

# ORACLE GLASSFISH SERVER

## 3.1.1

### KEY FEATURES AND BENEFITS

FLEXIBLE, EASY-TO-USE  
PLATFORM BASED ON OPEN-  
SOURCE.

#### BENEFITS

- Clustering and high availability
- Centralized administration with easy-to-use web console and command line tool
- GlassFish Server Control improves manageability
- Lightweight and flexible
- Fast startup of only those services required by deployed applications
- Enterprise OSGi – Hybrid OSGi / Java EE Development
- Easily leverage the Java EE 6 Web Profile and the complete Java EE 6 platform.
- Support available from Oracle's world-class services organization

*Oracle GlassFish Server is the world's first implementation of the Java Platform, Enterprise Edition (Java EE) 6 specification. Built using the GlassFish Server Open Source Edition, Oracle GlassFish Server delivers a flexible, lightweight and production-ready Java EE 6 platform.*

### Extending Java EE 6 with Clustering

Oracle GlassFish Server is based on the Java EE 6 Reference Implementation and is the first application server to support the full Java EE 6 platform and the new Java EE 6 Web Profile, which is designed specifically for Web applications. The Java EE 6 platform is backward compatible, so existing Java EE applications will continue to run on the newer platform. Extensive support for clustering across the entire product provides production grade reliability, scalability, fault tolerance and performance for GlassFish Server applications. This support extends from the installer to administration functions, from native web server plug-ins to Metro Web Services, JMS and stateful EJBs. These capabilities allow application clusters to be provisioned dynamically, adjusted on the fly, and redeploy/upgrade applications to meet user demand without service interruption. A single GlassFish Server domain server can manage multiple instances running simultaneously in multiple clusters.

### Fastest Open-Source Application Server

Oracle GlassFish Server is the only open-source application server to post a SPECjAppServer 2010 result (this industry-defined benchmark documents Java EE application server performance). Oracle GlassFish Server shows terrific performance while still providing ease-of-use, fast startup, and simplified administration.

### Enhancing Developer Productivity

Oracle GlassFish Server delivers a new, efficient model for developing and deploying production-level applications. Developers can begin with just the Web Profile and grow to the full Java EE 6 platform when needed. Because Oracle GlassFish Server runs on the OSGi runtime, modular features can be added as necessary. Developers can also create hybrid applications - using OSGi services from Java EE Applications or using Java EE services from OSGi services. It also keeps the footprint as small as possible by loading only modules required to service deployed applications, improving startup time and reducing resource utilization. Smaller downloads, faster startup times, and reduced memory footprints are only some of the capabilities that help developers deliver applications more efficiently.

Oracle GlassFish Server also provides multiple developer tooling options, including

support for Eclipse and NetBeans™. GlassFish Server supports developers' favorite tools—GUI and command line interface (CLI), Maven, Ant, RESTful API, and others. In addition, with Oracle GlassFish Server, Java EE 6 now runs on JDK 7 providing a more comprehensive feature-set with: enhanced developer productivity, better performance, and a more extensive runtime.

When combined with Eclipse or NetBeans, Oracle GlassFish Server can significantly improve iterative development. Instead of six time-consuming steps (edit, save, compile, package, deploy, re-populate session data), the same process is reduced to three steps (edit, save, and refresh browser). Active Redeploy allows session data in HTTP session and stateful EJBs to be retained across application deployments, eliminating the need to repopulate the session data when deploying new code to test. Application-scoped resources enable developers to limit the scope of resources to a deployed application.

The Java EE 6 platform improves developer productivity by supporting the use of annotations in place of XML configuration, simplifying packaging of business components, and enabling the construction of more Plain Old Java Objects (POJOs). The result is getting more done in less time with fewer artifacts to manage over time.

In addition, Oracle GlassFish Server includes multi-language support and is available in the following languages: English, French, German, Spanish, Japanese, Simplified Chinese, Traditional Chinese, Korean and Brazilian Portuguese.

### **GlassFish Server Control**

GlassFish Server Control is a suite of tools that improves manageability of production deployments, including:

- Monitoring Scripting Client enables custom monitoring scripts using fine-grained probes
- Domain Backup and Recovery enables scheduled, automated backups of a live domain server
- Performance Tuner enables up to a 300% performance improvement over out-of-the-box configuration
- Active Cache for GlassFish enables out-of-the-box replacement of in-memory replication with Coherence for more robust, flexible high availability
- Oracle Access Manager integration to enable single sign-on of applications and services
- Load Balancer Web Server Plug-in & Installer for balancing load across cluster instances and smart failover on instance failure.

### **Flexible, Extensible, and Customizable**

Oracle GlassFish Server offers significant enhancements:

- Embedded API for a tightly integrated solution with full EJB support

## RELATED PRODUCTS AND SERVICES

### RELATED PRODUCTS

- GlassFish Server Open Source Edition
- Oracle WebLogic Server
- Oracle Application Server
- Oracle Web Tier
- Oracle JRockit
- Java SE Hotspot Virtual Machine

### RELATED SERVICES

- Technical Support

### RELATED DEVELOPER TOOLS

- NetBeans IDE
- Oracle Enterprise Pack for Eclipse
- Oracle JDeveloper

- Enhanced fidelity when using GlassFish Embedded APIs
- JMX or RESTful administration API to enable new - or integrate with - network services
- Develop custom administration features and expose them through the web console, command line tool, and RESTful API.
- The ability to re-brand the user interface for a seamless user experience
- 64-bit load balancing plug-in support for better performance and memory capacity
- More extensive platform support with AIX 6.1 and 7.1 integration and support for Solaris 11 Express Edition.

## Oracle GlassFish Server and Oracle Fusion Middleware

Oracle GlassFish Server is part of the Oracle Fusion Middleware application grid portfolio and is ideally suited for applications requiring lightweight infrastructure with the most up-to-date implementation of enterprise Java, Java EE 6, and Java Web Services infrastructure. Oracle GlassFish Server complements Oracle WebLogic Server, which is designed to run the broader portfolio of Oracle Fusion Middleware and large-scale enterprise applications. This release improves application portability by offering support for WebLogic web deployment descriptors, WebLogic JMS, and shared runtime components like JPA, JAX-RS, JAXB, JAX-WS.

Oracle GlassFish Server provides certified interoperability with Oracle Fusion Middleware Products including: Oracle Internet Directory, Oracle Virtual Directory, Oracle JRockit JVM, Oracle Coherence, Oracle Web Services Manager, and Oracle Access Manager.

## System Requirements

Supported platforms are available at

<http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html>

Contact Us

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

Copyright © 2011, 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 is it 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. 0408