Solution Brief

Performance Monitoring for IBM WebSphere Application Server

Total Performance Visibility



Key Benefits

- ✓ **Improve uptime and performance** of applications deployed on WebSphere
- ✓ **Detect and resolve application slowdowns** before end-users are affected
- ✓ **Troubleshoot faster** by gaining deep performance insights and KPIs about WebSphere performance
- ✓ **Eliminate finger-pointing** between IT Ops, DevOps and developers by automatically pinpointing the root cause of performance issues
- ✓ **Single monitor for everything Java:** Monitor JVMs, containers, web front end, databases, underlying physical and virtual infrastructure from a single console

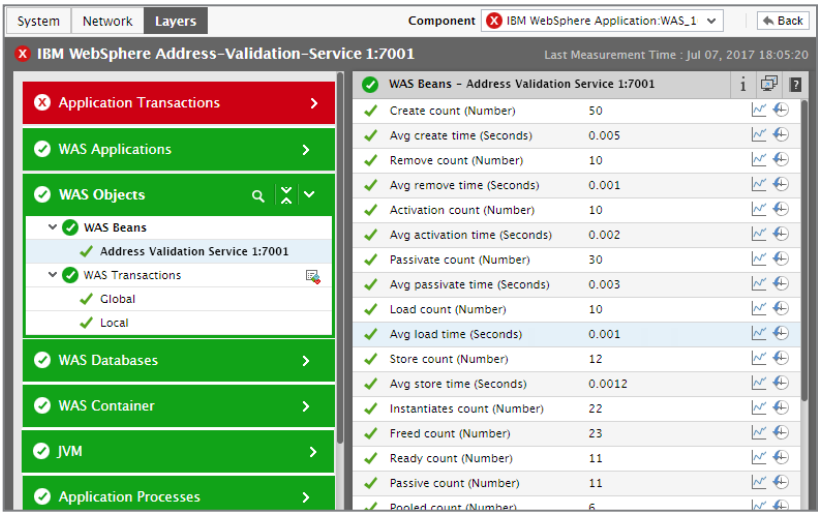
> *eG Enterprise gives us performance insight into our business-critical applications. It provides real-time and detailed visibility of every key component. With its prediction and analysis reports, we can be proactive instead of reactive.*
>
> **Thomas de Hoog**
> Travel Information GVB

The IBM WebSphere Application Server is being increasingly used to support highly transactional Java EE applications for business continuity and growth. The performance of the WebSphere Applications Server and the applications running on it is important. A bottleneck in WebSphere or any supporting infrastructure tiers can significantly affect application health. Administrators must be able to proactively detect problems before they affect users, diagnose the root cause, and provide quick resolution to get the service back up and running.

End-to-End WebSphere Performance Management

eG Enterprise provides a single-pane-of-glass view of the entire IBM WebSphere application infrastructure. From a centralized web console, application owners, developers and administrators can monitor the full Java stack including the JVM, web and EJB containers, problematic application code, database connections, slow queries, and external web service calls.

Out-of-the-box monitoring models, pre-built dashboards and reports provide in-depth diagnostics of all aspects of WebSphere Application Server performance, including components such as Java transactions, EJB, servlets, Connection Pools, threads, and JDBC connectivity.

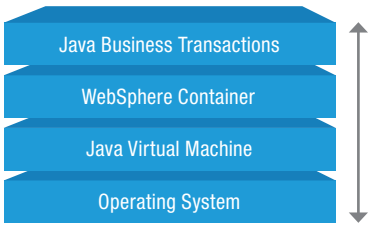


Comprehensive IBM WebSphere monitoring using eG Enterprise

eG Enterprise analyzes WebSphere Application Server performance over time, and baselines metrics to alert on abnormal behavior. Automated performance correlation and root cause analysis provide contextual visibility of WebSphere performance with that of other tiers (web server, database, virtualization, storage, OS, etc.) and isolate the exact cause of performance problems. This helps developers and operations teams avoid finger-pointing and accelerate troubleshooting of Java application failures.

Get Answers to Key Performance Questions

- Which of the Java business transactions are slow, stalled or having errors?
- Where is the response time slowdown: in the Java code, in the database queries, or in external web service calls?
- Were any errors detected during JSP/servlet processing?
- Does the Object Request Broker handle requests efficiently?
- Are transaction rollbacks happening too frequently on the server?



Full stack WebSphere application visibility

Key Capabilities of eG Enterprise for Monitoring IBM WebSphere Application Server

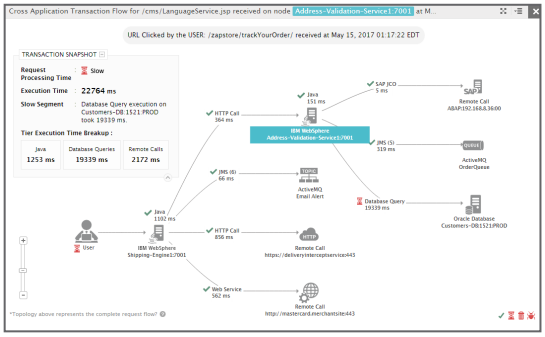
eG Enterprise provides in-depth performance metrics to resolve complex performance problems in your WebSphere infrastructure.

Business Transactions	Enterprise Java Beans (EJB)	Servlets	Web Services
• Slow, stalled, error-prone transactions • Code-level & query-level issues • Slow third-party remote calls	• Bean creation, removal, activation, passivation, storage • Method count and response time • Load count and response time	• Loaded, reloaded and requested servlets • Concurrent requests • Service time • Error count	• Loaded, dispatched, processes, received requests • Response time for request and reply
Threads	**JCA Connection Pool**	**Cache**	**Object Request Broker (ORB)**
• Threads created and destroyed • Pool size • Hung threads	• Allocated, freed, created, closed & managed connections • Waiting threads • Faults	• Client requests • Explicit invalidation • Hits on memory & disk • Cache miss count	• Request count • Lookup time • Processing time

Going Beyond IBM WebSphere Monitoring

eG Enterprise delivers total performance assurance for Java applications:

- **User experience monitoring:** Using real user monitoring and synthetic transaction monitoring, you can identify user experience issues and slow transactions. Find out if the issue is in the browser, network, or server-side.
- **Business transaction tracing:** Trace slow transactions across the Java application architecture and isolate server-side issues causing slowdowns.
- **Application code-level visibility:** In a single click, drill down to view inefficient application code and poorly written-database queries, and pinpoint the exact line of code causing slowness.
- **In-depth JVM monitoring:** Monitor every aspect of JVM performance including CPU, heap and non-heap memory, threads, classes, garbage collection, and more.



Tracing transactions to identify code-level bottlenecks

In addition to IBM WebSphere, eG Enterprise provides out-of-the-box monitoring for other application servers such as Oracle WebLogic, JBoss, Tomcat, and GlassFish, plus other many IBM applications, including WebSphere MQ, DB2, Liberty application server, IBM Integration Bus (IIB), IBM Web Server, and more.

About eG Innovations

eG Innovations is dedicated to helping businesses across the globe transform IT service delivery into a competitive advantage and a center for productivity, growth and profit. Many of the world's largest businesses use eG Enterprise to enhance IT service performance, increase operational efficiency, ensure IT effectiveness and deliver on the ROI promise of transformational IT investments across physical, virtual and cloud environments.

www.eginnovations.com | sales@eginnovations.com

USA: +1 866 526 6700 I UK: +44 (0)207 993 8325 I The Netherlands: +31 (0)70 205 5210 I Germany: +49 (0)151 222 852 96 I LATAM: +5511 98123 6966
Singapore: +65 6423 0928 I Hong Kong: +852 3511 6785 / 86 I India: +91 44 4263 9553 / 9566 I Korea: +82 02 318 0392 I ANZ: +61 8 7079 0524