



Enterprise Manager

Proactively monitor and tune Sun GlassFish™ Enterprise Server deployments

Highlights

- Jump-start deployments with easy-to-use Glassfish™ management tools
- Leverage enterprise tools and expertise with SNMP monitoring capabilities
- Improve performance up to 770% over default settings with wizard-driven optimization, based on your deployment configuration
- Reduce risk with real-time visibility into Java™ Virtual Machine (JVM™) processes and connections, identifying issues that affect service availability



Sun GlassFish™ Enterprise Server includes Enterprise Manager, a set of powerful and easy-to-use monitoring and performance-tuning tools. With Enterprise Manager, businesses that subscribe to GlassFish Enterprise Server can quickly deploy and monitor mission-critical applications and leverage SNMP monitoring, performance optimization, and performance monitoring capabilities.

SNMP Monitoring — standards-based network and systems management

Enterprise Manager provides both SNMP and Java JMX™ network and systems management protocols enabling IT to observe what is happening in the production environment and isolate potential issues. By looking for common causes of downtime and performance degradation and proactively sending alert notifications when key thresholds are exceeded, Enterprise Manager can alert IT to potential problems so they can be addressed before affecting critical applications.

Enterprise Manager leverages an organization's SNMP infrastructure and expertise to monitor GlassFish Enterprise Server by mapping JMX attributes to an SNMP interface. SNMP Monitoring can be configured to monitor the Domain Administration Server (DAS), as well as individual GlassFish Enterprise Server instances and clusters. In addition, SNMP Monitoring can be used to proxy through an operating system's master agent.

Enterprise Manager SNMP Monitoring supports Java Specification Request (JSR) 77, the Java Platform, Enterprise Edition (Java EE) management information base (MIB), SNMP V1, and SNMP V2c. No external agent is required for configuration, and installation is performed with just a few simple steps.

Performance Advisor eases optimization during deployment

Tuning a GlassFish Enterprise Server deployment optimizes application performance and maximizes load capabilities. Performance Advisor, a key capability available through Enterprise Manager, makes it easy to tune your specific installation based on your application's runtime environment. Performance Advisor features a static tuning tool — Performance Tuner — that asks questions about the specific deployment environment, such as hardware server type, garbage collection strategy, time spent in database versus executing business logic, and so on. Using this information, Performance Tuner presents a list of recommended tuning parameters, which can then be automatically applied. Internal testing shows performance improvements up to 770% over default settings.*

Performance Advisor also offers runtime tuning capabilities through the Self Management Framework, which proactively monitors key indicators and user-defined conditions that may affect performance. It sends notifications or performs appropriate actions when predefined thresholds — such as available memory, Java Virtual Machine (JVM) throughput, CPU utilization, and so on — are exceeded. Alerts can be emailed, and alert log files can be

rotated, deleted, then archived when date or space thresholds are reached. In addition, Enterprise Manager automatically tunes Java Database Connectivity (JDBC™) connection pools to minimize resource utilization while ensuring optimal performance within an instance or across a cluster.

Performance Monitor provides visibility into runtime behavior

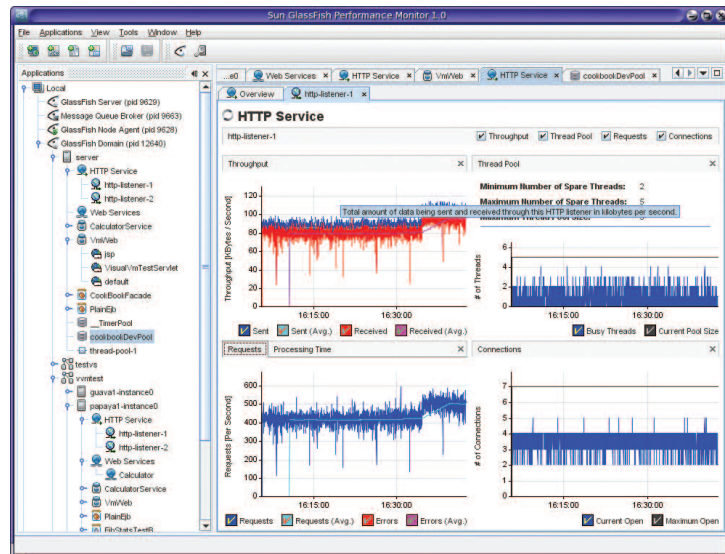
To provide visual monitoring of key performance metrics, Enterprise Manager features a Performance Monitor tool that provides visibility into GlassFish Enterprise Server performance runtime behavior. Performance Monitor charts activity in key GlassFish JVM services, including HTTP connector, EJB container, Web container, JDBC and JMS connections, thread pools, and others. This can be used to locate performance bottlenecks, such as thread contention, or simply keep an eye on what is happening to the application server.

Flexible, subscription-based pricing

As a value-added feature of GlassFish Enterprise Server, subscribers gain access to Enterprise Manager through flexible pricing that enables companies to scale and offers enterprise-class support to fit the needs of any size business.

Full-featured management for production deployments

Enterprise Manager provides the tools and capabilities required to jump-start production deployments, enabling businesses of all sizes



Monitoring HTTP Performance with Performance Monitor

to optimize performance in production environments. Additionally, Enterprise Manager's proactive management and monitoring features provide the functionality needed to head off potential problems before they happen.

GlassFish Portfolio

Enterprise Manager is part of the Sun GlassFish Portfolio, which includes GlassFish Enterprise Server and other foundational middleware products and support services. The GlassFish Portfolio provides the foundation to develop and deploy Web and enterprise applications and is a cost-effective way to acquire, manage, and maintain critical aspects of your Web platform.

Learn more

For more information about GlassFish Enterprise Manager, please visit sun.com/glassfish.

To learn about a GlassFish Enterprise Server subscription, please visit sun.com/appserver.

* Internal testing results are based on input from Sun's Performance Advisor Tuner Wizard. Sun GlassFish Enterprise Server can be optimized for Sun servers with chip multi-threading technology to deliver outstanding performance.