

Software & systems

PoINT Archival Gateway

Tape Archiving for NetApp StorageGRID Webscale

The Challenge

Most disk and flash-based storage systems are overloaded by inactive and cold unstructured data. This situation applies to NAS systems and, increasingly, to object storage systems. The use of these systems to store data that has not been accessed for months or even years is an inefficient use of resources. Your enterprise needs a solution that optimizes the load profile of your storage systems and that helps you fulfill archiving requirements.

The Solution

The optimal solution for this dilemma is a tiered storage architecture. This architecture keeps active files on fast primary storage, such as NetApp® FAS, and moves inactive files to capacityoptimized storage, such as NetApp StorageGRID® Webscale. It also archives and offloads cold data to an archive tier, such as tape libraries. The PoINT Archival Gateway supports this approach by integrating tape libraries with StorageGRID Webscale.

Tape technology is well suited for archiving. It provides the benefits of a small environmental footprint, high data integrity over an extended period, and a much lower cost per terabyte of storage than all other storage technologies. And compared with all the storage media that is available, tape technology has superior potential for essential capacity improvements.

AWS S3 REST API

The PoINT Archival Gateway provides an AWS S3–compatible interface. By using this interface, StorageGRID Webscale integration with Archival Gateway can send and offload unused data (for example, for archiving) transparently to tape library systems.

High Scalability and High Availability

The PoINT Archival Gateway is highly scalable and provides redundancy on the system and on the data level. Its interface nodes cooperate with each other (for example, for load balancing and for failover), and multiple database nodes provide synchronous replication and failover functions.

Integration of Tape

With the PoINT Archival Gateway, you can integrate tape storage systems in an existing storage infrastructure without the need for costly changes and disruptions. The archive service (archive node) of StorageGRID Webscale communicates with the Archival Gateway through the standardized AWS S3–compatible interface. The Archival Gateway acts as middleware between the archive node of StorageGRID Webscale and the tape storage systems (tape library).

HIGHLIGHTS

- Integrate tape systems with NetApp StorageGRID Webscale
- Optimize data placement with object data archiving to tape
- Fulfill archiving requirements
- Recover valuable disk storage space
- Create backup copies on tape media
- Manage offline tape media

SOLUTION COMPONENTS

- NetApp StorageGRID Webscale
- PoINT Archival Gateway



DIAGRAM 1: POINT ARCHIVAL GATEWAY ENABLES ADVANCED ARCHIVING ON TAPE FOR NETAPP STORAGEGRID WEBSCALE.

Backup Copies for Offline Storage

The PoINT Archival Gateway can also be used by NetApp StorageGRID Webscale to make backup copies to tape for offline storage. Multiple copies can be created to carry out a 3-2-1 backup strategy. With this strategy, you have at least 3 copies of your data. Two of those copies are online but are on different media (flash or disk and online tape), and at least one copy is offsite (offline tape).

Data and Management Security

The web-based admin GUI and a command line interface (CLI) provide the management interface of the Archival Gateway, and the AWS S3 REST API provides the data access interface. You can control and restrict access to those interfaces by defining security principals and by assigning access rights to those principals. The management interface offers functions to help you create local security principals of type, user, and group. As an option, you can also adopt external security principals from an Active Directory (AD) domain.

Native Tape Support

The PoINT Archival Gateway supports multiple vendors of tape systems and a wide range of tape library products. This support prevents a proprietary hardware solution that has long-term dependency and unforeseeable support costs. As an option, the PoINT Archival Gateway supports the replacement of a tape system, which can be performed at any time without interrupting your operations. The tape support also includes offline media management.

ABOUT PoINT

PoINT Software & Systems GmbH specializes in the development of software products for storage, management and long-term archiving of data using all available storage technologies. Read more at www.point.de.

ABOUT NETAPP

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