Hitachi TagmaStore™ Workgroup Modular Storage Model WMS100

For small- and medium-sized businesses, the all-SATA model WMS100 offers a highly scalable, reliable, and cost-effective platform for Microsoft Exchange Server and other business applications, consolidation, first SAN deployment, NAS access, backup, or data archiving.

Enterprise-class Solutions for SMB Customers

Small- and medium-sized businesses (SMBs) are facing big-company challenges of escalating data growth, availability, and protection as well as regulatory compliance and complex storage infrastructures. With many years of experience serving Fortune 500 companies, Hitachi Data Systems understands these challenges and has developed Application Optimized Storage™ solutions to match application requirements to storage attributes. Now Hitachi Data Systems brings SMB customers these proven solutions in modular, cost-effective packaging—including the Hitachi TagmaStore™ Workgroup Modular Storage model WMS100.

Business Benefits

Consolidate storage, anticipate growth, centralize management, and reduce costs

:: Move from inflexible and expensive, server-internal storage to cost-effective, scalable external storage, consolidate multiple storage systems into one, or build a first storage area network (SAN).

:: Scale to 42TB of Serial ATA (SATA) storage to keep up with data growth.

:: Support very large numbers of servers and applications with 512 LUNs.

:: Reduce management complexity and cost with a centralized storage infrastructure.

:: Benefit from easy-to-use software utilities for configuration and management.

Protect critical data

:: Enhanced SATA data protection for unmatched data availability and resiliency

:: RAID-6 for high availability and rapid RAID group rebuild times in the rare event of a disk drive problem

:: Hi-Track® "call-home" service/remote maintenance tool for 24/7 diagnostics to keep potential issues from becoming problems

:: Fully redundant and hot-swappable components to keep applications online

:: Within-system volume replication or incremental copies for frequent backups

Enhance application performance

:: Achieve great performance for SMB workloads.

:: Partition and dedicate cache to maximize performance of high-I/O applications.

Build a first storage network or extend an existing one

:: Simple SAN and SAN Starter solutions for easy deployment

:: Diskless boot for SAN-attached servers

:: High-capacity storage for NAS applications

Modular Storage for the Midrange Market

:: Hitachi TagmaStore™ Network Storage Controller

:: Hitachi Thunder 9585V™ ultra high-end modular storage

:: Hitachi TagmaStore™ Adaptable Modular Storage model AMS500

:: Hitachi TagmaStore™ Adaptable Modular Storage model AMS200

:: Hitachi TagmaStore™ Workgroup Modular Storage model WMS100

Leverage for SMB applications or enterprise tiered storage deployments

- :: Microsoft Exchange, ERP, CRM, NAS filer, backup applications, or tape replacement
- :: Archival and long-term tamperproof data retention to meet regulatory requirements
- :: Combine with Hitachi enterprise-class storage for complete data lifecycle management solutions within a tiered storage environment.

Optimize TCO with outstanding performance, availability, and scalability

- :: Match application requirements (performance, availability, cost, and functionality) to storage attributes.
- :: Use advanced features to help improve the reliability and usability within any modular infrastructure or mission-critical SMB operation, and for specific application workloads.

Workgroup Modular Storage—Model WMS100 Specifications

Physical Characteristics

Raw capacity	42TB (SATA)
Disk drive technology	250GB SATA (7200RPM) 400GB SATA (7200RPM)
Disk drive interface	SATA
Minimum/maximum number of disk drives	5–105 SATA
Model upgrade options	No
Number of controllers	1 or 2
Host Fibre Channel connections	4 at 1Gbit/sec or 2Gbit/sec
Maximum attached hosts (virtual ports)	512
Active loops per number of disk drives	4/15
LUNs	512

RAID Support

- :: RAID-1
- :: RAID-5
- :: RAID-1+0
- :: RAID-6

Availability

Nondisruptive component replacement	MAJOR FRU
Nondisruptive hot-pluggable disks	
Nondisruptive microcode updates	
Hi-Track® "call-home" service/remote maintenance tool	

Performance

Maximum cache	512MB–2GB
Cache binding	Hitachi Cache Residency Manager
Cache partitioning	

Software

Management software	Hitachi Resource Manager™ utility package, Hitachi HiCommand® Suite and Storage Area Management (SAM)
Common APIs across Hitachi storage	
Point-in-time copy	Hitachi ShadowImage™ In-System Replication, Hitachi Copy-on-Write Snapshot
Serverless disk copy and tape	Hitachi Cross-System Copy to/from Hitachi TagmaStore™ Universal Storage Platform and Hitachi Lightning 9900™ V Series systems
LU-change-ownership	
LUN security	Hitachi Volume Security
Host Storage Domains; virtual private storage; Multiple LUN0/Port	
Storage system–based "write once, read many" (WORM) data protection	Hitachi Data Retention Utility
Dynamic LUN management	Logical Volume Concatenation
Host failover	Hitachi Dynamic Link Manager™ path manager
SAN support	Nonproprietary
Heterogeneous SAN management	HiCommand Storage Services Manager and HiCommand Path Provisioning Manager, both powered by AppIQ

Operating Systems Support

- :: IBM® AIX®
- :: HP-UX
- :: Sun Solaris
- :: Microsoft Windows NT, Windows 2000, Windows Server 2003
- :: HP Tru64 UNIX
- :: SGI IRIX
- :: Novell NetWare
- :: LINUX
- :: HP OpenVMS
- :: NetApp® Data ONTAP, via HDS-NetApp Enterprise NAS Gateway
- :: IBM z/OS®, via Universal Storage Platform external attachment
- :: VMWare
- :: Apple MAC OS

Note: All capacities are based on 1GB = 1,000,000,000 bytes; 1TB = 1000GB