

Developing Large Oracle ADF 11g Applications

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Andrejus Baranovskis's Blog

Blog about Oracle technology

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On Insert Security Rule Implementation

As you know, ADF 11g allows to secure **read**, **update**, and **delete** operations on EO level. However there is no default support for **insert** operation. Typically, developers will go and set Expression Language statements directly on Web page to enable/disable one or another attribute. While this works, it is not good in terms of maintenance. Today I will describe another approach, where I will override isAttributeUpdateable() method on EO to evaluate security rule on insert. I believe, this approach works better comparing to Expression Language on front end, because it allows to secure Model directly. This is especially good



Oracle ACE



- PEPKOR-IT System
- Integration through ADF Task Flows and ADF Libraries
- Integration and Security Configuration
- Sharing Common Files Across Applications
- Building and Integrating with OJDEPLOY
- ADF BC Reusability
- Integration through Dynamic Regions
- Dynamic Flying Dashboard UI Shell
- Oracle UI Shell

Menu

- TMS
 - Geographical Hierarchy
 - Supplier
- Pricing
- Finance
- Merchandising
- Operations
- Planning
- Procurement



Menu
View Tracking Details Operating System
Create Delete Commit Rollback

TMS

Asset Tracking

- Computer Equipment Tracking
- View Tracking Details
- Hard Drive Capacity
- Manufacturer
- Memory Capacity
- Memory Type
- Model
- Operating System**
- Optical Device
- Processor Model
- Processor Speed
- Status
- Equipment Type
- Tracking Details

Call Logging

Operate System

Operate System No	Operate System	Active	Comment	Last update date	User
6	Linux	NO	Redhat	4/14/2010	LEOND
7	DOS	YES	DOS	4/8/2010	LEOND
2	WAYNE	YES	Test	4/8/2010	LEOND
10	Tester	YES	Tester	4/8/2010	LEOND
4	Windows XP	YES	Windows XP	4/8/2010	LEOND
9	Unix	YES	Unix	4/8/2010	LEOND
14	LINUX RES	NO	RED	4/16/2010	JVTest
11	TEST	YES	CASTER	4/8/2010	LEOND

Menu

View Tracking Details

Tracking Detail View

Advanced Saved Search Client

Match All Any

Client

Purchase Date -

Client Username

Department

Sub Department

Last update date -

Search Reset Save...

Title

menu View Detach

Track No	Client	Department	Sub Department	Purchase Date	Last update date	Memory Type	Model	Processor Model	Processor Speed	Equipment Type	Video Card	Delivery De
9	PEPKOR IT - INFR...	dept 123	sdept 4	5/1/2010	5/18/2010	2.00 GB	HP Compaq 6710b...	Core 2 4400	2.4 GHz	a	card1	5/10/2010
11	PEPKOR IT - INFR...			5/21/2010		1022.4 MB	HP Compaq 6710b...	Core 2 4400	1.6 GHz	ddd	eee	5/15/2010
10	PEPKOR IT - STOR...			5/14/2010		1022.4 MB	HP Compaq 6710b...	Core 2 6420	2.1 GHz	a	card1	5/11/2010

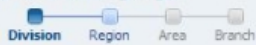
Navigation bar with back, forward, and search icons.

Menu

- TMS
 - > Geographical Hierarchy
 - > Supplier

Geographical Hierarchy

Division Landing Page



View + create ✎ edit 📄 🔗 Detach

DivisionNo	DivisionName	CostcentreDesc	DivisionManagerName	DivisionEmail
56	TEST DIVDSP	DUMMY BRANCH - SOUTH		
10	OPS DUMMY DIV	DUMMY BRANCH - SOUTH	OPS DUMMY DIV	
99	ALL DIVISIONS	DUMMY BRANCH - SOUTH		
11	WAREHOUSE DIVISION	DUMMY BRANCH - SOUTH	JANNIE HANEKOM	JANNIEH@PEPSTORES.COM
54	TEST DIV	DUMMY BRANCH - SOUTH		
57	TEST DIV 2	DUMMY BRANCH - SOUTH		
75	TESTDIVS	DUMMY BRANCH - SOUTH		
3	NORTHERN DIVISION	DIV NORTH	WYNAND MOLLER	DNTHMAN@PEPSTORES.COM
1	CENTRAL DIVISION	DIVISIONAL MANAGER SOUTH	KOKKIE DE KOCK	DCNTMAN@PEPSTORES.COM
2	SOUTHERN DIVISION	DIVISIONAL MANAGER SOUTH	PAUL WOLFAARD	DSTHMAN@PEPSTORES.COM
4	PROJECTS DIVISION	DIVISIONAL MANAGER PROJECTS 02171	VACANT	VACANT@PEPSTORES.COM

- > Pricing
- > Finance
- > Merchandising
- > Operations
- > Planning
- > Procurement



- Menu
- TMS
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Geographical Hierarchy

Division **Region Detail** Region Address Region Indicators Division Cancel

* DivisionNo

* DivisionName SOUTHERN DIVISION

* DivisionCostcentreNo

CostcentreDesc DIVISIONAL MANAGER SOUTH

* DivisionPerMgrCostcentreNo

CostcentrePerMgrDesc DIV PERS MAN - SOUTH

* DivisionLogMgrCostcentreNo

Menu

- TMS
 - > Geographical Hierarchy
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- > Merchandising
- > Operations
- > Planning
- > Procurement

Geographical Hierarchy

Division Region Detail **Region Address** Region Indicators Division Cancel

View + Add - Delete 📄 Detach

DivisionNo	AddressTypeInd	AddressLine 1	AddressLine 2	AddressLine 3	CityNo	PostalCode	LastUpdateDate	Username
2	P	Test					2010/04/15	anonymous
2	S	Tes					2010/04/15	anonymous



Menu

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- Operations
- Planning
- Procurement

Geographical Hierarchy

Division Region Detail Region Address **Region Indicators** Division Cancel Finish

View Detach

DivisionNo	GeographicIndicat...	GeographicAllowa...	LastUpdateDate	Username
2	ACTIVE_IND	YES (ACTIVE)	2008/02/15	ADELEM

Menu

View Tracking Details | Operating System | **Client**

All Client Departments | All Client Sub Departments | All Client Users

Client









Advanced | Saved Search | ItClientViewCriteria

Client Code:

Search | Reset | Save...

Title

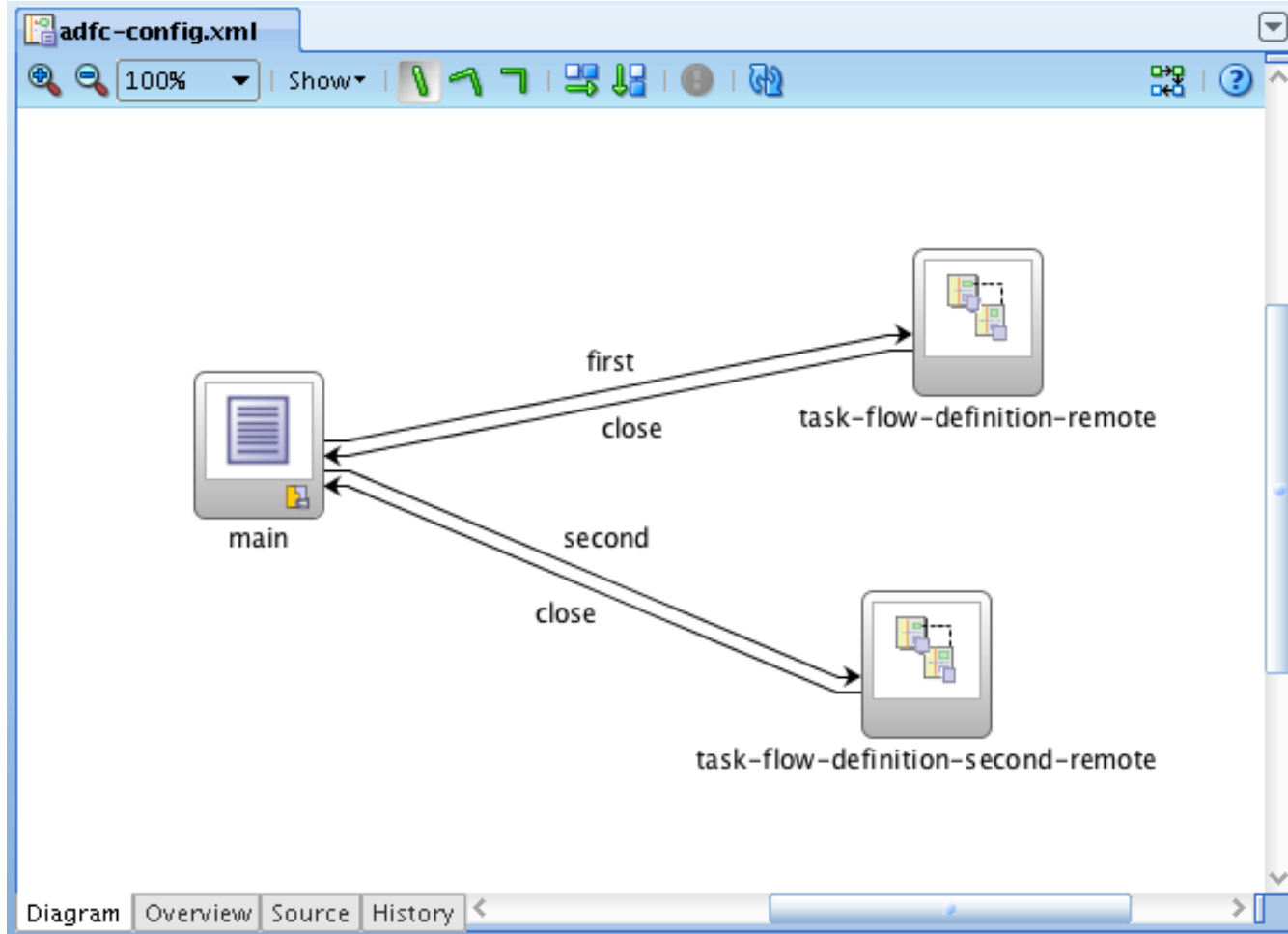
menu View Detach

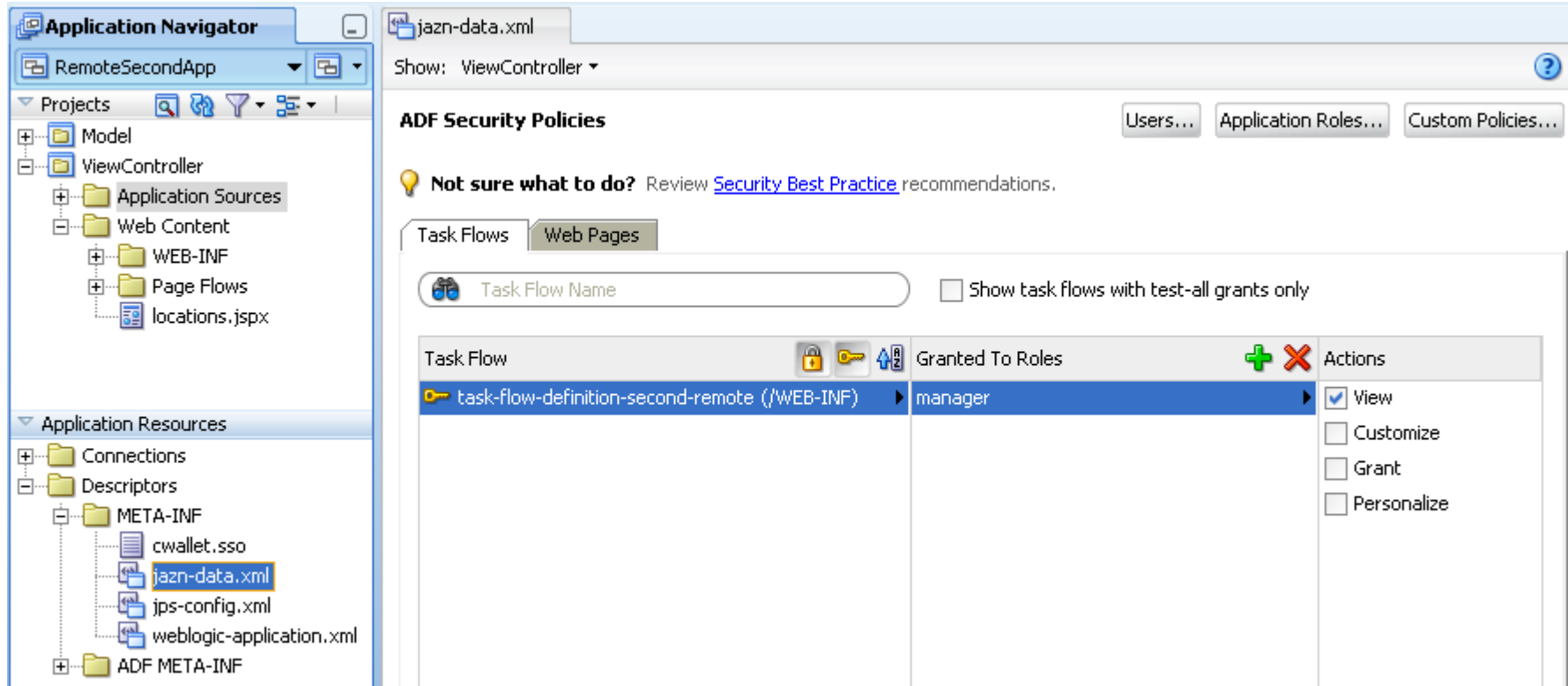
Client Department	Client Code	Client	Active	Last update date	User
	T3	Test C	YES	4/19/2010	anonymous
	PIT	PEPKOR IT - INFR...	YES	5/11/2010	#JVTest
	PCS	PEPKOR IT - STOR...	YES	5/11/2010	#JVTest
	T5	TEST E	YES	5/10/2010	#JVTest
	T6	TEST F	YES	5/10/2010	#JVTest
	T4	Test D	NO	4/22/2010	anonymous
	T2	Test B	YES	4/15/2010	HEINRIPC
	T1	Test A	YES	4/15/2010	HEINRIPC

Create Delete Commit Rollback

Asset Tracking

Call Logging





The screenshot shows the Oracle ADF Security Configuration tool interface. On the left, the **Application Navigator** displays the project structure for **RemoteSecondApp**, including folders for **Model**, **ViewController**, **Application Sources**, **Web Content**, **WEB-INF**, **Page Flows**, and **locations.jspx**. Under **Application Resources**, the **META-INF** folder contains files like **cwallet.sso**, **jazn-data.xml** (highlighted), **jps-config.xml**, and **weblogic-application.xml**.

The main workspace shows the configuration for **jazn-data.xml** in the **ViewController** view. The **ADF Security Policies** section includes buttons for **Users...**, **Application Roles...**, and **Custom Policies...**. A warning message states: **Not sure what to do?** Review [Security Best Practice](#) recommendations.

The **Task Flows** tab is active, showing a search bar for **Task Flow Name** and a checkbox for **Show task flows with test-all grants only**. Below is a table of task flows:

Task Flow	Granted To Roles	Actions
task-flow-definition-second-remote (/WEB-INF)	manager	<input checked="" type="checkbox"/> View <input type="checkbox"/> Customize <input type="checkbox"/> Grant <input type="checkbox"/> Personalize

Sharing Common Files Across Applications

The screenshot shows the 'Project Properties' dialog box for a project named 'RemoteApp/ViewController'. The 'Project Source Paths' tab is active, and the 'Use Project Settings' radio button is selected. The 'Java Source Paths' section contains two entries: the project's own source directory and a shared directory: '/Users/andrejusb/jdeveloper/mywork/ADFIIntegration/CommonApp/ViewController/src'. The 'Included' sub-tab is active, showing '(All)' under the 'Include Content from Subfolders' checkbox. The 'Output Directory' is set to the project's target directory, and the 'Default Package' is 'It.andrejusb.view.remote'. Buttons for 'Add...', 'Remove', 'Up', 'Down', 'Browse...', and 'OK/Cancel' are visible.

Project Properties - /Users/andrejusb/jdeveloper/mywork/ADFIIntegration/RemoteApp/ViewController/ViewCont...

Search

- Project Source Paths
- ADF Model
- ADF View
- Ant
- Business Components
- Compiler
- Dependencies
- Deployment
- EJB Module
- Extension
- Javadoc
- Java EE Application
- JSP Tag Libraries
- JSP Visual Editor
- Libraries and Classpath
- Resource Bundle
- Run/Debug/Profile
- SOA
- Technology Scope

Project Source Paths

Use Custom Settings Customize Settings...

Use Project Settings

Java Source Paths:

- /Users/andrejusb/jdeveloper/mywork/ADFIIntegration/RemoteApp/ViewController/src
- /Users/andrejusb/jdeveloper/mywork/ADFIIntegration/CommonApp/ViewController/src

Buttons: Add..., Remove, Up, Down

Included Excluded

Include Content from Subfolders

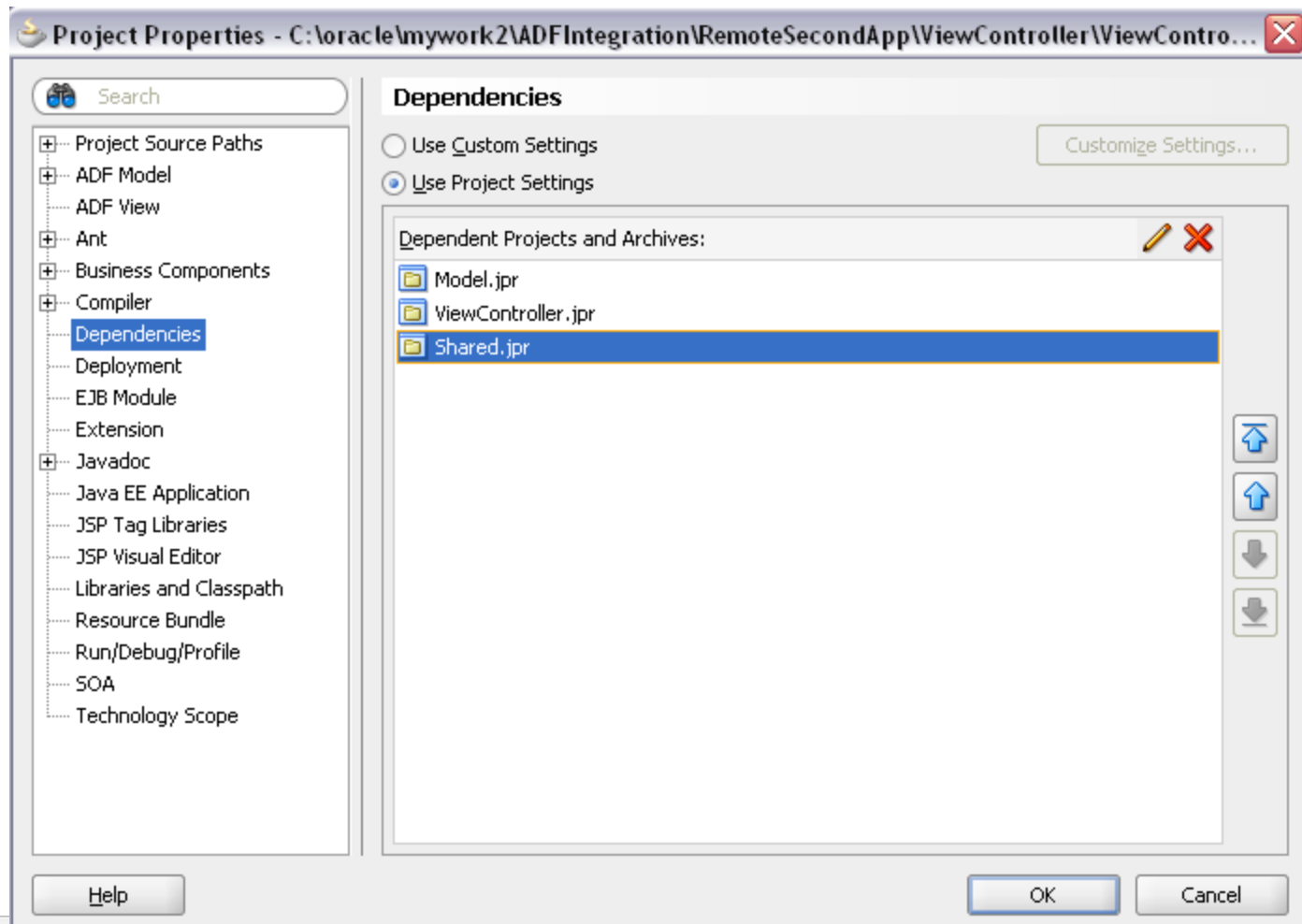
(All)

Buttons: Add..., Remove

Output Directory: /Users/andrejusb/jdeveloper/mywork/ADFIIntegration/RemoteApp/ViewController/ Browse...

Default Package: It.andrejusb.view.remote

Buttons: Help, OK, Cancel



```

oideploy-build.xml
<?xml version="1.0" encoding="US-ASCII" ?>
<ojdeploy-build basedir="E:\Oracle\mywork\ADFIIntegration\deploy">
  <!-- Defines default parameters for all deploy tasks.
       Also defines some variables strictly for use within this file
       in macros
  -->
  <defaults>
    <variable name="customdir" value="E:\Oracle\mywork\ADFIIntegration"/>
  </defaults>
  <deploy>
    <parameter name="workspace" value="\${customdir}\RemoteApp\RemoteApp.jws"/>
    <parameter name="project" value="ViewController"/>
    <parameter name="profile" value="adflibRemoteApp"/>
  </deploy>
  <deploy>
    <parameter name="workspace" value="\${customdir}\RemoteSecondApp\RemoteSecondApp.jws"/>
    <parameter name="project" value="ViewController"/>
    <parameter name="profile" value="adflibRemoteSecondApp"/>
  </deploy>
  <deploy>
    <parameter name="workspace" value="\${customdir}\LocalApp\LocalApp.jws"/>
    <parameter name="profile" value="SplitApp"/>
  </deploy>
</ojdeploy-build>

```

The screenshot shows the 'Project Properties' dialog for 'Model.jpr' in the 'Business Components: Imports' section. The left pane shows a tree view of project properties, with 'Imports' selected under 'Business Components'. The right pane contains the following information:

- Business Components: Imports**
These are the business components that are imported from a jar file.
Buttons:
- Imported Business Component Projects:**
A list containing: `com.redsamurai.model.Model`
- Location:** `E:\Oracle\Middleware1032\jdeveloper\jdev\bin\file:\E:\Oracle\mywork\ADFInte...`
- Packages from Model:**
A list containing: `com.redsamurai.model.shared.entities` and `com.redsamurai.model.shared.lovs`
- Contents of com.redsamurai.model.shared.entities:**
A list containing: `Departments`
-

At the bottom of the dialog are buttons for , , and .



▼ Applications

Select ▼

- Locations
- Departments
- Jobs
- Employees

7 Via Cola di Rie

39

StateProvince

CountryId IT

First Previous Next Last

Save

Applications

Select ▾

JobId AD_PRE\$


* JobTitle

MinSalary

MaxSalary

First Previous Next Last

Save

 **Warning**

Save Pending Changes !

OK

My Dashboard

- Locations
- Departments
- Jobs
- Employees

New Jobs | Jobs Distribution | Assigned Jobs | Show All | Show None

Locations

LocationId 1000

StreetAddress 1297 Via Cola di Rie

PostalCode 00989

City Roma

StateProvince

CountryId IT

First Previous Next Last

Save

Departments

View Save Detach

DepartmentId	DepartmentName	ManagerId	LocationId
10	Administration	200	1700
20	Marketing	201	1800
30	Purchasing	114	1700
40	Human Resources	203	2400
50	Shipping	121	1500
60	IT	103	1400
70	Public Relations	204	2700
80	Sales	145	2500
90	Executive	100	1700
100	Finance	108	1700
110	Accounting	205	1700
120	Treasury		1700

Jobs

JobId AD_ASST

* JobTitle President

MinSalary 20000

MaxSalary 40000

First Previous Next Last

Save

Employees

View Save Detach

FirstName	LastName	Email	PhoneNumber	HireDate	Salary
Steven	King	SKING	0037064023546	6/17/1987	24000
Neena	Kochhar	NKOCHHAR	515.123.4568	9/21/1989	1700
Lex	De Haan	LDEHAAN	515.123.4569	1/13/1993	17000
Alexander	Hunold	AHUNOLD	590.423.4567	1/3/1990	700
Bruce	Ernst	BERNST	590.423.4568	5/21/1991	500
David	Austin	DAUSTIN	590.423.4569	6/25/1997	4800
Valli	Pataballa	VPATABAL	590.423.4560	2/5/1998	4800
Diana	Lorentz	DLORENTZ	590.423.5567	2/7/1999	4200
Nancy	Greenberg	NGREENBE	515.124.4569	8/17/1994	12000
Daniel	Faviet	DFAVIET	515.124.4169	8/16/1994	9000
John	Chen	JCHEN	515.124.4269	9/28/1997	8200

The screenshot displays the Oracle HR Applications navigation shell. On the left, a sidebar titled "HR Applications" contains a list of links: [Locations](#), [Departments](#), [Jobs](#), and [Employees](#). The main content area features four application tabs: "Locations Application", "Departments Application", "Jobs Application", and "Employees Application". The "Departments Application" tab is active, showing a table with the following data:

DepartmentId	DepartmentName	ManagerId	LocationId
10	Administration	200	1700
20	Marketing	201	1800
30	Purchasing	114	1700
40	Human Resources	203	2400
50	Shipping	121	1500
60	IT	103	1400
70	Public Relations	204	2700
80	Sales	145	2500
90	Executive	100	1700
100	Finance	108	1700
110	Accounting	205	1700
120	Treasury		1700
130	Corporate Tax		1700

- Use ADF Task Flows and ADF Libraries to Develop Large and Integrated Applications
- Share Common Classes Across Applications
- Reuse ADF BC through ADF Libraries
- Use ADF Dynamic Regions and Integrate Into UI Shell