Oracle BPM 11g: Implement the Process Model

Duration: 4 Days

What you will learn

This course teaches the process developer how to implement a BPM process model. It addresses a more technical audience than the OBPM 11g Modeling course, assuming that the student already understands the basics of process modeling and knows how to use the modeling tools of BPM Studio. Students learn how to define the underlying implementation for process tasks such as user tasks, business rule tasks, and service tasks. They also learn how to manage the flow of information through a business process by mapping data objects into and out of gateways and business rules, and by integrating them into the design of human task forms.

The course also teaches students how to create more complex process models to meet their business needs through the use of different types of events, including message, signal, and timer events. Students will learn to manage synchronous and asynchronous communication between processes and subprocesses, peer processes, and other services. In addition, the course covers exception handling and UI customization. Since OBPM is closely integrated with SOA Suite, students will gain a clear understanding of how OBPM integrates with SOA in both the runtime and the development environment.

The student is requested to view the tutorial Building Your First Process with Oracle BPM 11g before attending class.

Learn To:

Define a business rule that can handle many different conditions and criteria

Use events to implement messaging and error handling between a process and subprocess, or a process and a peer process

Wire service implementations to tasks rendered as modeling elements

Customize the BPM Workspace user interface

Implement a Business Process Model

Define human workflow to provide complex routing of rule-based task approvals

Audience

Application Developers

Developer

SOA Architect

Related Training

Required Prerequisites

Experience creating process models using the Oracle BPM modeling tools (Process Composer and Studio design editor)

Experience with JDeveloper or other Java IDEs

Familiarity and some experience programming with Java or other similar object oriented language

Familiarity with web application and web service architectures and technologies

Suggested Prerequisites
Familiarity and some experience with SOA Suite

Oracle SOA Suite 11g: Essential Concepts

SOA Adoption and Architecture Fundamentals NEW

SOA Adoption and Architecture Fundamentals Ed 1

Some understanding of the SOA architecture

XML Fundamentals

Course Objectives
Describe and explain the various options available for creating a completely custom user interface for the BPM process

Implement a User Task using default BPM human task forms

Define data associations using data objects and expressions

Create expressions to define conditional branching

Create complex business rules using decision tables

Define approval flows using the human workflow editor

Implement service tasks

Create an ADF task flow for more complex user interaction with human tasks

Expose a BPMN process as a service

Send and receive messages of various types to/from another process, subprocess, or peer process

Catch an error message thrown from an external service

Use an event subprocess to handle errors at the process level

Send a message to a BPEL process from a BPMN process

Use a Notification activity to send an email from a process

Customize the BPM Workspace by using Flex Field based columns and custom skins

Understanding the OBPM Architecture
The Development Lifecycle
Looking at the OBPM Architecture
The Integrated Development Environment Using BPM Studio

Using Business Objects
Business Objects and Data Objects
Data Objects and their scope

Creating Human Tasks to Implement Interactive Activities
Human Task Patterns
Basic Default Settings for a Simple Human Task
Creating a Task Form Using "Auto Generate Form"

Defining Simple and XPath Expressions
Using the Expression Builders to Define Expressions
Defining XSLT Transformations for Data Used in the Process

Creating Business Rules
Using Decision Tables
Using IF/Then Rules
Testing Business Rules

Defining Human Workflows
Using the Human Task Editor to Define Dynamic Approval Flows for a Complex User Task

Implementing Service Tasks in an OBPM Process
Understanding the Different Types of SOA Service Tasks and Service Adapters and How to Use Them
Creating a File Write and File Read Service
Using External Web Services

Overview of Events
Using the Various Event Types: Start, End, Throw and Catch
Implementing Timer Events
Providing Loosely Coupled Interactions with Signal Events

Controlling Process Flow
Using Subprocesses
Altering thePprocess Flow
Interprocess Communication

Handling Exceptions
Types of Errors
System and Business Events
Handling Errors at the Activity, Subprocess, and Process level

Creating a More Complex User Interface Using ADF
Creating Task Flows
Defining an ADF Task Page from an ADF Template
Understanding Your options for Customizing the Process UI

User Interface Options
Customizing the Workspace
Using the BPM API
Process Spaces