

## Oracle WebLogic Server 11g: Advanced Administration

**Duration:** 5 Days

### What you will learn

Oracle WebLogic Server is a Java EE application environment that supports the deployment of mission critical applications using a robust, secure and scalable infrastructure. System administration of WebLogic Server includes a wide range of activities, from creating and configuring server domains, to deploying and securing applications, to monitoring and troubleshooting server, application and performance issues.

In this course, students expand upon their basic administrative knowledge and experience, and learn more sophisticated techniques for working with WebLogic Server and integrating it within the rest of their enterprise. Particular attention is paid to the topics of authentication, enterprise messaging, clustering and performance. This course also covers some basic techniques for monitoring server health and for troubleshooting problems. Students continue to use tools such as the WebLogic Server Administration Console and WebLogic Server Scripting Tool (WLST) for performing these administration tasks.

An appendix is included covering the differences between the 11g (10.3.3) and 12c (12.1.1) product versions with regard to Oracle WebLogic Server administration topics.

### Learn to:

Manage domains and templates

Configure a highly available messaging infrastructure

Automate server migration and failover

Utilize LDAP for authentication

Monitor servers using WLDF or SNMP

This course is an upgrade of Oracle WebLogic Server 10g R3: Advanced System Administration.

### Audience

Administrator

Security Administrators

Support Engineer

Technical Administrator

Technical Consultant

Web Administrator

### Related Training

#### *Required Prerequisites*

Experience with basic Linux administration and shell commands

## **Course Objectives**

Configure and monitor server network channels  
Define a JDBC data source for load balancing and failover  
Configure JMS to guarantee message delivery  
Configure JMS load balancing and failover in a cluster  
Configure JMS store and forward features  
Create custom domain and extension templates  
Bridge WebLogic JMS to an external JMS provider  
Configure automatic server migration in a cluster  
Replicate HTTP sessions using multiple clusters  
Integrate WebLogic Server with an external LDAP server  
Integrate WebLogic Server with a database security store  
Tune a Java VM for performance  
Tune server subsystems for performance  
Define server work managers  
Apply techniques to diagnose and troubleshoot server problems  
Trigger SNMP notifications from WebLogic Server

## **Course Topics**

### **Installation Management**

Smart Update  
Patch Management

### **Domain Templates**

Domain Templates  
Extension Templates  
Template Builder

### **Other Domain Tools**

WLST and Templates  
Pack Tool  
Configuration Backup  
Configuration Auditing

### **Advanced Network Configuration**

Network Channels  
Administration Channels  
Standby Mode

### **Multi Data Sources**

Data Source Failover

Data Source Load Balancing  
Connection Testing  
WebLogic and RAC

### **JDBC Performance Essentials**

Connection Pooling  
Statement Caching  
Last Logging Resource

### **JMS Message Management**

Viewing Messages  
Exporting Messages  
Pausing Destinations

### **JMS Guaranteed Messaging**

Persistent Stores  
Durable Subscribers

### **JMS Performance Essentials**

Quotas  
Thresholds  
Unit of Order

### **JMS Store and Forward**

SAF Agents  
SAF Contexts  
SAF Imported Destinations

### **JMS Message Bridge**

Bridge Adapters  
Bridge Destinations  
Quality of Service

### **Server Migration**

Cluster Leasing  
Candidate Machines

### **JMS Clustering**

JMS Cluster Targeting  
Service Migration  
Migratable Targets  
Distributed Destinations  
JMS Load Balancing

## **Cross-Cluster Replication**

- MAN Replication
- WAN Replication **Authentication Providers**
- Security Realms
- Security Stores
- Control Flags
- LDAP Authenticators
- SQL Authenticator
- Password Validation
- Security Migration

## **Server Performance Essentials**

- Load Testing
- JVM Tuning
- Heap Monitoring
- Work Managers

## **Monitoring and Diagnostics Essentials**

- Runtime MBeans
- Diagnostics Framework
- Metric Collectors
- Watches
- Instrumentation
- WebLogic and SNMP
- Trap Monitors