



Solution Brief

NetApp AltaVault Cloud-Integrated Storage

Boost recovery, cut costs, reduce risks, and back up to the cloud with AltaVault

Key Features

Efficient

Accelerates data protection by reducing data volumes by up to 90%.

Open

Integrates with the backup software you already use and all leading public and private cloud storage providers.

Secure

Keeps data encrypted at all times, reducing security and compliance risks in the cloud.

Simple

Go from zero to cloud protected in less than 30 minutes.

Business Challenge

Traditional backup and recovery solutions fall short because they are:

- **Too slow.** Users expect instant recovery and minimal data loss, but legacy backup and recovery strategies can't keep pace. As a result, many organizations fail to meet backup and recovery windows.
- **Too expensive.** As storage grows, companies struggle with the rising cost of protecting that data on premises. Additionally, bandwidth costs and constraints become more acute with larger datasets.
- **Too risky.** Many organizations still rely on tape, which increases risk exposure because of the potential for lost media in transport, increased downtime and data loss, and limited testing ability.
- **Too complex.** With an ever-increasing number of critical applications to protect, along with complex backup architectures, multiple backup apps, and error-prone legacy technologies, backup is incredibly complex.

AltaVault Solves Backup, Archive, and Restore Challenges

NetApp® AltaVault® (formerly SteelStore) enables customers to securely back up data to any cloud at up to 90% less cost compared to on-premises solutions. AltaVault gives customers the power to tap into cloud economics while preserving investments in existing backup infrastructure and meeting backup and recovery SLAs.

The Solution

Unparalleled efficiency

- **Industry-leading data reduction.** AltaVault uses inline deduplication and compression, resulting in up to 30:1 data reduction ratios. This means you store less data in the cloud and can get it there more quickly.
- **Network and cloud optimization.** Built-in WAN optimization and deduplication reduce the amount of data transported to cloud and speed transfer times by up to 4x. AltaVault intelligently throttles data, which saves you money (and time). QoS makes sure that data moves to and from cloud storage at the speed your business requires.
- **Faster data restoration.** AltaVault improves recoverability because 95% of restores occur from local cache. With intelligent prefetching, AltaVault restores data from the cloud within minutes. With AltaVault, customers can restore data up to 32x more quickly than with tape.

Enterprise scale on an open platform

- **Flexible deployment and scale.** Choose the offering that is right for you: physical, virtual, or cloud based in the AWS or Azure clouds. AltaVault appliances start as small as 2TB and scale up to 57PB of protected data in the cloud, making it the most scalable cloud-integrated storage on the market.

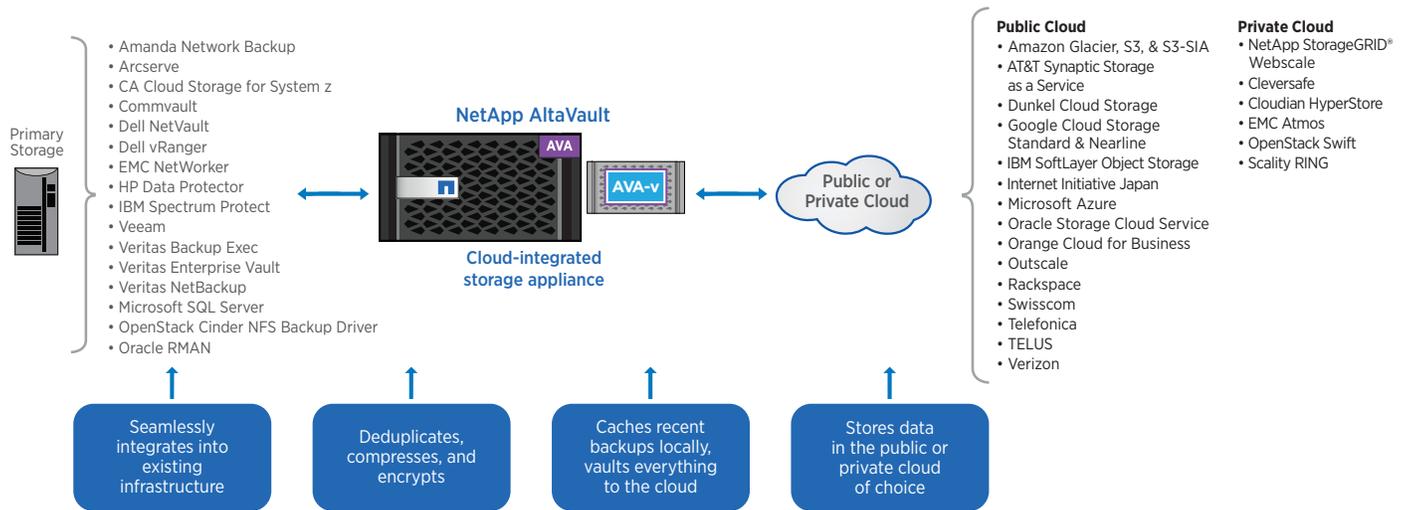


Figure 1) NetApp AltaVault provides seamless integrations with existing applications and cloud service providers.

- **Compatibility with existing backup software.** Do you love your backup software? So do we. AltaVault is compatible with all leading backup and archival software solutions, including EMC, Symantec, IBM, and Commvault. Don't waste time and effort ripping and replacing your backup software and retraining IT staff.
- **Cloud choice and agility.** Pick a cloud, any cloud, and AltaVault likely supports it. AltaVault supports 95% of all leading cloud storage providers and platforms on the market today. Cloud providers rise and fall, and you never want your data stuck with a cloud provider. AltaVault cloud agility allows you to free your data.

“King County is now using the cloud for storage and compute. A primary example: in the past year, we have started using NetApp AltaVault to back up to the cloud. This type of technology, combined with the utility of cloud storage, will reduce costs by allowing us to eliminate tape backups and associated operational complexity, while giving a more robust backup solution,” says Reid Swick, system architect, King County.

Ironclad security and compliance

- **Is encrypted and compliant.** Data is encrypted and secure at all times—in flight and at rest—using AES 256-bit encryption, compliant with FIPS 140-2 Level 1 (validation coming soon) and industry-standard TLS encryption.¹ Encryption keys can be managed locally with KMIP and never leave your data center.
- **Controls your data.** Confirm that only qualified employees can access data in AltaVault, with role-based access controls and integration with Terminal Access Controller Access Control System (TACACS) and Remote Authentication Dial In User Service (RADIUS). Use the management access control list to secure the appliance by exposing only the necessary protocols, ports, and networks.

- **Shrinks recovery time and data loss.** Reduce RTO by retrieving data more quickly in a disaster by accessing locally cached backups on the AltaVault appliance. Reduce RPO by immediately getting data off site so recovery points are as recent as your latest backup, rather than the last time tapes were shipped off site.
- **Prepares for disasters.** Recover on-premises workloads in the cloud during DR tests or declarations with the AltaVault cloud-based appliance in AWS and Azure.

Easy to deploy and manage

- **Deploy more quickly.** Get up and running with AltaVault in less than 30 minutes. In three simple steps, you can start sending data to the cloud.
- **Manage smarter.** Reduce tape management overhead and manual tasks that are error-prone and time consuming, allowing you to allocate valuable employee resources to other projects. Remote monitoring and management capabilities from a GUI-driven management dashboard give administrators complete control from across the data center or across the world.
- **Take advantage of world-class services and support.** Professional services, from NetApp and partners, can implement AltaVault in heterogeneous or NetApp environments to deliver an optimized solution that meets your specific needs. Support services help you achieve continuous operations, operational excellence, and improved cost efficiency.

1. AltaVault offers end-to-end security for data at rest and in flight with the NetApp Cryptographic Services Module. The module is currently undergoing FIPS 140-2 level 1 validation and is expected to complete the process in early 1H CY16.

AltaVault Lowers Adoption Barriers for Cloud Storage

Many organizations are excited by the prospect of leveraging cloud economics, but soon find themselves daunted by the many barriers associated with the public cloud. The AltaVault cloud-integrated storage appliance was designed to help customers vault over these barriers by:

- **Maintaining security and compliance in a multi-tenant environment.**

"We can't take chances with client data or our own data. NetApp AltaVault was the only viable way for us to adopt a cloud strategy to protect data while satisfying security requirements," says Scott E. Berterman, infrastructure architect, Riggs, Counselman, Michaels & Downes.

- **Easily managing large volumes of data, even with limited bandwidth.**

AltaVault deduplication reduced the amount of data stored by Metricon, an Australian home-building company, in the cloud from 39TB to just 7TB and copied the data to Azure in one week.

- **Enabling simple deployment for a faster cloud on ramp.**

"It was a straightforward install. Nothing complicated. Once we connected to Amazon Glacier, we pointed Backup Exec to the AltaVault appliance, and it just worked, says" Andrew Girin, IT technical team lead, Spot Trading.

- **Giving employees rapid access to data.**

"A huge advantage of AltaVault is how quickly we can restore data now. With tape, you can lose part of a week's data, depending on when you last backed up, which means you would lose the most recent information. With AltaVault, a full restore can be done within an hour or two and can be done from any location," says the global network manager of a global manufacturing company,

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To learn more about NetApp Professional and Support Services, go to www.netapp.com/services.

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