ITTcert
BY ORSYS

Course : Oracle WebLogic Server 14c: Administration I

OFFICIAL COURSE: DIGITAL SUPPORT AVAILABLE FOR 90 DAYS ONLY

Practical course - 5d - 35h00 - Ref. ODF

In this training course, you will learn how to install and configure Oracle WebLogic Server 14c. You'll get an overview of the basic concepts and architecture of WebLogic Server.

🎯 Teaching objectives

At the end of the training, the participant will be able to:

- ✔ Deploying applications on WebLogic Server
- ✔ Backing up and restoring a WebLogic Server domain
- ✔ Create a WebLogic Server domain
- ✔ Configuring and monitoring WebLogic Server
- ✔ Configuring WebLogic Server database resources
- ✔ Creating and configuring a WebLogic Server cluster
- ✔ Install WebLogic 12c server
- ✔ Configuring WebLogic Server's authentication provider

Intended audience
System administrators and developers.

Prerequisites
Experience in system administration. Experience in using basic Linux commands.

Certification
Successful completion of the exam leads to Oracle WebLogic Server 12c: Administration I certification.
Comment passer votre examen ?

PARTICIPANTS
System administrators and developers.

PREREQUISITES
Experience in system administration. Experience in using basic Linux commands.

TRAINER QUALIFICATIONS
The experts who lead the training courses are specialists in the subjects covered. They are approved by the publisher and certified for the course. They have also been validated by our teaching teams in terms of both professional knowledge and teaching skills for each course they teach. They have at least three to ten years of experience in their field and hold or have held positions of responsibility in companies.

ASSESSMENT TERMS
Assessment of targeted skills prior to training.
Assessment by the participant, at the end of the training course, of the skills acquired during the training course.
Validation by the trainer of the participant's learning outcomes, specifying the tools used: multiple-choice questions, role-playing exercises, etc.
At the end of each training course, ITTCERT provides participants with a course evaluation questionnaire, which is then analysed by our teaching teams. Participants also complete an official evaluation of the publisher.
An attendance sheet for each half-day of attendance is provided at the end of the training course, along with a certificate of completion if the participant has attended the entire session.

Practical details

Teaching methods

Training in French. Course material and practical exercises in English, in digital format and ACCESSIBLE ONLY FOR 90 DAYS. Good understanding of written English.

Course schedule

(1) **WebLogic server overview**

- Distributed systems.
- Java Platform Enterprise Edition.
- Oracle WebLogic server.
- JVM.
- Typical system architecture.
- WebLogic server domain.
- Administration server.
- Managed servers.
- Node manager.
- Machines and clusters.
- WebLogic server application services.
- WebLogic server application: example.
- WebLogic server administration tools.
- WebLogic server administration console.
- Fusion middleware control.
- WebLogic scripting tool.
- WebLogic diagnostic framework.
- WebLogic diagnostic framework monitoring dashboard.
- Enterprise Manager cloud control.
- WebLogic server and RESTful management.
- Cloud computing.
- Self-service.
- Infrastructure as a Service (IaaS).
- Platform as a Service (PaaS).
- Java cloud service.

(2) **Installing and applying patches on WebLogic Server**

- WebLogic server installation.
- Application of patches to WebLogic server.
- Correction without downtime.

(3) **Domain creation**

- Domain planning.
- Domain modes.
- Domain creation tools.
- Domain models.
- Using the configuration wizard.
- Multilocation concepts.

4 Server startup

- Server life cycle.
- Start and stop servers.
- Domain scripts.
- Customize domain scripts.
- Restart failed servers.

5 Using the administration console

- Use the administration console for configuration.
- Change management architecture.
- Create and modify managed servers.
- Enterprise Manager cloud control.

6 JDBC configuration

- JDBC review.
- Types of data sources.
- JDBC data source configuration.
- JDBC and RAC.
- Connection pools.

7 Domain monitoring

- Use of WebLogic server logs.
- WebLogic server monitoring.
- JMX, MBeans and monitoring.
- Monitoring dashboards.

8 Node manager

- Node manager concepts.
- Configuring and using the node manager.
- Node manager configuration tasks.
- Node manager and scripts.
- Node manager best practices.

9 Application deployment

- Deployment overview and life cycle.
- Deployment descriptor concepts.
- WebLogic deployment tools.
- Deploy an application.
- Application load testing.

(10) Shared Java EE libraries

- Before shared libraries.
- Shared libraries.
- Types of shared libraries.
- Java EE library support.
- WebLogic Java EE shared libraries.
- Configuration and deployment priority.
- Priority management.
- Setting up a shared library.
- Configuration of a shared library in the manifest file.
- Reference a shared library.
- Deploy a library using the administration console.
- Deploy a library with weblogic.Deployer.
- Deploy a library with WLST.

(11) Network channels and virtual hosts

- WebLogic networking by default.
- Additional networking scenarios.
- Dedicate network interfaces to specific servers.
- Use of multiple ports on a single server.
- Separate administrative communication.
- Isolate cluster communication.
- Network channel.
- CHAIN selection.
- Create a chain.
- Channel network settings.
- Surveillance channels.
- Administration port.
- Configure the domain administration port.
- Replacement of the administration port server.
- Server standby mode.
- Virtual host.
- Create a virtual host.
- Configure a virtual host.
- Configuration of a virtual host in DNS or in the hosts file.
- Deploy on a virtual host.
- Run the application using the virtual host.

(12) Clusters: proxies and sessions

- Web-level and cluster proxies.
- Oracle Traffic Director and Oracle HTTP Server.
- Cluster proxy configuration.
- Configuration of replication groups.

(13) Clusters: communication, planning and troubleshooting

- Cluster communication concepts.
- Multicasting and Unicasting.
- Replication channels.
- Cluster scaling and troubleshooting.

14 **Transactions**

- Transaction overview.
- Configure transaction persistence.
- Transaction logs.
- Transactions and persistent stores.
- Transaction monitoring.

15 **WebLogic server security**

- WebLogic security architecture.
- Configuration of an authentication provider.
- LDAP authentication.
- Authentication troubleshooting.

16 **Domain backup and WebLogic Server upgrade**

- Backup/recovery concepts.
- Backup types.
- Backing up and restoring a domain.