

## OWS14c-A1: Oracle WebLogic Server 14c: Administration I

Course Code: OWS14c-A1

Duration: 5 days

Instructor-led Training (ILT) | Virtual Instructor-

led Training (VILT)

#### **OVERVIEW**

The Oracle WebLogic Server 14c: Administration I certification is a globally recognized qualification designed to validate an individual's expertise in administering Oracle WebLogic Server solutions. It covers critical aspects such as creating WebLogic domains, deployments, and undertaking troubleshooting. Gaining this certification verifies an individual's aptitude in Oracle WebLogic Server's core functionality and its application within enterprise environments. Many industries regard this certification highly as it helps in optimizing system performance, scalability, and reliability. Thus, the certification is highly sought after by systems administrators, architects, and developers seeking to enhance their skills in leveraging Oracle WebLogic Server for building and deploying enterprise applications.

### **SKILLS COVERED**

You will learn how to: Install, configure, and administer Oracle WebLogic Server 14c.

- Create Domains
- Configure a cluster.
- Create and Monitor domain resources with WebLogic Admin Console.
- Start /Stop servers.
- Set up and use node manager.
- Deploy applications.
- Configure database resources.

#### WHO SHOULD ATTEND?

- IT professionals dealing with application server administration
- Oracle WebLogic server administrators
- Middleware administrators
- System administrators upgrading to WebLogic Server 14c
- Application developers seeking handson training
- Database administrators interested in WebLogic Server functionality
- IT professionals preparing for Oracle WebLogic certification exams.

### **PREREQUISITES**

- Good understanding of Web and Java EE technologies
- Basic skills in Linux and Windows environments
- Knowledge of application server administration
- Familiarity with Oracle Database concepts
- Understand usage of Kubernetes and Docker environments
- Strong problem-solving and analytical skills
- Prior hands-on experience with Oracle WebLogic Server 14c.

#### **MODULES**

# Module 1: Oracle WebLogic Server 14c: Administration I: Course Overview

Oracle WebLogic Server 14c:
Administration I: Course Overview

### Module 2: WebLogic Server: Overview

- WebLogic Server: Overview
- WebLogic Server Domain
- WebLogic Diagnostics Framework



## Module 3: Installing and Patching WebLogic Server

- Installing and Patching WebLogic Server
- WebLogic Server Installation Modes
- Installation Problems
- Practice 3-1: Installing WebLogic Server (Part I)
- Practice 3-1: Installing WebLogic Server (Part II)
- Practice 3-2: Patching WebLogic Server

### **Module 4: Creating Domains**

- Creating Domains
- Domain Mode: Production
- Creating a Domain with the Configuration Wizard
- Weblogic Server Domain Structure and Management
- Practice 4-1: Creating a New Domain
- Practice 4-2: Copying a Domain to a New Machine

### **Module 5: Starting Servers**

- Starting Servers
- Creating a Boot Identity File
- Changing Default JDK Location
- Practice 5-1: Starting and Stopping Servers (Part I)
- Practice 5-1: Starting and Stopping Servers (Part II)

### **Module 6: Using the Administration Console**

- Using the Administration Console
- Creating a Resource Example: New Server
- Practice 6-1: Using the Administration Console for Configuration

### **Module 7: Configuring JDBC**

Configuring JDBC

- Deployment of a Data Source
- Creating a Generic Data Source
- Oracle Real Application Clusters: Overview
- Practice 7-1: Configuring a JDBC Data Source

### **Module 8: Monitoring a Domain**

- Monitoring a Domain
- Accessing the Logs from the Admin Console
- Debug Scopes: Examples
- Creating a Custom View
- Practice 8-1: Working with WebLogic Server Logs
- Practice 8-2: Monitoring WebLogic Server (Part I)
- Practice 8-2: Monitoring WebLogic Server (Part II)

#### Module 9: Node Manager

- Node Manager
- Node Manager and Server Shutdown
- Other Node Manager Properties
- Practice 9-1: Configuring and Using Node Manager

## **Module 10: Deploying Applications**

- Deploying Applications
- Exploded Versus Archived Applications
- Deploying an Application
- Monitoring Deployed Applications: Monitoring Dashboard
- Practice 10-1: Deploying an Application
- Practice 10-2: Load Testing an Application

#### Module 11: Shared Java EE Libraries

- Shared Java EE Libraries
- Deploying a Shared Library



- Practice 11-1: Configuring and Deploying a Shared Library (Part I)
- Practice 11-1: Configuring and Deploying a Shared Library (Part II)

## Module 12: Network Channels and Virtual Hosts

- Network Channels and Virtual Hosts
- Channel Selection
- Virtual Host
- Practice 12-1: Configuring a Network Channel
- Practice 12-2: Configuring the Administration Port
- Practice 12-3: Creating a Virtual Host

## Module 13: Clusters: Overview, Creation, and Configuration

- Clusters: Overview, Creation, and Configuration
- Creating a Cluster: Administration Console
- Editing the New Dynamic Cluster
- Practice 13-1: Configuring a Cluster
- Practice 13-2: Configuring a Dynamic Cluster

#### Module 14: Clusters: Proxies and Sessions'

- Clusters: Proxies and Sessions
- Oracle Traffic Director
- Configuring Web Application Session Failover: weblogic.xml
- Secondary Server and Replication Groups
- Practice 14-1: Installing OHS (Optional) (Part I)
- Practice 14-1: Installing OHS (Optional) (Part II)
- Practice 14-2: Configuring a Cluster Proxy (Part I)
- Practice 14-2: Configuring a Cluster Proxy (Part II)

 Practice 14-3: Configuring Replication Groups (optional)

# Module 15: Clusters: Communication, Planning, and Troubleshooting

- Troubleshooting
- Clusters: Communication, Planning, and Troubleshooting
- Configuring Replication Channels
- Troubleshooting a Cluster
- Practice 15-1: Configuring a Cluster Broadcast Channel

### **Module 16: Transactions**

- Transactions
- Transaction States when Rolling Back
- JDBC Reminder
- Practice 16-1: Configuring Transaction Persistence (Part I)
- Practice 16-1: Configuring Transaction Persistence (Part II)

### **Module 17: WebLogic Server Security**

- WebLogic Server Security
- What the Providers Do
- LDAP Search Operations
- Multiple Authentication Providers
- Practice 17-1: Configuring an Authentication Provider (Part I)
- Practice 17-1: Configuring an Authentication Provider (Part II)

# Module 18: Backing Up a Domain and Upgrading WebLogic Server

- Backing Up a Domain and Upgrading WebLogic Server
- Impact of Administration Server Failure
- Practice 18-1: Backing Up and Restoring a Domain

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