

## Oracle SOA Suite 12c: System Architecture and Administration

**Duration:** 5 Days

### What you will learn

This Oracle SOA Suite 12c: Architecture and Administration training helps you develop the knowledge and skills to plan, prepare and install an Enterprise Deployment Architecture to run Oracle SOA Suite 12c products. You'll learn the step-by-step process needed to create an Oracle SOA Suite 12c configuration by using two virtual machines for creating a cluster of WebLogic Server instances.

### Learn To:

Install and configure Oracle SOA Suite 12c in a cluster configuration.

Initiate and create run-time instances.

Configure a WebLogic Server clustered domain with Oracle Fusion Middleware Infrastructure components.

Deploy application, monitor, tune and troubleshoot the environment for optimal day-to-day operations.

Configure and test the email notification service used by SOA composite applications and the human workflow operations.

Install and use Oracle Enterprise Scheduler Service.

Create Oracle Database schemas for Oracle Fusion Middleware products.

Configure a load balancer for servicing client requests.

### Benefits to You

By taking this course, you'll build a solid foundation to create an environment that supports scalability and high availability, and that is integrated with an LDAP server for authentication and authorization services. You'll walk away from this course with the ability to monitor and take action to tune Oracle SOA Suite 12c, the Oracle Database and SOA Suite components for optimal performance.

### Related Training

#### *Required Prerequisites*

Oracle WebLogic Server 12c: Administration I Ed 2

#### *Suggested Prerequisites*

Service Oriented Architecture Concepts

## Course Objectives

Configure a Weblogic Server clustered domain with Oracle Fusion Middleware Infrastructure components

Extend the WebLogic Cluster with Oracle SOA Suite 12c

Deploy

test

and troubleshoot SOA composite applications

Monitor and take action to tune Oracle SOA Suite 12c

the Oracle Database

and SOA Suite components for optimal performance

Configure a Load Balancer for servicing client requests

Integrate an LDAP Server for authorization and authentication

Extend the Weblogic Domain to include Oracle Enterprise Scheduler Service

Plan and design an Enterprise Deployment SOA architecture

Create Oracle Database schemas for Oracle Fusion Middleware products

Install Oracle Fusion Middleware Infrastructure 12c software

Install Oracle SOA 12c software

## Course Topics

## **Introduction to Oracle SOA Suite 12c Administration**

About Service-Oriented Architecture (SOA) concepts

Overview of Oracle SOA Suite 12c products

Exploring the road map for creating an Enterprise Deployment architecture

## **Planning Oracle SOA Suite 12c Deployments**

Choosing an appropriate deployment topology

Preparing the network environment and file system for Oracle SOA Suite 12c

Preparing and planning the database strategy

Planning an SOA deployment topology based on the Enterprise Deployment architecture reference model

Planning an architecture for scalability, high availability, and failover

## **Installing Oracle SOA Suite 12c: Creating the Fusion Middle Infrastructure**

Choosing the type domain and installation approach

Installing Oracle Fusion Middleware Infrastructure software

Creating the Oracle Database schemas for Oracle Fusion Middleware Infrastructure

Creating a WebLogic Domain with Oracle Fusion Middleware Infrastructure

Configuring WebLogic Server to use an external LDAP server for authentication and authorization

## **Installing Oracle SOA Suite 12c: Extending the Domain with Oracle SOA Suite**

Managing web-tier installation and configuration tasks

Installing Oracle SOA Suite 12c

Creating the Oracle Database schemas for Oracle SOA Suite 12c

Extending the WebLogic domain with Oracle SOA Suite 12c components

## **Installing Oracle SOA Suite 12c: Configuring the Load Balancer for Enterprise Deployment**

Explain the load balancer configuration requirements for an Enterprise Deployment topology

Create and configure a WebLogic Managed Server as a (software) load balancer

## **Configuring High Availability for Oracle SOA Suite 12c**

Reviewing the high availability architecture

Scaling out an enterprise deployment topology

Configuring high availability for the Administration Server

Configuring JCA Adapter (File, Database, and JMS) Resources for SOA applications

## **Fundamentals of Oracle SOA Suite**

Describing service-oriented architecture (SOA)

Explaining how services communicate

Describing the functionality of each type of Oracle SOA Suite 12c service component

## **Deploying and Testing SOA Composite Applications**

Deploying a Composite application by using Ant tools

Deploying and Testing Composite applications by using Oracle Enterprise Manager

Tracking Message flow through a Composite Application

Deploying a Composite application using Ant tools and Oracle Enterprise Manager

Describing a Composite application package and its dependencies

## **Managing Composite Applications and Their Life-Cycle**

Deploying new versions of a Composite application

Creating partitions and deploy Composites to those partitions

Identifying Composite application dependencies

Managing the Composite application life-cycle using configuration plans and global token variables

## **Monitoring and Managing Instances, Service Components, and Service Engines**

Configuring Logging, Audit Levels, and Sensors

Managing Faults in the Error Hospital

## **Managing Business Events**

Describing Business Events and the Event Delivery Network

Managing events using Oracle Enterprise Manager

## **Configuring and Testing Oracle User Messaging Services**

Introduction to Oracle User Messaging Services

Configuring Oracle User Messaging Services

## **Troubleshooting and Tuning Performance of Oracle SOA Suite 12c**

Designing a tuning methodology

Identifying top areas that require tuning

Monitoring and tuning Oracle SOA Suite by collecting performance information and using diagnostic tools

Configuring selective tracing

Troubleshooting common problems

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

Adopting a backup and recovery strategy

Backing up your Oracle Fusion Middleware environment

Recovering Oracle Fusion Middleware and Oracle SOA Suite

## **Configuring Security Services and Policies**

Describing Web services security

Describing Oracle Web Services Manager Policy Framework

Creating or modifying security policy

Attaching a security policy to Web services

Monitoring the performance of Web services

## **Enterprise Scheduler Service (ESS)**

Describing Enterprise Scheduler Service

Installing Enterprise Scheduler Service

Configuring scheduled jobs and related metadata

Administering running and completed jobs