

# Oracle SOA Suite 11g: Administration

**Duration:** 5 Days

#### What you will learn

The course describes how Oracle SOA Suite 11g, a Middleware component of Oracle Fusion Middleware, provides a complete set of service infrastructure components. These components include Mediator, BPEL, Human Workflow, Business Rules and Business Process Management for designing, deploying and managing SOA composite applications.

Learn To:

Install Oracle SOA Suite 11g.

Deploy SOA Composite Applications.

Configure and administer Oracle SOA Suite 11g and its components.

Monitor, troubleshoot and tune Oracle SOA Suite 11g components.

Troubleshoot SOA composite applications by performing corrective actions, like fault recovery.

Configure Security Policies for SOA Composite applications.

Backup and recover Oracle SOA Suite 11g.

Tune and configure the Oracle SOA Suite 11g environment for high availability (through a brief introduction).

### Prerequisite Skills & Knowledge

You're required to understand essential Oracle WebLogic Server administration tasks before taking this course. You'll learn how to install and configure Oracle SOA Suite 11g components in Oracle WebLogic Server domains.

Oracle Enterprise Manager Fusion Middleware Control

Expert instructors will also teach you how to use the Oracle Enterprise Manager Fusion Middleware Control Console. You'll use this console to perform the following administrative tasks: deploy SOA composite applications, configure SOA composite application resources, monitor SOA composite applications, manage and monitor service engines and update the state of SOA composite applications.

## **Audience**

Administrator SOA Architect Security Administrators System Administrator System Integrator Technical Administrator

## **Related Training**

Required Prerequisites

Basic knowledge of SQL queries

Familiarity with basic Web Service concepts

Familiarity with command line scripts and interfaces

Oracle WebLogic Server 11g: Administration Essentials

Suggested Prerequisites
Oracle SOA Suite 11g: Essential Concepts

## **Course Objectives**

Describe the Oracle SOA Suite 11g Architecture

Discuss Service Component Architecture (SCA)

Discuss Service Oriented Architecture (SOA) concepts

Install Oracle SOA Suite 11g

**Deploy SOA Composite Applications** 

Backing up and recovering Oracle SOA Suite 11g

Overview of high availability with Oracle SOA Suite 11g

Configure Security Policies for SOA Composite applications

Configure and Administer Oracle SOA Suite 11g and its components

Monitor, troubleshoot, and tune Oracle SOA Suite 11g components

#### **Course Topics**

# **Introducing SOA and Oracle SOA Suite 11g**

Describing Service-Oriented Architecture (SOA) Concepts
Introducing Service Component Architecture (SCA) Composite Applications
Describing Oracle SOA Suite 11g Architecture and Components
Introducing Oracle SOA Suite 11g Administration Tools

# **Installing Oracle SOA Suite 11gSOA**

Creating SOA Schemas with the Repository Creation Utility
Installing Oracle SOA Suite 11g
Configuring an Oracle WebLogic Domain with SOA Suite 11g Components
Exploring Oracle Enterprise Manager Fusion Middleware Control Console

## **Managing SOA Composite Applications**

Describing Composite Application Structure and Dependencies
Deploying Composite Applications
Testing and Monitoring Composite Applications
Managing Composite Application Life Cycle

#### Administering the SOA Infrastructure

Configuring Oracle SOA Suite 11g SOA Infrastructure Properties Monitoring SOA Infrastructure Run-time Information

### **Administering Oracle JCA Adapters and Binding Components**

Describing JCA Adapters and Binding Components
Configuring JCA Adapter Properties
Configuring File, Database, and JMS JCA Adapter Run-time Resources
Monitoring JCA Adapter Instances and Faults

## **Administering BPEL Process Service Components and Engines**

Describing BPEL Components and Service Engine
Configuring BPEL Service Engine Properties
Tracking Messages in a Composite Application With a BPEL Process
Monitoring BPEL Process Component Instances
Managing BPEL Process Component Instances and Faults

#### **Administering Oracle Mediator Service Components and Engines**

Describing Mediator Components and Service Engines
Configuring Mediator Service Engine Properties
Monitoring Mediator Component Instances and Routing Iinformation
Managing Mediator Faults

#### Administering Decision Service Components and Business Rules Service Engines

Describing Decision Services and Business Rules Service Engines Monitoring Business Rules Service Engine Instances and Faults

## **Administering Oracle User Messaging Service**

Describing User Messaging Service (UMS) Architecture and Components Configuring UMS for Human Workflow and BPEL Process Components Configuring Oracle WebLogic Server Embedded LDAP Server Configuring the Email Messaging Driver Testing UMS Services

### Administering Human Task Service Components and Human Workflow Service Engines

Describing Human Workflow Components and Service Engine
Configuring the Human Workflow Services
Configuring Human Workflow Task Service Properties
Exploring the Worklist Application for Task ManagementApplication
Describing User Messaging PreferencesPreferences

#### **Administering Oracle BPMN Process Service Components and Engines**

Describing BPMN Process Service Components and Engines Configuring BPMN Process Service Components and Engines Monitoring Oracle BPMN Process Service Components and Engines

## **Administering Oracle Business Activity Monitoring**

Describing Oracle BAM Components and Architecture Configuring the Oracle BAM Adapter Configuring Oracle BAM Server Properties Managing Oracle BAM Users and Distribution Lists Monitoring BAM Activity and Components

## **Administering Oracle B2B**

Describing the B2B Components and Concepts
Describing the B2B Console and Administration Tasks
Configuring a B2B Inplementation
Testing a B2B Implementation
Monitoring B2B Messages in Oracle B2B Console

# Administering Business Events

Describing Business Events
Describing the Event Delivery Network Architecture
Managing Business Event Subscriptions
Monitoring Business Event Occurences

## **Configuring Security Services and Policies**

Describing Oracle Web Services Manager Functionality Describing Web Service Security Concepts Creating a Simple Web Service Security Policy Securing a Service Endpoint with the Security Policy Monitoring Web Service Security Violations

## **Tuning Performance of Oracle SOA Suite and Components**

Implementing Best Practice Starting and Stopping Managed Servers
Extending SOA Database Tablespaces
Managing connection thresholds
Optimizing Loading of Enterprise Manager Metric Page Information
Purging data from Dehydration Store

## **Troubleshooting Oracle SOA Suite**

Resolving Managed Server Startup Problems

Managing Connection Timeouts
Identifying Log Files
Configuring Log Levels
Viewing Log File Entries
Identifying and Resolving Common Application Problems

# **Configuring High Availability for Oracle SOA Suite**

Describing Types of High Availability Options
Describing High Availability Implementations

## **Backing Up and Recovery of Oracle SOA Suite Instances**

Adopting a Backup and Recovery Strategy
Backing Up Oracle Fusion Middleware Environments
Backing Up the SOA Database Schemas
Recovering Oracel Fusion Middleware Environments
Recovering SOA Database Schemas