Virtualizing Veeam Tape Backup
with SymplyPRO Ethernet

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Tape Backup Challenges in Virtualized Environments

In virtualized infrastructures, backup applications like Veeam Backup & Replication depend on Windows servers to access tape hardware. Tape libraries, however, traditionally feature SAS or Fibre Channel connections — and hypervisors do not natively support passing those devices through to virtual machines.

This creates a fundamental limitation: while the Veeam Backup Server can run comfortably on a VM, the Tape Server role — which communicates directly with the drives and library — usually cannot. The reason is simple: hypervisors do not provide native support for passing SAS or Fibre Channel tape devices through to virtual machines, so the low-level SCSI commands required by tape cannot reach the hardware.

As a result, organizations are often forced to deploy dedicated physical servers with SAS or FC adapters to attach the tape library.

As data sets grow, these workarounds introduce new challenges:

- More physical servers to maintain, adding cost and risk of failure.
- Increased power draw and rack space requirements.
- Higher licensing costs for both hardware and software.
- Additional management overhead.
- Added complexity in Veeam tape job design and troubleshooting.

This results in a more fragile and costly tape infrastructure, negating the efficiency and flexibility of virtualization that a Veeam solution provides.

Traditional Hypervisor Backup Architecture
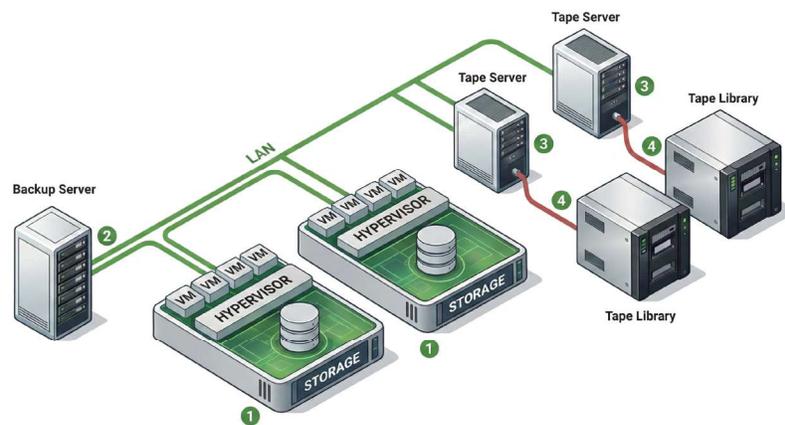
1. Hypervisor clusters generally do not support direct FC or SAS connections to tape.
2. Backup and tape servers must be deployed on bare metal.
3. Scaling tape storage often requires adding more physical servers.
4. Tape is frequently separated from core infrastructure due to distance limitations.

Why iSCSI Tape Matters for Veeam on Physical Servers

Even when Veeam Backup is deployed on a physical server, introducing an iSCSI-connected tape device (standalone drive or library) brings clear and lasting value. Traditional SAS and Fibre Channel connections restrict where tape devices can be placed, require specialized adapters, and often add cost and complexity. iSCSI changes this by bringing tape into the Ethernet network, making it simpler to deploy, manage, and scale.

With iSCSI, tape devices no longer need to be tethered by distance-limited SAS cables or expensive Fibre Channel infrastructure. Instead, they can connect over standard Ethernet, giving IT teams the freedom to position libraries where they make the most sense operationally. This reduces the hardware footprint, lowers capital costs, and simplifies day-to-day management.

Importantly, iSCSI also future-proofs your environment. An iSCSI-based tape device can be accessed by both physical and virtual Veeam servers, enabling a smooth path to hybrid or fully virtualized backup strategies without re-engineering the infrastructure.
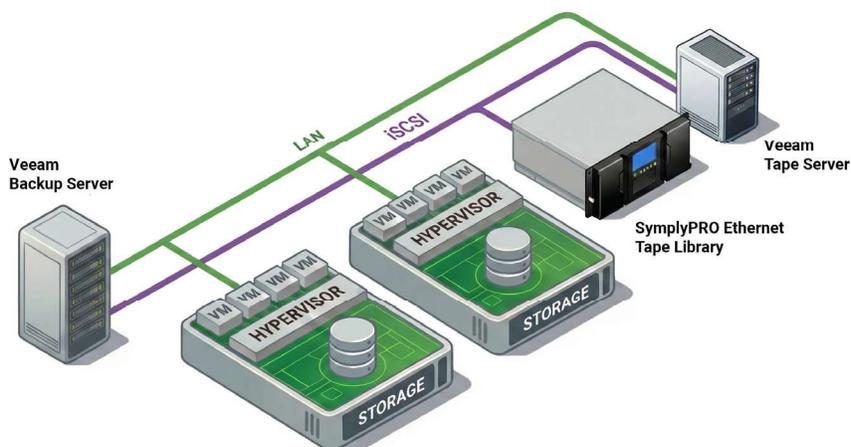

The iSCSI advantages are clear:

- Simplified connectivity using existing Ethernet infrastructure.
- Lower total cost of ownership with fewer specialized components.
- Flexible tape drive or library placement unconstrained by SAS or FC cabling.
- Easy scalability with additional iSCSI bridges or libraries.
- Future-ready support for both physical and virtual Veeam deployments.

SymplyPRO Ethernet Solution with Virtualized Veeam Server

SymplyPRO Ethernet can eliminate the need for dedicated physical tape servers by presenting tape drives and libraries over iSCSI. This allows Veeam environments to be fully virtualized without sacrificing performance or reliability.
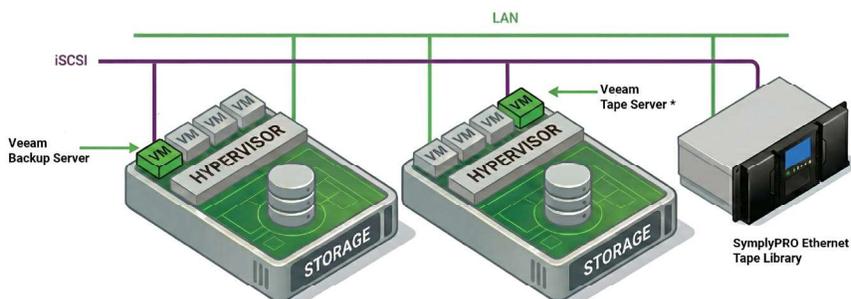
With SymplyPRO Ethernet you can:

- Replace expensive backup/tape servers with VMs.
- VMs have direct access to SymplyPRO Ethernet tape drives and libraries via iSCSI.
- Run backups from one or more VMs.
- Enjoy the benefits of VM migration while keeping connections to tape device intact.
- Improve disaster recovery processes.

SymplyPRO Ethernet Advantage

SymplyPRO Ethernet brings tape into the virtual era by making LTO drives and libraries accessible across standard Ethernet (iSCSI). Multiple guest operating systems can securely share the same tape resources without the need for dedicated Fibre Channel or SAS hardware. By leveraging existing network infrastructure, organizations can lower costs, simplify operations, and scale easily as data grows.

Key benefits include:

- **Reliability & Flexibility:** Shared tape access for multiple guest OSs, live VM migration with uninterrupted tape operations, and redundant iSCSI connections for added resilience.
- **Scalability & Control:** Expand easily with additional SymplyPRO Ethernet and manage multiple libraries from a single virtual backup server.
- **Efficiency:** Faster backups and restores, while eliminating Fibre Channel costs and SAS distance limitations.

Ready to simplify your tape backup?

Break free from the limitations of SAS and the cost of Fibre Channel. With SymplyPRO Ethernet, your tape infrastructure becomes easier to deploy, manage, and scale — all over standard Ethernet.

Contact us today at hello@gosymply.com to learn how SymplyPRO Ethernet can modernize your tape workflow.