Weblogic Server Administration

Course Description

This course information is intended for beginner and skilled in such the way, we gave in-depth knowledge to candidate over ideas. How to perform Oracle WebLogic Server 12c administrative tasks?

An overview of Oracle WebLogic Server 12c architecture, concepts and fundamentals. We provide elaborated sensible informative online training on Oracle WebLogic Server 12c administration from start-to-finish, case studies, practice material with every construct, 100 % sensible guidance and technique. After completion of training course candidate has better understanding over concept. A good hands-on over planning, designing, installing, configuring, deploying, and managing applications on the WebLogic Server.

Weblogic Server Administration online training curriculum

Oracle Fusion Middleware 12c (12.2.1)
- History of Oracle WebLogic Server
- Product Understanding of Oracle Fusion Middleware with Oracle WebLogic Server
- What new in WebLogic Server?
- Java EE 7 support in WebLogic Server
- Mutitenancy Support
- Understand New Runtime Features
- Release notes for WebLogic Server
- Certifications and Supported Standards

Installation of Oracle WebLogic Server
- Installing WebLogic Server by using Graphical User Interface (GUI) and Command Line (Silent)
- Learning the WebLogic Server Directory Structure

Configuring a Domain
- Common Elements in a WebLogic Server Domain
- Using Domains in the Enterprise
- Administration and Managed Servers
- Creating and Configuring a Domain
- Describing the Organization and Contents of the WLS Directory Structure
- Describing the use of WLST Offline to Manage Domains
- Creating a Simple Domain with One Managed Server
- Checking the Port Numbers that are used for Components

Using Templates to configure a domain
- Describing the Internal Process Used to Create or Update a Domain Using a Template
- Describing the Process of Extending a Domain Template
- Explaining the Domain Templates Provided for Setting up Jdeveloper, SOA, and Web-Centre

Using Administration Console and WLST
- Identifying Dynamic and Non-dynamic Attribute Changes in the Administration Console
- Customizing Monitoring Tables within the Administration Console
- Using the WebLogic Scripting Tool (WLST) Command-line Utility
- Invoking WLST and Navigate Through the Domain Structure
- Describing How Change Management is Performed Internally Using Java Management Extension (JMX) and Mbeans

Configuring Managed Servers
- Configuring Managed Servers Using the Administrative Console
- Configuring Managed Servers Using WebLogic Scripting Tool (WLST)
- Starting Managed Servers
- Shutting Down a Server or an Entire Domain Using WLST or the Administrative Console
- Configuring Managed Servers on a Computer Separate from the administration Server
- Explaining Administration and Managed Server Independence (MSI)

Configuring Node Managers
- Defining the Oracle WebLogic Server Machine
- Configuring a Machine and Assign Servers to it by Using the Console and WebLogic Scripting Tool (WLST)
- Explaining the Node Manager Architecture
- Describing the Organization and Contents of a Node Manager Directory Structure
- Configuring, Starting, and Stopping Node Managers
- Describing How to Start and Stop Procedures

Viewing and Managing Logs in Oracle WLS Environment
- Defining and Configuring Server and Domain Logs
- Viewing and Interpreting the Format of Domain and Server Log Files Using the Administration Console
- Configuring Server Standard Output Settings Using the Console
- Describing How Applications Can Integrate with WLS Logging Infrastructure (Apache commons, log4j)
- Accessing Online Log Message Catalogs
- Creating and Applying a Log Filter Using the Console
- Configuring Log Filter Expressions

Deployment Concepts
- Contrasting Auto deploy With Manual Deployment
- Configuring and Deploying Web Applications via the Administration Console, Command Line, and WLST
- Configuring Deployment Descriptors
- Testing Deployed Applications
- Describing the Role of Web Servers
- Tracing a Typical Web Interaction Flow

- Contrasting Static and Dynamic Content and deployment
- Front-end Deployed Applications with a Web Server

Deploying Java EE Applications
- Describing Java EE Web Applications
- Describing Enterprise Deployment Architectures
- Packaging Web Applications in Several Forms
- Defining Web Application Structure and Web Application Archive
- Explaining Why WebLogic Augments Standard Java EE Deployment Descriptors with Weblogic .xml Files
- Looking at Deployment Descriptors web.xml and weblogic.xml
- Describing URLs and Web Applications

Advanced Deployment
- Configuring an Application for Multiple Development Environments
- Creating a Deployment Plan
- Staging a Deployment Plan
- Using Production Redeployment

Understanding JDBC and Configuring Data Sources
- Configuring JDBC and JDBC Data Sources
- Configuring Data Source Scope
- Contrasting Two-tier and Multi-tier JDBC Architecture
- Configuring a Connection Pool
- Describing How Data Sources are used
- Deploying JDBC Resources to a Target
- Explaining the Components of JDBC URLs
- Monitoring and Testing a Data Source

Setting Up Java Message Service (JMS) Resources
- Describing JMS
- Describing How Oracle WebLogic Server JMS is implemented
- Configuring JMS Server
- Configuring Connection Factories
- Configuring Queues and Topics
- Configuring Persistent Messages
- Deploying an Application that Uses JMS
- Monitoring JMS Resources and Messages

Introduction to Clustering
- The Benefits of Oracle WebLogic Cluster
- Basic Cluster Architecture
- Multitier Cluster Architecture
- Communication among Clustered Server Instances
- The Key Criteria for Selecting Suitable Cluster Architecture

Configuring a Cluster
- Preparing Your Environment for a Cluster
- Creating and Configuring a Cluster
- Adding Servers to a Cluster
- Creating Dynamic Cluster
- Starting Up and Shutting Down Clustered Servers

Managing Clusters
- Deploying Applications to a Cluster
- Describing the Replication of a Session State in a Cluster
- Configuring Replication Groups
- Configuring In-memory Replication
- Configuring Java Database Connectivity (JDBC) Replication
- Configuring File Replication
- Configuring a Multitier Cluster for Enterprise JavaBeans (EJB) Applications

Security Concepts and Configuration
- Using the WebLogic Server (WLS) Security Architecture
- Configuring Security Realms
- Configuring Users and Groups
- Configuring Roles
- Configuring Policies
- Configuring Protection for Web Application Resources and EJBs

Protecting Against Attacks
- Configuring Secure Sockets Layer (SSL)
- Using the Key tool Utility to Configure Keys and Obtain Digital Certificates
- Configuring SSL for the WLS Server
- Configuring Countermeasures for Some Web-based Attacks

Configuring Oracle WebLogic Server Multitenant
- How to Manage WebLogic Server MT?
- Configuring WebLogic Server MT
- Configuring Virtual Targets
- Configuring Resource Group Templates
- Configuring Security
- Configuring Oracle Traffic Director
- Configuring Domain Partitions
- Configuring Resource Groups
- Configuring Resource Consumption Management
- Migrating a WebLogic Server Domain to a Domain Partition
- Exporting and Importing Partitions
- Monitoring and Debugging Partitions

Oracle Fusion Middleware Command Reference for Oracle WebLogic Server
- Oracle WebLogic Server Java Utilities
- Weblogic. Server Command-Line Reference

Oracle WebLogic Patching
- Patching Your Environment Using OPatch
- Patching Your Environment Using OPatch Auto

Oracle WebLogic Upgrade
- Introduction
- Roadmap for Upgrading Your Application Environment
- Reconfiguring WebLogic Domains
- Upgrading WebLogic Web Services
- Reconfiguration Wizard Screens
- WebLogic Server 12.2.1 Compatibility with Previous Releases

Backup and Recovery Operations
- Using a proper Backup and Recovery Strategy
- To Perform a Full Offline Backup and Recovery
- To Perform g an Online and Offline Domain Backup
- To Perform an Offline Domain Recovery
- To Perform an Instance Home Backup and Recovery