



Solution Brief

NetApp AltaVault

Cloud-integrated backup and archiving for Microsoft Azure

Key Benefits

Efficient

Uses inline deduplication and compression for up to 30:1 data-reduction ratios

Open

Integrates with the backup software that you already use

Secure

Keeps your data encrypted, reducing risks to both security and compliance in the cloud

Simple

Enables you to go from zero to cloud protected in less than 30 minutes

The Challenge

Traditional backup and recovery strategies can't keep pace with the requirements of users today because these strategies 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 the 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.

NetApp AltaVault and Microsoft Azure Cloud Storage

NetApp® AltaVault™ cloud-integrated storage enables you to securely back up data to Microsoft Azure, Azure Cool Blob Storage, or Azure GovCloud—and lower backup costs up to 90% compared to traditional on-premises solutions. AltaVault gives you the power to tap into cloud economics while preserving your investments in existing backup infrastructure and while meeting backup and recovery service levels.

Microsoft is a large and diversified technology vendor, with a significant footprint in enterprise computing, that is increasingly focused on delivering its software capabilities through Azure cloud services. Microsoft Azure offers Hyper-V virtual machines, with multitenant storage, along with many infrastructure-as-a-service (IaaS) and platform-as-a-service (PaaS) capabilities, including Office 365, Blob Storage and a Content Delivery Network, and optional enterprise-grade support. The Azure Marketplace offers third-party software and services. Azure Storage offers two storage tiers for Blob Storage (object storage): The Azure hot storage tier is optimized for storing data that is accessed frequently, and the Azure cool storage tier is optimized for storing data that is infrequently accessed and long-lived, with a lower availability SLA and higher access costs as trade-offs for much lower storage costs. Compared with other cloud suppliers, Azure has the largest number of data center locations or “regions.” There are multiple Azure regions in the United States, Canada, Australia, India, and Japan, as well as regions in Ireland, the Netherlands, Hong Kong, Singapore, and Brazil. There are also two regions for the U.S. federal government, referred to as GovCloud, with dedicated isolated instances of Azure, Office 365, Blob Storage, and other cloud services.

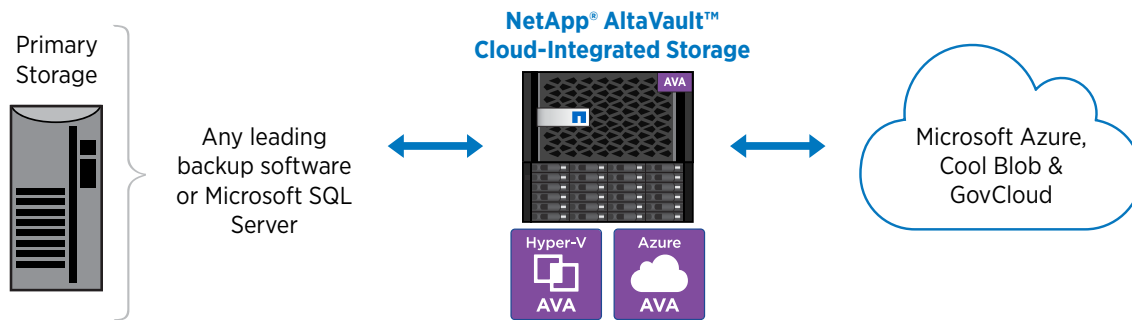


Figure 1) Back up data to Microsoft Azure with NetApp AltaVault.

The Solutions

Backup and recovery

Start as small as 2TB and scale up to 57PB of protected data in the cloud with AltaVault virtual and physical appliances. AltaVault virtual appliances for Microsoft Hyper-V are an optimal solution for medium-sized businesses that want to get started with cloud backup. They're also excellent for enterprises that want to protect branch offices and remote offices with the same level of protection that they obtain in the data center. AltaVault virtual appliances provide the flexibility of deploying onto heterogeneous hardware while still providing all the features and functionality of hardware-based appliances.

AltaVault physical appliances are among the industry's most scalable cloud-integrated storage appliances, with capacities ranging from 32TB to 384TB of usable local cache. Enterprises often deploy AltaVault physical appliances in their data centers to protect large volumes of data. These datasets typically require extremely high levels of performance and scalability. AltaVault physical appliances are built on a scalable and an efficient hardware platform that is optimized to reduce data footprints and to rapidly stream data to the cloud.

Cold storage and archives

AltaVault can be configured in cold storage mode. In this mode, which is optimized for infrequently accessed data, or archives, the AltaVault appliance uses the local cache for metadata only, increasing the scalability of the solution by more than 5x. This results in minimal management and operational costs for cold data, while also allowing for fast and simple access to data when needed.

Disaster recovery

For organizations without a secondary disaster recovery location, or for companies looking for extra protection with a low-cost tertiary site, cloud-based NetApp AltaVault appliances on Microsoft Azure allow you to quickly recover data after a disaster. By using on-premises AltaVault physical or virtual

“By using Microsoft Azure and NetApp AltaVault, we are spending 2 hours a week instead of 10 on backup work.”

George Chen, Server Manager
Metrixon Information Technology Group

appliances, data is seamlessly and securely backed up to the cloud. If the primary site is unavailable, you can quickly spin up a cloud-based AltaVault appliance in Azure and recover data in the cloud. And with usage-based pay-as-you-go pricing, you pay only for what you use.

If you already have production workloads that run in the Azure public cloud, you know that protecting those workloads in the cloud is just as critical as if they were running on-premises. Cloud-based AltaVault appliances offer an efficient and secure approach to backing up cloud-based workloads. By using your existing backup software, AltaVault cloud-based appliances deduplicate, encrypt, and rapidly migrate data to long-term, low-cost cloud storage.

Learn more about AltaVault

Learn more about AltaVault and Microsoft Azure at <http://cloud.netapp.com/storage-solutions-for-azure>.

Test drive AltaVault on the Azure Marketplace at <https://azure.microsoft.com/en-us/marketplace/partners/netapp>.

About NetApp

Leading organizations worldwide count on NetApp for software, systems and services to manage and store their data. Customers value our teamwork, expertise and passion for helping them succeed now and into the future.

www.netapp.com