IBM TotalStorage™
FAStT900 Storage Server

IBM TotalStorage FAStT900 Storage Server

Highlights

- **Uses 2Gb Fibre Channel connectivity to support high performance (772MB/sec throughput from disk) for faster, more responsive access to data**

- **Facilitates storage consolidation for Storage Area Network (SAN), Network Attached Storage (NAS) and direct-attach storage environments**

- **Supports continuous availability through redundant components and mirrored, battery backed-up cache**

- **Supports 2 to 224 hard disk drives and provides more than 32TB of easily scalable capacity**

- **Includes FAStT Storage Manager to help manage the storage subsystem**

- **Provides flexibility for multiplatform storage environments by supporting a wide variety of servers, operating systems and cluster technologies**

- **Offers advanced replication functions such as FlashCopy® and Remote Mirroring for high data availability and protection**

Excellent performance and scalability

The IBM TotalStorage FAStT900 Storage Server is the latest addition to the FAStT family of disk storage products. The FAStT900 is an enterprise-class storage server that is designed to provide performance and flexibility for today's demanding data-intensive computing environments. With more than 32TB of storage capacity, this server is well suited for high-performance applications such as online transaction processing (OLTP), data mining and digital media.

The FAStT900 builds on the capabilities of existing FAStT systems, using a common storage management interface and similar disk expansion tools. It is backward capable with existing FAStT EXP700 and FAStT EXP500 disk enclosures, and can support up to 224 Fibre Channel disk drives when using 16 FAStT EXP700 disk enclosures. When combined with FAStT EXP700 disk enclosures and 2Gb IBM TotalStorage SAN Switches, the FAStT900 can be used to build a complete 2Gb SAN environment.

In addition, the performance capabilities of the FAStT900 exceed that of other FAStT Storage Servers, with a 772MB/sec disk throughput. It also uses advanced caching algorithms to optimize disk performance.

The FAStT900 supports IBM @**server** pSeries™ and xSeries™ servers as well as other popular Intel® processor-based, AIX® and UNIX®-based servers and operating systems.

Enhanced storage management capabilities

The IBM TotalStorage FAStT900 Storage Server has several features designed to facilitate data management and improve storage system performance. FAStT Storage Manager 8.3 software centralizes storage management, helping make administrators more productive. In addition, administrators can partition the FAStT900 Storage Server into as many as 64 virtual servers. This capability allows organizations to strategically allocate storage capacity, helping to maximize storage space and

reduce hardware and storage management costs.

Another feature of the FAStT900 is Dynamic Volume Expansion, which enables administrators to resize logical volumes without disrupting other services within the storage system. Using this feature, administrators can expand storage while maintaining high data availability.

Improved productivity through FAStT Storage Manager

FAStT Storage Manager software provides centralized, online management of local or remote FAStT Storage Servers. Using Storage Manager, administrators can quickly configure and monitor storage from a simple, Java™-based Web browser interface. They also can nondisruptively customize and change settings on the fly as well as configure new volumes, define mappings, tune performance, handle routine maintenance and dynamically add new enclosures, disk drives and capacity to existing data volumes.

By providing an intuitive user interface and reducing the complexity of storage management, this software tool can help reduce the amount of time spent managing storage, helping companies to realize a significant reduction in total cost of ownership.

Additional tools to help manage storage

Other IBM tools can be used in conjunction with FAStT Storage Manager to help manage storage on the FAStT900.

FlashCopy is an optional feature that is designed to create an immediate single-point-in-time copy of all stored data and requires only a fraction of the original disk space. The fully functional snapshot volume can be used for file restoration, backups, application testing or data mining—all while the primary volume is active.

Another optional feature is Remote Mirroring, which replicates data to remote locations. It creates a mirror of volume across the Fibre Channel fabric between primary and backup FAStT Storage Servers.

IBM FAStT900 Storage Server at a glance

Characteristics

Model	1742-90U
RAID controller	Dual active 2GB RAID controllers
Cache	2GB, battery-backed
Host interface	Fibre Channel (FC) Switched and FC Arbitrated Loop (FC-AL)
Connectivity	4 standard, up to 8 via additional mini-hubs
Drive interface	FC-AL
Supported drives	36.4GB, 73.4GB and 146.8GB 10,000 rpm (2Gb FC)
	18.2GB, 36.4GB and 73.4GB 15,000 rpm (2Gb FC)
RAID levels	0, 1, 3, 5, 10
Storage partitioning	16, upgradeable to 64
Maximum drives supported	224 (using 16 EXP700 Expansion Units)
Fans and power supplies	Dual redundant, hot-swappable
Rack support	19-inch, industry-standard rack
Management software	IBM FAStT Storage Manager version 8.3
FC switch and FC hub support	For the most recent list, visit www.ibm.com/storage/fast900
SAN support	Supported IBM FC switches and directors (product numbers 2109, 3534, 2031, 2032, 2042 and 2062)
Copy services	FlashCopy
Availability features	Remote Mirroring
Certifications	Microsoft® Cluster Server (MSCS), Novell Clustering, HACMP, VERITAS Cluster for Solaris and MC/Service Guard[1]
Warranty	3-year parts and labor warranty, next-business-day response; upgradeable to 24×7 support with 4-hour response

Physical characteristics

Dimensions	174.5 mm H × 482 mm W × 635 mm D (6.87 in × 18.97 in × 24 in)
Weight	43.9 kg (97 lbs)

Supported systems[2]

Microsoft Windows® 2000, Novell Netware, VMware, Linux®, AIX, Sun™ Solaris™, HP-UX, Microsoft .NET, Microsoft Windows NT® 4, IBM @server pSeries and xSeries, select IBM RS/6000® servers, select IBM Netfinity® servers, select Sun and HP servers, UNIX-based and other Intel processor-based servers

IBM FAStT EXP700 Expansion Unit

Model	1740-1RU
Number of drives supported	Up to 14 FC drives (18.2GB, 36.4GB, 73.4GB or 146.8GB)
Fans and power supplies	Dual redundant, hot-swappable
Dimensions (with bezel)	13.23 cm H x 48.18 cm W x 59.74 cm D (5.21 in x 18.97 in x 23.52 in)
Bezel thickness	3.63 cm (1.43 in)

[1] Certification for HACMP, Veritas Clustering and HP Service Guard is scheduled for June, 2003.

[2] For specific details and configuration availability, please visit www.ibm.com/totalstorage/fast900.

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