Data Sheet: Application Performance Management

Symantec i³™ for J2EE

Formerly VERITAS™ i³ for J2EE

Performance management for the J2EE platform

Symantec i³ software provides comprehensive performance management for server-side Java applications. It addresses the need for optimizing application performance during the development, testing, and production phases of the application life cycle. i³ software makes communicating J2EE performance problems easy, and allows performance data to be shared by all application stakeholders.

The critical role of the middle-tier Java application server has resulted in a need for specialized data collection and analysis capabilities to ensure scalability. Symantec Indepth™ for the J2EE platform provides a method for detecting and correcting performance degradation of the business-logic tier before your business is affected.

Also available are Symantec Insight™ for J2EE, which provides an end-to-end breakdown of the end-user response time of multitier applications; and Symantec Inform™ for J2EE, which creates performance-degradation alerts and reports based on information collected by Symantec Insight and Symantec Indepth.
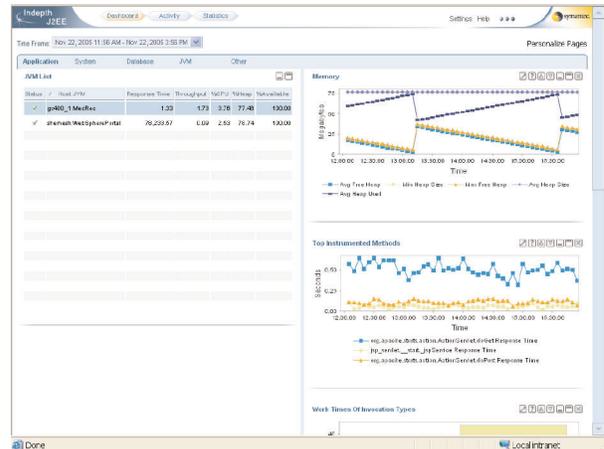

Figure 1. A Web-based GUI dashboard quickly and efficiently communicates performance problems.

Benefits

- Understand response-time contributions from JSPs, Servlets, JDBC, EJBs, JMS, XML, Web Services, and more.
- Review current and historical performance data.
- Correlate activity across Web servers, multiple JVMs, and databases.
- Take advantage of SmarTune™ technology, which automatically drills down, analyzes, and provides expert advice.
- Use Adaptive Instrumentation to automatically discover and instrument application components to maximize visibility and minimize overhead.
- Run in QA under load or in production environments.
- Empower new users to quickly isolate the origin of J2EE performance degradation and receive expert advice on corrective action.
- Visually manage the health of your JVM by monitoring memory, CPU, threads, and more.

✎ symantec™

- Collect and correlate JMX metrics.
- Quickly isolate SQL statements generated by your J2EE application that are causing problems, then continue the performance analysis in the database using Symantec Indepth™ for Oracle, DB2 UDB, SQL Server, or Sybase.

Ensure infrastructure performance

Today's internet-enabled applications demand peak performance, especially under burst loads when business consequences are greatest. Multitiered architectures centered on J2EE-compliant application servers provide the functionality needed to meet these demands. Symantec Indepth for the J2EE Platform provides specialized features to ensure that your IT infrastructure withstands business demands and supports growth.

Instantly detect performance bottlenecks

The SmarTune feature combines an in-depth knowledge of your J2EE application with expert system technology to instantly isolate the root cause of performance problems and recommend actionable advice on how to correct them. Companies with limited practical expertise in deploying J2EE applications into production can immediately benefit from the problem-solving SmarTune intelligence. With a single mouse click, QA and production environments are able to quickly identify and resolve performance problems—capabilities that were once the sole domain of engineering and development groups.

Identify and instrument hot spots automatically

The unique, patent-pending Adaptive Instrumentation tool ensures that all of an application's "hot spots" are identified and instrumented automatically—without costly application server restarts. Development, QA, and production teams no longer have to spend days or weeks trying to isolate the problem areas of their J2EE applications. Adaptive Instrumentation automatically maps the various application components, then adjusts and learns as changes are made to the application. This ensures maximum visibility with the lowest possible overhead.

Customize your data display

Communicating problems efficiently helps speed the time from problem detection to correction. Symantec Indepth for the J2EE Platform provides a customizable operational dashboard. Users can define the metrics they want to see (such as Response Time, Work Time, and JVM Status), and organize and display them on multiple user-defined tabs. The dashboard is role-based and can provide different views to each user. This portlet-based dashboard also allows users to consolidate information from their own JSR-168–compliant portal servers into a single view.

Symantec Indepth for J2EE: behind the scenes

Symantec Indepth for the J2EE Platform employs a multitier, fully distributable architecture, enabling it to scale to meet the variable needs of Java applications and deployments. The performance collector runs on the J2EE application server, using low-overhead, high-precision technology. The program uses a thin-client, HTML-based UI that gives IT staff access to all its features from a standard browser, either locally or from a remote location.

symantec™

The data collectors in Symantec Indepth for the J2EE Platform use application instrumentation and Java Virtual Machine (JVM) sampling. Instrumentation provides an application-centric view of performance correlated with both user page requests and back-end relational database requests. Sampling provides a way to measure the relative health of the JVM. Both are essential for comprehensive performance management.

The software's application discovery component works with a byte code instrumenter to generate numerous informative performance metrics during execution. This instrumentation provides accurate summary-level performance monitoring for HTTP requests (servlets and JSPs) and EJB invocations.

Symantec Indepth for the J2EE Platform extracts CPU resource usage data from the underlying operating system so that it can correlate CPU usage with Java application components and specific end-user requests. Multiple levels of "method invocations" among Java components are correlated to provide visibility into quantitative relationships among application components. It also leverages the unique vantage point of the middle tier to associate user requests with database activity, enabling it to isolate scalability bottle-necks between the middle tier and the database tier.

Symantec Indepth for J2EE can also help identify memory leaks. Symantec Application Saver metrics used to identify growing Java collections are available directly through the Symantec Indepth for J2EE user interface when the two products are installed together.

Figure 2. The Portlet Performance screen provides extensive details on the performance of individual portlets running on your portal server.

Part of the comprehensive Symantec i³ solution

Symantec i³ for J2EE is a superset of Symantec Indepth for J2EE. It is an ideal solution for operation and production groups that need comprehensive alerting and reporting. i³ software leverages a modular, integrated architecture to provide end-to-end performance measurement.

J2EE application components are commonly cited as the source of performance bottlenecks. However, slowdowns on the J2EE tier are often a symptom of problems in other tiers such as the Web server, the network, or the database. Symantec i³ for J2EE enables IT organization to isolate slowdowns on the J2EE tier and follow the problem in context into the database for resolution.

Symantec Indepth for the J2EE Platform can tell IT staff how many trips to the database each user request requires and how long each request takes to complete. It even identifies and isolates the longest-running SQL statements. When integrated with Symantec Indepth for Oracle, IBM

symantec™

DB2 Universal Database, or SQL Server, Symantec Indepth for the J2EE Platform further empowers IT staff to follow application performance problems across the J2EE tier into the database.

System requirements

Consult **http://support.veritas.com** for detailed application server and operating system version support information.

Application servers

- BEA WebLogic
- IBM WebSphere
- Oracle 9iAS, 10gAS
- JBoss
- Tomcat
- Macromedia JRun
- Sun iPlanet
- Sun JES
- ATG Dynamo
- Resin
- JEUS

Operating systems

- Microsoft Windows
- Sun Solaris
- IBM AIX
- HP-UX
- Linux on Intel-based systems

Symantec Corporation World Headquarters

20330 Stevens Creek Boulevard

Cupertino, CA 95014 USA

1 (408) 517 8000

1 (800) 721 3934

www.symantec.com

symantec™