



## SOLUTION BRIEF

# NetApp Solutions for Amazon Web Services

### Key Benefits

#### Accelerate

Innovate more quickly and be more responsive with a line of storage and data management solutions for AWS

#### Optimize

Choose the right NetApp and AWS resources for efficiency and business impact

#### Control

Maximize your data stewardship while using AWS cloud

### The Challenge

The pace of change in business and IT is relentless—to stay on top, today's leaders must modernize IT to gain agility. For many executives, instant, elastic, and affordable resources from Amazon Web Services (AWS) have become too attractive to ignore. Some companies have even instituted AWS and cloud mandates for their IT organizations.

The use of cloud can transform an enterprise. But to realize the full benefits, the organization must be confident that the transformation comes without increasing complexity and risk. How should IT store, manage, and protect data while it uses the cloud? How do you integrate the cloud with on-premises environments? How can you overcome these challenges without endless planning sessions that ruin cloud agility?

### The Solution: Transform Your Enterprise Faster with NetApp and AWS

NetApp partners with AWS to bring you a flexible line of hybrid cloud solutions that help meet business objectives in a changing world. Whether you're considering AWS to meet a cloud-first mandate, extend existing workloads to the cloud, or match resources to utilization and reduce costs, NetApp can help you in the following ways.

#### Accelerate innovation, time to market, and your cloud on-ramp

- **Use AWS for more apps and workloads.** Run backup, archival, and elastic workloads more efficiently across a hybrid cloud.
- **Move to the cloud faster with lower costs and risks.** Get started quickly with a pay-as-you-go offering from the AWS Marketplace; it's easy to upgrade or downsize as your business needs and requirements change.
- **Save time and minimize training for IT staff.** Use the same proven data management tools for AWS, hybrid cloud, and on-premises storage.

#### Optimize your resources for efficiency and business impact

- **Reduce costs and save time.** Store and move less data during your cloud transformation and on an ongoing basis, thanks to NetApp® storage efficiency features such as compression and deduplication.
- **Move data where it has the most value and achieve optimal cost.** Select the right AWS and NetApp infrastructure and then quickly move, manage, or sync data between the cloud and on-premises storage.

#### Maximize data stewardship

- **Broaden your security, compliance, and sovereignty capabilities** by combining NetApp and AWS.
- **Control your data** with cloud native, hybrid cloud, and on-premises data storage solutions for AWS.
- **Encrypt data** at rest or in motion to or from the cloud.



NetApp Platinum Partner

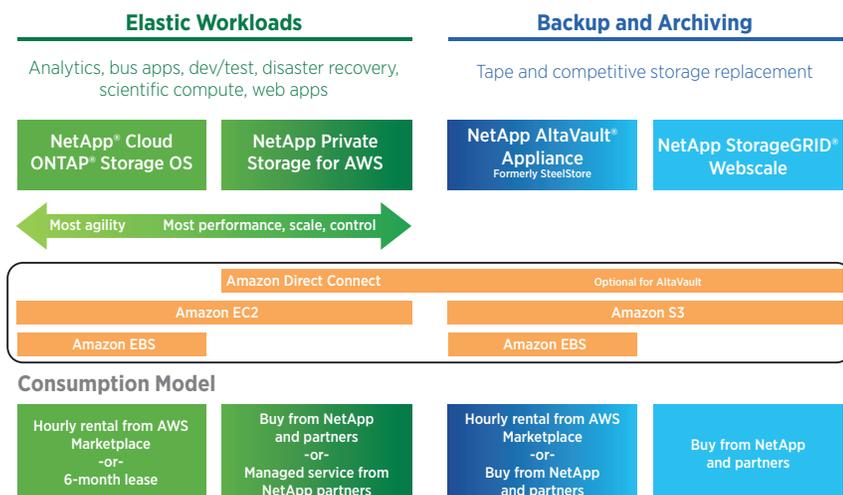


Figure 1) NetApp solutions for AWS.

### Run Elastic Workloads on NetApp and AWS

NetApp offers two options for organizations that need primary file storage for elastic workloads, such as business and web apps, development and testing, analytics, scientific computing, and production workloads or disaster recovery (DR).

#### Get started quickly with NetApp Cloud ONTAP

It can be difficult to justify a capex purchase for a new project. For superior agility, store your data in AWS cloud with the NetApp Cloud ONTAP® storage operating system. You can leverage the speed and flexibility of AWS for your compute and storage needs and to get up and running quickly.

#### Enhance cloud storage with the power of enterprise data management

NetApp data management and storage efficiency enhance service levels, save time for IT, and reduce storage and management costs. For example, with Cloud ONTAP, you can:

- Save up to 90% on storage capacity with NetApp space-efficiency technologies.
- Run traditional enterprise apps written for file storage and NAS in the cloud, without rewriting them.
- Provide better multiregional business continuity and DR at a lower cost.
- Pay for what you need, when you need it.

#### Get your storage environment running in minutes

Just point and click to deploy Cloud ONTAP from the AWS Marketplace. It's easy when you use OnCommand® Cloud Manager, a free cloud storage management environment from NetApp. You will receive an enterprise storage system with the NetApp clustered Data ONTAP® operating system running on top of Amazon Elastic Block Store (EBS) cloud storage with Amazon Elastic Cloud Compute (EC2).

### Gain cloud compute benefits for demanding apps and workloads with NetApp Private Storage (NPS) for Amazon Web Services (AWS)

Many enterprise apps and workloads demand extremely high performance, scale, availability, or control. You may be required by law or by company policies to meet the strictest possible compliance, privacy, security, or sovereignty requirements. This doesn't mean that these apps and workloads have to stay on premises.

NPS for AWS puts your data "next to" AWS cloud in tier 1 data centers such as Equinix, eircom, and e-shelter with connectivity provided by AWS Direct Connect—a secure, dedicated, high-speed connection that outperforms the Internet.

By combining dedicated enterprise storage with AWS cloud compute, you get the benefits of both with fewer tradeoffs. Your AWS compute feels local while your data is protected. NPS for AWS lets you do the following.

#### Use Amazon EC2 without sacrificing performance, availability, or control

- Cut compute costs for variable workloads that require hundreds of thousands of input/output operations per second.
- Achieve the same high availability and comparable performance to that received with NetApp storage on premises<sup>1</sup>.
- Connect to new clouds any time, without moving your data<sup>2</sup>.

#### Meet the strictest data compliance, privacy, and sovereignty requirements

- Maximize data stewardship by owning your storage, or use an opex-only managed service from a NetApp partner.
- Make data sovereignty a nonissue by knowing where your data resides at all times.
- Gain superior physical security from our tier 1 data center partners to meet the strictest requirements.

1. Clustered Data ONTAP software and NetApp storage in a hybrid cloud architecture offer performance comparable to that received on premises.

2. NPS for AWS is a member of the multicloud NetApp Private Storage for Cloud family, and is designed for multicloud connectivity. To attain full multicloud potential, NPS for AWS must reside in an Equinix IBX Data Centre and be connected to the Equinix Cloud Exchange.

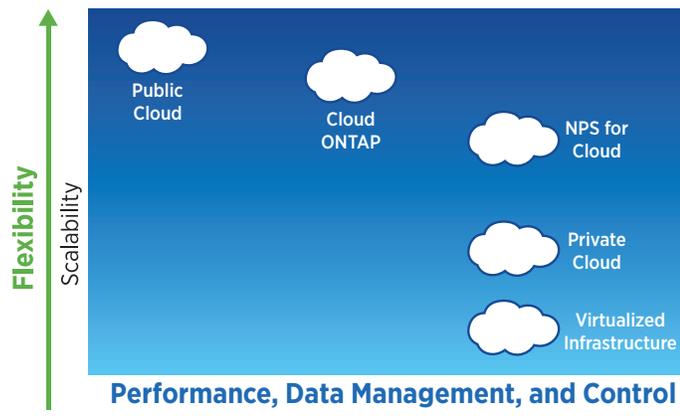


Figure 2) Public clouds offer flexibility. Private clouds offer control. NetApp solutions for AWS are designed to offer both with fewer tradeoffs.

### Gain superior disaster recovery and multiregion business continuity at a lower cost

With Cloud ONTAP or NPS for AWS for DR, you can:

- Obtain and pay for redundant servers in remote locations only when you really need them.
- Achieve multiregion continuity and DR with little management from IT. Easily sync data between the cloud and on-premises storage and across regions.
- Maximize your ROI. Popular secondary uses for DR systems include development, testing, sandboxes, reporting, and training.

### Combine Cloud ONTAP and NPS for AWS

Start with Cloud ONTAP. You can easily upgrade to a larger, bring-your-own-license (BYOL) version of Cloud ONTAP for enterprises, or deploy to NPS for AWS or NetApp storage on premises as your projects grow and mature.

### NetApp Solutions for Efficient Backup, Recovery, and Archiving

As storage grows, companies struggle with the rising cost of protecting data on premises. Traditional solutions are slow, expensive, and risky, and they fail to provide the service levels that end users expect or the simplicity that IT needs. Other challenges include:

- Disparate, siloed archives require more active management and time from IT staff.
- Organizations that rely on tape risk losing media in transport, risk increasing downtime and losing data, and have limited ability to test their solutions.
- Bandwidth costs and constraints become even more acute as data grows.

Highly scalable, low-cost, reliable cloud backup and archival solutions scale as you grow and are an optimal replacement for outdated systems. Yet native cloud storage doesn't offer the best recovery time or recovery point objectives, the lowest costs, or

the instant recovery that end users expect. And it doesn't offer the simplified management that organizations need to scale. As a result, many organizations still miss backup and recovery windows and struggle to manage exponential data growth and costs. NetApp solutions are designed to fill this gap.

### Back up and archive with NetApp AltaVault

NetApp AltaVault® cloud-integrated storage enables customers to securely back up data to Amazon Simple Storage Service (S3) and Glacier—at up to 90% lower cost than with on-premises solutions. Choose the AltaVault offering that's right for you: physical, virtual, or cloud-based appliances.

Get started quickly by choosing one of the AltaVault cloud-based appliances on AWS Marketplace. For under two dollars an hour, you can protect up to 2.4PB.

#### NetApp AltaVault: efficient, open, secure, and simple

- Reduce data volumes by up to 90% with 30:1 data-reduction ratios thanks to NetApp deduplication and compression.
- Enjoy affordable cloud backups, yet restore in minutes.
- Simplify management. AltaVault integrates with your existing storage and backup software, automatically sends data to Amazon S3 and Glacier, and takes you from zero to protected in less than 30 minutes.
- Secure data at all times—in flight, in the cloud, and on premises.

### Archive with NetApp StorageGRID Webscale

Business and compliance requirements of some organizations mandate that data outlive the underlying storage infrastructure. NetApp StorageGRID® Webscale is an optimal solution for organizations that want to simplify management and reduce costs for long-term archives of unstructured and web data. In addition, StorageGRID Webscale is compatible with S3 protocols, enabling fluid data movement between AWS S3 and on-premises storage.

# NetApp Solutions for AWS

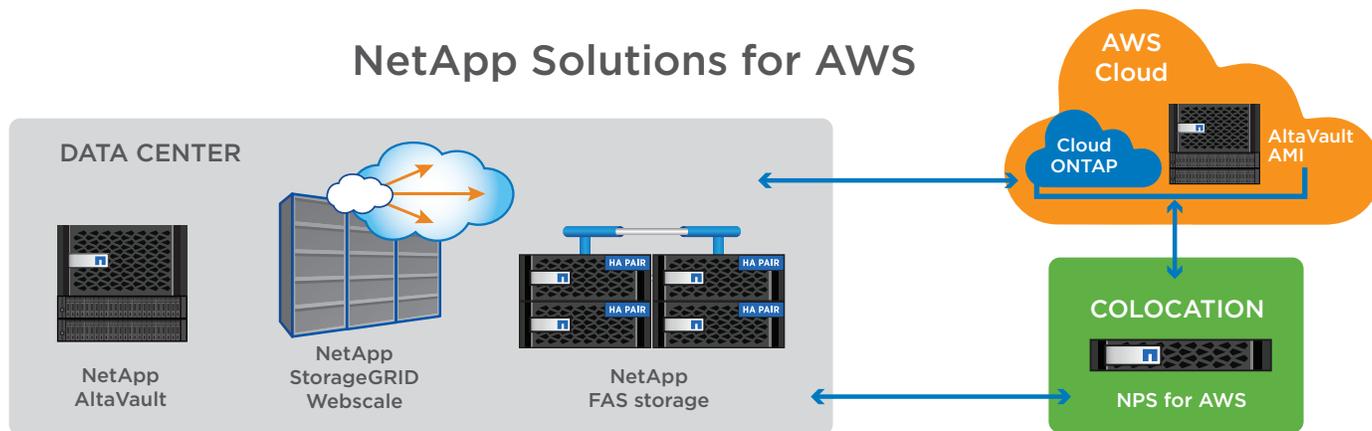


Figure 3) NetApp Solutions for AWS.

## StorageGRID Webscale: simple, efficient, durable, and flexible

The massively scalable, globally distributed StorageGRID Webscale object storage solution lets you store large amounts of data reliably and cost effectively across locations and decades. Best of all, it simplifies management so that you can free up IT staff to focus on more strategic initiatives. StorageGRID Webscale enables you to:

- Leverage the S3 protocol and tier and access data across on-premises storage and Amazon S3.
- Replace disparate archives with a single software-defined solution that manages heterogeneous storage, including NetApp, Amazon S3, and third-party storage.
- Automatically optimize data location based on your requirements for cost, performance, durability, and availability.

**Run apps created for Amazon S3 on premises.** If you want to explore alternative cost models, you can use StorageGRID Webscale to run cloud-native applications written for S3 on premises.

## Combine AltaVault and StorageGRID Webscale

For durable, cost-effective private cloud archives at web scale, use the AltaVault appliance to send data to StorageGRID Webscale with an option to seamlessly tier to Amazon S3.

## Try Our Solutions for Free

Start with a test drive and experience for yourself the value of our solutions.

Learn more about a one-hour test drive of Cloud ONTAP or NetApp Private Storage for AWS from the AWS Test Drive Program: [bit.ly/ntap-testdrive](http://bit.ly/ntap-testdrive).

Longer evaluations are available from NetApp Hybrid Cloud Labs or the AWS Marketplace. NetApp storage and software are provided for free. Bring your AWS account to cover the cost of AWS resources that you use. Get more information:

- Cloud ONTAP: [bit.ly/Explore\\_CloudONTAP](http://bit.ly/Explore_CloudONTAP)
- NPS for AWS: [bit.ly/POC\\_lab](http://bit.ly/POC_lab)
- AltaVault: [www.netapp.com/AltaVaultTrial](http://www.netapp.com/AltaVaultTrial)

## Where to Buy

- NetApp Cloud ONTAP and AltaVault cloud-based appliances are available on the AWS Marketplace: [bit.ly/NetApp\\_AWS\\_Market](http://bit.ly/NetApp_AWS_Market).
- For all other solutions, contact a NetApp partner to purchase.

## About NetApp and AWS

By combining NetApp and AWS, you get best-in-class solutions from two industry leaders. Learn more about our partnership and joint solutions at [bit.ly/NetApp-AWS](http://bit.ly/NetApp-AWS).

AWS is the highly reliable, scalable, low-cost cloud infrastructure platform that is the foundation and backbone of the global Amazon.com retail business. In addition, this infrastructure powers hundreds of thousands of businesses in 190 countries worldwide.

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.