



Hitachi extends controller-based storage virtualization

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September 2007



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Hitachi has announced its follow-on to the Network Storage Controller (NSC55): the Universal Storage Platform VM (USP VM). It has again delivered on providing cost-effective, robust, common and advanced storage functionality/services to meet, not only large data center requirements, but also smaller environments. Carl Greiner says that no longer do smaller enterprises have to settle for less robust, functionally deprived solutions – the rack-mounted USP VM is functionally equivalent to the USP V, albeit not as scalable, but much more affordable.

The Ovum view

Hitachi continues to bring high-end functionality to the total storage market through creative hardware packaging of its high-end intelligent virtual storage controller. The Hitachi USP VM offers robust storage virtualization-enabled common heterogeneous storage services and delivers the true economies of a shared storage infrastructure to data centers of all sizes. Traditional SMB and mid-market storage solutions are limited in functionality, attachment support and scalability; however, the Hitachi USP VM breaks this mould by providing enterprise-class solutions to all markets. Hitachi is further challenging traditional mid-range/modular storage vendors not to limit advanced functionality to certain market segments by providing robust enterprise capabilities to markets that normally resign themselves to 'good enough' solutions.

Announcement highlights

The rack-mounted Hitachi USP VM provides full-function, controller-based heterogeneous storage virtualization that is functionally identical to its larger sibling the USP V, eliminating the differences between entry-level and enterprise-class solutions. The USP VM supports the same common and heterogeneous storage and management services as the USP V, including:

- internal and external (Q4 2007) Hitachi Dynamic Provisioning (thin provisioning) driving higher storage utilization rates
- Hitachi Universal Volume Manager (virtualization software) with support for up to 96 petabytes of virtualized storage (72TB raw internal capacity)
- Hitachi Tiered Storage Manager for non-disruptive data placements to multiple storage types for more cost-effectiveness



- large Logical Storage Pools (wide striping) for optimum performance
- Hitachi Virtual Partition Manager for better isolation and security
- massively parallel crossbar switch architecture with 4Gbit/s end to end, including a switched 4Gbit/s fibre channel (FC) back-end, and up to a 75% increase in peak IOPS from the NSC55, with 1.2 million IOPS
- mainframe (FICON/ESCON) and open support (FC) for more effective consolidations and resource sharing
- day one support for VMware ESX Server 3.0, allowing for enhanced integration of server and storage virtualization strategies for additional efficiencies
- simplified frame-based software licensing with software bundles
- configuration flexibility for customers, including a storage controller-only option (diskless) for virtualization services
- environmentally friendly hardware packaging not requiring a raised floor and utilizing standard 220-volt power
- support for non-disruptive heterogeneous data migrations to ease technology refreshes and/or repurposing.

The Hitachi USP VM is a scalable rack-mounted version of the USP V, offering common virtualization-enabled heterogeneous functionality and capability, addressing an extremely broad set of environments, from the smallest of the SMBs to the largest enterprise data centers. The cost-effective and environmentally friendly USP VM uniquely allows users of all sizes to implement robust, efficient, scalable shared storage infrastructures with common storage services normally affordable in only the largest of enterprises.



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