

## Oracle Application Server 10g: Administration I

**Duration 5 Days**

### What you will learn

This course introduces the architecture of Oracle Application Server 10g and enables the participants to effectively install and manage it. The participants learn how to access and use Oracle Application Server management tools, and practice the basic management tasks such as starting and stopping of Oracle Application Server instances and its components.

The participants gain hands-on experience in configuring the OracleAS Infrastructure and the OracleAS middle-tier. They also learn to deploy PL/SQL applications and J2EE applications such as Java Servlets, JavaServer Pages, Enterprise JavaBeans, and Web Services. They learn the concepts of identity management and how to manage and configure Oracle Internet Directory, OracleAS Single Sign-On Server, and the OracleAS Certificate Authority. The participants enable the use of SSL for some OracleAS components.

### Audience

Technical Consultant

### Prerequisites

Working experience with Linux Operating System

### Course Objectives

- Describe the role of a Web administrator
- Describe the architecture and components of Oracle Application Server (OracleAS) Infrastructure including its components and services
- Install OracleAS Infrastructure and OracleAS Middle Tier
- Configure and manage OracleAS Infrastructure components
- Configure and manage OracleAS Middle Tier components
- Manage and configure OracleAS Certificate Authority
- Deploy and manage Web applications
- Enhancing Oracle Application Server Components to Use SSL

### Course Topics

#### Oracle Application Server Key Components and Features

- OracleAS Middle-Tier Components and Solutions
- OracleAS Infrastructure Components
- Oracle Application Server Management
- Enhancing Performance with Caching
- Securing the Web Infrastructure
- Oracle Application Server Terminology
- Wireless-Enabled Applications
- OracleAS Enterprise Portal and OracleAS Discoverer

#### Analyzing Oracle Application Server Architecture

- Oracle Application Server Products and Installation Types
- OracleAS Infrastructure Installation Types
- OracleAS Middle-Tier Components
- Services and Components of OracleAS Infrastructure
- OracleAS Developer Kits
- A Simple Oracle Application Server Topology
- Introducing OracleAS Deployments
- OracleAS Personalization

#### Installing OracleAS Infrastructure

- OracleAS Infrastructure Installation: Overview
- OracleAS Infrastructure: Installation Steps
- Postinstallation Tasks
- OracleAS Certificate Authority
- Accessing the OracleAS Instance
- Application Server Control
- Accessing the SSO Server

Verifying OID Server

### **Installing the OracleAS Middle Tier**

- Preinstallation: OracleAS Middle Tier Requirements
- Preinstallation: Setting Up the Environment
- Installation: Installer Steps Overview
- Accessing the Application Server Control
- Application Server Ports Page
- Accessing the Component Home Pages
- Accessing OracleAS Portal Welcome Page
- Accessing OracleAS Reports Services and Forms Services

### **Using Oracle Application Server Management Tools**

- Oracle Application Server: Overview
- Using Application Server Control
- Application Server Control: Home Pages
- Oracle Application Server Component Home Pages
- Starting, Stopping, and Restarting Components
- Enabling SSL for Application Server Control
- Oracle Process Management and Notification Server
- OracleAS Hi-Av Tool (iHAT)

### **Managing the Oracle Internet Directory**

- LDAP Components
- Security Benefits of OID
- OID Architecture Overview
- OID Server Instance Architecture
- OID Server Processes
- OID Command-Line Tools
- Using LDAP Command-Line Tools and Bulk Tools
- ODM Connect Dialog Box

### **Managing and Configuring Oracle HTTP Server**

- Oracle HTTP Server Modules
- Managing Processes and Connections
- Oracle HTTP Server Configuration Files
- Configuring the Oracle HTTP Server
- Administrative Directives
- Server Logs
- Managing Client Requests and Connection Handling
- Advanced Server Properties

### **Configuring Directives and Virtual Hosts**

- Container Directives
- Block Directives
- Merging Containers and Contents
- Defining and Configuring Virtual Hosts
- Enabling Server-Side Includes (SSI)
- Overriding Directives with the Per-Directory Configuration
- Directory Indexing
- Error and Response Handling

### **Configuring mod\_rewrite**

- Regular Expressions
- Matching Characters
- Quantifiers for Characters
- Functioning of mod\_rewrite
- mod\_rewrite Directives
- Rewrite Rule: Tips
- Redirecting: Examples

### **Managing and Configuring OracleAS Web Cache**

- OracleAS Web Cache Architecture
- Administering OracleAS Web Cache
- Configure Listening Ports for Requests
- Configuring Site Definitions
- Creating Caching Rules

Defining Expiration Rules  
Basic Content Invalidation  
Logging Events and Accessing Information

### **Managing and Configuring OC4J**

Creating an OC4J Instance  
Enabling OC4J Instances  
OC4J Configuration Basics  
Configuring OC4J Using Application Server Control  
Web Site Properties  
Application Deployment  
Maintaining Applications  
Maintaining Web Modules

### **Managing the OracleAS Portal**

OracleAS Portal Administrative Services: Overview  
Managing the OracleAS Portal Instance Using Application Server Control  
Managing the OracleAS Portal Instance Using Administrative Portlets  
Default Portal Users and Groups  
Managing Passwords for the OracleAS Portal Schemas  
Managing Portal Users and Groups  
Exporting and Importing Objects in OracleAS Portal  
Managing the Portlet Repository

### **Configuring OracleAS Portal**

Configuring the Self-Registration Feature in OracleAS Portal  
Configuring OraDAV Support for OracleAS Portal Access  
Configuring Language Support  
Configuring OracleAS Portal Dependencies  
OracleAS Portal Configuration Assistant: Overview

### **Deploying PL/SQL and CGI Applications**

Communication Flow: The Path of HTTP Requests  
Configuring mod\_plsql  
Configuring DADs Using dads.conf  
Invoking a PL/SQL Application  
PL/SQL Server Pages  
Enabling the FastCGI Server  
Installing the Database Provider and Its PL/SQL Portlets  
Registering the Database Provider Using OracleAS Portal

### **Deploying J2EE Applications**

Deploying Web Application Modules Using dcmctl  
J2EE Architecture  
Databases and J2EE  
Enterprise JavaBeans  
EJB and OC4J  
Deploying J2EE Applications Using Application Server Control and dcmctl  
Accessing Web Providers  
Registering Web Providers

### **Configuring Oracle Application Server Components in OID**

Oracle Identity Management  
Oracle Application Server Components and OID  
OID Administration Delegation  
OID Protection Domains  
Oracle Application Server Administration Model  
Password Policies  
Relationship Between OracleAS Portal and OID  
Enabling Directory Synchronization in the OracleAS Portal Instance

### **Managing Access Using Delegated Administration Service**

Concept and Architecture of DAS  
Configuring the Default Identity Management Realm-Specific Context  
Managing Users, Groups, and Subscribers Using DAS  
Managing Services  
Managing Accounts

Accessing DAS from OracleAS Portal  
Granting Privileges to OracleAS Portal Users by Using DAS Roles  
Disabling the Privilege Assignment Section

### **Administering the OracleAS Single Sign-On Server**

Single Sign-On Components  
Authentication Flow for OracleAS Single Sign-On  
OracleAS Single Sign-On Administrator's Role  
Configuring the OracleAS Single Sign-On Server  
Creating and Editing a Partner Application  
Administering External Applications  
Accessing SSO Server from OracleAS Portal  
Accessing External Applications from OracleAS Portal

### **Securing OracleAS Components Using SSL**

Using Digital Signatures  
How SSL Works?  
Oracle Wallet Manager Functions  
Managing Wallets  
Managing User Certificates  
Managing Trusted Certificates  
Configuring Oracle HTTP Server for SSL Certificates  
Configuring OracleAS Web Cache to Use SSL

### **Managing and Configuring OracleAS Certificate Authority**

Oracle PKI Management Tools  
OracleAS Certificate Authority: Key Features  
OCA Architecture  
OCA Configuration Elements  
Requesting the Web Administrator Certificate  
Approving Certificate Requests  
Revoking Certificates  
Single Sign-On Authentication

### **Suggested Next Courses**

Oracle Application Server 10g: Administration II