



ORACLE®
JDEVELOPER

What's New in Oracle JDeveloper

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Oracle

<http://oracle.com/technology/jdev>

TS-9585

What's New in Oracle JDeveloper

Learn how Oracle JDeveloper and Oracle ADF can help you be more productive when building applications today and tomorrow

Agenda

Where Is JDeveloper Now?

A Quick Overview of JDeveloper 10.1.3

What's Next for JDeveloper?

Improved and Enhanced IDE

Java™ Platform, Enterprise Edition

(Java EE) 5.0

Taking JavaServer™ Faces to the Next Level

Further Oracle ADF Improvements

Meta-Data Management

JDeveloper Goals

- Productive applications development
 - Oracle has ~ 8,000 applications developers
 - They must be productive
- Design time for fusion middleware
 - Take advantage of special features
 - Integrated development experience
- Keep developers in the Java technology camp
 - An alternative to the MS .NET development

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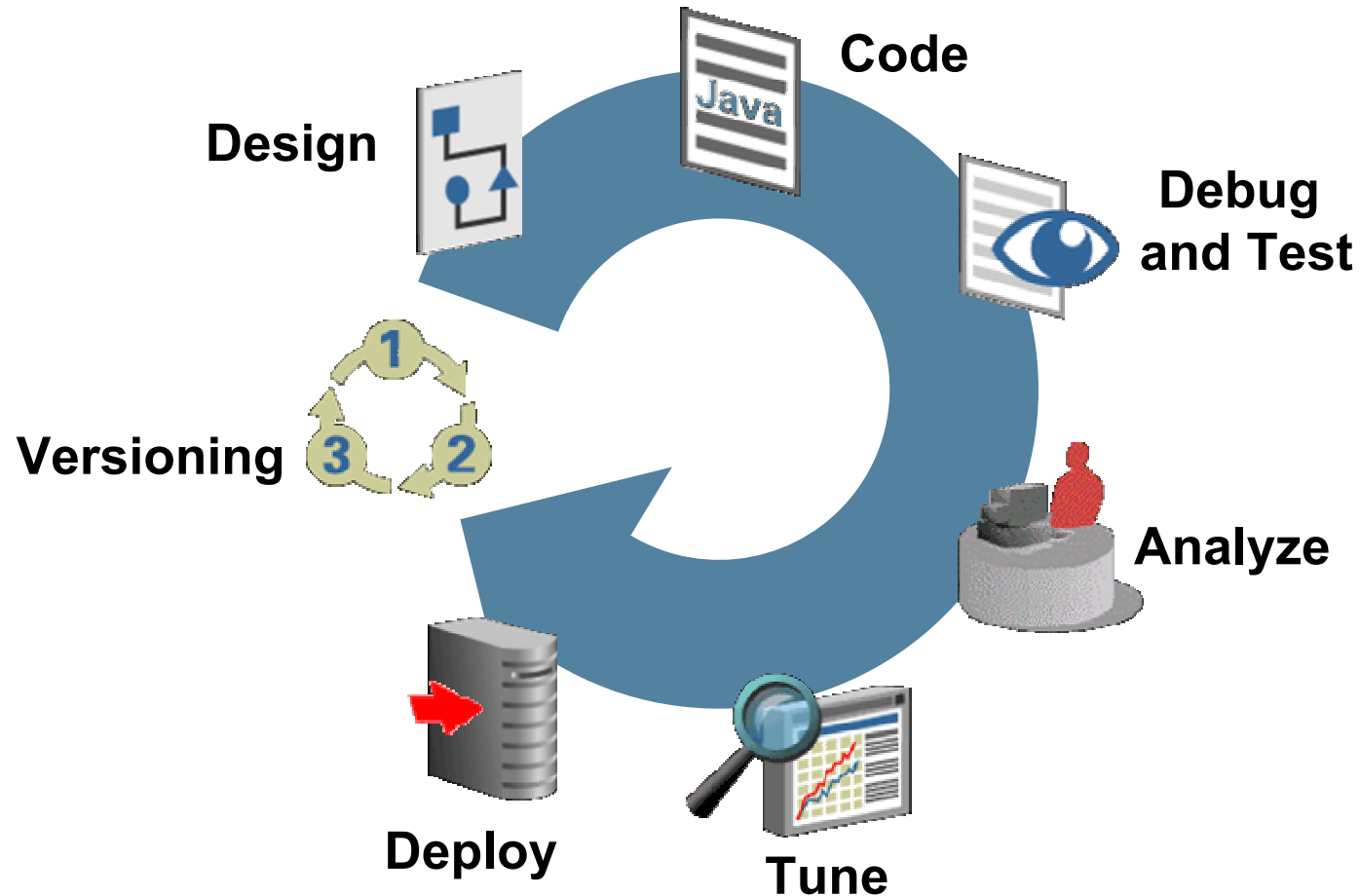
Further Oracle ADF Improvements

Meta-Data Management

JDeveloper: Where We Are Today

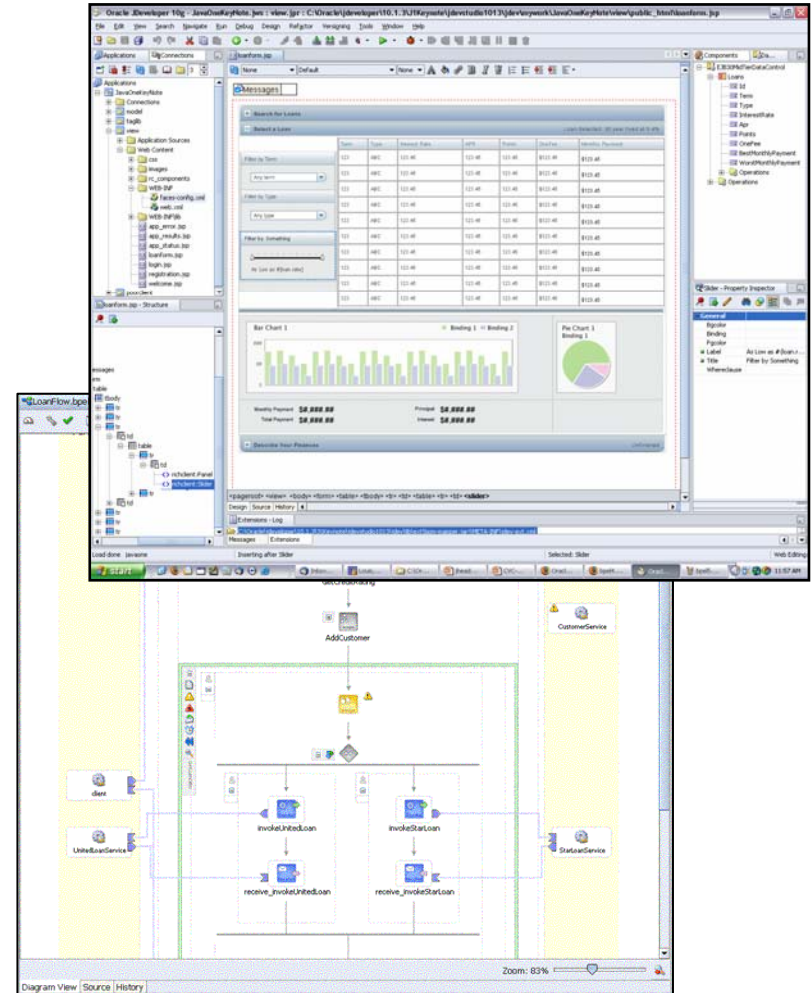
- January 2006: JDeveloper 10.1.3
 - Visual JavaServer Faces technology development
 - Java 2 Platform, Enterprise Edition (J2EE™) 1.4 + EJB™ 3.0 specification
 - Revamped IDE
 - Much more...
- October 2006: JDeveloper 10.1.3.1—SOA Suite
 - Visual BPEL
 - Visual ESB
 - Visual XSLT
- February 2007: JDeveloper 10.1.3.2—WebCenter Suite
 - JavaServer Faces technology/Portlet Bridge
 - Java™ Specification Request (JSR) 168, JSR 170, etc.

Full Development Lifecycle

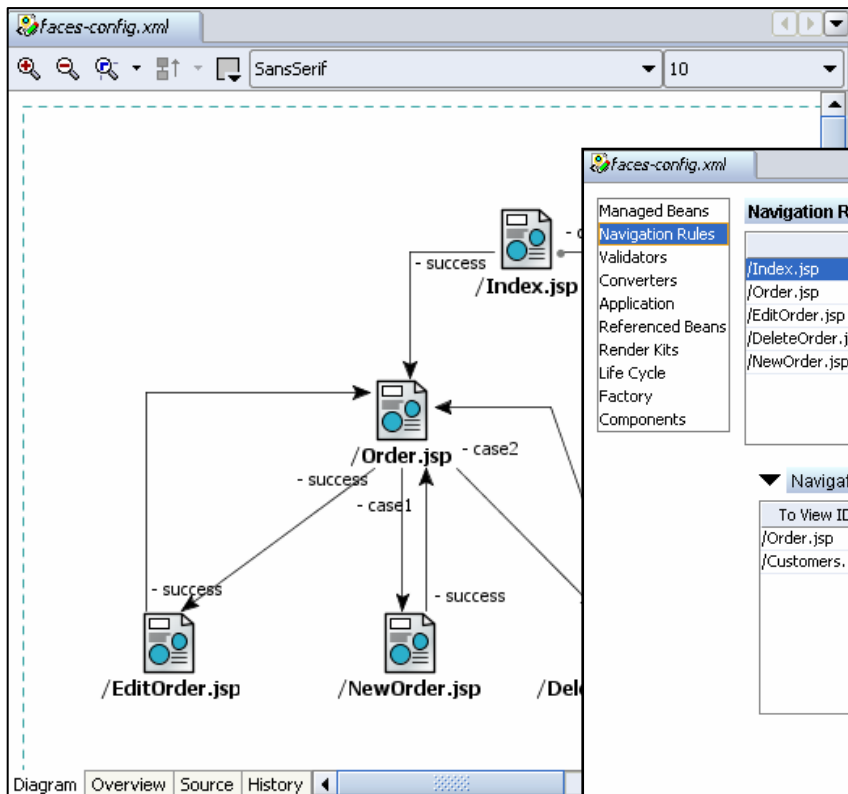


Visual and Declarative

- WYSIWYG editors
 - JavaServer Faces technology, JavaServer Pages™ (JSP™) technology, HTML, Swing
- Visual page flow
 - JavaServer Faces technology, Struts
- Modelers
 - DB, class modeling
- Visual editors
 - XML schema, XSLT, WSDL
- Process flow
 - BPEL, ESB



Choice of Development Styles



faces-config.xml

Navigation Rules

From View ID
/Index.jsp
/Order.jsp
/EditOrder.jsp
/DeleteOrder.jsp
/NewOrder.jsp

Navigation Cases

To View ID	From Action	From Outcome
/Order.jsp		success
/Customers....		case1

faces-config.xml

```

<?xml version="1.0" encoding="windows-1252"?>
<!DOCTYPE faces-config PUBLIC
"-//Sun Microsystems, Inc.//DTD JavaServer Faces Config 1.1//EN"
"http://java.sun.com/dtd/web-facesconfig_1_1.dtd">
<faces-config xmlns="http://java.sun.com/JSF/Configuration">
  <managed-bean>
    <managed-bean-name>backing_untitle1</managed-bean-name>
    <managed-bean-class>view.backing.Untitle1</managed-bean-class>
    <managed-bean-scope>request</managed-bean-scope>
    <!--OracleJdevComment:managed-bean-jsp-link=file:/C:/Oracle/jdev...>
  </managed-bean>
  <lifecycle>
    <phase-listener>oracle.adf.controller.faces.lifecycle.ADFPhaseListener</phase-listener>
  </lifecycle>
  <application>
    <default-render-kit-id>oracle.adf.core</default-render-kit-id>
  </application>
  <managed-bean>
    <managed-bean-name>backing_Order</managed-bean-name>
    <managed-bean-class>view.backing.Order</managed-bean-class>
    <managed-bean-scope>request</managed-bean-scope>
    <!--OracleJdevComment:managed-bean-jsp-link=file:/C:/Oracle/jdev...>
  </managed-bean>
  <managed-bean>
    <managed-bean-name>backing_EditOrder</managed-bean-name>
    <managed-bean-class>view.backing.EditOrder</managed-bean-class>
  </managed-bean>

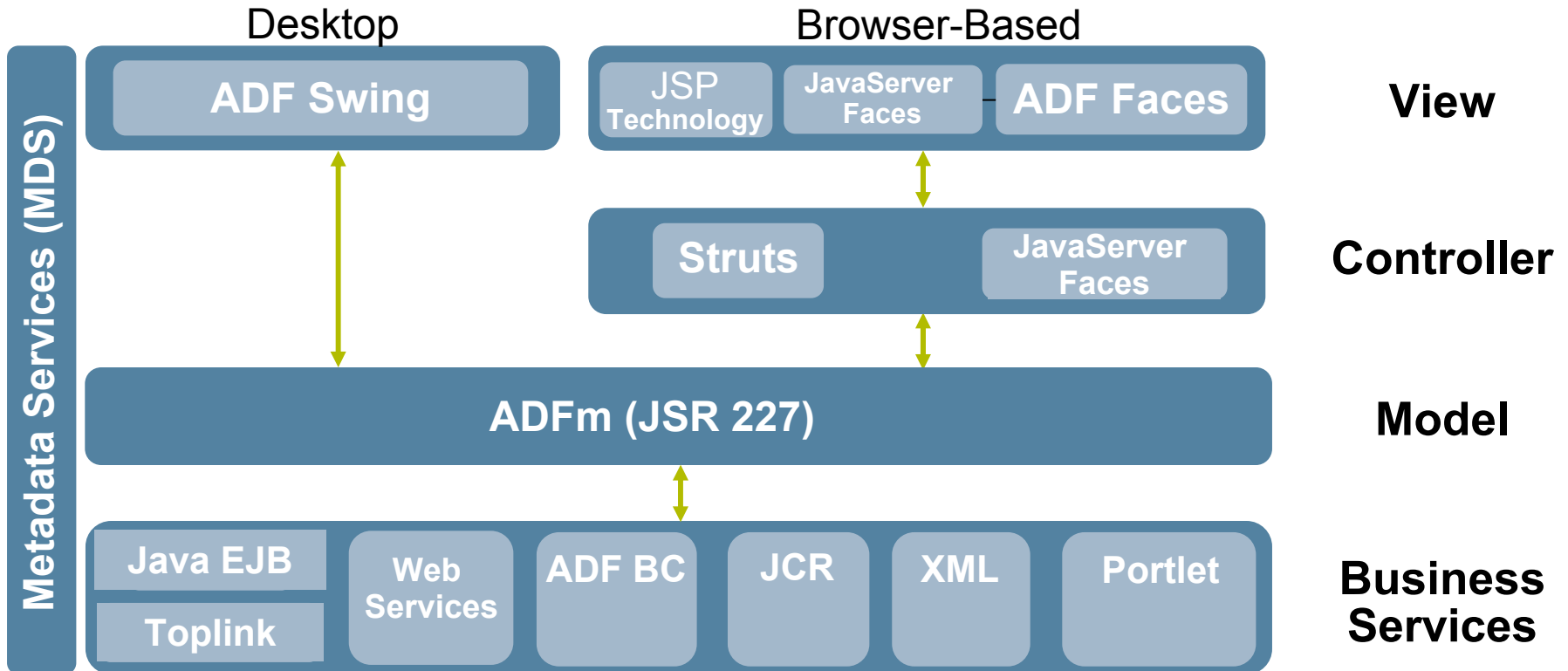
```

Visual

Dialog

Code

Oracle ADF 10.1.3 Architecture





DEMO

Visual and Integrated Development

JavaServer Faces Technology + EJB 3.0
Specification + BPEL + Portlets

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Meta-Data Management

Oracle JDeveloper 11

- Focus areas
 - Improved and enhanced IDE
 - Java™ Platform, Enterprise Edition (Java™ EE) 5.0
 - Taking JavaServer Faces technology to the next level
 - Ajax JavaServer Faces components
 - Reusability for JavaServer Faces technology development
 - Further Oracle ADF improvements
 - More data controls
 - More declarative features
 - Meta-data management
 - Refactoring
 - Source control and deployment
 - Customization

Improved and Enhanced IDE

- Enhanced user experience
- JavaScript™ programming language editing/debugging
- SQL Developer integration
- New profilers
- New coding features
- Dependency analysis
- JUnit 4.0
- XML compare
- And more

JDeveloper—Java EE

- EJB 3.0/JPA
 - EJB 3.0 diagramming
 - Improved annotation support
 - Declarative persistence.xml and orm.xml dialogs
- JavaServer Faces 1.2 technology
- Web services development enhancements
 - JAX-WS support
 - WSDL editor
 - WS tester
 - WS annotation (JSR 181)—Property inspector

Taking JavaServer Faces Technology to the Next Level

- What is missing in JavaServer Faces technology today?
- Ajax and rich client components
- Reusability
 - Page templates
 - Reusable page flows
 - Reusable page fragments
- Security

ADF Faces Rich Client Next Generation JavaServer Faces Technology UI Development

- 100+ AJAX-enabled JavaServer Faces components
- Data visualization components (Graphs)
- Drag-and-drop framework
- Dialog and pop-up framework
- Navigation menu framework
- Partial page rendering
- Active data framework
- Advanced data streaming

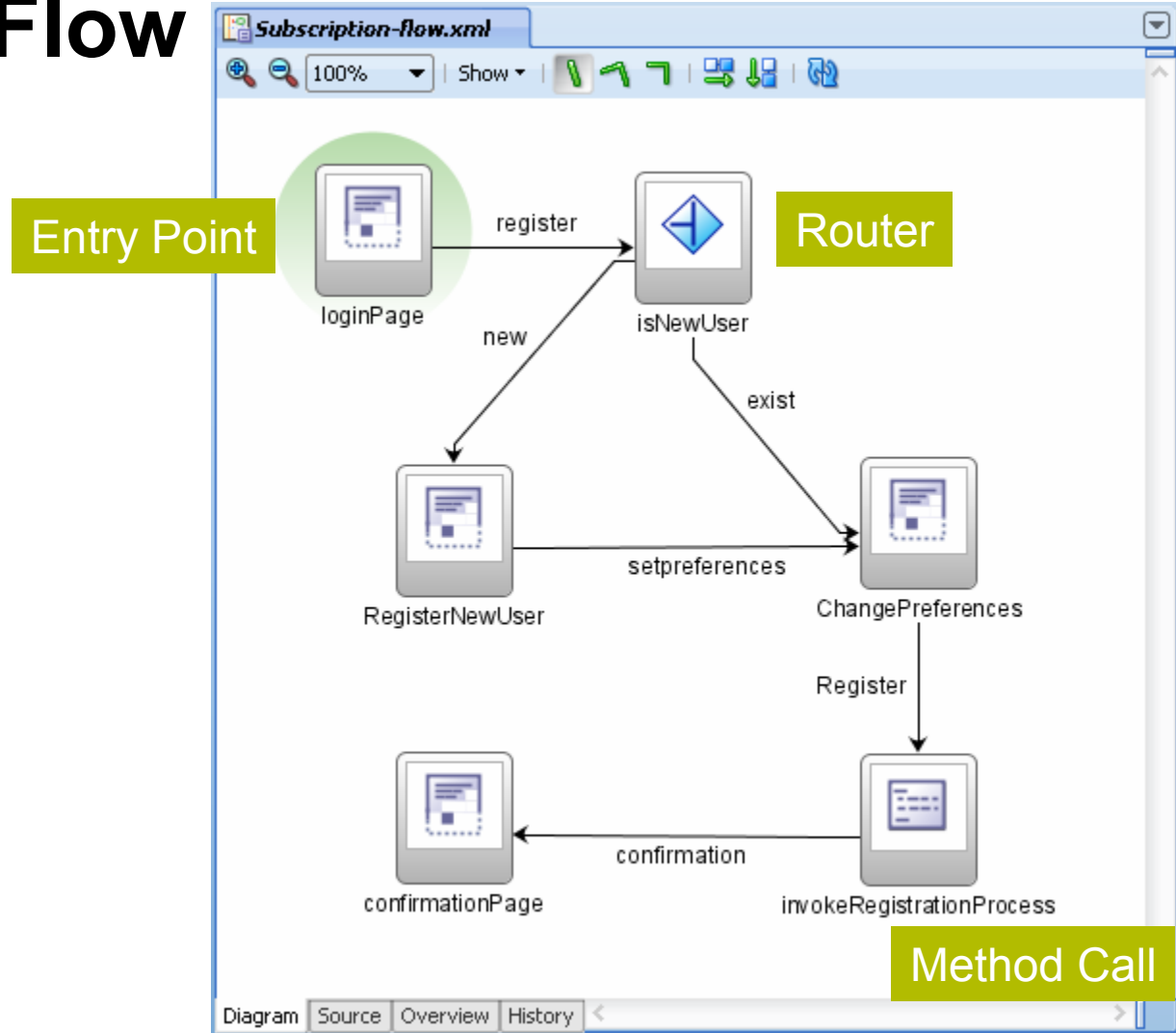
ADF Task Flows Extending JavaServer Faces Technology Page Flow

- ADF task flows add functionality on top of the JavaServer faces technology page flow
- Enhanced reusability
- Out-of-the-box advance features
- Declarative functionality

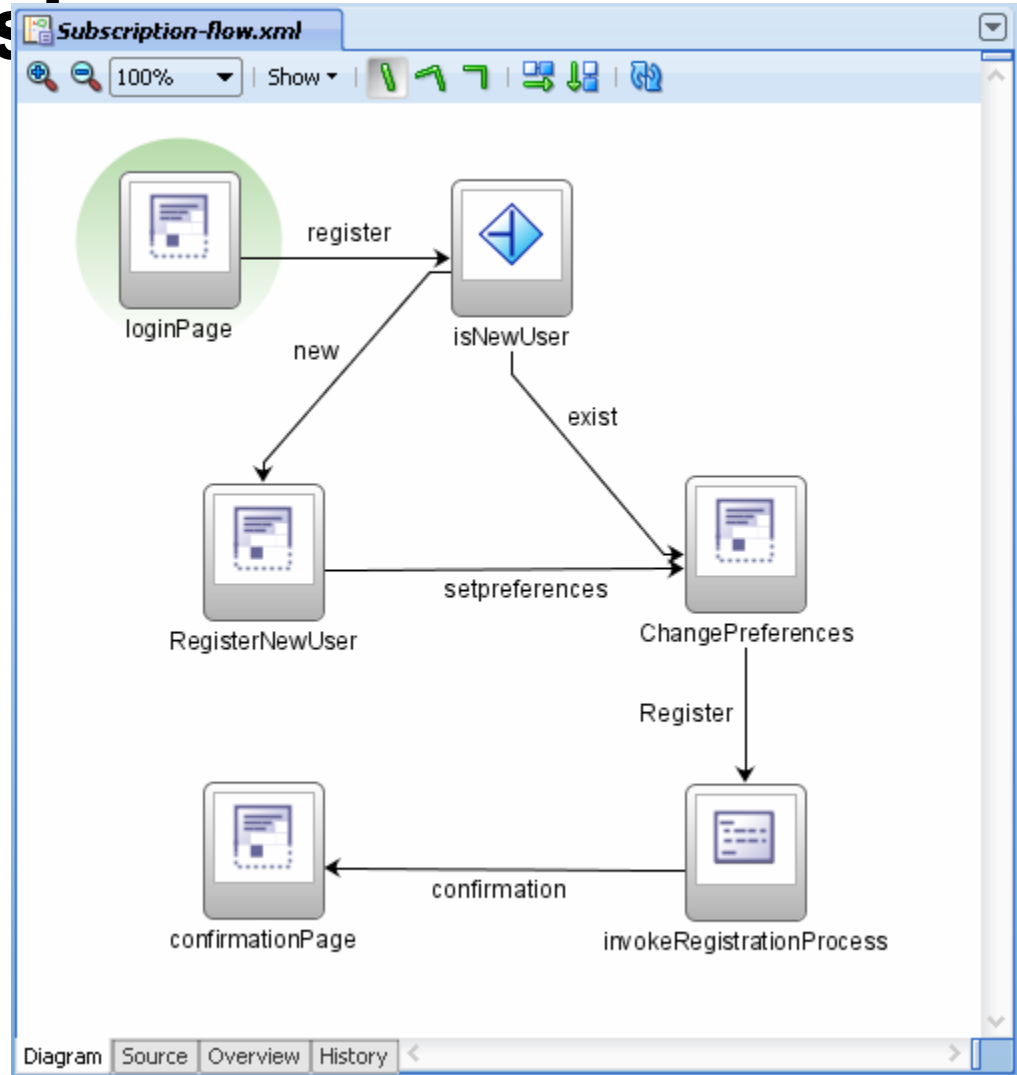
Task Flows—Reusable Page Flows

- A task flow represents a reusable block of functionality with a single entry point, defined exit points, and its own memory scope and transaction boundaries
- Task flows can receive parameters from, and return parameters to, a calling task flow

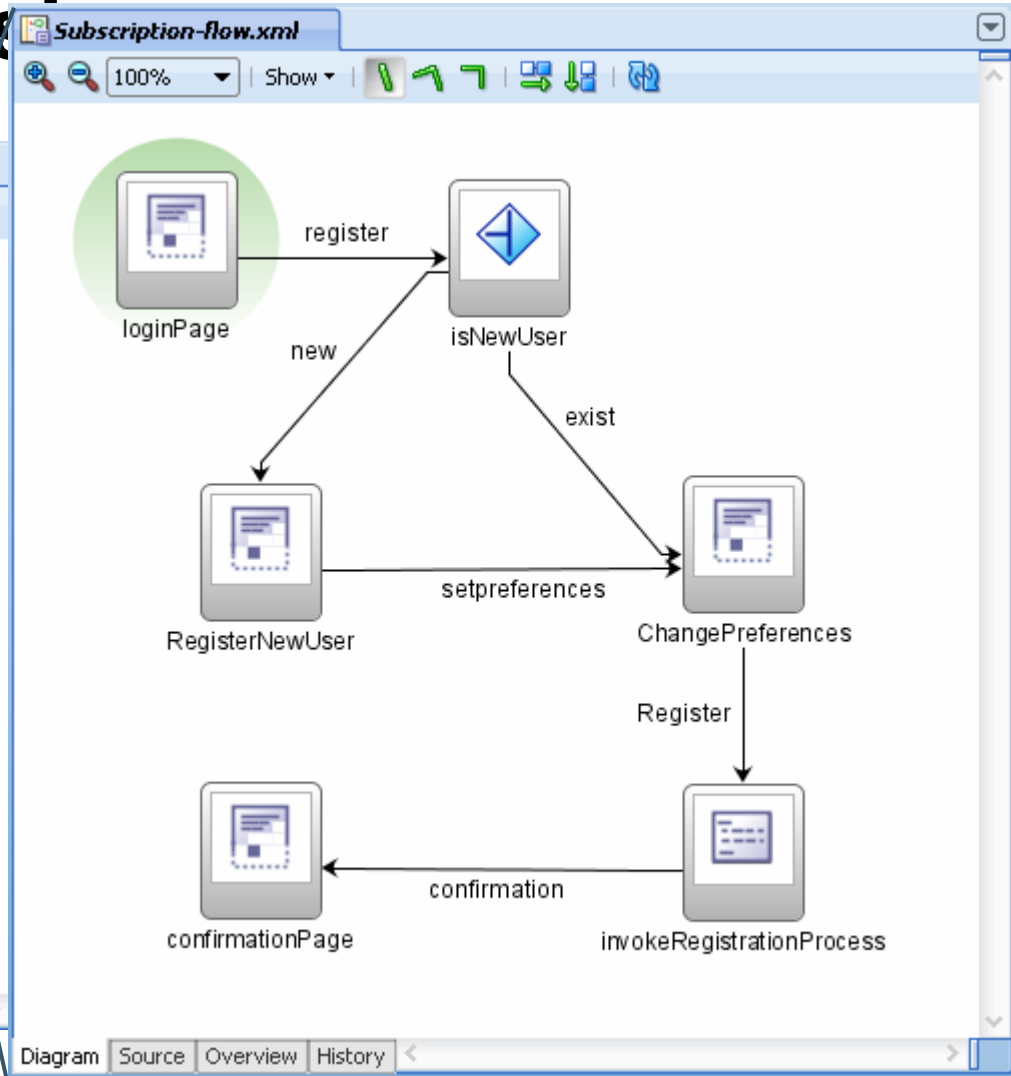
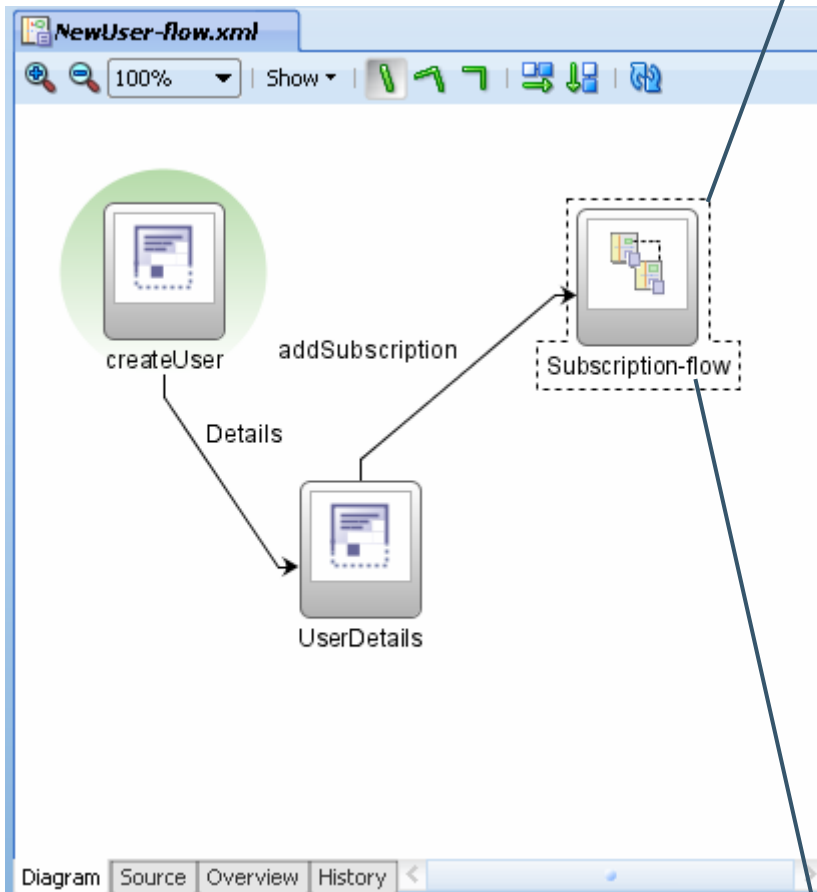
A Task Flow



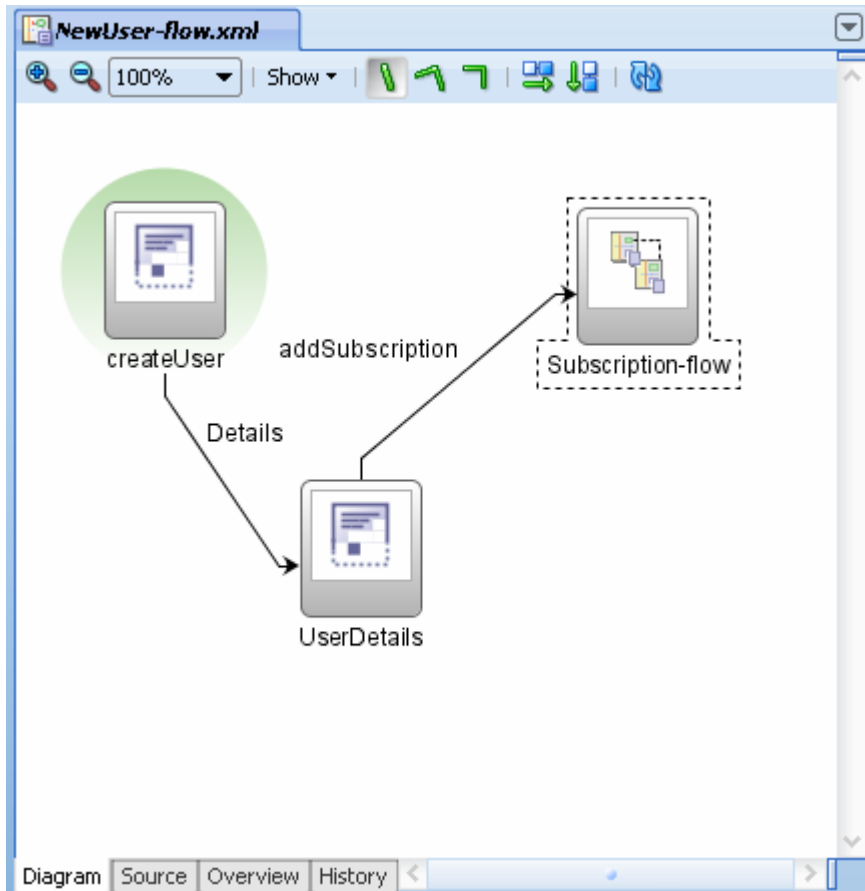
Reusable Task



Reusable Task



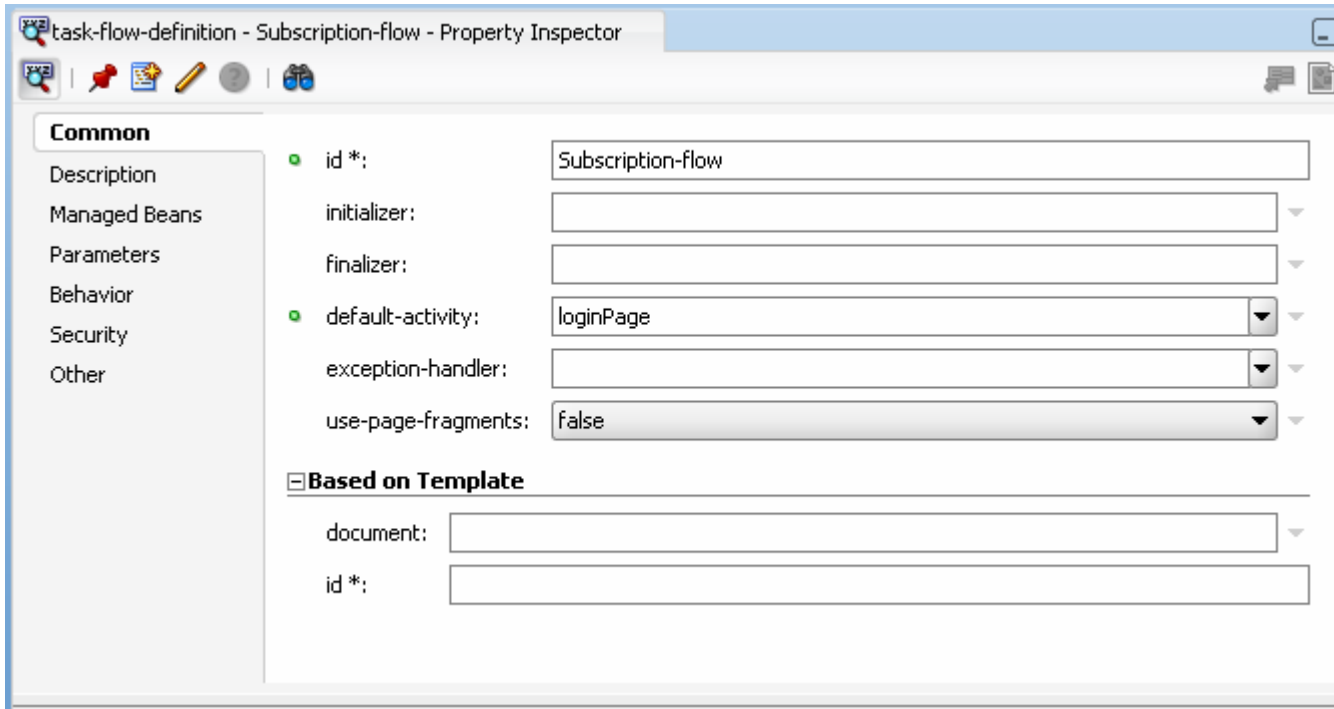
Reusable Tasks



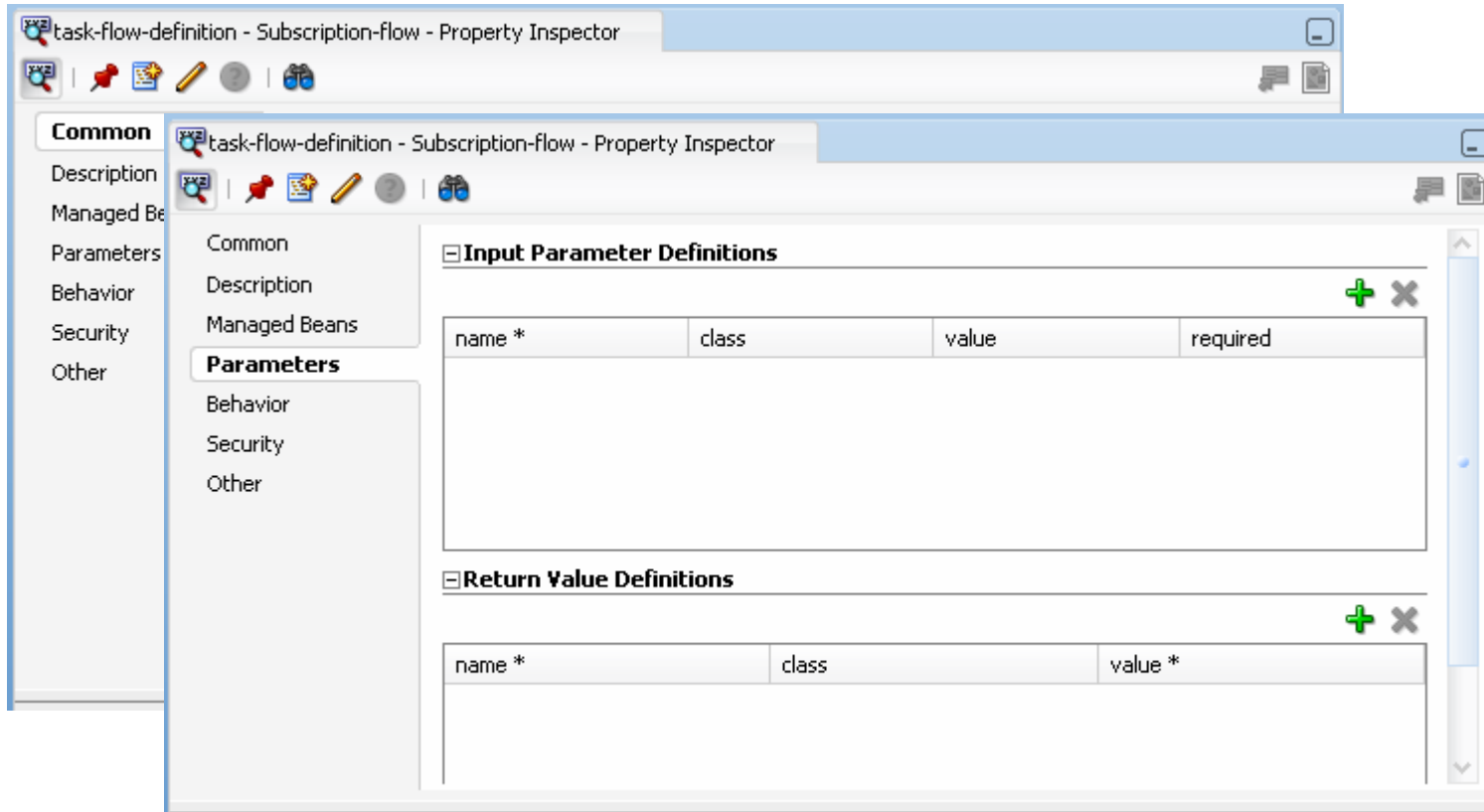
ADF Task Flows Features

- Trains: a progression of related pages
- Router activity: conditional routing
- Method call activity
- Wildcard control flow
- Save for later—resume incomplete transactions
- Declarative bookmarking
- Declarative transaction management
- Declarative support for browser back button navigation
- Declarative support for exception handlers
- Declarative security based on Java™ Authentication and Authorization Service (JAAS)

Declarative Functionality for Tasks



Declarative Functionality for Tasks



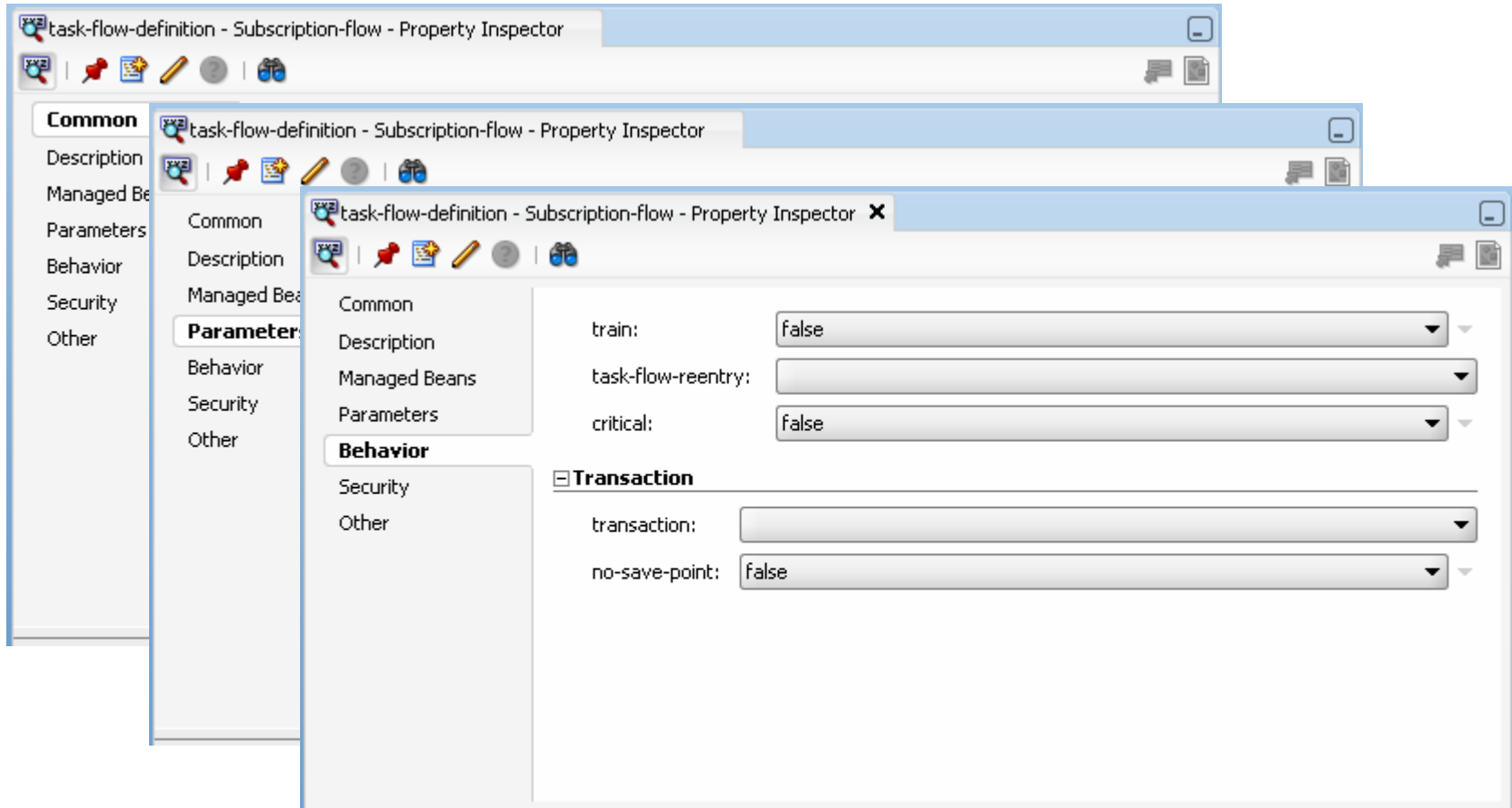
The screenshot shows a Java IDE window titled "task-flow-definition - Subscription-flow - Property Inspector". The left sidebar contains a tree view with categories: Common, Description, Managed Beans, Parameters, Behavior, Security, and Other. The "Parameters" category is selected, and the "Input Parameter Definitions" section is expanded. Below this, there is a table with the following structure:

name *	class	value	required

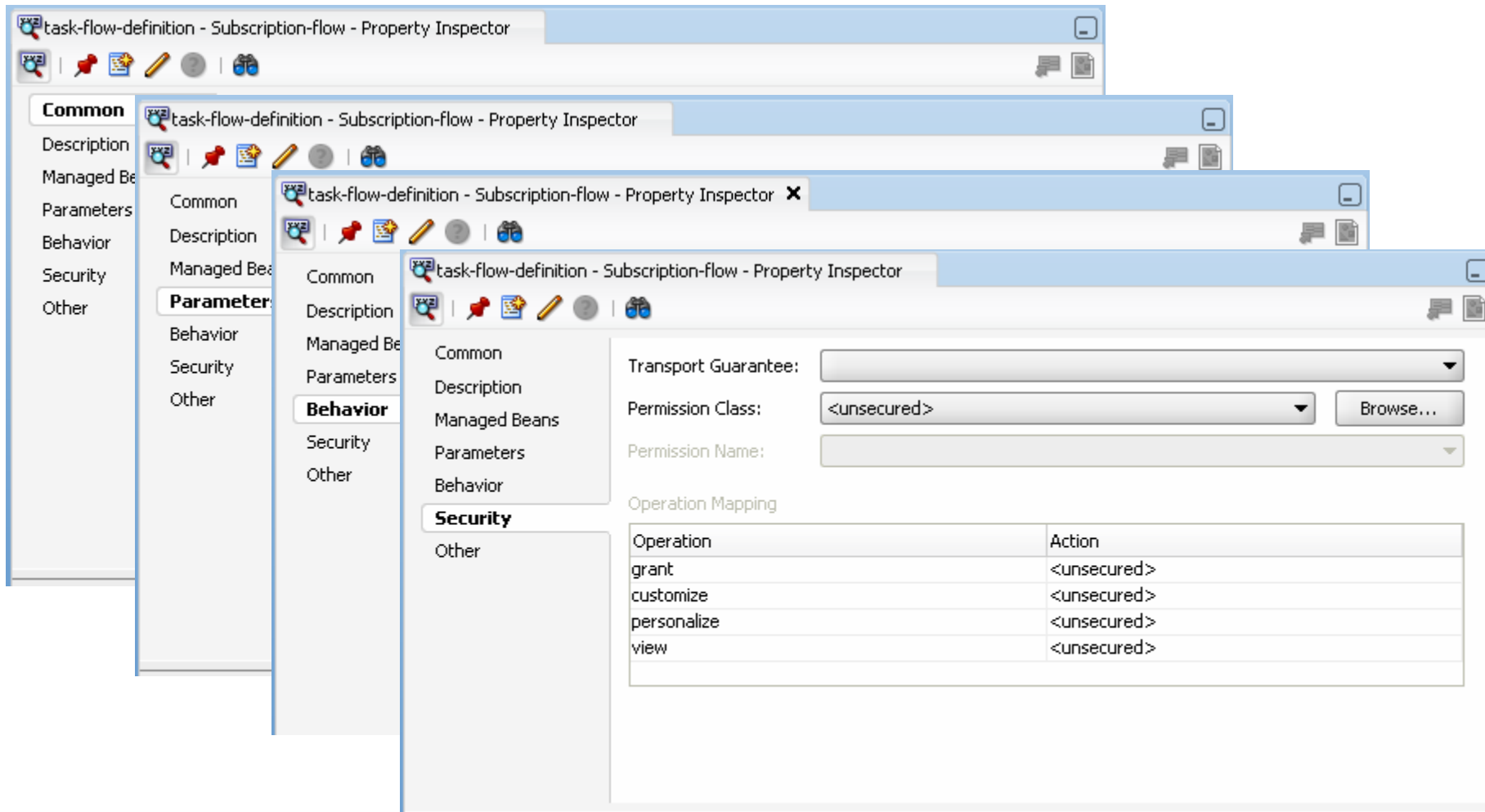
Below the table is the "Return Value Definitions" section, which is also expanded. It contains a table with the following structure:

name *	class	value *

Declarative Functionality for Tasks



Declarative Functionality for Tasks



The screenshot displays the 'task-flow-definition - Subscription-flow - Property Inspector' window in a Java IDE. The 'Security' tab is active, showing the following configuration:

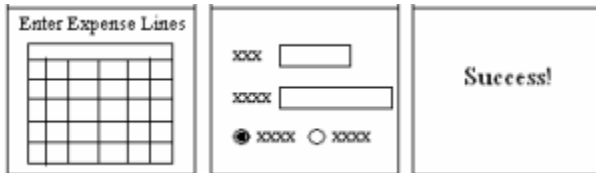
- Transport Guarantee:** A dropdown menu.
- Permission Class:** A dropdown menu set to '<unsecured>' with a 'Browse...' button.
- Permission Name:** A dropdown menu.
- Operation Mapping:** A table with two columns: 'Operation' and 'Action'.

Operation	Action
grant	<unsecured>
customize	<unsecured>
personalize	<unsecured>
view	<unsecured>

Reusability for JavaServer Faces Technology Page Development

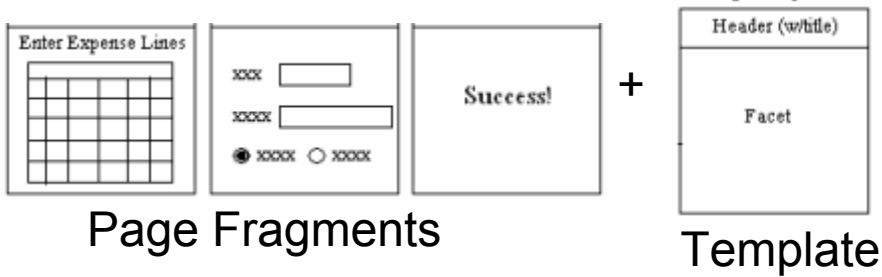
- Templating for JavaServer Faces technology
 - Define a standard page template
- Page fragments
 - Develop reusable areas
- Page regions
 - Construct a page from fragments
- Declarative components
 - Bundle components together

Reusable JavaServer Faces Technology Page Development

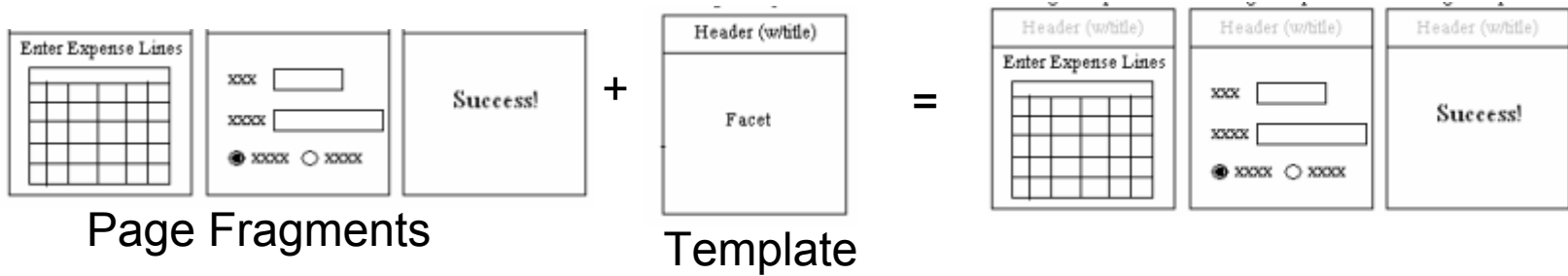


Page Fragments

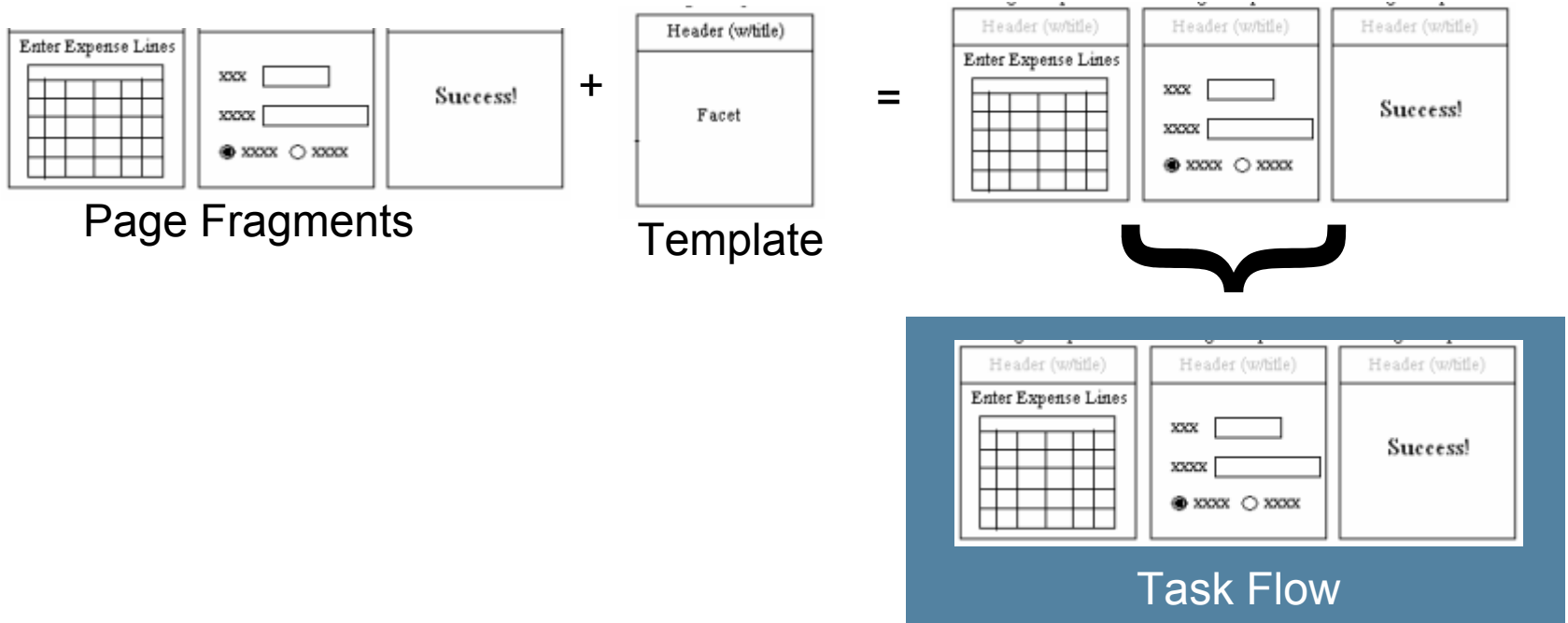
Reusable JavaServer Faces Technology Page Development



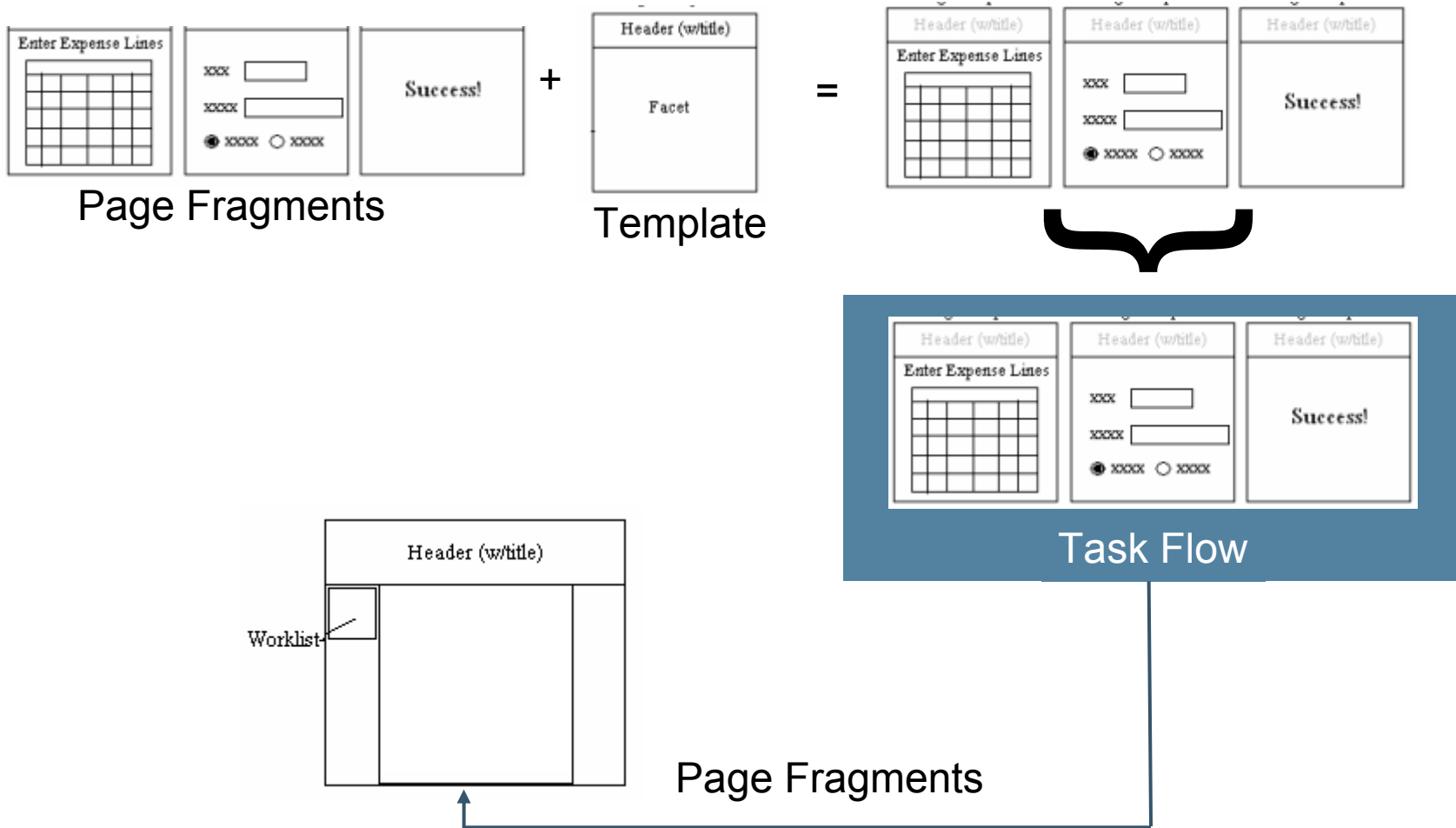
Reusable JavaServer Faces Technology Page Development



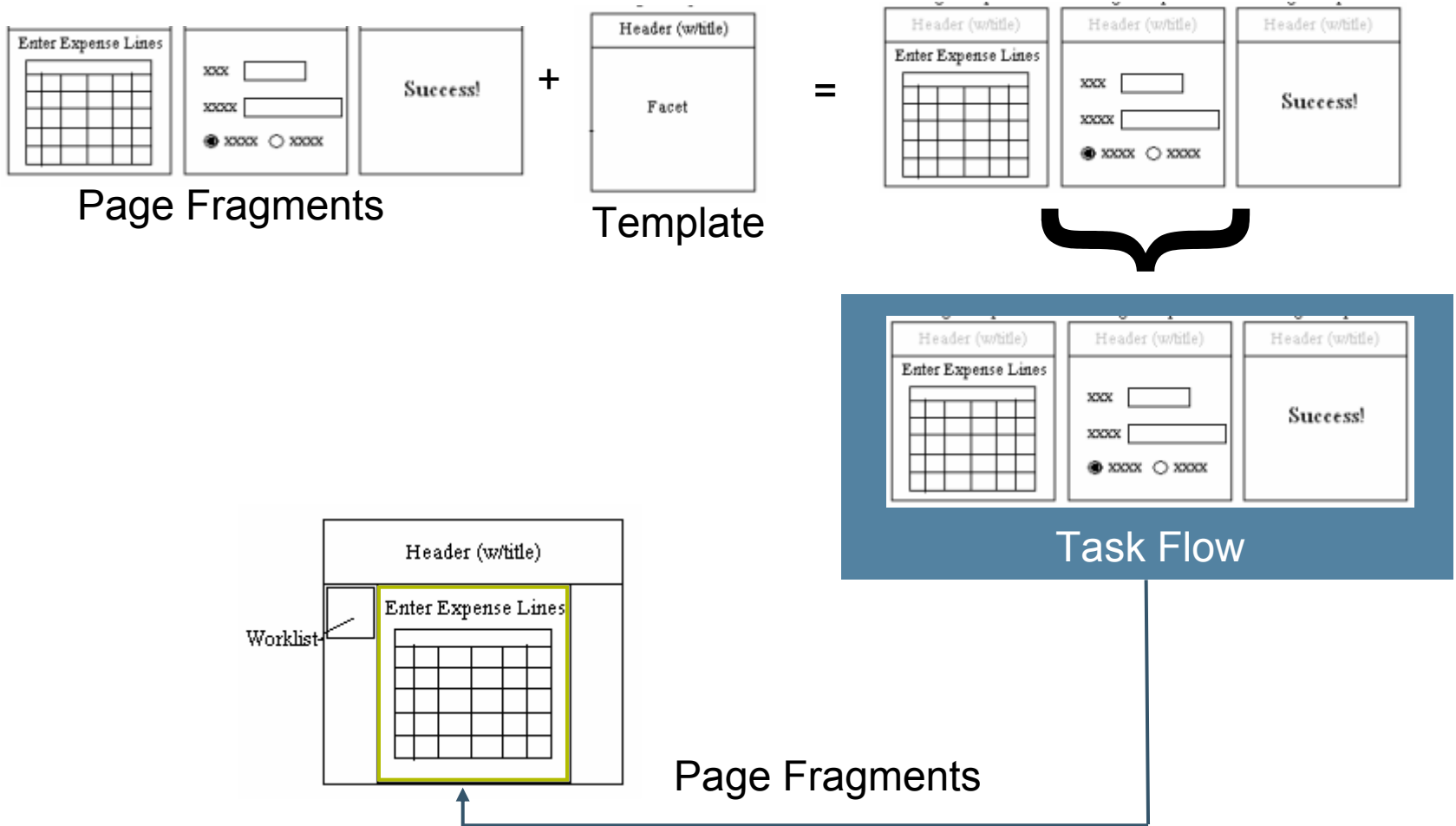
Reusable JavaServer Faces Technology Page Development



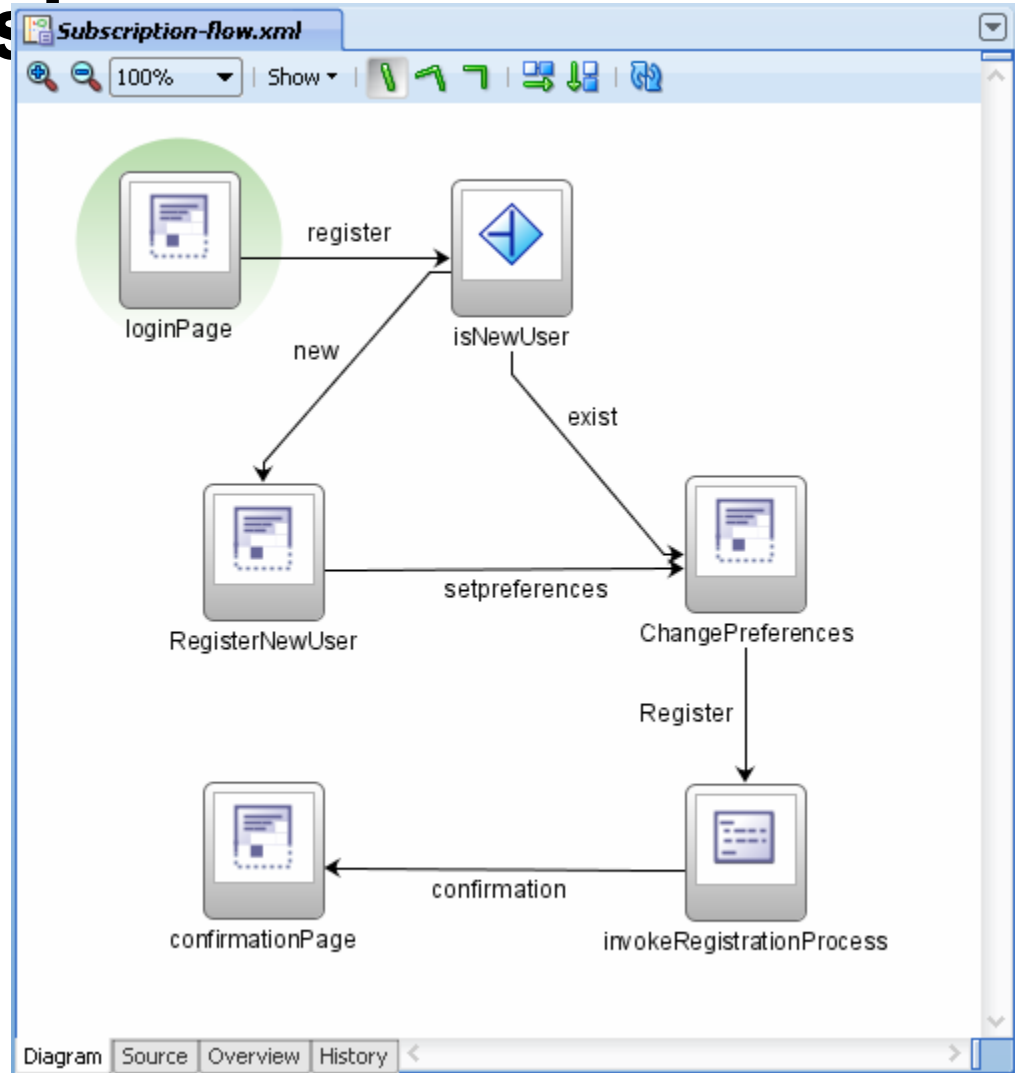
Reusable JavaServer Faces Technology Page Development



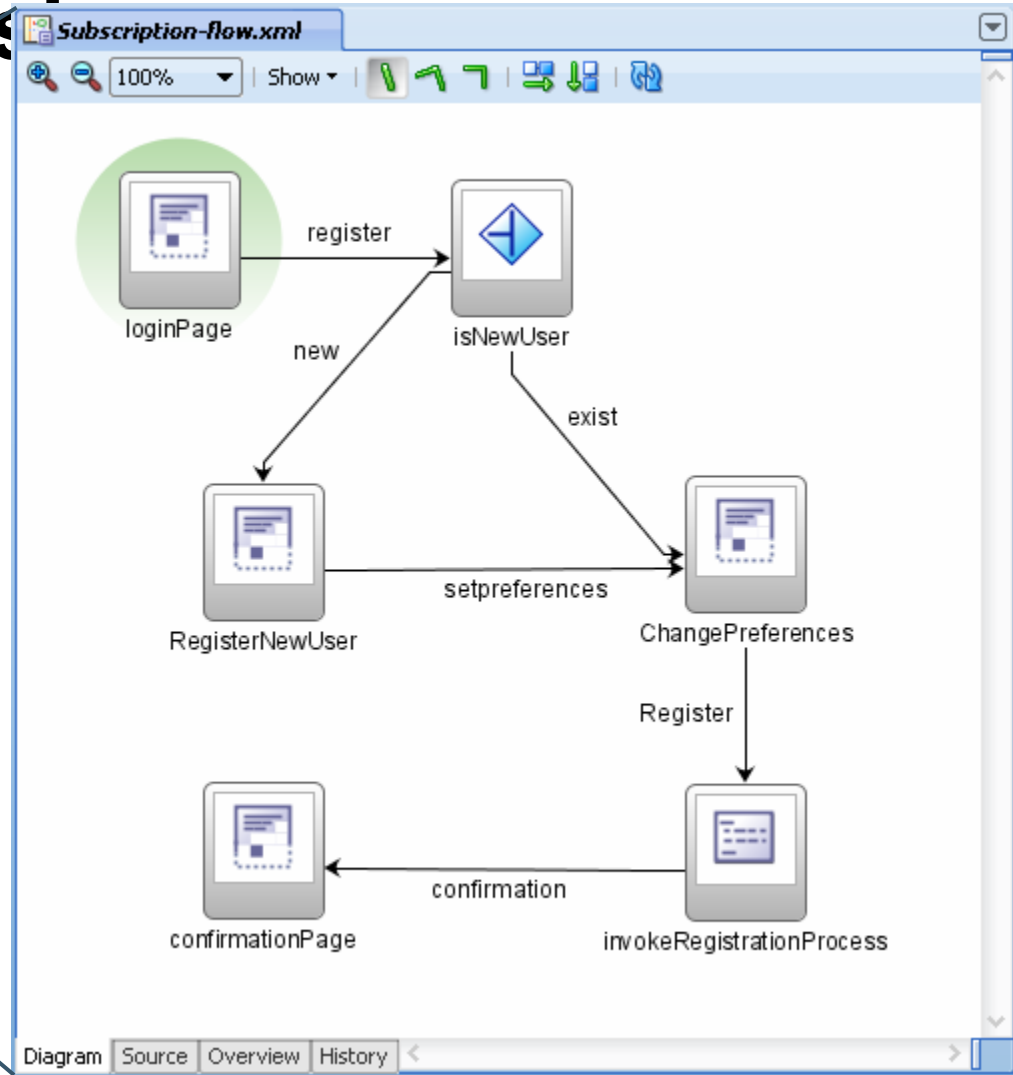
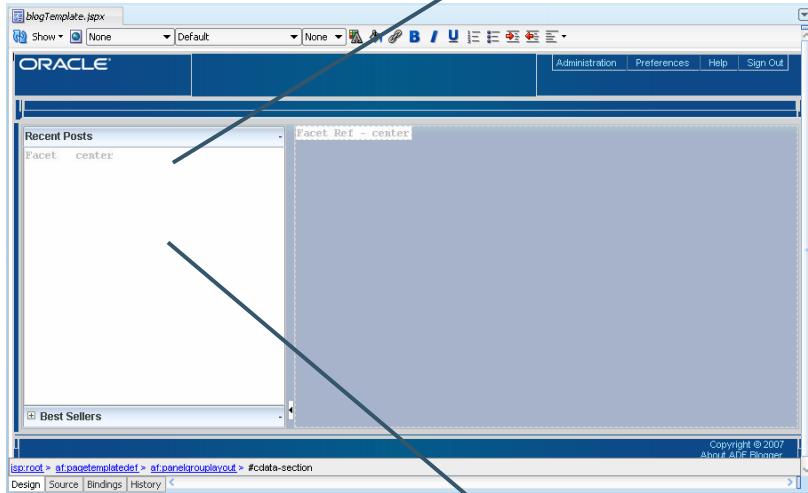
Reusable JavaServer Faces Technology Page Development



Reusable Task



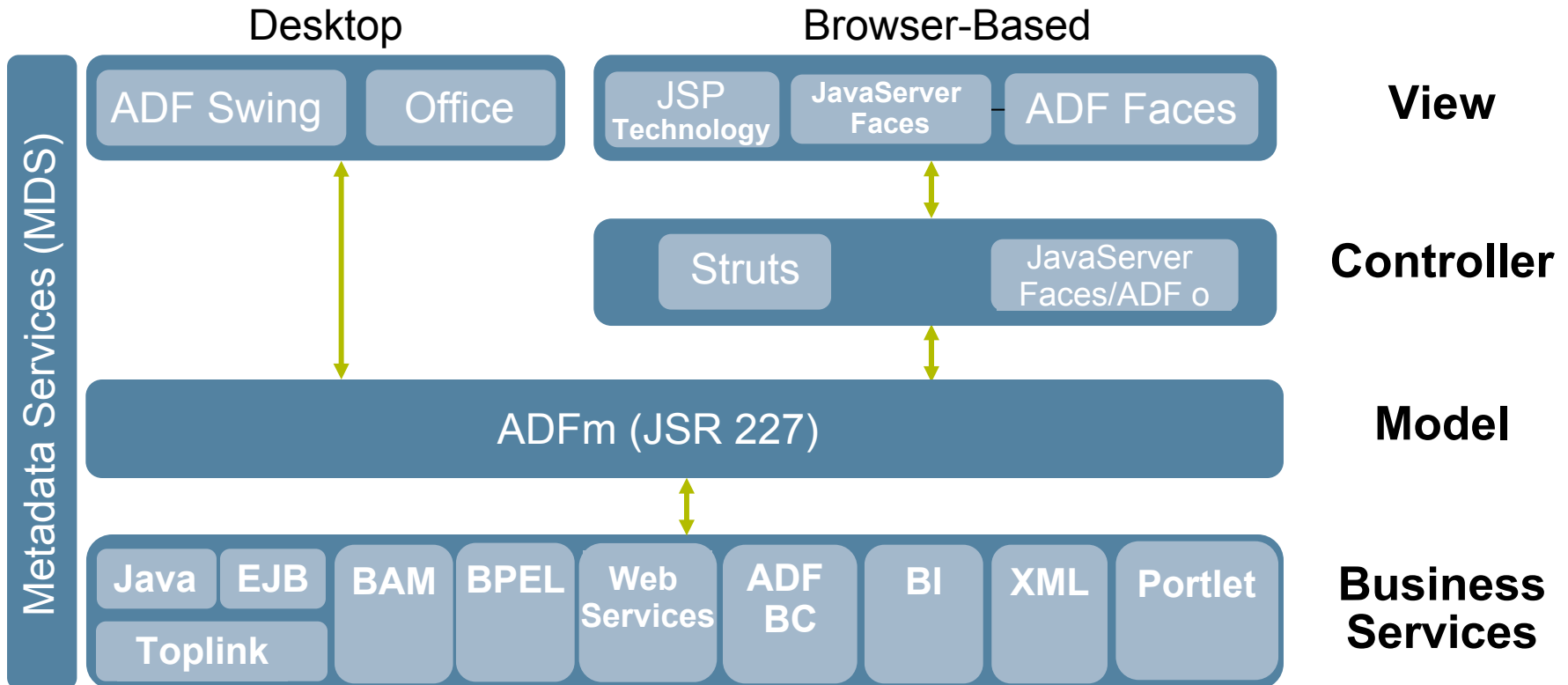
Reusable Task



Oracle ADF Enhancements

- New clients
 - ADF Rich Client, MS Office
- New data control types
 - BI, Java™ Management Extensions (JMX™), Placeholder
- ADF business components enhancements
- New databound components
 - List of values
 - Search forms
 - Graphs

Oracle ADF 11 Architecture



Metadata Services (MDS)

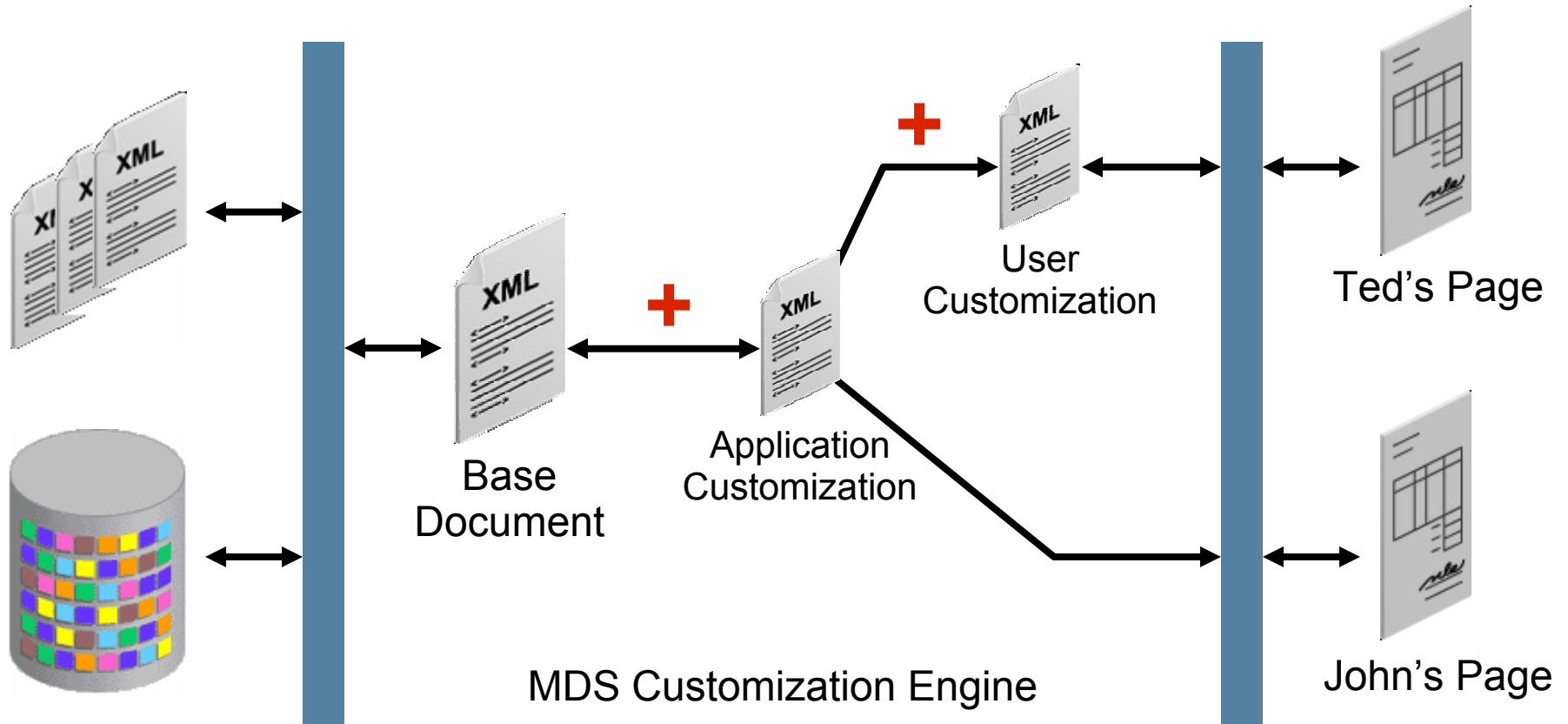
- Single service for Metadata management
 - Loading, caching, updating, storing
- Single API Abstraction
 - Client asks for metadata object, configuration determines the rest
- Single management and lifecycle
 - Deployment
 - Update
- Promotes MDD

Metadata Services (MDS) Features

- Validation—Single point of data validation and recovery
- Persistence—Customers choose where to persist their metadata
- Versioning—Track and rollback changes to your application at runtime
- Customization—Lower runtime overhead and upgrade cost
- Sandboxing—Make and test runtime changes without affecting your users

Application Customization

Single solution across entire stack

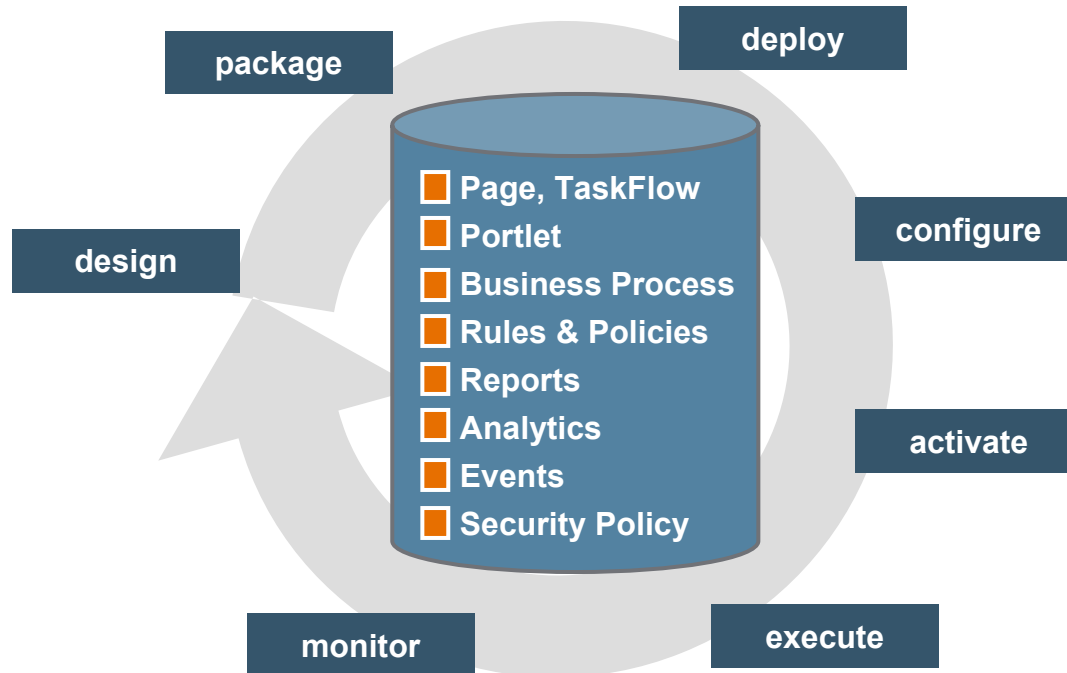


Common Metadata Model and Lifecycle

Design Time

Runtime

Metadata Services (MDS)





DEMO

Development Experience With
Oracle JDeveloper 11

Summary

- JDeveloper is **more than** a Java IDE
- Oracle is an innovator in developer productivity
- JDeveloper 11 with Oracle ADF brings a new level of productivity and reusability to Java EE application development

For More Information

- Oracle.com/technology/jdev
- Oracle's booth at the JavaOneSM conference



Q&A

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