

LONGITUDE 2.0 AND SITESCOPE 8.0

Monitoring Without Agents

by Barry Nance, Network Testing Labs

Keeping a really close eye on your servers and applications just got infinitely easier with Heroix Longitude 2.0.

Installing server agent software components is a tedious and painful process. The agent may require a different server operating system version or OS configuration. The monitoring tool vendor might not offer an agent for every operating system you use. The agent software may make the server less stable and reliable. Corporate standards for server configurations may not allow the introduction of “new” software, such as monitoring agent modules, onto meticulously-tuned servers. The agent itself may cause server or network performance problems.

Each subsequent server agent update, whether to the agent’s code or its configuration, may suddenly turn a previously well-behaved server into a troubleshooting nightmare.

Installing and updating desktop agents can be even more difficult.

However, you don’t need to resign yourself to having to live with the idiosyncracies and problems of an agent-based monitoring tool. Some vendors claim you can effectively monitor servers, desktops and network devices without using any agents at all.

To explore whether an agentless monitoring tool can give you perfectly adequate alerts and reports while saving you time, effort and money, we decided to look at two of the best agentless tools on the market. We evaluated Heroix’s Longitude 2.0 and Mercury Interactive’s SiteScope 8.0 in our lab.

Our standards for monitoring tools are quite high. The perfect tool immediately alerts you when outages occur, pinpoints the root cause of the outage and helps you reestablish communications tout-de-suite. An



ideal tool produces useful reports showing utilization trends, outage statistics, Service Level Agreement (SLA) compliance breaches and other information. A perfect tool is easy to use, scales well, handles any and all applications and supports just about every computing environment. Furthermore, an agentless monitoring tool collects, analyzes and reports on exactly that critical performance data that reveals the current health of your server-based applications.

Meeting or exceeding our expectations in every category, Longitude emerged from the tests with flying colors. Longitude contains a wealth of features, is robust and reliable, is quite platform-neutral, performs superbly and scales well. It sports a responsive and intuitive user interface, it's easy to install and maintain and Longitude offers highly useful reports. Longitude earns the Network Testing Labs World Class Award.

Monitoring without Agents

Out of the box, Longitude does a superior job of monitoring a wide range of applications and operating environments. Longitude comprehensively measures hundreds of operational metrics that it uses in its alerts, reports and charts.

In our tests, we found Longitude gathers just the right user- and business-related metrics, user-defined transaction metrics and usage trend data.

Installing Longitude takes just a few minutes. Its self-updating and automatic database maintenance features mean you'll spend more time focusing on your applications and less time on maintaining Longitude. We also liked the fact that Longitude's installation is all-inclusive – unlike SiteScope, Longitude's monitoring, alerting, SLA, reporting, and graphing are part of one, integrated package.

Longitude monitors Windows Server 2000/2003, Windows XP, Red Hat Linux, SuSE Linux, Sun Solaris, Hewlett-Packard HP-UX and IBM AIX. Longitude collects and reports performance details for Web servers (Microsoft IIS and Apache), databases (SQL Server, Oracle and MySQL), J2EE application servers (WebSphere, WebLogic and JBoss), messaging environments (Exchange Server 2000 and 2003), user transactions (DNS, FTP, HTTP, Ping, Port, SMTP, etc.), and infrastructure (Active Directory and DHCP).

SiteScope contains logic to keep an eye on some additional environments such as SCO OpenServer, SGI IRIX, ATG Dynamo Application Server, Oracle9i Application Server, DB2 and Siebel. However, we especially liked Longitude's extensibility. For unique



situations, Heroix provides a complete and robust programming interface to Longitude. Because Longitude is already a comprehensive, full-featured monitor of critical applications, we expect few customers will find a need to use the API. Nonetheless, it's comforting to know we could extend Longitude if we wished.

We found Longitude to be the perfect Service Level Agreement (SLA) tracker for documenting the uptime and availability of your servers and applications. While other Longitude components measure the performance of individual servers and applications, the SLA feature can rather neatly aggregate servers (whether or not they're linked into a cluster) to show, for instance, overall uptime for a group of servers that logically share a particular workload.

If one of five related servers suffers downtime but the healthy other four servers continue to ensure application availability to the business community, Longitude on the one hand accurately and correctly notes the server's downtime on its dashboard and in its monitoring reports. On the other hand, just as accurately and correctly, its SLA feature reports the overall availability of the shared-server application as "good." Similarly, if an SLA specifies that multiple resources (Web server, application server and database server, for example) must all be available at the same time,

Longitude unerringly displays and reports SLA violations when one of the resources fails.

Longitude's sophisticated SLA analysis understands the difference between individual server or application monitoring and measuring performance against the terms of an SLA.

In contrast to SiteScope, Longitude is 100% Java-based, and it exhibits a "best practices" design throughout.

Alerts

When it detects a problem, based on default threshold criteria or criteria you've set up, Longitude uses its pre-configured internal SMTP server to send e-mail to the appropriate people. Longitude's e-mail note contains a problem description along with sufficient detail to help a network administrator know exactly what to do to fix the problem.

SiteScope can additionally page someone, but its notifications are not as comprehensive and solution-oriented as Longitude's. Also, although Longitude does not incorporate paging per se, it can easily send pages through an email gateway.



Ease of Use

We found Longitude's browser-based user interface intuitively easy to navigate and understand. Longitude features thoughtfully-designed real-time dashboards with pin-point drill-down capabilities. These behave in a natural fashion to make sure you're never lost in nor never rudely surprised by the interface. Even the user interface scales well – portions of an overall network, or specific roles within the overall administration of the network, can be delegated to a local administrator.

SiteScope's UI, which is also Web-based, tries to emulate the Windows Explorer paradigm in a browser window. We felt SiteScope's attempts to make a Web page behave like Windows Explorer was more difficult to navigate and more sluggish than Longitude's approach. SiteScope also sports a dashboard metaphor for tracking critical network, server and application slowdowns and outages. Network administrators who are frustrated by SiteScope's Explorer-like treatment of a browser window can turn off the Explorer interface and revert to SiteScope's original, pre-Web interface.

The pure Java Longitude Server component is certified on Windows Server 2003, Red Hat Linux 9, Red Hat Linux Enterprise 3.0 and SuSE Linux 9. Its user interface supports Mozilla Firefox in addition to Microsoft's and Netscape's browsers.

SiteScope runs on Windows 2000/2003 Server, Red Hat Linux 8.0, Red Hat Linux 9.0 with Native POSIX Threading Library (NPTL) or RedHat Enterprise Linux 3.0. It also runs on Sun Solaris.

Conclusion

Longitude is an impressive and effective agentless server and application monitoring tool. It's scalable, robust, comprehensive, especially easy to use, easy to install and quite affordable. We recommend you take a close look at Longitude.



Testbed and Methodology

Our test environment consisted of six routed Fast Ethernet subnet domains and a T-1 Internet connection. Each subnet's 25 client computers were a mix of Windows 2000 Professional, NT Workstation 4.0, Windows 98, Windows ME, Windows XP, Red Hat Linux 7.0 and Macintosh platforms. The relational databases on the network were Oracle 8i, Sybase Adaptive Server 11.5 and Microsoft SQL Server 2000. Windows 2000 and NetWare 5.1 shared files, while Internet Information Server (IIS), Netscape and Apache software served up Web pages. An Agilent Advisor protocol analyzer decoded and displayed network traffic.

We ran both Longitude and SiteScope on a 4-way Compaq ProLiant ML570 900 MHz computer with Pentium III CPUs, 2G-bytes of RAM and six 18G-byte SCSI RAID drives. The operating system was Windows 2003 Advanced Server.

We tested both products' ability to monitor for outages and slowdowns, send e-mail alerts or page us when problems occurred and give us reports we could use to track problems and spot trends.



Report Card

Category and weight (%)	Heroix Longitude 2.0	Mercury Interactive SiteScope 8.0
Monitoring (30%)	A	A
Notifications and reports (20%)	B+	B
Ease of use (20%)	A	B
Platform support (10%)	B	A
Scalability (10%)	A	B
Documentation and Installation (10%)	A	C
Overall score	A -	B

Grade scale is A through F, with F = Failing and A = Perfect



Product and Vendor Details

Longitude 2.0

Price: Starts at \$299 per monitored system for base OS monitoring. Support services and subscription pricing are also available.

Heroix

57 Wells Avenue
Newton, Massachusetts 02459
(800) 229-6500
www.heroix.com

SiteScope 8.0

Price: Starts at \$2,995.

Mercury Interactive Corporation

1325 Borregas Avenue, Building A
Sunnyvale, CA 94089
(800) 837-8911
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About the Author

Barry Nance is a networking expert, magazine columnist, book author and application architect. He has more than 29 years experience with IT technologies, methodologies and products. Over the past dozen years, working on behalf of Network Testing Labs, he has evaluated thousands of hardware and software products for ComputerWorld, BYTE Magazine, PC Magazine, Network Computing, Network World and many other publications. He's authored thousands of magazine articles as well as popular books such as *Introduction to Networking (4th Edition)*, *Network Programming in C* and *Client/Server LAN Programming*.

He's also designed successful e-commerce Web-based applications, created database and network benchmark tools, written a variety of network diagnostic software utilities and developed a number of special-purpose networking protocols.

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About Network Testing Labs

Network Testing Labs performs independent technology research and product evaluations. Its network laboratory connects myriads of types of computers and virtually every kind of network device in an ever-changing variety of ways. Its authors are networking experts who write clearly and plainly about complex technologies and products.

Network Testing Labs' experts have written hardware and software product reviews, state-of-the-art analyses, feature articles, in-depth technology workshops, cover stories, buyer's guides and in-depth technology outlooks. Our experts have spoken on a number of topics at Comdex, PC Expo and other venues. In addition, they've created industry standard network benchmark software, database benchmark software and network diagnostic utilities.

