

ENTERPRISE SOLUTIONS

NETAPP NEARSTORE® VTL

Accelerate the backup and recovery of data—without disrupting your backup environment.



KEY BENEFITS

- Dramatically faster backup and restores
- Seamless integration with existing tape infrastructure
- Reduces backup management costs
- Use of 50% fewer physical tapes compared with other VTL solutions
- Decru DataFort™ encryption options

For most organizations, backing up to tape remains the primary method for protecting critical business data. However, as backup windows continue to shrink and restore time objectives become more demanding, many are discovering that tape systems alone can no longer meet their data protection requirements. To address this problem, companies are seeking disk-based solutions that can increase backup and restore performance yet also leverage the existing investment in tape processes and infrastructure.

Disk-based backup is now widely accepted as superior to tape for backup and restore performance, and virtual tape libraries (VTLs) have emerged as the solution that provides the best combination of performance and seamless integration for existing tape environments. As a result, storage managers are increasingly faced with the issue of selecting a VTL solution that can address all of their backup needs, including performance, capacity, ease of use, cost of ownership, security, and interoperability with existing tape libraries.

NEARSTORE VTL

The NearStore VTL is a disk-based storage system that appears like a tape library to a backup application but provides the superior reliability and performance of disk technologies. The VTL backup solution

complements conventional tape drives and libraries by seamlessly inserting disk into the backup process, allowing existing tape libraries to be used for the creation of physical tapes for off-site storage.

In addition, the NearStore VTL provides the unique benefit of fully automated performance tuning by continuously balancing backup jobs across all available system resources. Whether the backup needs are large or small, the NearStore VTL provides immediate out-of-the box performance optimization. Unlike other solutions, maximum backup performance is achieved without user intervention and without the need for ongoing and time-consuming resource planning and allocation.

Based on proven technology developed specifically to address the needs of open systems storage networks, the NearStore VTL system delivers an industry-leading combination of scalability, price, and performance. A comprehensive solution, the NearStore VTL provides multiple options for creating off-site tapes, restoring data, and encrypting backup data.

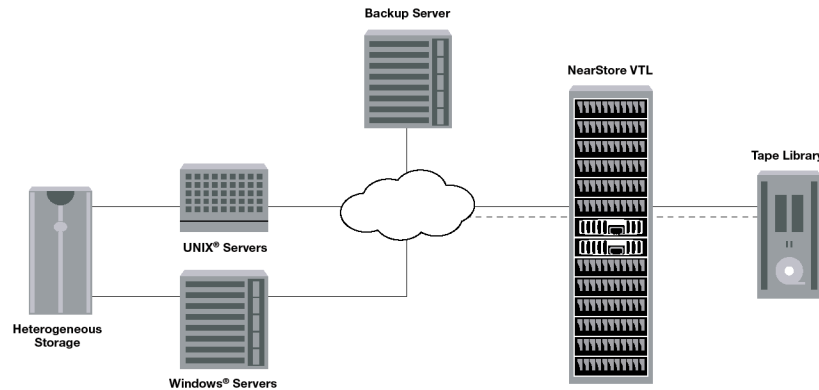


Figure 1) Optimized backup performance with NearStore VTL.

CHALLENGE

NEARSTORE VTL SOLUTION

Backups take too long	The NearStore VTL provides dramatic improvements in backup performance by using self-tuning technology to automatically and continuously assign backup streams to the most available disks as data loads change. Disk writes are coalesced to provide high-performance large block sequential disk transfers. The NearStore VTL can support sustained write throughput performance of 3.6TB/hour.
Restores are slow	The NearStore VTL significantly improves restore performance with the speed and reliability of online disk. Access to data is immediate as mechanical delays found in tape libraries are eliminated. Tape pass-through mode accelerates restores from physical tape by making data immediately available to the backup application. The NearStore VTL can support sustained read throughput performance of over 4TB/hour.
Unreliable backups and restores	The NearStore VTL virtually eliminates backup and recovery failures by using extremely reliable RAID-protected disk storage to protect against media failure. In addition, a Journalled Object Store (JOS) is used to write data to disk in a self-describing format that is resilient against even the most catastrophic system failures.
Too much IT time spent on back-ups and resources	The NearStore VTL delivers all of the benefits of disk-based backup without the need for additional management or administration. The appliance design enables easy installation and operation, while features such as self-tuning performance and automatic tape creation free IT staff from the time-consuming tasks of performance tuning and troubleshooting backup failures.
Ongoing operational costs for backups	Consolidate backup operations by replacing multiple physical libraries with a single NearStore VTL to better utilize backup infrastructure and simplify backup management. The use of cost-effective SATA disk storage lowers acquisition costs, and NearStore VTL tape smart sizing technology reduces tape costs by as much as 50% compared to other VTLs.
Backup resources not shared effectively	Create multiple, dedicated virtual libraries on a single NearStore VTL to optimize performance for each server and backup environment. NearStore VTL systems can even be shared among backup servers running different backup application software.
Cannot afford to make changes to existing backup processes	The NearStore VTL emulates existing tape drive and libraries. Create a virtual library with the same tape drive technology, inquiry strings, and geometry as an existing physical library for easy plug-and-play integration. The NearStore VTL is also certified with all leading backup applications for complete compatibility with your existing backup procedures and processes.

