

# COST-EFFICIENT S3-TO-TAPE WITH POINT AND NETAPP



Extend NetApp® StorageGRID® object-based storage transparently with a tape-based on-prem S3 storage class for archiving and for cold data.

# Backup, tiering, and archiving for object storage

As data volumes increase in both number and size, organizations struggle to optimize their storage infrastructure to handle that growth. With traditional storage methods, large amounts of data are frequently misplaced, resulting in inflated backup volumes, failed restores, and straining processes.

Adding an S3 storage class, such as StorageGRID mitigates these issues, providing a consistent destination for backups, cold-data offloading, and archiving. It protects against data loss, maintains compliance, reduces costs, and simplifies operations. Backups guard against deletion, corruption, and ransomware, and moving cold data to lower-cost tiers frees up performance storage. Archiving preserves critical information for long-term retention and regulatory compliance.

# Tape integration for NetApp StorageGRID with PoINT Archival Gateway

Connecting your tape-based object storage <u>PoINT Archival Gateway</u> at your NetApp® StorageGRID® storage seamlessly integrates your tape libraries with your backup, tiering of cold data, and archiving that you need.

Tape technology is well-suited for these requirements. You get the benefits of a small environmental footprint, high data integrity over an extended period, and much lower costs per terabyte of storage as compared to most other storage technologies. Furthermore, tape technology is sustainable because of its low power consumption and low CO2 emissions.

NetApp StorageGRID is a globally recognized leader in object storage, trusted by enterprises and service providers worldwide. Designed for massive scalability, StorageGRID delivers secure, durable, and cost-efficient storage for unstructured data at any scale.

With PoINT Archival Gateway, tape storage can be homogeneously integrated into your existing StorageGRID installations, eliminating the need for costly changes and disruptions. NetApp StorageGRID communicates with PoINT Archival Gateway through a standardized S3-compatible interface. PoINT Archival Gateway acts as middleware between StorageGRID and your tape storage systems (such as tape libraries).

## S3-to-Tape with Storage GRID Cloud Storage Pool

Cloud Storage Pool is an integrated NetApp StorageGRID feature that automatically transfers your object data to external S3-capable storage, such as the S3-to-Tape solution PoINT Archival Gateway. This feature enables seamless tiering, cost optimization, and extended data lifecycle management. Cloud Storage Pool enables you to store objects outside of the StorageGRID system. For instance, you may want to transfer rarely accessed objects to lower-cost tape storage. Maintaining a backup of your StorageGRID objects is another option. You can use this backup to recover lost data if a storage volume or Storage Node fails.

PoINT Archival Gateway supports Cloud Storage Pool and is certified for this StorageGRID feature, providing an AWScompatible S3 REST interface. It also supports Amazon S3 Glacier commands, which consider the high latencies of tape storage. With Cloud Storage Pool, NetApp StorageGRID integration with PoINT Archival Gateway enables the transparent writing of data to tape library systems (for example, for offloading cold data and for archiving).

#### Native tape support for vendor independence

PoINT Archival Gateway supports a wide range of tape library products. You don't need a proprietary hardware solution with long-term dependencies and unforeseeable support costs. PoINT Archival Gateway can replace a tape system at any time without interrupting your operations. It also integrates tape libraries; no additional drivers or software products are required. It supports LTO and IBM 3592 tape drives, as well as mixed drive configurations.

PoINT Archival Gateway also manages tape media that has been exported from a library and is therefore "offline." Offline media are listed in the Admin GUI along with the name of the library where the media were last online. PoINT Archival Gateway supports direct writing to and reading from tape media.

# **KEY BENEFITS**

- · Cost-efficient scale: Long-term archiving on tape to significantly lower your storage costs per terabyte
- · Cost savings: No cloud storage ingest, egress, or transaction costs, because it's an on-premises solution
- Air-gap security: Tape archives that offer built-in protection from cyberthreats such as ransomware
- Tape vendor flexibility: Hardware-agnostic tape support, so no lock-in to specific tape vendors
- High throughput: Support for petabyte-scale ingestion, optimal for StorageGRID high-volume tiering and archiving
- Seamless S3 tiering: Transparent offloading of cold data from StorageGRID to tape through S3
- Sustainability: Low energy consumption and low CO2 emissions thanks to tape technology

And because NetApp StorageGRID is designed for high data throughput, it can write objects directly to the tape storage class. When reading, this feature avoids cumbersome and lengthy restore processes to disk caches. Your data is delivered directly to NetApp StorageGRID.

#### High scalability and high availability

PoINT Archival Gateway is highly scalable and offers redundancy on a system and data level. The internal nodes cooperate with each other (such as for load balancing) and offer a highly scalable S3 REST web service. This service enables almost unlimited parallelization and very high data transfer rates. The database nodes provide synchronous replication and failover. Flexibly selectable erasure coding procedures maintain the protection of stored data.

### Integrated administration and logging

Administration is through a web-based Admin GUI, which is provided by PoINT Archival Gateway through an HTTP service. In addition to the Admin GUI, a REST Admin API with Swagger support is available. With this API, administrative functions can be integrated into your own applications.

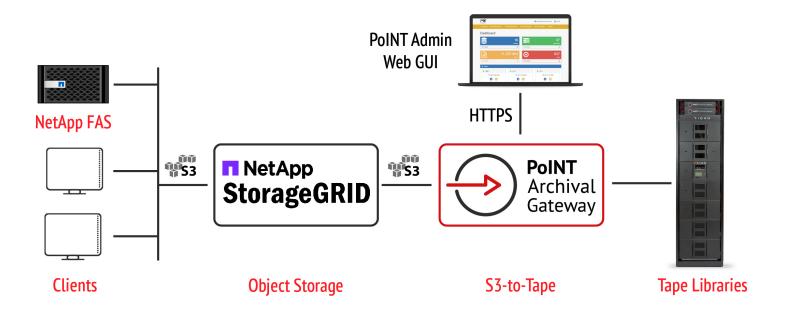


Figure 1: S3-to-Tape integration with NetApp StorageGRID.

PoINT Archival Gateway also supports Data Access Audit Logs and Security Audit Logs. Each time the data objects of an object repository are accessed, it is logged in assigned access audit log files. These log records contain a time stamp, the access type, and the identifier of the user who accessed the objects.

All manager login activity is also logged in a protected Security Audit Log file, as are any changes made by security managers and changes related to security settings. This log file contains information about the users and details about the changes that they made.

#### **About PoINT**

PoINT Software & Systems GmbH is specialized in the development and distribution of software products for storage, management and archiving of data. Our data & storage management solutions offer an easy and efficient integration of different storage technologies and systems in consideration of enterprise requirements. PoINT products allow optimized usage of storage systems and help to reduce costs and issues caused by data growth.

Learn more at www.point.de.



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#### About NetApp

NetApp is the intelligent data infrastructure company, combining unified data storage, integrated data, operational and workload services to turn a world of disruption into opportunity for every customer. NetApp creates silo-free infrastructure, harnessing observability and Al to enable the industry's best data management. As the only enterprise-grade storage service natively embedded in the world's biggest clouds, our data storage delivers seamless flexibility. In addition, our data services create a data advantage through superior cyber resilience, governance, and application agility. Our operational and workload services provide continuous optimization of performance and efficiency for infrastructure and workloads through observability and Al. No matter the data type, workload, or environment, with NetApp you can transform your data infrastructure to realize your business possibilities. Learn more at <a href="https://www.netapp.com">www.netapp.com</a>