

EXCLUSIVE

Tandberg Data StorageLibrary T40+

The T40+ shows tape has a lot to offer for data backup, as this well-built library has massive expansion potential

As hard disk arrays increase in popularity for data backup, so tape autoloader and library manufacturers need to make tape-based backup more appealing. Tandberg Data's latest StorageLibrary T40+ certainly hits the mark for value, but also offers an impressive storage capacity with massive expansion potential.

The 4U chassis can be desk or rack-mounted. The base configuration comes with the two lower 12-slot magazines licensed, and Tandberg's COD (capacity of demand) feature allows you to license the two upper eight-slot magazines when needed. The T40+ supports up to two full-height or four half-height tape drives, with LTO-2, LTO-3 and LTO-4 options available.

Tandberg's Pass-Thru feature lets you stack up to five libraries together as a single unit, allowing backup storage capacity to be increased to keep in step with demand. The library includes an integral barcode reader, and you can choose from SCSI, FC or SAS interfaces.

The library's operator panel provides



Low power consumption makes the T40+ a greener alternative to a hard disk array.

full access for configuration, and it can also be used to view slot contents, unload and load cartridges, and move them around the magazines and drives. Remote management is also provided, and the T40+ offers one of the best web interfaces we've seen for a tape library. It provides remote access to the same features as the operator panel, graphical views of the library and its contents, and error notification.

The magazines can be partitioned in up to four separate virtual libraries, where each requires at least one tape

drive and magazine. This function can be configured from either the control panel or web interface, and the loader arm plus designated I/E and cleaning slots are shared by all partitions. The review system also came with both hot-plug power supplies included in the price.

For testing, we used a Boston Supermicro dual 3GHz Xeon 5160 server running Windows Server 2008 and called up the A-Listed Symantec Backup Exec 12 (web ID: 195450), as this is bundled with the library as standard. Full access was provided to the drive and slots, allowing us to run inventories, erase tapes and move them around.

The quoted price includes an IBM LTO-4 tape drive and you'll need something special on the host system to get close to its 120MB/sec transfer rate. We ran a full backup of 17GB of test data on the host server from a volume on a single SATA hard disk, and saw top average speeds of about 65MB/sec. With HP's Ultrium 1840 (web ID: 120516) and Quantum's LTO-4 HH (web ID: 213831) tape drives, we could only achieve greater than 100MB/sec when backing up from fibre-channel disk arrays.

The StorageLibrary T40+ puts in a strong argument for tape-based backup, as disk arrays can't hope to compete with its price/capacity ratio. And at no time during testing, using an in-line power meter, did consumption go above 45W, making the T40+ a far greener alternative. **DAVE MITCHELL**

BACKUP TAPE LIBRARY

PRICE
40 slots, £6,330
exc VAT

SUPPLIER
Tandberg Data
08450 706 916

INTERNET
www.tandbergdata.com

WARRANTY
3yr (1st year
advanced
replacement)

SPECIFICATIONS
4U chassis • 1 x IBM LTO-4 tape drive • native transfer rate 120MB/sec • total native capacity 32TB (40 slots) • Ultra320 SCSI interface • barcode reader • dual power supplies • 10/100BaseTX Ethernet • web management, Symantec Backup Exec Single Server software bundled. Options: LTO-4 media, £53 • 24-slot model, £4,822 (ex VAT)

PERFORMANCE
★★★★★
FEATURES & DESIGN
★★★★★
VALUE FOR MONEY
★★★★★
OVERALL
★★★★★

QNAP TS-409U Turbo NAS

Build quality could be better, but this rack NAS appliance delivers ample storage functions for small businesses

When QNAP launched its TS-409 Turbo RAID options are better, although

Raptor drives in a mirror, added a third and migrated it to a RAID5 array in about 1hr 30mins.

QNAP's Finder utility locates the appliance on the network and takes you through network configuration, firmware installation and RAID setup. We upgraded our unit with the latest firmware, which brings in the new Surveillance Station – very similar to that offered by Synology's storming DS508

NAS APPLIANCE

PRICE
Diskless, £478
exc VAT

SUPPLIER
Xsps 0871 200
3268

INTERNET
www.qnap.com

WARRANTY