

## Oracle SOA Suite 11g: Administration

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.

### 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 Information
- 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 Implementation
- 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 Occurrences

#### **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 Oracle Fusion Middleware Environments
- Recovering SOA Database Schemas

#### **Recommended Related Training Courses:**

##### Oracle SOA Suite 11g: Essential Concepts

This SOA Suite 11g training introduces you to fundamental information and technical understanding of SOA concepts and Oracle SOA Suite product. Learn how composite applications are built and managed on the Oracle SOA platform.

##### XML Fundamentals

This XML Fundamentals training teaches you to create and validate XML documents. Learn to transform XML documents by using stylesheets and XPath expressions, familiarize yourself with XML features in the database, use Xquery language and more.

##### Oracle BAM 11g: Build Real-Time Dashboards

This Business Activity Monitoring (BAM) training explains how to use Oracle BAM to monitor enterprise business activities across an enterprise in real time. Check key performance indicators and service-level agreements and take corrective action in real time.

Oracle SOA Suite 11g : Build Composite Applications

This SOA Suite 11g training teaches you to design and develop SOA composite applications for application integration with services. Learn to create an SOA Composite application using Jdeveloper, test, debug and troubleshoot and more.

Developing Web Services Using Java Technology

This Java Technology training is ideal for business component and client developers. Learn to create, implement and deploy web services and web service clients using Java technology components and the Java Platform.

SOA Adoption and Architecture Fundamentals **NEW**

Numerous companies have begun a SOA initiative with the assumption that implementing web services is synonymous with employing a service-oriented architecture. They have gone on to discover various barriers to SOA success and have not seen the returns a successful SOA implementation can provide. These companies lacked an understanding of SOA adoption and architecture fundamentals. This course presents those fundamentals with an Enterprise Architect's view of Oracle's SOA Enterprise Technology strategy, to equip the student with skills for handling both business and IT concerns throughout the entire SOA life cycle, from both the program and the project perspectives.