

# **Oracle SOA Training Course Contents**

# **Introduction to Service Oriented Architecture**

- Describing Service-Oriented Architecture (SOA)
- Explaining Service Component Architecture
- Reviewing of services and key standards
- Explaining the Oracle SOA Suite 11g architecture and components
- Explaining Business Events and the Event Delivery Network

# **Getting Started with Composite Applications**

- Describing basic synchronous and asynchronous interaction patterns
- Discussing XSD and Web Services Description Language (WSDL)
- Creating a Mediator component
- Defining a Routing Service
- Creating XSL Transformations with the XSLT Mapper
- Introducing working with adapters
- Creating a file adapter service reference
- Examining the composite.xml Source

# Managing and Monitoring a Composite Application

- Deploying a Composite Application
- Versioning Applications
- Discussing Application state
- Using Configuration Plans
- Managing the life cycle of a Composite Application
- Testing a Composite Application
- Managing SOA Applications with JDeveloper
- Testing a Composite Application in Enterprise Manager

#### **Working With Data**

- Discussing Data Standards
- Using Attributes
- Introducing XSL Transformations
- Using XPath Functions
- Using the Mapper in JDeveloper
- Using Dictionaries



- Testing Transformations
- Working with native format data

# Using the JMS and JDBC Adapters

- Introducing Binding Components and JCA Adapters
- Monitoring Adapters
- Discussing JMS Messaging
- Discussing Adapters and the WebLogic Application Server
- Introducing the Oracle JMS Adapter
- Configuring JMS Resources with WebLogic Administration Console
- Configuring the JDBC Adapter
- Discussing Transactionality

# **Introduction to BPEL**

- Defining Business Processes and BPEL
- Introducing parts of a BPEL Process
- Discussing variables in a BPEL Process
- Using the Sequence and Scope Activities
- Using the BPEL Design Editor
- Testing a BPEL Process in Enterprise Manager

# More BPEL Activities

- Conditional Branching with the If activity
- Processing with the Flow activity
- Parallel and Sequential Looping with the Foreach activity
- Suspending a process with the Wait activity
- Waiting for a message with the Pick activity
- Looping with the While activity
- Indexing XML arrays dynamically
- Discussing Synchronous and Asynchronous Interaction Patterns

# Handling Faults in Composite Applications

- Introducing Faults and Fault Handling options
- Managing Faults in Synchronous and Asynchronous Mediators
- Introducing Faults and Fault Handlers in BPEL Processes
- Returning Faults from Synchronous and Asynchronous Processes
- Throwing Faults
- Introducing Compensation and Compensation Handlers
- Introducing the Fault Management Framework
- Recovering Faults with Enterprise Manager Fusion Middleware Control
- Introducing Human Tasks



- Introducing Human Tasks
- Creating and configuring a Human Task in a Composite Application
- Adding a Human Task to a BPEL Process
- Generating and deploying Task Display Forms
- Using the Worklist Application to view and act on task information
- Introducing the Oracle User Messaging Service
- Configuring UMS Notification Properties
- Sending Notifications to Users Preferred Channel
- Introducing Business Rules
- Introducing the Business Rule Component
- Describing the Oracle Business Rules architecture
- Creating rules and decision tables with the JDeveloper Rule Editor
- Examining Business Rule Component Files
- Describing the role of the Rules SDK
- Editing Business Rules at Runtime
- Testing SOA Composite Applications
- Introducing the Composite Test Framework
- Defining Emulations and Assertions
- Discussing Test Suites and Test Cases
- Testing initiation of inbound messages
- · Emulating outbound, fault, and callback messages
- Running Test Cases
- Examining results of a Test Run
- Debugging Composite Applications
- Securing Services and Composite Applications
- Explaining security for services
- Describing the Fusion Middleware security architecture
- Attaching security policies at design time in JDeveloper
- Attaching security policies post-deployment in Enterprise Manager
- Designing and Managing Business Events
- Describing the Event Delivery Network
- Creating a business event
- Publishing an event
- Subscribing to an event
- Managing events in Oracle Enterprise Manager
- Monitoring Composite Applications with Sensors and Oracle BAM
- Creating and configuring BPEL sensors
- Creating and configuring composite sensors
- Introducing Business Activity Monitoring
- Creating a Data Object with BAM Architect
- Preparing an Oracle BAM Dashboard
- Integrating Oracle BAM with the BAM Adapter
- Creating and configuring a BAM Sensor Action in a BPEL Process
- Introducing Oracle Complex Event Processing
- Oracle BPM, Governance, and the SOA Suite



- Exploring another definition of Business Process •
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- Introducing the Oracle Business Process Management Suite Explaining the elements of a BPMN Business Process Model •
- Discussing SOA challenges and governance objectives •
- Introducing the Oracle Governance solution •
- Describing the governance lifecycle •