

O142 - Oracle 10g Portal with Java Portlets

Course Objectives

This course has been designed to follow-on from the iTrain 10gAS Portal Management course.

The course introduces the integrated Java portlet development environment and covers all the practical skills involved with the design, development and deployment of Java based portlets through the Oracle Portlet toolkit.

A practical hands-on course, students will learn the full range of capabilities and skills within the Oracle Portal environment needed to manage and deploy enterprise wide Java based applications.

Who Should Attend	Prerequisites	Duration
Web Page Developers Web Masters Web Designers Web Technicians Web Support Engineers Network Engineers Oracle Developers Oracle Analyst/Programmers	Java Programming Java v2 Enterprise Edition (recommended) Oracle PLSQL (recommended) Oracle 10gAS (recommended)	2 Days

Course Contents

Introduction to Oracle 10gAS Portal

Oracle 10gAS Portal architecture
 Oracle 10gAS Portal framework
 What is a portlet provider?
 Portlets and Providers
 Development Choices
 Oracle 10gAS Portal Developer Kit

Building a Simple Java Portlet

Java portlet renderer code
 Defining and modifying attributes
 Deploying the provider and its portlets to Oracle Application Server Containers for J2EE (OC4J).
 Configuring the application server for running the Java portlet.
 Registering the Web provider with the Oracle 10gAS Portal framework.
 Adding the portlet to a portal page

Extending the Java Portlet Functionality

Identifying the portlet display modes
 Passing parameters to portlets to affect their behaviour.
 Reading portlet parameters
 Maintaining a continuous virtual connection between the client requests.
 Saving Java objects into the session storage.

Enabling Portlet Customization

Introducing the concept of preference storage.
 Describing the role of personalization managers.
 Storing the user preferences in the file system.
 Saving the customization data to the database.
 Modifying the provider definition file to enable portlet customization.

Enabling Portlet Caching and Security

Identifying caching goals
 Expiry and validation based portlet caching concepts

The role of Oracle 10gAS Web Cache in the invalidation-based caching process
 Controlling access to portlets using security managers
 Building and applying custom security managers

Building a Java Servlet Portlet

Benefits of servlets
 Why use servlets as portlet renderers?
 Building a servlet portlet renderer
 Writing the servlet code
 Updating the provider definition file
 Deploying the provider
 Turning servlets into portlets

Building JavaServer Pages Portlets

Why use JSPs for developing portlets?
 Writing the JSP code
 Specifying the provider definition file
 Deploying the provider to the application server
 Enabling additional portlet display modes

Using JavaBeans in JSP
Portlets
Accessing the session context
information
Adding customization to JSP
portlets

Multilingual Portlets
Overview
Storing translations
Resource bundles
Include translations in Portlet
content
The provider definition file

Portlet Logging
Overview
Portlet logging architecture
Add logging to Portlets &
testing

Debugging Portlets
Using JDevelopers debugger
Debugging Portlet code