
Oracle WebLogic Administration

Duration: 5 Days Course Code: OWLA Delivery Method: Virtual Learning

Overview:

This Oracle WebLogic Administration course teaches the core skills needed to install and configure the Oracle WebLogic Application Server. Using a mixture of discussions and a hands-on workshop approach, delegates learn to; deploy Java EE applications using the Administration Console, use the command-line and WLST scripting tool, configuration of Oracle HTTP Server and an Oracle WebLogic Server cluster to support failover and load balancing for applications.

Delegates can use Oracle WebLogic versions 11g or 12c when attending their training. The course covers essential features of both versions and outlines the important differences between both versions.

Exercises and examples are used throughout the course to give practical hands-on experience with the techniques covered.

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Target Audience:

This Oracle WebLogic Administration course is suitable for application server administrators, Java EE developers and systems administrators using Oracle WebLogic 11g or 12c, who need to gain the skills necessary to install, configure and manage an Oracle WebLogic Application Server.

Objectives:

- To provide the skills necessary to install, configure, and manage an Oracle WebLogic server. This includes deploying applications and understanding the core aspects of Oracle WebLogic server.
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Prerequisites:

Good operating system knowledge similar to the level covered on our Linux Introduction course or an equivalent Windows course is required. Whilst no prior knowledge of WebLogic is required, delegates should be from a relevant technical background. Some awareness of internet architectures and protocols is assumed.

Follow-on-Courses:

- Apache Web Server (APH)
 - Developing Applications with Java EE (JEE)
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Content:

Oracle WebLogic Administration Training Course Course Contents - DAY 1

Course Introduction

- Administration and Course Materials
- Course Structure and Agenda
- Delegate and Trainer Introductions

Session 1: WELCOME TO ORACLE FUSION MIDDLEWARE

- The Oracle Fusion Middleware Environment
- Oracle WebLogic Server Component Tour
- Online and Offline Documentation Sources

Session 2: JAVA ENTERPRISE EDITION (JEE) ARCHITECTURE

- Understanding the Java EE 6.0 Environment
- Java Middle Tier Architecture

Session 3: INSTALLING ORACLE WEBLOGIC SERVER

- Installation Options
- Graphical User Interface (GUI) Installation
- Command Line Installation
- WebLogic Server Directory Structure
- Patching WebLogic Server

Session 4: DOMAIN CONFIGURATION

- Understanding WebLogic Domains
- Administration Servers and Managed Servers
- Creating and Configuring Domains
- The Domain Directory Structure
- Offline WLST Domain Management Oracle WebLogic Administration Training Course Course Contents - DAY 2

Session 5: DOMAIN TEMPLATES

- Understanding and Creating a Domain Template
- Extending a Domain Template
- Domain Templates for Fusion Middleware Suites

Session 6: ADMINISTRATION TOOLS

- Utilising the Administration Console
- Using WLST to Navigate the Domain Structure
- Understanding Internal Change Management Using JMX and MBeans

Session 7: MANAGED SERVERS

- Configuring Managed Servers
- Starting and Stopping Managed Servers or Domains
- Startup Scripting
- Configuring Managed Servers Remotely
- Explaining Administration and Managed Server Independence (MSI)

Session 8: BACKUP AND RECOVERY

- Backup and Recovery Strategy
- Full Offline Backup and Recovery
- Online and Offline Domain Backup
- Instance Home Backup and Recovery Oracle WebLogic Administration Training Course Course Contents - DAY 3

Session 9: DEPLOYING WEB APPLICATIONS

- Understanding Deployment Strategies
- Deployment Using Administration Console
- Deployment Using Command Line
- WLST Web Application Deployment
- Editing Deployment Descriptors
- Application Monitoring and Stress Testing
- WebLogic and Web Server Interaction

Session 10: DEPLOYING JEE APPLICATIONS

- Describing JEE Web Applications
- Packaging Web Applications
- Web Application Structure and Packaging
- Deploying Shared Libraries
- Understanding Deployment Descriptors

Session 11: DEPLOYMENT IN PRODUCTION ENVIRONMENTS

- Development, Testing and Staging Deployments
- Deployment Plans
- Redeployment of Versioned Applications

Session 12: JDBC AND DATA SOURCES

- Understanding JDBC and Data Sources
- Configuring JDBC and Data Sources
- Using and Tuning Connection Pools
- Deploying JDBC Resources
- Monitoring and Testing Oracle WebLogic Administration Training Course Course Contents - DAY 4

Session 13: JAVA MESSAGE SERVICE (JMS) SETUP

- Describing and Configuring JMS
- Connection Factories, Queues and Topics

Session 15: UTILISING NODE MANAGER

- Node Manager Architecture
- Node Manager Directory Structure
- Understanding Machines
- Configuring Node Manager
- Start and Stop Procedures

Session 16: CLUSTERING BASICS

- Clustering Benefits
- Planning a WebLogic Cluster Configuration
- Basic and Multitier Cluster Architecture
- Communication Between Clustered Server Instances Oracle WebLogic Administration Training Course Course Contents - DAY 5

Session 17: CLUSTER CONFIGURATION

- Preparing, Creating and Configuring a Cluster
- Preparing, Creating and Configuring a Dynamic Cluster
- Extending a Cluster
- Controlling Clustered Servers
- Using Oracle HTTP Server as a Cluster Proxy

Session 18: CLUSTERS AND APPLICATIONS

- Deploying Applications to a Cluster
- Clustered Session State Replication
- Replication Groups and In-memory Replication
- Stateful Session Beans in Multitier Clusters
- Configuring JDBC and File Replication

Session 19: SECURITY ARCHITECTURE

- WebLogic Server Security Architecture
- Security Realms
- Users and Groups / Roles and Policies
- Understanding WebLogic Server Authentication Providers
- Web Application Resources and EJB Protection

Session 20: SECURING THE WEB INTERFACE

- Keys and Digital Certificates with the Keytool
- Configuring SSL for WebLogic Server
- Steps to Prevent Web-based Interference

- Using Persistent Messages
- JMS Monitoring

Session 14: DOMAIN MONITORING

- Server Log Monitoring
- Administration Console Log Management
- Integrating Application Logging
- Log Filtering
- Server Health and Performance Monitoring
- JDBC Data Source Monitoring
- Using the Monitoring Dashboard

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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