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JDeveloper 11g: New Features Overview

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Oracle JDeveloper Themes

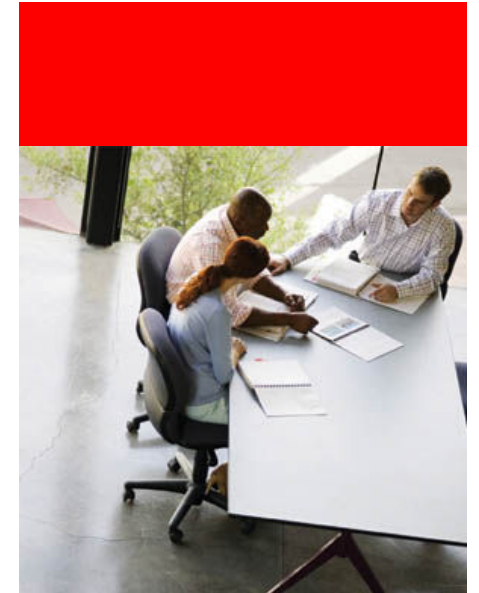
- Complete
 - Full development lifecycle
 - One tool for Java, Web Services, XML, DB, SOA, WebCenter
- Standard
 - Support industry standards
 - Cross platform (AS and DB)
- Productive
 - Improved coding productivity
 - Visual and declarative development
 - Oracle Application Development Framework (Oracle ADF)
- FREE



JDeveloper 11g Themes

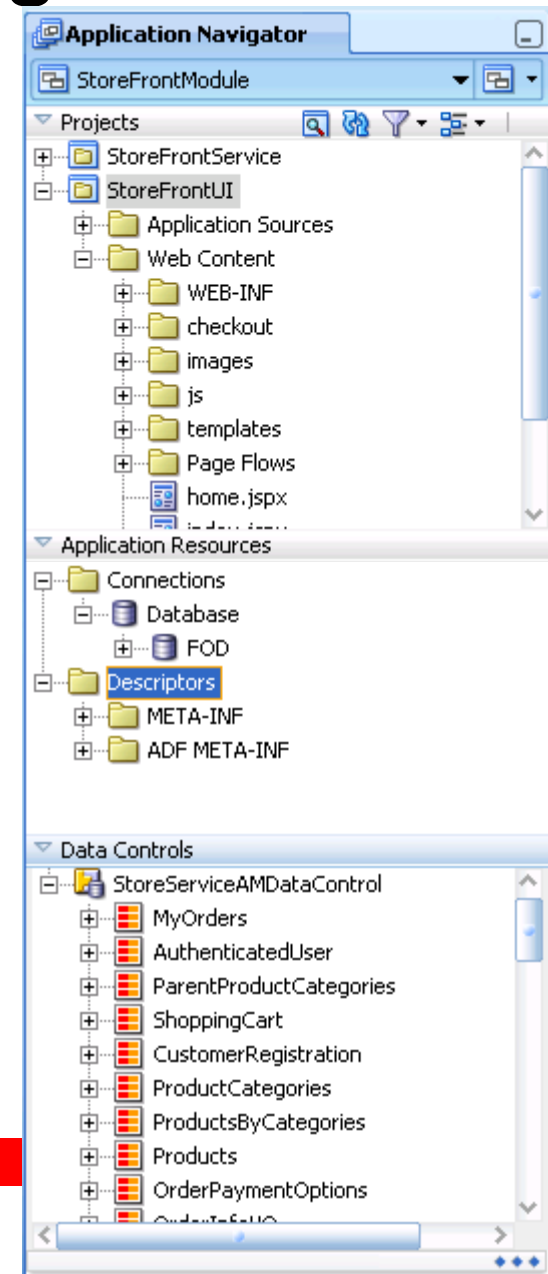
- Simplified Design Time Experience
- Simplified Java Development
- Simplified Database Development
- Simplified Enterprise Java Development

Simplified
Design Time Experience



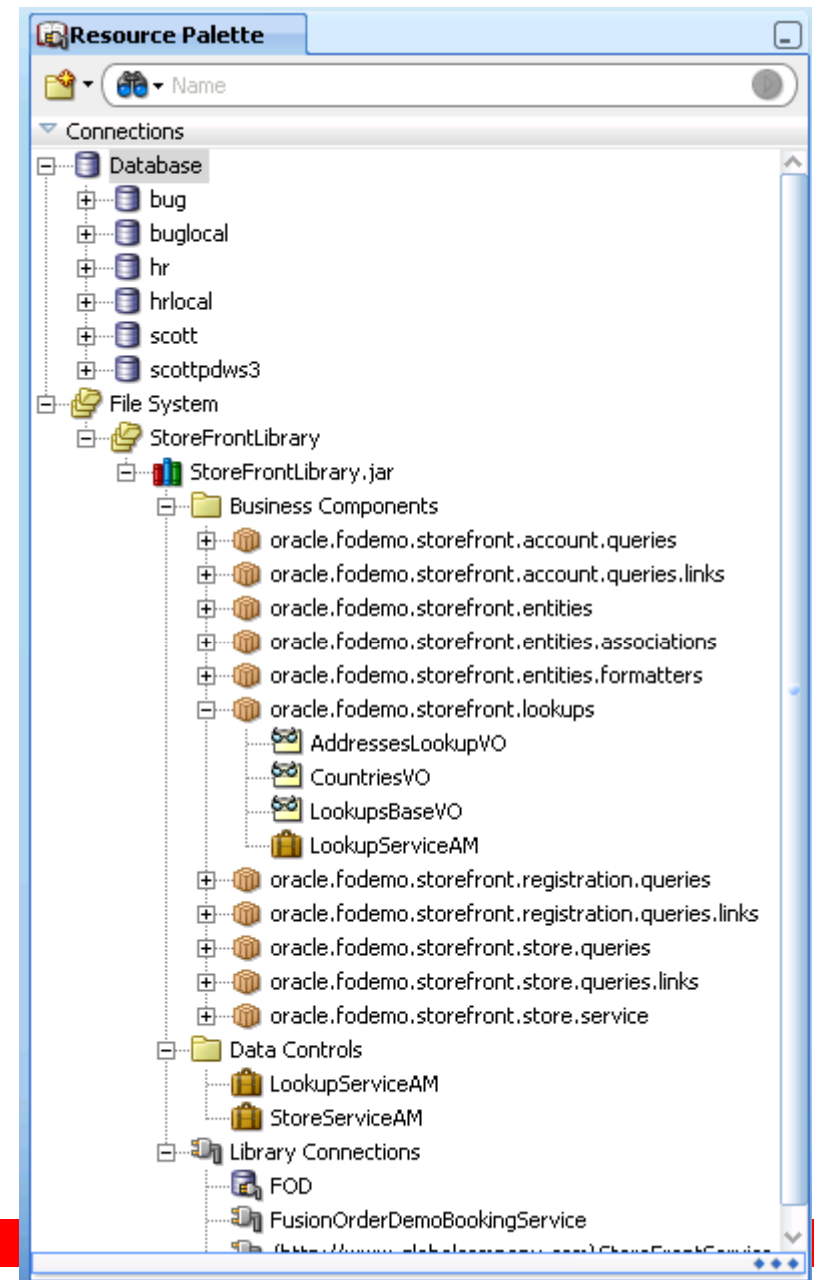
Enhanced Application Navigator

- Collapsible Panels
- Hide Less Used Panels
- Related Files Grouped Together



Resource Catalog

- Connect to Resource Providers
- Drag/Drop Resources
- Search Resources
 - Application server
 - Database
 - File system
 - UDDI Registry
 - URL adapter
 - WebDAV





Application Overview

- Categorized List of All Application Files
- Easily See Where Application Has Errors
- Easily Create New Components

Application Overview

The screenshot displays the Oracle JDeveloper 11g Development Build interface for a project named 'MyForumsMonitor.jws'. The main window shows a 'File Summary' section with the following statistics: Total: 45, Error: 2, Warning: 13, Incomplete: 0, Advisory: 1, Ok: 29, and Unchecked: 0. A mouse cursor is hovering over the 'Error: 2' indicator.

Below the summary, there are two panels: 'Java Files' and 'XML Files'. The 'Java Files' panel lists 15 files, all with warning icons (yellow triangles). The 'XML Files' panel lists 15 files, all with success icons (green checkmarks).

At the bottom, the 'File List' view is active, showing search results for 'Error' files. The search criteria are 'Status is Error'. The results table shows 2 files found on Oct 18, 2007 at 6:22 PM.

Status	File	Project	Date Modified
✖	TeamMembersOnTeam.xml	BrowseData.jpr	Jan 22, 2007 9:40:00 PM
✖	Help.html	XSQLPages.jpr	Jan 22, 2007 9:40:00 PM

The status bar at the bottom indicates 'Load done browsedata' and 'Editing'.

File List

The screenshot shows the File List application interface. At the top, there is a header bar with the title "File List" and a close button. Below the header, there is a search bar with the following filters:

- Look in: All Projects
- Saved Searches: <New Search>
- File Name: contains category
- Category: is ADF Business Components
- Date Modified: before Oct 18, 2007

There are also radio buttons for "Match All" (selected) and "Match Any", and buttons for "Search" and "More Actions".

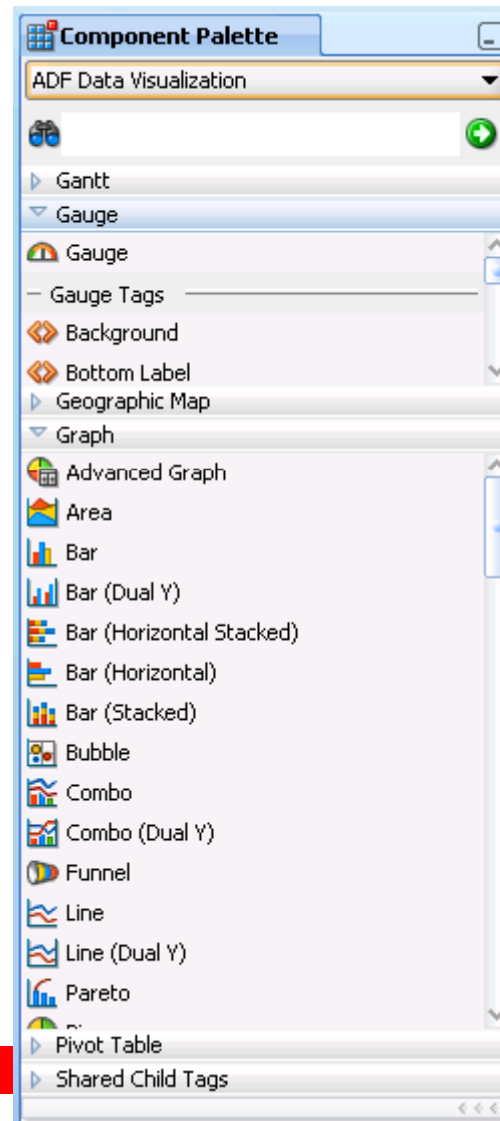
Below the search filters, there is a section for search results. It shows "Results: 7 files found. Oct 18, 2007 6:18 PM". The results are displayed in a table with the following columns: Status, File, Project, and Date Modified.

Status	File	Project	Date Modified
✓	ProductCategory.xml	Model.jpr	Sep 19, 2007 11:57:28 PM
✓	ProductSubcategory.xml	Model.jpr	Sep 19, 2007 11:57:26 PM
✓	ProductCategoryList.xml	Model.jpr	Sep 19, 2007 11:57:32 PM
✓	ProductSubcategoryList.xml	Model.jpr	Sep 19, 2007 11:57:30 PM
✓	CategoryForProductAssoc.xml	Model.jpr	Sep 19, 2007 11:57:28 PM
✓	SubcategoryForCategoryAssoc.xml	Model.jpr	Sep 19, 2007 11:57:26 PM
✓	SubcategoryForProductAssoc.xml	Model.jpr	Sep 19, 2007 11:57:26 PM

At the bottom left, there is a tab labeled "File List View".

Improved Component Palette

- Collapsible Panels
- Quick Search
- Favorites List
- Recently Used



New Property Inspector

- Layout
- Categories
- Searching

af.pagetemplate > f.facet > af.group > af.panelgrouplayout > af.panelgrouplayout > af.panelformlayout > af.selectonechoice#categoryid >

Messages - Log Select One Choice - #{bindings.Category.la... - Property Inspector

Type to find a property

Common	Required:	<default>	ReadOnly:	<default> (false)
Data	Disabled:	<default> (false)	AutoSubmit:	true
Appearance	PartialTriggers:	productid		
Style	RefreshCondition:			
Behavior	Validation			
Other	Immediate:	<default>	Converter:	<default>
	ValuePassThru:	<default> (false)		
	Validator:			
	ValueChangeListener:			
	Advanced			



Demonstration

Property Palette Searching

Modeless Editors

AddressEO.xml

General

Attributes + ✎ ✖ Add from Table... Override...

Entity attributes can be based upon columns in the schema object or can be based upon transient values.

Name	Type	Column	Column Type	Extends
AddressId	oracle.jbo.domain.D...	ADDRESS_ID	NUMBER(15, 0)	
Address1	String	ADDRESS1	VARCHAR2(40)	
Address2	String	ADDRESS2	VARCHAR2(40)	
City	String	CITY	VARCHAR2(40)	
PostalCode	String	POSTAL_CODE	VARCHAR2(12)	
StateProvince	String	STATE_PROVINCE	VARCHAR2(40)	
CountryId	String	COUNTRY_ID	CHAR(2)	
Longitude	Number	LONGITUDE	NUMBER(20)	
Latitude	Number	LATITUDE	NUMBER(20)	
CreatedBy	String	CREATED_BY	VARCHAR2(60)	
CreationDate	Date	CREATION_DATE	DATE	
LastUpdatedBy	String	LAST_UPDATED_BY	VARCHAR2(60)	
LastUpdateDate	Date	LAST_UPDATE_DATE	DATE	
ObjectVersionId	Number	OBJECT_VERSION_ID	NUMBER(15, 0)	

Validation Rules: AddressId + ✎ ✖

Use to add and edit declarative validation rules. The rules could be predefined or they may be your own custom rules

Validation Rule	Type
Precision : (15,0)	Database Constraints

Custom Properties: AddressId + ✎ ✖

Security: AddressId

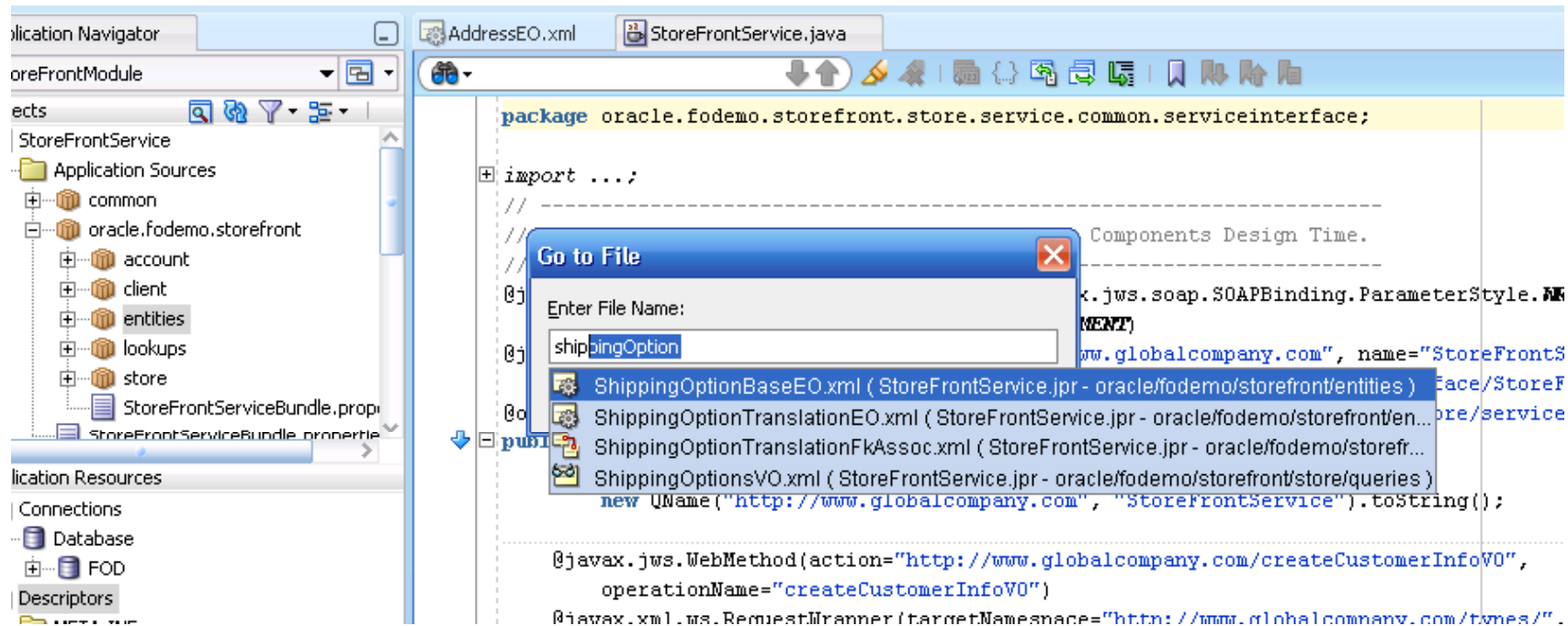
Overview Source History



Demonstration

Modeless Editors

Go To File



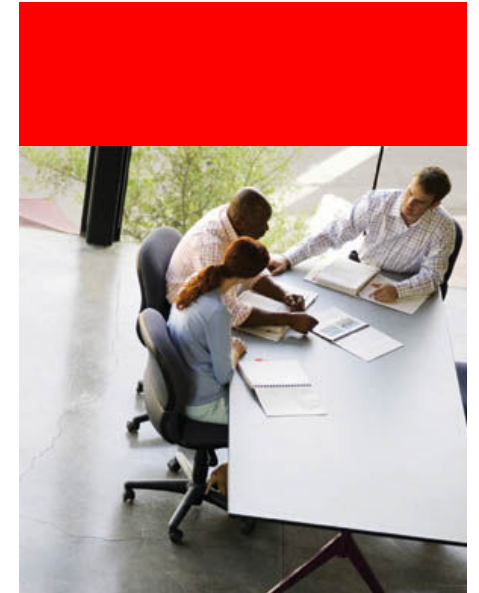
The screenshot shows an IDE window with a Java file named `StoreFrontService.java` open. The file content includes a package declaration and several imports. A `Go to File` dialog box is displayed over the code, with the text `shippingOption` entered in the search field. The dialog lists the following search results:

- ShippingOptionBaseEO.xml (StoreFrontService.jpr - oracle/fodemo/storefront/entities)
- ShippingOptionTranslationEO.xml (StoreFrontService.jpr - oracle/fodemo/storefront/en...)
- ShippingOptionTranslationFkAssoc.xml (StoreFrontService.jpr - oracle/fodemo/storefr...)
- ShippingOptionsVO.xml (StoreFrontService.jpr - oracle/fodemo/storefront/store/queries)

The IDE interface also shows a Project Explorer on the left with a tree view of the project structure, including folders like `common`, `account`, `client`, `entities`, `lookups`, and `store`.



Simplified **Java Development**



New Features for Coders

- Code-editor improvements
 - Toolbar, auto highlight, more syntax colors, quick javadoc for functions, better hierarchy navigation
- New code generation
 - Constructors, equals & hash code, improved accessors generation
- JUnit 4.0 support
- New profilers
 - Memory and CPU
 - Run on native JVM
- XML compare and merge conflict

The image displays three screenshots from an IDE illustrating various features:

- Code Editor:** A search dialog for 'find' in 'Movie.java' with options for 'Match Case', 'Whole Word', and 'Highlight Occurrences'. Below, a code snippet shows a TODO comment and a field declaration: `public boolean empName =`. A context menu offers 'Create Field' and 'Create Variable' options.
- Code Generation:** A snippet showing an `@Entity` annotation, a `@NamedQuery` annotation, and a `public class Employees` declaration with a `private Double commi` field.
- Profiler:** A screenshot of the 'swing' profiler showing a table of thread groups and their memory allocation. The table includes columns for Description, Alloc %, Alloc, Allocy, Alloc Size, and Alloc.

Description	Alloc %	Alloc	Allocy	Alloc Size	Alloc
ThreadGroup 2 main	33%	45,571		2,315,784	
Thread 11 AWT-EventQueue-0	29%	40,390		2,127,888	
Thread 5 Thread-2	2%	3,924		149,128	
java.lang.Thread.run ()	2%	3,924		149,128	
oracle.dms.spy.jvm.ThreadMonitor\$4.run ()	2%	3,924		149,128	
oracle.dms.spy.jvm.ThreadMonitor.access\$300 ()	2%	3,822		144,680	
oracle.dms.spy.jvm.ThreadMonitor.access\$200 ()	0%	102		4,448	
Thread 4 AWT-Windows	0%	1,227		37,728	
Thread 15 TimerQueue	0%	30		1,040	

XML-Aware File Compare

The screenshot displays the Oracle JDeveloper 11g Technology Preview 2 interface, showing a side-by-side comparison of two XML files: `app_SRMainPageDef.xml` (Compare: 1) and `app_SRMainPageDef.xml` (Compare: 2). The XML content is visible in both panes, showing various actions and bindings. A difference is highlighted in the right pane at Line 11, where the `RangeSize` attribute has been added to the `<button>` element. The status bar at the bottom indicates "2 differences: 1 added, 0 removed, 1 changed Editing".

```
</attributeValues>
<button IterBinding="ServiceHistoriesIterator" id="Hidden"
  <AttrNames>
    <Item Value="Hidden"/>
  </AttrNames>
  <ValueList>
    <Item Value="true"/>
    <Item Value="false"/>
  </ValueList>
</button>
<action id="Delete" IterBinding="ServiceRequestsIterator"
  InstanceName="SRService.ServiceRequests" DataControl="SRService"
  RequiresUpdateModel="false" Action="removeCurrentRow"/>
<action id="Create" IterBinding="ServiceHistoriesIterator"
  InstanceName="SRService.ServiceHistories" DataControl="SRService"
  RequiresUpdateModel="true" Action="createRow"/>
<action id="DeleteNewHistory" IterBinding="ServiceHistoriesIterator"
  InstanceName="SRService.ServiceHistories" DataControl="SRService"
  RequiresUpdateModel="false" Action="removeCurrentRow"/>
<action id="Commit" InstanceName="SRService" DataControl="SRService"
  RequiresUpdateModel="true" Action="commitTransaction"/>
<methodAction id="deleteServiceHistoryNotes"
  InstanceName="SRService.dataProvider" DataControl="SRService"
  MethodName="deleteServiceHistoryNotes"
  RequiresUpdateModel="true" Action="invokeMethod"/>
<NamedData MDName="keySet"
  MDValue="{backing_SRMain.historyTable.selectedAdfRowKeys}"
  MDType="java.util.Set"/>
</methodAction>
</bindings>
```

Comparison Summary: 2 differences: 1 added, 0 removed, 1 changed Editing



Ant Debugging

- Find Problems in Your Build Files
- Set Breakpoints
- Step
- See Values of Properties



Demonstration

Ant Debugging



Enhanced Subversion Support

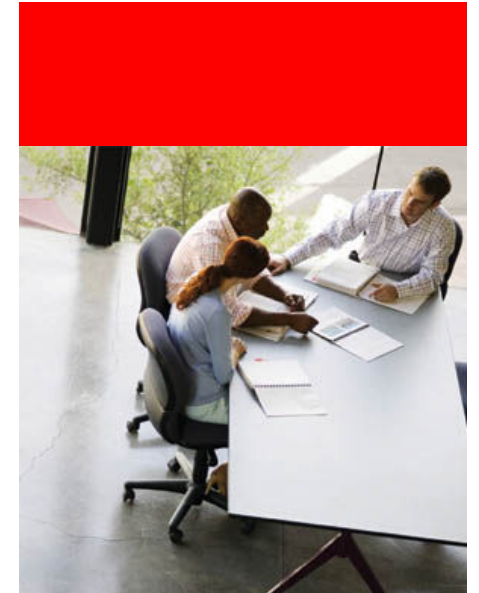
- Branch/Tag, Switch / Merge
 - Files, Projects, and Applications
- Incoming Changes
 - Now visible in the Pending Changes
- XML-Aware Interactive Merge Conflict Resolution



UML Diagramming

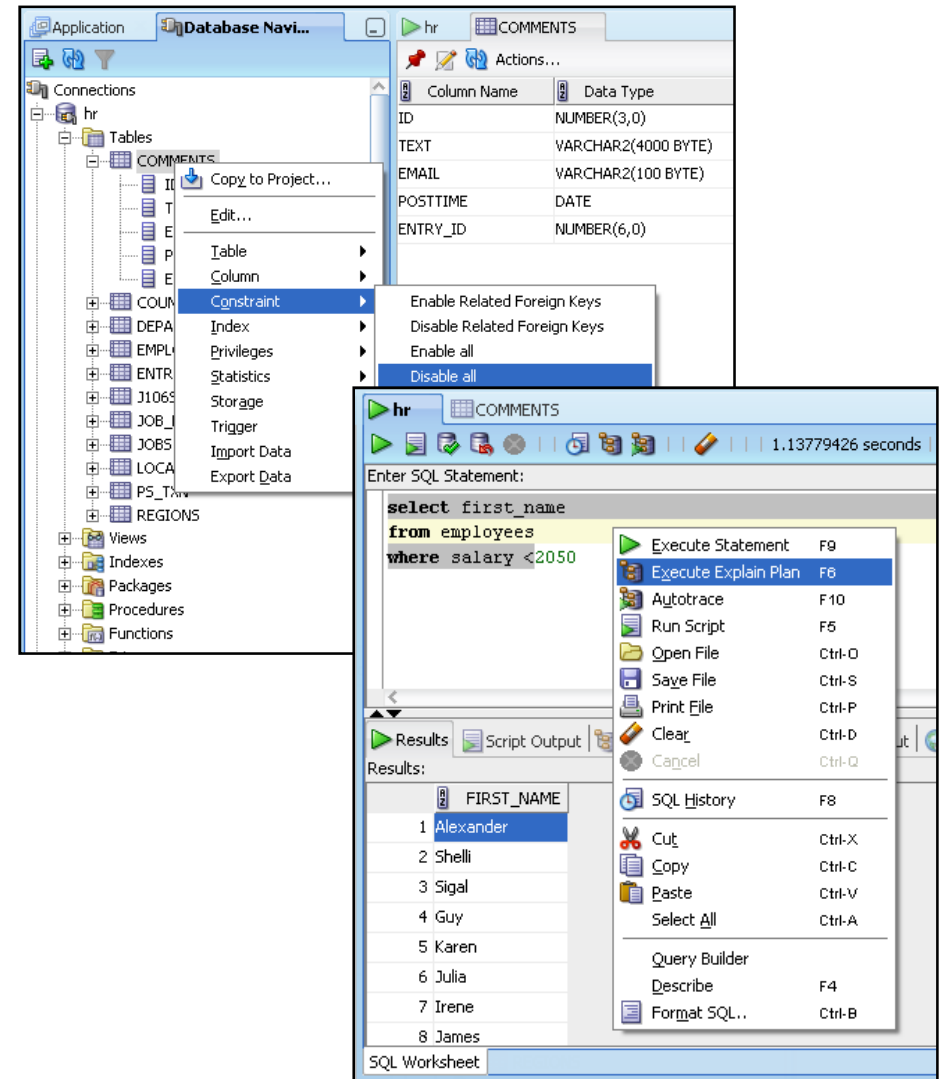
- Show / Hide Individual Attributes and Operations
- Drag to Reorder Attributes and Operations
- Improved Visual Feedback for Error Conditions
- Set Default Preferences for Multiple Object Types
- Multi-level Undo/Redo
- Better Refactoring Integration for Java Class Diagram
- Improved Diagram Printing Options

Simplified **Database Development**



New Features for Database Developers

- SQL Developer integrated
- Additional online/offline database manipulation capabilities
- Extended SQL worksheet
- Edit PL/SQL files
- Enhanced database modeler





Database Navigator (SQL Developer)

- Database Navigator
 - Explore Entire Contents of Your Schema
- SQL Worksheet
 - Execute Scripts, Explain Plan, Autotrace, Drag Code Snippets
 - See DBMS_OUTPUT and OWA content in the log
- Creation of All Kinds of Tables and Views
 - External, IOT, Temp, Partitioned, Materialized Views
- Extensive Object Modification Support
 - Table Rename, Add Columns, Compile Programs Units, Rebuild Indexes, Test Database Links
- Browse, Query, Update, Delete, Sort, and Filter
- Export and Import Data in Multiple Formats, Export DDL
- Query Builder



Demonstration

Query Builder

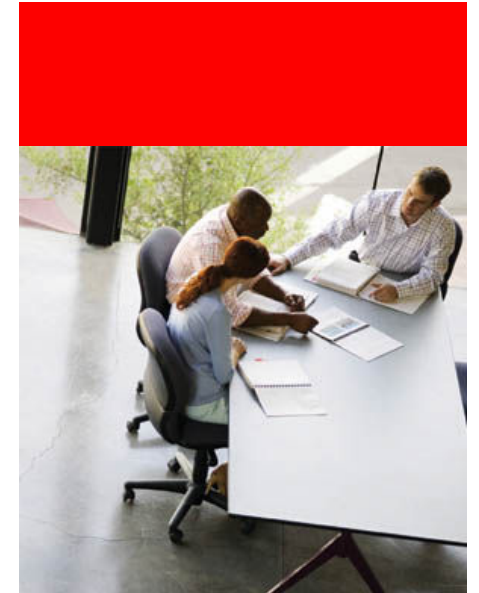


Enhanced Offline Database Support

- Multiple, Named Offline Databases with Cross-Referencing
- New Object Types:
 - IOT and External Tables
 - Partitioned tables and indexes
 - Materialized views and view logs
 - Object Collections
 - Triggers
 - Domain indexes
 - Schema Storage Properties
 - Auto-generated column values
- Custom Schema Object Metadata
- Query Builder



Simplified **Enterprise Java Development**





Deployment

- Configure Full Oracle App Server for Testing
- Application-Level Deployment Profiles
- Command-Line Deployment with `ojdeploy`

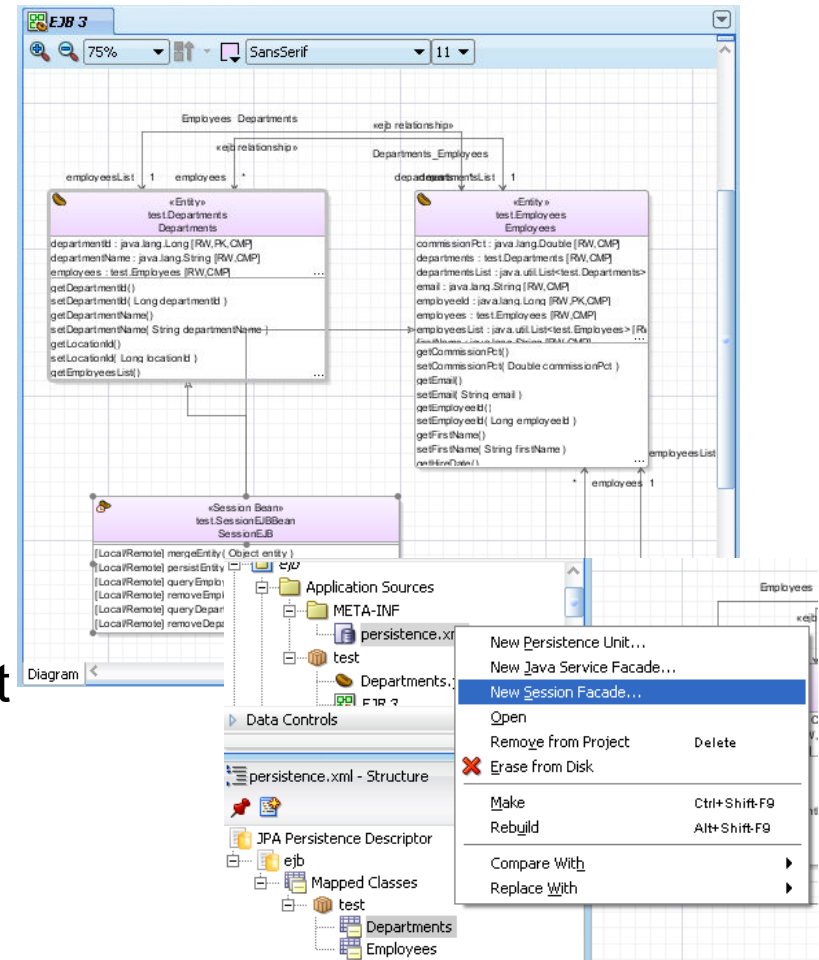


JavaScript Editing and Debugging

- Integrated JavaScript Editor
 - Syntax highlighting, Brace matching
 - Code folding, Code insight
 - Error underlining and audits
 - Find usages, Refactoring
 - Go to declaration
 - Structure pane integration
- Rich JavaScript Debugging
 - Breakpoints, Stepping, Watches, Modify Data
 - See All Loaded Files
 - Remote Debug using Firefox

EJB 3.0/JPA/TopLink New Features

- EJB 3.0/JPA
 - EJB 3.0 visual modeler
 - Annotation insight
 - Declarative persistence.xml and orm.xml editing
 - Web Services Support (JSR 181)
- Oracle TopLink
 - Object/XML mapping
 - Enhanced object/relational support



Improved JPA / Toplink Design Time

The screenshot displays the Oracle JDeveloper 11g Technology Preview 2 IDE. The main window is titled "Oracle JDeveloper 11g Technology Preview 2 - TedFlix.jws : Model.jpr". The interface includes a menu bar (File, Edit, View, Search, Navigate, Run, Debug, Refactor, Versioning, Tools, Window, Help) and a toolbar with various icons for file operations and development actions.

The left sidebar contains the "Application Navigator" showing a project named "TedFlix" with a tree view of files and folders. The "Data Controls" section is also visible. Below it, the "Movie.java - Structure" view shows a class hierarchy with "Map As" and various attributes like "dateMade", "description", "id", "length", "movieToActorList", "movieToDirectorList", "movieToGenreList", "orderList", "price", "quantity", "rank", "rating", "rownum", "sold", "studio", "title", and "userRank".

The main workspace shows the "movieToActorList" association configuration. The "General" tab is active, displaying a diagram of a one-to-many mapping. Below the diagram, the "Joining" section has a "Target Entity" dropdown set to "<none selected>". The "Fetch Type" section has three radio buttons: "Default (Lazy)", "Eager", and "Lazy", with "Lazy" selected. The "Cascade Type" section has two columns of radio buttons: "Default", "All", and "Custom" in the first column; "Merge", "Refresh", "Persist", and "Remove" in the second column. "Default" is selected in the first column, and "Merge" is selected in the second column.

At the bottom, the "TopLink Problems" panel is visible, showing a table with columns "Node", "Code", and "Message". The status bar at the bottom indicates "Editing" and shows the file path "D:\tedflix\Model\src\model\pojo\Movie.java".

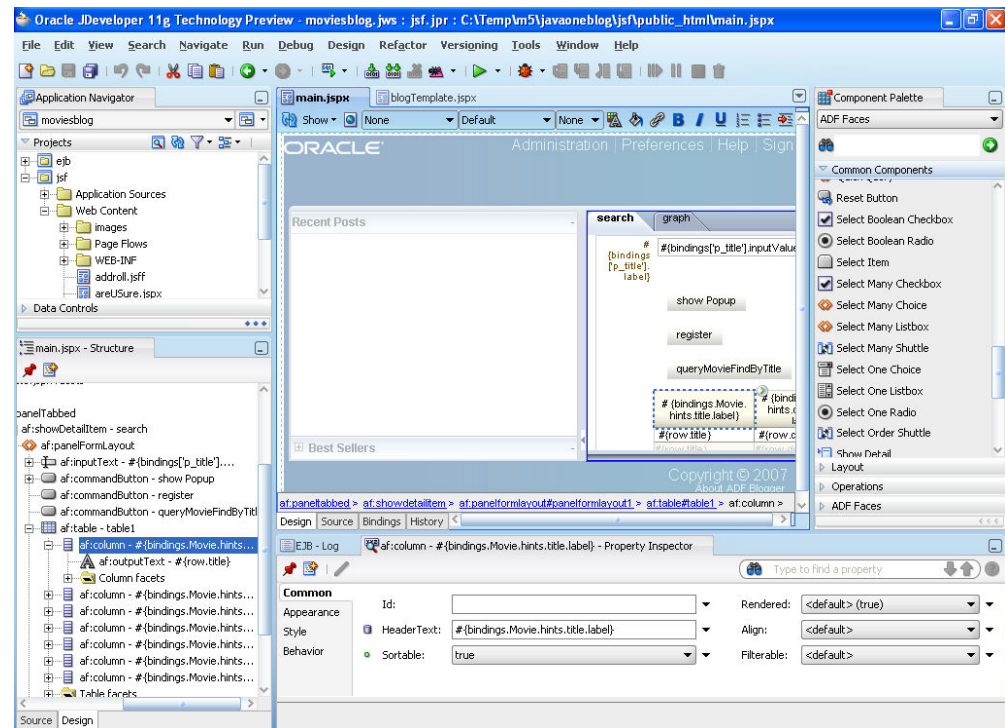


EJB 3.0 Development

- Simplified configuration of EJB 3.0 session beans and message driven beans leveraging annotation insight and property inspector
- EJB 3.0 diagramming support
- Support for JSR 109 Deployment model
- Web Services support via JSR 181

JSF New Features

- JSF 1.2 support
- Improved visual editor
 - Easier manipulation
 - Ajax rendering
- Improved expression builder
- ADF Faces rich client components



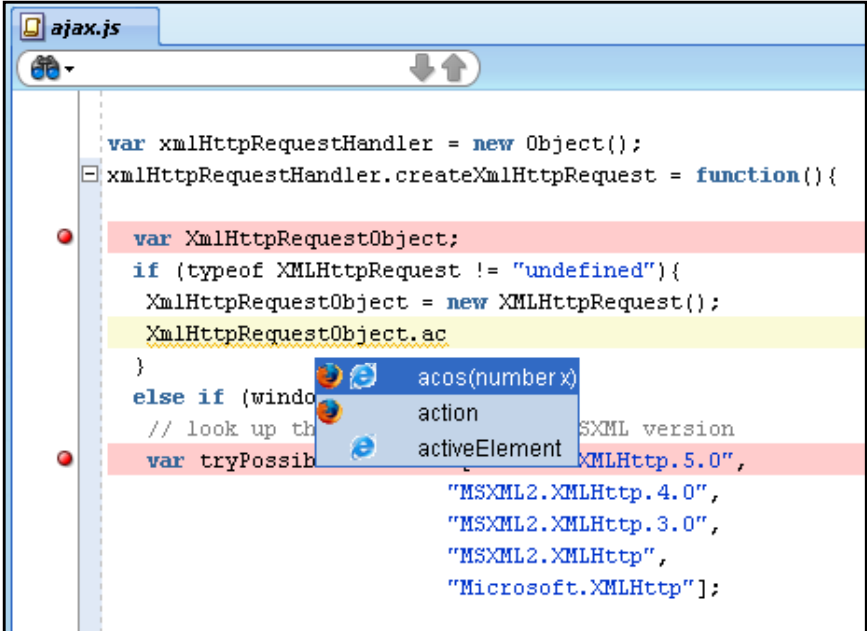


Demonstration

Quick JSF Design Demo

New JavaScript Support

- Helpful editor
 - Syntax highlighting
 - Brace matching
 - Code folding
 - Code insight
 - Error underlining and audits
 - Go to declaration
- JavaScript debugger
- Find usages
- Refactoring
- Structure pane integration



```
ajax.js
var xmlhttpRequestHandler = new Object();
xmlhttpRequestHandler.createXmlHttpRequest = function(){
    var XmlHttpRequestObject;
    if (typeof XMLHttpRequest != "undefined"){
        XmlHttpRequestObject = new XMLHttpRequest();
        XmlHttpRequestObject.ac
    }
    else if (window
        // look up th
    var tryPossib
        "MSXML2.XMLHttp.4.0",
        "MSXML2.XMLHttp.3.0",
        "MSXML2.XMLHttp",
        "Microsoft.XMLHttp"];
}
```

The screenshot shows a code editor window titled 'ajax.js'. The code is syntax-highlighted, with keywords in blue, strings in red, and comments in green. A tooltip is visible over the 'acos' function call, showing its signature 'acos(number x)' and a list of actions: 'action', 'XML version', and 'activeElement'. The code defines an XMLHttpRequest handler and lists several XMLHttp versions for compatibility.



New Features for Web Services

- Create Java EE 5.0 (JAX-WS) Web services
- Annotations support
 - Code insight, property inspector
- Improved WSDL editor
 - Drag and drop operations, validation, layout
- New WS-Tester
- Improved http analyzer
 - Stub out messages
- Improved WS generation
 - Incremental changes, doesn't override changes



Demonstration

HTTP Analyzer



Oracle ADF New Features

- ADF View
 - ADF Faces Rich Client UI & Data Visualization Components
 - Page Templates, Fragments, and Declarative Components
- ADF Business Components
 - Enable Service Interface for Web Service Access
 - Declarative LOV's, Validations, and View Criteria
- ADF Data Binding
 - Improved Design Time Editors and Navigation
 - Refactoring Support
- ADF Controller
 - Task Flows and Declarative Transaction Management
 - Back Button and Bookmarking Support
- ADF Swing
 - New Shuttle Panel, Tree Table, and LOV button



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