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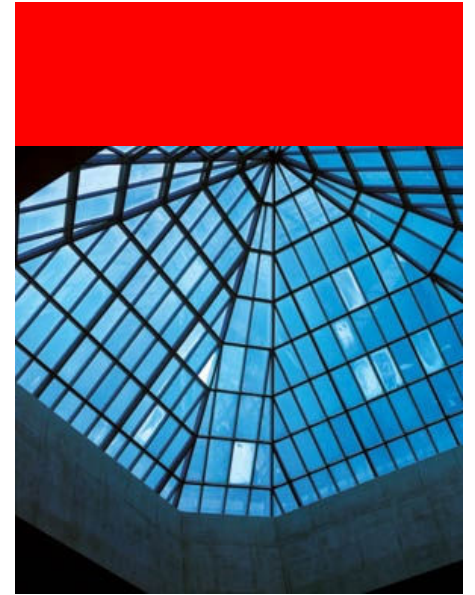
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Oracle ADF 11g: New Declarative Validation, List of Values, and Search Features

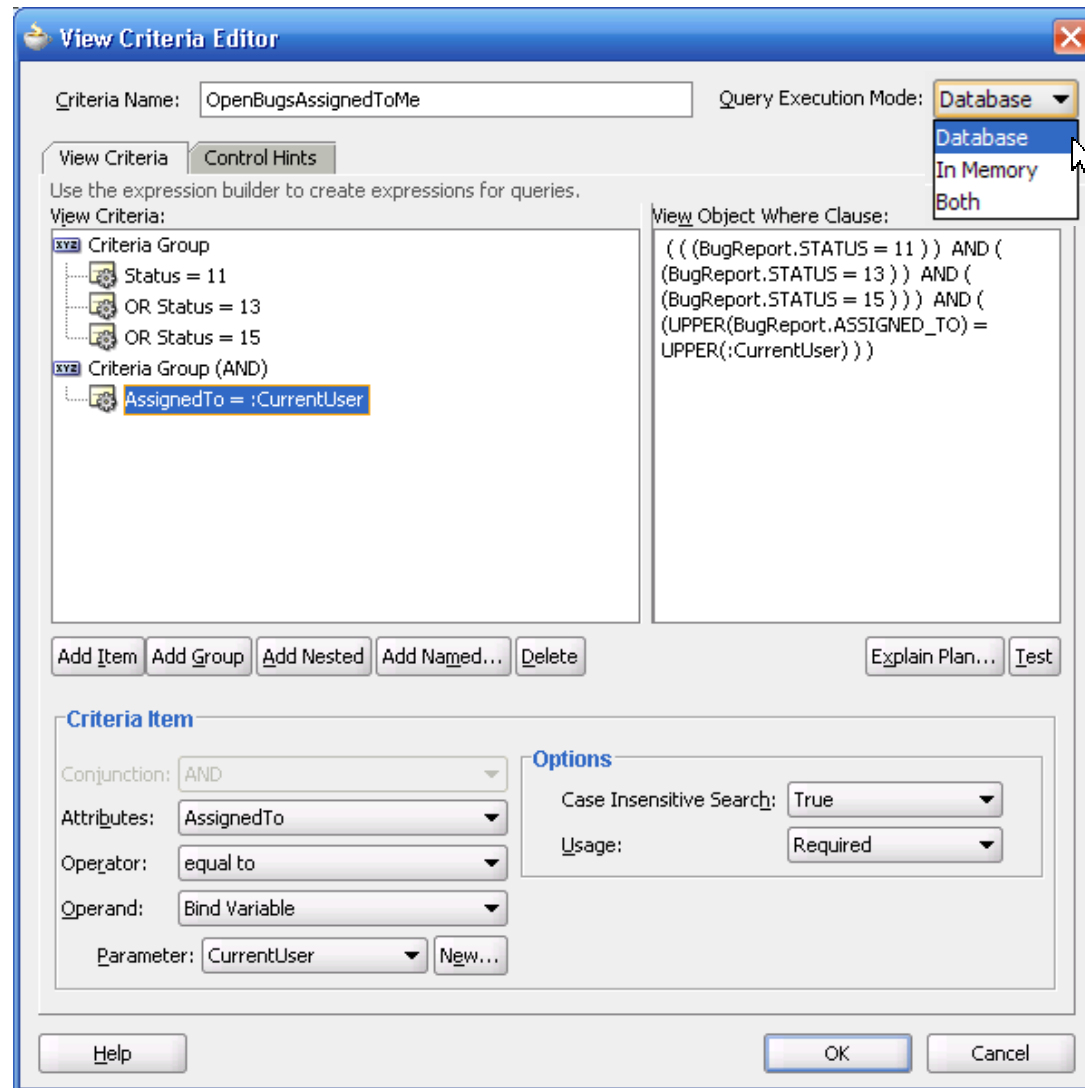
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Consulting Product Manager
Oracle ADF Development Team



View Object Enhancements



Named View Criteria Filters



Named View Criteria Filters: Nested Exists

The image shows two overlapping dialog boxes from Oracle SQL Developer. The background window is the "View Criteria Editor" for a criteria named "SearchByName". It displays a tree view of criteria groups, including "EmpViewNestedCriteria" which contains a nested "Criteria Group" with the filter "Ename CONTAINS :NameToFind". The "Criteria Item" section at the bottom shows a conjunction of "AND", attribute "Deptno", operator "equal to", and operand "Bind Variable" with parameter "DeptId". A red box highlights the "New..." button next to the parameter dropdown.

The foreground window is the "Bind Variable" dialog, which is open to the "Variable" tab. It shows the variable name "DeptId" and type "Number". The "Value Type" is set to "Literal". A red box highlights the "Required" checkbox, which is currently unchecked. A red arrow points from the "New..." button in the background window to the "Required" checkbox in this dialog.

View Criteria Editor

Criteria Name: SearchByName Query Execution Mode: Database

View Criteria

Use the expression builder to create expressions for queries.

View Criteria:

- Criteria Group
 - Dname CONTAINS :NameToFind
 - AND Loc CONTAINS :NameToFind
 - AND EmpView EXISTS
 - EmpViewNestedCriteria
 - Criteria Group
 - Ename CONTAINS :NameToFind
- Criteria Group (AND)
 - Deptno = :DeptId

Criteria Item

Conjunction: AND

Attributes: Deptno

Operator: equal to

Operand: Bind Variable

Parameter: DeptId

Bind Variable

Variable

Name: DeptId

Type: Number

Value Type: Literal Expression

Value:

Updatable Required



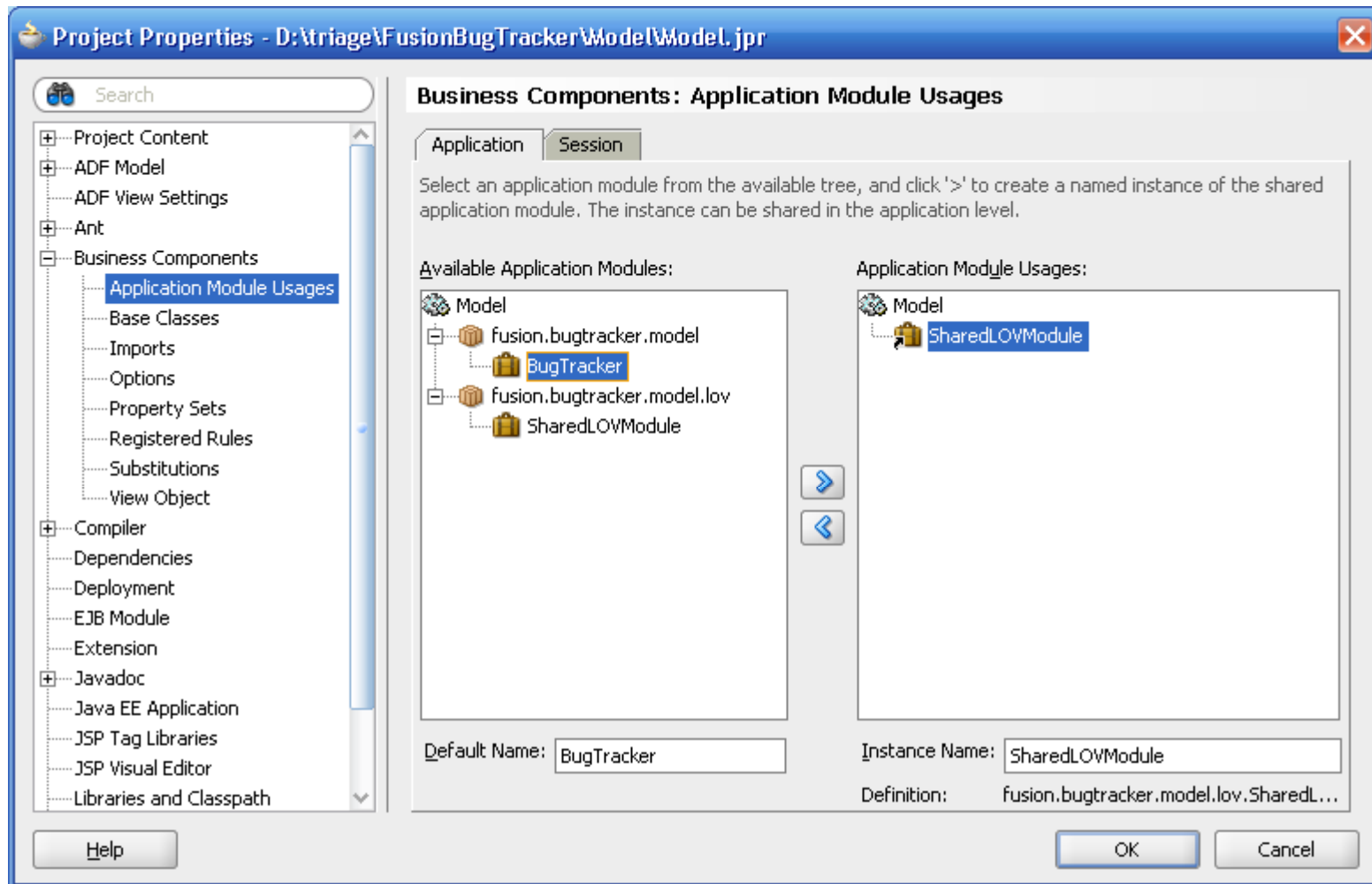
Groovy Bind Variable Default Values

- **CurrentUser Bind Variable**
 - `adf.context.securityContext.userName`
- **CurrentDateAndTime Bind Variable**
 - `adf.currentDateTime`
- **DeptNo Bind Variable**

```
deptVO = viewObject.applicationModule
        .findViewObject("DeptView")
return deptVO != null ? deptVO.currentRow.Deptno
                       : null
```

- **Name Bind Variable**
 - `LastName?.toUpperCase()`

Shared Application Modules



- Cache Partitioned By Distinct Bind Variable Values

View Objects with Static Data

The screenshot displays the 'Create View Object' wizard in Oracle JDeveloper, showing three overlapping windows for steps 1, 2, and 4. Step 1 is 'Name', Step 2 is 'Attributes', and Step 4 is 'Static List'. A 'BugStatusCodesMsgBundle.properties' window is also open, showing translatable keys for bug status codes.

Create View Object - Step 1 of 9

Name

View objects are for joining, filtering, projecting, and sorting your business data for the specific needs of a given application.

Package:

Name:

Extends:

Property Set:

Select the data type:

- Updatable
- Read-only
- Rows populated
- Rows populated

Create View Object - Step 2 of 6

Attributes

Use the New button to add new attributes.

Attributes:

- Code(Transient)
- Description(Transient)

Create View Object - Step 4 of 6

Static List

Click plus or minus icon to add or remove a row to or from the static list data table. Click import button to import static list data from a CSV file to the static list data table.

Code	Description
11	Open
30	Pending
90	Closed

BugStatusCodesMsgBundle.properties

```
# translatable keys
fusion.bugtracker.model.BugStatusCodes.SL_0_0=11
fusion.bugtracker.model.BugStatusCodes.SL_0_1=Open
fusion.bugtracker.model.BugStatusCodes.SL_1_0=30
fusion.bugtracker.model.BugStatusCodes.SL_1_1=Pending
fusion.bugtracker.model.BugStatusCodes.SL_2_0=90
fusion.bugtracker.model.BugStatusCodes.SL_2_1=Closed
```


View Accessors

Edit View Accessor: ProductSubcategoryList

View Object
Configure the view object query for this accessor.
View Definition:

View Criteria
Select the view criteria that you want to apply to this view object. If you select multiple view criteria, they will be combined with an AND operator.

Available: Selected:

Bind Parameter Values
Provide values for any bind parameters defined for this query.

Row-level bind values exist

Parameter	Type	Value
TheCategory	java.lang.String	Category
TheProductId	oracle.jbo.domain.Number	ProductId

Order By:

- Use in
- Use Pro

View Accessors

View Accessors

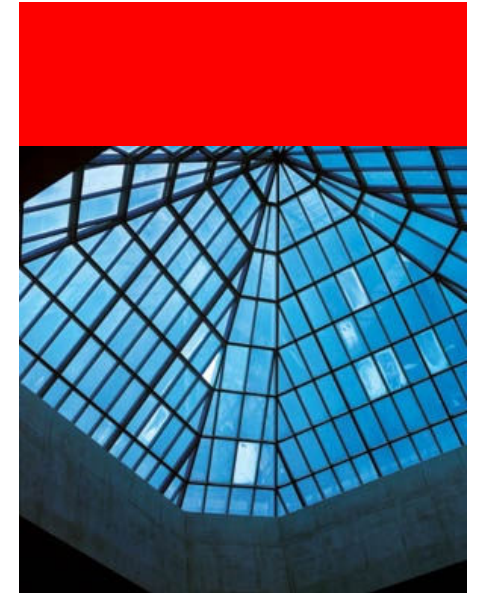
View accessors provide access to view instances of shared application modules in the business components project.

Accessor Name	View Definition	Application Module Inst...	View Instance
UserList	fusion.bugtracker.model.queries.UserList	SharedLOVModule	UserList
ProductSubcategoryList	fusion.bugtracker.model.queries.ProductSubcategoryList	SharedLOVModule	ProductSubcategoryList
PlatformList	fusion.bugtracker.model.queries.PlatformList	SharedLOVModule	PlatformList
BugPriorityList	fusion.bugtracker.model.queries.BugPriorityList	SharedLOVModule	BugPriorityList
BugStatusList	fusion.bugtracker.model.queries.BugStatusList	SharedLOVModule	BugStatusList
ProductList	fusion.bugtracker.model.queries.ProductList	SharedLOVModule	ProductList
ProductCategoryList	fusion.bugtracker.model.queries.ProductCategoryList	SharedLOVModule	ProductCategoryList
BugReport.BugStatusList	fusion.bugtracker.model.queries.BugStatusList		

- Use in LOVs / Validators
- Use Row-Level Bind Values
- Use Programmatically



Declarative Validation

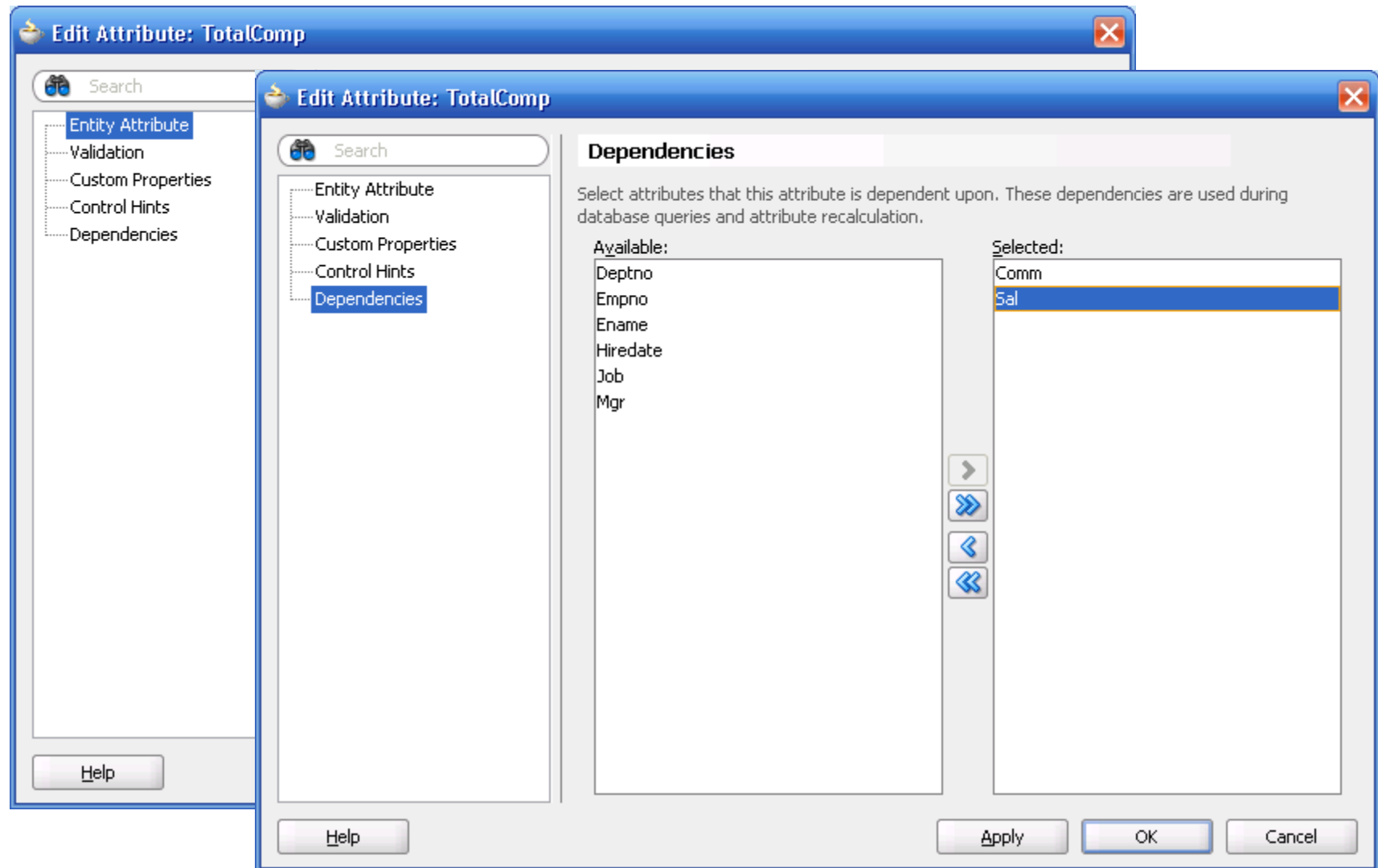




Easy Calculated Attributes & Defaults

- Groovy Standard Scripting Language for Java (JSR 241)
- Calculated Expressions Can Be:
 - Simple Expressions
 - Use the Full Power of the Language
 - Leverage Any Java Classes Seamlessly
- Define Attribute Dependencies for Automatic Recalculation

Easy Calculated Attributes & Defaults





Improved Declarative Validation

- Key Exists
 - Enforce Foreign Key Existence
- Collection
 - Enforce Condition on Aggregate Over Composed Children
- Compare
 - Compare Attributes to Each Other or To An Expression
- List
 - Enforce a Value Is In a List of Choices
- Groovy Scripting Expression
- UniqueKey
 - Enforce (Alternate) Key is Unique

Improved Declarative Validation

- Validation Level
- Conditional Execution
- Triggering Attributes

Add Validation Rule for: BugReport

Rule Type: **Key Exists**

Rule Definition | Validation Execution | Failure Handling

Validation Level

The rule can be executed once at the transaction level for all entities, or at the entity level.

Execute at Entity Level

Defer execution to Transaction Level

Conditional Execution

To execute this rule only when certain conditions are true, provide a boolean expression. When no condition is provided, this rule always executes.

Conditional Execution Expression:

Test

Triggering Attributes

Execute only if one of the Selected Attributes has been changed

Available Attributes

- AssignedTo
- BaseReportId
- BugType
- Customer

Selected Attributes

- Subcategory
- Category
- ProductId

Help **OK** **Cancel**

Improved Declarative Validation

- Validation Failure Severity
- Failure Message
- Message Token Expressions

Rule Type: Key Exists

Validation Failure Severity: Error Informational Warning

Failure Message

Enter text for the translatable validation failure messages.

Message Text:

The product with SKU {id} does not exist

Token Message Expressions:

Message Token	Expression
id	ProductId

Buttons: Help, OK, Cancel

List Validator

- Iterates the RowSet Looking for a Match
- View Accessor View Object Can Use (Row-Level) Bind Vars

Add Validation Rule for: Deptno

Define the Validation you want to perform with this rule and configure the Validation Failure response.

Rule Type: List

Rule Definition | Validation Execution | Failure Handling

Attribute: Deptno

Operator: In

List Type: View Accessor Attribute

Select View Accessor Attribute

- Emp
 - DepartmentList
 - Deptno**
 - Dname
 - Loc

Hint: Values of selected attribute are used for comparison.

Help OK Cancel

Key Exists Validator

- Based Directly on Entity Association
- Performs a `findByPrimaryKey()`

Define the Validation you want to perform with this rule and configure the Validation Failure response.

Rule Type: Key Exists

Rule Definition | Validation Execution | Failure Handling

Existence Check Definition

Validation Target Type: Entity Object

Association Name: WorksInDeptAssoc

Emp Entity Attributes	Validation Target Attributes
Emp.Deptno	Dept.Deptno

Help OK Cancel

Key Exists Validator

- Based on View Accessor
- Performs a `findByKey()`

Add Validation Rule for: Deptno

Define the Validation you want to perform with this rule and configure the Validation Failure response.

Rule Type:

Rule Definition | Validation Execution | Failure Handling

Existence Check Definition

Validation Target Type:

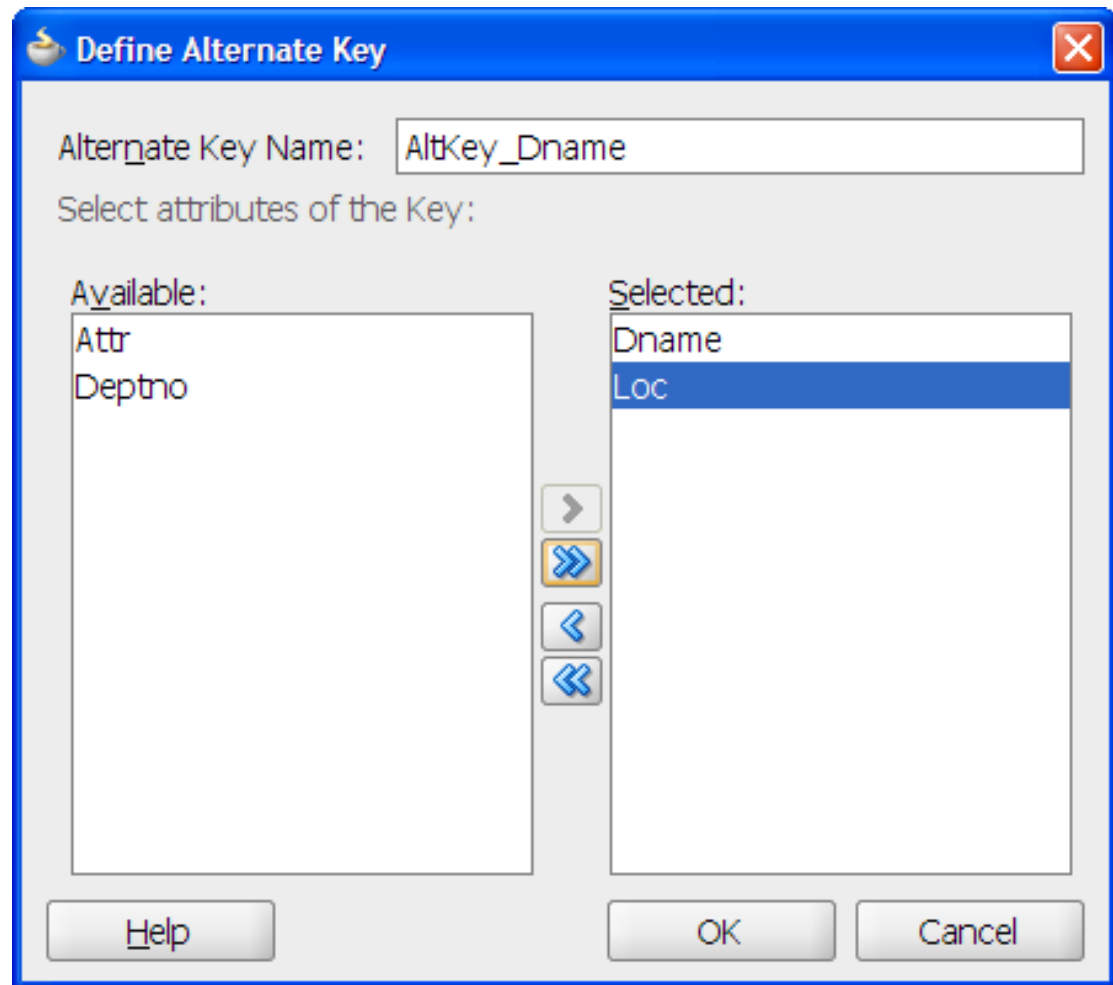
Select each pair of attributes from this entity and the validation target and click Add.

Emp Entity Attributes	Validation Target Attributes
Deptno	Emp DepartmentList Deptno

Emp Entity Attributes	Validation Target Attributes
Emp.Deptno	DepartmentList.Deptno

Alternate (Unique) Key – Entity Object

- Combination of Alternate Key Attributes Must Uniquely Identify a Row
- If Two Entity Rows Have the Same Alternate Key a Runtime Exception is Thrown!



Unique Key Validator

- Error Message Tokens Can Reference Attributes By Name Without Using `newValue` Expression

Add Validation Rule for: Dept

Define the Validation you want to perform with this rule and configure the Validation Failure response.

Rule Type: UniqueKey

Rule Definition | Validation Execution | Failure Handling

Validation Failure Severity Error Informational Warning

Failure Message

Enter text for the translatable validation failure messages.

Message Text:
Department named {N} located in {L} already exists.

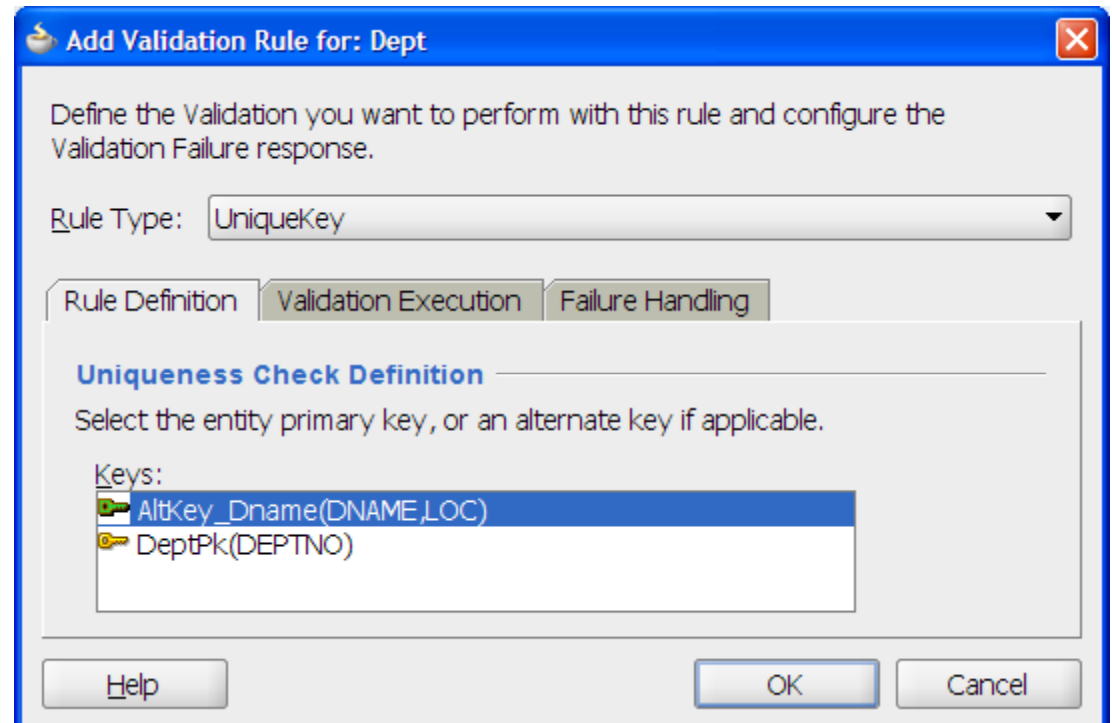
Token Message Expressions:

Message Token	Expression
N	Dname
L	Loc

Help OK Cancel

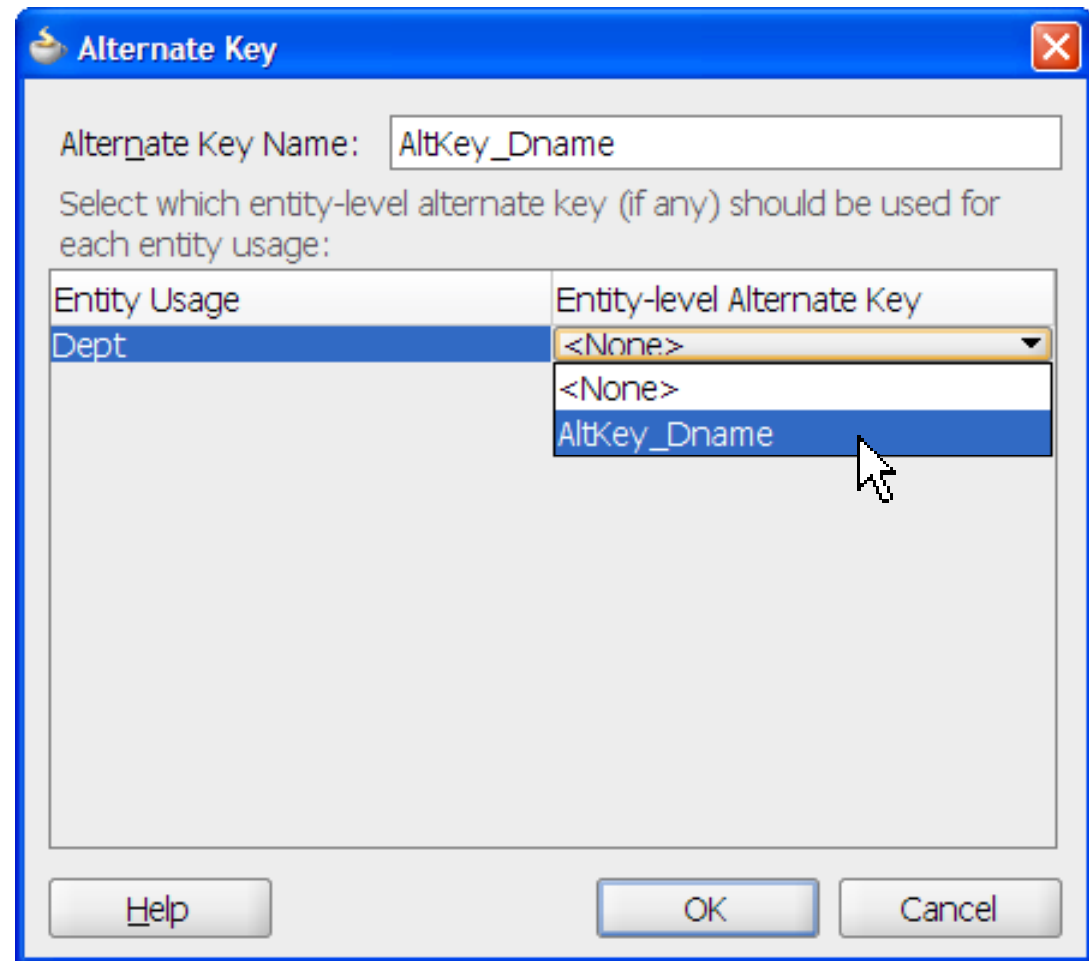
Unique Key Validator

- Validates Unique Primary Key and/or Unique Key Combinations
- Supports Multiple-Attribute Keys



Alternate (Unique) Key – View Object

- View Object Alternate Keys are Based on Some Entity Alternate Key for Each Participating Entity Usage



Key Exists Using Alternate Key

Define the Validation you want to perform with this rule and configure the Validation Failure response.

Rule Type:

Rule Definition | Validation Execution | Failure Handling

Existence Check Definition

Validation Target Type:

Select each pair of attributes from this entity and the validation target and click Add.

Emp Entity Attributes	Validation Target Attributes
Emp.Ename	DepartmentList.Dname
Emp.Nickname	DepartmentList.Loc

Buttons: Help, OK, Cancel

- Map Attribute Pairs to Correct Set of:
 - Primary Key Attributes
 - Some Alternate Key Attributes



Groovy Scripting Expression Validator

- ShippingDate Must Be On or After Order Date

```
ShippingDate >= OrderDate
```

- LineItem Discount Cannot Exceed 5% Unless Gold Customer

```
if (Order.Customer.Level != "Gold") {  
    return Discount <= 0.05  
}
```



Groovy Scripting Expression Validator

- Exactly One Contact Phone Number Must Be Set as Default

```
PhoneNumbers.count('Default=="Y"') == 1
```

- Department Salary Budget Cannot Exceed Limit

```
Employees.sum('TotalComp') <= Budget
```

Groovy Script Expression Validator

Add Validation Rule for: Emp

Define the Validation you want to perform with this rule and configure the Validation Failure response.

Rule Type: Script Expression

Rule Definition | Validation Execution | Failure Handling

Validation Failure Severity Error Informational Warning

Failure Message

Message Text: + 🔍 ✖

Resource Bundle	Message Id	Message String
test.ModelBundle	TOO_HIGH	Value {V} is too high!
test.ModelBundle	TOO_LOW	Value {V} is too low!

Token Message Expressions:

Message Token	Expression
V	Sal

Help OK Cancel

- Create New Message Bundle Strings
- Reference Existing Messages from a Bundle
- Include Tokens

Groovy Script Expression Validator

Edit Validation Rule for: Emp

Define the Validation you want to perform with this rule and configure the Validation Failure response.

Rule Type: Script Expression

Rule Definition Validation Execution Failure Handling

Enter the text for the validation expression. To reference an application value, click on Insert Value Binding. Click on Test to validate the syntax of your expression.

Expression:

```
if (source.someComplexThing()) {
    return true
}
if (Sal > 8000) {
    adf.error.raise("TOO_HIGH")
}
if (Sal < 1000) {
    adf.error.warn("TOO_LOW")
}
return true
```

Test

Hint: See Help for Validation Expression Syntax, special variables and examples.

Help OK Cancel

- **source** References Entity Being Validated to Call Methods on It
- Raise Exceptions or Warnings Based on Message Bundle Key



Groovy Validation Tips

- Built-in RowSet Functions

- `rowSetAttr.sum("GroovyExpr")`
 - `employees.sum("Sal")`
 - `employees.sum("Sal!=0?Sal:0 + Comm!=0?Comm:0")`
- `count("Expr"), avg("Expr"), min("Expr"), max("Expr")`

- Access ADF Context

- `adf.context.securityContext.userName`

- Access UserData HashTable

- `source.DBTransaction.session.userData.FunctionalRole`

- Access Root AM Configuration Properties Map

- `source.DBTransaction.rootApplicationModule.propertiesMap.MaxSal`

Attach Validators to Updateable Transient View Object Attributes

The screenshot shows the Oracle JDeveloper IDE interface. The main window displays the configuration for the 'EmpView.xml' file. The 'Attributes' tab is active, showing a table of attributes for the view object. The 'MyTransientAttr' attribute is highlighted, and the 'Validation Rules' section is expanded, showing a new validation rule being added.

Attributes

View object attributes can be based upon attributes from an entity object or can be calculated or SQL-derived.

Name	Type	Column	Info
Empno	Number	EMPNO (Emp)	
Ename	String	ENAME (Emp)	
Job	String	JOB (Emp)	
Mgr	Number	MGR (Emp)	
Hiredate	Date	HIREDATE (E...	
Sal	Number	SAL (Emp)	
Comm	Number	COMM (Emp)	
Deptno	Number	DEPTNO (Emp)	
MyTransientAttr	String		Transient

Custom Properties: MyTransientAttr

List of Values: MyTransientAttr

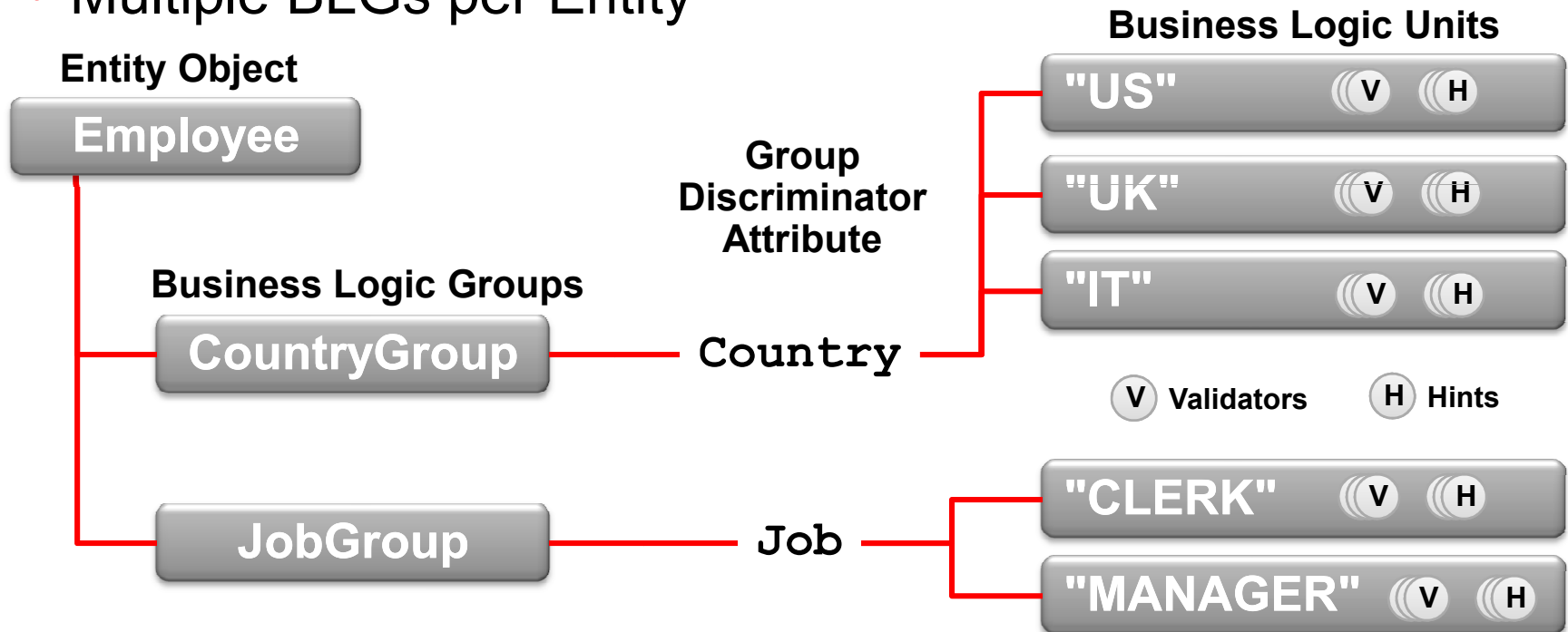
Validation Rules: MyTransientAttr

Click the New button to apply a new validation rule.

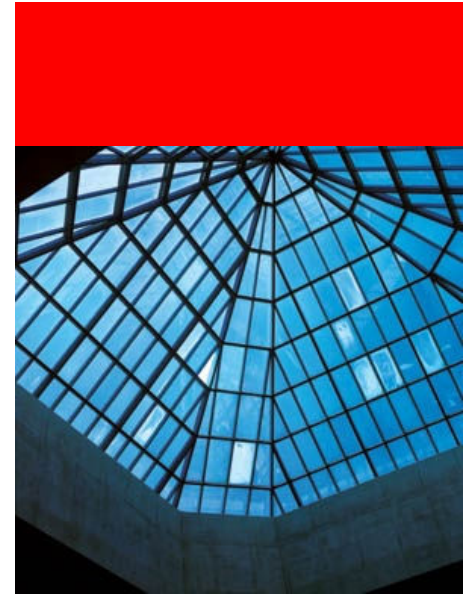
Add Validation Rule

Business Logic Groups

- Dynamic, Data-Driven Groups of Validation and UI Hints
- Orthogonal Feature to Inheritance
- Transient Calculated Group Discriminator
- Multiple BLGs per Entity



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Declarative List of Values

Declarative List of Values

The screenshot shows the Oracle JDeveloper IDE with a project named 'BugReports.xml'. The 'Attributes' table is visible, listing various attributes and their types. A 'List of Values' dialog box is open, configuring a declarative LOV named 'LOV_Subcategory'. The dialog has two tabs: 'Configuration' and 'UI Hints'. The 'Configuration' tab is active, showing the following settings:

- List of Values Name: LOV_Subcategory
- Default List Type: Choice List
- Display Attributes: In choice components, multiple display attributes are separated by white space. Available: Category, Code. Selected: Description.
- List Search: Include Search Region: All Queryable Attributes. Query List Automatically.
- Choice List Options: Most Recently Used Count: 0. Include "No Selection" Item: Blank Item (First of List).

At the bottom of the dialog, there are 'Help', 'OK', and 'Cancel' buttons. Below the dialog, a table shows the configuration for the LOV:

Name	List Data Source	List Attribute
LOV_Subcategory	ProductSubcategoryList	Code

The Oracle logo is visible in the bottom right corner of the IDE window.

List of Values UI Styles

List of Values Name: LOV_Subcategory

Configuration UI Hints

Default List Type: Choice List

Display Attribute

In choice component Available:

- Choice List
- Combo Box
- Combo Box with List of Values
- Input Text with List of Values
- List Box
- Radio Group

Category

Code

ProductId

List Search

Include Search Region: All Queryable Attributes

Query List Automatically

Choice List Options

Most Recently Used Count: 0

Include "No Selection" Item: Blank Item (First of List)

Help OK Cancel

View Criteria to Drive LOV Search Form

Create View Criteria

Criteria Name: Query Execution Mode:

Edit Query Criteria | Control Hints

View Criteria:

- ProductSubcategoryListCriteria
 - () Group
 - Code STARTSWITH
 - AND Description STARTSWITH**

View Object Where Clause:
category = :TheCategory and
product_id = :TheProductId

Add Item | Add Group | Add Criteria | Add Named Criteria... | Delete | Explain Plan... | Test

Criteria Item

Conjunction:

Attribute:

Operator:

Operand:

Value:

Options

Case Insensitive Search:

Usage:

Help | OK | Cancel

List Search Options for Input Text with List of Values Style

List of Values Name: LOV_Subcategory

Configuration UI Hints

Default List Type: Input Text with List of Values

Display Attributes

In choice components, multiple display attributes are separated by white space.

Available: Category, Code, ProductId

Selected: Description

List Search

Include Search Region: All Queryable Attributes

- All Queryable Attributes
- Use SearchByCodeOrDescription
- < No Search >

Query List Automatically:

Most Recently Used Count: 0

Include "No Selection" Item: Blank Item (First of List)

Help OK Cancel

- LOV Search Region
- Indicate Whether Query Should Automatically Be Performed in LOV

Additional Choice List Options for Combo Box with List of Values

List of Values Name: LOV_Subcategory

Configuration UI Hints

Default List Type: Combo Box with List of Values

Display Attributes

In choice components, multiple display attributes are separated by white space.

Available: Category, Code, ProductId

Selected: Description

List Search

Include Search Region: Use SearchByCodeOrDescription

Query List Automatically

Choice List Options

Most Recently Used Count: 3

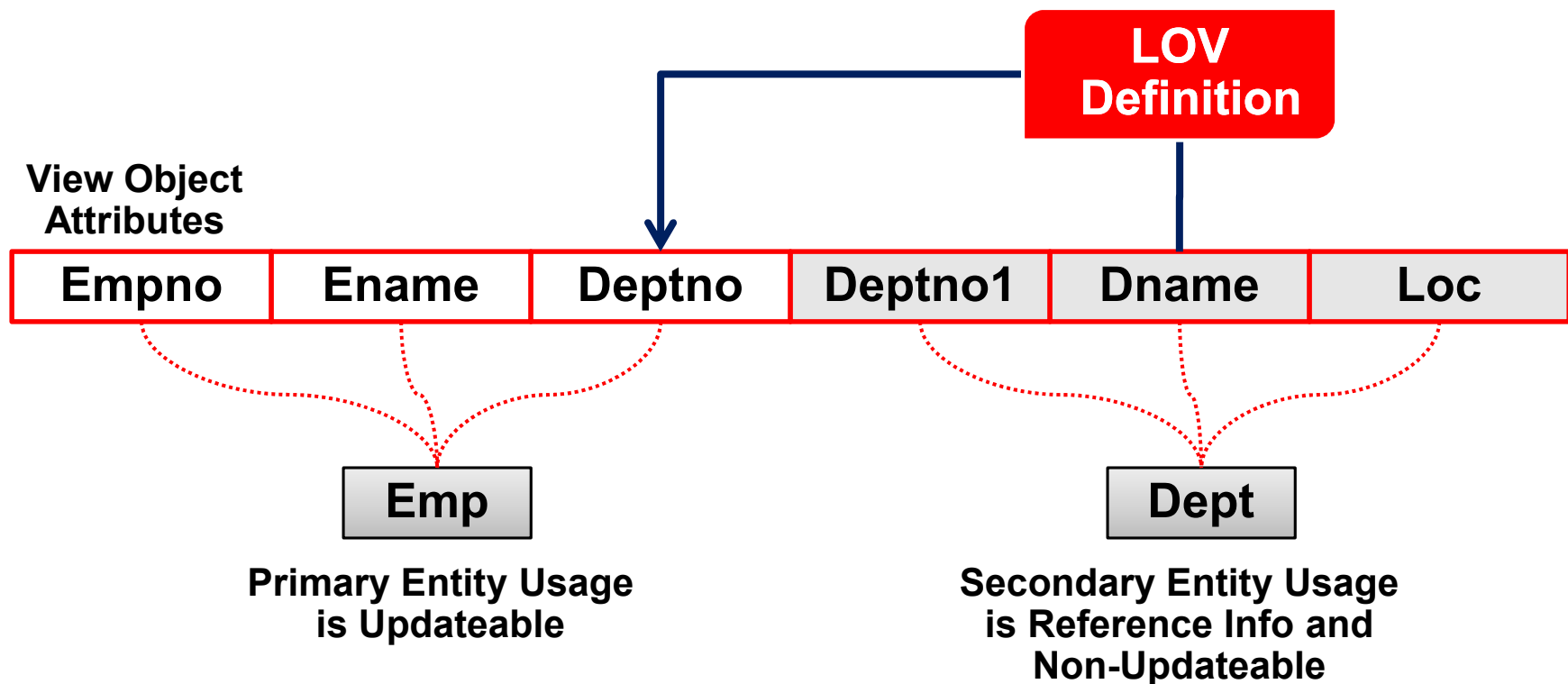
Include "No Selection" Item: Blank Item (First of List)

Help OK Cancel

- Number of Most Recently Used Entries
- Whether or Not a "No Selection" Item Should Appear

LOVs on Reference Entity Attributes

- Otherwise Read-Only Attribute (**Dname**) Enabled for Editing When Associated LOV Sets Updatable Foreign Key Attribute (**Deptno**)





Autocomplete List of Values Behavior

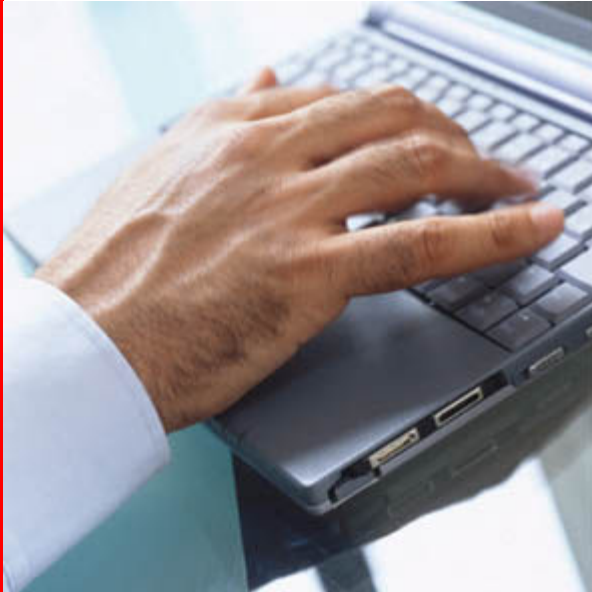
- Works for:
 - `<af:inputTextListOfValues>`
 - `<af:inputComboboxListOfValues>`
- Enabled When UI Component Has `AutoSubmit=true`
- Works Like Oracle Forms Users Would Expect
 - Exact Match Performs "Silent" LOV Selection
 - Partial Match Pops LOV Dialog with Reduced List
 - No Match Pops LOV Dialog Showing All Choices

Auto PPR

- Automatically Trigger Partial Page Refresh for UI Components Whose Bound Data Value Changes
- Configured on Iterator Binding or Individual Bindings

The screenshot shows the Oracle APEX Property Inspector for the `BugReportsIterator` component. The `Advanced` tab is selected, and the `ChangeEventPolicy` property is set to `ppr`. The `ChangeEventRate` property is set to `<default>`. The `Bind` property is set to `BugReports`, and the `DataControl` is set to `BugTrackerDataControl`. The `RenderHint` is set to `<default> (immediate)`. The `Active Events` section is visible at the bottom of the inspector.

The background shows the APEX page editor with the `Executables` and `Data Controls` panes. The `BugReportsIterator` component is selected in the `Executables` pane, and the `BugReports` data control is selected in the `Data Controls` pane.



DEMO

List of Values On Reference Attributes Using Auto PPR

When Multiple LOV's Exist for Attribute Need to Configure Switcher Attribute

The screenshot shows the Oracle JDeveloper IDE with the 'BugReports.xml' file open. The 'Attributes' tab is selected, showing a list of attributes for the 'Subcategory' attribute. The 'List of Values' section is expanded, showing the configuration for the 'Subcategory' attribute. The 'List of Values Switcher' is highlighted with a red box, showing '<None Specified>'. Below this, there is a table of 'Lists of Values'.

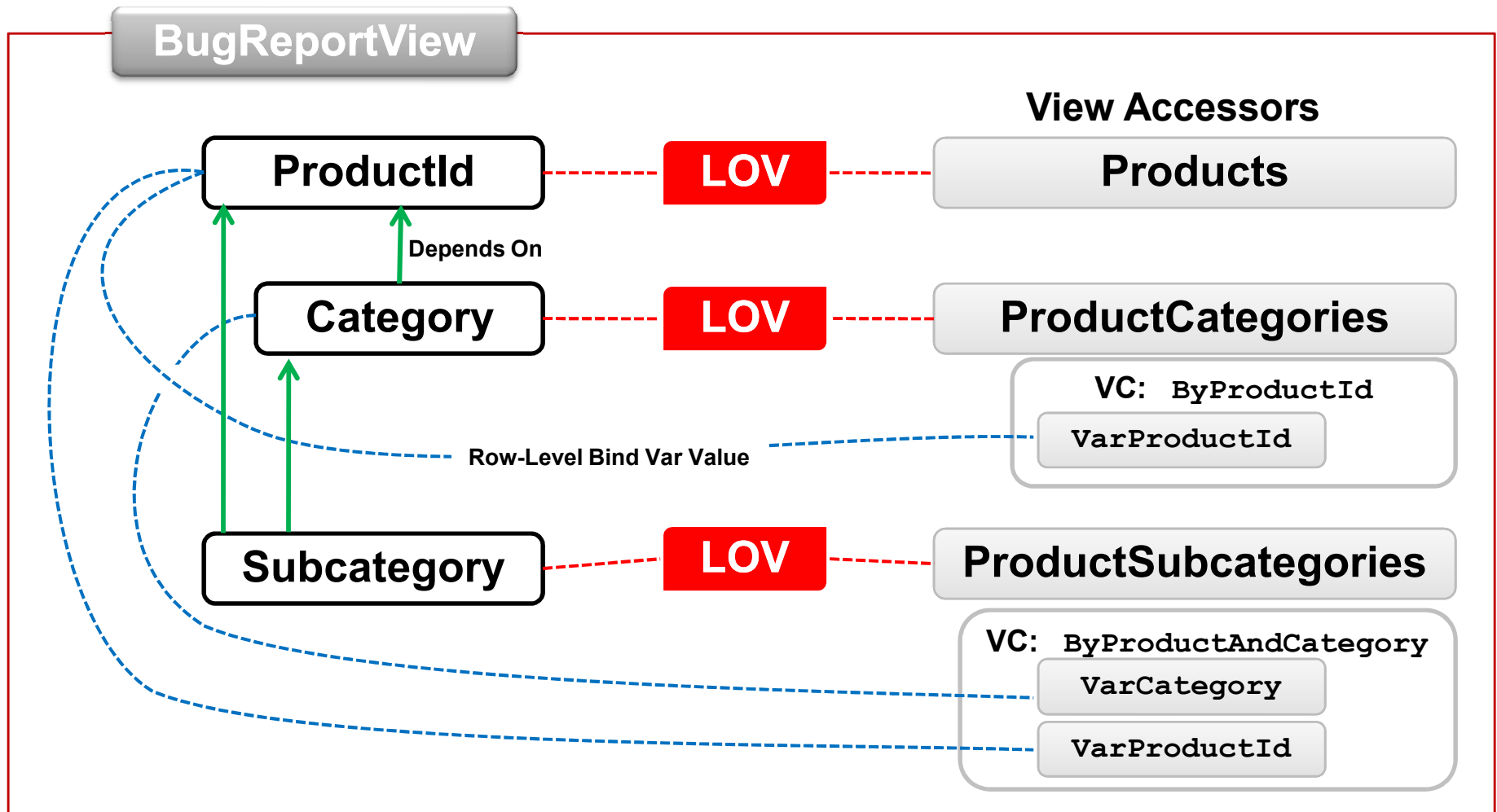
Default	Name	List Data Source	List Attribute
<input checked="" type="radio"/>	LOV_Subcategory	ProductSubcategoryList	Code
<input type="radio"/>	LOV_Subcategory2	ProductSubcategoryList	Code



Declarative List of Values

- Work in:
 - Edit Forms
 - Search Forms
 - Editable Tables
 - Tree Tables
- Even “Cascading” Lists are Simple

Cascading List of Values



Testing List of Values

Oracle Business Component Browser (BugTrackerLocal-Local)

File View Create Database Help

BugTracker

- BugsFiledByMe
- BugReports
 - EntriesForBugReport1
 - BugReportEntries
- OpenBugsAssignedToMe
- VersionInfo

BugReports

Navigation icons: back, forward, search, etc.

Bug Num 4082605

Product JDeveloper

Component Java Business Objects

Subcomponent Runtime

Component Version 11.1.1.0.0

Platform Microsoft Windows XP

Customer INTERNAL

Priority 3 (Normal)

Status 82 (Q/A to Enhancement Evaluation)

Subject PLEASE ADD DECLARATIVE LIST OF VALUES

Assigned to SHSHEN

Fix by Release

Filed by SVINAYAK

Filed 11-OCT-2007 10:42:44

Updated by ANONYMOUS

Updated 18-OCT-2007 01:29:21

Fixed in Release

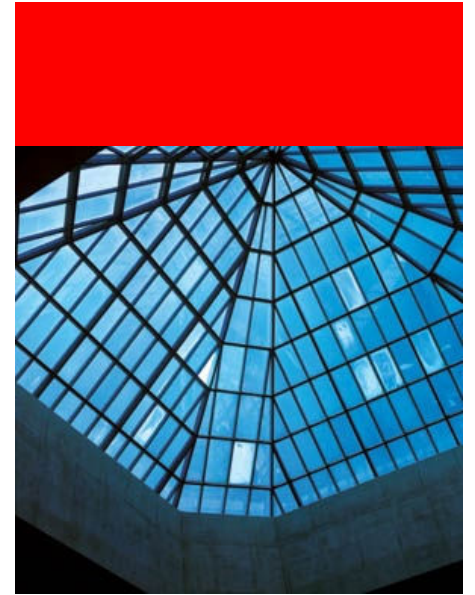
Base Bug No

PreviousBugType E

Type E

VersionNumber 3

Name:BugTracker.BugReports Definition:fusion.bugtracker.model.queries.BugReports



Declarative Search Forms

Named View Criteria Defines Search

- Not Only for LOV Search Region
- Drives Search Forms in the UI As Well

Edit View Criteria

Criteria Name: Query Execution Mode:

Edit Query Criteria | **Control Hints**

Search Region

Configure this view criteria's search region mode when presented in an ADF Faces Query control.

Query Automatically Search Region Mode:

Show Match All and Match Any Show Operators:

Criteria Item Control Hints

Select the item to set its control hints.

ByProductAndCategory
Group
Category = :VarCategory
AND ProductId = :VarProductId

Selected Criteria Item: Category = :VarCategory
Rendered Mode:

Saved Search List

Indicate whether queries for this view criteria can be included in the Saved Search list.

Show in List
Display Name:

Help OK Cancel

Setting Default Search Region Mode

Edit View Criteria

Criteria Name: Query Execution Mode:

Edit Query Criteria | **Control Hints**

Search Region

Configure this view criteria's search region mode when presented in an ADF Faces Query control.

Query Automatically Search Region Mode:

Show Match All and Match Any Show Operators:

Criteria Item Control Hints

Select the item to set its control hints.

- ByProductAndCategory
 - Group
 - Category = :VarCategory
 - AND ProductId = :VarProductId

Selected Criteria Item: Category = :VarCategory

Rendered Mode:

Saved Search List

Indicate whether queries for this view criteria can be included in the Saved Search list.

Show in List

Display Name:

Controlling When/If Operators Appear

Edit View Criteria

Criteria Name: Query Execution Mode:

Edit Query Criteria | **Control Hints**

Search Region

Configure this view criteria's search region mode when presented in an ADF Faces Query control.

Query Automatically Search Region Mode:

Show Match All and Match Any Show Operators:

Criteria Item Control Hints

Select the item to set its control hints.

- ByProductAndCategory
 - Group
 - Category = :VarCategory
 - AND ProductId = :VarProductId

Selected Criteria Item: Category = :VarCategory

Rendered Mode:

Saved Search List

Indicate whether queries for this view criteria can be included in the Saved Search list.

Show in List

Display Name:

Help OK Cancel

Search Form Auto-Execution

Edit View Criteria

Criteria Name: Query Execution Mode:

Edit Query Criteria | **Control Hints**

Search Region

Configure this view criteria's search region mode when presented in an ADF Faces Query control.

Query Automatically Search Region Mode:

Show Match All and Match Any Show Operators:

Criteria Item Control Hints

Select the item to set its control hints.

- ByProductAndCategory
 - Group
 - Category = :VarCategory
 - AND ProductId = :VarProductId

Selected Criteria Item: Category = :VarCategory

Rendered Mode:

Saved Search List

Indicate whether queries for this view criteria can be included in the Saved Search list.

Show in List

Display Name:

Help OK Cancel

Controlling When/If Items Appear

Edit View Criteria

Criteria Name: Query Execution Mode:

Edit Query Criteria | **Control Hints**

Search Region

Configure this view criteria's search region mode when presented in an ADF Faces Query control.

Query Automatically Search Region Mode:

Show Match All and Match Any Show Operators:

Criteria Item Control Hints

Select the item to set its control hints.

- ByProductAndCategory
 - Group
 - Category = :VarCategory
 - AND ProductId = :VarProductId**

Selected Criteria Item: AND ProductId = :VarProductId

Rendered Mode:

Saved Search List

Indicate whether queried criteria can be included in the Saved Search list.

Show in List

Display Name:

Controlling Saved Search List Entry

Edit View Criteria

Criteria Name: Query Execution Mode:

Edit Query Criteria | **Control Hints**

Search Region

Configure this view criteria's search region mode when presented in an ADF Faces Query control.

Query Automatically Search Region Mode:

Show Match All and Match Any Show Operators:

Criteria Item Control Hints

Select the item to set its control hints.

- ByProductAndCategory
 - Group
 - Category = :VarCategory
 - AND ProductId = :VarProductId**

Selected Criteria Item: AND ProductId = :VarProductId

Rendered Mode:

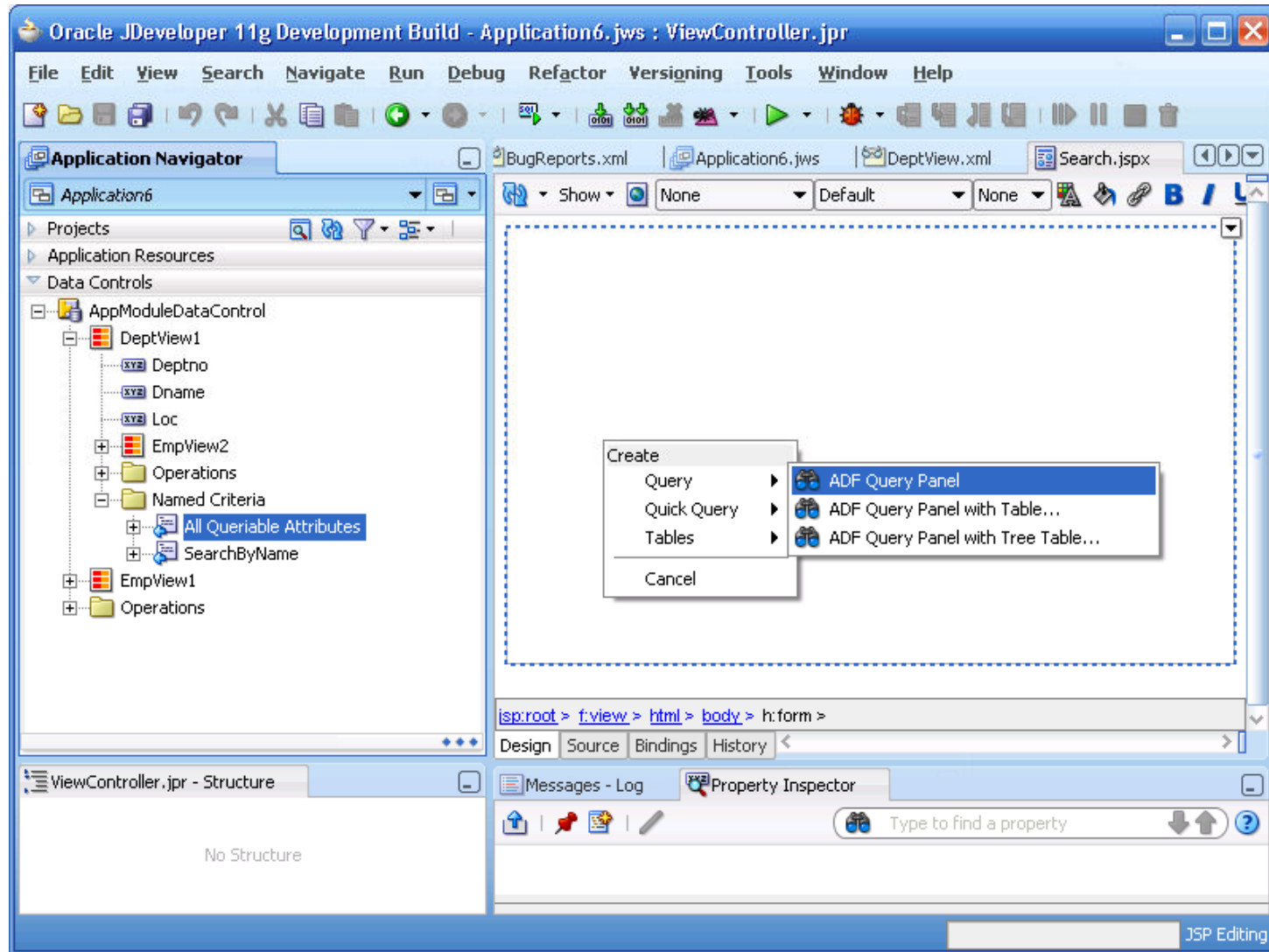
Saved Search List

Indicate whether queries for this view criteria can be included in the Saved Search list.

Show in List

Display Name:

Search Form and Quick Query



Quick Query

Dept

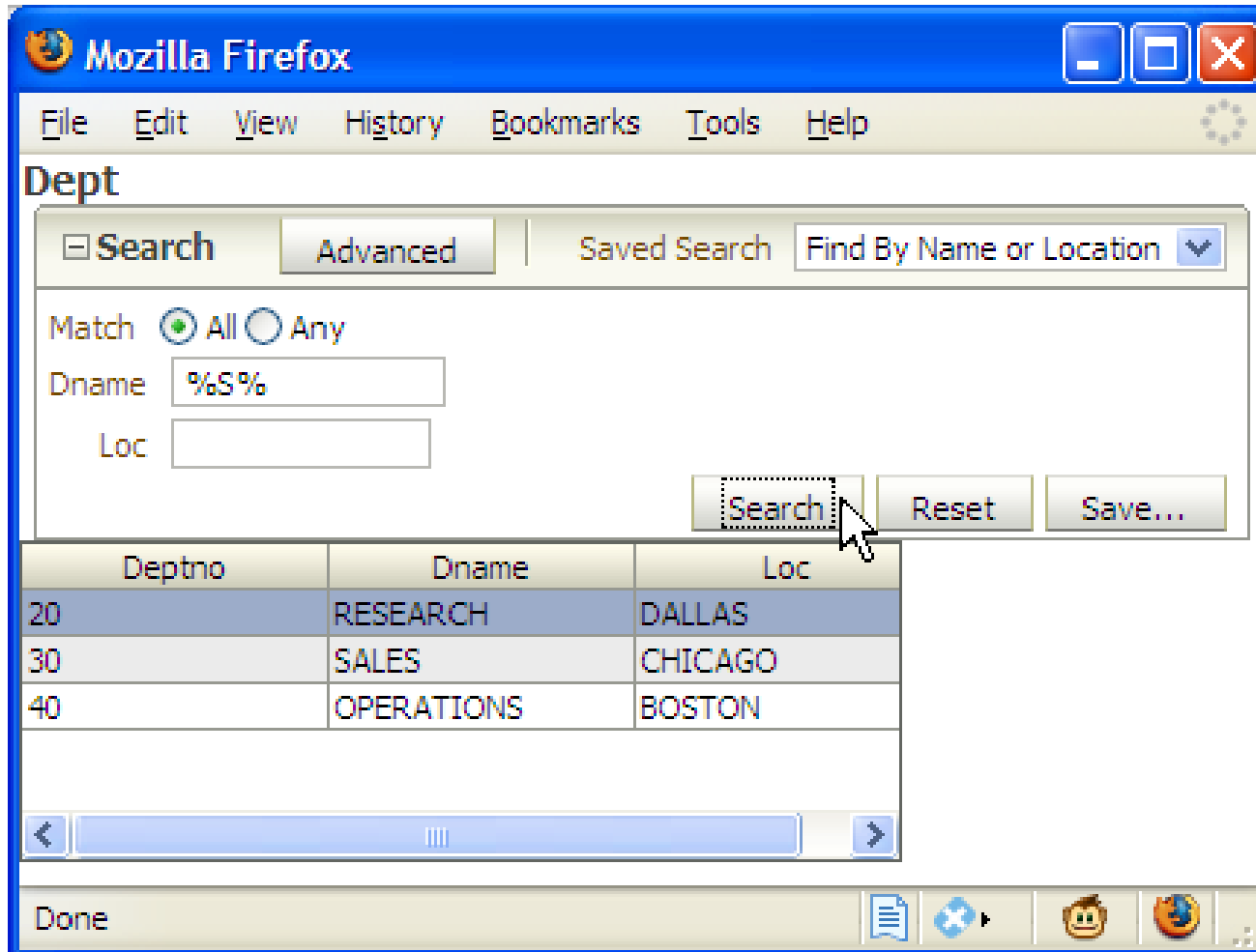
Search Dname BOS

Deptno	Dname	Loc
40	BOSTON	OPERATIONS

Navigation: < ||| >

- Uses Default Operator for Each Attribute's Data Type

Search Form: Basic Mode



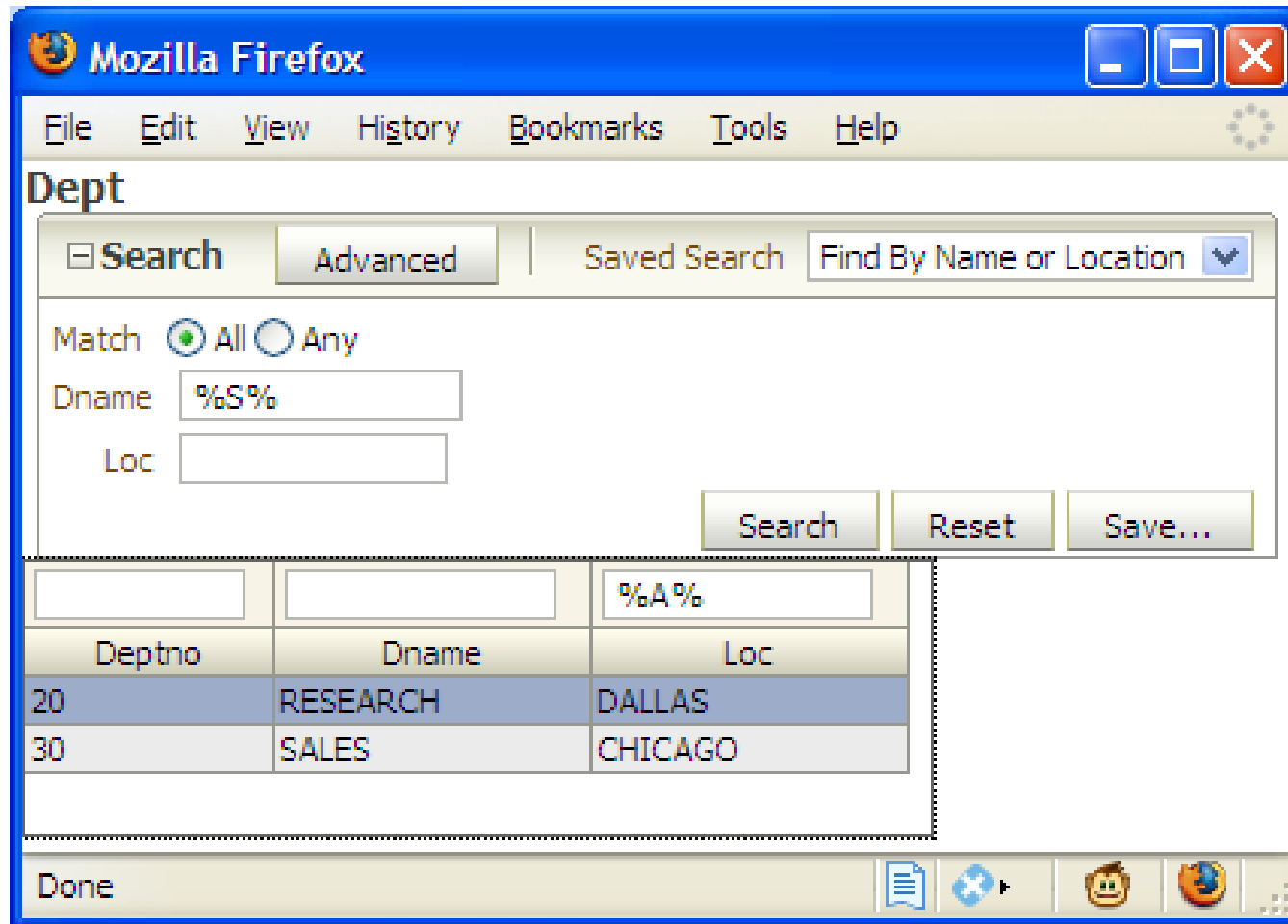
The screenshot shows a Mozilla Firefox browser window displaying a search form titled "Dept". The form is in "Basic Mode" and includes the following elements:

- Search Options:** A "Search" button, an "Advanced" button, a "Saved Search" button, and a dropdown menu set to "Find By Name or Location".
- Match Criteria:** Radio buttons for "All" (selected) and "Any".
- Input Fields:** A text box for "Dname" containing "%S%" and an empty text box for "Loc".
- Buttons:** "Search", "Reset", and "Save..." buttons.
- Table:** A table with three columns: "Deptno", "Dname", and "Loc".

Deptno	Dname	Loc
20	RESEARCH	DALLAS
30	SALES	CHICAGO
40	OPERATIONS	BOSTON

The browser's status bar at the bottom shows "Done" and several icons.

Search With Table Filtering



The screenshot shows a Mozilla Firefox browser window displaying a search interface for a table. The interface includes a search bar with the text "%S%" and a dropdown menu set to "Find By Name or Location". Below the search bar are radio buttons for "Match" set to "All", and input fields for "Dname" (containing "%S%") and "Loc" (empty). There are "Search", "Reset", and "Save..." buttons. Below the search controls is a table with three columns: Deptno, Dname, and Loc. The table contains two rows of data.

Deptno	Dname	Loc
20	RESEARCH	DALLAS
30	SALES	CHICAGO

Search Form: Advanced Mode

The screenshot shows a Mozilla Firefox browser window displaying an Oracle search form titled "Dept". The form is in "Advanced Mode" and includes the following elements:

- Search Mode:** "Basic" (selected) and "Saved Search" (Find By Name or Location).
- Match:** Radio buttons for "All" (selected) and "Any".
- Search Criteria:** Two rows for "Dname" and "Loc", both set to "Starts with" with empty input fields.
- Buttons:** "Search", "Reset", "Save...", and "Add Fields" (with a dropdown arrow).
- Table:** A table with columns "Deptno", "Dname", and "Loc".
- Dropdown Menu:** Opened over the table, showing "Deptno", "Dname", and "Loc" as options.

Deptno	Dname	Loc
20	RESEARCH	DALLAS
30	SALES	CHICAGO
40	OPERATIONS	BOSTON

Search Form: Advanced Mode

The screenshot shows a web application search form in advanced mode. The form is titled "Dept" and includes the following search criteria:

- Match: All Any
- Deptno: Between 30 - 40
- Dname: Starts with
- Loc: Starts with

The search results table is as follows:

Deptno	Dname	Loc
30	SALES	CHICAGO
40	OPERATIONS	BOSTON

Declarative Layout Control

The image shows a Visual Studio IDE with two windows. The left window displays a web application titled "Bug Tracker" with a "BugReport" section. The "BugReport" section contains a search form with a "Search" button, "Basic" and "Saved Search" tabs, and radio buttons for "Match All" and "Match Any". Below the search form is a table with four columns: "#(...ReportId.label)", "#(...ProductId.label)", "#(...Category.label)", and "#(...Subcategory.label)". The table contains three rows of data, each with placeholder values like "#(...ReportId)".

The right window is titled "Query - Property Inspector" and shows the properties for the selected search form. The properties are organized into sections: "Common" and "Appearance".

- Common**
- Appearance**
 - DisplayMode: <default> (default)
 - SaveQueryMode: <default> (default)
 - Rows: 10
 - MaxColumns: 2
 - FieldWidth:
 - LabelAlignment: <default> (start)
 - LabelWidth:
 - Disclosed: true
 - ModeButtonPosition: <default> (toolbar)
 - ModeChangeVisible: <default> (true)
 - HeaderText *: Search
 - HelpTopicId:
 - ShortDesc:
 - Rendered: <default> (true)

The bottom of the Visual Studio window shows the breadcrumb path: "af:panelfitter > f:facet > af:panelheader > af:query#implicitviewcriteriaqueryid".

Controlling When Search Results Are Cleared or Auto-Executed

The screenshot displays the Oracle ADF IDE interface. The main window shows the 'Binding Definition' for 'view1.jspx'. The 'Executables' pane lists 'ProductSubcategoryView1Iterator' and 'ByProductAndCategoryQuery'. The 'Property Inspector' for 'ByProductAndCategoryQuery' is open, showing various properties. A red dashed line connects the 'Criteria' property in the Property Inspector to the 'Edit View Criteria' dialog box. In the dialog, the 'Criteria Name' is 'ByProductAndCategory...', and the 'Query Automatically' checkbox is checked. The 'TrackQueryPerformed' and 'InitialQueryOverridden' dropdown menus are also visible, with 'PageFlow' selected in the latter.

Property Inspector: ByProductAndCategoryQuery

- id *: ByProductAndCategoryQu...
- Binds: ProductSubcategory Vie...
- Refresh: <default> (deferred)
- RefreshAfter:
- RefreshCondition:
- Criteria: ByProductAndCategory**
- Customizer: oracle.jbo.uicli.binding.JU...
- DefaultQuickSearchAttrName:
- TrackQueryPerformed: <default> (PageFlow)
- InitialQueryOverridden: <default> (PageFlow)

Edit View Criteria

Criteria Name: ByProductAndCategory...

Query Automatically

TrackQueryPerformed: <default> (PageFlow)

InitialQueryOverridden: <default> (PageFlow)

List of Values Automatically Participate in Search Forms

The screenshot shows a Mozilla Firefox browser window displaying a 'BugReport' search interface. The search form includes various input fields for filtering bugs, such as ReportId, ProductId, Category, Subcategory, Priority, Status, Subject, AssignedTo, ReportedBy, ReportedOn, ModifiedBy, ModifiedOn, FixedInRelease, BaseReportId, BugType, and VersionNumber. The 'Match' options are set to 'All'. Below the search form, a table displays the search results with columns for ReportId, ProductId, Category, Subcategory, Priority, Status, Subject, and AssignedTo.

ReportId	ProductId	Category	Subcategory	Priority	Status	Subject	AssignedTo
3588565	807	DATABIND	RT	2	11	BACKPORT 3558906	FECHEN
4019929	807	DATABIND	RT	2	11	NEED AN API TO RET	SVINAYAK
3498580	807	DATABIND	RT	3	13	LIFECYCLE CONFIGU	RHEFFERA
3473458	807	DATABIND	RT	2	13	CUSTOMIZING ERRO	RRGORDON
4028478	807	DATABIND	RT	4	21	ADD GETINPUTVALUE	SVINAYAK
3089547	807	DATABIND	RT	2	36	FIND MODE: RESETI	JLOROPEZ
4041670	807	DATABIND	RT	3	11	COMMENTS IN DATA	SVINAYAK
4042314	807	DATABIND	RT	3	11	ITERATORBINDING N	SVINAYAK

§



DEMO

Declarative Search Forms



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