

## Hitachi HiCommand® QoS Software for Business Applications

Hitachi HiCommand® QoS software for business applications ensures satisfaction of service-level requirements by identifying how storage infrastructure performance, capacity, and availability impact the application and enable end-to-end monitoring and management of the complete infrastructure.

### HiCommand QoS Software— Real-time Management for Increased Application Uptime and Improved Performance—Delivers True Quality of Service

Managing the performance and availability of business applications has been labor-intensive and inefficient because no single tool monitored the entire path, from application, through the network, to the storage system. HiCommand QoS software for business applications brings the integrated storage infrastructure, storage resource, and storage operations management capabilities of Hitachi HiCommand Storage Services Manager software to business applications with:

- HiCommand QoS for Oracle software
- HiCommand QoS for Sybase software
- HiCommand QoS for Microsoft SQL Server software
- HiCommand QoS for Microsoft Exchange software

HiCommand QoS software for business applications auto-discovers your application infrastructure, charting the application dependencies on hosts, host bus adaptors (HBAs), SAN switches, and disk storage systems, to deliver all the topology, configuration, storage capacity, and performance information relevant to your business applications right to your fingertips.

When the “application-is-slow” call comes in, HiCommand QoS software provides the application perspective within the storage infrastructure, so you can quickly isolate the event by drilling down from the application to identify bottlenecks and determine which infrastructure resource may be at fault. When a storage infrastructure event occurs, you will be promptly alerted to which applications

and users will be impacted so you can react appropriately. When you need to plan for future performance and capacity demands, the QoS software extrapolates historical data to help you plan appropriately and construct maintenance or disaster recovery routines that will minimize application downtime.

### Business Benefits

#### Increase Application Availability

- Reduce or eliminate application downtime from storage infrastructure maintenance.
- Speed recovery after storage infrastructure events impact availability.
- Resolve storage issues before an outage occurs.

#### Ensure Application Performance

- Quickly react and help resolve performance issues for Oracle, Sybase, SQL Server, or Exchange applications.
- Promptly determine or eliminate the storage infrastructure as the cause of reported application problems.

#### Improve Administrative Efficiency

- Reduce time spent correlating information from various domain-specific, performance-monitoring tools.
- Minimize the need to confer with database, network, and system administrators to troubleshoot and resolve problems.
- Enable administrators to automatically discover and manage their entire application environment from a centralized management utility.

### Application Optimized Storage™ Solutions Ensure Service-level Satisfaction through Intelligent, Efficient Storage Resource Management

To Hitachi Data Systems and members of the Hitachi TrueNorth™ Channel Partner Program, Application Optimized Storage™ solutions accomplish more than simply securing your data. HiCommand QoS software for business applications is yet another example of storage capability optimization to support business operations. QoS software helps administrators satisfy service-level requirements, respond more efficiently to help-desk calls, increase application uptime, and plan for effective disaster recovery.

### Complementary Solutions

- HiCommand Chargeback software
- HiCommand Path Provisioning software
- HiCommand Global Reporter software
- HiCommand QoS for File Servers software
- HiCommand Device Manager software

## Reduce Operational and Capital Costs

- ∴ Enjoy support for multivendor storage environments, which ensures that existing storage investments are protected.
- ∴ Identify unused or wasted storage capacity that can be reallocated to defer additional capital investments.

## Feature Highlights

### Auto-discovery and Topology Rendering

- ∴ Auto-discovers the application infrastructure and maps the entire path down through the file system, host, HBA, and SAN switch to the storage system
- ∴ Provides unique visualization with the ability to zoom in and out from the application down to individual device details; navigation of this information in context is vital to correlating results of individual actions to their impact on the overall application environment

### Dependency Management

- ∴ Automatically identifies multilevel dependencies between applications and the SAN infrastructure, enabling administrators to see which application instances will be affected by planned or unplanned downtime
- ∴ Guides which resources to bring online first to ensure a prioritized return-to-service for critical applications after an unplanned outage

### Real-time Performance Management

- ∴ Monitors performance from an application object level through the SAN fabric to individual storage systems; each type of supported element has multiple predefined performance views that provide real-time monitoring

### Capacity Planning

- ∴ Monitors and analyzes capacity utilization to allow administrators to conduct proactive capacity planning
- ∴ Extrapolates capacity demands and constraints from historical data—increasing service levels and decreasing capital expenses

### Policy-based Automation

- ∴ Threshold-based management utilizing the HiCommand Storage Services Manager policy engine allows automatic response to any storage events that may impact a QoS application; HiCommand QoS software can automatically send e-mail, alert a pager, execute a command, provision new capacity, or run an external program, enabling you to ensure the continued availability of your application environment

## Prerequisites

### HiCommand Storage Services Manager Software

HiCommand Storage Services Manager software is the main Hitachi console for HiCommand standards-based, heterogeneous storage infrastructure management solutions. Built on the SMI-S industry standard, it ensures broad support for multivendor storage environments that protect investments in both storage hardware and management solutions. As the base platform upon which HiCommand QoS software for business applications builds, Storage Services Manager software allows enterprises to optimize heterogeneous storage infrastructures to meet business objectives and manage storage as an application-focused utility.

### System Requirements and Support Matrix

For a complete list of applications, system requirements, and supported hardware/software platforms, please visit: <http://www.hds.com/go/hicommandrequirements>

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