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# Oracle WebLogic Server 12c Certified Implementation Specialist Exam Study Guide

## Getting Started

The Oracle WebLogic Server 12c Certified Implementation Specialist Exam Study Guide is designed to help you prepare for the [Oracle WebLogic Server 12c Implementation Specialist certification](#) (1Z0-599).

Earning this certification helps OPN members differentiate in the marketplace through proven in-depth expertise, and helps their partner company qualify for the [Oracle WebLogic Server 12c Specialization](#).

## Target Audience

Oracle WebLogic Server 12c Certified Implementation Specialist exam audience defines the type of participants who are likely to pass the exam and targets individuals with a specific level of education and expertise:

### *Job Role:*

- Fusion Middleware/Java EE Architects
- Technical Consultants
- WebLogic Administrators
- System Administrators

### *Level of Competency:*

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

## Exam Topics

Oracle WebLogic Server 12c Certified Implementation Specialist Exam covers **nine topics**:

- Cloud Application Foundation (CAF) Fundamentals
- WebLogic Server Fundamentals
- Deploy Java Enterprise Edition (EE) Applications
- WebLogic Server Management
- WebLogic Server Advanced Topics
- WebLogic Server System Architecture
- WebLogic Server Implementation Best Practices
- WebLogic Server Patching and Upgrading with SmartUpdate
- Integrate Enterprise Manager and WebLogic Server

## Levels of Knowledge

Each exam topic contains objectives and each objective is categorized by learner or practitioner level of knowledge.

**Learner** items test foundational grasp and require product comprehension (not recognition or memorization).

Example:

“When setting up price list modifiers in Advanced Pricing, which three steps must be completed in order to successfully activate surcharge and price break features?”

**Practitioner** items present on-the-job scenarios and require the ability to: integrate and apply knowledge in new contexts, analyze and troubleshoot complex issues, and solve problems.

Example:

1) “You are creating price list modifiers in Advanced Pricing. Your customer has three requirements: X, Y, Z. Identify the two steps that must be completed in order to meet those requirements.

2) “You are running a two-instance database with six redo logs defined. You decide to add a third thread to support a third database instance, on the third node of the cluster.

Using command line administration, which two commands will you execute to achieve this?

## Training Options

Throughout the study guide each exam topic recommends one or several training formats:

- [OPN Boot Camps](#)
- [Online Training](#)
- [Oracle University Training](#)

While the Oracle PartnerNetwork facilitates free access to online training, in class trainings often require a fee.

## Exam Details per Topic

This section covers details associated to all exam topics such as: exam topics overview, objectives, levels of knowledge, recommended trainings and sample questions. Specialization exams include all application functionalities not only the most frequently used ones.

### Topic 1: Cloud Application Foundation (CAF) Fundamentals

#### Objective

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

#### Level

Learner  
Learner  
Learner  
Learner  
Learner  
Learner  
Learner  
Learner

#### Recommended Training

##### Instructor-Led Training

- [Oracle Cloud Application Foundation Implementation Boot Camp](#)
- [Oracle WebLogic Server 12c Implementation Boot Camp](#)

##### Online Training

- [WebLogic Server 12c, Cloud Application Foundation for Oracle Partners](#)
- [Introducing WebLogic Server 12c](#)

##### Documentation

- [Getting Started with Oracle WebLogic Server 12c: Developer's Guide](#) Ch. 1

#### Sample Questions

Which four service offerings are included in Oracle Public Cloud?

- **Database Service**
- **Data Service**
- **Java Service**
- **Security Service**
- .NET Service
- SOA Service



Oracle Coherence is best classified as \_\_\_\_\_?

- A Database Product
- **A Middleware Product**
- An Object Relational Mapping (ORM) Tool
- A Soft Load Balancer
- An Application Product

## Topic 2: WebLogic Server Fundamentals

### Objective

	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	Practitioner
• 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

### Recommended Training

#### Instructor-Led Training

- [Oracle WebLogic Server 12c: Administration I](#)
- [Oracle WebLogic Server 12c: Administration II](#)
- [Oracle WebLogic Server 12c Implementation Boot Camp](#)
- [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 \(PDF\)](#)
- [Oracle WebLogic Server 12c Administration Handbook](#)

## 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?

- `coherence-work.jar`
- `coherence.jar`
- `active-cache-1.0.jar`
- `coherence-web-spi.war`



## Topic 3: Deploy Java Enterprise Edition (EE) Applications

### Objective

	Level
• Describe Java EE 6 and Developer Productivity features	Learner
• Describe Java Integrated Development Environments (IDE) support	Learner
• Describe Maven integration features	Learner
• Describe Java SE packaging	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

### Recommended Training

#### 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

- [Getting Started with Oracle WebLogic Server 12c: Developer's Guide](#) Ch. 3, 8 & 11
- [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?

- **Java**
- **C++**
- **.NET**
- **REST**

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

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



## Topic 4: WebLogic Server Management

### Objective

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

### Level

- Practitioner
- Practitioner
- Practitioner
- Practitioner
- Practitioner

### Recommended Training

#### Instructor-Led Training

- [Oracle WebLogic Server 12c: Administration I](#)
- [Oracle WebLogic Server 12c: Administration II](#)
- [Oracle WebLogic Server 12c Implementation Boot Camp](#)

#### 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](#)
- [Oracle WebLogic Server 12c: Distinctive Recipes: Architecture, Development and Administration](#) Ch. 18, 30 & 31

### 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?

- Coherence
- **Tuxedo**
- JRockit
- WebLogic Server



## Topic 5: WebLogic Server Advanced Topics

<b>Objective</b>	<b>Level</b>
• Describe the value that WLS offers above an EE container	Learner
• Describe JDBC	Learner
• Describe WLS Distributed JMS	Learner
• Describe WLS Clustering	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

### Recommended Training

#### Instructor-Led Training

- [Oracle WebLogic Server 12c: Administration I](#)
- [Oracle WebLogic Server 12c: Administration II](#)
- [Oracle WebLogic Server 12c Implementation Boot Camp](#)
- [Oracle WebLogic Server 12c: JMS Administration](#)

#### 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](#)
- [Getting Started with Oracle WebLogic Server 12c: Developer's Guide](#) Ch. 7

### Sample Questions

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

- Coherence\*Web
- **Coherence\*Extend**
- TopLink Grid with Coherence
- Coherence cluster lifecycle management in WebLogic Server
- Named cache dependency Injection



## Topic 6: WebLogic Server System Architecture

### Objective

- |  | 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 |

### Recommended Training

#### Instructor-Led Training

- [Oracle WebLogic Server 12c Implementation Boot Camp](#)
- [Oracle WebLogic Server 12c: Performance Tuning Workshop](#)

#### Online Training

- [Oracle WebLogic Server 12c System Architecture](#)

#### Documentation

- [Getting Started with Oracle WebLogic Server 12c: Developer's Guide](#) Ch. 7
- [Oracle WebLogic Server 12c: Distinctive Recipes: Architecture, Development and Administration](#) CH. 2, 3 & 4

### Sample Questions

What are four benefits of recommended basic architecture?

- Good load balancing between Presentation Tier and Object Tier
- **Easy administration**
- **Flexible Load balancing**
- **Optimal performance**
- **Simple security**



## Topic 7: WebLogic Server Implementation Best Practices

Objective	Level
<ul style="list-style-type: none"> <li>Create WLS system design considerations</li> </ul>	Practitioner
<ul style="list-style-type: none"> <li>Create a WLS Domain using best practices</li> </ul>	Practitioner
<ul style="list-style-type: none"> <li>Configure a WLS Cluster and Managed Servers using best practices</li> </ul>	Practitioner
<ul style="list-style-type: none"> <li>Configure the JVM where WLS runs using best practices</li> </ul>	Practitioner
<ul style="list-style-type: none"> <li>Configure JDBC Connection Pools using best practices</li> </ul>	Practitioner
<ul style="list-style-type: none"> <li>Configure JMS using best practices</li> </ul>	Practitioner
<ul style="list-style-type: none"> <li>Use Work Managers using best practices</li> </ul>	Practitioner
<ul style="list-style-type: none"> <li>Install with Node Manager using best practices</li> </ul>	Practitioner

### Recommended Training

#### Instructor-Led Training

- [Oracle WebLogic Server 12c Implementation Boot Camp](#)
- [Oracle WebLogic Server 12c: Performance Tuning Workshop](#)

#### Online Training

- [Oracle WebLogic Server 12c System Architecture](#)

#### Documentation

- [Getting Started with Oracle WebLogic Server 12c: Developer's Guide](#) Ch. 7
- [Oracle WebLogic Server 12c: Distinctive Recipes: Architecture, Development and Administration](#) CH. 2, 3 & 4

### Sample Questions

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

- Web Session Affinity
- Concurrent Request Manager**
- Coherence
- Elastic Message Overflow**

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

- Per Machine**
- Per Domain
- Per Managed Server
- Per Admin Server



## Topic 8: WebLogic Server Patching and Upgrading with SmartUpdate

### Objective

- |  | 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      |

### Recommended Training

#### Online Training

- [Oracle WebLogic Server 12c Implementation Boot Camp](#)
- [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?

- GlassFish
- iAS
- WebLogic Server 11g
- JBoss



## Topic 9: Integrate Enterprise Manager and WebLogic Server

### Objective

	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

### Recommended Training

#### Instructor-Led Training

- [Oracle WebLogic Server 12c Implementation Boot Camp](#)
- [Oracle WebLogic Server 12c: Enterprise Manager Management Pack](#)

#### 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?

- **Search information in logs across multiple domains**
- View different log information in single console location
- Save current performance data as baseline to be used in comparison with future data
- 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?

- Reports





- Compliance
- **Support Workbench**
- Asset Discovery

## Exam Registration Details

Full exam preparation details are available on the exam page [Oracle WebLogic Server 12c Essentials](#) (1Z0-599), including learning objectives, number of questions, time allowance, pricing and languages available.

The OPN Certified Specialist Exams appointments are available worldwide at [Pearson VUE Testing Centers](#). Reservations can be made via phone or online.

Candidates must have an Oracle Web Account to access [CertView](#) and check their exam results. In order to have their certifications reflected on [OPN Competency Center](#), both CertView and Pearson Vue accounts must be updated with the current OPN Company ID. Your Company ID can be obtained by contacting your local [Oracle Partner Business Center](#) or by signing in to your [OPN account](#).

## Additional Resources

- [Oracle WebLogic Server Knowledge Zone](#)
- [OPN Guided Learning Paths & Assessments](#)
- [OPN Certified Specialist Exam Study Guides](#)
- [Enablement 2.0 Boot Camps](#)