A scalable high-capacity, high-performance LTO Ultrium tape library for backup and archival solutions

IBM TotalStorage 3583 Tape Library

Highlights

- ***Designed to support the new IBM LTO® Ultrium® 3 Tape Drive for increased capacity and performance, including 2 Gbps Fibre Channel and LVD Ultra160 SCSI attachments***
- ***Offers capacity, performance, and reliability for midrange and network tape storage environments***
- ***Patented multi-path architecture can help increase configuration flexibility with logical library partitioning***
- ***Control Path Failover and Data Path Failover designed to allow flexibility in SAN configuration, availability, and management***
- ***Adheres to widely supported Linear Tape-Open® (LTO) Ultrium design specifications***

IBM TotalStorage 3583 Tape Library

Today, all types of businesses rely on data as a key corporate asset. They want to be able to access data quickly and reliably, archive large databases and retrieve them when needed, and complete these tasks economically. By fully leveraging advanced Linear Tape-Open (LTO) technology, the IBM TotalStorage® 3583 Tape Library is designed to provide a cost-effective solution for handling a wide range of backup, archive, and disaster recovery data storage needs.

Advanced features

The IBM TotalStorage 3583 Tape Library now supports the IBM LTO Ultrium 3 Tape Drive. The new IBM Ultrium 3 drive has more than double the drive performance of the second generation LTO Ultrium Tape Drives. The IBM Ultrium 3 Tape Drives are designed to support up to 80 MBps native data transfer rates. In addition, with the use of the new IBM TotalStorage LTO Ultrium 400GB Data Cartridge, the IBM Ultrium 3 Tape

drive doubles tape cartridge physical capacity up to 400GB native capacity (800GB with 2:1 compression) over the Ultrium 2 data cartridges. The IBM Ultrium 3 Tape Drives come in Low Voltage Differential (LVD) Ultra160 SCSI and 2 Gbps Fibre Channel to attach to a variety of open system servers.

The IBM TotalStorage Ultrium 3 Tape Drives can read and write second generation LTO Ultrium data cartridges and read original LTO Ultrium data cartridges at original Ultrium 1 & 2 capacities with improved Ultrium 1 performance. The Ultrium 3 tape drives and cartridges can be resident in the same IBM 3583 library with first and second generation Ultrium tape drives and cartridges.

The IBM 3583 Tape Library is designed with a variety of advanced features. The IBM 3583 features the patented multi-path architecture which is designed to allow simultaneous attachment of heterogeneous servers and applications to LTO logical library partitions, including mixed Ultrium drives and media. The IBM 3583 Tape Library comes standard with a barcode reader for quick media verification and inventory. The IBM 3583 features storage capacities of 18, 36, and 72 data cartridge slots, providing total Ultrium 3 capacities of 7.2TB, 14.4TB, and 28.8TB of native data. With 2:1 compression, the largest model of the IBM 3583 can store 57.6TB of data for your business. The IBM 3583 Tape Library also comes standard with a one-cartridge I/O station; however, 12-cartridge I/O expansion capability is available. Remote management capabilities using a Web browser provides library control and configuration. Simple Network Management Protocol (SNMP) functionality is also included. Redundant power with an additional DC power supply and control path failover and data path failover options are also available.

Software support

You can maximize the power of the IBM TotalStorage 3583 Tape Library by managing it with industry-leading tape management solutions such as Tivoli® Storage Manager or other industry-recognized storage software.

Why IBM LTO?

LTO is an open tape architecture developed by a consortium of three world class storage producers. IBM LTO Ultrium drives are designed to provide best-of breed technology. Advanced multi-track recording capabilities, state-of-the-art magneto-resistive (MR) heads, and a sophisticated track following servo system work together to produce extremely high recording densities. New Ultrium 3 drive enhancements include a new dual stage 16-channel head actuator designed to provide precision head alignment to help support higher track density. IBM Copper chip technology and power management can help provide reduced power consumption, IBM generation 3 drives also feature a larger internal data buffer and 704 data tracks (compared to 512 in the Ultrium 2). IBM and IBM authorized products also provide service and technical support when you invest in an IBM LTO Ultrium solution—including a complete array of servers, software, printers, and storage devices.

Media

You can order media for the IBM TotalStorage 3583 Tape Library at the time of purchase or from IBM Media, Supplies Distribution, and authorized dealers. Call 1-888-IBM-Media (1-888-426-6334) toll-free in the United States and Canada.

IBM TotalStorage 3583 Tape Library at a glance

Model number	L18 (18 cartridges); L36 (36 cartridges); L72 (72 cartridges)
Control Path Failover	1680
Data Path Failover	1681
LTO Ultrium 3 LVD Ultra160 Drive	8033
LTO Ultrium 3 Fibre Drive	8035
Rack-mount feature code	8006
LTO Ultrium 2 LVD Ultra 160 Drive	8103
LTO Ultrium 2 HVD Drive	8104
LTO Ultrium 2 Fibre Drive	8105
The IBM 3583 Tape Library is a customer setup unit, with IBM installation available for a fee.	
Characteristics	
Tape drive type	IBM LTO Ultrium 1, 2 or 3
Number of drives	Up to 6
Number of tape cartridges	18, 36, 54, or 72
Capacity per cartridge[1]	Up to 800GB per cartridge compressed; 400GB native (generation 3 LTO) Up to 400GB per cartridge compressed; 200GB native (generation 2 LTO) Up to 200GB per cartridge compressed; 100GB native (generation 1 LTO)
Library Capacity	Up to 57.6TB per library compressed; 28.8TB native
Sustained data transfer rate	Up to 80 MBps native with LTO Ultrium 3
Media type	IBM TotalStorage LTO Ultrium 400GB Data Cartridge (PN 24R1922) IBM TotalStorage LTO Ultrium 200GB Data Cartridge (PN 08L9870) IBM TotalStorage LTO Universal Cleaning Cartridge (P/N 35L2086) Call 1-888-IBM Media
Dimensions	27" H x 18.9" W x 28.9" D (63.5 cm x 48.1 cm x 73.5 cm)
Weight	145 lb to 257.0 lb (65.8 kg to 116.6 kg)
Warranty	One year; IBM On-site Repair (IOR)
Operating environment	
Temperature	10˚ to 38˚ C (50˚ to 100˚ F)
Relative humidity	20% to 80% (non-condensing)
Electrical power	6.0-3.0 amps at 100-240 VAC, 50/60 Hz (max. configuration)
Attachment and systems support	The IBM TotalStorage 3583 Ultrium Scalable Tape Library connects to native switched fabric 2GB Fibre Channel, LVD Ultra2/Wide or Ultra 160 SCSI and HVD Ultra SCSI interfaces attaching to IBM @server® pSeries®, IBM @server iSeries™, IBM @server xSeries®, RS/6000®, RS/6000 SP, AS/400®, and IBM Netfinity® systems, and non-IBM servers, workstations, and personal computers.
Operating systems support	Device driver support is available for AIX®; OS/400®; i5/OS™, Windows® 2000; Windows Server™ 2003; Sun Solaris; HP-UX; and Red Hat® and SUSE LINUX

For more information

Contact your IBM representative or IBM Business Partner or visit

ibm.com/totalstorage/lto

IBM Systems and Technology Group
9000 S. Rita Road
Tucson, AZ 85744

Produced in the United States
February 2005

This document could include technical inaccuracies or typographical errors. IBM may make changes, improvements or alterations to the products, programs and services described in this document, including termination of such products, programs and services, at any time and without notice. Any statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only. The information contained in this document is current as of the initial date of publication only and is subject to change without notice. IBM shall have no responsibility to update such information.

IBM is not responsible for the performance or interoperability of any non-IBM products discussed herein. Performance data for IBM and non-IBM products and services contained in this document was derived under specific operating and environmental conditions. The actual results obtained by any party implementing such products or services will depend on a large number of factors specific to such party's operating environment and may vary significantly. IBM makes no representation that these results can be expected or obtained in any implementation of any such products or services.

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 NONINFRINGEMENT. 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] Based on 2:1 compression

TSD00873-USEN-00