



Hitachi Data Systems Technical Briefing

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A Partnership beyond Technology

One of the
world's largest
integrated electronics companies

- Founded in 1910
- Manufacturer of over 20,000 products
 - 932 subsidiaries
 - 355,000 employees
 - Over 2,000 Ph.Ds
- Total FY06 sales of \$86.8B
- FY06 R&D Investment: \$4.5B
 - Approx. 40% in IT
- Approx. \$5.6B in cash



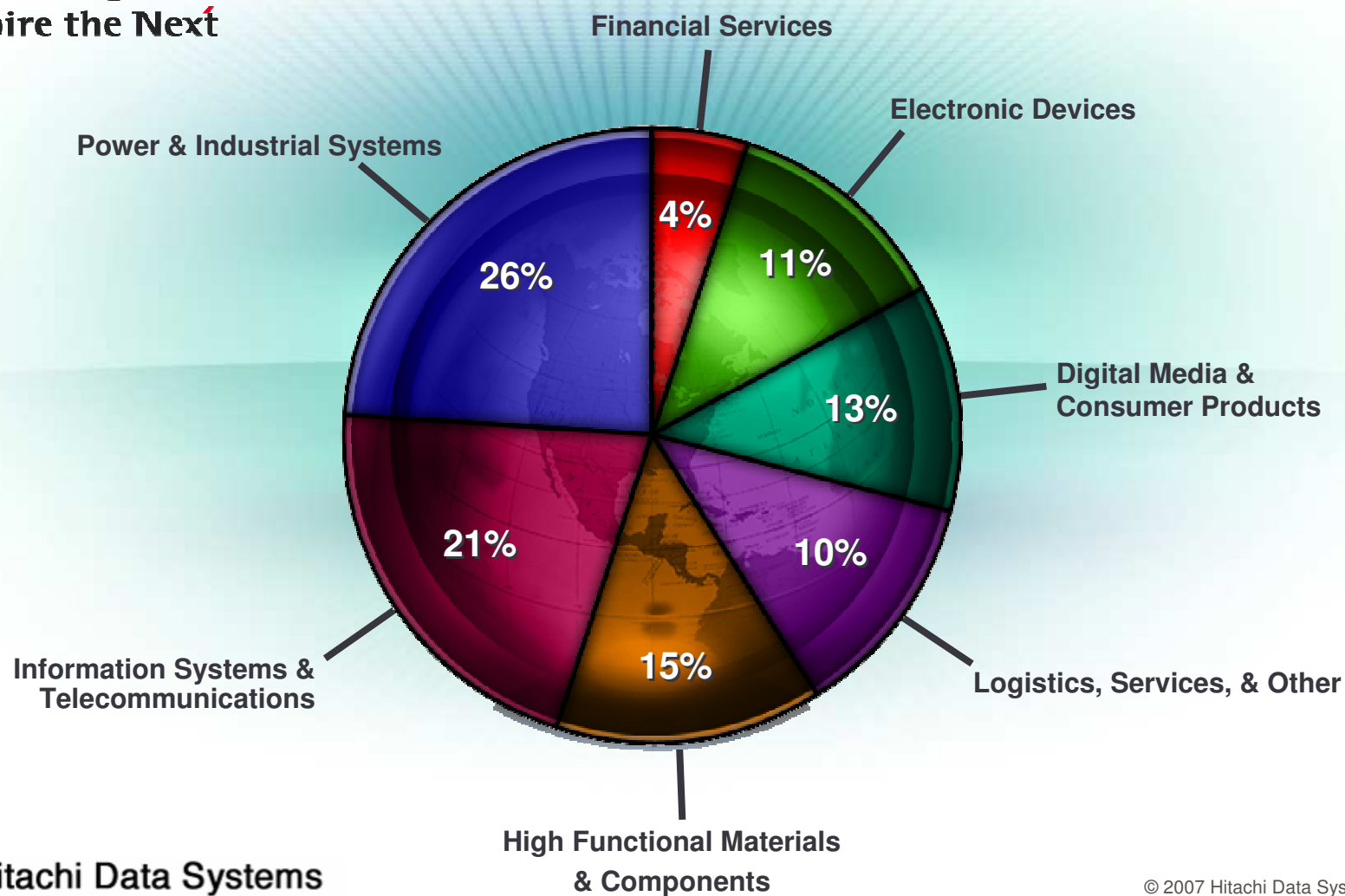
No. 48 on the 2007 FORTUNE Global 500®

Hitachi, Ltd. FY2006 Revenue by Segment

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FY2006 Revenues of \$86.8B

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A Continued Investment in Innovation

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Hitachi will Invest \$2 BILLION
in the Hitachi Storage Solutions Group through 2008

Hitachi Storage Solutions Group



Hitachi Data Systems At-A-Glance

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Wholly owned subsidiary of Hitachi, Ltd. (NYSE:HIT)

- Formed in 1989
- Direct and indirect sales in over 170 countries & regions
- 3,400 employees and expanding

Hitachi, Ltd.'s focal point for storage infrastructure solutions, storage management software, and storage consulting services

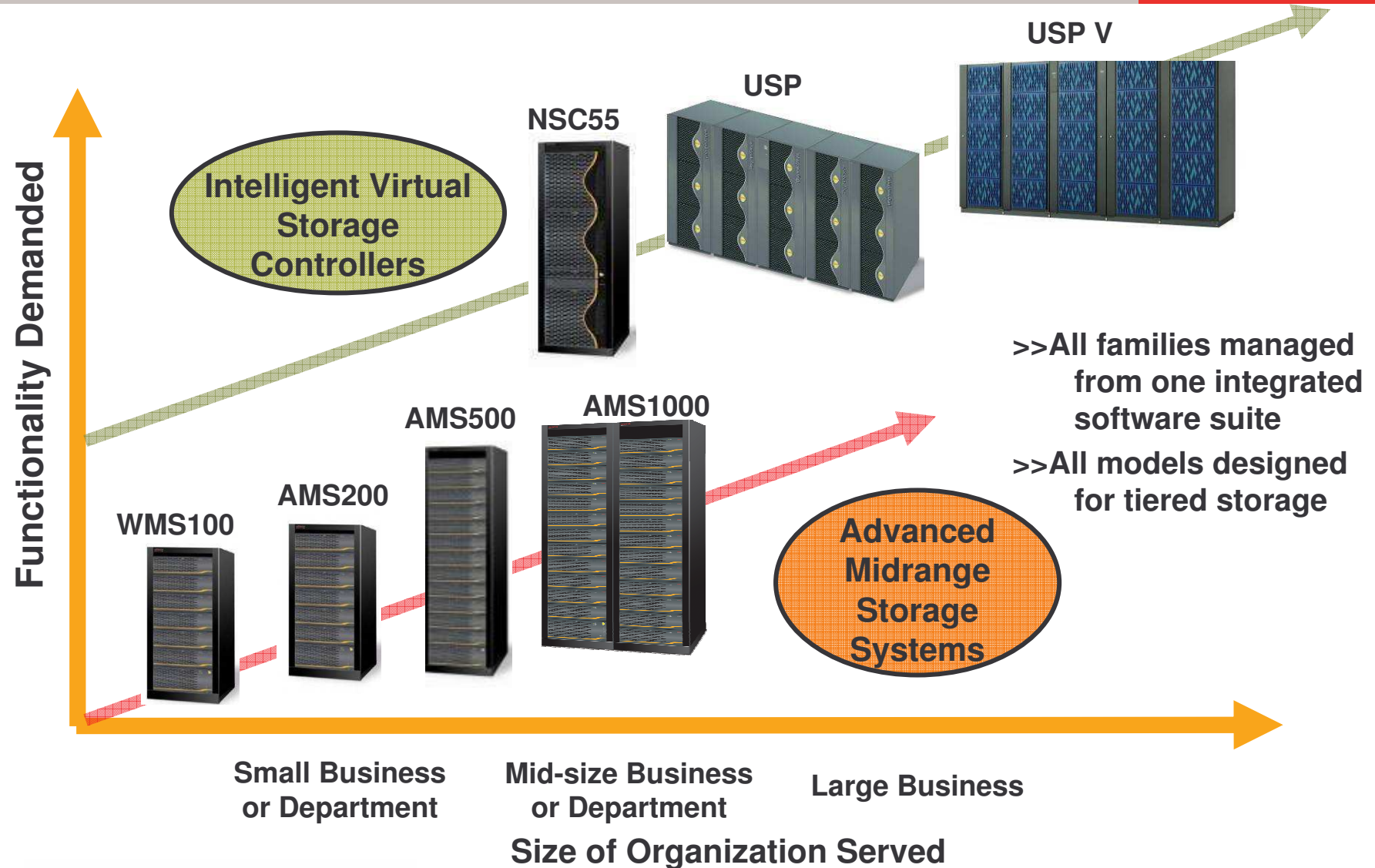
Excellence in Customer Service

Awarded to Hitachi Data Systems by:



Hitachi Product Portfolio

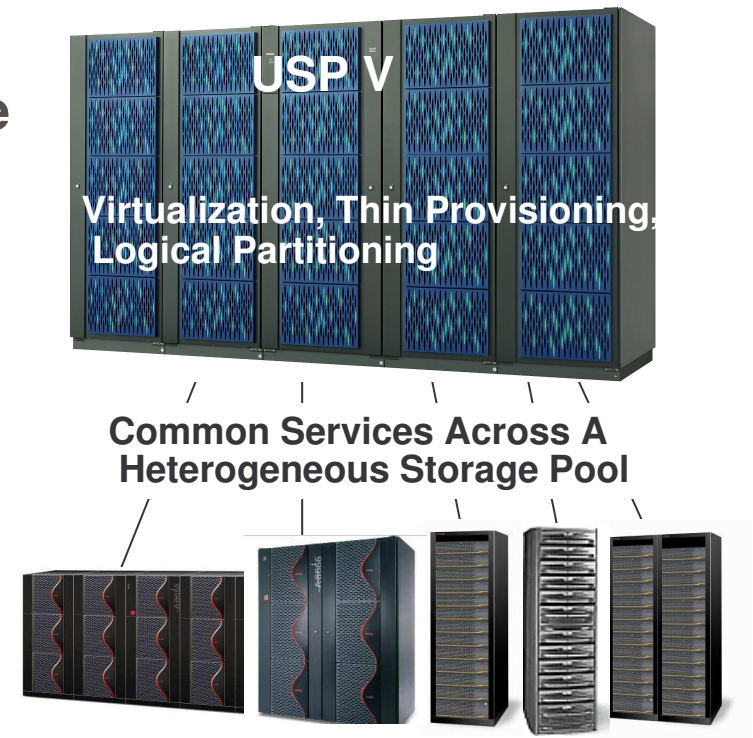
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On 14 May, 2007 The Hitachi Universal Storage Platform V

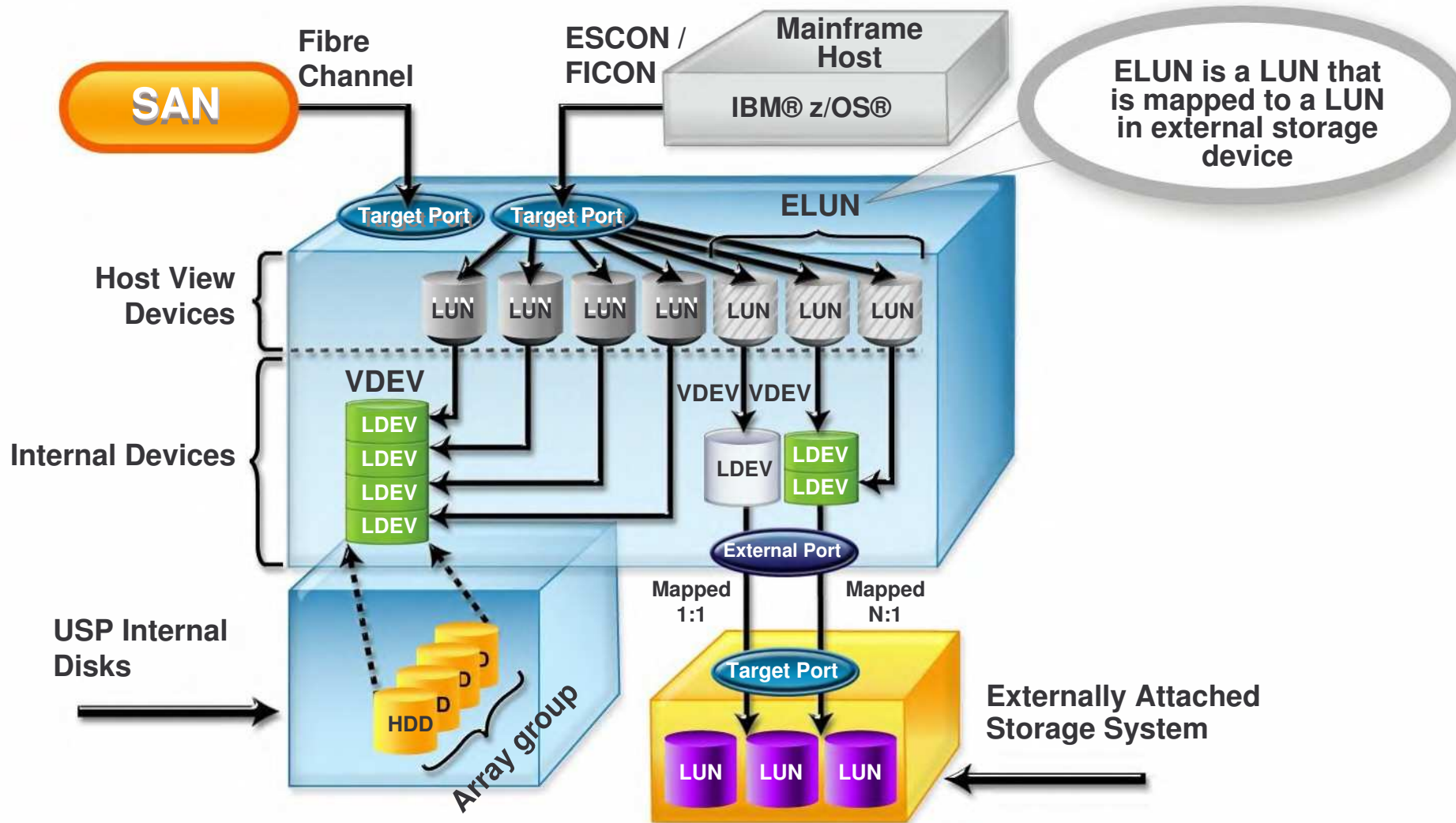
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- Introducing the world's most advanced enterprise storage services platform – **one storage services platform for all data**
- Common management, migration and replication services across 247PBs of
- World's first enterprise-class virtualization combined with thin provisioning software
- Universal Network Star™ crossbar switch providing 40% more performance and 5x the virtualized storage port bandwidth
- The foundation for Hitachi Services Oriented Storage Solutions that simplify management, lower costs, and extend lifetime value



Universal Storage Platform - Externally Attached Storage virtualization Implementation

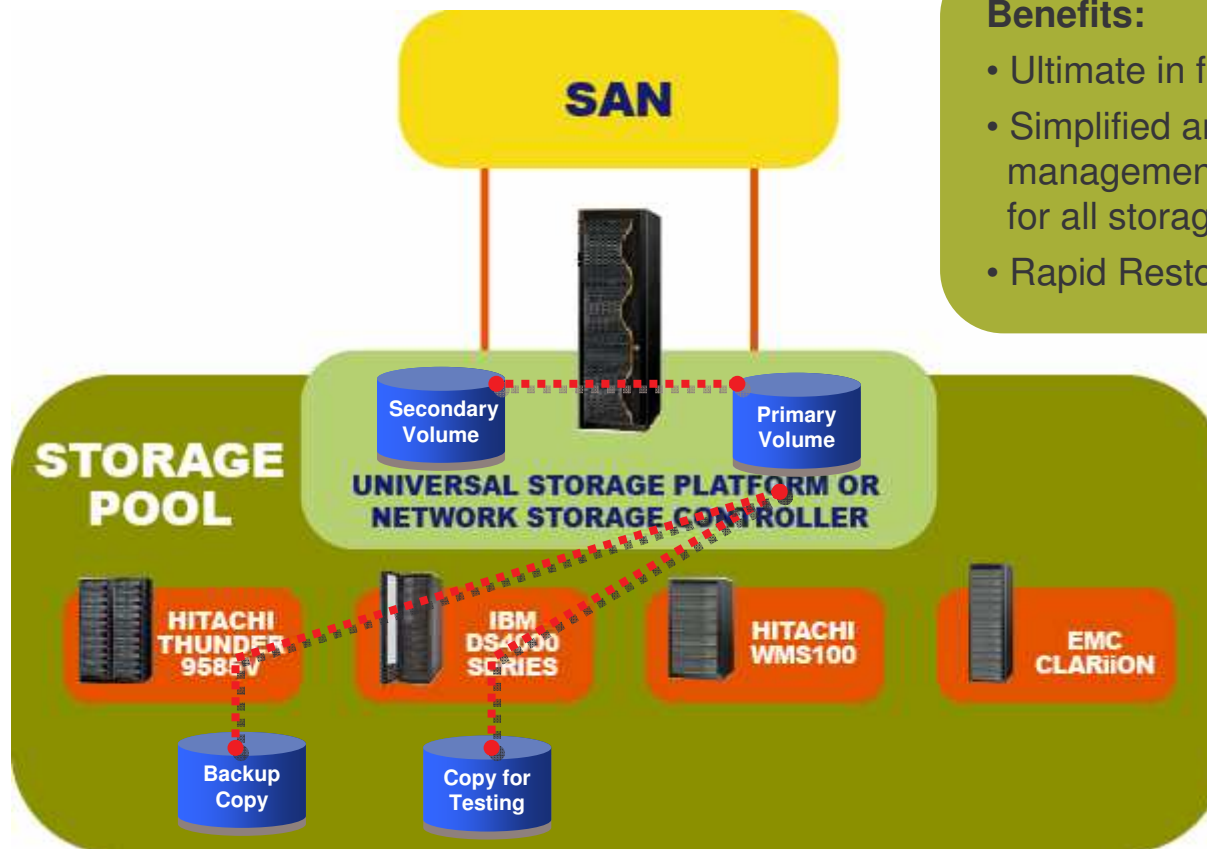
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Platform for Business Continuity: Local Replication Across Tiers

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Data mirroring **across tiers** with Hitachi ShadowImage™



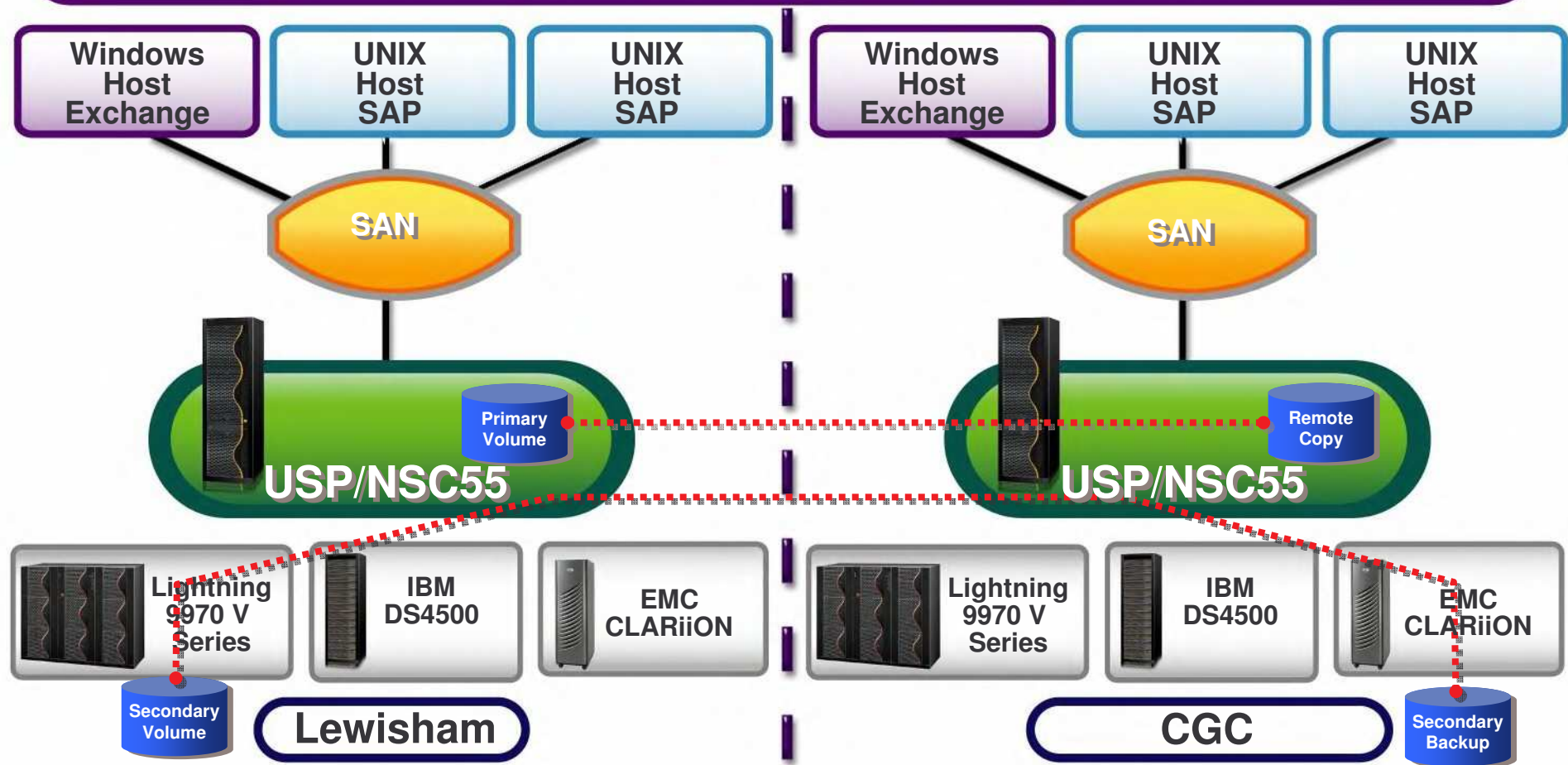
Benefits:

- Ultimate in flexibility
- Simplified and consistent management of replication for all storage platforms
- Rapid Restore from Disk

Virtualization enables Common Remote Replication Software Across Heterogeneous Storage Tiers

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• Remote Replication with Universal Replicator Software



Ensure QoS

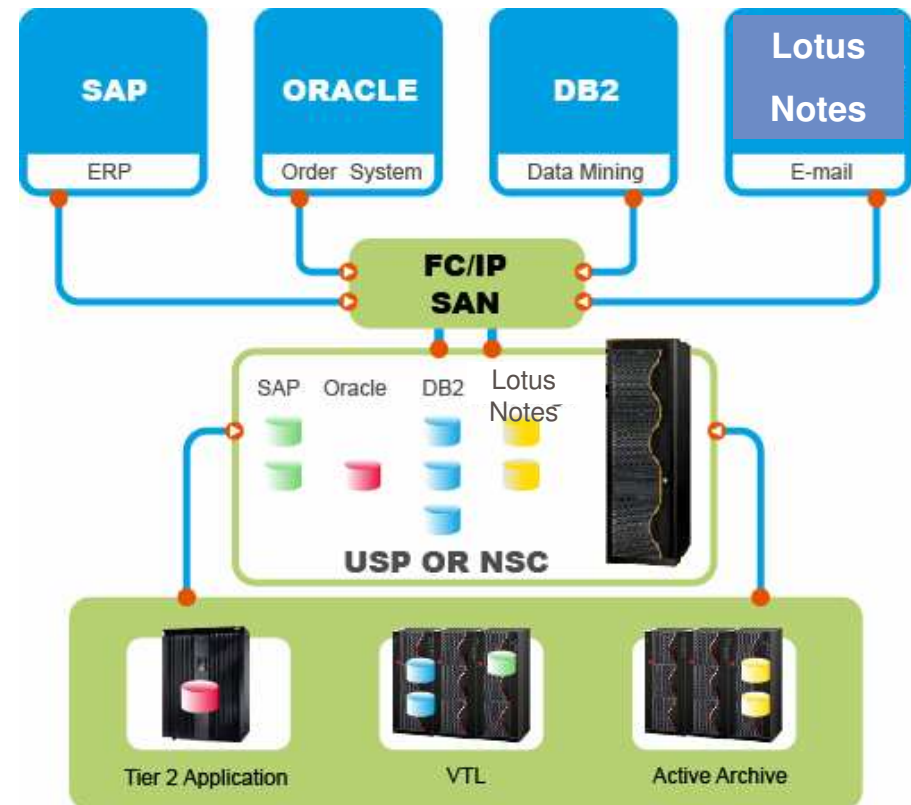
Complete Set Of Tools to Manage QoS

Virtual Storage Machines

- Multi tenancy
- Upto 32 autonomously manageable virtual machines
 - Capacity, Cache, Ports

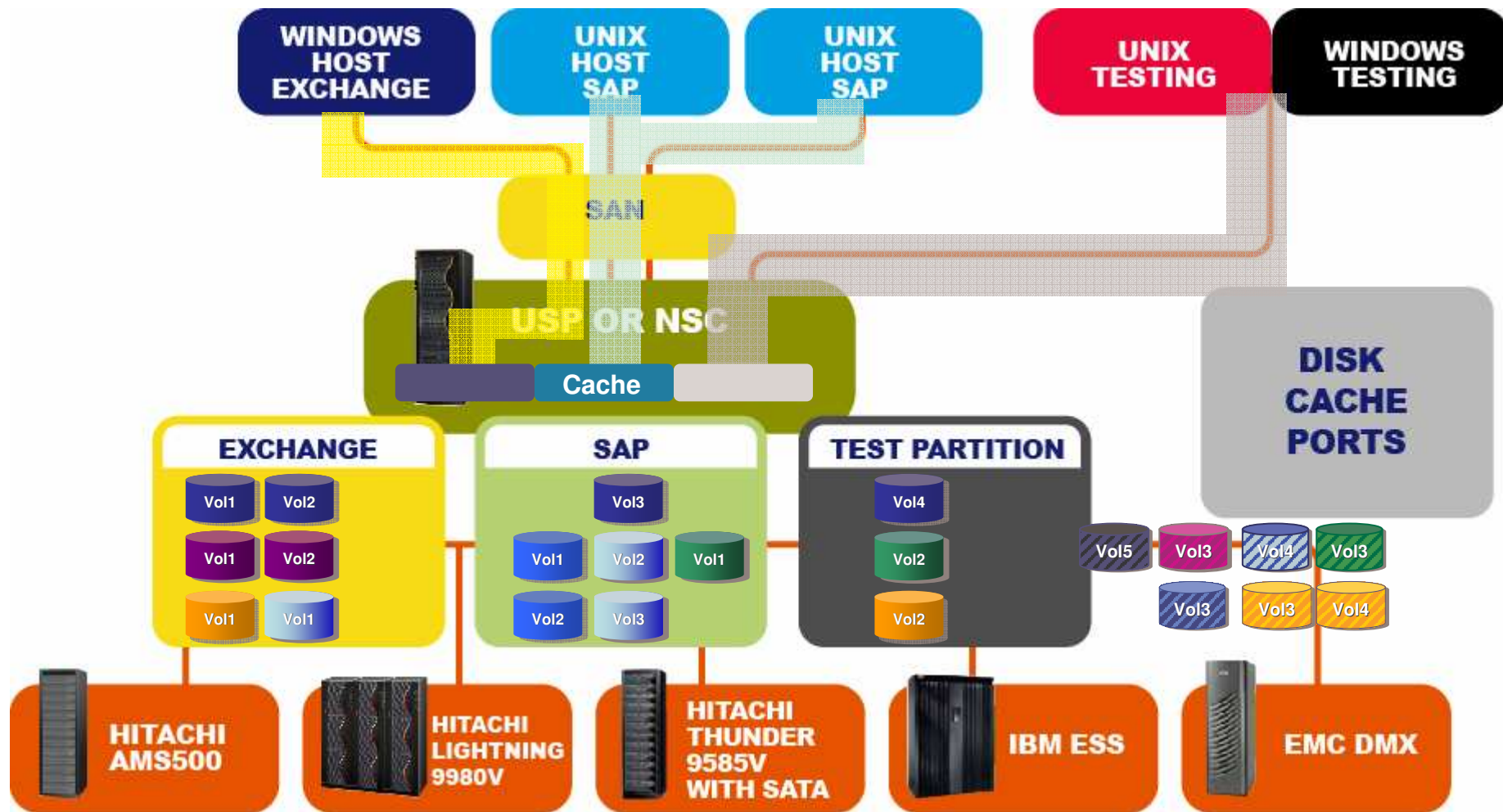
HTSM & HTnM integration

- Performance monitoring
- Data Migration based upon performance thresholds



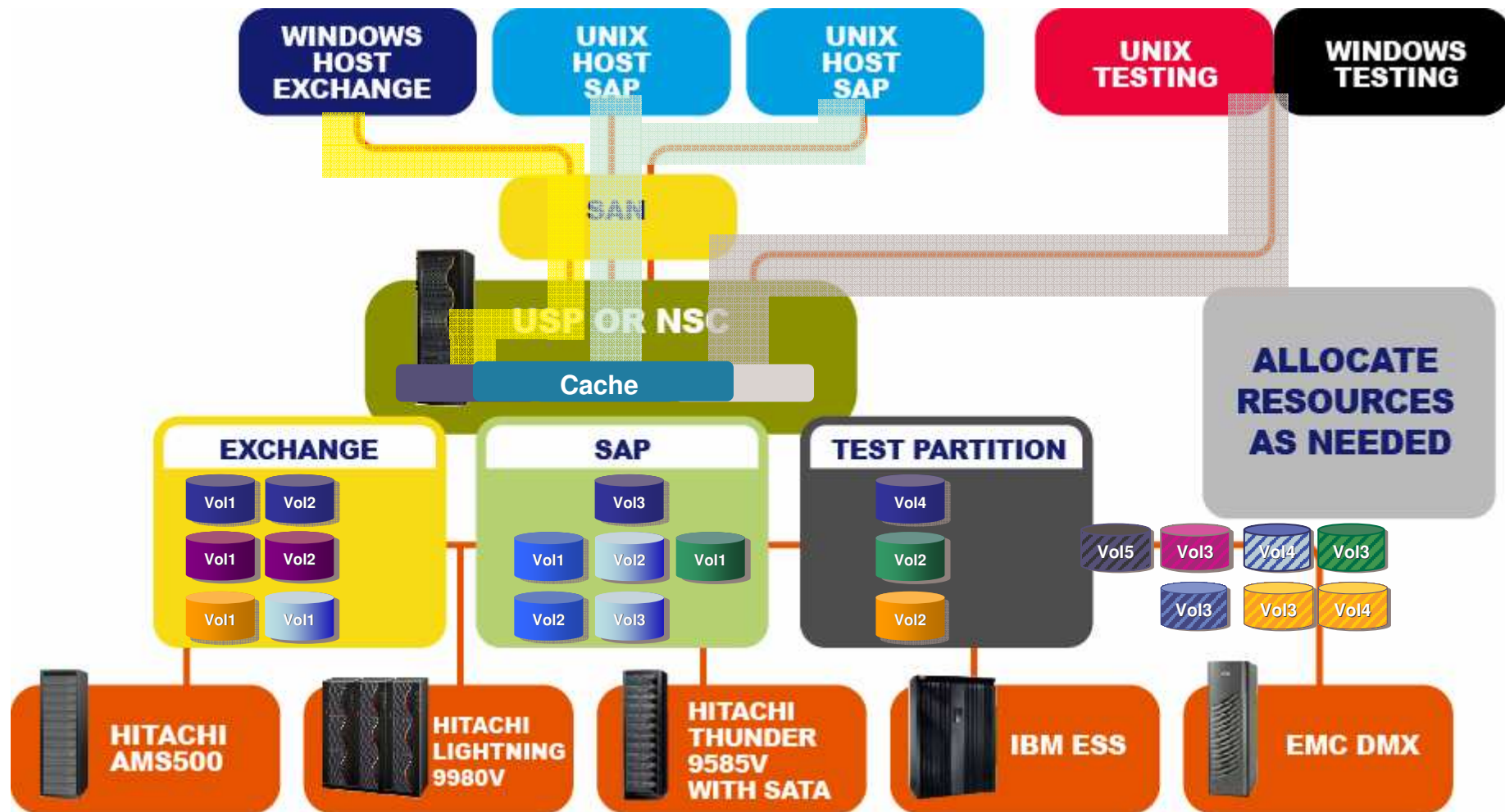
Ensure QoS with Private Virtual Storage Machines

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Ensure QoS with Private Virtual Storage Machines

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Summary

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Hitachi is leading the industry in storage virtualization

- Well over 6,000 Virtual Controllers shipped since Sept. 2004
- Enables Dynamic Tiered Storage (ILM)

Hitachi is growing faster than EMC, IBM and taking material marketshare

- Hitachi grew revenue in CYQ206 3 times the rate of the market
- High-end marketshare leader with 42.6% share
- Growing, profitable, and hiring

Only Hitachi can deliver the power of a single replication engine and a single management interface across all storage assets regardless of cost, type, functionality

- Application Optimized Storage™: Matching application requirements to storage attributes

Hitachi has changed the business model in the storage market

- Separating the commodity media (disks) from the innovation (USP and NSC intelligent control units) required to provide storage, data, and content services
- Hitachi is playing in a different field now—one that the company has created—and which is affirmed by IDC as a “New Category of Storage” and by Gartner as the “Next Big Thing in high-end enterprise storage.”

Hitachi's unique approach enables the company to have an entirely different discussion with clients about solving their most pressing business problems with the latest storage management tools

- No rip and replace required; enabling migration of EMC and HP environments non-disruptively

HDS are growing faster than the competition

Hitachi Storage Management Software

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Business Application Modules

QoS Application Modules
Oracle - Exchange - Sybase -
SQL Server - NetApp

QoS for File Servers
SRM

Hitachi Dynamic Link Manager

Path failover and failback
load balancing

Storage Operations Modules

Chargeback

Path Provisioning

Global Reporter

Tuning Manager

Tiered Storage Manager

Storage Services Manager

Hitachi Volume Migration

Hitachi Server Priority Manager

HDS Array Services

Device Manager

Configuration

Reporting

**API
CIM/SMI-S**

**Provisioning &
Replication**

Hitachi Resource Manager

Hitachi Performance Monitor

Hitachi Universal Volume Manager

Hitachi Virtual Partition Manager

Heterogeneous

Hitachi Storage Specific