

# ORACLE WEBLOGIC SERVER

## KEY FEATURES AND BENEFITS

### ORACLE WEBLOGIC SERVER STANDARD EDITION

- Java EE 7 full platform support
- Java SE 8 certification, support
- Choice of IDEs, development tools and frameworks
- Oracle Cloud compatibility
- Industry-leading performance
- Comprehensive management
- Oracle Web Tier

### ORACLE WEBLOGIC SERVER ENTERPRISE EDITION

- Oracle WebLogic Server Standard Edition, plus...
- Java SE Advanced
- High performance clustering
- Dynamic Clusters
- Single partition domains for application portability

### ORACLE WEBLOGIC SUITE

- Oracle WebLogic Server Enterprise Edition, plus...
- Oracle Coherence Enterprise Edition
- Active GridLink for RAC
- Java SE Suite
- iAS Enterprise Edition

### ORACLE WEBLOGIC SERVER MULTITENANT

- Multi-partition domains for application consolidation
- Isolation between applications in separate partitions
- Microcontainers for flexible, service-based architectures
- WebLogic Coherence Grid Edition Option
- Oracle Traffic Director
- Prerequisite: WebLogic Server Enterprise Edition or WebLogic Suite

### ORACLE WEBLOGIC SERVER CONTINUOUS AVAILABILITY

- Maximum availability for multi data center deployments
- Zero downtime patching
- Live partition migration
- Cross-site transaction recovery
- WebLogic Coherence Grid Edition option
- Oracle Traffic Director
- Oracle Site Guard
- Prerequisite: WebLogic Server Enterprise Edition or WebLogic Suite

*Oracle WebLogic Server is the #1 Java application server. It offers development tools and APIs for application innovation with a mission critical runtime. Multitenancy supports application consolidation, while preserving isolation and enabling portability. Continuous availability features enable zero downtime in multi data center configurations. Oracle WebLogic Server is strategically integrated with Oracle's full product and cloud service portfolio, and is available in multiple editions.*

*Oracle WebLogic Server Standard Edition combines full Java Enterprise Edition 7 support with a reliable, manageable, high-performance runtime platform. Oracle Enterprise Pack for Eclipse, Oracle JDeveloper and Oracle NetBeans IDEs support development with Maven, Hudson/Jenkins, the Oracle Java Cloud Service and other tools.*

*Oracle WebLogic Server Enterprise Edition includes all Standard Edition features, plus clustering and Java SE Advanced. Dynamic clusters support automated, elastic scaling for performance and availability. Java Mission Control and Java Flight Recorder provide unique diagnostic capabilities. Domain partitions enable application portability across environments.*

*Oracle WebLogic Suite is an application infrastructure that spans web server, application server, and data grid technology tiers. It includes all of Oracle WebLogic Server Enterprise Edition plus Oracle Coherence Enterprise Edition for performance and scalability, Active GridLink for RAC for connectivity with Oracle Database RAC, Java SE Suite, and all of iAS Enterprise Edition.*

*Oracle WebLogic Server Multitenant supports running multiple, isolated partitions in WebLogic domains to consolidate applications and reduce costs. Partitions also provide microcontainers for application services, to increase manageability and agility of enterprise application architectures.*

*Oracle WebLogic Server Continuous Availability adds unique high availability features and technologies for multi data center deployments, including zero-downtime patching, live partition migration, cross-site transaction recovery, Coherence federated caching, Oracle Traffic Director and Oracle Site Guard.*

## Oracle WebLogic Server Standard Edition

Oracle WebLogic Server Standard Edition provides developers with the tools and technologies for building enterprise applications quickly. In production, Oracle WebLogic Server Standard Edition delivers high performance and administration capabilities to keep enterprise applications and services up and running.

### ▪ Simplified Development

- Oracle WebLogic Server 12cR2 is fully Java Enterprise Edition 7 compatible and Java SE 8 certified, supporting the latest developer innovations. Oracle Java SE Support is included in WebLogic Server Standard Edition.
- Quick Installers provide a lightweight distribution for developer ease of use.
- Oracle WebLogic Server provides a choice of IDEs. Developers can use Oracle Eclipse-based tooling and Oracle NetBeans open source IDEs for Java EE development, or the Oracle JDeveloper IDE that supports the full Oracle Fusion Middleware product line.
- Maven plug-ins integrate Oracle WebLogic Server with public and private Maven repositories, and continuous integration environments based on Hudson/Jenkins and other tools.
- Oracle Application Development Framework (ADF) is an end-to-end MVC development framework, built on top of Java EE, and available with Oracle WebLogic Server Standard Edition.
- The Oracle Java Cloud Service and Oracle Developer Cloud Service are available separately and provide cloud-based options for developing and deploying Oracle WebLogic Server applications.

### ▪ Industry-leading performance

Oracle WebLogic Server delivers industry-leading performance, making it possible to meet service levels with fewer servers and resources to manage, at lower cost. Optimizations in individual system components, combined with self-tuning capabilities, deliver high performance across diverse applications, as proven in customer environments, and in industry standard benchmarks. Oracle WebLogic Server 12c currently holds the world record result of 57,422.17 SPECjEnterprise2010 EjOPS<sup>1</sup>.

### ▪ Superior Manageability, Monitoring and Management

Oracle WebLogic Server Standard Edition provides built-in management, diagnostic and automation tools to increase management and operational efficiency. The WebLogic Administration Console provides a Web interface for all Oracle WebLogic Server management functionality. Oracle Fusion Middleware Control provides an integrated console for managing all of Oracle Fusion Middleware. The WebLogic Scripting Tool enables command-line and script-based management, and RESTful APIs in 12cR2 enable REST-based access to all management functionality. The WebLogic Diagnostic Framework enables users to instrument applications for monitoring and diagnostic purposes, and to drive rules-based management automation.

### ▪ Oracle Web Tier Integration

Oracle WebLogic Server Standard Edition includes Oracle Web Tier technologies to provide seamless integration across Web Servers and the application server tier. Oracle Web Tier includes Oracle HTTP Server, Oracle iPlanet, and Web Server plug-ins for Apache and Microsoft IIS. The WebLogic Management Framework supports integrated management of Oracle HTTP Server 12c instances.

## Oracle WebLogic Server Enterprise Edition

Oracle WebLogic Server Enterprise Edition includes all of Oracle WebLogic Server Standard Edition, with improved application performance and availability features, and deep diagnostic capabilities for production systems.

### ▪ Enterprise Scalability and Clustering

Clustering simplifies scaling of applications with high availability and reliability. Cluster-wide management and deployment simplify management of clustered environments. Session failover, whole server migration, automatic service migration, and rolling upgrades are just a few of the clustering capabilities that help maintain system availability.

In Oracle WebLogic Server 12c, automated, rules-based elastic scaling of dynamic clusters can be used to automatically adapt to changing application requirements. Oracle Web Tier components automatically recognize cluster configuration changes and adapt load balancing and session failover accordingly.

---

<sup>1</sup> SPEC and the benchmark name SPECjEnterprise are registered trademarks of the Standard Performance Evaluation Corporation. Results from [www.spec.org](http://www.spec.org) as of Oct. 18, 2015. Oracle WebLogic Server 12c (12.1.1) on SPARC T5-8, 57,422.17 SPECjEnterprise2010 EjOPS.

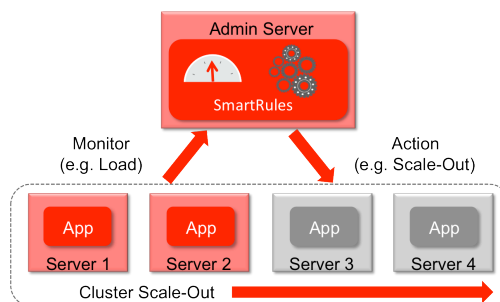


Figure 1: Automated Elasticity and Scaling of Dynamic Clusters

▪ **Java Mission Control and Java Flight Recorder**

Java Mission Control and Java Flight Recorder are unique JVM capabilities included in Java SE Advanced and in Oracle WebLogic Server Enterprise Edition. They enable users to record JVM events in an in-memory buffer that can be persisted for post-incident analysis. The WebLogic Diagnostic Framework is integrated with Java Flight Recorder to enable combined Oracle WebLogic Server and JVM event analysis.

▪ **Single Partition Domains for Application Portability and Agility**

Domain partitions are a new configuration option introduced in Oracle WebLogic Server 12cR2. Partitions provide microcontainers that encapsulate applications and their dependent resources into portable entities, simplifying the migration of applications across development, test, production and cloud environments. Oracle WebLogic Server Enterprise Edition supports running single partitions in Oracle WebLogic Server domains, allowing customers to use domain partitions for application portability and agility.

**Oracle WebLogic Suite**

Oracle WebLogic Suite includes all of the features of Oracle WebLogic Server Enterprise Edition, and adds unique performance, availability, scalability and manageability capabilities to meet the needs of modern enterprises.

▪ **Linear Scalability – Oracle Coherence Enterprise Edition**

Oracle WebLogic Suite includes Oracle Coherence Enterprise Edition, an in-memory data grid that enables applications to improve performance, scalability and reliability. Developers can use Oracle Coherence APIs, JCache or Memcached APIs, or can use features such as Coherence\*Web HTTP session management to leverage Oracle Coherence functionality with no application programming.

Oracle WebLogic Server 12c enables the management of Coherence clusters using the WebLogic Management Framework, and tools such as the WebLogic Console and WebLogic Scripting Tool (WLST). This feature, called Managed Coherence Servers, provides a unified, efficient management infrastructure for managing Oracle WebLogic Server and Oracle Coherence together.

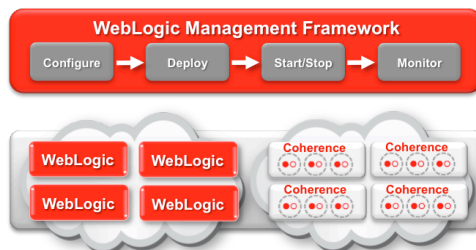


Figure 2: Unified management for Oracle WebLogic Server and Oracle Coherence.

▪ **High Availability – Active GridLink for RAC**

Active GridLink for Oracle Real Application Clusters (RAC) integrates Oracle WebLogic Server and Oracle RAC. GridLink data sources simplify management by connecting to RAC clusters while isolating Oracle WebLogic Server configurations from RAC configuration changes. Runtime Connection Load Balancing increases application performance and scalability. Transaction affinity ensures transactions are processed

with maximum performance and reliability. Fast Connection Failover speeds detection of RAC node failures, and failover to remaining nodes, for continuous connectivity and improved system availability.

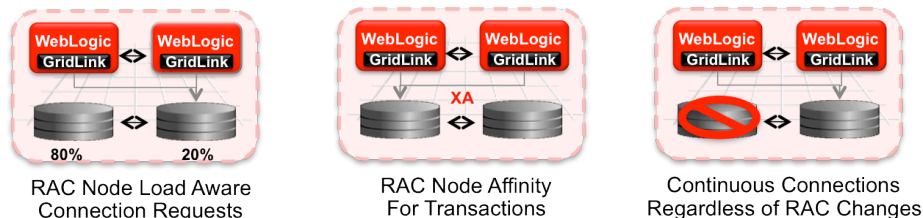


Figure 3: Active GridLink for RAC Load Balancing, XA Affinity and Failover

**Oracle WebLogic Server Multitenant**

Oracle WebLogic Server Multitenant, available with Oracle WebLogic Server 12cR2, provides additional value-add capabilities for WebLogic Server Enterprise Edition and WebLogic Suite customers. Oracle WebLogic Server Multitenant supports full use of partition-based microcontainers, providing maximum application portability across development, production and cloud environments. Support for domains with multiple partitions allows users to consolidate applications onto a small number of domains and servers for reduced cost of ownership. Partitions provide multiple levels of isolation to ensure independence, autonomy and security of applications running in shared servers.

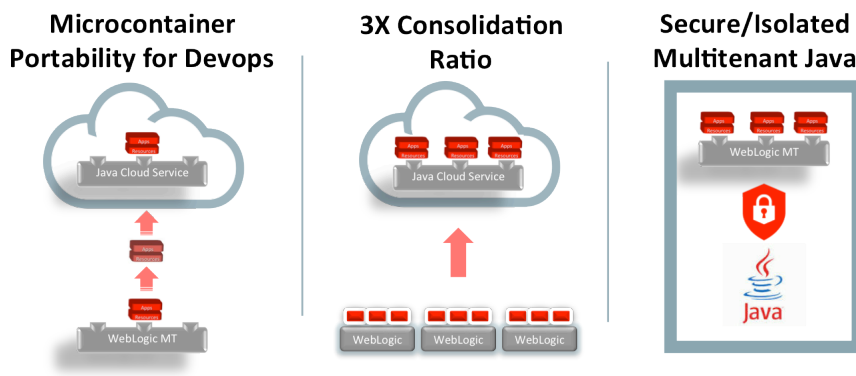


Figure 4: Oracle WebLogic Server Multitenant Benefits

Oracle WebLogic Server Multitenant capabilities are also supported by, and integrated with, other products in the Cloud Application Foundation product family. Oracle Traffic Director, included with Oracle WebLogic Server Multitenant, not only supports load balancing across partitions, but also automatically recognizes new partitions as they are added to server configurations. For Coherence users, the WebLogic Coherence Grid Edition option enables creation and management of dedicated Oracle Coherence services used by partitions and tenants. Partitions can use dedicated databases, or pluggable databases hosted in Oracle Database 12c. Partition management support is available in Oracle Fusion Middleware Control and the other management tools supported by Oracle WebLogic Server.

Please consult the Oracle WebLogic Server Multitenant data sheet for more information about this product offering.

**Oracle WebLogic Server Continuous Availability**

Oracle WebLogic Server Continuous Availability is designed to minimize planned and unplanned downtime in multi data center configurations. It is available with Oracle WebLogic Server 12cR2 as a value-add offering for WebLogic Server Enterprise Edition and WebLogic Suite customers and includes the WebLogic Coherence Grid Edition Option. Features such as zero-downtime patching, live partition migration, cross-domain transaction recovery, Oracle Coherence federated caching, Oracle Traffic Director and Oracle Site Guard enable users to create high availability environments within data centers and across multiple data centers, with built-in management automation for cross-site operations such as failover and failback.

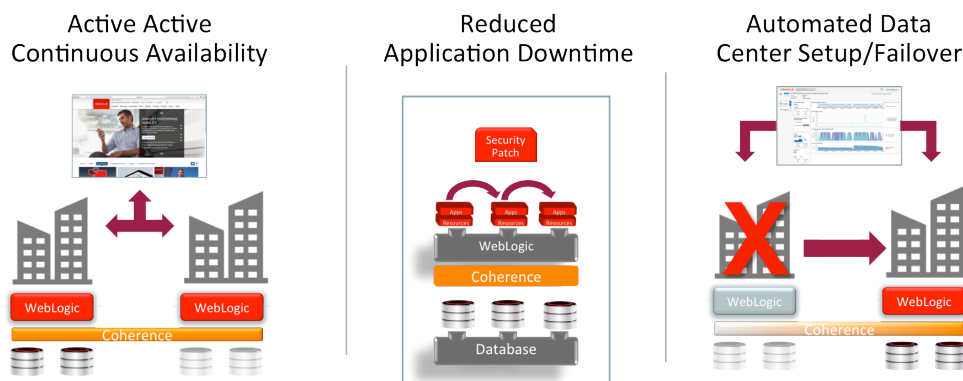


Figure 5: Oracle WebLogic Server Continuous Availability – Minimize Downtime Within and Across Data Centers

Please consult the Oracle WebLogic Server Multitenant data sheet for more information about this product offering.

### Oracle Database 12c Integration

All Oracle WebLogic Server editions support multiple database products. However, in Oracle WebLogic Server 12c we have added specific feature capabilities to integrate with Oracle Database 12c features. Application Continuity provides continuous application services, even when database connections are lost. Integration with Database Resident Connection Pools improves the scalability of cloud application environments sharing a pool of database connections. Global Data Services support enables transparent failover to database services across multi-site database environments (available with Active GridLink for RAC only).

### Oracle Enterprise Manager

Oracle WebLogic Server Management Pack Enterprise Edition is available as an add-on to all Oracle WebLogic Server editions. It enables Oracle WebLogic Server management via Oracle Enterprise Manager Cloud Control, including business transaction management, performance, diagnostics, and lifecycle management, and provisioning and patching for managing multi-domain environments.

### Deployment Options

Oracle WebLogic Server supports a unique set of deployment options. Users can deploy Oracle WebLogic Server applications to conventional systems such as Linux, Solaris and Windows systems. Users can also deploy to Engineered Systems such as Oracle Exalogic Elastic Cloud and Oracle SPARC SuperCluster systems, with optimizations for performance, availability and manageability. Finally, users can deploy applications to the Oracle Java Cloud Service, running in the Oracle Cloud today, or running on Exalogic private clouds in the near future. Applications are fully compatible across these environments.

### Foundation for Oracle Fusion Middleware, Oracle Applications, and the Oracle Cloud Platform

Oracle WebLogic Server provides the core runtime for Oracle Fusion Middleware, Oracle Applications, and many of the PaaS and SaaS services available in the Oracle Cloud. Common provisioning, application development, management, and integration capabilities across these offerings deliver flexible integration between custom applications developed on Oracle WebLogic Server, and Oracle's middleware, application and cloud services portfolio.

### Summary

Oracle WebLogic Server provides a modern development platform for building applications, a runtime platform for high performance and availability, and rich management tooling for efficient and low cost operations. It offers unique multitenant and continuous availability capabilities for modern enterprise requirements. It offers flexible choice of deployment options across cloud environments, engineered systems, and conventional systems. It is a critical foundation technology for Oracle's middleware, applications and cloud services offerings. No other application server in the industry has the same breadth of capabilities and strategic vendor commitment. Build your next generation of applications on Oracle WebLogic Server!

**RELATED PRODUCTS**

Oracle Fusion Middleware works with Oracle WebLogic Server to form an integrated set of capabilities for diverse business requirements.

**RELATED PRODUCTS**

Extend Oracle WebLogic Server Continuous Availability with:

- Oracle Integration Continuous Availability

Extend Oracle WebLogic Suite with:

- Oracle WebLogic Coherence Grid Edition Option
- Oracle BPEL Process Manager Option
- Oracle Service Bus
- Oracle SOA Suite
- Oracle Unified Business Process Management Suite

Extend Oracle WebLogic Server Enterprise Edition with:

- Oracle WebCenter Portal
- Oracle WebCenter Real-Time Collaboration

Extend Oracle WebLogic Server Standard Edition with:

- Oracle WebLogic Server Management Pack Enterprise Edition
- Oracle Cloud Management Pack for Oracle Fusion Middleware

**Supported Platforms**

For supported platforms and configuration detail, refer to the following: [oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html](http://oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html)  
See table 1 for a platform summary.

Supported Platforms	
Software	
Operating systems	<ul style="list-style-type: none"> <li>• AIX</li> <li>• HP-UX</li> <li>• Linux (including Docker containers)</li> <li>• Mac OS X (development)</li> <li>• Solaris</li> <li>• Windows</li> </ul>
Databases	<ul style="list-style-type: none"> <li>• Oracle (and Oracle Real Application Clusters)</li> <li>• IBM DB2</li> <li>• Microsoft SQL Server</li> <li>• MySQL</li> <li>• Sybase</li> </ul>
Web Servers	<ul style="list-style-type: none"> <li>• Apache</li> <li>• Microsoft IIS</li> <li>• Oracle HTTP Server</li> <li>• Oracle iPlanet Web Server</li> </ul>
Java	<ul style="list-style-type: none"> <li>• Java EE 7 and Java SE 8 (Oracle WebLogic Server 12cR2)</li> <li>• See product documentation for details on other Oracle WebLogic Server versions</li> </ul>

**Table 1: Oracle WebLogic Server Platform Support Summary**

**Contact Us**

For more information about Oracle WebLogic Server, please visit [oracle.com](http://oracle.com) or call +1.800.ORACLE1 to speak to an Oracle representative.



Copyright © 2015, Oracle and/or its affiliates. All rights reserved.

This document is provided for information purposes only and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.