



HITACHI
DATA SYSTEMS



Hitachi HiCommand[®]
Storage Services
Manager Software



Partner Beyond Technology



Hitachi HiCommand® Storage Services Manager Software

By auto-discovering the storage infrastructure and illuminating the path from each application through the SAN to the storage system, HiCommand Storage Services Manager software provides complete, end-to-end capacity and performance management.

HiCommand Storage Services Manager— Application Availability, IT Efficiency, Maximized Resource Usage, and Reduced Costs

Traditional storage management practices can be labor-intensive and inefficient, which not only impacts productivity but also puts the most important corporate asset—information—at risk. The Hitachi HiCommand® Storage Services Manager module is the main Hitachi Data Systems console for heterogeneous SAN and storage resource management (SRM). Storage Services Manager software, powered by ApplQ, provides the discovery, monitoring, reporting, active management, and automation capabilities required to ensure application availability and performance, improve IT efficiency, maximize storage resource utilization, and reduce operational and capital costs.

By helping administrators drill down from application performance and availability issues to the underlying cause, and issuing alerts when storage infrastructure changes might impact applications, Storage Services Manager software enables administrators to satisfy service-level requirements, respond more efficiently to help desk calls, increase application uptime, and plan for effective disaster recovery.

Heterogeneous Device Support: Broad and Deep

All HiCommand modules leverage a SMI-S- and CIM-based architecture. Noncompliant devices are “wrapped” with a CIM interface for simplified, normalized management. This powerful agent-light architecture results in fast, low-risk implementations, without the complexity or high costs of maintenance associated with other solutions. By supporting SMI-S- and non-compliant devices in the same fashion, Storage Services Manager software protects existing and future investments, and provides the flexibility to use new technologies and devices from different vendors.

Business Benefits

Ensure Application Availability

- :: Provide faster root-cause analysis and correction of availability issues.
- :: Predict outage conditions before they occur.
- :: Reduce or eliminate downtime of revenue-generating systems, applications and Web portals.

Ensure Application Performance

- :: Provide faster root-cause analysis and correction of application performance problems.

Improve Administrative Efficiency

- :: Automatically e-mail customized reports to key personnel.
- :: Manage ever-increasing storage capacity without increasing IT staff.
- :: Automate tedious and time-consuming storage management tasks, allowing more focus on strategic projects.

Reduce Operational and Capital Costs

- :: Reduce time spent managing large-scale storage networks.
- :: Identify unused or wasted storage capacity that can be re-allocated to defer additional capital investments.
- :: Ensure that existing storage infrastructure is optimally utilized.

Feature Highlights

Auto-discovery and Topology Rendering

Automatically discovers the entire network storage infrastructure and renders both the logical and physical topology. Zoom in or out from the application perspective to specific device details of the hosts, switches, and storage systems on which an application depends.

Navigate information in context to correlate individual actions to their impact on the overall environment.

Path, Connection, and Dependency Management

Automatically identifies multilevel dependencies to understand which applications will be affected by planned and unplanned downtime of storage infrastructure elements.

Enables visualization of connections from:

- :: Storage system to core switch
- :: Host bus adapter (HBA) to host
- :: Core to edge switch
- :: Host to mount point
- :: Edge switch to HBA
- :: Mount point to applications

Determines which resources to bring online first to ensure a prioritized return-to-service for critical applications in the event of an unplanned outage.

Real-time Performance Management

Monitors a wide range of application, host, HBA, switch, and storage system statistics to trigger threshold alerts or allow correlated analysis to aid quick root-cause determination and correction.

End-to-end Capacity Management and Planning

Accesses current and historical capacity snapshots plus future capacity projections, system-wide, and for:

- :: Hosts: megabytes (MBs) used and available
- :: Volumes: MBs allocated and unallocated
- :: Switches: ports used and available
- :: Storage volumes and pools: MBs used, available, exported, unexported, and unused raw

Expert Advice and Automation

Provides advice about or automation of tedious and time-consuming tasks, including updating firmware, replacing HBAs, managing global changes, and identifying unallocated capacity available to an application or host using existing zone sets.

Policy-based Automation

Integrated policy engine leverages configuration and utilization levels, user-defined business rules and thresholds, and event triggers to automatically send e-mail messages, alert pagers, and execute other Storage Services Manager commands, or to run external programs.

Role-based Security and Groups

Customizes views as well as access and administrative rights for C-level executives, SAN architects, storage administrators, IT administrators, application and database administrators, and help-desk staff.

Out-of-the-box, Customizable Reports

Provides an extensive set of out-of-the-box reports, including capacity management and planning, performance management, asset management, and chargeback.

OpenRAD Toolkit and Command Line Interface (CLI)

Enables customization of Storage Services Manager capabilities to meet specific requirements using powerful OpenRAD tools and CLI.

Prerequisites

HiCommand Device Manager or Device Manager SP Software

HiCommand Device Manager software is an optimized platform that can stand alone to centrally manage, configure, and monitor Hitachi storage systems as well as Sun StorEdge 9900 and 9990 series and T3 storage systems. HiCommand Storage Services Manager software requires Device Manager or Device Manager SP to access Device Manager's CIM-based interface to detailed information on both Hitachi and Sun storage systems.

Quick Start Implementation Service for HiCommand Storage Services Manager Software

This required service helps you with project planning, installation, and configuration of Storage Services Manager software. Through a collaborative, hands-on approach, Hitachi Data Systems consultants provide knowledge transfer to enable your technical personnel to roll out the software's capabilities across your enterprise storage environment.

System Requirements

<http://www.hds.com/go/hicommandrequirements>

Complementary Solutions

HiCommand QoS for Microsoft Exchange

HiCommand QoS for Microsoft Exchange extends HiCommand software's integrated SAN management, storage resource management, and storage operations management capabilities inside Microsoft Exchange, enabling higher availability and better performance of messaging and collaboration applications.

HiCommand QoS for Oracle and HiCommand QoS for Sybase

HiCommand QoS for Oracle and HiCommand QoS for Sybase extend HiCommand software's integrated SAN management, storage resource management, and storage operations management capabilities inside your databases, helping to ensure the availability and performance of Oracle- or Sybase-based applications.

HiCommand Tuning Manager Software

HiCommand Tuning Manager software provides enhanced performance monitoring and reporting for Hitachi storage systems, with a focus on the application.

HiCommand QoS for File Servers

HiCommand QoS for File Servers seamlessly integrates traditional storage resource management file scanning and reporting capabilities with active SAN management features to deliver end-to-end capacity, performance, and user consumption management solutions for file servers.

HiCommand Chargeback Software

HiCommand Chargeback provides powerful asset management and business unit chargeback capabilities, enabling organizations to align their storage infrastructures with business objectives and manage storage as an internal, application-driven utility.

HiCommand Path Provisioning Software

HiCommand Path Provisioning automates the end-to-end provisioning of hosts, SAN switches, and disk systems, which speeds the deployment of new applications and ensures that mission-critical applications have the storage resources they need to deliver business value.

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