYMMDD, YYYY-MM-DD and YYYY/MM/DD
 - ERROR Row n: Master Product ID [MASTER_PRODUCT_ID_DATA] has an invalid Thru Date [DATE_DATA]. Formats supported are YYYYMMDD, YYYY-MM-DD and YYYY/MM/DD

7.10 **Facet Groups**

- The following columns will be displayed from the Facet Group tab:
 - Facet Group ID
 - Description
 - Product Category ID
 - Sequence Num
 - Tooltip
 - Min Display
 - Max Display
 - From Date
 - Thru Date
- Processing
 - If the ProductCategoryId element is blank or null then apply the Tooltip text update to ALL Product-Categories for the Facet Group
- Validation
 - ERROR Row n: Product-Category-ID [PRODUCT-CATEGORY-ID-DATA] must match to a newly loaded or existing Product Category (relationship to the Product Category tab)
 - ERROR Row n: The Sequence-Number [SEQUENCE-NUM-DATA] must be numeric and a whole number
 - ERROR Row n: Min-Display [MIN-DISPLAY-DATA] must be numeric and a whole number
 - ERROR Row n: Max-Display [MAX-DISPLAY-DATA] must be numeric and a whole number
 - ERROR Row n: Min-Display [MIN-DISPLAY-DATA] must be less than or equal to Max-Display [MAX-DISPLAY-DATA]
 - From and Thru Date (if non blank)
 - ERROR Row n: Facet-Group [FACET-GROUP-ID-DATA] has an invalid From-Date [DATE_DATA]. Formats supported are YYYYMMDD, YYYY-MM-DD and YYYY/MM/DD
 - ERROR Row n: Facet-Group [FACET-GROUP-ID-DATA] has an invalid Thru Date [DATE_DATA]. Formats supported are YYYYMMDD, YYYY-MM-DD and YYYY/MM/DD

7.11 **Facet Value**

- The following columns will be displayed from the Facet Value tab:
 - Facet Group ID
 - Facet Value ID
 - Description
 - Sequence Num
 - PLP Swatch URL
 - PDP Swatch URL

- From Date
- Thru Date
- Processing
 - Translate Facet-Value-ID to a proper "ID" value for matching
- Validation
 - ERROR Row n: Facet-Group [FACET_GROUP_ID_DATA] and Facet-Value [FACET-VALUE-ID-DATA] must match to a newly loaded or existing Facet Group/Value
 - ERROR Row n: The Sequence-Number [SEQUENCE-NUM-DATA] must be numeric and a whole number
 - From and Thru Date (if non blank)
 - ERROR Row n: Facet-Value [FACET-VALUE-ID-DATA] has an invalid From-Date [DATE_DATA]. Formats supported are YYYYMMDD, YYYY-MM-DD and YYYY/MM/DD
 - ERROR Row n: Facet-Value [FACET-VALUE-ID-DATA] has an invalid Thru Date [DATE_DATA]. Formats supported are YYYYMMDD, YYYY-MM-DD and YYYY/MM/DD

7.12 Manufacturer

- the Manufacturer List will be similar to the Category list display
- the following columns will be displayed from the Manufacturer tab:
 - Manu ID
 - Manu Name
 - Address
 - City
 - State
 - Zip
 - Country
 - Short Desc
 - Long Desc
 - Manu Image
- Validation
 - General
 - ERROR Row n: Manufacturer ID must be specified and cannot be blank or empty
 - ERROR Row n: Manufacturer ID [MANU_ID_DATA] cannot exceed 20 characters in length
 - State and Country
 - These values, if not blank, must be validated against the appropriate GEO entity
 - ERROR Row n: State [STATE_DATA] is not valid for Manufacturer ID [MANU_ID_DATA]
 - ERROR Row n: Country [COUNTRY_DATA] is not valid for Manufacturer ID [MANU_ID_DATA]

7.13 Default sequencing of SOLR Groups and Values

- The Selectable and Descriptive Features are ultimately used to build the SOLR Groups and Values
- As a Product Load file is processed, these Features should be setup in alphabetical sequence
- For example:

Master Product ID	Product ID	Selectable Feature #1
Ring-1	Ring-1	
Ring-1	Ring-1-8	Ring Size:8
Ring-1	Ring-1-7	Ring Size:7
Ring-1	Ring-1-9	Ring Size:9
Ring-2	Ring-2	
Ring-1	Ring-1-5	Ring Size:5
Ring-1	Ring-1-7	Ring Size:7
Ring-1	Ring-1-6	Ring Size:6

- By default, after an initial load, since the Features are sorted alphabetically, the default sequence reflected in the Facets and selectable drop-down values would be appropriately sorted:
- Facets:

Ring Size
5
6
7
8
9
- Drop Down selectors in PDP:
 - Ring-1 will have "7,8,9" correctly sequenced
 - Ring-2 will have "5,6,7" correctly sequenced

8 Image Location Preferences

8.1 Processing Overview

- This function will maintain the sequencing of the XML file "OSafeImagePath.xml"
- An example excerpt from this file is as follows:

```

<property key="DEFAULT_IMAGE_DIRECTORY">
<value>/osafe_theme/images/catalog</value>
</property>

<property key="SMALL_IMAGE_URL">
<value>products/small</value>
</property>

<property key="THUMBNAIL_IMAGE_URL">
<value>products/thumbnaile</value>
</property>

<property key="LARGE_IMAGE_URL">
<value>products/large</value>
</property>

<property key="ADDITIONAL_IMAGE_1">
<value>products/additional</value>
</property>

<property key="XTRA_IMAGE_1_LARGE">
<value>products/large</value>
</property>

<property key=" XTRA_IMAGE_1_DETAIL">
<value>products/large</value>
</property>

```

8.2 Visual Guideline

image location preferences

[message-area]

Image Location Preferences	
Image Name	Directory Location
DEFAULT_IMAGE_DIRECTORY	osafe_theme/images/catalog/
SMALL_IMAGE_URL	products/small/
THUMBNAIL_IMAGE_URL	products/thumbnaile/
LARGE_IMAGE_URL	products/large/
ADDITIONAL_IMAGE_1	products/additional/

XTRA_IMAGE_1_LARGE	products/large/
XTRA_IMAGE_1_DETAIL	products/large/
Back	Save

- Validation / Processing:
 - Value of Directory Location" may be blank, this indicates that the image is stored at the highest level
- Save:
 - Update the XML file
 - Display message "Image Location Preferences has been updated"
 - Refresh and remain on this screen

9 Create BigFish Template File

create bigfish template file

[message-area]

Create BigFish Product Load File

Generate an empty BigFish "Product Load TEMPLATE" file

[Back](#)[Create XLS Template](#)[Create XML Template](#)

10 Create BigFish Product File from DB

10.1 UI Guideline

create bigfish product file from database

[message-area]

Create BigFish Product Load File

From the existing database, create a BigFish format "Product Load" file

Back

Create XLS File

Create XML File

10.2 Processing

11 Convert eBay/Amazon to BigFish Format

11.1 UI Guideline

■ FOR A FUTURE PHASE ** NO DEVELOPMENT REQUIRED **

convert ebay/amazon to bigfish format

[message-area]

Convert Ebay/Amazon to BigFish format

Starting with a standard eBay/Amazon product load formatted file, convert to a BigFish "Product Load" for

EBay / Amazon File:

Back

Create