Hitachi Freedom Storage™

Thunder 9500™ V Series
Join the V Generation: Modular. Flexible. Intelligent.
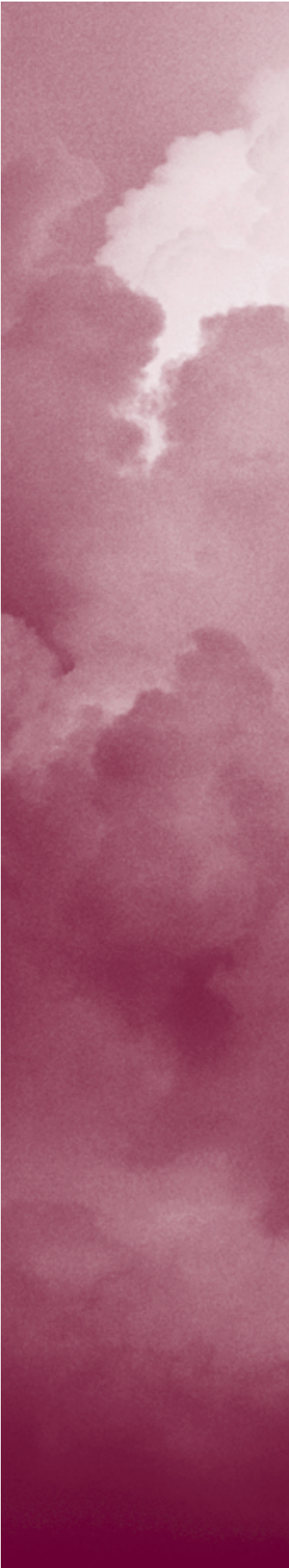
HITACHI
DATA SYSTEMS

**Modular storage—Thunder 9531V™, Thunder 9532V™,
and Thunder 9533V™ models—designed to meet your needs now,
and easily upgrade later**

We know you've heard of the "V" generation. It's all about intelligent storage management via virtualization. And you'll find nothing delivers on the promise better than our Hitachi Freedom Storage™ Thunder 9500™ V Series storage systems for high-performance and easy-to-manage open storage in a small footprint. Incorporating innovative features and functions of our technology- and market-leading Hitachi Freedom Storage Lightning 9900™ V Series systems, the Thunder 9500 V Series systems redefine the notion of modular storage, supporting your business objectives with scaleable capacity, high availability, and ease-of-use.

Thunder 9500 V Series storage supports open systems in direct attach or networked environments, allowing you to choose the optimal server for your applications, worry-free. Our Hi-PER Architecture™ with ultrahigh-speed controller interconnects is designed to support the dynamic information management demands of various-sized enterprises.

True North™

The direction you can trust

Get a perfect fit for your information infrastructure, plus tools for intelligent storage management

There are four Thunder 9500 V Series systems in our new "Thunder family." One is the enterprise-sized Hitachi Freedom Storage Thunder 9570V™ system. The other three are preconfigured, smaller-capacity Hitachi Freedom Storage systems: Thunder 9531V™, Thunder 9532V™, and Thunder 9533V™. For smaller-capacity deployment, simply select the system that best supports your business and IT objectives.

To enhance fundamental business continuity and make your life easier, the three smaller-sized advanced modular systems are also quickly installed, configured, and expanded. You'll find each model offers you the same innovative Hi-PER Architecture™ for trouble-free integration, as well as identical controllers, cabinetry, and microcode.

Thunder 9500 V Series storage— ideal for retail businesses and professional offices

Each of the Thunder 9500 V Series storage systems can readily become a working partner in retail operations—electronic or brick-and-mortar. Businesses that want to supply seamless service to their customers and gather valuable marketing intelligence can quickly identify and profit from the benefits of our scaleable, plug-and-play modular storage. Ideal for franchise outlets and remote locations, the ease of installation and virtualization-enabled management keep costs down while enhancing productivity.

Professional offices, such as medical, legal, and accounting services, also require high-availability for their stored information and support for business continuity to ensure rapid access to critical, personal information and services. Any one of our Thunder 9500 V series storage systems can assume a key role in small-sized and growing professional office operations and can be upgraded when client records or advanced marketing applications increase the demand for capacity. It's easy. You decide on the storage infrastructure you need now—then simply upgrade as demand evolves.

The Thunder 9531V, 9532V, and 9533V storage systems— you have choices.

We offer you the same high-speed, high-availability characteristics in each of today's Thunder 9500 V Series storage systems, including hot-swappable components and an innovative Hi-PER Architecture to allow each system to take on key responsibilities in support of sustained growth. And you can set up distributed strategies for reliable data replication and information sharing.

> Use for point-of-purchase transactions and record gathering

> Deploy for small-scale network and remote strategies

> Rely on to build and store valuable marketing data

Count on Hitachi Resource Manager™ software to help reduce storage management concerns and increase productivity

Hitachi Resource Manager™—an activated package of management utilities, including Hitachi FlashAccess™, Hitachi LUN Manager, and Hitachi SANtinel™ software—is shipped with the Thunder 9531V, Thunder 9532V, and Thunder 9533V systems. Resource Manager provides storage administrators with a flexible, easy-to-use configuration and error management tool. Storage administrators can monitor and manage their storage systems through a graphical user interface or a command line interface.

Resource Manager helps optimize performance by providing valuable resource utilization information, such as I/O activity, cache usage, and availability status/event notification. Administrators can also use Password Protection to authorize up to 20 users. This provides protection against unauthorized access to the Management mode and stores the password list at the array level.

If integrating a Thunder 9500 V Series system with Lightning 9900 V Series systems or Sun™ StorEdge™ 9900 Series and T3 systems, or working with an extensive distributed environment, our HiCommand™ Management Framework can manage storage from any location.

Hitachi Freedom Storage Software Suites

You create the plan. You make the call. If your strategy requires advanced applications, we can provide you with a full array of industry-leading software, including our Storage Area Management Suite, Business Continuity Suite, Backup and Recovery Suite, Performance Enhancement Suite, and Data Movement Suite. Operations implementing Thunder 9500 V Series storage systems may be particularly interested in our proven copy software tools, such as Hitachi ShadowImage™, which further ensure that your Thunder 9500 V Series system will keep your business running onsite or as backup at remote locations.

For more information on Hitachi Freedom Storage software and platform-specific feature availability, please contact your account representative or visit our Web site at www.hds.com.

Major Platforms Supported

Open Systems

- Sun Solaris™
- Microsoft® Windows NT®
- Microsoft Windows® 2000
- IBM® AIX®
- HP-UX®
- IBM DYNIX/ptx®
- SGI™ IRIX®
- Novell® NetWare®
- HP® Tru64™ UNIX
- Red Hat® Linux®
- SuSE® Linux
- Turbolinux®
- HP OpenVMS™
- NCR™ MP-RAS

The upgradeable Hitachi Freedom Storage Thunder 9500 V Series "family" includes three entry-level models, each with a pre-configured RAID-5 level:

Thunder 9531V—Single controller. Low capacity.

- 358GB raw capacity using five 72GB hard disk drives
- RAID-5 (3+1), 1 hot spare
- One 2Gbit/sec Fibre Channel port
- 2GB cache
- Available upgrade paths
  - > 9531V to 9532V (Upgrade Kit includes additional controller, 1GB cache, and 4 disk drives)
  - > 9531V to 9533V (Upgrade Kit includes additional controller, 1GB cache, and 8 disk drives)
  - > 9531V to 9570V

Thunder 9532V—Dual controller. Medium capacity.

- 645GB raw capacity using nine 72GB hard disk drives
- RAID-5 (2 sets of 3+1), 1 hot spare
- Two 2Gbit/sec Fibre Channel ports
- 2GB cache
- Available upgrade paths
  - > 9532V to 9533V (Upgrade Kit includes 4 disk drives)
  - > 9532V to 9570V

Thunder 9533V—Dual controller. Full capacity.

- 931GB raw capacity using thirteen 72GB hard disk drives
- RAID-5 (2 sets of 5+1), 1 hot spare
- Two 2Gbit/sec Fibre Channel Ports
- 2GB cache
- Available upgrade path
  - > 9533V to 9570V

Superlative Services and Support — Ranked Number One

When you partner with Hitachi Data Systems, we're with you every step of the way. Our storage experts provide experienced consultation—backed by comprehensive assessment, planning, and implementation services—to help you develop your enterprise information strategies and deploy your systems. In fact, respondents to a recent survey by FIND/SVP placed Hitachi Data Systems *Number One in overall service and support as well as technical performance—two years in a row (2001-2002).*

Hitachi TrueNorth™—the Direction You Can Trust

Information and knowledge are determinants for success in the global economy. Thus, the standards for storage infrastructure availability, performance, scalability, and manageability continue to rise. Hitachi TrueNorth™ is our response to the ensuing demand, allowing you to simplify, protect, and optimize your information infrastructure, reducing total cost of ownership and ensuring a more rapid return on investment.

The Hitachi TrueNorth vision and strategic direction, along with an associated product road map, anticipate customer needs. We view the future storage infrastructure as a synergistic combination of management software and powerful, intelligent storage systems that will deliver set-and-forget management, complemented by flexible capacity, performance, and connectivity.

Prepare for the future with Hitachi. As we move forward, we offer you an open and collaborative storage management framework, policy-based automation tools, virtualization capabilities, and the world's finest storage systems.

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