Hitachi TagmaStore™ Adaptable Modular Storage Model: AMS200 for Health Care

For the growing health care facility, model AMS200 offers a highly scalable, reliable, and cost-effective platform for key applications such as PACS, HIS, and RIS, as well as tiered storage, image and data archiving, compliance, consolidation, and backup.

Enterprise-class Solutions for Midrange Health Care Customers

The health care industry is facing huge IT challenges of high I/O applications, escalating data growth, high availability needs, and protection as well as regulatory compliance issues 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 key application requirements to storage attributes. Now Hitachi Data Systems brings health care customers these proven solutions in modular, cost-effective packaging—including the Hitachi TagmaStore™ Adaptable Modular Storage model AMS200 for health care.

Business Benefits

Leverage for health care applications or enterprise tiered storage deployments

:: PACS, HIS, RIS, C-PACS, CIS, EMR, Microsoft Exchange Server, ERP, CRM, database, 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.

Manage storage costs while ensuring scalability, reliability, and flexibility

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

:: Match the value of data to the cost of storage with a system that supports native Fibre Channel SAN and cost-effective Serial ATA (SATA) intermix drives.

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

:: Scale to 40.5TB of SATA and Fibre Channel storage (intermix) to keep up with data growth.

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

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

:: Use advanced features—Cache Partition Manager and RAID-6—to help improve performance, reliability, and usability.

Protect critical data

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

:: RAID-6 for high availability and reliable rebuild for RAID groups

:: 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

Modular Storage for the Health Care 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

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

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 network attached storage (NAS) applications
- :: Manage and configure systems using Hitachi HiCommand® Suite and Storage Area Management (SAM) software.

Adaptable Modular Storage—Model AMS200 Specifications

Physical Characteristics	
Raw capacity	40.5TB SATA Intermix
	31.5TB Fibre Channel
Disk drive technology options—Fibre Channel unless otherwise noted	73GB (10,000RPM)
	73GB (15,000RPM)
	146GB (10,000RPM)
	146GB (15,000RPM)
	300GB (10,000RPM)
	250GB SATA (7200RPM)
	400GB SATA (7200RPM)
Disk drive interface	SATA–Fibre Channel Intermix
Minimum/maximum number of disk drives	4–105 Fibre Channel
	0–90 SATA
Model upgrade options	AMS500
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-0 (Fibre Channel only)	:: RAID-5
:: RAID-1	:: RAID-6
:: RAID-1+0	

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

Performance	
Maximum cache	1GB–4GB
Cache binding	Hitachi Cache Residency Manager feature
Cache partitioning	

Software	
Management software	Hitachi Resource Manager™ utility package, Hitachi HiCommand® Suite and Storage Area Management (SAM)
Common APIs	YES—across Hitachi storage systems
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 Lighting 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
Heterogeneous SAN management	HiCommand Storage Services Manager and HiCommand Path Provisioning Manager, both powered by AppIQ

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

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