

## Hitachi Becomes a Storage Provider for *The Rest of Us* — The New Thunder 9520V

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### Management Summary

Hitachi Data Systems (HDS) is known for delivering extremely fast, scalable, and resilient storage arrays to the largest of enterprises. More than half of the Fortune 500 are customers. However, enterprises with small- and mid-scale IT operations have not generally thought of HDS first as their storage provider. Like a college student admiring an upscale sports car, they may have thought, “*This is out of our league.*” While the *Hitachi Thunder 9500 V Series* has reached well into the midrange, it was perhaps too much - in terms of performance and price - for those at the entry level.

**HDS has changed this with the introduction of the *Thunder 9520V*. This storage array is sized and priced for smaller-scale storage requirements.** At the same time, its speed, capacity, and replication and management features are a cut above what one would expect from products in this segment. The 9520V is also available through VARs and resellers. Read on for details.

### Thunder 9520V at a Glance

**The Thunder 9520V is a modular storage array that connects to multiple host servers over a Fibre Channel SAN.** It uses inexpensive SATA drives. Salient features are:

- **Modest price** – No vendor wants to lead with price, but the entry-level market is quite sensitive to it. If a solution is out of the budget, it is out of the question. The recommended list price of a 9520V with dual controllers and 3.4 TB of capacity is \$43,750 (less with a single controller or less capacity). This is within the reach of modest storage budgets.
- **Relatively great performance** – The sequential performance (cached bandwidth) is 4.2 GB/s. In light of the less speedy SATA drives employed and relative to other arrays in this segment, this is fast.
- **Easy management** – It comes with *Hitachi Resource Manager* for single-system management and will have a GUI wizard for installation. Other HDS tools can manage it centrally alongside other distributed storage arrays.
- **Incremental scalability to 13 TB** – It scales in a pay-as-you-grow manner, which minimizes the upfront investment and gives headroom for growth. The platform consists of a

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controller unit with 14 drives @ 146 GB, plus up to three expansion drawers with 15 drives, each at 250 GB. Enterprises can start with the controller unit and add drives and expansion drawers over time – up to 59 drives or 13 TB.

- **Built-in resiliency** – Robustness is important because business operations depend on storage. The 9520V's features include dual controllers with failover, mirrored cache, battery backup, RAID 1 and 5, global spare drives, host path failover, and proactive call-home support. It also has a number of special features to protect against SATA drive failures.
- **Broad consolidation** – A single 9520V can connect to as many as 512 heterogeneous host servers over a Fibre Channel SAN, which is certainly adequate for small- and mid-scale environments. Supported operating systems are *Windows*, *Linux*, *Unix*, *NetWare*, *OpenVMS*, and *NetApp's DataONTAP* for connection to a NAS gateway.
- **Advanced data replication** – Data replication is an enabling tool for data protection, repurposing, migration, and distribution. The 9520V can create clone and snapshot copies within a system as well as copy data between other HDS systems.
- **Channel availability** – This solution is “for the channel”, where the mid-market is accustomed to purchasing. It will be available through Lenovo and Acer in Asia, MAXDATA in Europe, Gateway in the Americas, and Bell Microproducts in North America.

### Storage Consolidation on a Smaller Scale

The 9520V is a platform for storage consolidation. Enterprises are turning to networked storage (i.e., SAN and NAS) for the benefits of consolidation.<sup>1</sup> It is a proven technique for lowering costs and improving

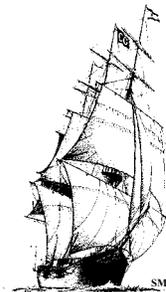
information availability. By disaggregating storage from servers and creating a common storage pool, an enterprise increases capacity utilization and simplifies ongoing management. This is also the same basic rationale behind server and network consolidation.

While large-enterprise data centers have already made the leap, small- and mid-sized IT operations are still transitioning from direct-attached to networked storage. This means not only small- and mid-sized enterprises, but also remote offices and departments of large enterprises. The good news is that technologies have matured and moved down market, so it is more compelling than ever for *the rest of us* to adopt. **The 9520V is designed for this type of storage consolidation on a smaller scale.**

In addition, the 9520V is useful as a secondary storage tier due of its use of low-cost SATA technology. For instance, it could serve as a target for disk-based backup or archiving. It even has an optional software feature that makes it a WORM (write once, read many) device for ensuring data authenticity to meet regulatory and legal requirements.

### Conclusion

HDS is no longer just the storage provider for larger enterprises. It now has a nice solution for the rest of us. The 9520V delivers storage consolidation on a smaller scale while maintaining the performance and feature distinctions that one would expect from HDS. And you can buy it from a reseller.



<sup>1</sup> See *Networked Storage – A Buyer's Guide to Pain Relief* in the **Clipper Group Explorer** dated April 25, 2003, at <http://www.clipper.com/research/TCG2003017.pdf>.

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