

demand

Strategic storage imperatives

Information technology is the lifeblood of any business, especially today when organizational performance depends on information on demand. Business accountability hinges on it, laws and regulations mandate it, customers demand it and effective business processes rely on it. With information on demand, businesses can respond quickly with the flexibility to meet customer requirements, market opportunities or external threats. But as utterly valuable as information has become, it also has become more costly to store, maintain and protect.

To meet these challenges, IBM® has taken a holistic approach to the problem, looking well beyond storage products alone to help you share, manage and protect your data. To provide complete solutions for businesses using the on demand model, IBM has addressed three areas of IT:

- **Simplifying the underlying IT infrastructure and its management** to help lower fixed costs and provide greater agility to respond to business needs
- **Improving business continuity, security and data durability** to help prevent threats from any source from disrupting the business
- **Managing information efficiently over its life-cycle** to help further reduce IT costs

Now, take a look inside each of these initiatives.

Infrastructure simplification

Few would question the statement that IT infrastructures have grown more complex in recent years. The dramatic growth in the use of IT, combined with distributed computing architectures, is part of the reason. But business processes have also become more complex and integrated, too, driving a greater need for complex interconnections among systems.

The added complexity that accompanies growth can stand in the way of fully realizing the benefits of IT. Infrastructure simplification is a way to look at the entire IT operation and help eliminate the complexity that can raise costs, increase training needs, make simple activities difficult, add risk and slow business—factors making it harder to operate as an on demand business.

Three proven methods for simplifying an IT infrastructure are physical consolidation, virtual consolidation and automated management. Each technique can be applied to all areas that compose an IT operation—servers, storage and networks.

Within the storage arena, physical consolidation can include reducing the number of data centers and sharing fewer large-capacity storage systems among a greater number of application servers. Consolidated resources can cost less to own and manage and can be easier to share and protect.

the most

With virtualization, physical boundaries no longer limit the ability to meet users' demands on information resources. Logical pools of resources are more divisible, reconfigurable and customizable to meet changing business needs. Physical storage devices have limits in all of these areas, limiting efficiency and ease of management. Virtualization can help organizations simplify the storage environment, which can help increase utilization and availability.

The storage arena is full of opportunities to lower administrative costs through automation. Once tasks are automated, particularly with workflows, administrators can deal with more strategic issues. In addition, automation can help reduce errors and contribute to higher system performance.

Business continuity

On demand businesses rely on their IT systems to conduct business. Everything must be working all the time. Nothing less is acceptable. A sound and comprehensive *business continuity* strategy encompasses high availability, near continuous operations and disaster recovery. For each of these areas, the IBM TotalStorage® Resiliency Family includes a comprehensive set of products that are compatible with multiple platforms.

Information lifecycle management

The primary goal of *information lifecycle management* (ILM) techniques is to optimize the storage and management of information based on its value to your business. An ILM process can help a business maximize the value of information, from the moment of its creation to the moment of its disposal. Corporate governance policies, business processes and compliance guidelines all influence ILM policies.

The primary capabilities from IBM that support ILM include optimized storage environments with tiered storage platforms; policy-based retention management software; content and records management applications; and nonrewritable, nonerasable media. The potential benefits to your business include improved risk management, optimum storage utilization, better handling of compliance issues and lower costs.

Take advantage of highly accessible support teams

IBM has a worldwide team of local experts through IBM Global Services (IGS) and IBM Business Partners. They can work with you on issues including consulting, design and integration, storage consolidation, data migration, testing and implementation, performance management, maintenance, and storage management. Additionally, there are more than 150 IBM TotalStorage Solution Centers (TSSCs) around the world where you can take advantage of "one-stop shopping" for storage hardware, software and consulting services.



the right

Select from a complete range of on demand infrastructure building blocks

IBM has the essential products and the support behind them to create total solutions that can help your business adopt the on demand model—to help you respond to the marketplace and manage costs through increased productivity and resiliency.

TotalStorage Open Software Family¹

IBM TotalStorage Productivity Center

- IBM TotalStorage Productivity Center for Disk²
- IBM TotalStorage Productivity Center for Data³
- IBM TotalStorage Productivity Center for Fabric⁴
- IBM TotalStorage Productivity Center for Replication⁵

IBM Tivoli® Storage Manager Family

- IBM Tivoli Storage Manager Extended Edition, IBM Tivoli Storage Manager for Application Servers, IBM Tivoli Storage Manager for Databases, Tivoli Storage Manager for Enterprise Resource Planning, Tivoli Storage Manager for Hardware, Tivoli Storage Manager for Mail, Tivoli Storage Manager for Space Management, Tivoli Storage Manager for Storage Area Networks, Tivoli Storage Manager for System Backup and Recovery
- IBM System Storage Archive Manager*

IBM TotalStorage virtualization software

- IBM TotalStorage SAN Volume Controller and SAN File System

**formerly IBM Tivoli Storage Manager for Data Retention*

Disk storage

Disk systems

- IBM TotalStorage DS4000, DS6000 and DS8000 series
- IBM TotalStorage DS300 and DS400
- IBM TotalStorage Enterprise Storage Server®
- IBM TotalStorage DR550
- IBM TotalStorage Expandable Plus 320
- IBM TotalStorage 7204 External Disk Drive

Disk management

- IBM TotalStorage Expert

Tape storage

Tape libraries and autoloaders

- IBM TotalStorage 3494 Virtual Tape Server
- IBM TotalStorage 3494 Tape Library
- IBM TotalStorage 3584 Tape Library
- IBM TotalStorage 3583 Tape Library
- IBM TotalStorage 3582 Tape Library
- IBM TotalStorage 3581 Tape Autoloader
- IBM 7212 VXA-2 Tape Autoloader
- IBM 7332 4mm Tape Autoloader

Tape drives

- IBM TotalStorage 3592 Tape Drive
- IBM TotalStorage 3590 Tape Drive
- IBM TotalStorage 3580 Tape Drive
- IBM 7208 External Tape Drive
- IBM 7207 External Tape Drive
- IBM 7206 External Tape Drive
- IBM 7205 External Tape Drive
- IBM 7212 External Storage Enclosure

Network Attached Storage (NAS)

- Network Attached Storage (NAS) and IP Attached Storage
- IBM TotalStorage N3700
- IBM @server® xSeries® Storage Servers

Storage Area Networking (SAN)

SAN fabric switches

- IBM TotalStorage SAN b-type (Brocade) switches (IBM 2005) and directors (IBM 2109)
- IBM TotalStorage SAN m-type (McDATA®) switches (IBM 2026) and directors (IBM 2027)
- Cisco® MDS 9000 Multilayer switches (IBM 2061) and directors (IBM 2062)

solution

IBM TotalStorage virtualization software

Virtualization software is designed to take the complexity out of your storage infrastructure by insulating the application environment from the physical storage infrastructure. This can help significantly improve your ability to manage a heterogeneous storage environment, which can lead to greater freedom to choose the best products for your needs without increasing support costs. Virtualization can also help facilitate changes to the storage environment with minimal or no disruption to applications, which can help you better respond to unanticipated business needs. In financial terms, simplified administration can help lead to lower operating costs, and increased storage utilization can help lower capital costs.

IBM TotalStorage SAN Volume Controller

is designed to help reduce the complexity and costs of managing disparate storage controllers in a SAN environment. It is designed to allow users to virtualize their storage to help increase the utilization of existing capacity and centralize the management of multiple storage controllers in an open-system SAN environment. The SAN Volume Controller storage software can be delivered as an appliance within the SAN Volume Controller or embedded within the Caching Services Module of the Cisco MDS 9000 Switch.

IBM TotalStorage SAN File System (SFS)

is designed to simplify file and data management in your storage area network by consolidating file systems across UNIX, Windows, and Linux servers. SAN File System helps clients achieve information lifecycle management efficiencies through policy-driven automation and tiered storage management, aimed at maximizing the value extracted from information while minimizing the total cost to store and manage it.

IBM Tivoli Storage Manager Family

The IBM Tivoli Storage Manager is the base product in Tivoli Storage Manager or Tivoli Storage Manager Extended. The Tivoli Storage Manager family includes a wide range of optional modules—which can be ordered separately—for mail, databases, hardware, SANs system backup and recovery, space management application servers and enterprise resource planning (ERP). IBM Tivoli Storage Manager is designed to provide protection of your 24x7 applications and key data in the event of hardware, software or network failures.

Tivoli Storage Manager

is designed to provide enterprise availability of key data and applications in the event of hardware, software or network failures. It offers move-and-store techniques and policy-based automation, which work together to help increase data and application protection, decrease disaster recovery time and lower storage administration costs. It also is designed to manage inactive data and match the value of the data to the effective storage management practices.

open

IBM TotalStorage Productivity Center

IBM TotalStorage Productivity Center is an open storage infrastructure management solution designed to help reduce the effort of managing complex storage infrastructures, to help improve storage capacity utilization and to help improve administrative efficiency.

IBM TotalStorage Productivity Center for Data

is designed to automate the capacity management of file and database resources in a storage infrastructure. It also offers capabilities for analyzing how effectively these resources are being used.

IBM TotalStorage Productivity Center for Fabric

is designed to automate management of a broad range of devices in a storage network. It offers resource discovery, event monitoring and altering, zone control, and SAN error-prediction capabilities.

IBM TotalStorage Productivity Center for Disk

is designed to help administrators manage a heterogeneous SAN environment from a single point. It is designed to operate with a number of SMI-S enabled storage such as the IBM TotalStorage Enterprise Storage Server (ESS) and the IBM TotalStorage DS4000, DS6000 and DS8000 series as well as storage that is virtualized using the IBM TotalStorage SAN Volume Controller.

IBM TotalStorage Productivity Center for Replication

is designed to simplify and automate the configuration of your replication environment, helping to allow for more effective Peer-to-Peer Remote Copy (PPRC) and IBM FlashCopy® management. It is also designed to monitor copy operations across devices to help support a replication environment.



software

IBM TotalStorage disk storage systems

High-performance IBM TotalStorage disk systems are among the most reliable, scalable and interoperable in the industry. High-availability, multiplatform support and support for several operating systems can help you implement the IBM strategy of an On Demand Business.

IBM TotalStorage continuum of enterprise disk storage

IBM TotalStorage has a continuum of enterprise disk storage. The IBM TotalStorage Enterprise Storage Server Models (ESS) 800 and 750 are the foundation of enterprise-class reliability, support, and function. The DS6000 series, along with the IBM TotalStorage DS8000 series, build on the ESS base to deliver an enterprise storage continuum of systems with shared replication services and common management interfaces. These enterprise-class products push the enterprise-class spectrum down into what had been strictly midrange space before and way up to cover the higher range of performance and scalability needs.

IBM TotalStorage DS6000 series

is designed to offer true enterprise-class functionality with a dramatically reduced size and a revolutionary price. Intended for medium and large businesses, it implements a common set of advanced copy functions and management interfaces with the DS8000 series. The DS6000 series is designed to deliver excellent performance that is comparable to or better than that of the ESS 800 in many metrics. Its modular packaging allows it to grow as storage needs to grow and yet is surprisingly easy to install and service. The DS6000 supports FC/FICON® attachment to the same wide range of servers and operating systems as DS8000 and ESS. Additionally, the DS6000 comes with an industry-leading, four year warranty for the system hardware, as well as the operating environment and advanced functions.

IBM TotalStorage DS8000 series

sets a new standard of highly scalable, cost-effective data storage for high-performance, mission-critical workloads. The DS8000 supports a very large, efficient cache and up to 192TB of physical disk capacity with up to six times the throughput of the ESS Model 800. The DS8000 takes advantage of the latest IBM POWER5™ server technology to deliver high-performance scalability, and long-term cost-effectiveness. DS8300 is also designed to deliver the cost advantages of running the equivalent of two, independent storage arrays, in storage system LPARs (logical partitions), all within a single physical DS8300.

The DS8000 also offers business continuity solutions with Metro and Global mirroring. The DS8000 is a great system for storage consolidation with support for FC/FICON and ESCON® attachment to a wide range of servers. DS8000 comes standard with a four year warranty for the system hardware, as well as the operating environment and advanced functions.

disk

IBM TotalStorage Enterprise Storage Server

is the foundation of enterprise-class reliability and function. The ESS Model 800 provides up to 55.9TB of physical disk capacity and is designed for excellent, balanced performance. It offers very robust business continuity solutions, including FlashCopy®, as well as Metro and Global mirroring. The ESS is a great system for storage consolidation with FC/FICON®, ESCON®, and SCSI attachments for a wide range of servers, including both mainframe and open systems, supporting many new and legacy versions of popular operating systems.

IBM TotalStorage DS4000 series

can help handle the growing high-performance or high-capacity storage requirements of today's on demand era. The IBM TotalStorage DS4000 series (formerly FAStT Storage Servers) uses common storage management software and high-performance hardware design, helping to provide customers with enterprise-like capabilities at a low cost. High-availability, multiplatform support, a broad range of open operating system support and comprehensive management tools all help you adjust to changing storage requirements and challenges.

IBM TotalStorage DS300

is designed to provide a low-cost iSCSI subsystem for workgroup storage applications such as file, print and Web serving, as well as remote boot for diskless xSeries servers. The IBM TotalStorage DS300 leverages standard Ethernet infrastructure to offer a simple, affordable SAN solution. In addition, using 300GB Ultra320 SCSI drives, the DS300 can scale up to 4.2TB of physical storage capacity to help meet your growing storage requirements now and in the future.

IBM TotalStorage DS400

is designed to provide a low-cost storage solution for high-performance Fibre Channel storage fabrics, the IBM TotalStorage DS400 delivers an exceptional solution for workgroup storage applications such as e-mail, file, print and Web servers, as well as collaborative databases. In addition to featuring both single- and dual-controller configurations, the system also helps leverage your investment in IBM EXP400 enclosures for affordable migration from direct attach storage (DAS) to a SAN. By attaching up to two EXP400 model enclosures, clients can scale the DS400 dual controller model up to an impressive 12TB of physical storage capacity.

storage

IBM TotalStorage DR550

is designed as a preconfigured, integrated offering to help store, retrieve, manage, share and secure regulated and non-regulated data. The DR550 is designed to support both high performance for data access and also very high storage capacity (up to petabytes with attached IBM tape libraries). The DR550 also supports data encryption, which is designed to prevent unauthorized access to records and helps protect privacy. The policy-based, archive data-retention capabilities of the DR550 are designed to support nonerasable, nonrewritable data storage. Using an established archive application programming interface (API), it helps address the needs of regulated industries and other businesses with long-term data retention and protection requirements.

IBM TotalStorage 7204 External Disk Drive

is a stand-alone Ultra SCSI(LVD) device that provides 36GB to 146GB of hard drive storage. This external drive allows pSeries® users to add new application programs and also expands the number and size of readily accessible online data files.

IBM TotalStorage Expandable Storage Plus 320 (2104)

is well-suited for small- and medium-scale IBM AIX® environments requiring the latest Small Computer System Interface (SCSI) Ultra 320 technology. It is designed to handle either dual-host attachment with a single SCSI bus for non-concurrent, high-availability configurations with High Availability Cluster Multi-processing (HACMP™) failover software, or dual-host attachment with two SCSI buses. The Expandable Plus 320 is well-suited for multi-host attachments to IBM @server pSeries and RS/6000® servers.



IBM TotalStorage DR550

tape

IBM TotalStorage tape storage systems

Tape storage systems play a key role in business continuity and information lifecycle management initiatives. Few go to greater lengths to help you store, archive and retrieve your data than IBM with its complete line of tape drives, autoloaders and libraries.

Tape libraries and auto-loaders

IBM TotalStorage Virtual Tape Server (VTS)

is designed to virtualize tape and utilize the full capacity of cartridges to help provide excellent performance, reduce tape processing costs, and reduce floor space and environmental requirements. A fully redundant peer-to-peer VTS configuration installed in two separate sites can help facilitate the resumption of normal operations after a system failure, or a natural or man-made disaster.

IBM TotalStorage 3494 Tape Library

is an excellent solution for large datacenters that include IBM @server and open-system platforms. It features a modular design that can be configured to help meet customer requirements, attach to supported servers and help support business continuance. This tape library incorporates the 3592 tape drive which can utilize Write Once, Read Many (WORM) as well as standard data cartridges. The 3494 tape library supports the VTS and is designed to scale to help meet future storage requirements. It is also designed to provide high availability and support for future tape technologies.

IBM TotalStorage 3584 Tape Library

is an excellent choice for large-capacity open systems and IBM System z9 and @server zSeries environments. It can be configured with high-performance, high-capacity IBM LTO Ultrium generations 2 or 3 tape drives to provide an excellent alternative to digital linear tape (DLT). IBM 3592 tape drives can be incorporated to provide fast access as well as high performance and high capacity. Both 3592 and LTO gen 3 tape drives support WORM as well as standard data cartridges.

IBM TotalStorage 3583 Tape Library

is designed as a high-performance, reliable, scalable tape subsystem automating up to 72 tape cartridges. The 3583 features the patented IBM Multi-Path architecture, designed to allow you to define multiple logical libraries within a single physical library and allowing heterogeneous applications to simultaneously share a single physical library. Control-path failover adds additional autonomic capability. This library is available with both generations 2 & 3 LTO tape drives. WORM data cartridges are also supported (with LTO gen 3 drives).

storage

IBM TotalStorage 3582 Tape Library

is extremely compact with its 4U height, yet holds up to 24 LTO cartridges and one or two LTO Ultrium 3 or 2 tape drives. This library supports up to two heterogeneous servers sharing it simultaneously without any additional hardware or software. A bar code reader is standard, as is a single-cartridge input/output door. An optional Web interface allows users to monitor the library status with a Web browser. The 3582 is superb for addressing the growing storage requirements of small- to medium-sized businesses. The LTO Ultrium 3 tape drive also provides for WORM function for the 3582 Tape Library.

IBM TotalStorage 3581 Tape Autoloader

is an external stand-alone or rack-mounted, 8 cartridge, 2U high autoloader using a single IBM LTO Ultrium 3 or 2 tape drive. It is a good choice for customers who use tape and require a large-capacity or high-performance tape backup—with or without random access. If bar code label scanning is required, an optional bar code-reader can be added to one of the existing cartridge slots. This is designed to provide automated storage management software the ability to select the required cartridge. WORM function capability is also available with the LTO Ultrium 3 tape drive.



IBM TotalStorage LTO Family of storage products

storage

Tape drives

IBM TotalStorage 3592 Tape Drive

is designed to provide fast performance and high capacity to help reduce customer resource requirements in heterogeneous server environments. The 3592 is designed to provide both fast access to data and the high capacity necessary to back up large databases, thus allowing the adoption of a single tape technology. This can help reduce costs and allow data to be consolidated onto fewer footprints, which, in turn, can help reduce the complexity of the storage environment and management overhead. Additionally, the 3592 offers WORM functionality that is designed to help support data-retention needs and applications requiring an audit trail.

IBM TotalStorage 3590 Tape Drive

offers configuration flexibility with models for large, scalable automation solutions to small auto cartridge loaders. The 3590 is designed to provide high performance for backup window management and productivity. It supports enhanced tape sharing with cross-enterprise attachment and flexible implementation with support for multiple attachments. The 3590 is designed to support data integrity and reliability for mission-critical data.

IBM TotalStorage 3580 Tape Drive

provides convenience for existing Linear Tape Open (LTO) tape cartridge users or users who typically store less than 400GB of data on a single tape cartridge. This self-contained single generation 3 LTO drive can be rack-mounted or can simply sit on the desktop, and is an excellent alternative to SDLT, DLT, 1/4 in., 4 mm or 8 mm tapes drives. The LTO Ultrium 3 tape drive also provides for WORM function.



IBM 3580 Tape Drive

Complementary tape storage product

offerings, the 7205 (SDLT format), 7206 (4 mm and VXA-2 format), 7207 (SLR formats) and 7212 (multi-tape technology format), help you protect, access and manage mission-critical data—regardless of the size of your organization.



IBM 7212 1U Dual Bay Enclosure

networking

IBM storage networking

While hidden from most users, the IBM storage network infrastructure components are designed to facilitate connectivity to scalable, reliable storage for businesses of all types and sizes. The IBM storage network plays a key role in helping to simplify your infrastructure by pooling storage resources to help improve utilization of storage assets and sharing and access to information.

Storage Area Networking (SAN)

solutions can provide the infrastructure to help you keep your enterprise nimble and agile enough to address the constant flux, high pressure and rapidly changing scenarios of an On Demand Business. IBM offers a wide variety of SAN infrastructure products from our SAN switch vendors— Brocade (IBM TotalStorage b-type), McDATA (IBM TotalStorage m-type) and Cisco. These products provide the connection of servers and storage devices into high-availability storage networks, supporting scalability to help address the demands of rapid and unpredictable growth.

Network Attached Storage (NAS) and IP Attached Storage

IBM TotalStorage N3700

The IBM TotalStorage N3700 is the first offering from the IBM TotalStorage N series of products. The N3700 is a Network Attached Storage (NAS) device that is designed to:

- Support entry-level and midrange customers having the need for IP attached heterogeneous storage access
- Provide an ideal solution for distributed, branch and regional office locations
- Provide scalability up to a raw storage capacity of 16.8TB using 72GB, 144GB and 300GB fibre channel disk drives
- Supports Network File System (NFS), Common Internet File System (CIFS) protocols enabling file sharing capabilities for Windows®, UNIX® and Linux® environments
- Support Internet Small Computer System Interface (iSCSI) protocols for attachment to a multitude of host systems including Microsoft® Windows, UNIX and Linux systems

Provide high-availability options with redundancy and hot swappable features



IBM TotalStorage N3700

tap into

	Storage management software	System management software	Virtualization offerings	Disk storage	Tape storage	SAN/NAS	Business Partner solution centers
IBM	●	●	●	●	●	●	●
HP ⁶	●	●	●	●	●	●	●
EMC ⁷	●	●	●	●		●	●
Dell ⁸		●		●	●	●	●
Hitachi ⁹	●		●	●		●	●

IBM storage offerings compared with other vendors' offerings

IBM @server xSeries and BladeCenter Storage Servers

The new IBM @server Storage Server products offer a broad range of affordable Windows-based network-attached file server solutions. They combine the IBM proven xSeries and BladeCenter® server technology with Microsoft Windows Storage Server 2003 operating system to provide a superior network-attached storage solution for companies ranging from large enterprises to small businesses. Each of the server's hardware has been preconfigured and the Windows Storage Server 2003 operating system is preinstalled enabling rapid deployment and ease-of-use.



IBM x346 NAS Storage Server

Tap into the power

A worldwide network of top-notch sales and technical support services backs every IBM storage product. IBM offers local, focused support capabilities to help expedite system development at all stages, from conception to warranty repair. In addition to customer support, qualification and integration assistance, IBM offers a wide range of financing options and education and consulting services designed to provide complete data storage solutions.

IBM works with IBM Business Partners and other leading technology companies to deliver the right storage solutions to help your business succeed in today's dynamic marketplace. You also can visit an IBM TotalStorage Solutions Center for a hands-on test drive of IBM storage solutions. With IBM as your technology provider, you can take full advantage of the new and emerging technologies that can be critical to business success.

Start today

It's an easy decision. Why keep searching for multiple vendors to duplicate what a single, global, end-to-end storage solution provider can do for your organization? Insist on exceptional storage solutions, products and services from an industry leader.

the power

	Database software	Hosting	Consulting and implementation service	Financing	Microsoft Windows servers	UNIX Server	Traditional mainframe	Application server
IBM	●	●	●	●	●	●	●	●
HP ⁶			●	●	●	●		
EMC ⁷		●	●	●				
Dell ⁸		●	●	●	●			●
Hitachi ⁹			●	●				

Rely on IBM for the help you need

IBM offers:

- A full menu of customizable, open IT storage solutions to meet your specific business needs and budgets
- A broad portfolio of modular hardware and software offerings
- Outstanding warranty support
- International service and support
- Flexible financing options

Choose IBM for the storage you need

These comprehensive IBM storage offerings can help IT organizations break through traditional paradigms of data management, protection and use—enabling the freedom and power of *information on demand*. The convergence of server and storage technology can provide a powerful new basis for infrastructure simplification, flexible growth and lower total cost of ownership.

IBM is one of the industry leaders in its ability to address simplification issues from this broad perspective.

IBM looks at the entire environment—servers, networks and storage. Doing so gives you the ability to create a much more cost-effective, flexible and resilient environment in which resources and information flow freely, and capacity and configurations can be changed quickly to meet business needs.

What's the IBM advantage? Of course, IBM offers an impressive product portfolio that includes servers, network components, management software and storage products. But IBM also can provide services to help support the success of your infrastructure simplification, business continuity and information management initiatives.

IBM Global Services and IBM Business Partners can bring the entire spectrum of skills, from consulting through implementation and operations, to help you develop a solution tailored to your unique needs and budget. These services can help simplify your IT operation—helping to lower costs, improve resiliency and add the flexibility to support on demand information.



ibm.com/totalstorage

For more information

IBM and IBM Business Partners can offer clear guidance and a broad portfolio of skills and products to help you build an open, On Demand Business today. Visit: **ibm.com/totalstorage**

To view a complete list of pre-qualified TotalStorage solutions, please visit:

ibm.com/totalstorage/proven

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- ¹ Open Software Family is part of the IBM Virtualization Engine.
- ² Formerly known as IBM TotalStorage Multiple Device Manager—Performance Manager
- ³ Formerly known as Tivoli Storage Resource Manager
- ⁴ Formerly known as Tivoli SAN Manager
- ⁵ Formerly known as IBM TotalStorage Multiple Device Manager—Replication Manager
- ⁶ According to HP, March 2004 and found at www.hp.com/
- ⁷ According to EMC, March 2004 and found at www.emc.com
- ⁸ According to Dell, March 2004 and found at www.dell.com/us/en/gen/default.htm
- ⁹ According to Hitachi, March 2004 and found at www.hitachi.com/