

## Oracle Application Server 10g R2: Administration II

**Duration:** 5 Days

### What you will learn

The focus of this class is to introduce how to distribute Oracle Application Server components in different enterprise topologies to provide and maintain high availability, and scalability. Optimize performance and reduce risks by learning about recommended enterprise topologies, high availability, and disaster recovery features in Oracle Application Server (10.1.2.0.2). Students learn about installing and maintaining high availability implementations such as OracleAS Cold Failover Cluster (Infrastructure), OracleAS Cold Failover Cluster (Middle Tier), OracleAS Cluster (Portal). The participants access and use Oracle Application Server monitoring and management tools. This course counts towards the Hands-on course requirement for the Oracle Application Server 10g Administrator Certification. Only instructor-led inclass or instructor-led online formats of this course will meet the Certification Hands-on Requirement. Self Study CD-Rom and Knowledge Center courses are excellent study and reference tools but DO NOT meet the Hands-on Requirement for certification.

Cloning and staging of Oracle Application Server

Configuring and managing OracleAS Cluster (Web Cache)

Deploying OracleAS Forms, Oracle Reports, and OracleBI Discoverer to Oracle Application Server

Configuring and managing OracleAS Cluster (OC4J)

Administering OracleAS Forms, Oracle Reports, OracleBI Discoverer

Configuring and managing OracleAS Cluster (Identity Management)

### Audience

Sales Consultants

Support Engineer

Technical Consultant

Web Administrator

### Prerequisites

*Required Prerequisites*

Working experience with LINUX operating system

*Suggested Prerequisites*

Oracle Application Server 10g R2: Administration I

### Course Objectives

Choose the deployment topology that fits your needs

Describe high availability and scalability features available in Oracle Application Server 10g

Install OracleAS Infrastructure using a distributed environment

Choose the appropriate failover strategy according to their business needs

Manage OracleAS Reports Services, OracleAS Forms Services and OracleAS Discoverer

Reconfigure Oracle Application Server 10g

Configure and use monitoring tools provided with Oracle Application Server

## Course Topics

### Introduction

Course Discussion

### Managing Customized Oracle Application Server Topologies

What is Enterprise Deployment Architecture?

What are the Benefits of Enterprise Deployment

What are the Key Considerations in Implementing EDA?

Standard Enterprise Deployment Topologies

Implementing Enterprise Security Infrastructure Topology

Implementing Enterprise J2EE Topology

Implementing Enterprise Portal Topology

### Cloning and Staging Oracle Application Server

Cloning Oracle Application Server Instances: Overview

Cloning Process

Cloning: General Considerations and Limitations

Customizing the Cloning Process

Understanding Test to Production of Middle Tier (Staging): Overview

Moving J2EE Applications from Test Middle Tier to New Production Environment

Moving OracleAS Portal Metadata from Test to Production

Moving Applications from a Test Middle Tier with IM and a Product Metadata to an Existing Production with IM

### Distributing Oracle Application Server Infrastructure Components

Selecting Different Infrastructure Installation Types

Installing Multiple Metadata Repositories

Installing OracleAS Infrastructure by Using an Existing Oracle Database

Installing OracleAS Metadata Repository in an Existing Database

Installing OracleAS Infrastructure by Using an Existing Oracle Internet Directory

Upgrading a Distributed Oracle Application Server Environment

Upgrading Transitions: Three Paths

OracleAS Infrastructure Upgrade

### Reconfiguring Middle-Tier Instances

Expanding a Middle-Tier Installation

Differences between Installing and Expanding a Middle Tier

Configuring OracleAS Web Cache After Installation

Associating a J2EE and Web Cache Installation with OracleAS Infrastructure

Configuring Portal After Installation

Configuring Forms and Reports Services After Installation

Configuring and Disabling Components

De-config Tool

### Administering OracleBI Discoverer in Oracle Application Server

Configuring OracleBI Discoverer

Controlling the Discoverer Service

Configuring OracleBI Discoverer Plus

Configuring OracleBI Discoverer Viewer

Configuring Discoverer Portlet Provider

Discoverer Catalog, EUL, and OLAP Catalog

Managing Discoverer Catalog

## **Administering Oracle Reports in Oracle Application Server**

- OracleAS Reports Services Architecture
- Configuring Reports Server
- Configuring Additional Reports Server Settings
- Controlling Access and Registering with OracleAS Portal
- Deploying Reports - Paper and Web Layouts
- Deploying a Reports Application Using OC4J\_BI\_Forms
- Advantages of Key Mapping

## **Administering Forms Applications in Oracle Application Server**

- OracleAS Forms Services Communication Flow
- Performing Configuration Tasks
- Application Server Control: Managing OracleAS Forms Services
- Configuring Run-Time Pooling
- Configuring JVM Pooling
- Configuring Forms Trace
- Configuring Environment Variables with Application Server Control
- Deploying OracleAS Forms Applications

## **Diagnosing Oracle Application Server**

- Introduction to Oracle Application Server Logging
- Creating and Managing the Diagnostic Message Database Repository
- Configuring Component Logging Options
- Starting and Stopping Log Loader
- Searching the Log Repository
- Enabling ODL Messages with Oracle HTTP Server
- Configuring OC4J to Produce ODL Messages
- Enabling ECIDs with OC4J

## **Tuning the Oracle Application Server Middle Tier**

- Performance Tuning Methodology
- Comparison of Monitoring Tools
- Monitoring Oracle HTTP Server
- Configuring OC4J for Performance
- OC4J-Specific Tips for Tuning EJBs
- Factors that Affect the Caching Efficiency
- Cache Size Determination
- Invalidation Performance Considerations

## **Oracle Application Server High Availability Solutions**

- Oracle Application Server Clustering Types
- OracleAS Cold Failover Cluster (Infrastructure)
- OracleAS Cluster: Overview
- Types of OracleAS Cluster
- OracleAS Cluster: Terminology
- Load-Balancing Algorithms Used by mod\_oc4j
- High Availability and State Replication
- OracleAS Cluster (Portal): Overview

## **Configuring and Managing OracleAS Cluster (Web Cache)**

- OracleAS Cluster (Web Cache): Concepts
- How OracleAS Cluster (Web Cache) Works
- Configuring OracleAS Cluster (Web Cache)
- Dynamic Membership in Oracle Cluster (Web Cache)
- Invalidation in OracleAS Cluster (Web Cache)
- Session-Binding (Stateful Load Balancing)

### **Configuring and Managing OracleAS Cluster (OC4J)**

- Initiating an OracleAS Farm Using a File-Based Repository
- Configuring DCM-Managed OracleAS Cluster
- Managing OracleAS Cluster
- Configuring State Replication
- Improving Availability of the File-Based Repository
- Installing OracleAS Cluster (Portal)

### **Configuring OracleAS Cold Failover Cluster (Infrastructure)**

- High Availability: Terminology
- OracleAS Cold Failover Cluster Infrastructure: Normal Mode
- OracleAS Cold Failover Cluster Infrastructure: Failover Mode
- OracleAS Cold Failover Cluster Example

### **Configuring OracleAS Cold Failover Cluster (Middle-Tier)**

- OracleAS Cold Failover Cluster (Middle-Tier)
- Installing OracleAS Cold Failover Cluster (Middle-Tier)
- Post installation Tasks
- Reconfigure Components to Use the Virtual IP Address
- Actions at Failover
- OracleAS Cold Failover Cluster (Web Cache)

### **Installing and Configuring OracleAS Cluster (Identity Management)**

- Active Failover Cluster
- OracleAS Infrastructure Active-Active Configurations in Release 2
- OracleAS Cluster (Identity Management)
- OracleAS Cluster (Identity Management): Load Balancer Configuration
- OracleAS Cluster (Identity Management) 10.1.2: Installation and Configuration
- Installing Distributed OracleAS Cluster (Identity Management)
- Oracle Internet Directory Service Replication
- Metadata Repository in an Existing RAC Database

### **Oracle Application Server Disaster Recovery**

- OracleAS Disaster Recovery: Modes of Operation
- Disaster Recovery Setup: Overview
- Implementing in an Existing Production Site
- Configuring Port and Storage Symmetry
- Moving Oracle Inventory to Shared Disk
- Implementing with New Production and Standby
- Disk Replication Setup and Synchronization Frequency
- Failover Operations