FORTUNE 20 GLOBAL TELECOMMUNICATIONS COMPANY SELECTS VERSITY FOR S3 TO TAPE SOLUTION

Versity

SOLUTION FOCUS

- Scalable, performant, S3 object to tape archiving
- On-premises cloud offering

CHALLENGE

- Seamless, transparent ability for employees to archive and retrieve data
- Support for scalably archiving both file and object data to tape
- High write and read throughput
- Reduce or eliminate public cloud storage footprint
- Drive down cost of long term data storage

SOLUTION

- Versity Mass Storage Platform

KEY BENEFITS

- Scalable, high throughput S3 object archiving to tape
- Transparently archiving and retrieving both object and file data
- All data is visible from both POSIX and object interfaces
- Significant cost savings compared to public cloud and legacy internal systems

At a Glance

This Fortune 20 global telecommunications and media company has 135,000 employees and over 130 Billion in annual revenue. The company sought a scalable enterprise solution to store their rapidly growing collection of object and file data while significantly reducing data storage costs.

Overview

This public company operates critical infrastructure components and offers high value services to customers worldwide, including advanced networking, wired and wireless communications, internet search, email, and consumer media. Hundreds of millions of customers depend on their services every day for both individual services and business critical functions.
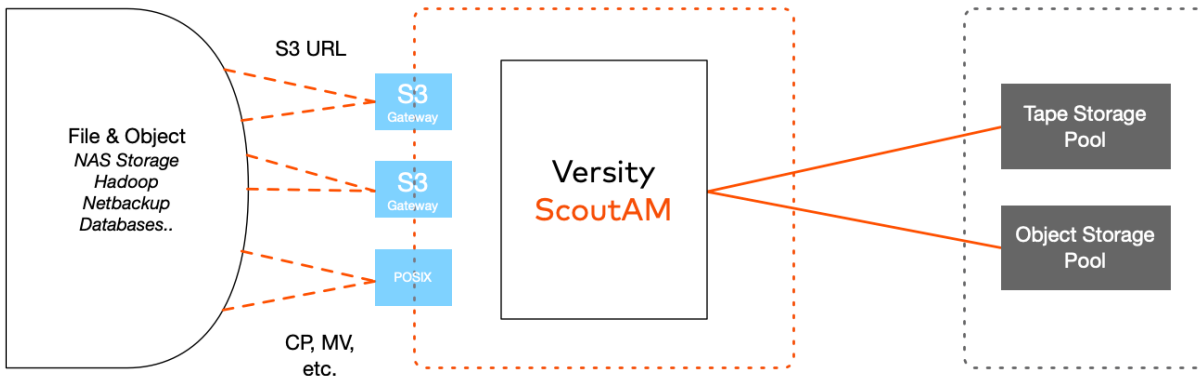
Challenges

The company has thousands of employees across the globe. Employees in different departments within the company were storing data on multiple independent storage systems. The company was facing escalating costs for this fragmented mass storage requirement and public cloud solutions were deemed to be prohibitively expensive.

The company's IT organization supports a large analytics cluster, which is Hadoop based and is used primarily for data analysis, artificial intelligence, and machine learning (AI/ML) workloads. The Hadoop Distributed File System (HDFS) on the cluster periodically nears capacity, which starts to slow down the system or cause it to be inoperable for periods of time. Continually purchasing more storage equipment became impractical with limited IT budgets and exponential data growth. The IT department did not have the option to purge data due to regulatory and business requirements.

The company urgently needed a way to efficiently store large amounts of both object and file data from different sources within the company, to achieve greater efficiency and lower total storage costs for the company.

The IT organization already understood that large scale tape storage is the absolute lowest cost data storage solution, and has other benefits, such as low power consumption and an air-gap for security. The IT team was looking for software that would enable scalable S3 access to their tape storage resources, which would enable an internal cloud scale cold storage service for employees.

- Many departments and applications storing and retaining data inefficiently
- Strong demand for an "internal glacier" storage service
- Retention periods supported by object or class
- Standard S3 interface

The company needed a solution to enable:
- Seamless, transparent ability to archive and retrieve data
- Support for scalable storage of file and object data to tape
- High read and write throughput
- Grouping of small objects and configurable policies
- Drive down cost of long term data storage

Solution

The company evaluated numerous solutions, completing an exhaustive analysis, product trial, and Proof of Concept (PoC). The trials tested the ability to scale up to high performance levels for archiving objects to tape. The tests also attempted to confirm that reads and writes were transparent, meaning that employees and applications did not need knowledge of the underlying systems or storage methodologies to store and retrieve data. After realizing that Versity could transparently support existing workflows, deliver superior performance for on-premises archiving to tape, and deliver enormous cost savings compared to public cloud, the company chose Versity.

Results

Implementing an on-premises Versity archive has delivered both immediate and long-term results. Using Versity's ability to archive both objects and files to tape, the company was able to deploy tape libraries to create an on-premise, internal cloud service for their organization that both legacy and modern applications are able to utilize. Employees throughout the organization can cost-effectively store and retrieve their objects and files without changing workflows. Both primary

data and secondary data are presented and available in the same way. The IT organization sees multi-GB/s ingest and archiving to tape on a regular basis in production. The Versity archiving solution has saved the company significant amounts of money and simplified the internal mass storage offerings.

Versity provides both POSIX and object interfaces for data ingest, so that users and systems throughout the organization can cost-effectively archive and retrieve objects and files without changing workflows. An added benefit is that users and

> "Versity was the only company that could scale to efficiently archive our S3 object and file data to tape. We have lowered storage costs and overcome the challenge of supporting existing applications and infrastructure. Versity delivered an excellent solution for our on premise mass storage system."

applications can change back and forth between POSIX and S3 interfaces, while always seeing the same data. There are hundreds of millions of files and objects visible from the same

namespace, without splitting data onto separate systems. This benefit has been incredibly helpful in enabling modern and legacy applications to work together on the same data sets, and it has simplified the overall archiving service for the company's IT organization.

Using the on-premises Versity mass storage platform, the company was able achieve significant savings on data storage costs. Another benefit to the IT organization is much more insight into the data that is archived. Centralizing the data has resulted in the potential for better collaboration and has enabled new initiatives for the company.

Versity cost-effectively solved the issue the company was experiencing with the data storage resources reaching capacity limits and becoming fragmented. With the Versity solution, the company's IT organization is able to archive data that is not immediately needed to a low cost, but still quickly accessible pool of tape storage. When the data is needed again, the application simply starts reading and Versity automatically retrieves the data from tape. Versity's ability to transparently archive and retrieve data to and from a low cost, high capacity tape system has been a game changer. It has allowed the company's IT organization to stop continually expanding existing storage systems.

Versity enabled the IT department to utilize tape storage to create a globally accessible and easy to use, standardized S3 internal cloud service. The company has removed significant cost form their data storage budget. The company's IT organization shared that Versity's ability to efficiently archive to tape was the only solution that met all their needs, and it was the highest performing and most capable of all the solutions that they investigated.

The company realized many benefits with Versity including:
- Scalable, high throughput mass storage solution for storing object data on tape using a standard S3 interface
- Transparently archiving and retrieving both object and file data
- All data is visible from both POSIX and object interfaces
- Significant cost savings compared to existing internal systems and public cloud