



NetApp™
Go further, faster



Systems

NetApp VTL

Storage efficiency and high performance for backup and recovery

KEY BENEFITS

Complete backup and recovery jobs on time, every time

Enterprise performance enables you to meet your critical backup windows and stringent restore requirements.

Increase storage efficiency by 95% or more

Native deduplication lets you store more backups on disk for longer.

Maximize tape asset utilization

Patented Direct Tape Creation (DTC) technology provides high-speed physical tape creation and reduces tape media spend up to 50%.

Speed restores by 10x and facilitate disaster recovery

Shadow Tapes enable fast, disk-based restores that are compatible with the backup application catalog even when physical tapes are located offsite.

Proven, enterprise-class reliability

With its integrated appliance design, 100% technology ownership, and common platform, NetApp VTL delivers reliability built on years of primary and backup storage expertise.

THE CHALLENGE

Faced with shrinking backup windows, increasing amounts of production data, and stringent service level requirements, tape-only backup infrastructures cannot keep pace. Add the need for faster restores and it's easy to see why companies of all sizes are rethinking their legacy backup strategies.

Disk-to-disk backup can help, but the solution must integrate quickly and easily into your existing backup infrastructure. For compliance and disaster recovery, there should be efficient migration of data to physical tape without tape's usual headaches.

THE SOLUTION

NetApp VTL meets these challenges with a powerful combination of performance, scalability, simplicity, and cost savings. It delivers all the benefits of disk-to-disk backup and recovery without major changes to your existing policies and best practices. NetApp VTL is certified with all the leading backup applications, so it seamlessly integrates into your storage infrastructure.

With NetApp VTL, it's easy to consolidate and better leverage your existing physical tape assets for efficient off-site storage, while increasing productivity.

ENTERPRISE PERFORMANCE FOR FASTER BACKUPS AND RESTORES

NetApp VTL is purpose built and tuned for backup and recovery, providing the throughput needed to meet tightening windows. With features such as write aggregation and high-speed hardware-accelerated compression, NetApp VTL delivers up to 8.2TB/hr of throughput, enabling your backups to complete on time. And for physical tape creation, NetApp VTL has an embedded tape path providing up to 3.0TB/hr, so tapes can easily be sent offsite for disaster recovery.

NATIVE DEDUPLICATION FOR MAXIMUM EFFICIENCY AND RELIABILITY

We know you're challenged to provide data protection for more business initiatives. And with budget dollars being spread across more operations and a new emphasis on controlling power consumption, it's critical that a solution delivers maximum efficiency. NetApp VTL can help.

Our enterprise deduplication stores only unique data letting you reduce disk requirements by 95% or more. You can cost-effectively retain more backups online and protect more servers while minimizing power and cooling requirements. NetApp VTL uses variable block deduplication combined with the security of byte comparison for maximum efficiency and data integrity.

Unlike other offerings, deduplication is an intrinsic part of the system and runs natively on the VTL disk controller. The result: improved manageability, enhanced performance, and a streamlined upgrade path for new features.

FLEXIBILITY TO MEET YOUR NEEDS

NetApp VTL can optimize performance and storage efficiency to meet your specific backup needs. With deduplication running and assuming a 20:1 deduplication ratio, virtual capacity scales to 10PB with ingest throughput up to 4.3TB/hr. And for those customers who need maximum performance, deduplication can run as a background task outside the backup window. In that case, NetApp VTL using standard hardware compression can achieve ingest throughput up to 8.2TB/hr. Deduplication can be selectively enabled on a per-virtual library basis for maximum flexibility.

ADVANCED TAPE INTEGRATION MAXIMIZES TAPE ASSET UTILIZATION

NetApp VTL integrates tightly with leading backup applications to simplify backup and recovery management. Our patented Direct

Tape Creation technology includes several features that enable the industry's most advanced use of tape assets, and can drive your tape infrastructure significantly faster than your backup servers.

DTC allows the backup application to manage disk-to-disk-to-tape backup and recovery. The backup software directs the NetApp VTL to create tapes that are sent offsite for disaster recovery. Meanwhile, NetApp VTL's Shadow Tape feature retains "hidden" or "shadow" virtual tape copies on disk that can be automatically accessed by the backup application for rapid restores. The entire process is fully compatible with the backup application's catalog and management processes. Restore times are 10x faster than accessing an off-site tape.

Tape Smart Sizing checks data compressibility and automatically adjusts the size of virtual tapes to efficiently fit on physical tapes. Media utilization increases by as much as 50%, so you'll buy and manage fewer tapes.

To further protect your data and satisfy regulatory requirements, NetApp VTL integrates with NetApp DataFort encryption appliance with Lifetime Key Management™. Your data is secure, and accessible, no matter where it goes.

PROVEN RELIABILITY AND INVESTMENT PROTECTION

NetApp VTL is built on software and hardware that has been proven at the most demanding data centers worldwide. The technology is 100% owned by NetApp, and leverages years of service and engineering expertise in primary and secondary storage deployments. The integrated appliance design simplifies management and increases reliability, while in-house engineering provides continuous innovation.

PARTNER FOR SUCCESS

NetApp Global Services professionals can provide backup and recovery design and implementation services. Pre- and post-sales consulting services will help maximize your return on investment.

NETAPP VTL SERIES OVERVIEW

	VTL 300	VTL 700	VTL 1400
Max Usable Capacity (Uncompressed)*	55TB	275TB	550TB
Virtual Capacity (@20:1)*	1PB	5PB	10PB
Max Performance (TB/hr)*			
Deduplication running	1.5	2.1	4.3
Standard compression	2.3	4.1	8.2
Direct Tape Creation Speed (TB/hr)*	0.9	1.5	3.0

* Maximum performance and capacity are calculated using Base 10 arithmetic. Standard compression assumes deduplication is not running on a specific virtual library and data compression of 2:1.

NetApp creates innovative storage and data management solutions that accelerate business breakthroughs and deliver outstanding cost efficiency. Discover our passion for helping companies around the world go further, faster at www.netapp.com.

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