



**HITACHI**  
DATA SYSTEMS

# Hitachi HiCommand<sup>®</sup> Dynamic Link Manager Software

Partner Beyond Technology



# Hitachi HiCommand® Dynamic Link Manager Software

Helping to improve both information access and availability, HiCommand Dynamic Link Manager software offers fault-tolerant connections, including failover and load balancing.

## HiCommand Dynamic Link Manager Software—Data-route Protection for Enhanced Performance and Nonstop Availability

In today's ultracompetitive, information-driven business climate, 24/7 data availability is a must. Well-planned business continuity strategies must include the ability to protect data as it travels from the server to the storage system. This is a difficult challenge, as data paths can become congested—resulting in bottlenecks—or fail entirely, cutting off access to key information.

The capabilities of Hitachi HiCommand® Dynamic Link Manager software—including path failover and failback, and automatic load balancing—provide higher data availability and accessibility. If one path fails, the path failover feature in Dynamic Link Manager software automatically switches the I/O to an alternate path, helping to ensure that an active route to your data is always available. Dynamic Link Manager software also helps maintain outstanding system performance by balancing workloads across available paths.

For organizations challenged with managing larger numbers of servers that have Dynamic Link Manager software installed, each with multiple storage paths, another HiCommand tool assists with storage administration. HiCommand Global Link Availability Manager software provides single-point management of all multipathed storage paths in complex SAN environments.

## Business Benefits

### Protect Data Availability

- ∴ Reduces the risk of financial loss due to failures of critical applications via path failover

- ∴ Achieves a higher level of data availability through automatic failover and failback
- ∴ Keeps applications online while performing maintenance that requires taking a path down

### Simplify Operations

- ∴ Includes both a browser-accessible graphical user interface and a command-line interface
- ∴ Provides one path-management tool for all your operating systems
- ∴ Adds value to existing path-failover products

### Optimize System Performance

- ∴ Improves system performance by taking all storage I/O requests and splitting the workload across available paths
- ∴ Monitors the status of online paths through a health-check facility at administrator-specified intervals and places a failed path offline when an error is detected

## Features

### Wide Range of Operating Environments

- ∴ Supports path failover and I/O load balancing for IBM® AIX®, Microsoft Windows, HP-UX, Sun Solaris, and Linux operating systems
- ∴ Supports Fibre Channel and iSCSI connections
- ∴ Supports most major server-clustering products
- ∴ Supports standard volume-management tools
- ∴ Supports popular host bus adapters (HBAs)

- :: Complements Microsoft Windows MPIO environments through added automation, including failback and path load balancing
- :: Supports all Hitachi storage systems
- :: Supports EMC Symmetrix DMX series and CLARiiON CX series storage systems (in Windows environments)
- :: Enables easy management of paths through browser connection to server

### **Fault-tolerant Path Management**

- :: Data access on all Hitachi storage systems in both direct attached storage (DAS) and storage area network (SAN) environments, enabled with path failover and I/O balancing over multiple HBA cards
- :: Failover and failback in either manual or automatic modes
- :: Automated path health checks
- :: Dynamic LUN addition and deletion without a server reboot
- :: Boot-disk support
- :: Multiple active paths for bandwidth control at the HBA port level
- :: Easy installation and operation through auto-discovery function

## **At Your Service**

The Hitachi Data Systems Global Solution Services (GSS) team delivers a full range of storage design, rapid product deployment, and ongoing storage management services to create Application Optimized Storage™ solutions that map to your critical business application requirements and truly deliver value to your organization. HiCommand software services help simplify and reduce the cost of managing your storage environment. GSS offers a variety of services to help you use HiCommand software tools with even the most complex storage infrastructures.

## **System Requirements and Support Matrix**

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

## **Complementary Solutions**

### **Hitachi HiCommand Device Manager Software**

HiCommand Device Manager software provides advanced management for Hitachi and Sun StorEdge 9900/9990 series and T3 storage systems. Device Manager software provides a single, easy-to-use interface for all types of Hitachi storage systems and allows centralized management of multiple storage systems in distributed environments. It also manages replication configuration and is the storage “pool” manager and prerequisite for many advanced functions and products. Device Manager software provisions the whole path (servers and storage systems), and it is the SMI-S provider for Hitachi storage systems, allowing management via a standards-based management tool such as HiCommand Storage Services Manager software.

### **Hitachi HiCommand Global Link Availability Manager Software**

For organizations challenged with managing larger numbers of servers that have HiCommand Dynamic Link Manager software installed, each with multiple storage paths, another HiCommand

tool assists with storage administration. HiCommand Global Link Availability Manager software provides single-point management of all multipathed storage paths in complex SAN environments. It centralizes path management and reporting, streamlining administration while minimizing configuration errors. It helps improve system reliability and reduces downtime by load balancing, automated path health checks, reporting of alerts from each host, and by rapid problem troubleshooting.

### **Business Continuity Consulting Services**

Hitachi Data Systems offers business continuity services to ensure continuous access to information across your enterprise. The services assess your current disaster recovery capabilities and business needs, analyze your areas of risk, and then help you to develop and implement the strategic and technical plans you need to achieve nonstop operations.

 **Hitachi Data Systems Corporation****Corporate Headquarters**

750 Central Expressway  
Santa Clara, California 95050-2627  
U.S.A.  
Phone: 1 408 970 1000  
**www.hds.com**  
**info@hds.com**

**Asia Pacific and Americas**

750 Central Expressway  
Santa Clara, California 95050-2627  
U.S.A.  
Phone: 1 408 970 1000  
**info@hds.com**

**Europe Headquarters**

Sefton Park  
Stoke Poges  
Buckinghamshire SL2 4HD  
United Kingdom  
Phone: + 44 (0)1753 618000  
**info.eu@hds.com**

Hitachi Data Systems is registered with the U.S. Patent and Trademark Office as a trademark and service mark of Hitachi, Ltd. The Hitachi Data Systems logotype is a trademark and service mark of Hitachi, Ltd. HiCommand is a registered trademark of Hitachi, Ltd.

Application Optimized Storage is a trademark of Hitachi Data Systems.

All other product and company names are, or may be, trademarks or service marks of their respective owners.

Notice: This document is for informational purposes only, and does not set forth any warranty, express or implied, concerning any equipment or service offered or to be offered by Hitachi Data Systems. This document describes some capabilities that are conditioned on a maintenance contract with Hitachi Data Systems being in effect, and that may be configuration-dependent, and features that may not be currently available. Contact your local Hitachi Data Systems sales office for information on feature and product availability.

Hitachi Data Systems sells and licenses its products subject to certain terms and conditions, including limited warranties. To see a copy of these terms and conditions prior to purchase or license, please go to [http://www.hds.com/products\\_services/support/license.html](http://www.hds.com/products_services/support/license.html) or call your local sales representative to obtain a printed copy. If you purchase or license the product, you are deemed to have accepted these terms and conditions.

©2006, Hitachi Data Systems Corporation. All Rights Reserved.  
DISK-464-06 April 2006

