IBM

IBM TotalStorage DS300

Highlights

■ *Designed to provide a cost-effective Internet SCSI (iSCSI) subsystem for workgroup storage applications, such as file, print and Web serving, as well as remote boot for diskless servers*

■ *Leverages standard Ethernet infrastructure to help offer a simple, affordable storage area network (SAN) solution—with single- and dual-controller configurations*

■ *Includes easy-to-use IBM® ServeRAID™ Manager, which provides common management software*

■ *Helps deliver business continuance and disaster recovery through enterprise-class software features*

■ *Scales to 2TB of physical storage capacity*

■ *Uses common IBM @server® xSeries® Ultra320 SCSI disks*

Flexible, low cost SAN storage

The IBM TotalStorage® DS300 is an entry-level, low cost workgroup storage subsystem for IBM @server xSeries and BladeCenter™ servers. Designed to deliver advanced functionality at a breakthrough price, the DS300 offers an exceptional solution for workgroup storage applications, such as file, print and Web serving, as well as remote boot storage for diskless servers.

Leveraging standard Ethernet infrastructure and low cost SCSI drives, the DS300 is designed to offer a simple, affordable storage area network (SAN) solution that can be used in direct-attached or network-attached environments for shared storage. For even greater flexibility, the DS300 is designed to allow simultaneous support of heterogeneous operating system (OS) environments for xSeries and BladeCenter servers—in either single- or dual-controller configurations.

Performance for today, scalability for tomorrow

By utilizing standard xSeries hot-swap Ultra320 SCSI drives, designed to offer high performance and reliability, the DS300 can help your business achieve enterprise-class, high I/O processor (IOP) performance today—and allow for future growth tomorrow. The modular design of the DS300 is designed to allow you to easily perform upgrades and additions to help meet the needs of your growing, changing application environment—scaling to support increasing volumes of data flexibly and affordably.

In addition, advanced software features on the DS300—including access control lists (ACLs) and online array expansion—are designed to give administrators the power to configure storage according to changing usage needs. These features also help enable IT managers to share storage across multiple application servers.

Enterprise-class reliability and availability

The new DS300 is designed to deliver advanced functionality for business continuance and disaster recovery—at an entry-level price. Using a rack-mountable 3U enclosure with 14 SCSI drives and redundant design, hot-swap power and cooling modules, the DS300 features RAID reliability and high-availability software to help maintain operations.

The enclosure supports either one or two controllers for high-availability configurations. Each controller is designed to support up to three Gigabit Ethernet ports for management and redundant data paths so that—even if a line or a controller fails—multiple paths between servers and storage can help maintain a connection.

Metro mirroring[1] on the DS300 is designed to enable disaster recovery implementations to help protect critical data. The DS300 also offers optional advanced features such as space-efficient IBM FlashCopy® solutions, which are designed to help reduce storage backup windows and improve storage utilization for Microsoft® Exchange, Microsoft SQL Server™ 2000 and Lotus Notes® applications.

Powerful management tools

The DS300 is designed to offer excellent storage management and configuration capabilities through IBM ServeRAID Manager, helping enable clients to manage multiple IBM TotalStorage DS300 and DS400 subsystems—as well as direct-attached internal ServeRAID controllers—all through a single, easy-to-use management console with an extensive online help library. Configuration wizards simplify initial storage setup. IBM ServeRAID Manager is designed to support most common operating environments for workgroup applications, including Microsoft Windows®, Novell NetWare and Linux® platforms.

The management software of the DS300 is built directly into the client/server workgroup manager IBM Director[1]. IBM Director is designed to allow IT administrators to view and track the hardware configuration of remote systems in detail and monitor the usage and performance of critical components, such as processors, disks and memory.

IBM TotalStorage DS300 at a glance

Model	1701-1RL	1701-1RS	1701-2RD
RAID Controllers	Single	Single	Dual
Controller Upgrade	No	Yes	Not Applicable
RAID Cache Memory (min/max per controller)	256MB/256MB	256MB/1GB	256MB/1GB
Battery Backup for Cache	No	Yes	Yes
Host Interface	Gigabit Ethernet, iSCSI	Gigabit Ethernet, iSCSI	Gigabit Ethernet, iSCSI
Host Ports per Controller	1	2	2
Drive Interface	Ultra320 SCSI	Ultra320 SCSI	Ultra320 SCSI
Number of Drive Bays	7 / 14 Max.*	14	14
Maximum Storage Capacity	2TB*	2TB	2TB
RAID Levels	0, 1, 10, 5, 50	0, 1, 10, 5, 50	0, 1, 10, 5, 50
Power Supplies and Fans	Single/Optional Dual redundant design	Dual redundant design	Dual redundant design
Rack Support	Industry-standard 19-inch rack	Industry-standard 19-inch rack	Industry-standard 19-inch rack
Form Factor	3U	3U	3U

* Requires a second power supply upgrade for maximum drives.

ON DEMAND™ EXPRESS PORTFOLIO™
BUILT FOR MID-SIZED BUSINESS.

IBM Express Portfolio

Select configurations of the IBM TotalStorage DS300 are part of the IBM Express Portfolio, designed, developed and priced to meet the specific needs of mid-sized businesses. The IBM Express Portfolio of solutions is easy to acquire, install and manage. And it leverages IBM technology to provide tangible solutions to help you solve business problems in an on demand world.

For more information

For more information about the IBM TotalStorage DS300, contact your IBM representative or an IBM Business Partner, or call 1 800 IBM-CALL within the U.S. Also, you can visit the IBM Web sites at

ibm.com/totalstorage

ibm.com/eserver/xseries

ibm.com/eserver/bladecenter

MB, GB and TB equal 1,000,000, 1,000,000,000 and 1,000,000,000,000 bytes, respectively, where referring to storage capacity. Actual storage capacity will vary based upon many factors and may be less than stated. Some numbers given for storage capacities give capacity in native mode followed by capacity using data compression technology.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EITHER EXPRESSED OR IMPLIED. IBM EXPRESSLY DISCLAIMS ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements (e.g., IBM Customer Agreement, Statement of Limited Warranty, International Program License Agreement, etc.) under which they are provided.

References in this document to IBM products, programs or services does not imply that IBM intends to make such products, programs or services available in all countries in which IBM operates or does business. Any reference to an IBM program or product in this document is not intended to state or imply that only that program may be used. Any functionally equivalent program or product that does not infringe IBM's intellectual property rights may be used instead. It is the user's responsibility to evaluate and verify the operation of any non-IBM product, program or service.

[1] Planned availability for this feature is 1Q 2005.