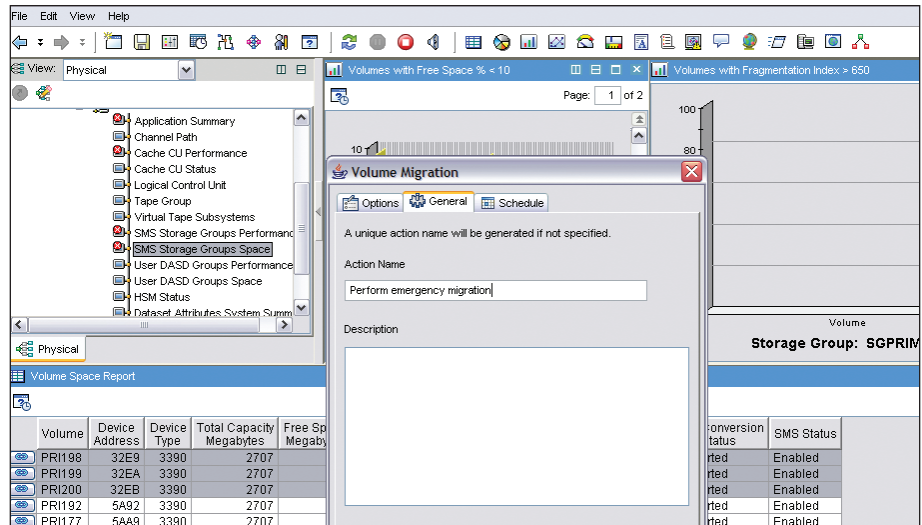**IBM**

Tivoli® software

IBM Tivoli OMEGAMON XE for Storage on z/OS

Highlights

- Oversee SMS, non-SMS and DASD storage from a single console

- Simplify daily storage administration tasks by taking advantage of new storage toolkit functions for online, generating JCL for batch functions or both

- Help optimize space and performance by proactively managing available storage space, from the group and volume levels down to individual data sets

- Monitor offline storage tape environments

- Monitor all access to data sets — at the address space level on z/OS — to specifically watch critical workloads running on the system

- Quickly find bottlenecks to help maximize performance

- Customize detailed alerts to your environment

- Integrate with Tivoli storage management tools as a single pane of glass to provide a single point of control for System z management

- Automate fixes to recurring performance problems to help maximize staff productivity

Succeeding in today's fast-paced business environment often depends on achieving subsecond application response times. That's more crucial than ever when it comes to your storage systems, which often must search through hundreds of terabytes of material to retrieve data. Success also depends on the abilities to anticipate related space problems and address them, as well as to handle other daily storage tasks with maximum efficiency.

IBM Tivoli® OMEGAMON® XE for Storage on z/OS® enables you to manage elements of your mainframe storage environment — including system-managed storage (SMS) and non-SMS direct access storage device (DASD) and tape devices — for optimal performance, disk use and related administration. From a single point of control, the product's built-in tools give you the power to manage disk use down to the individual data set level. Views and reporting reveal a detailed picture of your storage environment.

Tivoli OMEGAMON XE for Storage on z/OS provides a helpful online toolkit that allows you to conduct DFSMShsm and DFSMSdss commands to the appropriate volume and dataset level actions.

In addition to using Tivoli OMEGAMON XE for Storage on z/OS to manage space, you can rely on the included online toolkit to help resolve issues rapidly. The product provides a wealth of real-time and long-term performance metrics that let you keep tabs on the overall health of those systems. You can easily tailor product views to investigate storage issues within your environment and quickly drill down to pinpoint bottlenecks and other contentions. Additionally, you can use the software to automate daily storage tasks and respond to recurring problems — and thereby help drive staff productivity.

Monitor the health of critical applications

To help you manage your most important workloads running on z/OS for maximum performance and efficiency, Tivoli OMEGAMON XE for Storage on z/OS provides granular control. Track details of all I/O to DASD used by an address space — in real time.

Other metrics provide granular performance and availability information on the volumes — down to the actual data sets used by an address space — to help you tune performance.

See key performance indicators

When bottlenecks or other problems slow performance, Tivoli OMEGAMON XE for Storage on z/OS pinpoints where contentions and resource locks occur. The source of those problems can be identified by application name (address space). Easily customized workspaces let you configure dynamic tables and charts to investigate related problems, then intuitively drill down to the source of slow performance.

Tivoli OMEGAMON XE for Storage on z/OS also reveals when storage access hotspots are potentially overburdened. You can see, for example, the time it takes to read or write to the hard disk. Read-hit and write-hit percentages tell you when hard drives backing up the cache are accessed too frequently — a common cause of slow performance.

Additionally, Tivoli OMEGAMON XE for Storage on z/OS helps you quickly identify performance degradation caused when multiple guest operating systems (Linux®, for example) vie for access to the same physical data.

Manage more proactively

Tivoli OMEGAMON XE for Storage on z/OS gives you the power to manage storage tasks with great efficiency. With it, you closely monitor space use and administer it for maximum efficiency. Detailed reports provide a thorough picture of your disk use. Included product features then facilitate actions to move, migrate, reorganize and otherwise manage precious disk space.

Additionally, the included online toolkit provides the ability to issue IBM Data Facility Storage Management Subsystem Hierarchical Storage Manager (DFSMShsm™), Data Set Services (DFSMSdss™), ICKDFS and IDCAMS commands. A new JCL generation capability is provided, which greatly enhances the flexibility of the tools and functions you can use with this product. Furthermore, the outcome of any toolkit-generated action is available directly from the IBM Tivoli Enterprise Portal interface. The feature includes an intuitive graphical interface to easily format related command options.

Tivoli OMEGAMON XE for Storage on z/OS enables definition of complex problem situations and alerting when performance begins to slip. Features that help you act proactively include:

- *Situation Editor* — Set up intelligent alerts based on detailed if/and/or logic. You can easily define and tailor situations to your specific environment to provide granular control and eliminate many false alerts.
- *Take Action* — Resolve recurring problems by running built-in scripts or new scripts, which you can create easily.
- *Expert Advice* — Mouse over an alert to receive a detailed explanation of the problem and potential fixes. Use knowledge out of the box or edit the feature to preserve solutions specific to your environment.

Tivoli OMEGAMON XE for Storage on z/OS helps maximize productivity by remembering custom solutions and automatically using them when common problems recur. Custom alerts can trigger automated execution of potential solutions.

Integrate with other Tivoli monitors to move beyond IT silos

Many organizations continue to address IT problems at the IT department or "operations silo" level. Unfortunately, because applications and related problems often span numerous systems and platforms, finding a problem's root cause may require an approach that reveals the depth and breadth of performance — and related problems — across your organization.

- Tivoli OMEGAMON XE for Storage on z/OS provides a true end-to-end solution that correlates data from multiple systems. Integration via Dynamic Workspace Linking to other specialized Tivoli storage management tools like Advanced Reporter for DFSMShsm, Advanced Audit for DFSMShsm, Advanced Catalog Management, Allocation Optimizer, Tape Optimizer, Automated Tape Allocation Manager and Advanced Backup and Recovery combine powerful deep-dive capability for a total IBM System z® centralized hub to manage your environment.
- Tivoli OMEGAMON XE for Storage on z/OS integrates with other performance monitors, including IBM Tivoli Composite Application Manager software, IBM Tivoli Monitoring 6.1 and other Tivoli OMEGAMON XE monitors. These products share technologies that support efforts to centralize mainframe and distributed monitoring functions via a single user interface: Tivoli Enterprise Portal.

Because integration is key to leveraging the full power of the Tivoli OMEGAMON monitoring portfolio, these products now include advanced Dynamic Workspace Linking. The function allows easy navigation between the workspaces provided by other IBM products that use Tivoli Enterprise Portal. Predefined cross-product links reveal information about systems, subsystems, resources and network components collected by other monitoring agents. Because the links remain in context, you see only the resources associated with those under investigation. This saves the time of navigating manually between workspaces to quickly find problems.

Dynamic Workspace Linking also understands the intricate relationship between monitored data and subsystems such as IBM IMS™, IBM DB2®, storage and others — freeing the user from the need to comprehend those relationships.

Support for Group One languages (Chinese Simplified, Chinese Traditional, French, German, Italian, Japanese, Korean, Portuguese and Spanish) lets users view workspaces in numerous other languages. Team members from offices in North America,

Europe and Asia can now all log in simultaneously to view the information in their native languages, which helps ease communications and speed problem determination.

IBM TotalStorage® Productivity Center products launch directly from Tivoli OMEGAMON XE for Storage on z/OS, for additional time savings and convenience.

Agent versioning support eases migration to new Tivoli OMEGAMON XE releases as expanded capabilities become available.

Maximize the value of your IT investments with a single point of control

Performance and availability problems aren't limited to a single platform, so Tivoli OMEGAMON solutions identify and track problems across your enterprise. IBM Tivoli OMEGAMON DE on z/OS allows you to see information from multiple Tivoli OMEGAMON XE monitors and third-party software — in a single location. This helps you make decisions quickly, efficiently and proactively.

Tivoli OMEGAMON DE on z/OS provides data integration between Tivoli OMEGAMON XE monitors that you can use to:

- Correlate reports in customizable workspaces.
- Build business and technical views geared to users' job responsibilities.
- Allow policy-based, automated response to correlated data.

Achieve end-to-end System z management

IBM Tivoli OMEGAMON System z infrastructure management solutions help customers achieve a true on demand computing environment. Composed of integrated, industry-leading monitors and consoles, Tivoli OMEGAMON solutions combine with IBM Tivoli Monitoring for distributed systems and IBM Tivoli Composite Application

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IBM Tivoli OMEGAMON products for System z include:

Operating systems:
- IBM Tivoli OMEGAMON XE on z/OS
- IBM Tivoli OMEGAMON XE for Linux on System z
- IBM Tivoli OMEGAMON XE on z/VM® and Linux

Data management:
- IBM Tivoli OMEGAMON XE for DB2 for Performance Expert on z/OS
- IBM Tivoli OMEGAMON XE for DB2 for 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

Manager products to provide an end-to-end view across an entire IT infrastructure. The advanced Tivoli OMEGAMON System z 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 infra-structures 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/solutions/zseries

To keep in touch with the latest devel-opments 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 manage-ment platform for organizations to deliver quality service by providing visi-bility, control and automation — visibility to see and understand the workings of their business; control to effectively manage their business, minimize risk and protect their brand; and automa-tion to 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 require-ments. 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 prac-tices by participating in independently run IBM Tivoli User Groups around the world — visit www.tivoli-ug.org

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