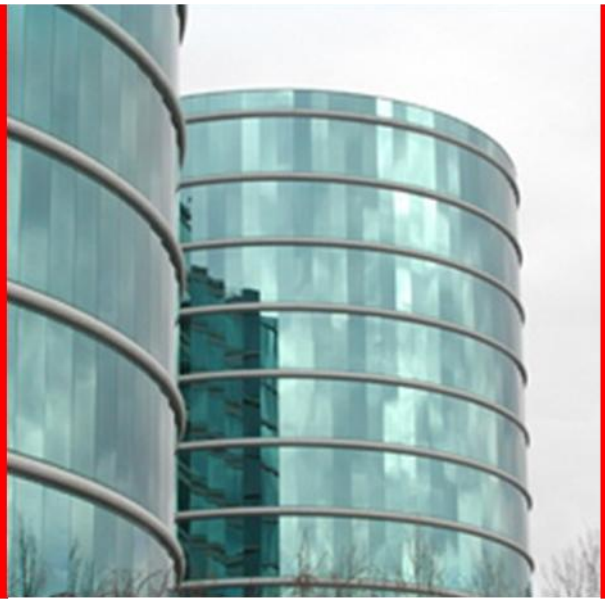

Oracle WebLogic Server 12c Essentials Exam Study Guide

ORACLE PARTNERNETWORK

Specialized. Recognized by Oracle.
Preferred by Customers.

Objective & Audience

Objective

Help you prepare to take the Oracle WebLogic Server 12*c* Essentials exam by providing pointers to resources that you can use in your preparation.

Targeted Audience

- System Administrator/Implementation Specialist
- Technical Consultants who can install, design, configure, deploy, administer, troubleshoot and maintain WebLogic Server systems.
- Up-to-date WebLogic Server 12*c* product training is strongly recommended.

For Oracle employees and authorized partners only. Do not distribute to third parties.
© 2012 Oracle Corporation – Proprietary and Confidential

Exam Topics & Objectives

Exam Topics

The Oracle WebLogic Server 12*c* Essentials exam consists of 9 topics:

1. Cloud Application Foundation (CAF) Fundamentals
2. WebLogic Server Fundamentals
3. Deploy Java Enterprise Edition (EE) Applications
4. WebLogic Server Management
5. WebLogic Server Advanced Topics
6. WebLogic Server System Architecture
7. WebLogic Server Implementation Best Practices
8. WebLogic Server Patching and Upgrading with SmartUpdate
9. Integrate Enterprise Manager and WebLogic Server

Exam Objectives

The exam objectives are defined by learner or practitioner level of knowledge:

- **Learner-level:** questions require the candidate to recall information to determine the correct answer. Example: Define the term cloud.
- **Practitioner-level:** questions require the candidate to derive the correct answer from the application of their knowledge, which can only be attained by extensive experience with the product. Example: The client requires a cloud implementation for both intranet and extranet usage. What would you recommend to address the need?

For Oracle employees and authorized partners only. Do not distribute to third parties.
© 2012 Oracle Corporation – Proprietary and Confidential

Training Options

For each exam topic there have been identified alternative training options that are available at Oracle. The training options are divided into four categories:

- **Boot Camps**
  The boot camps are designed as a "jump start" training to enhance your skills by providing role-based training on industry-leading Oracle solutions and services. The boot camps are built as concise, intensive, and real-time training to give partners a competitive advantage as they prepare to build powerful solutions for their own customer base. Partners can choose to attend these boot camps in class or in a live virtual class format to maximize the effectiveness and the time allocated to training. Partners can take any publicly-scheduled Oracle University courses at steep discounts. Benefit from hands on experience to gain real working skill and work toward Oracle certifications.

- **Online Training**
  Oracle partners are entitled free access to the Oracle Knowledge Center, a vast library of recorded product courses. New courses are regularly added to the library, providing partners with the latest information and training to master new products or to increase proficiency on the new releases.

- **Documentation**
  Books, white papers, product user guides and reference manuals are available from Oracle on the web.

For Oracle employees and authorized partners only. Do not distribute to third parties.
© 2012 Oracle Corporation – Proprietary and Confidential

Topic 1: Cloud Application Foundation (CAF) Fundamentals

Objectives	Level
• Describe Cloud Application Foundation concepts	Learner
• Identify components of WebLogic Suite	Learner
• Identify differences between WebLogic Server (WLS) SE, EE & Suite	Learner
• Describe the problem domain of Coherence with WLS	Learner
• Describe Oracle Cloud Computing business drivers	Learner
• Describe Virtual Assembly Builder Studio features	Learner
• Describe supported and custom Appliances for Virtual Assemblies	Learner
• Describe ActiveCache (WLS and Coherence)	Learner

Training Options

- Online Training
  - WebLogic Server 12c, Cloud Application Foundation for Oracle Partners
  - Introducing WebLogic Server 12c

Sample Questions

Which four service offerings are included in Oracle Public Cloud?

a. Database Service
b. Data Service
c. Java Service
d. Security Service
e. .NET Service
f. SOA Service

Oracle Coherence is best classified as _____?

a. A Database Product
b. A Middleware Product
c. An Object Relational Mapping (ORM) Tool
d. A Soft Load Balancer
e. An Application Product

For Oracle employees and authorized partners only. Do not distribute to third parties.
© 2012 Oracle Corporation – Proprietary and Confidential

Topic 2: WebLogic Server Fundamentals

Objectives	Level
• Describe the different WLS distributions that are available	Learner
• Describe Enterprise Grid Messaging	Learner
• Describe Active GridLink for Real Application Cluster (RAC) features	Learner
• Explain WLS Domain concepts	Learner
• Install WLS	Learner
• Create and use WLS Domain Templates	Practitioner
• Automate WLS administration tasks with WebLogic Scripting Tool (WLST)	Practitioner
• Secure WLS resources and applications	Practitioner
• Configure and use WLS Work Managers, Contexts and Constraints	Practitioner
• Create and target JDBC Connection Pools	Practitioner
• Create and target JMS Distributed Queues	Practitioner
• Create and target JMS Distributed Topics	Practitioner
• Configure and use WebLogic Diagnostic Framework (WLDF)	Practitioner
• Configure and use JRockit Flight Recorder and WLDF integration	Practitioner
• Tune the Application Server Environment including the Java Virtual Machine (JVM) for performance	Practitioner
• Troubleshoot and debug WLS using logs and thread dumps	Practitioner

For Oracle employees and authorized partners only. Do not distribute to third parties.
© 2012 Oracle Corporation – Proprietary and Confidential

Topic 2: WebLogic Server Fundamentals

Training Options

- Instructor-Led Training
  - Oracle WebLogic Server 12c: Administration I
  - Oracle WebLogic Server 12c: Administration II
  - Oracle WebLogic Server 12c: JMS Administration
- Online Training
  - Oracle WebLogic Server 12c Solution Overview
  - What's New in Oracle WebLogic Server 12c Part 1
  - What's New in Oracle WebLogic Server 12c Part 2
  - WebLogic Server 12c Product Area Features and Functions for Technical Individuals
- Documentation
  - Introducing WebLogic Server 12c
  - Oracle WebLogic Server
  - **Oracle® Fusion Middleware Getting Started With Installation for Oracle WebLogic Server 12c Release 1 (12.1.1)**
  - **Oracle® Fusion Middleware Installation Guide for Oracle WebLogic Server 12c Release 1 (12.1.1)**
  - Oracle® Fusion Middleware Installation Guide for Oracle WebLogic Server 12c Release 1
  - Oracle® Fusion Middleware Understanding Oracle WebLogic Server 12c Release 1
  - Oracle® Fusion Middleware What's New in Oracle WebLogic Server 12c Release 1
  - Oracle® Fusion Middleware Understanding Domain Configuration for Oracle WebLogic Server 12c Release 1
  - Oracle® Fusion Middleware Oracle WebLogic Scripting Tool 12c Release 1
  - Oracle® Fusion Middleware Configuring and Managing JMS for Oracle WebLogic Server 12c Release 1
  - Oracle WebLogic Server Active GridLink for Oracle Real Application Clusters (PDF)

Sample Questions

To use Active Cache features in WebLogic 12C, which three libraries are needed from the WebLogic Server installation to be deployed in WebLogic Server?

a. `coherence-work.jar`

b. `coherence.jar`

c. `active-cache-1.0.jar`

d. `coherence-web-spi.war`

For Oracle employees and authorized partners only. Do not distribute to third parties.

© 2012 Oracle Corporation – Proprietary and Confidential

Topic 3: Deploy Java Enterprise Edition (EE) Applications

Objectives	Level
• Describe Java EE 6 and Developer Productivity features	Learner
• Describe Java Integrated Development Environments (IDE) support	Learner
• Describe Maven integration features	Learner
• Describe the structure and parts of a Java web application	Learner
• Describe the structure and parts of a Java enterprise application	Learner
• Deploy Java EE applications to WLS	Practitioner
• Deploy Java EE applications using a Deployment Plan	Practitioner
• Deploy WLS shared libraries and associate them with applications	Practitioner
• Deploy applications using the WLS Administration Port and Side by Side Deployment	Practitioner
• Use the Continuous Integration (CI) and Build Tools that WLS supports (ANT, Maven, etc.)	Practitioner
• Enable and use WLS Fast Swap for Rapid Redeployment	Practitioner
• Troubleshoot classloading conflicts with the ClassLoader Analysis Tool	Practitioner
• Describe WLS Spring Support and how Spring can utilize WLS features	Learner
• Secure Java EE applications	Practitioner

Training Options

- Instructor-Led Training
  - Developing Applications with Java EE 6 on WebLogic Server 12c
  - Java EE 6: Develop Web Components with Servlets & JSPs
  - Developing Applications for the Java EE 6 Platform
  - Java EE 6 Hands-on Lab
- Documentation
  - Oracle® Fusion Middleware Deploying Applications to Oracle WebLogic Server 12c Release 1
  - Oracle® Fusion Middleware Developing Applications for Oracle WebLogic Server 12c Release 1

Sample Questions

For real time event processing, which three clients can you use?

a. **Java**
b. **C++**
c. **.NET**
d. REST

Which four steps are involved to use Active Cache Dependency Injection in a WebLogic Java EE application?

a. **Deploy Active Cache shared library**
b. **Declare dependency on the shared library**
c. **Declare all dependency injection entries**
d. Package tangosol-coherence-override.xml in modules classpath
Package coherence-cache-config.xml in modules classpath

For Oracle employees and authorized partners only. Do not distribute to third parties.
© 2012 Oracle Corporation – Proprietary and Confidential

Topic 4: WebLogic Server Management

Objectives	Level
• Use JRockit Mission Control to monitor WLS at runtime	Practitioner
• Use JRockit Mission Control to view JRockit Flight Recorder and WLDF data	Practitioner
• Monitoring and diagnose WLS for best performance	Practitioner
• Use the WLS Admin Console to manage WLS	Practitioner
• Start and stop WLS instances using the Node Manager	Practitioner

Training Options

- Instructor-Led Training
- Online Training
  - Setting up and running Oracle JRockit
  - Understanding Oracle Enterprise Manager Cloud Control 12c and WLS Management Pack EE
- Documentation
  - Oracle® Fusion Middleware Managing Server Startup and Shutdown for Oracle WebLogic Server 12c Release 1
  - Oracle® Fusion Middleware Extending the Administration Console for Oracle WebLogic Server 12c Release 1
  - Administration Console Online Help
  - Oracle® Fusion Middleware Node Manager Administrator's Guide for Oracle WebLogic Server 12c Release 1

Sample Questions

Which product has guaranteed messaging and transactional integrity for 100% reliability, over 25 years of use in the world's largest transaction applications?

a. Coherence
b. Tuxedo
c. JRockit
d. WebLogic Server

For Oracle employees and authorized partners only. Do not distribute to third parties.
© 2012 Oracle Corporation – Proprietary and Confidential

Topic 5: WebLogic Server Advanced Topics

Objectives	Level
• Describe the value that WLS offers above an EE container	Learner
• Describe JDBC	Learner
• Describe WLS Distributed JMS	Learner
• Use Scripting with WLS	Practitioner
• Use Automation options for WLS	Practitioner
• Describe Remote Procedure Calls (RPC) & Web Services Standards supported by WLS	Learner
• Describe Web Session and XA Affinity features of Active GridLink	Learner
• Configure WLS to store Transaction Logs in a Database	Practitioner
• Configure systems for High Availability	Practitioner
• Configure and use advanced JMS features: Store and Forward	Practitioner
• Configure and use advanced JMS features: Unit of Order (UOO) and Unit of Work (UOW)	Practitioner
• Configure and use TopLink Grid - Java Persistence API (JPA) and Coherence	Practitioner
• Configure systems for ease of Disaster Recovery	Practitioner
• Configure and use ActiveCache (WLS and Coherence)	Practitioner
• Implement High Availability (HA) in WLS with Service and Server Migration	Practitioner

Training Options

- Instructor-Led Training
- Online Training
- Documentation
  - Oracle® Fusion Middleware Configuring and Managing JDBC Data Sources for Oracle WebLogic Server 12c Release 1
  - Oracle® Fusion Middleware Programming JDBC for Oracle WebLogic Server 12c Release 1
  - Oracle® Fusion Middleware Programming JMS for Oracle WebLogic Server 12c Release 1
  - Oracle® Fusion Middleware Configuring and Managing JMS for Oracle WebLogic Server 12c Release 1
  - Oracle® Fusion Middleware Oracle WebLogic Scripting Tool 12c Release 1
  - Oracle® Fusion Middleware Getting Started With JAX-RPC Web Services for Oracle WebLogic Server 12c Release 1
  - Oracle® Fusion Middleware Using ActiveCache 12c Release 1

For Oracle employees and authorized partners only. Do not distribute to third parties.
© 2012 Oracle Corporation – Proprietary and Confidential

Topic 5: WebLogic Server Advanced Topics

Sample Questions

Active Cache is the integration of Coherence and WebLogic Server. Which component is NOT part of this integration?

a. Coherence*Web

b. Coherence*Extend

c. TopLink Grid with Coherence

d. Coherence cluster lifecycle management in WebLogic Server

e. Named cache dependency Injection

For Oracle employees and authorized partners only. Do not distribute to third parties.

© 2012 Oracle Corporation – Proprietary and Confidential

Topic 6: WebLogic Server System Architecture

Objectives	Level
• Design a scaled-out solution with WLS	Practitioner
• Architect a highly available WLS system	Practitioner
• Use proxy web server	Practitioner
• Use load balancer	Practitioner
• Design a WLS system for maximum uptime, availability and business continuity	Practitioner

Training Options

- Instructor-Led Training
- Online Training
  - Oracle WebLogic Server 12c System Architecture
- Documentation
  -

Sample Questions

What are four benefits of recommended basic architecture?

a. Good load balancing between Presentation Tier and Object Tier

b. Easy administration

c. Flexible Load balancing

d. Optimal performance

e. Simple security

For Oracle employees and authorized partners only. Do not distribute to third parties.
© 2012 Oracle Corporation – Proprietary and Confidential

Topic 7: WebLogic Server Implementation Best Practices

Objectives	Level
• Create WLS system design considerations	Practitioner
• Create a WLS Domain using best practices	Practitioner
• Configure a WLS Cluster and Managed Servers using best practices	Practitioner
• Configure the JVM where WLS runs using best practices	Practitioner
• Configure JDBC Connection Pools using best practices	Practitioner
• Configure JMS using best practices	Practitioner
• Use Work Managers using best practices	Practitioner
• Install with Node Manager using best practices	Practitioner

Training Options

- Instructor-Led Training

- Online Training
  - WebLogic Server 12c Implementation Best Practices
- Documentation

Sample Questions

In WebLogic 10.3.6 and WebLogic 12c on ExaLogic, performance of JMS is further improved through _____ and _____.

a. Web Session Affinity
b. Concurrent Request Manager
c. Coherence
d. Elastic Message Overflow

WebLogic Node Manager can be used to manage the life cycle of WebLogic servers. WebLogic Node Manager is installed and started _____.

a. Per Machine
b. Per Domain
c. Per Managed Server
d. Per Admin Server

For Oracle employees and authorized partners only. Do not distribute to third parties.
© 2012 Oracle Corporation – Proprietary and Confidential

Topic 8: WebLogic Server Patching and Upgrading with SmartUpdate

Objectives	Level
• Describe how patches are applied to WLS	Learner
• Apply a rolling patch strategy to a WLS Cluster to ensure maximum availability	Practitioner
• Upgrade from WLS 10.3.3 to newer versions	Practitioner
• Upgrade from Oracle Application Server (OC4J/OAS) to WLS	Practitioner
• Describe Oracle offerings for upgrading from non-Oracle platforms to WLS	Learner

Training Options

- Instructor-Led Training
- Online Training
  - WebLogic Server Patching & Upgrading using SmartUpdate
- Documentation
  - Applying Patches to Oracle WebLogic Server
  - Oracle® Fusion Middleware Upgrade Guide for Oracle WebLogic Server 12c Release 1
  - Oracle Fusion Middleware Supported System Configurations

Sample Questions

What type of Java EE application can be upgraded to WebLogic 12c using the Smart Upgrade tool?

a. GlassFish
b. iAS
c. WebLogic Server 11g
d. JBoss

For Oracle employees and authorized partners only. Do not distribute to third parties.
© 2012 Oracle Corporation – Proprietary and Confidential

Topic 9: Integrate Enterprise Manager and WebLogic Server

Objectives	Level
• Integrate Enterprise Manager with WLS	Practitioner
• Explain how to position WebLogic Management Pack EE	Learner
• Describe Real Operation Automation	Learner
• Describe Real Operation Insight	Learner
• Use Enterprise Manager Lifecycle Management for WLS	Practitioner
• Describe Enterprise Manager Real User Experience Insight	Learner
• Describe Enterprise Manager Business Transaction Management for WLS	Learner
• Describe Enterprise Manager Configuration Management for WLS	Learner

Training Options

- Instructor-Led Training
- Online Training
  - Understanding Oracle Enterprise Manager Cloud Control 12c and WLS Management Pack EE
- Documentation
  - WebLogic Server Management Pack EE Data Sheet
  - Monitoring and Managing Oracle WebLogic Server

Sample Questions

In the area of Performance Management and Diagnostics, which feature is supported in Oracle Enterprise Manager 12C?

a. **Search information in logs across multiple domains**
b. View different log information in single console location
c. Save current performance data as baseline to be used in comparison with future data
d. Provides single dashboard across multi-tier composite application

When a critical error occurs, which module in Enterprise Manager will automatically collect diagnostics data from WebLogic Server?

a. Reports
b. Compliance
c. **Support Workbench**
d. Asset Discovery

For Oracle employees and authorized partners only. Do not distribute to third parties.
© 2012 Oracle Corporation – Proprietary and Confidential

Exam Registration

- **How to register for the exam?**

  You can register for all Oracle certification exams with Pearson VUE. Before a registration can be submitted, a Pearson VUE profile must be created using your Company ID. Your Company ID can be obtained by contacting your local Oracle Partner Business Center or by signing in to your OPN account. Your Company ID is located in the section on the right under "Company information".

  Please follow these instructions in order to properly set-up your Pearson VUE account for the first time.

- **Have you completed an Oracle Certification Exam in the past?**

  Due to systems enhancements, each partner who has completed an Oracle Certification Exam will need to update their Pearson VUE profile in order to receive credit and for those records to appear in the OPN Competency Center.

- **How to get full recognition as Certified Implementation Specialist?**

  To get full recognition as a Certified Implementation Specialist you need to:

  A. Update your Pearson VUE profile with your Company ID

  B. Activate your Certview Account

  Please follow these instructions and your records will be properly recorded.

For Oracle employees and authorized partners only. Do not distribute to third parties.
© 2012 Oracle Corporation – Proprietary and Confidential

SOFTWARE. HARDWARE. COMPLETE.

For Oracle employees and authorized partners only. Do not distribute to third parties.
© 2012 Oracle Corporation – Proprietary and Confidential