EMC²
where information lives

EMC Symmetrix 8000 Series

High-End Networked Storage Systems

Cost-effective high performance with unmatched connectivity, scalability, and choice for today's demanding business environments

EMC Symmetrix® 8000 series networked storage systems provide the foundation upon which businesses can build a flexible, scalable, and continuously upgradeable information infrastructure for today's connected world. Symmetrix 8000 series systems consolidate all your enterprise information so you can more easily manage and quickly access and gain business value from it. Symmetrix 8000 series systems provide a consistent IT environment that won't be disrupted by architectural and technological obsolescence, thereby increasing productivity. Symmetrix offers choice— choice of capacity range and connectivity technology, as well as operating system, server, and database system independence.

The Big Picture

- Cost-effective high-end storage to meet ever-rising service level requirements across the enterprise

- Advanced cache technology dramatically reduces cache queuing and storage system latency for faster response to information demands and customer requests

- Concurrent multi-host support for the widest range of open systems and mainframe platforms and operating systems in the industry for efficient storage consolidation and management

Symmetrix features and capabilities:

- Two Symmetrix 8000 series models: Providing a broad range of functionality, capacity, connectivity, scalability, and Total Cost of Ownership advantages.

- Global cache directors implement advanced arbitration, buffering, and contention-eliminating techniques for rapid-fire transaction throughput.

- Enhanced mainframe support: Symmetrix 8000 series includes FICON and ESCON support, GDPS compliance, RAID 10 for IBM z/OS and OS/390, dynamic PAV/MA support, and other Enginuity operating environment enhancements.

- Embedded switch technology: New Fibre Channel directors offer four- or 12-port per director connections for enhanced server connectivity and enterprise consolidation, decreasing cost and complexity.

- Additional Enginuity operating environment features: Further enhancements to EMC's industry-leading Automated Networked Storage infrastructure.

- Renowned Symmetrix availability features, including full redundancy of data paths, disk, channel, and global cache directors; redundant power supplies with full system battery backup

- Industry-leading business continuity software to meet the needs of the world's most risk-intolerant environments

- Built on Enginuity, the industry's most robust, stable, and thoroughly proven storage operating system; complemented by a full suite of advanced software, fully compatible across all Symmetrix systems

Low TCO and high ROI—the new mantra for business today

In addition to their industry-leading capabilities, Symmetrix 8000 series systems also offer dramatically improved Total Cost of Ownership (TCO) over competing systems. With storage hardware costs continually falling and staff costs rising, the cost to manage your storage infrastructure can rapidly become your major expense factor. According to a recent IDC study, an EMC information infrastructure offered the following advantages:

- Customers using an EMC Automated Networked Storage infrastructure experienced as much as a 9:1 efficiency gain in storage management headcount.

- Compared with alternative methods, an EMC infrastructure enabled many companies to gain an additional 40-50 percent storage capacity utilization.

- With a hardware-only approach to storage, costs double with capacity growth—and costs compound over time.

Reduced TCO plus the outstanding capabilities of Symmetrix yield increased Return On Information—the new ROI for your business.

Symmetrix 8000 series high-end information storage systems

There are two models in the Symmetrix 8000 series—the Symmetrix 8530 and Symmetrix 8830—each with leadership performance and capabilities in their respective capacity ranges. Each model fully adheres to the EMC Enterprise Storage philosophy of:

- High performance

- Industry-leading scalability

- Assured information protection

- Superior intelligence at the storage system level

- Universal, open connectivity through industry-standard interfaces

Also available are two models of Symmetrix z8000 series systems, specifically tailored to and exceptionally cost-effective for mainframe environments. Information on Symmetrix z8000 series systems can be found elsewhere on EMC.com or by contacting your EMC representative.

The performance to put information at your fingertips—without ever waiting

Deriving optimal performance from an information infrastructure depends on how quickly information can be reliably accessed. Symmetrix 8000 series systems use large cache memory configurations (up to 64GB) and

one hundred percent cache fast writes to ensure the highest possible performance when writing data.

Symmetrix 8000 models incorporate powerful microprocessors, global cache directors for faster information throughput and reduced cache queuing, and increased port density for enhanced connectivity. The result is an enterprise information storage system that more rapidly adapts to a constantly changing business climate and easily accommodates growth.

Industry-leading scalability to handle the largest applications and databases

Symmetrix 8000 series systems offer new ways to manage change and growth in applications, databases, servers, and overall business requirements. Symmetrix 8000 systems enable deployment of consolidated storage strategies by providing incrementally scalable storage in a common family. System capacities scale from 144GB to nearly 70TB of fully protected storage.

Assured information protection for peace of mind

Symmetrix provides a variety of hardware information protection features and optional software applications. The Symmetrix architecture offers a choice of data protection at the disk level: Mirroring, the optimal RAID level for both performance and availability; EMC's RAID-S parity protection for increased usable protected capacity; Symmetrix Remote Data Facility (SRDF™) for remote mirroring; TimeFinder™ for local replication; and dynamic sparing.

These basic data protection schemes are supported by fully redundant data paths, disk and channel directors, and redundant power supplies with full-system battery backup to provide protection against loss of data access due to component failure or power loss. All Symmetrix 8000 series components are capable of non-disruptive replacement, enabling continuous full data availability.

Enginuity—the fuel that powers your information

The EMC Enginuity operating environment is designed from the ground up to drive high-speed, highly available storage management functionality. Through its robust, open application programming interfaces (APIs), industry-leading software developers are leveraging Enginuity's wide range of capabilities for moving, replicating, managing, and protecting information, giving customers a seamless infrastructure that's both totally achievable today and incredibly powerful. Through Enginuity, virtually all major mainframe, UNIX, Windows 2000/NT, PC LAN, and AS/400 systems can use these capabilities without incurring host processor overhead.

Universal connectivity eliminates interoperability issues

Businesses are challenged by the wide variety of host platforms commonly found in today's information infrastructure environments. Symmetrix 8000 series systems provide connectivity to host platforms through multiple industry-standard interfaces. The Symmetrix 8000 series can simultaneously support mainframe connections through ESCON and FICON channels and connection to open UNIX, Linux, Windows 2000/NT, and AS/400 systems with connectivity through SCSI and Fibre Channels.
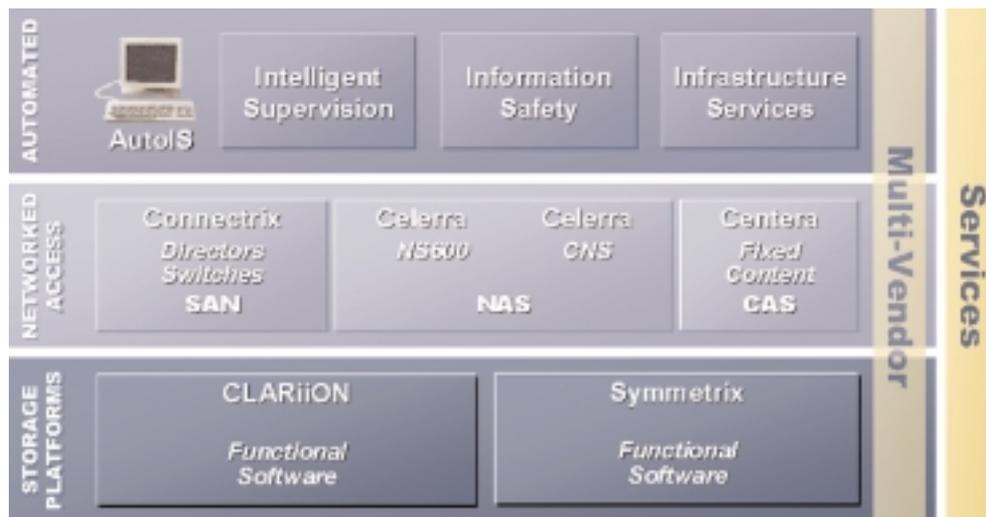
The Symmetrix 8530 is a single-bay, high-performance,networked storage system with up to 64GB of cache; up to 17.2TB of capacity; support for Fibre Channel (up to 72 ports); Ultra/Ultra 2 SCSI (up to 24 ports); ESCON (up to 24 ports); FICON (up to 16 ports); or a combination of all connectivity types.

The Symmetrix 8830 is a triple-bay, high-performance, networked storage system with up to 64GB of cache; up to 69.5TB of capacity; support for Fibre Channel (up to 96 ports); Ultra/Ultra 2 SCSI (up to 32 ports); ESCON (up to 32 ports); FICON (up to 12 ports); or a combination of all connectivity types.

EMC Automated Networked Storage is the key to achieving your business objectives. To meet all the diverse challenges you face, handle all the various information demands of your business, and to find a way to consolidate and automate management processes, you need more than just point solutions. Symmetrix 8000 series systems and the power of EMC open software can form the foundation of your Automated Networked Storage environment

Take the Next Step

For more information on EMC Symmetrix 8000 series Automated Networked Storage systems, contact your EMC sales representative or authorized EMC value-added systems integrator. Or visit our website at www.EMC.com.

Extend Automated Networked Storage value throughout your enterprise

Symmetrix 8000 series systems can, when combined with EMC Connectrix™ Fibre Channel directors or switches and EMC storage software, form the backbone of powerful, virtually unlimited storage area networks (SANs) and network attached storage (NAS) infrastructures. You can link, manage, share, and protect all of your enterprise-wide information resources, regardless of geography, connectivity, or information-type and apply those resources to your most pressing business challenges. And by virtue of EMC's extensive interoperability testing—the most complete and comprehensive in the industry—you can do so with the confidence that everything will work together in one unified EMC Automated Networked Storage™ environment.

EMC Services delivers results

EMC Services delivers results to our customers throughout the entire IT and information lifecycle. Our platform-independent storage consulting services, offered through Information Solutions Consulting, help companies strategically look at their information, technology, and contingency planning. In addition to point solutions, like the implementation of your Symmetrix 8000 system, EMC Services delivers comprehensive storage services for all EMC technology—everything from consolidation of your current resources to a strategic shift to EMC Automated Networked Storage.