



BROCHURE

Fulfill the promise of the cloud

NetApp Solutions for Amazon Web Services: Simplify. Scale. Save.



NetApp® Cloud Volumes Service benefits¹ include:

- Easy and seamless migration of data to AWS.
- 20 times faster performance.
- Rapid deployment: Go from zero to 100 TB in 8 seconds.
- The ability to scale up or down, on demand.

¹Speeds are based on NetApp internal testing

Many organizations are migrating on-premises workloads to the cloud to increase efficiency, take advantage of cloud economics, and reduce or eliminate the hardware and management costs of data centers. Today, your organization can migrate to the cloud with the same performance and scale as on premises.

NetApp® provides solutions for Amazon Web Services (AWS) to help you meet rapidly changing business demands. NetApp's cloud portfolio enables you to meet these business objectives in a dynamic world. With solutions such as NetApp Cloud Volumes Service for AWS and NetApp Cloud Volumes ONTAP®, you maintain control over your data and can seamlessly manage data across your AWS environments.

NetApp Cloud Volumes Service for AWS: a fully-managed file service

NetApp Cloud Volumes Service for AWS is a simple, fully-managed data service for your cloud applications that delivers high performance, reliability, and scale. Cloud Volumes supports multiple file protocols, so you can easily run file-based applications, including legacy apps without refactoring them, on the cloud. With the advanced data management and services that NetApp Cloud Volumes delivers to cloud applications, your technology stack becomes rocket fuel for innovation. Cloud Volumes Service matches your applications' need for performance and scale with the flexibility to automatically

grow or shrink capacity and performance as necessary. Guaranteed service level agreements (SLAs)² ensure performance and availability.

NetApp Cloud Volumes Service for AWS offers:

High performance: A simple cloud service that allows you to deploy 100 TB in 8 seconds and deliver 20 times the performance compared to previous roll-your-own methods.¹

A flexible and comprehensive service: Leverage multiprotocol file services with NFSv3, NFSv4.x³, and SMB support to migrate and run any workload (file services, analytics, data lakes, databases, and DevOps) on AWS. Automate your environment with REST APIs. Take advantage of AWS file services for high performance computing apps, Windows file shares, analytics, and databases.

Scalability: Automatically match capacity and performance to application needs. Deploy persistent storage (for data lakes, cloud-native apps, or to migrate enterprise applications to the cloud) without adding complexity using this fully-managed service.

1. Speeds are based on NetApp internal testing.
2. Guaranteed SLAs so in the event any of the "Service" does not meet the Service Levels for performance and/or availability, you will be eligible to receive a "Service Credit" from NetApp for the future use of the Service.
3. Coming soon.



Efficiency: Optimize costs and streamline business operations. Pay only for what you consume. Create snapshots and clones of volumes, restore from existing snapshots, and use the NetApp Cloud Sync service to do one-time migrations or to continuously synchronize your data.

Data protection: Easily protect data stored in Cloud Volumes Service using hourly, daily, weekly, and monthly snapshot scheduling. Use Cloud Backup Service to backup or archive data on Amazon S3 storage.

NetApp Cloud Volumes Service for AWS: Migrate file workloads to the cloud with confidence

You may have found it difficult to migrate workloads that require file services to the cloud in the past, perhaps because you need SMB or NFS support—or multiprotocol access to the same volumes. Cloud Volumes Service supports SMB, NFS, and multiprotocol file services so users and applications can access the same shared files with either protocol. You can move to the cloud without refactoring applications or disrupting established workflows.

With Cloud Volumes Service, you can migrate any workload quickly and confidently simplifying administration, while saving time and reducing costs.

With NetApp Cloud Volumes Service for AWS, you can:

- Migrate more workloads without refactoring.
- Run workloads on AWS with guaranteed SLAs² for performance, availability and durability.
- Get out of the business of managing data centers.
- Achieve scale and efficiency.
- Get measurable time and cost benefits.
- Protect data to your enterprise standards with Cloud Backup Service

NetApp Cloud Volumes ONTAP: Full data control

You need to control what happens to your data, no matter where it resides. When you migrate your applications to the cloud, you are still responsible for managing and protecting your business data.

Organizations have spent years establishing the appropriate levels of data performance, protection, and security in the data center to support their applications. As you move to the cloud, you must maintain the same level of control over your data that you have in an on-premises environment.

Cloud Volumes ONTAP helps you manage your data while reducing your cloud storage spend by up to 70%.

NetApp Cloud Volumes ONTAP:

- Creates a virtual NetApp appliance with advanced data management capabilities.
- Runs on Amazon Elastic Compute Cloud (Amazon EC2).
- Uses Amazon Elastic Block Store (Amazon EBS) as the underlying disk layer.

Related NetApp solutions

NetApp Kubernetes Service (NKS)

The NetApp Kubernetes Service is a simple way to deploy a Kubernetes cluster in AWS, requiring just three clicks. You can customize a cluster for your needs by choosing from a variety of popular software options for Kubernetes environments, including Prometheus, Istio, and Trident; upgrading to new software versions is as easy as a mouse click. NetApp Kubernetes Service makes it simple to deploy and manage production-ready Kubernetes clusters across multiple public clouds.

NetApp Cloud Tiering

NetApp Cloud Tiering service allows you to extend your on-premises data center to AWS cloud. It allows you to move

KEY CAPABILITIES OF NETAPP CLOUD VOLUMES ONTAP:

Storage efficiency: Consume less storage capacity and lower your cloud storage spend with built-in thin provisioning, deduplication, data compression, and inline data compression. Use NetApp SnapMirror® technology to sync data between cloud and on-premises locations.

File-sharing services: Manage file shares according to business requirements. Cloud Volumes ONTAP supports all versions of NFS and SMB.

Cloud data management: Manage data centrally to promote the most appropriate use of storage resources. Allocate block storage to Amazon EC2 instances, and reduce costs by tiering infrequently-used data automatically to S3.

Efficiency and speed: Create snapshots of your data without requiring more storage and without affecting application performance. Instantly create writable clones of existing storage volumes for development and testing using NetApp FlexClone® technology.

Data replication and backup: Incrementally synchronize on-premises applications with Cloud Volumes ONTAP using SnapMirror data replication. Create a cloud-based backup solution with NetApp SnapVault® software.

Use of encryption to secure data: Manage encryption of at-rest storage while you retain complete control of encryption keys.

infrequently-used data automatically to lower-cost storage, leveraging object storage on Amazon S3 as a capacity tier. You also benefit by freeing up high-performance storage for more workloads on-premises. Cloud Tiering uses smart, auto tiering technology so as soon as data needs to be accessed it can be transferred back to the highly-performant storage systems on-premises seamlessly.

Cloud tiering is a method for moving data between different storage systems or formats so that the data resides in the tier that offers the best cost/performance benefits at any given time—improving your business agility.

NetApp Cloud Backup Service

Cloud Backup Service is a fully-managed integrated add-on feature for Cloud Volumes Service for AWS. It delivers backup and restore capabilities for protection and long-term archive of your cloud data. Your data is stored on Amazon S3, and no infrastructure needs to be deployed or managed on premises or within your virtual private cloud. Cloud Backup Service complements Cloud Volumes Service Snapshots, so you have a choice of data management capabilities that matches your RTO and RPO requirements. It can effectively improve RTO and RPO beyond what

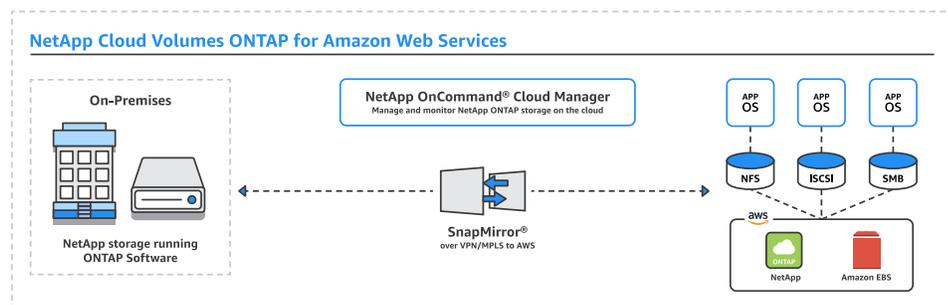
cloud provider and third party solutions offer today, ensuring that users will find success when measured on their restore responsibilities. Cloud Backup Service provides a fully featured catalog that allows you to selectively recover file objects from backups, rather than an entire volume. This gives you unmatched flexibility to define and orchestrate a highly efficient recovery strategy. You do not need to mount the backup and crawl through content looking for the file that you need. Instead, browse and search capabilities provide near real-time access to the information, without the need to access the actual backup data until you are ready to restore it. This simplifies the recovery process and saves you time and money.

NetApp Cloud Sync Service

If you need to copy or synchronize data from data sources to a target object store or to a file system on AWS, NetApp Cloud Sync offers fast, secure, and automated synchronization. Use it for data migration, data tiering, data consolidation, big data analytics on AWS, migration, and replication.

NetApp SaaS Backup

Although some SaaS providers offer comprehensive disaster recovery from disruption to data center operations, they do not guarantee the integrity of your



Use NetApp Cloud Volumes ONTAP to build an enterprise storage solution directly on AWS and manage your cloud storage the same way that you manage NetApp storage within your on-premises infrastructure.

data against accidental deletion, virus or malware, hackers, or ransomware attacks. So, your data might not be fully protected. NetApp SaaS Backup for Microsoft Office 365, provides superior data protection for your Exchange Online, SharePoint Online, OneDrive, Groups, and Teams data. NetApp SaaS Backup for Salesforce protects your critical Salesforce data and metadata. You can protect business-critical SaaS data by using automated and on-demand backup and granular restore.

NetApp Data Availability Services

Data protection in hybrid cloud environments creates new challenges and new opportunities. NetApp Data Availability Services lets IT generalists intuitively orchestrate data movement from primary to secondary to Amazon S3 storage. A scalable backup catalog makes search and restore rapid and easy. Data that used to be stranded in an unusable backup format can be fully utilized in the cloud for key activities such as Dev/Test, QA, analytics, and more.

Integrate. Optimize. Protect.

At NetApp, we are committed to continually fueling business growth and innovation by delivering data-rich experiences through workload migration and new application deployments on AWS. We have a proven track record of providing superior enterprise data protection.

NetApp shares a common vision with AWS, obsessing over our customers' needs and delighting them with innovation. We continue to listen to our customers, and by delivering solutions that outpace

an evolving landscape of cloud data management requirements, we empower our customers to achieve their cloud mandates. We care deeply about providing technology for workloads that are highly secure, scalable, and flexible, while giving customers a variety of purchasing and deployment options.

Get started today

Visit [NetApp Cloud Central](#) to request a Cloud Volumes Service demo. Visit [AWS Marketplace](#) to start a [free trial](#) of NetApp Cloud Volumes ONTAP for AWS and explore the entire family of NetApp solutions for your cloud workloads.



About NetApp

NetApp provides a full range of cloud data services that simplify management of applications and data across cloud and on-premises environments to accelerate digital transformation. Together with its partners, NetApp empowers global organizations to unleash the full potential of their data to expand customer touchpoints, foster greater innovation, and optimize their operations. For more information, visit <https://cloud.netapp.com/aws-partners>.