

# Sun GlassFish™ Enterprise Server

Next-generation open-source applications and services



## Highlights

Sun GlassFish™ Enterprise Server provides:

- Significant cost savings with annual subscriptions
- Record-setting performance that maximizes your investment
- Easy-to-use administration console and command-line tool
- 99.999% high availability for uninterrupted service
- Microsoft .NET interoperability
- Improved monitoring and management with Enterprise Manager



Businesses are always looking for ways to reduce IT costs and complexity, and many are achieving these goals by embracing open source and open standards. The “one size fits all” approach to middleware is being replaced by a strategy that leverages enterprise-ready, open-source products.

Replacing proprietary application servers with open-source products can maximize cost savings and business flexibility by avoiding vendor lock in. By using open-source products for new projects, companies can realize cost savings and enable new business initiatives while reducing risk.

Built on the open-source Project GlassFish, the Sun GlassFish Enterprise Server delivers a cost-efficient, enterprise-class application server for demanding enterprise and Web 2.0 applications. It delivers best-in-class performance and enterprise features at a fraction of the cost of proprietary application servers.

### Java™ Platform, Enterprise Edition support

GlassFish Enterprise Server is the Java™ Platform, Enterprise Edition (Java EE platform) reference implementation and the first application server to support Java EE 5 technology, which delivers ready access to a secure, portable and scalable platform for enterprise applications. For developers, it makes coding simpler and more straightforward through annotations, Plain Old Java Objects (POJOs), and more.

### Enterprise features

With support for centralized administration and high-availability clustering, GlassFish Enterprise Server is built for business-critical environments where centralized management is key to lowering operations costs. Monitoring and management of clusters, standalone

instances, applications, load balancing agents, and Web services are handled from a centralized administration console or command line interface.

GlassFish Enterprise Server supports application clusters for scalability and high availability. Application clusters can be created dynamically and adjusted on the fly to meet user demand without service interruption.

For deployments that must handle application server failure without service interruption, in-memory session replication is a robust and easy-to-use solution. For deployments that require 99.999% availability with no loss of session data, GlassFish Enterprise Server leverages the High Availability Database (HADB), which helps ensure data integrity and availability.

### Full-featured Enterprise Manager

For GlassFish Enterprise Server deployments, Enterprise Manager offers improved monitoring and administration through three features:

- The SNMP Monitoring can be deployed to any GlassFish Enterprise Server instance or clustering, and integrated with widely available network management tools.
- The Performance Advisor optimizes performance by recommending GlassFish and Java Virtual Machine (JVM™) settings and highlighting issues that affect service availability, such as high CPU and memory utilization.

- The Performance Monitor identifies and trouble shoots potential performance bottlenecks.

### Fastest open-source application server

GlassFish Enterprise Server is the only open-source application server to post a SPECjAppServer 2004 result. (This industry-defined benchmark documents Java EE application server performance.) When compared to proprietary application servers, GlassFish Enterprise Server can offer up to a 7x price/performance advantage.<sup>1</sup>

### Designed for ease of use

In addition to centralized monitoring and management, GlassFish Enterprise Server's intuitive administration console makes common tasks and configuration wizards readily available, and advanced application server features are easily accessible.

All administration console features are also available through a command line interface (CLI) for use with customized shell scripts or provisioning tools. To simplify IT deployments, GlassFish Enterprise Server includes a lightweight developer profile, a cluster profile for typical production deployments, and an enterprise profile for 99.999% availability.

### Microsoft .NET interoperability

Sun and Microsoft work closely to ensure the Java EE and .NET platforms can interoperate easily. With Project Metro, Sun delivers secure, reliable, transactional, and high-performing interoperability with Microsoft .NET. Project

Metro supports many standards and Web services specifications, including the Java API for Web Services (JAX-WS 2.1), which reduces coding, and Java Architecture for XML Binding (JAXB 2.1), which specifies Java and XML binding.

### Foundation for Service-Oriented Architecture (SOA)

With strong support for Open ESB, an open source project created from Sun's award-winning Java Composite Application Suite (Java CAPS), which enables enterprises to build flexible SOA architectures; Project Metro; RESTful Web services; and Web services management, GlassFish Enterprise Server is an ideal platform for developing SOA applications.

GlassFish ESB, another product within the Sun GlassFish Portfolio, is based on Open ESB. GlassFish Enterprise Server supports GlassFish ESB for easy integration of Web services and existing enterprise resources to create loosely coupled, enterprise-class composite applications.

Web services are first-class manageable objects when deployed to GlassFish Enterprise Server; Web services can be automatically discovered, managed and monitored. If monitoring is enabled for a Web services endpoint, information about response time, throughput, requests, and faults is collected and viewed through the administration console, along with Simple Object Access Protocol (SOAP) message content. Also, Web services testing pages can be automatically generated, eliminating the need for explicit Web services client development.

#### Learn More

Additional information can be found on the following sites:

GlassFish Enterprise Server:  
[sun.com/appserver](http://sun.com/appserver)

GlassFish Portfolio:  
[sun.com/glassfish](http://sun.com/glassfish)

### Dynamic language support

Dynamic languages like JRuby and Groovy also run on GlassFish Enterprise Server and benefit from its manageability and performance. Beginning with GlassFish v3 Prelude, dynamic languages are first-class citizens. For example, JRuby runs directly on the GlassFish v3 Prelude microkernel without the need for a servlet container. This reduces runtime resource requirements and provides a more seamless development approach for JRuby developers.

### Why GlassFish Enterprise Server?

- Take advantage of enterprise features, best-in-class performance, and support through cost-efficient annual subscriptions
- Improve IT productivity with easy-to-use, centralized administration
- Enable scalability and high availability through clustering
- Improve administration and monitoring with Enterprise Manager

1. <http://www.spec.org/jAppServer2004/results/res2008q4/jAppServer2004-20081008-00118.html>