



## Oracle WebLogic Server 12c: JMS Administration

This Oracle WebLogic Server 12c: JMS Administration training shows you how to configure, manage, and monitor WebLogic JMS resources according to proven best practices. Interact with expert instructors through a combination of instruction and hands-on exercises that will reinforce your learning. **This version of the 12c course is the latest, using WebLogic Server 12.2.1.4.**

### Learn How To:

- Configure JMS servers and destinations
- Configure JMS high availability
- Migrate messages from a failed server
- Monitor and tune JMS performance
- Configure JMS Clustering and High Availability
- Troubleshoot JMS problems
- Investigate, identify and fix common JMS issues with the help of a variety of tools
- Understand JMS Security

### Benefits to You

Increase the performance and scalability of your organization's applications and services with the #1 application server. Simplify deployment and significantly improve time-to-market.

### High Availability

This course will teach you how to configure your WebLogic environment to provide load balancing and failover for JMS resources. You'll learn how to identify when to use configured and dynamic clusters for JMS. Furthermore, you'll develop the knowledge and skills to move JMS resources across servers in your cluster in response to a server failure or during scheduled server maintenance.

### Prerequisites

Prerequisites: • Oracle WebLogic Server Admin I Suggested Prerequisites: • Oracle WebLogic Server Admin II

## Audience

- Administrator
- Developer
- Implementer
- Systems Administrator

## Objectives

- Configure distributed queues and topics.
- Deploy JMS to configured and dynamic clusters.
- Configure whole-server migration.
- Configure and initiate JMS service migration.
- Monitor and tune JMS performance.
- Troubleshoot JMS problems.
- Configure JMS persistent storage.
- Configure JMS queues, topics, and connections.
- Forward JMS Messages between WebLogic Servers with Store and Forward
- Use Messaging Bridge to connect messaging services

## Topics

### Java Messaging Concepts

- Messaging Terminology
- Point-to-Point Model
- Publish-Subscribe Model
- JMS Providers
- JMS Destinations
- JMS Acknowledgements

### Message Driven EJBs

#### Basic Configuration

- JMS Server Targeting
- JMS Server Best Practices
- System Module Targeting
- Connection Factory Delivery Setting
- Subdeployment Best Practices
- Configuring Destination Delivery Overrides
- Configuring an Error Destination
- Quota Best Practices

#### Message Monitoring and Management

- Introduction to Message Integration
- Monitoring a JMS Server
- JMS and the Monitoring Dashboard
- Monitoring MDBs
- Querying Messages
- Creating a Test Message

- Moving Messages
- Pausing and Resuming JMS Operations

## **Persistence, Transactions, and Durability**

- Producer Delivery Mode
- Persistent Store Options
- Monitoring JMS Transactions
- Durable Subscriber Example
- Shared Subscriptions
- Monitoring and Managing Durable Subscribers

## **Distributed Destinations**

- JMS Scalability Challenges
- JMS Clustering Options
- Targeting JMS to a Cluster
- Distributed Destination Connectivity
- Distributed Queue Architecture
- Partitioned Distributed Topic Architecture
- Replicated Distributed Topic Architecture
- MDBs and Distributed Destinations

## **Server Migration**

- JMS High Availability Challenges
- Prerequisites for Server Migration
- Node Manager Migration Settings
- Cluster Leasing Service
- Configuring Candidate Machines
- Enabling Automatic Migration
- Machine Failback
- Manual Server Migration

## **Service Migration**

- Prerequisites for Service Migration
- JTA Migration Architecture
- JMS Migration Architecture
- Targeting JMS to Support Migration
- Migration Policy Options
- Configuring a Migratable Target
- Migrate Services Manually

## **Performance Tuning**

- JMS Programming Considerations
- Tuning Server Heap
- Tuning Message Paging

- Tuning Persistent Stores
- Flow Control Logic
- Tuning Flow Control
- Tuning Message Compression
- Tuning the Consumer Message Pipeline

### **Introduction to WebLogic JMS Unit of Order**

- The need for JMS Message ordering
- WebLogic UOO value add
- Configuring WebLogic UOO

### **Troubleshooting**

- JMS Troubleshooting Tools
- JMS Logging
- JMS Headers and Properties
- JMS and MDB Debug Flags
- JMS and Diagnostic Images
- Common Configuration Problems
- Common Runtime Problems