



FALCONSTOR VIRTUALTAPE LIBRARY APPLIANCE

With the FalconStor VirtualTape Library (VTL) Appliance, existing backup and recovery procedures originally designed for tape environments can now take advantage of the higher performance that a disk-based storage technology provides. Any site that has ever missed a maintenance window, fallen victim to operator-induced errors, or ever failed to provide the required levels of recovery services to its clients will find the VTL to be useful technology at an affordable price.

Issues

Tape libraries were created to provide comprehensive and robust data protection solutions to companies that needed to ensure the integrity of business-critical data. Reliability may be an issue due to potential robotic mechanical failures and physical tape media errors. The difficulty however, has always been that tapes operate at different speeds from disk, and are more sensitive to changes in data rates.

This attribute leads to two major drawbacks with tape: tape devices are often a bottleneck, since sequential devices can only serve one user at a time, and there is frequent opportunity to introduce media, robotic and human errors in both backup and recovery operations. The result is that backups often overrun available maintenance windows, and recoveries are awkward at best and, in worst-case situations, are frequently impossible to execute at all. Tape is better suited to long-term archiving than for backup/restore operations in modern data centers.

Virtual tape libraries were created to provide the same services that physical tape libraries offer, but with one significant difference: IT managers now have the chance to take advantage of the speed of disk storage without changing the tape management procedures their staffs already understand. More data can be moved between primary storage and the VTL over a SAN to optimize the backup window and recoverability service levels.



HIGHLIGHTS

VENDOR NAME:

FalconStor Software, Inc.

PRODUCT NAME:

VirtualTape Library Appliance

PRODUCT FUNCTION:

A backup and recovery appliance.

OPERATING SYSTEM:

Linux, Solaris

VENDOR Contact:

www.falconstor.com;

info@falconstor.com

PRICING INFORMATION:

Starts at \$15,900 for IP edition,
\$29,900 for Fibre Channel edition

AVAILABILITY:

Currently shipping worldwide

A New Solution

The FalconStor VirtualTape Library resides on a SAN (either iSCSI or Fibre Channel, and can be configured to both), and provisions virtual tape devices/libraries to multiple hosts. The VTL can emulate industry standard tape drives and libraries. A site's investment in existing backup and recovery software is preserved, and no changes to existing IT room procedures are required.

Installation is a quick 3-step process: connect the VTL to the network, follow the configuration guidelines to create virtual tape libraries from existing disk storage, and offer the virtual libraries to the backup servers via Fibre Channel, iSCSI or SCSI interface. The VTL uses raw disk instead of a conventional file system; thus it is less prone to corruption, cannot be infected by viruses, experiences less disk fragmentation, and performs sequential rather than random writes.

Deployment is immediate because sites continue to use their existing backup and recovery software with no change in procedures. (Data may also be offloaded from the VTL to a physical tape environment at a manager's discretion.)

At the heart of the VTL Appliance is FalconStor's IPStor server software. IPStor is proven technology, and has been in use worldwide since 2001.



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Key Benefits

FalconStor's VTL is a straightforward and uncomplicated install, which indicates quick time-to-value. From that point on, its automated operation requires minimal oversight. This is because a virtual tape library looks to other systems like physical tape devices. In reality however they store data on disks, so the only impact most sites should expect to see is that what are apparently traditional backups happen much faster.

The idea of a virtual tape library should be appealing to IT managers for a number of reasons:

- Disk-based backup is always faster than backups to tape.
- Virtual Tape compression is supported (2:1).
- Recoveries from on-line disks are much faster than recoveries from offline devices can ever be, and no operator ever needs to chase down a tape.
- Because the servers view virtual tape libraries as actual, physical tape drives, backup procedures currently in place—at many sites, tested and proven for a decade—are preserved. No new procedures or retraining is ever necessary.

The VTL appliance is quick to install and easy to maintain.

Market

With this product FalconStor has targeted enterprise-class IT rooms (typically, Fibre Channel environments) and IT establishments that utilize less-costly IP technology for their SANs (this last includes both mid-level businesses and the distributed storage requirements seen in remote or departmental IT sites). The key point at

each site will be cost sensitivity and medium-to-very high demand for data protection services.

Pricing and Availability

The FalconStor Virtual Tape Library Appliance is available now for both Fibre Channel and SCSI backup devices. Pricing for the Fibre Channel version starts at \$29,900. The IP version starts at \$15,900.

EMA's Perspective

Ultimately, any technology investment relies on the commitment of the vendor to its long-term product roadmap, and beyond that, to the vendor's own staying power in the marketplace. IT managers considering the VTL Appliance can feel at ease on both counts: IPStor is well-regarded in the marketplace (and is at present in its fourth release), and FalconStor has been a publicly held company (FALC, on NASDAQ) since 2001. Additionally, the company has built a reputation for reliability, which shows up on FalconStor's website via two important indicators – a list of world-class technology partners, and a list of world-class customers.

Virtual tape as an appliance makes a lot of sense – it is easy to install, easy to use, and provides fast and efficiently-managed services that storage managers are likely to appreciate. Its automation reduces the opportunity for operator-induced error. Because the value of a site's existing storage hardware, software and procedures is preserved, we consider it likely that an investment in this technology will provide a highly competitive ROI. This looks to be a fine solution from an established vendor.

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