

ORACLE WEBLOGIC SERVER

KEY FEATURES AND BENEFITS

ORACLE WEBLOGIC SERVER STANDARD EDITION

- Java EE 6 full platform support plus selected Java EE 7 APIs
- Java SE 6 and 7 certification
- Oracle Java SE Support
- ZIP distribution for development
- Oracle TopLink
- Choice of IDEs: Oracle Enterprise Pack for Eclipse, Oracle JDeveloper, Oracle NetBeans IDE
- Maven plug-ins, POMs, and archetypes
- Support for rich client applications – REST, JSON, WebSocket, Server-Sent Events and TopLink Data Services
- Classloader Analysis Tool to detect/resolve class conflicts
- Oracle Application Development Framework
- Spring Framework integration
- Industry-leading performance
- Comprehensive, easy-to-use WebLogic Management Framework
- Oracle Web Tier

ORACLE WEBLOGIC SERVER ENTERPRISE EDITION

- Oracle WebLogic Server Standard Edition, plus...
- High performance clustering and failover capabilities
- Dynamic Clusters
- Java SE Advanced, including Java Mission Control and Java Flight Recorder application monitoring and diagnostics
- JMS clustering for reliable enterprise messaging
- WebLogic Software Kit for Oracle Database Appliance

ORACLE WEBLOGIC SUITE

- Oracle WebLogic Server Enterprise Edition, plus...
- Oracle Coherence Enterprise Edition – Scale-out for data intensive applications
- Active GridLink for RAC – High Availability with Oracle Database RAC
- Java SE Suite – Minimize application latency
- iAS Enterprise Edition

Oracle WebLogic Server is the #1 application server for developing and deploying applications across cloud environments, engineered systems, and conventional systems. Oracle WebLogic Server offers application developers modern development tooling and advanced APIs for application innovation. It provides a mission critical cloud platform for applications requiring high performance, scalability and reliability. Powerful, integrated management tools simplify operations and reduce management costs. Finally, Oracle WebLogic Server provides the foundation for the Oracle Fusion Middleware portfolio of products. Oracle WebLogic Server is available in three editions with increasing functionality.

Oracle WebLogic Server Standard Edition includes Oracle TopLink, Oracle Application Development Framework, Oracle Web Tier and the core Oracle WebLogic Server. Full Java Enterprise Edition support is included along with development features such as Maven support, and IDE support from Oracle Enterprise Pack for Eclipse, Oracle JDeveloper and Oracle NetBeans. Oracle WebLogic Server Standard Edition provides a reliable, manageable runtime platform with industry-leading performance.

Oracle WebLogic Server Enterprise Edition includes all Oracle WebLogic Server Standard Edition features, plus Oracle WebLogic Server clustering, Java SE Advanced and the WebLogic Software Kit for Oracle Database Appliance. Proven clustering technology enables scaling of applications with high availability. Java SE Advanced includes Java Mission Control and Java Flight Recorder for diagnosing problems in development and production. JMS clustering features such as Whole Server Migration and Automatic Service Migration support reliable enterprise messaging.

Oracle WebLogic Suite is the flagship Oracle WebLogic Server edition. Oracle WebLogic Suite is an integrated solution for building an on-premise application infrastructure that spans web server, application server, and data grid technology tiers. Oracle WebLogic Suite includes all of Oracle WebLogic Server Enterprise Edition plus the integration of the Oracle Coherence Enterprise Edition data grid for performance and scalability, Active GridLink for RAC to optimize connectivity with Oracle Database RAC, Java SE Suite to minimize application latency, and all of iAS Enterprise Edition capabilities.

Oracle WebLogic Suite

Oracle WebLogic Suite is the flagship Oracle WebLogic Server edition. It includes all of the capabilities of Oracle WebLogic Server, the industry's #1 application server, and 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. Oracle WebLogic Suite enables enterprises to outperform their competitors while minimizing operational costs, and will scale to adapt to changing business conditions and application requirements.

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 now 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.

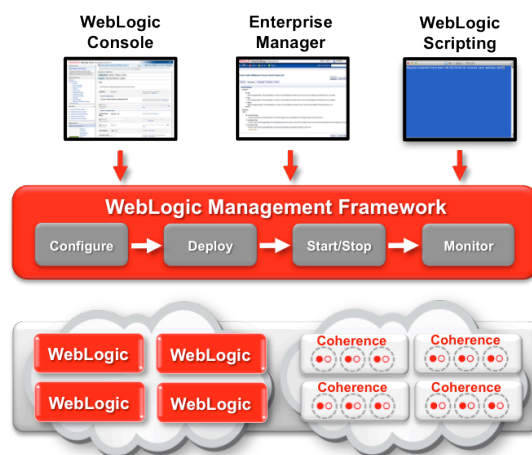


Figure 1: Managed Coherence Servers - Unified management for Oracle WebLogic Server and Oracle Coherence.

Oracle WebLogic Server and Oracle Coherence offer superior capabilities as standalone products. No other application infrastructure provides the same combined, integrated capabilities as Oracle WebLogic Suite.

High Availability – Active GridLink for RAC

Active GridLink for Oracle Real Application Clusters (RAC) integrates Oracle WebLogic Server and Oracle RAC. "GridLink" data sources connect to RAC clusters and simplify Oracle WebLogic Server management by 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.

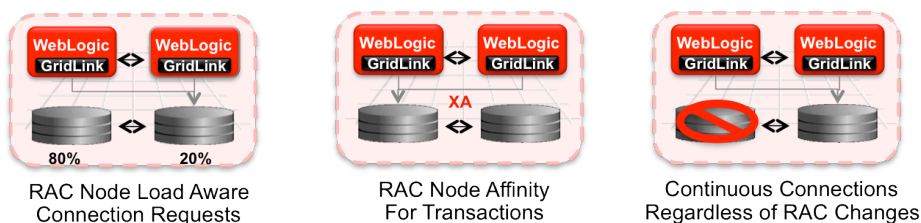


Figure 2: Active GridLink for RAC Load Balancing, XA Affinity and Failover

In Oracle WebLogic Server 12c, Active GridLink for RAC now supports advanced features of Oracle Database 12c such as Global Data Services. Together with transaction affinity, Web session affinity and other features, Active GridLink for RAC delivers the best application server integration with the world's premier database technology.

- **Runtime predictability – Oracle Java SE Suite**

Oracle Java SE Suite provides the Java runtime environment for Oracle WebLogic Suite, including access to the world's two leading JVMs – Oracle JDK and Oracle JRockit. Java SE Suite advanced garbage collection technology reduces pause times and enables lowers latency for mission-critical applications that require performance and predictability.

Oracle WebLogic Server Enterprise Edition

When your business cannot afford to have applications fail or have services become inaccessible, Oracle WebLogic Server Enterprise Edition provides organizations with high availability and superior monitoring and management capabilities to keep IT infrastructure running even as load on the system increases. Oracle WebLogic Server Enterprise Edition ensures superior application performance and provides deep diagnostic capabilities for production systems. Oracle WebLogic Server Enterprise Edition is engineered to support modern data centers with maximum uptime at minimum cost. It includes all of Oracle WebLogic Server Standard Edition, plus the following features.

- **Enterprise Scalability and Clustering**

Dynamic configuration changes, production redeployment, and rolling upgrades are just a few of the capabilities that help maintain system availability. Cluster-wide management and deployment simplify management of clustered environments. Web Server plug-ins provide connectivity from Web Servers to Oracle WebLogic Server clusters, with dynamic load balancing across servers in the cluster. Server self-monitoring and overload protection help avoid server failures. Session failover, whole-server migration, automatic service migration, and transaction recovery services maintain cluster availability when individual servers become unavailable. Oracle WebLogic Server also simplifies the configuration of multi-site deployments for Disaster Recovery needs.

In Oracle WebLogic Server 12c, Dynamic Clusters provide a new option for cluster configuration, simplifying both initial cluster configuration, and enabling elastic scaling of clusters to meet changing requirements of cloud applications and environments.

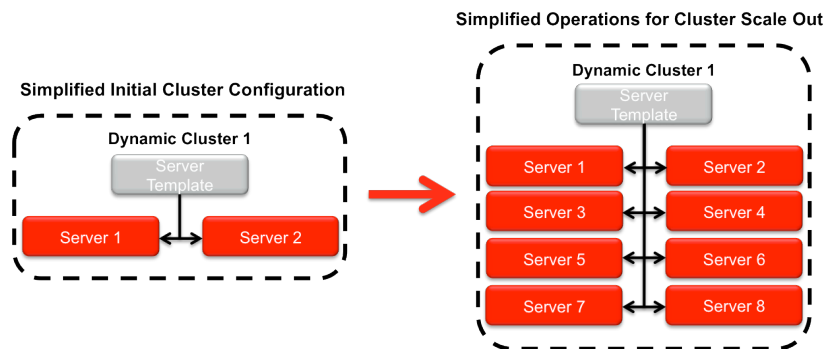


Figure 3: Dynamic Clusters – Elastic Scaling for Cloud Environments

- **Enterprise Messaging**

Reliable messaging between systems is critical for applications and modern data centers. Oracle WebLogic Server Java Message Service (JMS) provides an enterprise-class messaging engine built into the application server for simplified application development and infrastructure management. In Oracle WebLogic Server 12c, elastic JMS simplifies configuration of JMS clusters and enables JMS inclusion in dynamic clusters for simplified scaling, with whole server migration for high availability.

- **Java Mission Control and Java Flight Recorder**

Java Mission Control and Java Flight Recorder are unique JVM capabilities that included in Java SE Advanced and in Oracle WebLogic Server Enterprise Edition. Java Flight Recorder captures JVM events in a circular buffer that can be persisted to disk for post-incident analysis. Java Mission Control is an intuitive

Eclipse-based GUI for analyzing Java Flight Recorder data. The WebLogic Diagnostic Framework is integrated with Java Flight Recorder to enable combined Oracle WebLogic Server and JVM event analysis.

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 12c is fully Java EE 6 compatible and includes selected Java EE 7 APIs – JAX-RS 2.0, Java API for JSON Processing, Java API for WebSocket, and JPA 2.1. Oracle WebLogic Server 11g supports Java EE 5.
- Oracle WebLogic Server Standard Edition includes Oracle Java SE support. Oracle WebLogic Server 11g and 12c are certified with Java SE 7, including new developer features. See Oracle certification matrices for Java SE 6 certification information.
- Oracle WebLogic Server is available as a lightweight zip distribution for fast download times and developer ease of use. Free developer licenses are provided to enable desktop application development.
- Oracle TopLink is a Java persistence framework based on the open source EclipseLink project. It offers standards-based JPA, JAXB and SDO support, along with TopLink Grid, TopLink Data Services and other value-added product features.
- Oracle Enterprise Pack for Eclipse, JDeveloper and NetBeans provide a choice of open source and commercial IDE offerings. Developers can choose the completeness of the Oracle JDeveloper IDE that spans Oracle Fusion Middleware, Oracle Eclipse-based tooling with Oracle supported plug-ins, or NetBeans. Eclipse and NetBeans offer popular choices built in open source for highly productive Java EE development.
- Oracle WebLogic Server provides Maven plug-ins, POMs and archetypes that integrate Oracle WebLogic Server with Maven repositories and build environments. Binding the goals from the Oracle WebLogic Server plug-ins into a Maven project lifecycle allows both simple and complex execution sequences to be automatically performed in Continuous Integration build environments.
- Support for rich client applications added in Oracle WebLogic Server 12c enables the development of interactive applications between HTML5 clients or native mobile applications, and applications hosted on Oracle WebLogic Server. New features include support for JAX-RS 2.0, JSON processing, WebSocket, WebSocket emulation, Server-Sent Events and TopLink Data Services.

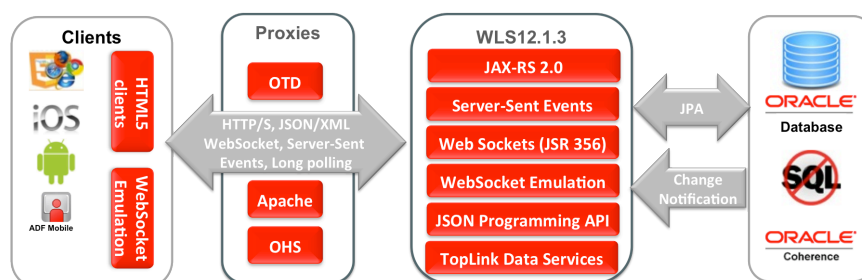


Figure 4: Rich Client Application Development: JAX-RS, JSON, WebSocket, Server-Sent Events, TopLink Data Services

- The Classloader Analysis Tool (CAT) simplifies the use of open source technologies in Oracle WebLogic Server applications. It helps identify and resolve class and library conflicts quickly.
- Oracle Application Development Framework (ADF) is an end-to-end development framework, built on top of the Enterprise Java platform, offering unparalleled productivity to application

developers. The framework provides integrated infrastructure solutions for the various Model-View-Controller (MVC) layers of the application and an easy way to develop on top of them.

- Oracle WebLogic Server supports the development and deployment of Spring applications and delivers simplified configuration with Spring pre-configured beans. It has been upgraded to support Spring 3.0, 3.1 and 4.0. Spring developers can leverage Oracle WebLogic Server features such as Datasources, JMS, Work Managers, Clustering, Transactions, and Monitoring and Management.

▪ Industry-leading performance

Oracle WebLogic Server delivers industry-leading application performance. Optimizations in specific containers, such as JMS, provide high levels of message capacity and throughput. Thread management innovations such as Work Managers deliver self-tuning server capabilities for optimal performance across containers and applications. Optimized protocols enable high-performance communications across server instances. Integration with Web Server and Database technologies provide for maximum performance of multi-tier environments. High performance means that IT users can deliver high levels of service to business users with fewer server instances and resources to manage, at lower cost.

These performance benefits have been proven not only in customer environments, but also in industry standard benchmarks. Oracle WebLogic Server 12c currently holds the world record result of 57,422.17 SPECjEnterprise2010 EjOPS¹.

▪ Superior Manageability, Monitoring and Management

Oracle WebLogic Server Standard Edition provides built-in management, diagnostic and automation tools to increase operational efficiency for complete lifecycle management support – from development to test to production.

- The WebLogic Management Framework includes the administration server, lifecycle management via the Node Manager, and the WebLogic Administration Console. The console provides a Web interface for all Oracle WebLogic Server management functionality. The WebLogic Scripting Tool enables command-line and scriptable control over Oracle WebLogic Server. The WebLogic Diagnostic Framework enables users to instrument applications for monitoring and diagnostic purposes. RESTful APIs for management provide monitoring, lifecycle management, deployment and datasource configuration support.
- Oracle Fusion Middleware Control provides an integrated console for managing all of the Oracle Fusion Middleware product line, within a single Oracle WebLogic Server domain. Enhanced monitoring and configuration management capabilities are available for Oracle WebLogic Server 12c. Oracle Fusion Middleware Control also leverages the WebLogic Management Framework to manage Oracle HTTP Server 12c instances.
- 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. It includes rich functionality, such as business transaction management, performance diagnostics, lifecycle management, and provisioning and patching, for managing multi-domain environments,
- **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 Database 12c Integration

All Oracle WebLogic Server editions support diverse database technologies and products. In Oracle WebLogic Server 12c we have added new capabilities to integrate with and leverage new Oracle Database 12c features. Application

¹ SPEC and the benchmark name SPECjEnterprise are registered trademarks of the Standard Performance Evaluation Corporation. Results from www.spec.org as of 06/28/2013. Oracle WebLogic Server 12c (12.1.1) on SPARC T5-8, 57,422.17 SPECjEnterprise2010 EjOPS.

Continuity provides continuous application services, even when database connections are lost. Multitenancy support enables multitenant applications to dynamically switch between pluggable databases hosted within a single multitenant container database. 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 that have been migrated across global, multi-site database cloud environments (available with Active GridLink for RAC only).

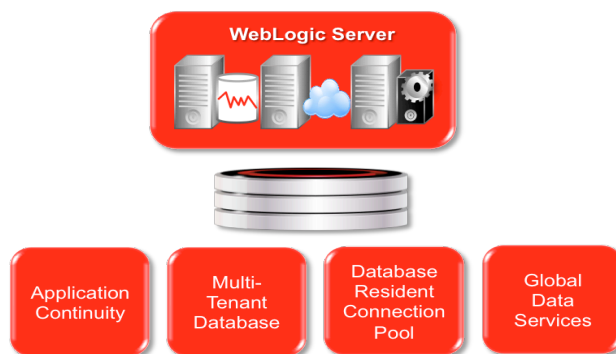


Figure 5: Oracle WebLogic Server 12c and Oracle Database 12c Integration

Deployment Options

Oracle WebLogic Server is unique in the number of delivery platforms that are offered to users. First, users can deploy Oracle WebLogic Server on conventional on-premise systems. The Enterprise Manager Cloud Management Pack enables support for self-service private cloud provisioning and management. Second, users can deploy on Engineered Systems such as Oracle Exalogic Elastic Cloud, Oracle SPARC SuperCluster, and Oracle Database Appliance systems. Oracle WebLogic Server contains multiple optimizations for performance, high availability and manageability on Exalogic and SuperCluster systems. Finally, users can deploy Oracle WebLogic Server in public cloud environments, such as the Oracle Cloud, and other third-party cloud offerings. Applications are fully compatible across these environments.

Oracle WebLogic Server – Foundation for Oracle Fusion Middleware and Fusion Applications

Oracle WebLogic Server and Oracle Cloud Application Foundation provide the core platform for Oracle Fusion Middleware and Oracle Fusion Applications. Oracle delivers common installation, upgrade, patching, provisioning, application development, management, performance, availability and database integration capabilities across all the components of Oracle Fusion Middleware and Fusion Applications, with multiple deployment platform options, providing significant value for customers who not only want to standardize not only on an industry-leading application infrastructure, but also want to leverage it across Oracle Fusion Middleware and Oracle Fusion Applications.

Summary

Oracle WebLogic Server provides a modern development platform for building innovative applications, delivers a runtime platform with unique performance and availability capabilities, and offers rich management tooling for efficient and low cost operations. It offers flexible choice of deployment options across cloud environments, engineered systems, and conventional systems. It is the cornerstone for Oracle's Cloud Application Foundation, Oracle Exalogic Elastic Cloud engineered systems, Oracle Fusion Middleware and Oracle Fusion Applications. 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 WebLogic Server is the #1 application server for developing and deploying applications across conventional and cloud environments. Other Oracle Fusion Middleware offerings come together to form a complete and integrated set of capabilities to meet various business scenarios.

RELATED PRODUCTS

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

Extend Oracle WebLogic Server Standard Edition with:

- Oracle WebLogic Server Management Pack Enterprise Edition
- 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

See table 1 for a platform summary.

Supported Platforms	
Software	
Operating systems	<ul style="list-style-type: none"> • AIX • HP-UX • Linux • Mac OS X (development) • Solaris • Windows
Databases	<ul style="list-style-type: none"> • Oracle (and Oracle Real Application Clusters) • IBM DB2 • Microsoft SQL Server • MySQL • Sybase
Web Servers	<ul style="list-style-type: none"> • Apache • Microsoft IIS • Oracle HTTP Server • Oracle iPlanet Web Server
Java	<ul style="list-style-type: none"> • Java EE 6, plus selected Java EE7 APIs in Oracle WebLogic Server 12c • Java EE 5 in Oracle WebLogic Server 11g • Java SE 6 and 7 - see detailed support matrix

Table 1: Oracle WebLogic Server Platform Support Summary

Contact Us

For more information about Oracle WebLogic Server, please visit

oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.



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