

Hitachi Simple Modular Storage 100 Solution for Microsoft® Windows 2003 iSCSI SAN Environments

Hitachi Simple Modular Storage 100 is a simple and reliable storage solution for small and medium businesses (SMBs) that offers enterprise-class features and data protection solutions for Microsoft® Windows 2003 SAN attached servers.

Simple Modular Storage 100—Enterprise-level Benefits for SMBs

Storage area network (SAN) solutions offer many advantages, including economic benefits of consolidated, self-managing storage, more familiar IT infrastructure and excellent integration with Microsoft Windows server environments. With Hitachi Simple Modular Storage 100, Hitachi Data Systems introduces an easy-to-deploy iSCSI SAN solution with uncompromised reliability and performance for Microsoft Windows environments.

Simple Modular Storage 100 gives smaller organizations enterprise-class storage flexibility and reliability without the costs and complexity associated with traditional SANs. This cost-effective platform can be installed in minutes. After setup, operation of the storage system is largely hands-off. Simple Modular Storage 100 is designed to run for years without disruption. Organizations can spend valuable resources on managing, securing and growing business without the cost or complexity associated with disparate storage systems management on servers.

Feature Highlights

Hitachi Simple Modular Storage 100 has powerful, enterprise-class features that are

more common in higher-priced and more complex storage solutions, including:

High Availability. Simple Modular Storage 100 offers storage with no single point of failure. In simple terms, this means that multiple things can go wrong and business stays up and running. If one controller is unavailable, all data volumes are still available via a second controller. And what happens if a drive fails? No problem. Simple Modular Storage makes use of RAID-6 technology for nondisruptive operation. In a RAID-6 configuration, any two drives can fail at the same time—a highly unlikely event—and you still have not lost data.

Cutting-edge Performance. The active symmetrical controllers design, 2GB cache size and SAS drive support unique features that make this platform a workhorse for business critical applications. Some of the demonstrated performance capabilities include:

- Supports in excess of 1,000 average Microsoft Exchange 2003 users (2,000 average users for Exchange 2007)
- Outperforms the competition by 60 percent with cache read in excess of 51,000 per second (compared to Dell/EMC AX 150i)
- Sustains 226MB/sec of sequential write bandwidth with a dual controller system compared to Network Appliance Store

Vault S500 80MB/sec throughput, which yields a 275 percent improvement

Built-in Data Protection. Data protection tasks are simplified with a point-and-click, graphical user interface (GUI)-based Hitachi Copy-on-Write Snapshot and Hitachi ShadowImage® Replication software. Copy-on-Write Snapshot software is included with Simple Modular Storage 100 (dual controller models) to enable fast replication of volume changes via point-in-time snapshots without impacting host server performance.

Business Solutions

Hitachi Data Systems and its Hitachi TrueNorth™ Channel Partners offer industry-leading technology to help organizations of all sizes meet their unique requirements for business continuity, regulatory compliance and data recovery. Together, we provide cost-effective storage products and solutions that leverage world-renowned Hitachi global R&D resources to deliver performance, availability and scalability—supporting business critical applications and strengthening competitive advantage.

For more complex copy/restore operations, optional ShadowImage Replication software provides a nondisruptive way to create multiple full-volume disk-based copies of any volume within Simple Modular Storage 100 while keeping data RAID-protected and fully recoverable. ShadowImage is fully integrated with Microsoft Volume Shadow Copy Service (VSS) to provide snapshot capability. There is no need to shut down any Microsoft VSS compliant application such as Microsoft Exchange or SQL Server for either backup or restore. An off-host backup can be enabled without impacting the host server or traffic on the LAN leveraging the Microsoft VSS technology integration. The back up host can access the snapshot through the iSCSI network to back up to tape. Other Microsoft VSS compliant applications including Symantec BackupExec can also leverage this feature.

Hitachi TrueCopy® Extended Distance software (SimpleDR) is also available, as an option, for asynchronous remote replication between Simple Modular Storage devices at separate locations using an IP network. No other storage solution on the SMB market offers enterprise-class storage data protection features.

Easy Setup and Quick Installation. Simple Modular Storage 100 ships with easy-to-follow instructions similar to the instructions that ship with personal computers. It can be installed in minutes. The easy-to-use Hitachi Storage Navigator Modular 2 program, a wizard-based tool, provides guidance through the initial setup and configuration with an intuitive interface for easy navigation and simplified storage management. Storage Navigator Modular 2 software can be quickly installed on any server running Microsoft Windows 2003 and other operating systems and applications. No storage expertise is required!

Simple Maintenance. Should a disk drive ever fail, Simple Modular Storage 100 will continue to operate as if nothing happened. RAID-6 configurations allow any two drives to fail without losing data. The Storage Navigator Modular 2 program will notify you that a drive has malfunctioned and direct you to contact the support center, which will send

Business Benefits

Hitachi Simple Modular Storage 100 significantly reduces the burden of backup and restore administration, making high-performance data protection a reality for SMBs and remote site environments. In addition, the economical platform provides radically simplified installation and management, Microsoft Windows-friendly integration and ease of iSCSI-based SAN setup, which result in:

- Maximized infrastructure investments through centralization of resources
- Effective backup and restore operations with shorter backup windows
- High availability for critical data
- Elimination of the need for dedicated storage staff
- Economical management of significantly more data capacity

a replacement. Once it arrives, just plug the new disk into one of the two repair slots on the device—no need to remove the faulty disk. The system automatically rebuilds the RAID group. Should you ever need to replace the entire unit, just install the new Simple Modular Storage system in place, plug it in, point and click the easy-to-use, automated copy software and data is copied from the old storage system to the new one.

Simple Upgrades. Upgrading to higher capacity or performance is straightforward with a simple and secure auto-migration feature. Should you need additional capacity, just

install another Simple Modular Storage unit and attach it to the existing system. The patented auto-migration feature automatically copies data to the new unit.

SAS or SATA II HDD Support. A Serial Attached SCSI (SAS) interface helps improve storage performance and enable continuous access to disks, even if an internal link fails. Simple Modular Storage supports 147GB SAS, 300GB SAS, 500GB SATA II, or 750GB SATA II drives. Any workload can be hosted economically. You won't find this next-generation of SCSI technology in comparable products.

Compliments of:

 Hitachi Data Systems Corporation



**3835R E. Thousand Oaks Blvd. #315
Westlake Village, CA 91362
Tel 877.230.2837 / Fax 805.435.2500
www.ess-direct.com**

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