Tivoli software

IBM Tivoli OMEGAMON XE on z/VM and Linux

Highlights

- ***Facilitate the cost-effective migration of workloads onto mainframes by monitoring IBM z/VM® and Linux® performance***
- ***Make data available to a broader monitoring infrastructure to enable advanced performance, provide situational and capacity analysis, and drill down to root causes of problems***
- ***Integrate with other IBM Tivoli® OMEGAMON® XE monitors and IBM Tivoli Monitoring products to streamline time-consuming management tasks***

Migrating your UNIX® applications to the Linux operating system can provide significant software cost savings. Taking the next step to consolidate those Linux servers on the mainframe can save you even more and help you maximize application performance and availability.

IBM Tivoli OMEGAMON XE on z/VM and Linux can help you monitor those applications and administer the underlying resources for maximum efficiency and throughput. With it, you can effectively manage both virtual and real computing resources—and track related Linux and z/VM performance across multiple systems and platforms—from a single point of control.

The product further automates complex problem analysis and diagnosis to help prevent outages—and maximize operator productivity. With its wealth of detailed metrics and reports, and its easily customized workspaces, you can quickly pinpoint problems without additional software tools.

Tivoli OMEGAMON XE on z/VM and Linux operates as a stand-alone tool, or as part of an end-to-end solution that can be integrated with other Tivoli OMEGAMON monitors and other solutions in the Tivoli portfolio.

Monitor the health and well-being of your systems and workload

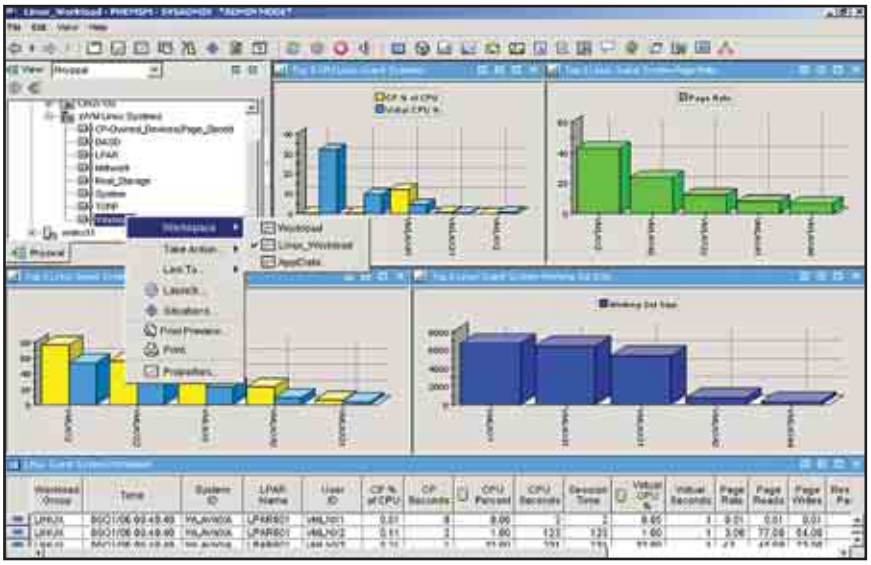
From the IBM Performance Toolkit for VM, Tivoli OMEGAMON XE on z/VM and Linux provides detailed performance metrics for your Linux applications and the underlying z/VM operating system that assigns CPU, storage and other computing resources to Linux and those applications. The product displays statistics for z/VM and its guest systems, including:

- *System utilization.*
- *DASD.*
- *LPAR utilization.*
- *PAGING and SPOOLING utilization.*
- *REAL STORAGE utilization.*
- *TCP/IP utilization.*
- *Workload activity.*

The product presents statistics for all Linux processes running under z/VM, including:

- *CPU usage.*
- *I/O statistics.*
- *File system details.*
- *Disk and memory space.*
- *Network performance.*
- *Process information.*

With Tivoli OMEGAMON XE on z/VM and Linux, you can also view complex workloads as they traverse multiple virtual and real systems within your environment. Resource and performance statistics include virtual machine throughput and resource activity and use. In addition, operators can observe workload details for virtual machines, groups, response times and logical partitions (LPARs)—and compare those statistics against baseline thresholds—to quickly isolate and pinpoint problems.



Tivoli OMEGAMON XE on z/VM and Linux workspaces help you easily investigate problems related to z/VM and Linux performance, with views of metrics including CPU consumption (guest/virtual and z/VM overhead), paging rates, total page reads (and writes) and working set size.

As part of the IBM Tivoli Monitoring portfolio, Tivoli OMEGAMON XE on z/VM and Linux views and reports can be customized to each end user. Executives, for example, can benefit from higher-level information that reveals how IT problems influence business and the bottom line. Granular views and reports let IT staff track problems across multiple systems and platforms and share related information that concerns other IT departments.

Integrate with other Tivoli monitors to move beyond IT silos

Many organizations continue to address IT problems within IT departments or silos. Unfortunately, because applications and related problems often span numerous systems and platforms, finding a problem's root cause may require an extensive search throughout numerous departments. Solving complex problems efficiently requires an approach that reveals the depth and breadth of performance—and related problems—across your organization.

Tivoli OMEGAMON XE on z/VM and Linux is part of a true end-to-end solution that correlates data from multiple systems. The product integrates with other performance monitors, including IBM Tivoli Composite Application Manager software, IBM Tivoli Monitoring 6.2, the IBM Tivoli System Automation family, IBM Tivoli Netcool®/OMNIbus™, IBM Tivoli Business Service Manager, and other Tivoli OMEGAMON XE monitors.

Because Tivoli OMEGAMON XE monitors use Tivoli Monitoring 6.2 shared technologies, they also support efforts to centralize mainframe and distributed monitoring functions onto a single user interface: IBM Tivoli Enterprise Portal. The shared technologies include:

- *Visibility of mainframe and distributed resources across the enterprise.*
- *Alerts when established thresholds are exceeded.*
- *Automated responses to events.*
- *Flexibility to create role-based views of resources.*
- *Integration with Tivoli event correlation and business service management solutions.*
- *Support for IBM Tivoli Data Warehouse, which aggregates and prunes monitoring data from Tivoli OMEGAMON XE on z/VM and Linux and other monitoring tools to help improve historical reporting.*
- *Agent versioning support, which eases migration to new OMEGAMON XE releases as expanded capabilities become available.*

Take advantage of dynamic workspace links for quick problem diagnosis

Because integration is key to leveraging the full power of your Tivoli OMEGAMON portfolio, these products now include advanced Dynamic Workspace Linking. This function lets you easily navigate between the workspaces provided by other Tivoli OMEGAMON monitors. Predefined cross-product links reveal information about systems, subsystems, resources and network components collected by other monitoring agents.

For example, if Tivoli OMEGAMON XE on z/VM and Linux detects an application slowdown, you instantly receive a link to help you examine the problem or issue in more depth and see potential resource contentions. Because the links remain in context, you see only the resources associated with those under investigation. This saves you the time of navigating manually between workspaces to find problems.

Dynamic Workspace Linking also understands the intricate relationship between monitored data and subsystems such as IBM WebSphere® Application Server, IBM z/OS®, IBM DB2®, storage and others. And it automatically provides links to the most relevant workspaces, freeing users from the need to comprehend those relationships.

Rely on advanced alerting and automation for quicker problem resolution

In addition to using comparisons and thresholds, Tivoli OMEGAMON XE on z/VM and Linux relies on Boolean logic to notify you when performance degrades. The ability to say "if A and C, but not B and D occurs, alert me," provides granular control while eliminating many false alerts that waste staff time. OMEGAMON also has the ability to alert you when a threshold is exceeded over a period of time. For example, a one-time spike in CPU activity may not concern you, but you may want to be notified if the CPU threshold is exceeded for five minutes.

For added control, you can create alerts based on any attribute monitored by Tivoli OMEGAMON XE on z/VM and Linux for virtual and real resources, such as the details of Linux file systems and those of z/VM mini disks.

When common or recurring problems hamper performance within the z/VM and Linux environment, the solution can automate responses to improve IT staff productivity and streamline operations.

Help maximize the value of your IT investments with a single point of control
Because performance and availability problems aren't limited to a single platform, IBM Tivoli Monitoring and OMEGAMON XE solutions can identify and track problems across your enterprise. Your monitoring can be aggregated using IBM Tivoli OMEGAMON DE on z/OS, which allows you to see information from multiple Tivoli OMEGAMON XE monitors and third-party software—on a single monitor or console for more efficient, proactive problem solving.

Tivoli OMEGAMON DE on z/OS provides data integration between Tivoli OMEGAMON XE (z/OS, z/VM and Linux on System z®), Tivoli Monitoring (distributed platforms), and Tivoli Composite Application Manager monitors that let you:

- *Correlate reports from multiple platforms in customizable workspaces.*
- *Tailor cross-platform resource views to users' job responsibilities.*
- *Allow complex policy-based, automated response to events from correlated data.*

Achieve end-to-end System z management
Tivoli OMEGAMON System z infrastructure management solutions from IBM help customers achieve a true on-demand computing environment. Composed of integrated, industry-leading monitors and consoles, Tivoli OMEGAMON solutions combine with Tivoli Monitoring for distributed systems and Tivoli Composite Application Manager products to provide an end-to-end view across an entire IT infrastructure. These advanced infrastructure management solutions help businesses meet the demands of increasing data center volume, complexity and volatility by helping IT quickly identify, isolate and fix problems before they impact customers. With Tivoli OMEGAMON software, businesses can continually adjust their end-to-end System z infrastructures to deliver high performance and ultimately help prevent threats to system performance before they impact service levels.

For more information

To learn more about Tivoli enterprise performance and availability solutions, contact your IBM representative or IBM Business Partner, or visit: **ibm.com**/tivoli

To keep in touch with the latest developments for System z environments, you can also subscribe to CCR2™—the monthly e-newsletter published exclusively for the IBM System z community—at **ibm.com**/tivoli/features/ccr2

About Tivoli software from IBM

Tivoli software offers a service management platform for organizations to deliver quality service by providing visibility, control and automation—visibility to see and understand the workings of their business; control to effectively manage their business, help minimize risk and protect their brand; and automation to help optimize their business, reduce the cost of operations and deliver new services more rapidly. Unlike IT-centric service management, Tivoli software delivers a common foundation for managing, integrating and aligning both business and technology requirements. Tivoli software is designed to quickly address an organization's most pressing service management needs and help proactively respond to changing business demands. The Tivoli portfolio is backed by world-class IBM Services, IBM Support and an active ecosystem of IBM Business Partners. Tivoli clients and Business Partners can also leverage each other's best practices by participating in independently run IBM Tivoli User Groups around the world—visit: www.tivoli-ug.org

Additionally, IBM Global Financing can tailor financing solutions to your specific IT needs. For more information on great rates, flexible payment plans and loans, and asset buyback and disposal, visit: **ibm.com**/financing

Tivoli OMEGAMON XE on z/VM and Linux at a glance

Software requirements:

- IBM z/VM 5.3, 5.4 and later
- At least one Linux guest running SUSE Linux Enterprise Server (SLES) 9.0 and later or Red Hat Enterprise Linux (RHEL) 4.6 and later
- Other Linux Guests can run at lower levels of SLES/RHEL
- IBM Performance Toolkit for VM

IBM Tivoli OMEGAMON products for System z include:

Operating systems:

- IBM Tivoli OMEGAMON XE on z/OS
- IBM Tivoli OMEGAMON XE on z/VM and Linux

Data management:

- IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS
- IBM Tivoli OMEGAMON XE for DB2 Performance Monitor on z/OS
- IBM Tivoli OMEGAMON XE for IMS™ on z/OS

Host transaction processing:

- IBM Tivoli OMEGAMON XE for CICS® on z/OS

Networking:

- IBM Tivoli OMEGAMON XE for Mainframe Networks

Storage management:

- IBM Tivoli OMEGAMON XE for Storage on z/OS

Integration:

- IBM Tivoli OMEGAMON DE on z/OS

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Produced in the United States of America
December 2008

TID10252-USEN-01