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## **Oracle JHeadstart - Overview**



# What is JHeadstart?

- JDeveloper extension for template-based automation of ADF development tasks
  - Development Toolkit on top of ADF
  - Builds on ADF Runtime architecture
  - Fully integrates with ADF Design Time
- Takes declarative development to the next level
  - Generates complete ADF applications
  - Like the Designer Forms Generator generates Forms apps, JHeadstart generates ADF apps
- Transforms Oracle Forms into ADF applications



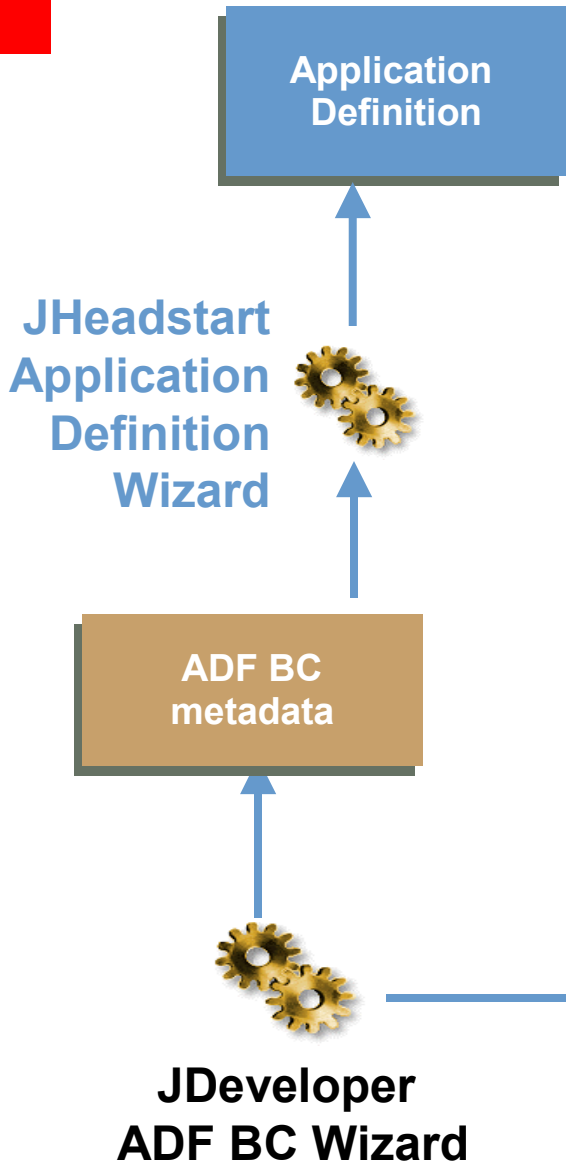
# JHeadstart – Main Components

- JHeadstart Application Generator (JAG)
  - Generates best-practice web application
- JHeadstart Utilities
  - Automate other ADF development tasks
  - Perform quality checks
- JHeadstart Runtime
  - Reusable components to implement complex functionality
  - Auto-implements host of best practices
- JHeadstart Forms2ADF Generator
  - Create fully-functional ADF app based on forms definitions
- JHeadstart Developer's Guide

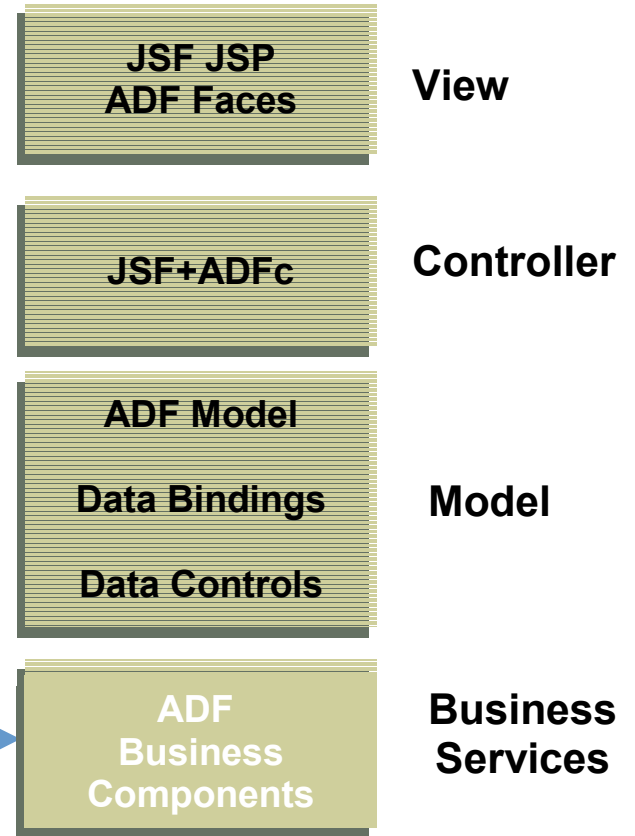


# JHeadstart Application Generator (JAG)

- Generates ADF Faces JSPX Pages
- Generates (un)bounded task flows
- Generates PageDefinition XML files (data bindings)
- Does NOT generate any Java code!
- JAG is driven by
  - XML-based Application Definition file, created and edited through GUI Wizard (JDeveloper add-in)
  - Velocity Generator Templates
- Generated output is 100% customizable



# Generation Process





JHeadstart  
Application  
Definition  
Wizard

Application  
Definition

ADF BC  
metadata

JDeveloper  
ADF BC Wizard

The screenshot shows the 'AppModuleApplicationDefinition.xml - Application Definition Editor' window. The left pane displays a tree view of the application structure, with 'Employees' selected under the 'AppModule' folder. The right pane shows the configuration for the 'Employees' group, including identification, group layout, and query settings.

Identification	
Name	Employees
Short Name	
Description	Employees
Use as List of Values?	<input type="checkbox"/>
Group Image / Icon	

Group Layout	
Layout Style	table-form
Table Overflow Style	inline
Stack Detail Groups on Same...	<input type="checkbox"/>
Same Page?	<input type="checkbox"/>

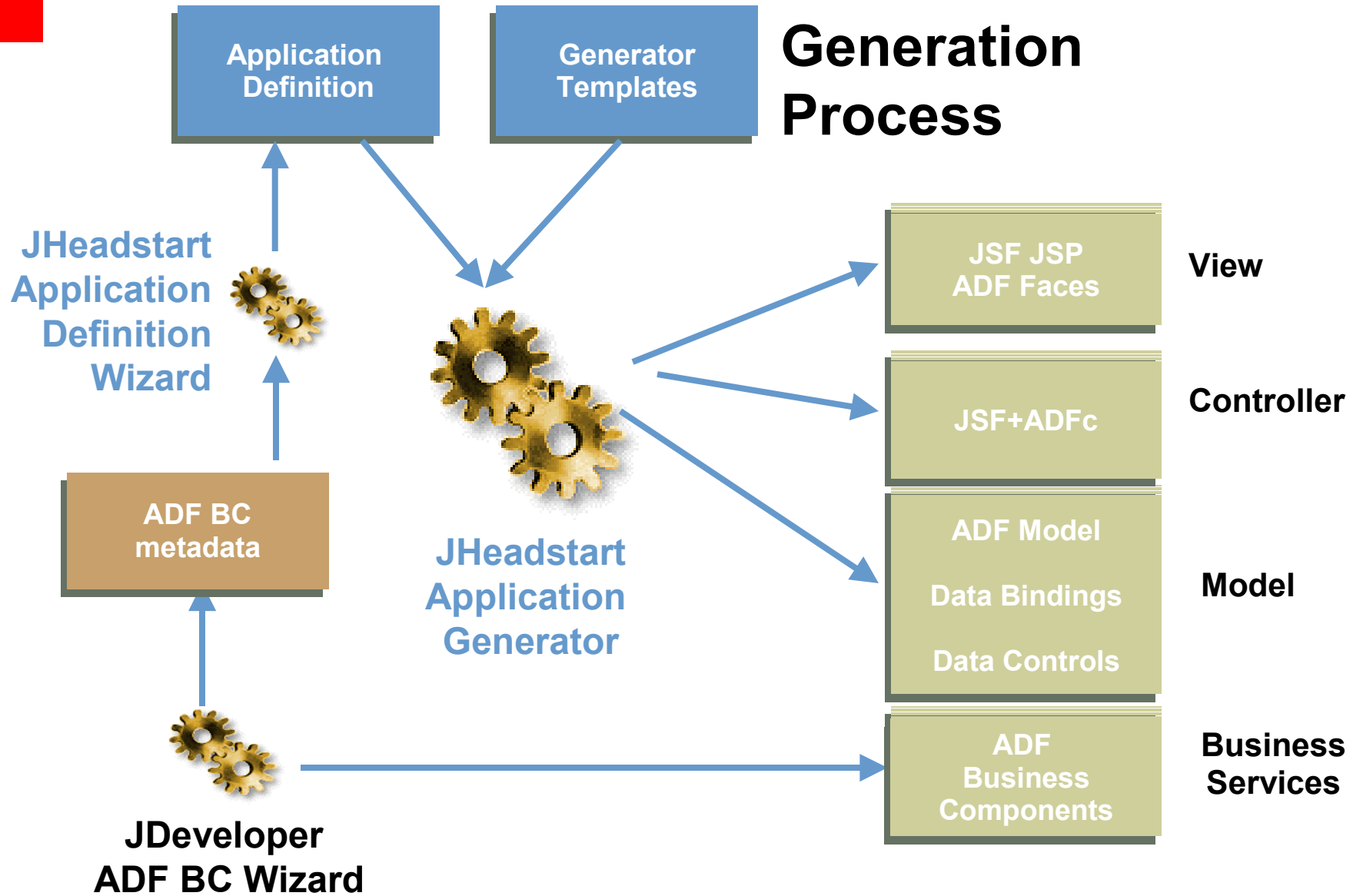
  

Query Settings	
Data Collection	EmployeesView1
Data Collection Implementation	EmployeesView
Query Bind Parameters	

This attribute determines the number and layout of the pages that are generated to select, view and manipulate the group ViewObject.  
form: generates a single-record page.  
table: generates a single page in Table (multi-record) format.  
table-form: generates a Table Page, as well as a single-record Details page.  
select-form: generates a Select Page with a list box where the user can select a record, and a single-record page.

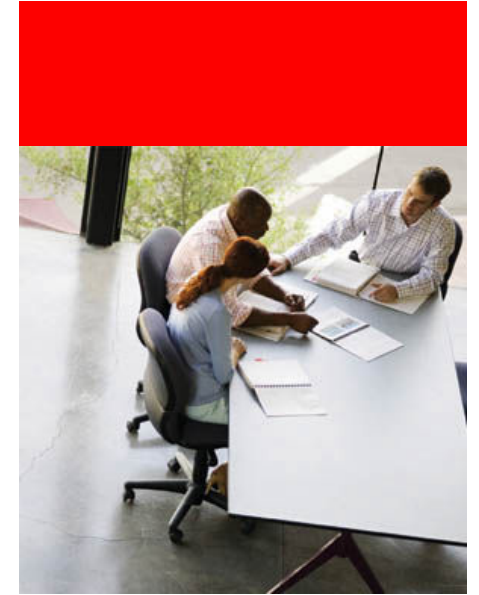
Properties | Templates

Buttons: Help, Apply, OK, Cancel





# JHeadstart Generated Pages



# Example JHeadstart Generated Page

The screenshot displays the Oracle JHeadstart Demo application interface. At the top, there is a navigation bar with the title "ORACLE JHeadstart Demo" and several menu items: "Home", "HRModule", "Page Template", "Tabbed Menu", "Skin", and "fusion". Below this is a secondary navigation menu with tabs for "Employees", "Departments", "Jobs", "Locations", "Countries", and "Regions".

The main content area is titled "Employees" and features an "Advanced Search" section. This section includes a "Match" dropdown set to "All", and several input fields for searching: EmployeeId, JobId, FirstName, Salary, LastName, CommissionPct, Email, ManagerId, PhoneNumber, Department, and HireDate. There are also buttons for "Search", "Reset", and "Save...".

Below the search form is a table with columns: EmployeeId, FirstName, LastName, and JobId. The table contains five rows of data:

EmployeeId	FirstName	LastName	JobId
100	Steven	King	AD_PRES
101	Neena	Kochhar	AD_VP
102	Lex	De Haan	AD_VP
103	Alexander	Hunold	IT_PROG
104	Bruce	Ernst	IT_PROG
105	David	Austin	IT_PROG

Below the table, a detailed view for the selected employee (Neena Kochhar) is shown, displaying fields such as Email (NKOCHHAR), CommissionPct, PhoneNumber (515.123.4568), ManagerId (King), HireDate (21-Sep-1989), Department (Executive), and Salary (17000).

At the bottom left of the application window, the text reads: "Copyright Oracle Corporation, 2010. Demo Application for JHeadstart 11g".

# Example JHeadstart Generated Page

ORACLE JHeadstart Demo Home HRModule Page Template Tabbed Menu Skin fusion

Employees Departments Jobs Locations Countries Regions

Employees (King) >

Edit Employees Kochhar [2 / 107] Save Cancel

\* EmployeeId: 101 \* JobId: AD\_VP AD\_VP  
\* Salary: 17000  
\* Last Name: Kochhar CommissionPct:   
\* Email: NKOCHHAR ManagerId: King  
Phone Number: 515.123.4568 Department: Executive  
\* Hire Date: 21-Sep-1989

> Managed Departments

Subordinates

Action View Format Freeze Detach Wrap

	* EmployeeId	FirstName	* LastName	* Email	PhoneNumber	* HireDate	* JobId
	108	Nancy	Greenberg	NGREENBE	515.124.4569	17-Aug-1994	FI_MGR
	200	Jennifer	Whalen	JWHALEN	515.123.4444	17-Sep-1987	AD_ASST
	203	Susan	Mavris	SMAVRIS	515.123.7777	07-Jun-1994	HR_REP
	204	Hermann	Baer	HBAER	515.123.8888	07-Jun-1994	PR_REP
	205	Shelley	Higgins	SHIGGINS	515.123.8080	07-Jun-1994	AC_MGR

Columns Frozen 1

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Demo Application for JHeadstart 11g



# Example JHeadstart Generated Page

The screenshot displays a web application interface with a navigation bar at the top containing tabs for 'Employees', 'Departments', 'Jobs', 'Locations', 'Countries', and 'Regions'. The 'Countries' tab is active, showing a 'Countries' section with a filter by 'CountryId' and an 'Advanced Search' button. Below this is a table with columns for CountryId, CountryName, and RegionId. The table contains two rows: Brazil (BR) and Canada (CA), both associated with the 'Americas' region. Below the 'Countries' section is a 'Locations' section with a table containing columns for LocationId, StreetAddress, PostalCode, City, and StateProvince. The table contains two rows: Toronto (LocationId 1800) and Whitehorse (LocationId 1900). Below the 'Locations' section is a scrollable area containing a table with columns for CountryId, CountryName, and RegionId. The table contains three rows: Switzerland (CH), China (CN), and Germany (DE), with regions of Europe, Asia, and Europe respectively.

* CountryId	CountryName	RegionId
BR	Brazil	Americas
CA	Canada	Americas

* LocationId	StreetAddress	PostalCode	* City	StateProvince
1800	147 Spadina Ave	MSV 2L7	Toronto	Ontario
1900	6092 Boxwood St	Y5W 9T2	Whitehorse	Yukon

* CountryId	CountryName	RegionId
CH	Switzerland	Europe
CN	China	Asia
DE	Germany	Europe

# Example JHeadstart Generated Page

The screenshot displays a web application interface for managing departments and employees. The main window is titled "Edit Departments Shipping".

**Navigation:** Employees | Departments | Jobs | Locations | Countries | Regions

**Left Panel (View):**

- Europe
- Americas
  - Argentina
  - Brazil
  - Canada
  - Mexico
  - United States of America
    - Southlake
    - South San Francisco
      - Shipping
    - South Brunswick
    - Seattle
- Asia
- Middle East and Africa

**Main Form (Edit Departments Shipping):**

- \* DepartmentId: 50
- ManagerId: Fripp
- \* DepartmentName: Shipping

**Employees Table:**

Action	* EmployeeId	FirstName	* LastName
	120	Matthew	Weiss
	121	Adam	Frapp
	122	Payam	Kaufling
	123	Shanta	Vollman
	124	Kevin	Mourgos
	125	Julia	Nayer
	126	Irene	Mikkilineni
	127	James	Landry
	128	Steven	Markle
	129	Laura	Bissot

**Employee Detail View (Kevin Mourgos):**

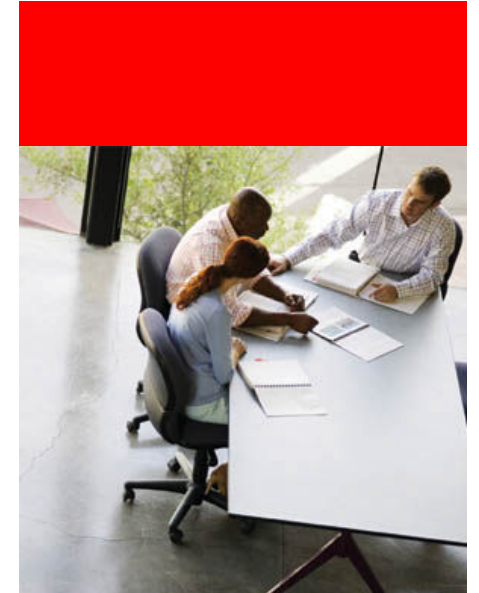
- Department: Shipping
- ManagerId: King
- \* JobId: ST\_MAN
- PhoneNumber: 650.123.5234
- \* Email: KMOURGOS
- \* HireDate: 16-Nov-1999



# Best Practice ADF Architecture

- JHeadstart generates highly reusable ADF task flows with page fragments.
- ADF Task flows highly configurable using predefined taskflow parameters
- “One-page (UIShell)” application with dynamic region driven by application menu
- Generated ADF task flows can easily be reused in drag-and-drop pages

# **JHeadstart** Reusable Application Components





# Reusable Application Components

- Fine-grained Permission-based Authorization, seamlessly integrated with ADF Security
- Dynamic Menu Structure
- Flex Items: Adding New Items at Runtime
- Runtime Customization of Standard Items
  - Show/hide
  - Make mandatory
- Runtime Translation/Modification of Page Text

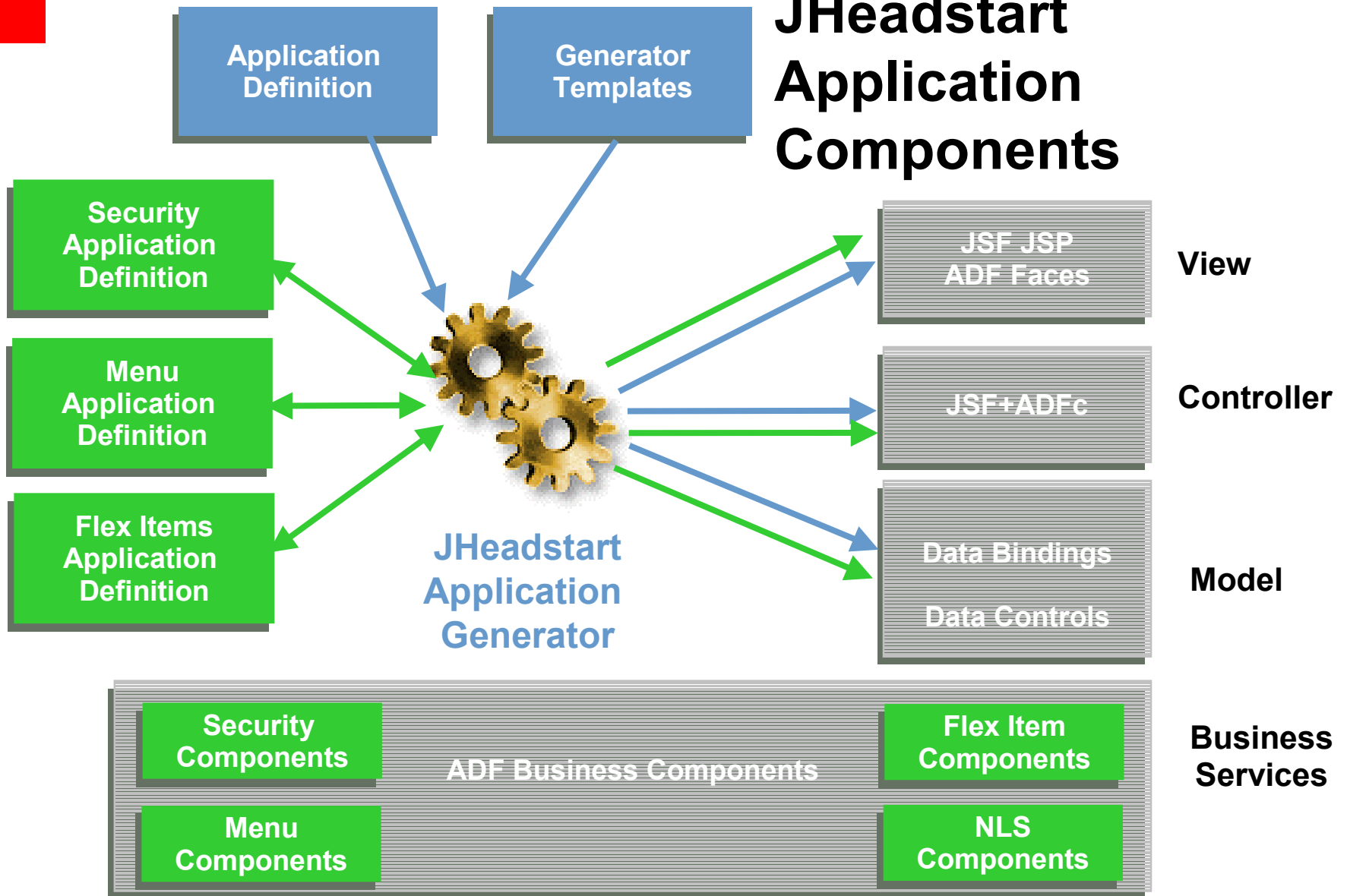


# Reusable Application Components - Packaging

- DDL script to Create Table Structure
- Predefined Business Components with Application Module that is nested within own app module
- JHeadstart Application Definitions *generated*, that can be used to generate admin screens
- SQL scripts are generated and executed to populate the database tables
  - Roles, Permissions (Group Access/Action), Grants
  - Module and menu items
  - Translations
  - Flex Region Definitions



# JHeadstart Application Components



# Generated Menu Admin Page

The screenshot displays the Oracle JHeadstart Demo interface for menu administration. The top navigation bar includes the Oracle logo, 'JHeadstart Demo', and several dropdown menus: 'Home', 'Module' (set to 'Menu Administration'), 'Page Template' (set to 'Tabbed Menu'), 'Skin' (set to 'fusion'), and 'Log Off'. Below the navigation bar, there are two tabs: 'Menu Structure' and 'User Interface Skins'. The main content area is titled 'Edit Menu Item Employees' and contains a form with the following fields:

- Display Sequence:** 1
- Name:** Employees
- Module:** HRModule
- Parent Menu Item:** (empty dropdown)
- Label:** Employees
- Label Translation Key:** (empty text field with a search icon)
- Launching Group Name:** Employees
- JSF Navigation Action:** uishell:Employees
- IFrame Url:** (empty text field)
- Roles:** Employees
- Disabled Expression:** false
- Rendered Expression:** true

On the left side, there is a 'Modules' tree view showing a hierarchy: HRModule (expanded) containing Employees (selected), Departments, Jobs, Locations, Countries, Regions, Menu Administration, and Security Administration. The form also includes 'Save' and 'Cancel' buttons.

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# Generated Security Admin Page

The screenshot displays the Oracle JHeadstart Demo Security Administration interface. The main page is titled "Edit Role USER" and shows the role's configuration, including the short name "USER" and the name "USER". A modal dialog box titled "Search and Select Permissions" is open, showing a search filter for "Service Name" set to "HRModule". The dialog contains a table of permissions with the following data:

Name	Service Name	Type
HRModule	HRModule	Group Access
Employees	HRModule	Group Access
Employees.create	HRModule	Group Action
Employees.update	HRModule	Group Action
Employees.delete	HRModule	Group Action
EmpWizard	HRModule	Group Access
EmpWizard.create	HRModule	Group Action
EmpWizard.update	HRModule	Group Action
EmpWizard.delete	HRModule	Group Action
Departments	HRModule	Group Access

The dialog also shows "Rows Selected: 4" and "Columns Frozen: 1". The background interface includes navigation tabs for "Users", "Roles", and "Permissions", and a footer with the text "Copyright Oracle Corporation, 2010. Powered by Oracle JHeadstart 11g".

# In-Page Text Editing and Translating

The screenshot shows the Oracle JHeadstart Demo interface. At the top, there's a navigation bar with 'Home', 'Module' (set to 'HRModule'), and 'Customize Mode Change/Translate Page Text'. Below this is a menu with 'Employees', 'Departments', 'Jobs', 'Locations', 'Countries', and 'Regions'. The main content area shows an 'Employees' table with columns for 'Action', 'View', and 'Format'. A dialog box titled 'Translate or Modify Page Text' is open, displaying a table of keys and values. The dialog has fields for 'Page' (set to '/UIShell') and 'Language' (set to 'English'). A 'Filter by Key' field is also present. The table lists various keys and their corresponding values, such as 'PRODUCT\_TITLE' with 'JHeadstart Demo' and 'MENU1\_TITLE\_EMPLOYEES' with 'Employees'. A 'Save' button is at the bottom left of the dialog, and 'OK' and 'Cancel' buttons are at the bottom right.

Key	Value
PRODUCT_TITLE	JHeadstart Demo
APPLICATION_TITLE	MyJhsTutorial
MODULE_HRMODULE	HRModule
MODULE_MENUADMINSERVICE	MenuAdminService
MODULE_FLEXREGIONSERVICE	FlexRegionService
HOME_BUTTON_LABEL	Home
MODULE_SELECTOR_LABEL	Module
CUSTOMIZE_MODE_BUTTON_LABEL	Customize Mode
LOG_OFF_BUTTON_LABEL	Log Off
MENU1_TITLE_EMPLOYEES	Employees
MENU1_TITLE_DEPARTMENTS	Departments
MENU1_TITLE_JOBS	Jobs
MENU1_TITLE_LOCATIONS	Locations
MENU1_TITLE_COUNTRIES	Countries

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# Define Flex Items Dialog

**Customize Flex Region** ✕  
Edit Flex Region Definition FlexRegionEmployees >

**Edit Flex Item Definition BirthCountry** ⏪ ⏩ [ 2 / 8 ] + ✕ Save Cancel

\* Display Sequence  \* Display Type

\* Name  Display Width

\* Label  Display Height

Label Translation Key  🔍 Depends On Item

Hint Text  Roles

Hint Text TranslationKey  🔍 Rendered Expression

**Default Value** **Validation** **Allowable Values**

Allowable Values Query

**Static Allowable Values**

Action ▾ View ▾ Format ▾ + 🔒 Freeze 📄 Detach ↶ Wrap

	* Display Sequence	* Value	Label Translation Key	* Label
No rows found				

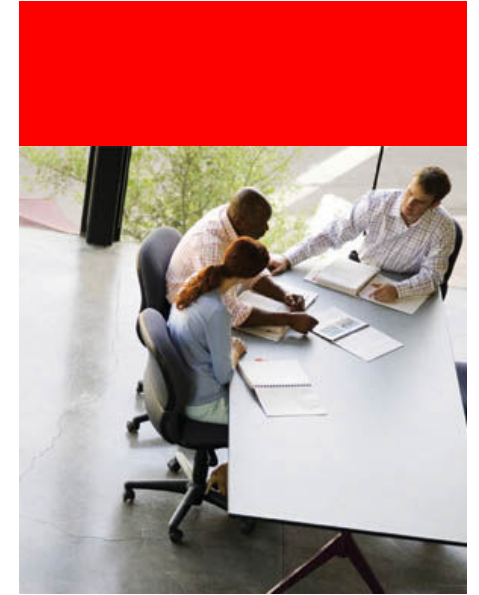
# Flex Items Added to Employee Page

The screenshot displays the 'Edit Employees Kochhar' page in the Oracle HR system. The page is titled 'Employees (KING) >' and 'Edit Employees Kochhar'. It features a navigation bar with tabs for 'Employees', 'Departments', 'Jobs', 'Locations', 'Countries', and 'Regions'. The main content area contains several input fields and dropdown menus for employee details. A red rounded rectangle highlights the 'Personal Information' section, which includes fields for 'Region of Birth', 'Country of Birth', 'BirthDate', 'Java Experience', 'Favorite Color', 'Favorite Technologies', 'Curriculum Vitae', and 'Private email'.

Field	Value
* EmployeeId	101
JobId	AD_VP
FirstName	Neena
* LastName	Kochhar
* Salary	17000
* Email	NKOCHHAR
CommissionPct	
PhoneNumber	515.123.4568
ManagerId	Davelaar
* HireDate	21-Sep-1989
Department	Executive
Region of Birth	Europe
Country of Birth	Netherlands
BirthDate	30-Dec-1982
Java Experience	
Favorite Color	Red (selected)
Favorite Technologies	ADF (checked), JHeadstart (checked), Struts (unchecked)
Curriculum Vitae	No file chosen
Private email	Neena.Kochhar@hotmail.com



# **JHeadstart** Generator Templates





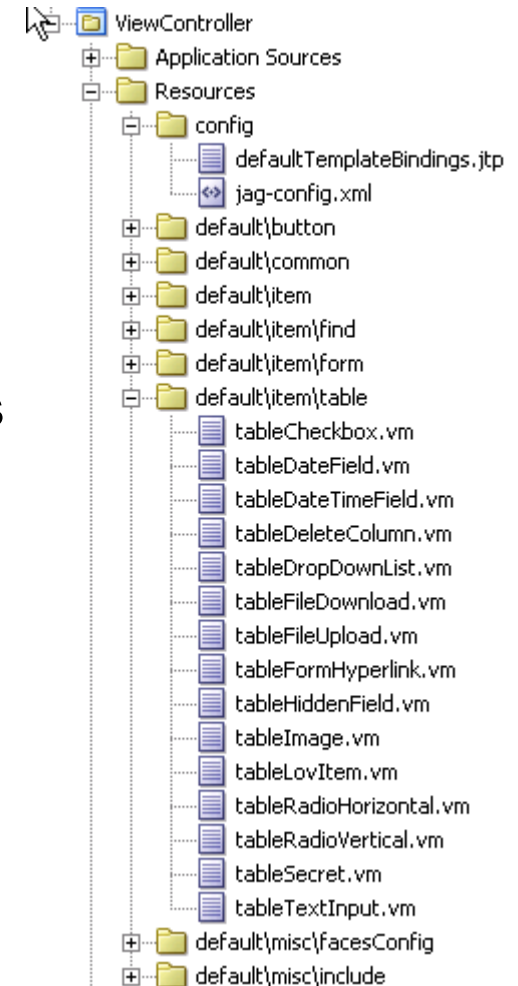
# Recommended Approach to Customizing Generated Output

- Use the visual design time tools in JDeveloper to make any modifications you like
  - Drag and drop from control palette
  - Structure pane
  - Property inspector
  - ..
- Run the modified page and verify it works as expected
- Move the custom page code to a custom template to preserve the modifications upon regeneration
- (or switch off page generation flag and skip last step)

# JHeadstart Generator Templates

- The content of generated pages is completely driven by Velocity generator templates
- The templates are categorized in groups
  - Page, pageComponent, button, item (table/form/search), search, misc, etc.
- Which template is used for which page “snippet” is handled by defaultTemplateBindings.jtp file.
- You can customize anything that is generated onto a page by creating a custom template

```
# -----  
# TABLE ITEM TEMPLATES  
# -----  
TABLE_TEXT_INPUT=default/item/table/tableTextInput.vm  
TABLE_CHECK_BOX=default/item/table/tableCheckbox.vm  
TABLE_DROP_DOWN_LIST=default/item/table/tableDropDownList.vm  
TABLE_RADIO_VERTICAL=default/item/table/tableRadioVertical.vm  
TABLE_RADIO_HORIZONTAL=default/item/table/tableRadioHorizontal.vm  
TABLE_LIST=default/item/table/tableList.vm
```



# Creating Custom Templates

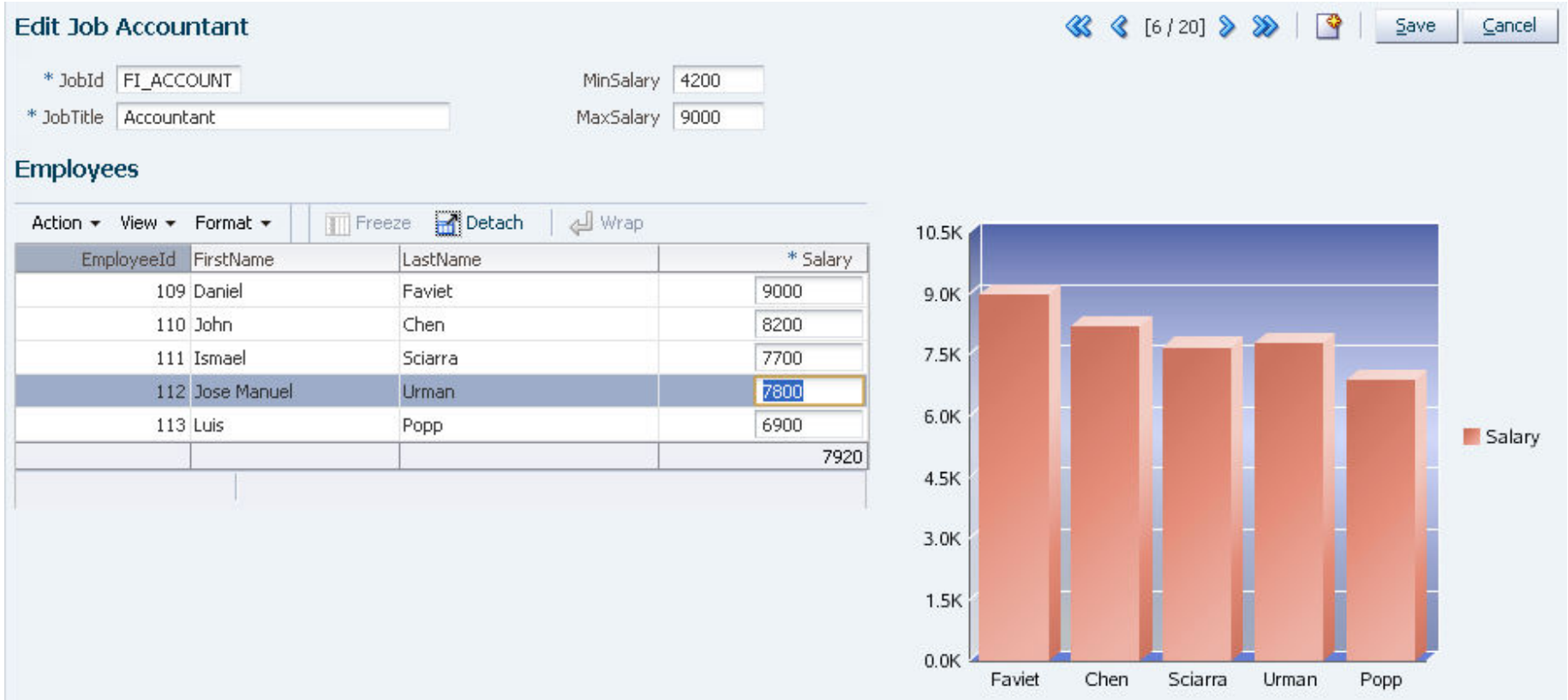
The screenshot shows the 'Application Definition Editor' window for 'HRServiceApplicationDefinition.xml'. The left sidebar displays a tree view of the application structure, including 'Employees' and 'EmployeesList'. The main area shows a table of templates and their paths, with 'FORM\_GROUP' selected. A 'Create file' dialog box is overlaid on the editor, asking: 'Do you want to create this file and copy the inherited template?'. The dialog has 'Yes' and 'No' buttons. Below the dialog, the editor shows XML code for a panel group layout. At the bottom of the editor, there are 'Revert' and 'Apply' buttons, and at the very bottom, 'Help', 'Apply', 'OK', and 'Cancel' buttons.

Template Name	Path
TABLE_PAGE_CONTENT	default/page/tablePageContent.vm
TREE_FORM_PAGE_CONTENT	default/page/treeFormPageContent.vm
TREE_PAGE_CONTENT	default/page/treePageContent.vm
SHUTTLE_PAGE_CONTENT	default/page/shuttlePageContent.vm
<b>Group Layout</b>	
GROUP_CONTENT	default/pageComponent/groupContent.vm
<b>FORM_GROUP</b>	default/pageComponent/empFormGroup.vm
TABLE_GROUP	
TABLE_SELECTION	

```
#if (${JHS.current.group.databound})
<af:panelGroupLayout layout="vertical">
  #if (${JHS.current.pageComponent})
    #if (${JHS.current.pageComponent})
      #JHS_PARSE_INCLUDE("${JHS.current.pageComponent}")
    #else
      #JHS_PARSE("SEARCH_AREA" ${JHS.current.model})
    #end
  #end
#end

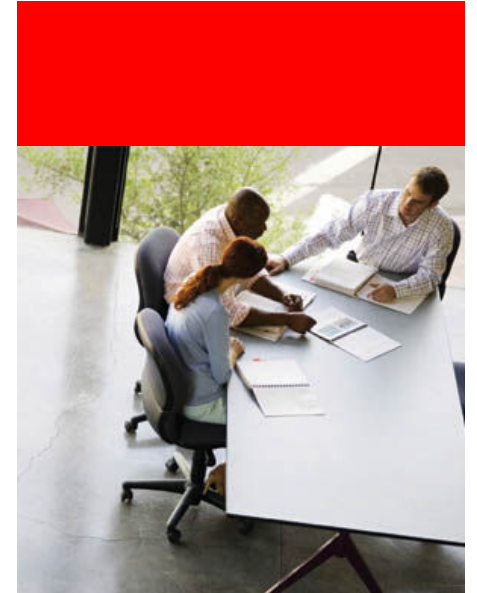
<af:panelGroupLayout rendered="#{!GROUP_NOT_IN_FIND_MODE}" id="${JHS.current.pageComponent}">
  #JHS_PARSE_INCLUDE("${JHS.current.pageComponent}")
</af:panelGroupLayout>
```

# Graph Generated Using Custom Template

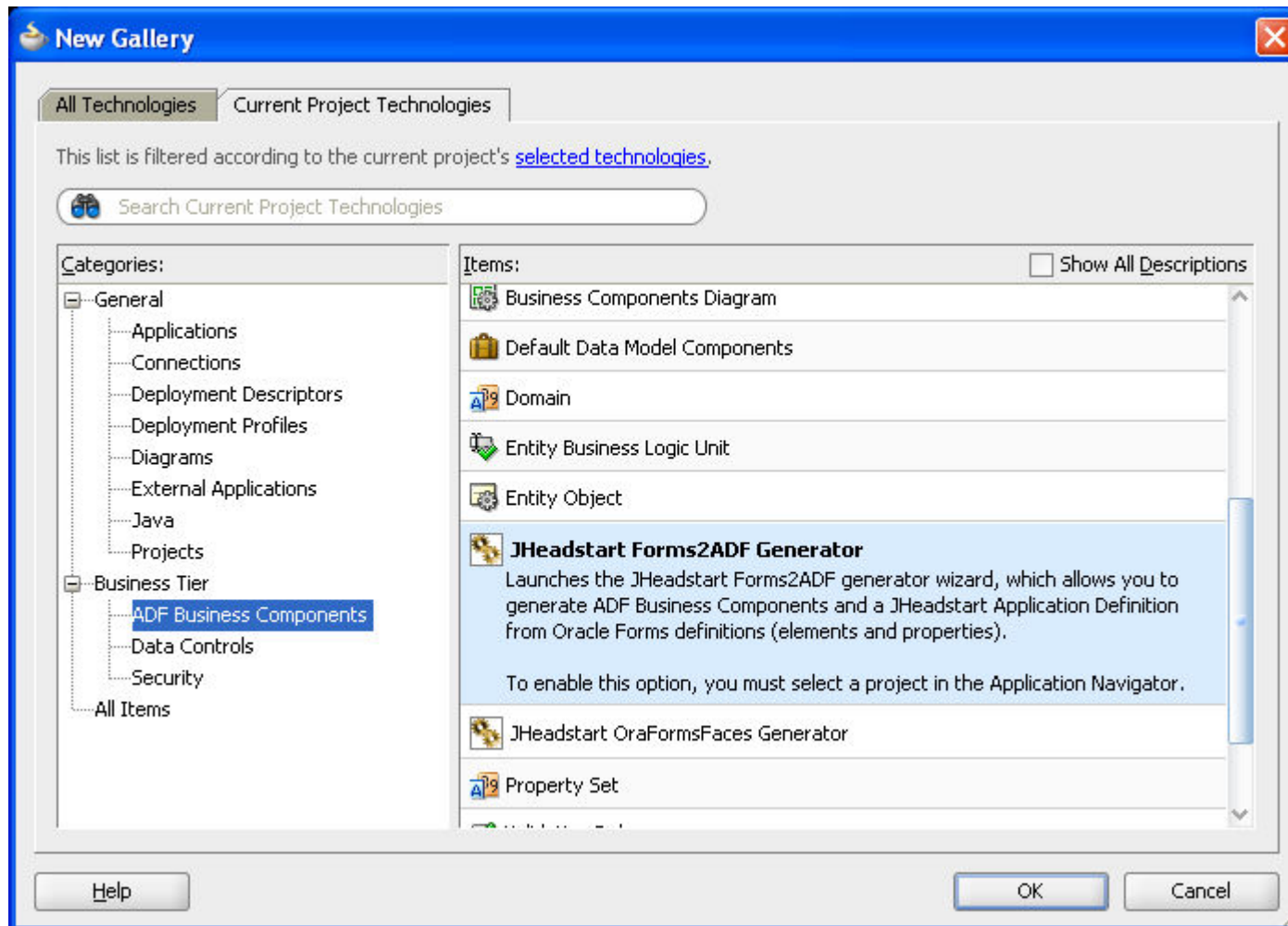




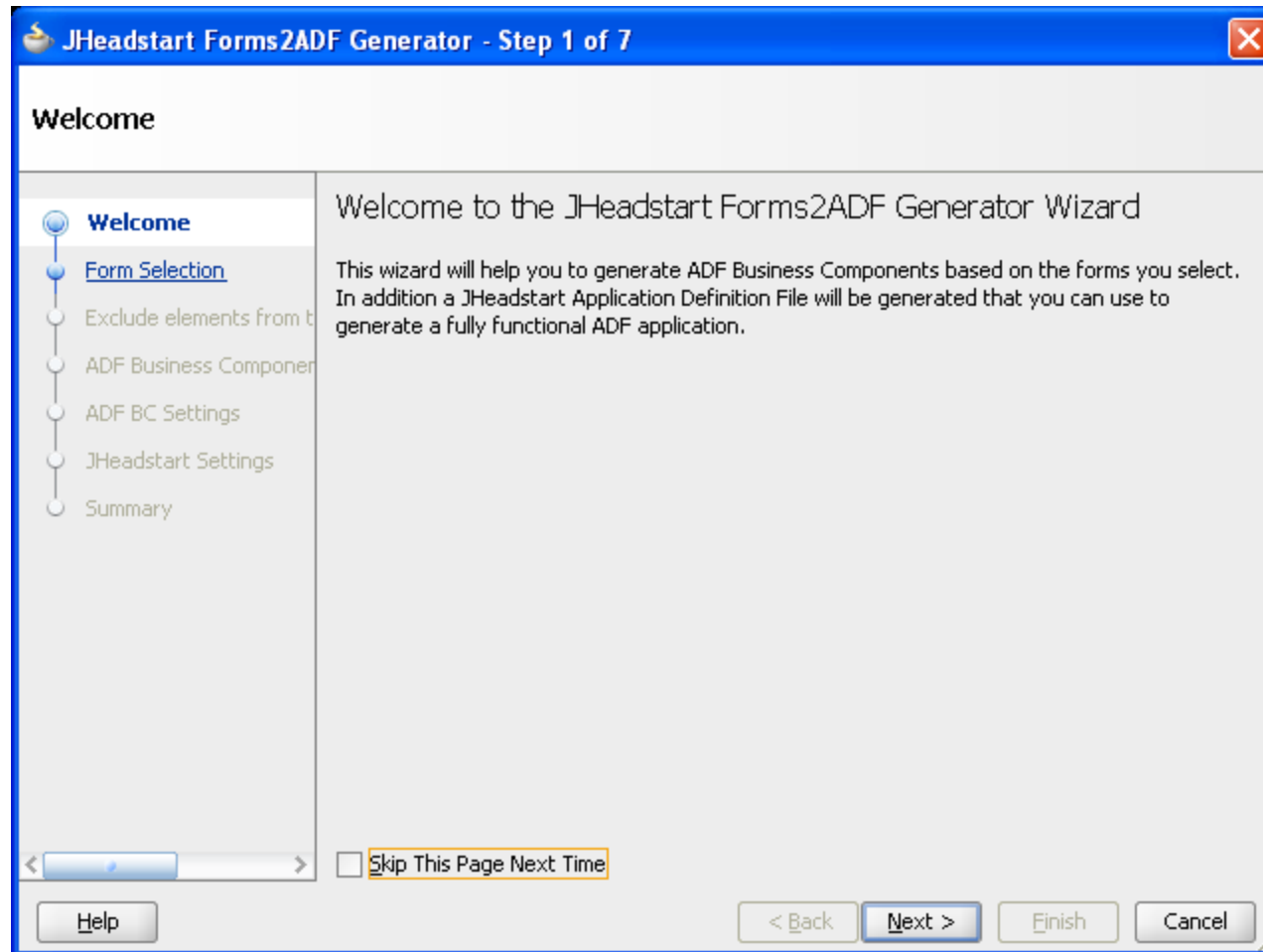
# **JHeadstart** Forms2ADF Generator



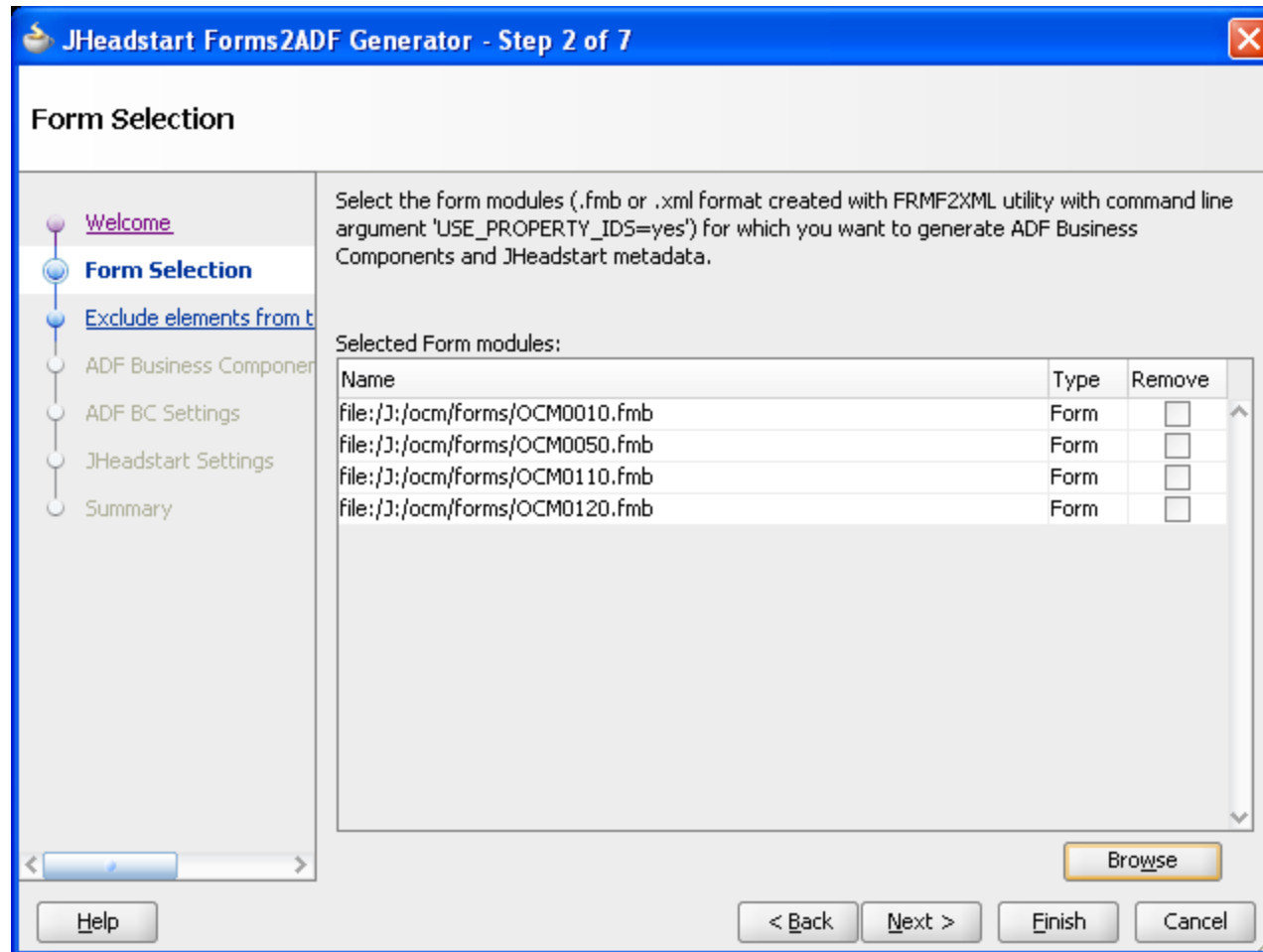
# Running the Forms2ADF Generator



# Running the Forms2ADF Generator



# Running the Forms2ADF Generator



# Running the Forms2ADF Generator

**JHeadstart Forms2ADF Generator - Step 3 of 7**

### Exclude elements from the selected forms

Enter elements from the selected forms to be excluded when generating ADF Business Components and the JHeadstart Application Definition File. You can use the \* at the end of the name to match elements that start with the excluded element name.

Names of form elements to be ignored by Forms2ADF Generator:

Name	Remove
CALENDAR	<input type="checkbox"/>
CALENDAR_TIME	<input type="checkbox"/>
QMS\$*	<input type="checkbox"/>
QF_*	<input type="checkbox"/>
CG\$CTRL	<input type="checkbox"/>
ORAFORMSFACES*	<input type="checkbox"/>
TOOLBAR*	<input type="checkbox"/>

Buttons: Help, < Back, Next >, Finish, Cancel, Defaults, Add




# Running the Forms2ADF Generator

JHeadstart Forms2ADF Generator - Step 4 of 7

### ADF Business Components Database Connection

Select the connection to your database for ADF Business Components. This connection should have access to all tables and views used in the forms you selected.

If the connection uses synonyms to access tables or views used by the forms, then the connection user must have the SELECT ANY DICTIONARY privilege for the Forms2ADF generator to succeed.

Connection:    

User Name: ocm

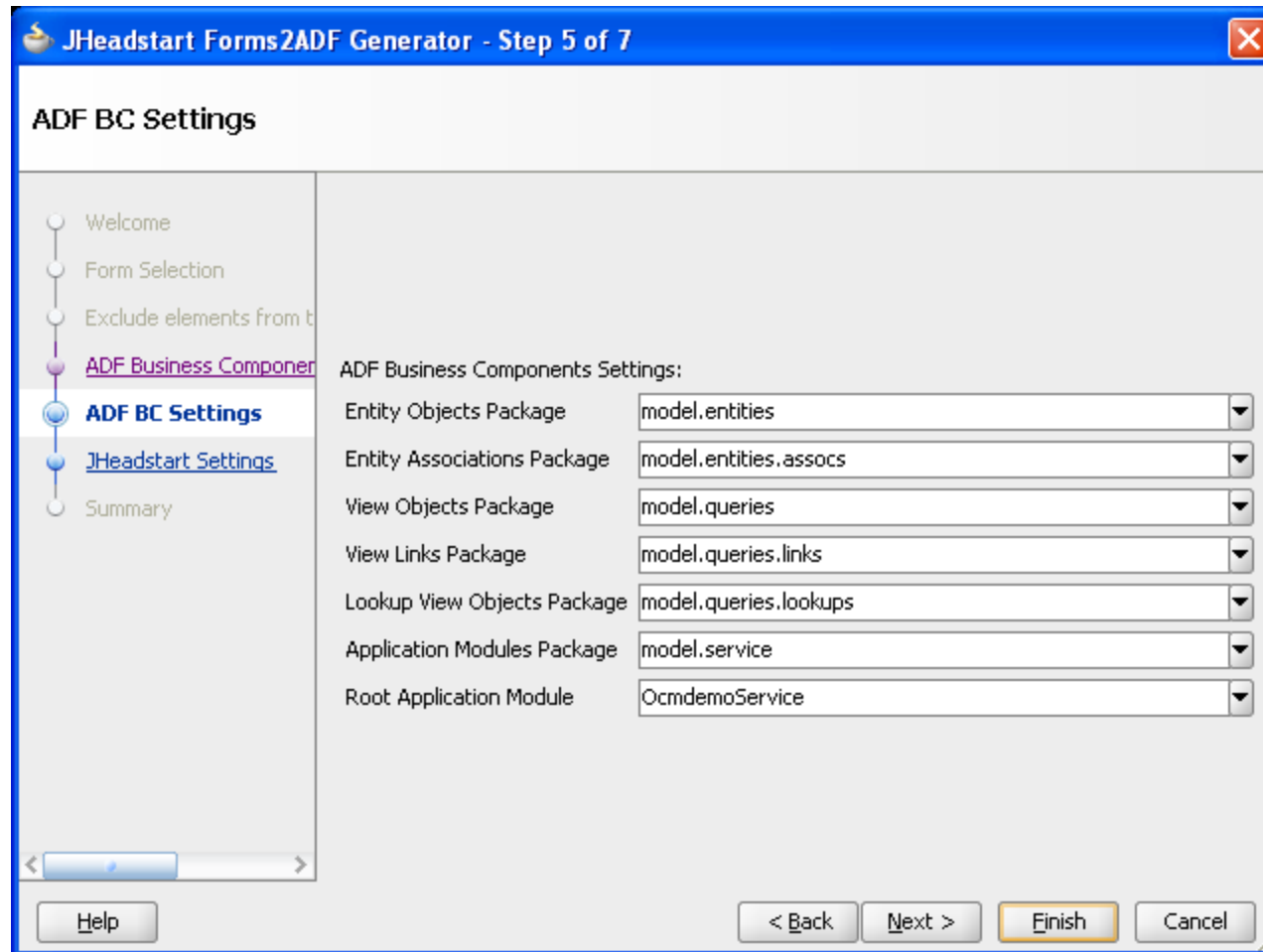
Driver: oracle.jdbc.OracleDriver

Connect String: jdbc:oracle:thin:@localhost:1521:orcl

< Back Next > Finish Cancel

Help

# Running the Forms2ADF Generator



The screenshot shows the 'JHeadstart Forms2ADF Generator - Step 5 of 7' window. The title bar is blue with a close button. The main area is titled 'ADF BC Settings'. On the left, a vertical navigation pane shows a list of steps: Welcome, Form Selection, Exclude elements from t, ADF Business Componer, ADF BC Settings (highlighted), JHeadstart Settings, and Summary. The main content area is titled 'ADF Business Components Settings:' and contains seven rows of settings, each with a label and a dropdown menu:

Setting Name	Value
Entity Objects Package	model.entities
Entity Associations Package	model.entities.assocs
View Objects Package	model.queries
View Links Package	model.queries.links
Lookup View Objects Package	model.queries.lookups
Application Modules Package	model.service
Root Application Module	OcmdemoService

At the bottom of the window, there are four buttons: 'Help', '< Back', 'Next >', and 'Finish' (highlighted in yellow). A 'Cancel' button is also present.

# Running the Forms2ADF Generator

JHeadstart Forms2ADF Generator - Step 6 of 7

### JHeadstart Settings

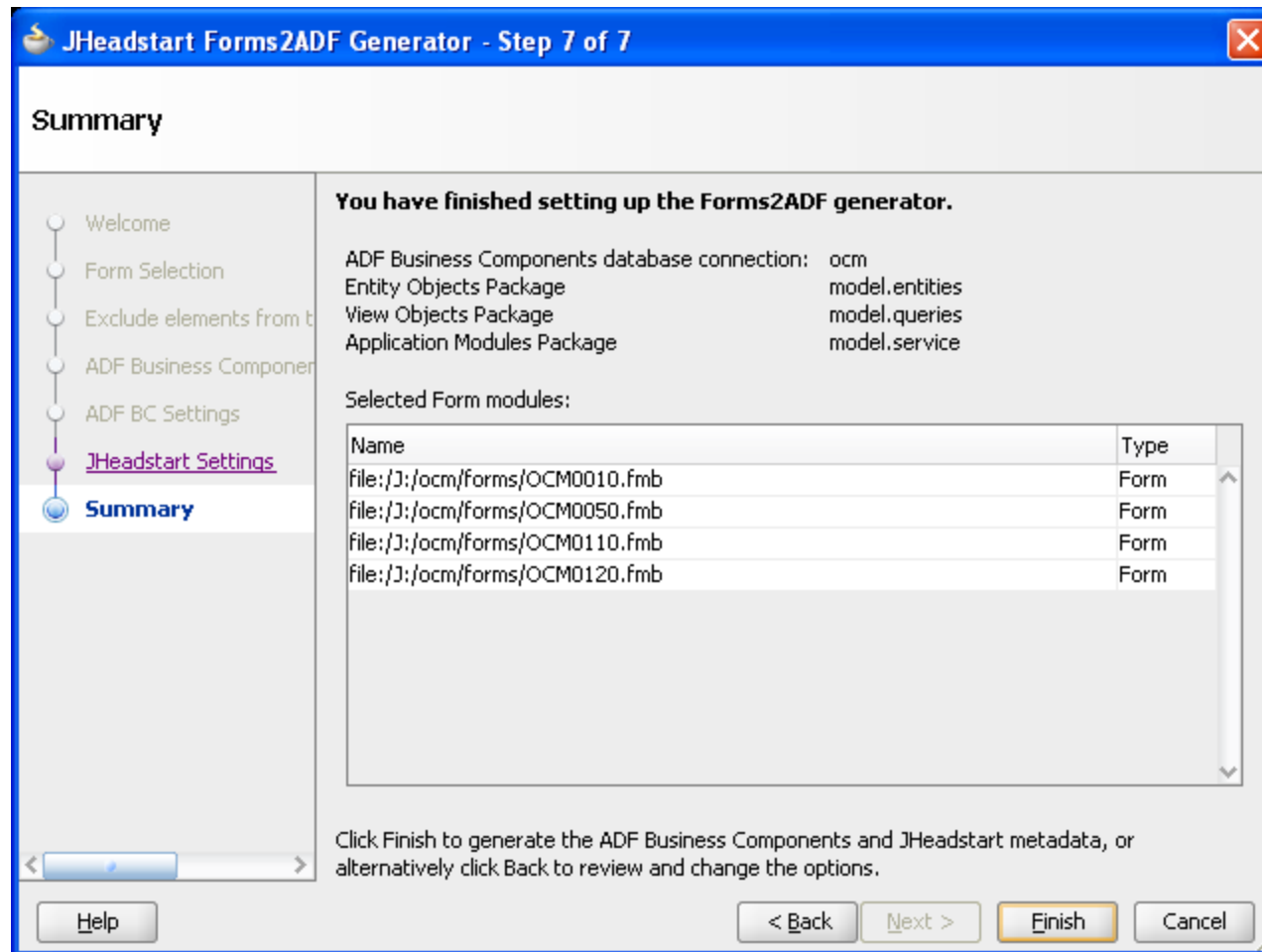
- Welcome
- Form Selection
- Exclude elements from t
- ADF Business Componer
- ADF BC Settings
- JHeadstart Settings**
- Summary

JHeadstart Settings

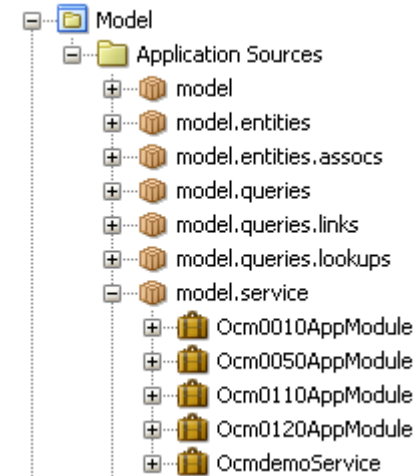
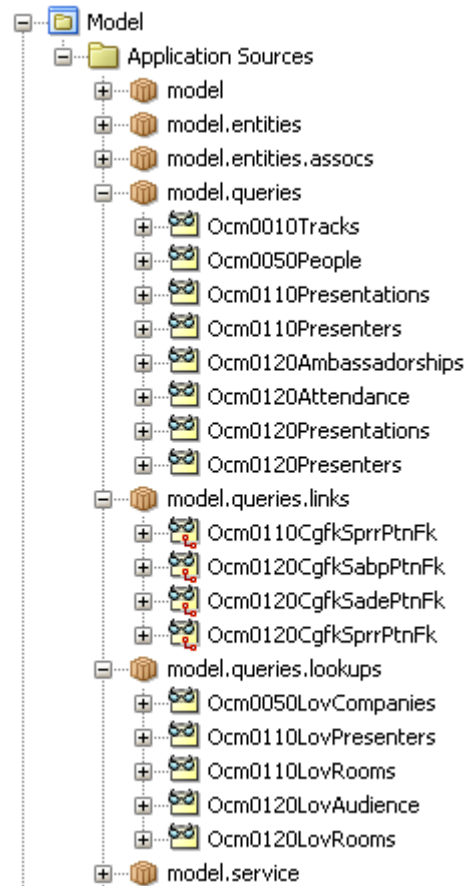
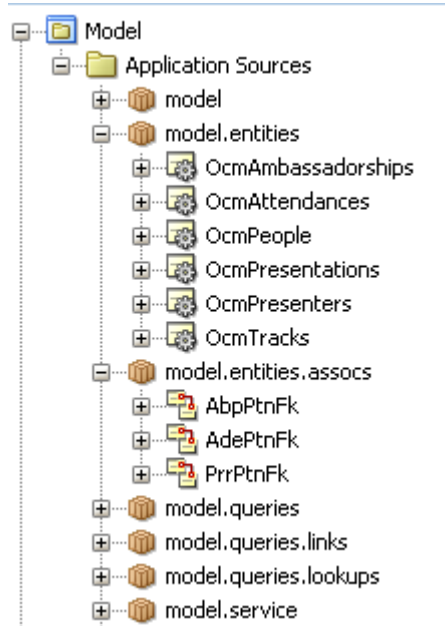
Service Name	Ocmdemo
View Controller Project	ViewController.jpr
Extract PL/SQL Logic?	<input checked="" type="checkbox"/>
Migrate Text Graphics?	<input checked="" type="checkbox"/>
Use Text Graphics as Label?	<input checked="" type="checkbox"/>
LOV implementation	ADF Model
Search implementation	ADF Model

Help < Back Next > Finish Cancel

# Running the Forms2ADF Generator



# Generated ADF Business Components



# Generated Application Definition

The screenshot shows the 'OCMDemo - Application Definition Editor' window. On the left is a tree view of the application structure. The 'Ocm0050People' folder is expanded, showing 'Items' > 'CgSpa1' > 'CgSpa1cgBoilerplateGroupcgFrame1' > 'OdtugMember'. The 'OdtugMember' item is selected. On the right is a properties table for the selected item.

General	
Bound to Model Attribute? *	<input checked="" type="checkbox"/>
Name *	OdtugMember
Short Name	
Attribute Name *	OdtugMember
Value	
Java Type *	java.lang.String
Display Type *	checkBox
Domain	Ocm0050PeopleOdtugMemberDomain
Display Settings	
Display in Form Layout? *	false
Display in Table Layout? *	false
Display in Table Overflow Area? *	true
<input checked="" type="checkbox"/> Display at Right of Item	
Display Summary Type in Table	
Prompt in Form Layout	Odtug Member
Prompt in Table Layout	
Short prompt	
Width	#{HINTS\$.displayWidth}

At the bottom of the window are buttons for 'Help', 'Apply', 'OK', and 'Cancel'. The 'Properties' and 'Templates' tabs are visible at the bottom of the right pane.

# Oracle Forms Screen

ODTUG Conference Manager, 2002 Demo Application

File Edit View Window Help Administration Self Service

Administrate People

First Name	Last Name	Email	Company
Ken	Atkins		RightSizing
Frank	Brink	frank.brink@oracle.com	Amis
Bradley	Brown		Explorer Consulting
David	Brown	david.brown@oracle.com	Explorer Consulting
Steven	Davelaar	steven.davelaar@oracle.co	Oracle Corporation
Paul	Dorsey		Dulcian
William	Dwight	william.dwight@oracle.com	Oracle Corporation
Kent	Graziano		Quest Software
Erwin	Groenendal	erwin@cumquat.nl	cumQuat
Martijn	Hinten	martijn@cumquat.nl	cumQuat

ODTUG History

Odtug Member

Personal

Country: Netherlands

Birthdate: 21-SEP-1963

Biography: He created Headstart, he created JHeadstart and he will create much more. The master of generation is

# JHeadstart Generated ADF/JSF Page

ORACLE JHeadstart Demo

Home Administration SelfService

Administrate Conference Tracks Administrate Companies Administrate Conference Rooms Administrate Evaluation Questions **Administrate People**

Administrate People Save Cancel

Filter By First Name  Advanced Search

Action View Format  Freeze Detach Wrap

	First Name	Last Name	Email	Company
<input type="checkbox"/> <input type="checkbox"/>	Ken	Atkins		cumQuat
<input type="checkbox"/> <input type="checkbox"/>	Frank	Brink	frank.brink@oracle.com	Oracle Corporation
<input type="checkbox"/> <input type="checkbox"/>	Bradley	Brown		Explorer Consulting
<input type="checkbox"/> <input type="checkbox"/>	David	Brown	david.brown@oracle.com	Oracle Corporation
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Steven	Davelaar	steven.davelaar@oracle.com	Oracle Corporation
<input type="checkbox"/> <input type="checkbox"/>	Paul	Dorsey		Oracle Corporation
<input type="checkbox"/> <input type="checkbox"/>	William	Dwight	william.dwight@oracle.com	Explorer Consulting
<input type="checkbox"/> <input type="checkbox"/>	Kent	Graziano		Quest Software
<input type="checkbox"/> <input type="checkbox"/>	Erwin	Groenendal	erwin@cumquat.nl	cumQuat
<input type="checkbox"/> <input type="checkbox"/>	Martijn	Hinten	martijn@cumquat.nl	cumQuat

**ODTUG History**  
OdtugMember

**Personal**  
Country: Netherlands  
Birthdate: 21-Sep-1963  
Biography: He created Headstart, he created JHeadstart and he will create much more.

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# Oracle Forms Screen

The screenshot shows an Oracle Forms application window titled "ODTUG Conference Manager, 2022 Demo Application". The window has a menu bar with "File", "Edit", "View", "Window", "Help", "Administration", and "Self Service". Below the menu bar is a toolbar with various icons for file operations and navigation. The main content area is titled "Submit Presentations for ODTUG 2002" and contains the following fields and controls:

- Title:** CDM RuleFrame: the framework for analysing, designing and implementing business rules
- Technology Track:** Oracle Forms Developer (dropdown menu)
- Keywords:** business rules, design, j2ee, html, forms, eee
- Presentation Level:** Novice (dropdown menu)
- Abstract:** Business Rules are key. Multiple technologies (Java/J2ee/HTML, Forms, Portal) used to build applications that act on the same data.

Below the abstract, there are two tabs: "Schedule" and "Administration". The "Administration" tab is active and contains the following fields:

- Room:** Capri (dropdown menu)
- Slot:** 2.00 -3.00 PM (dropdown menu)
- Day:** Wednesday 19th June (dropdown menu)

Below the "Administration" tab, there is a section titled "Presenters" with a table of presenter information:

First Name	Last Name	Primary presenter?	Demonstrator?
Steven	Davelaar	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lucas	Jellema	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

At the bottom of the window, there is a status bar showing "Record: 1/2" and a "<OSC>" button.

# JHeadstart Generated ADF/JSF Page

The screenshot displays the Oracle JHeadstart Demo application interface. The main header shows 'ORACLE JHeadstart Demo' and navigation tabs for 'Home', 'Administration', and 'SelfService'. Below the tabs, there are sub-tabs for 'Submit Presentations', 'Presentation Scheduler', 'Presentation Evaluations', and 'Conference Attendance Management'. The 'Presentations' form is the primary focus, containing fields for Title, Technology Track, Keywords, Presentation Level, and Abstract. A 'Schedule' dialog box is open, showing details for Room (Capri), Slot (2.00 -3.00 PM), and Day (Wednesday 19th June). Below the form is a 'Presenters' table with columns for First Name, Last Name, Primary presenter?, and Demonstrator?.

**Presentations**

Filter By: Title [v] [Advanced Search]

\* Title: CDM RuleFrame: the framework for analysing, designing and implementing business rules

\* Technology Track: 16

Keywords: business rules, design, j2ee, html, forms, eee

\* Presentation Level: Novice [v]

Abstract: Business Rules are key. Multiple technologies (Java/J2ee/HTML, Forms, Portal) used to build applications that act on the same data.

**Schedule**

Room: Capri [v]

Slot: 2.00 -3.00 PM [v]

Day: Wednesday 19th June [v]

**Presenters**

Action	View	Format	+	Freeze	Detach	Wrap	First Name	Last Name	Primary presenter?	Demonstrator?
							Lucas	Jellema	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
							Steven	Davelaar	<input type="checkbox"/>	<input type="checkbox"/>

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# Oracle Forms Screen

The screenshot displays the Oracle Forms application window titled "ODTUG Conference Manager, 2002 Demo Application". The main form is for submitting presentations, with fields for Title, Technology Track, Keywords, Presentation Level, and Abstract. A "Schedule" section includes Room, Slot, and Day dropdowns. A "Presenters" table lists Steven Davelaar and Lucas Jellema. A "Conference Rooms" dialog box is open, showing a list of rooms with "Pompeian Ballroom Salon I&II" selected.

**ODTUG Conference Manager, 2002 Demo Application**

File Edit View Window Help Administration Self Service

Submit Presentations for ODTUG 2002

Title: CDM RuleFrame: the framework for analysing, designing and implementing business rules

Technology Track: Oracle Forms Developer

Keywords: business rules, design, j2ee, html, forms, eee

Presentation Level: Advanced

Abstract: Business Rules are key. Multiple technologies (Java/J2ee/HTML, Forms, Portal) used to build applications that act on the same data.

**Schedule Administration**

Room: Roman Ballroom Salon II

Slot: 2.00 -3.00 PM

Day: Wednesday 19th June

**Presenters**

First Name	Last Name	Primary pres
Steven	Davelaar	<input checked="" type="checkbox"/>
Lucas	Jellema	<input type="checkbox"/>
		<input type="checkbox"/>

**Conference Rooms**

Find %

- Name
- Roman Ballroom Salon I
- Florentine Ballroom
- Pompeian Ballroom Salon I&II
- Anzio
- Turin
- Trevi
- Capri

Find OK Cancel

# JHeadstart Generated ADF/JSF Page

The screenshot displays the Oracle JHeadstart Demo application interface. The main window has a navigation bar with 'Home', 'Administration', and 'SelfService' tabs. The 'Administration' tab is active, showing a 'Submit Presentations' section with various filters and a 'Schedule' section with room, slot, and day selection. A 'Presenters' table is visible at the bottom. A 'Search and Select Room' dialog box is open in the foreground, allowing users to search for a room by ID or name. The search results list several rooms, with 'Trevi' currently selected.

**Search and Select Room**

Search

Match  All  Any

Id

Name

Name
Roman Ballroom Salon I
Florentine Ballroom
Pompeian Ballroom Salon I&II
Anzio
Turin
<b>Trevi</b>
Capri
Pompeian Ballroom Salon III&IV
Roman Ballroom Salon II
Roman Ballroom Salon III
Roman Ballroom Salon IV
Bathroom

# Oracle Forms Screen

The screenshot shows the Oracle Forms Presentation Scheduler application window. The title bar reads "ODTUG Conference Manager, 2002 Demo Application". The menu bar includes "File", "Edit", "View", "Window", "Help", "Administration", and "Self Service". The toolbar contains various icons for file operations and navigation. The main window is titled "Presentation Scheduler" and displays a list of presentations with columns for Title, Slot, and Day. Below the list are filters for Room, Technology, and Level. A "Details" section is expanded for the selected presentation, showing an Abstract, Keywords, and a checked "Oracle Presentation?" checkbox. At the bottom right, there are buttons for "Audience", "Presenters", and "Ambass...".

Title	Slot	Day
CDM RuleFrame: the framework for analysing, design	2.00 -3.00 PM	Wednesday 19th J...
Forms Tuning Techniques -- Users Will Sing Praise	2.00 -3.00 PM	Wednesday 19th J...
High Performance Web Sites with Web Cache	3.15 -4.15 PM	Tuesday 18th June
How the west was won - Oracle Designer makes it		Monday 17th June
Implementing Business Rules in Business Componen	4.45 -6.15 PM	Wednesday 19th J...
Java Race: Case Study Comparing the Performance	8.30-9.30 AM	Monday 17th June
Java/J2EE Application Development with Oracle Desi	11.00-12.30...	Wednesday 19th J...
Migrate to the Web with Oracle9i Designer	3.15 -4.15 PM	Monday 17th June

Room: Roman Ballroom Salo  
Technology: Oracle Forms Developer  
Level: Advanced

Details  
Track

Abstract: Business Rules are key. Multiple technologies (Java/J2ee/HTML, Forms, Portal) used to build applications that act on the same data.

Keywords: business rules, design, j2ee, html, forms, eee

Oracle Presentation?

Audience Presenters Ambass...

# JHeadstart Generated ADF/JSF Page

The screenshot displays the Oracle JHeadstart Demo interface, specifically the Presentation Scheduler. The page has a blue header with the Oracle logo and the text "ORACLE JHeadstart Demo". Below the header are navigation tabs for "Home", "Administration", and "SelfService". Under "Administration", there are sub-tabs for "Submit Presentations", "Presentation Scheduler", "Presentation Evaluations", and "Conference Attendance Management".

The main content area is titled "Presentation Scheduler" and includes a "Filter By" dropdown set to "Title" and an "Advanced Search" button. Below this is a toolbar with "Action", "View", "Format", a plus sign, "Freeze", "Detach", and "Wrap" options. A table lists several presentations with columns for "Title", "Slot", and "Day". The selected row is "Java Race: Case Study Comparing the Performance of".

Below the table, there are input fields for "Room" (Anzio), "\* Technology Track" (23), and "\* Level" (Intermediate). A "Details" section contains an "Abstract" text area, a "Keywords" text area with the value "java,pl/sql,performance,batch", and a checked "OraclePresentation" checkbox. At the bottom of the details section are buttons for "Audience", "Presenters", and "Ambassadors".

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* Title	Slot	Day
CDM RuleFrame: the framework for analysing, designir	2.00 -3.00 PM	Wednesday 19th June
Forms Tuning Techniques -- Users Will Sing Praise	2.00 -3.00 PM	Wednesday 19th June
High Performance Web Sites with Web Cache	3.15 -4.15 PM	Tuesday 18th June
Implementing Business Rules in Business Components f	4.45 -6.15 PM	Wednesday 19th June
Java Race: Case Study Comparing the Performance of	8.30-9.30 AM	Monday 17th June
Java/J2EE Application Development with Oracle Design	11.00-12.30 I	Wednesday 19th June
Migrate to the Web with Oracle9i Designer	3.15 -4.15 PM	Monday 17th June
Mom, I'am in Vegas - Business Intelligence for the millio		Monday 17th June



# What about PL/SQL Logic?

- Custom PL/SQL Logic not automatically migrated to Java
- JHeadstart prefers sound multi-tier target architecture (ADF MVC) above automated PL/SQL migration
  - Analyze the logic
  - Determine in which tier(s) it should be implemented
  - Determine how to implement it
- Application Definition Editor shows all form, block and item triggers and all program units
  - Good overview of all custom PL/SQL logic
  - Ability to move logic to database, to ADF BC or to JSF managed beans

# PL/SQL Code in Appl. Definition Editor

The screenshot displays the Oracle Application Definition Editor (ADE) interface. The left pane shows a tree view of the application structure, with the 'Program Units' folder expanded to show a list of units. The unit 'CGFK\$QRY\_PEOPLE\_PSN\_COPY\_FK' is selected and highlighted. The right pane shows the 'General' tab for this unit, with the following details:

Property	Value
Name *	CGFK\$QRY_PEOPLE_PSN_COPY_FK
Program Unit Type *	Procedure

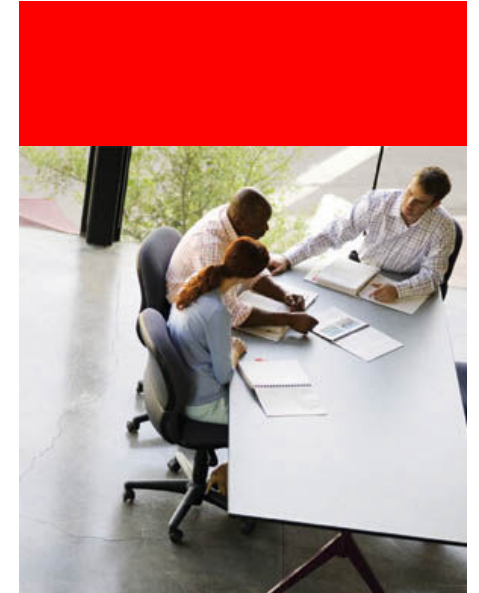
Below the properties, the PL/SQL code is displayed in a text area:

```
/* CGFK$QRY_PEOPLE_PSN_COPY_FK */  
/* Query foreign key value/query lookup data. */  
PROCEDURE CGFK$QRY_PEOPLE_PSN_COPY_FK(  
  P_L_COPY_NAME   OUT VARCHAR2, /* Value in item :PEOPLE.L_COPY_...  
  P_ID_WORKS_FOR  IN  NUMBER    /* Value in item :PEOPLE.ID_WOR...  
)  
IS  
  CURSOR C1 IS  
    SELECT L_COPY.NAME  
    FROM   OCM_COMPANIES L_COPY  
    WHERE  P_ID_WORKS_FOR = L_COPY.ID  
    ;  
  CURSOR C2 IS  
    SELECT L_COPY.NAME  
    FROM   OCM_COMPANIES L_COPY  
    WHERE  P_ID_WORKS_FOR = L_COPY.ID  
    ;  
BEGIN  
  TR /
```

At the bottom of the editor, there are buttons for 'Revert', 'Apply', 'Help', 'Apply', 'OK', and 'Cancel'. The 'Properties' and 'Templates' tabs are visible at the bottom of the right pane.



# **JHeadstart** **OraFormsFaces** **Generator**





# OraFormsFaces

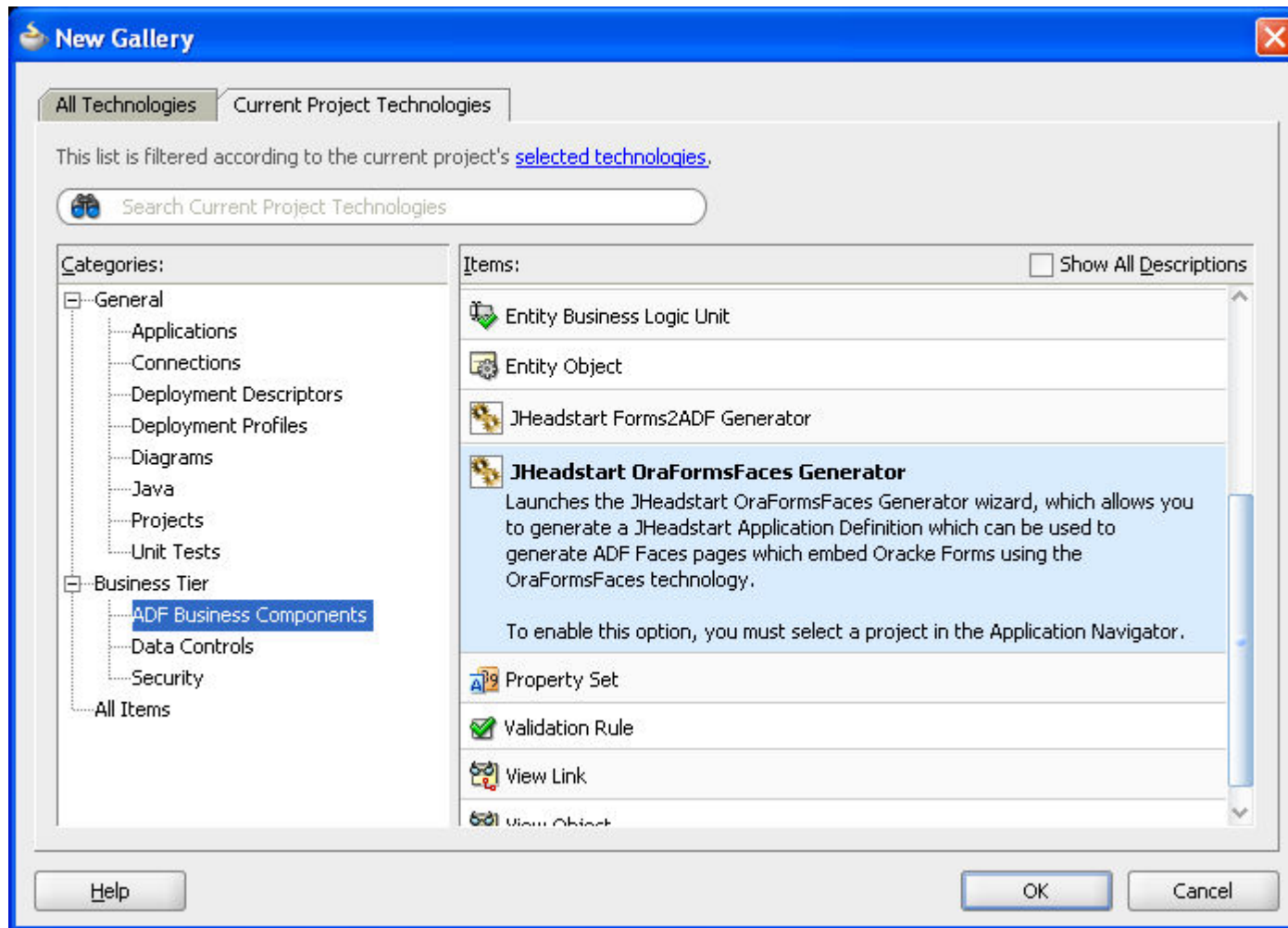
- Third party product supplied by Commit Consulting
- Allows reuse of existing Forms as full featured JSF components
- Two-way communication between forms and ADF Faces web pages
- Allows for **incremental migration** to ADF/SOA world



# JHeadstart OraFormsFaces Generator

- JHeadstart accelerates use of OraFormsFaces
  - Generate pages with embedded Form components using Item display type “OraFormsFaces”
  - Easy deeplinking into Oracle Forms
  - Generate Create, Delete, Save buttons that call out to embedded Oracle Form
  - Add security to JSF pages holding Forms Components
  - Generate menu structure

# Running the OraFormsFaces Generator



# Running the OraFormsFaces Generator

Form Selection

Select the form modules (.fmb or .xml format created with FRMF2XML utility with command line argument 'USE\_PROPERTY\_IDS=yes').

Selected Form modules:

Name	Type	Remove
file:/J:/ocm/forms/OCM0020.fmb	Form	<input type="checkbox"/>
file:/J:/ocm/forms/OCM0030.fmb	Form	<input type="checkbox"/>
file:/J:/ocm/forms/OCM0040.fmb	Form	<input type="checkbox"/>
file:/J:/ocm/forms/OCM0130.fmb	Form	<input type="checkbox"/>
file:/J:/ocm/forms/OCM0140.fmb	Form	<input type="checkbox"/>

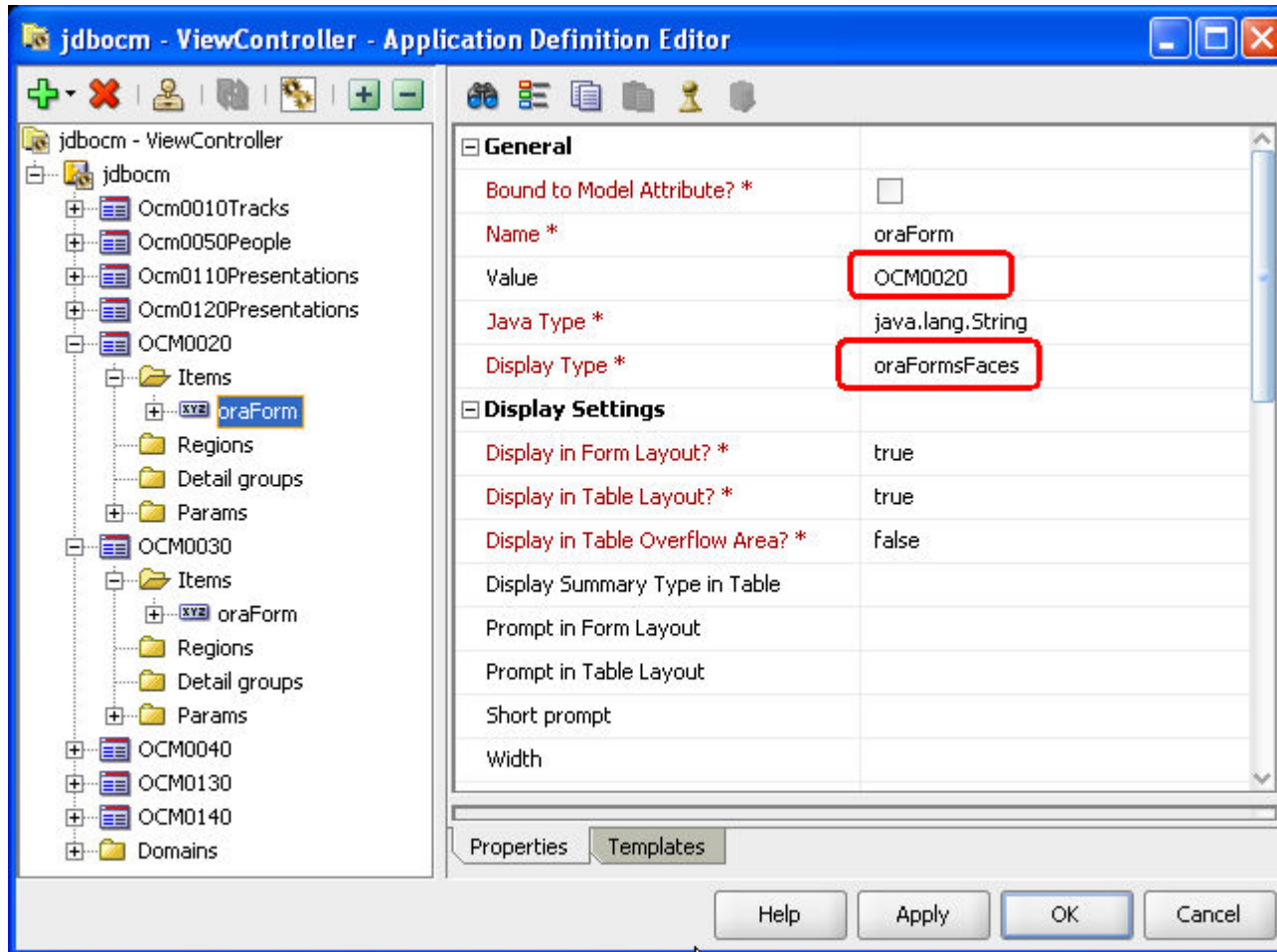
Browse

Help < Back Next > Finish Cancel

# Running the OraFormsFaces Generator

The screenshot shows a dialog box titled "JHeadstart OraFormsFaces Generator - Step 3 of 4". The main area is titled "Generator Settings". On the left, there is a vertical navigation pane with four steps: "Welcome", "Form Selection", "Generator Settings" (which is highlighted in blue), and "Summary". The main content area is labeled "JHeadstart Settings:" and contains two fields: "Service Name" with the value "jdbocm" and "View Controller Project" with the value "ViewController.jpr". At the bottom of the dialog, there are four buttons: "Help", "< Back", "Next >", and "Finish" (which is highlighted in yellow). A mouse cursor is visible over the "Next >" button.

# OraFormsFaces Metadata in JHeadstart Application Definition



# Integration JHeadstart - OraFormsFaces

ORACLE JHeadstart Demo

Home Administration SelfService

Administrate Conference Tracks **Administrate Companies** Administrate Conference Rooms Administrate Evaluation Questions Administrate People

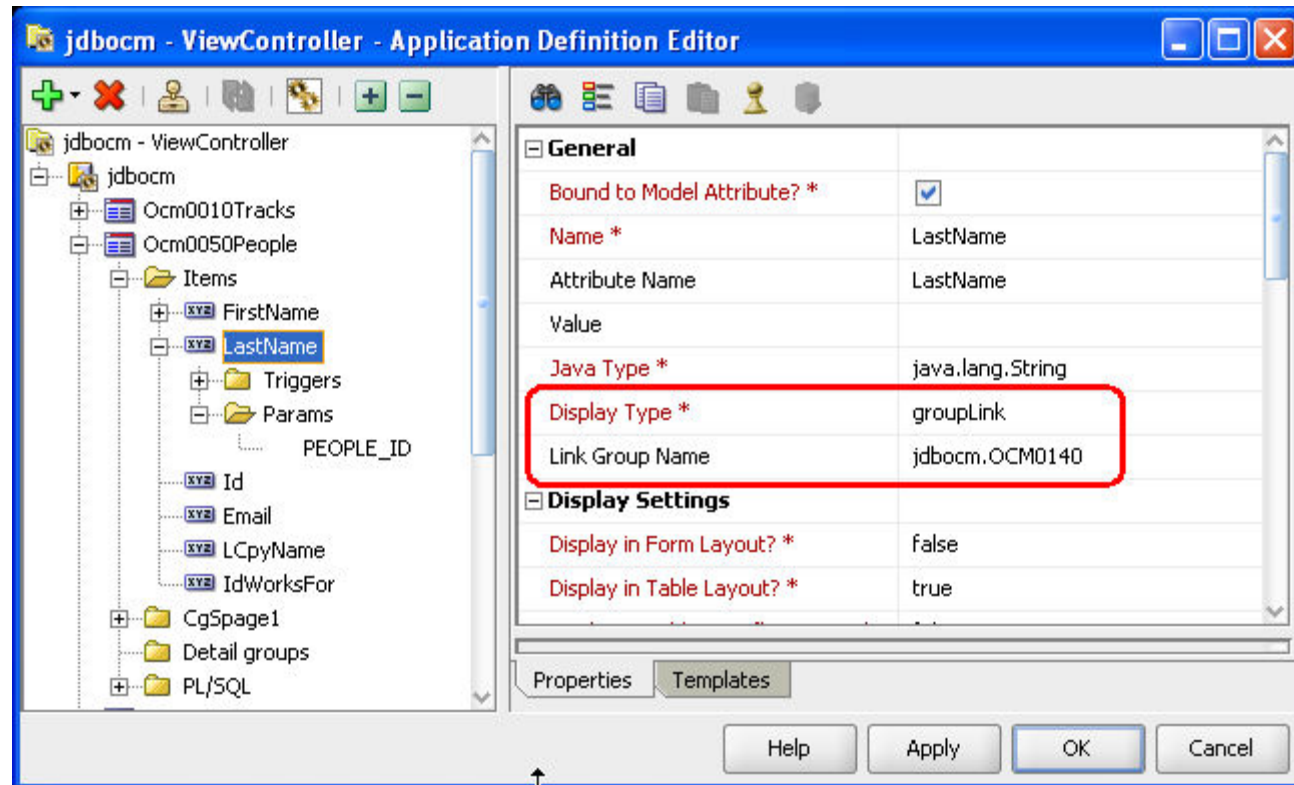
Administrate Companies Save Cancel

Name	Country	Company Size
Amis	Netherlands	Just under average (50-100)
Arrows Enterprises	United States of America	Just under average (50-100)
Dulcian	United States of America	Just under average (50-100)
Explorer Consulting	United States of America	Just under average (50-100)
Oracle Corporation	United States of America	Huge and above (1001 and ab...)
Quest Software	United States of America	Pretty Big (101-1000)
Quovera	United States of America	Just under average (50-100)
RightSizing	United Kingdom	Tiny (1-5)

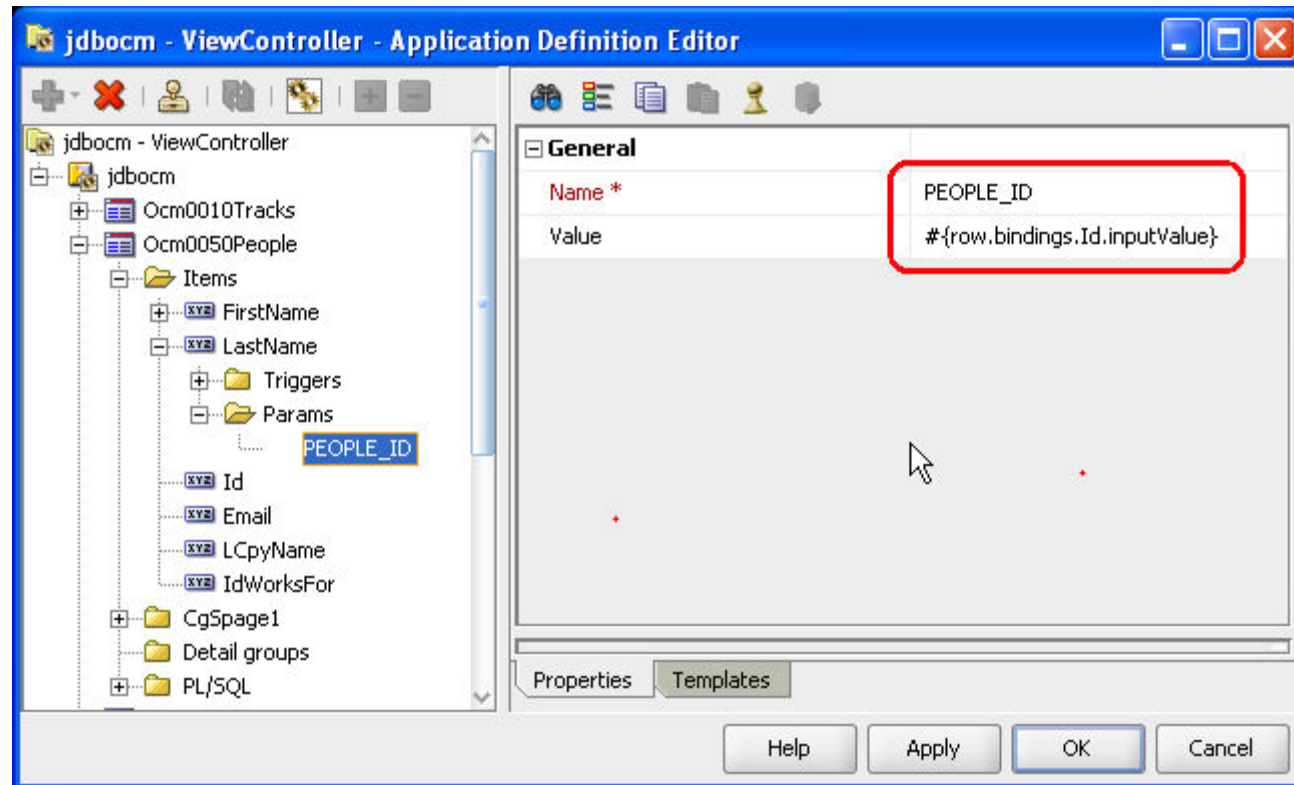
ORACLE

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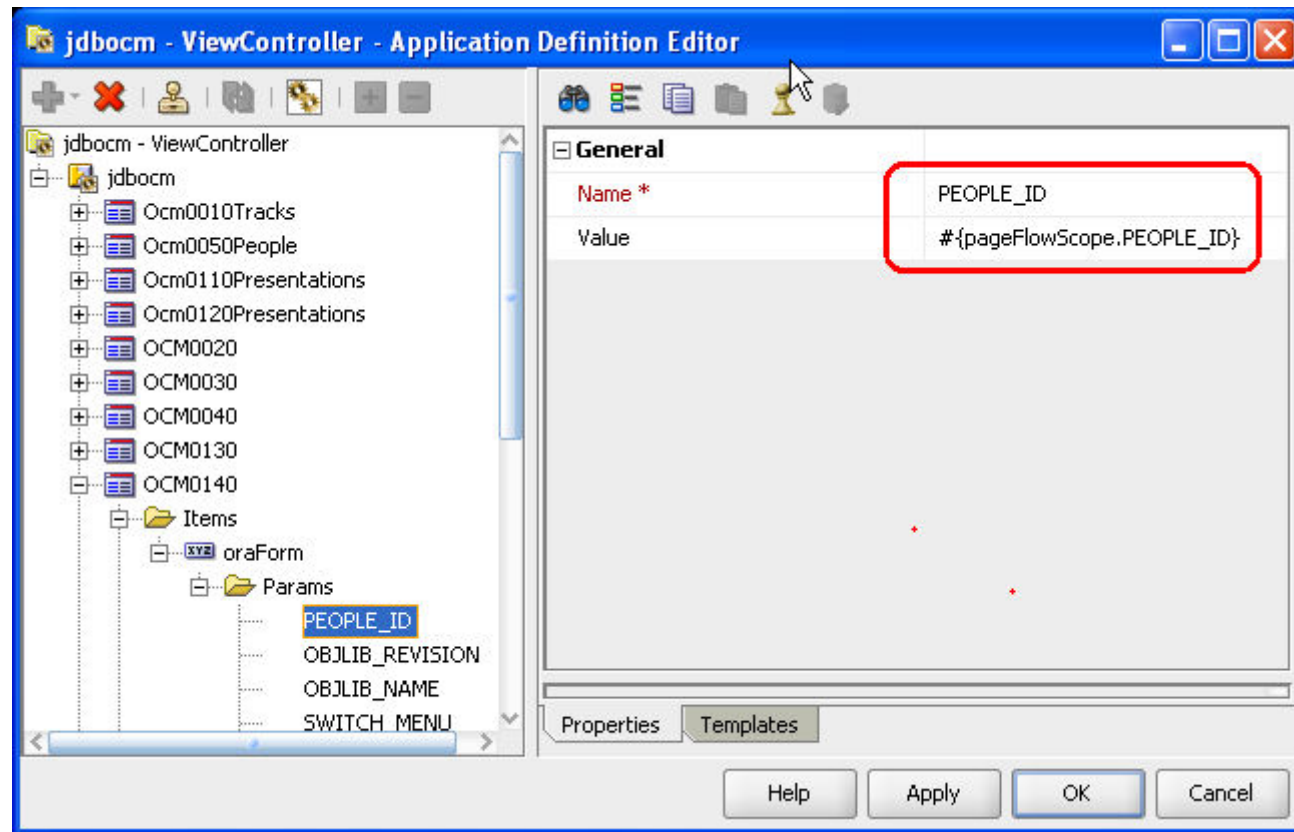
# Setting up Deeplinking between ADF Page and Oracle Form



# Setting up Deeplinking between ADF Page and Oracle Form



# Setting up Deeplinking between ADF Page and Oracle Form



# Integration JHeadstart – OraFormsFaces Deeplinking JSF Page and Oracle Form

ORACLE JHeadstart Demo

Home Administration SelfService

Administrate Conference Tracks Administrate Companies Administrate Conference Rooms Administrate Evaluation Questions Administrate People

Administrate People Save Cancel

Filter By First Name  Advanced Search

Action View Format + Freeze Detach Wrap

	First Name	Last Name	Email	Company
	Ken	Atkinsqqq		cumQuat
	Frank	Brink	frank.brink@oracle.com	Oracle Corporation
	Bradley	Brown		Explorer Consulting
	David	Brown	david.brown@oracle.com	Oracle Corporation
	Steven	Davelaar	steven.davelaar@oracle.com	Oracle Corporation
	Paul	Dorsey		Oracle Corporation
	William	Dwight	william.dwight@oracle.com	Explorer Consulting
	Kent	Graziano		Quest Software
	Erwin	Groenendal	erwin@cumquat.nl	cumQuat
	Martijn	Hinten	martijn@cumquat.nl	cumQuat

**ODTUG History**  
OdtugMember

**Personal**  
Country: Netherlands  
Birthdate: 21-Sep-1963  
Biography: He created Headstart, he created JHeadstart and he will create much more. The master of generation is now the Knight of Reuse.

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# Integration JHeadstart – OraFormsFaces Deeplinking JSF Page and Oracle Form

The screenshot displays the Oracle JHeadstart Demo interface. The main window is titled "ORACLE JHeadstart Demo" and has a navigation bar with "Home", "Administration", and "SelfService". Under "Administration", there are links for "Administrate Conference Tracks", "Administrate Companies", "Administrate Conference Rooms", "Administrate Evaluation Questions", and "Administrate People". The current page is "Administrate People (Davelaar) >" and is titled "Conference Attendance Management".

The form contains the following fields and sections:

- Personal Details:**
  - First Name: Steven
  - Last Name: Davelaar (highlighted with a red box)
  - Email: steven.davelaar@oracle.com
  - Country: Netherlands
  - Odtug Member
  - Biography: He created Headstart, he created JHeadstart and he will create much more. The master of generation is now the Knight of Reuse.
  - Birthdate: 21-SEP-1963
- Presenter Of:**

Day	Slot	Title
Tuesday 18th June	3:15 -4:15 PM	Oracle JHeadstart - Building E-Business Applications
Wednesday 19th June	2:00 -3:00 PM	CDM RuleFrame: the framework for analysing, design
Tuesday 18th June	8:30-9:30 AM	Oracle Forms 2.3 - The lasting legacy
Wednesday 19th June	4:45 -6:15 PM	Implementing Business Rules in Business Componen
- Primary pres...  Demonstrator? Level: All
- Abstract: [Empty text area]

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# JHeadstart – Key Messages

- JHeadstart incorporates a **host of best practices** in developing ADF Fusion web applications
- **Rapid prototyping** to speed up analysis phase, and to figure out most suitable user interface patterns
- Repetitive development tasks are **automated**.
- JHeadstart auto-implements **common user interface design patterns**
- Forms application definitions can be reused to **ease transition to ADF and SOA**
- Learn ADF 11 by example.



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