



Solution Brief

NetApp Private Storage for Cloud

Your cloud, your terms: use multiple industry-leading clouds and maintain complete control over your data

Key Benefits

Quick and Easy Multicloud Access

Connect to many clouds, switch any time without moving your data.

Own and Control Your Data

Maintain complete control of your data on dedicated, private NetApp® storage.

Cloud Benefits with Proven Enterprise Storage

Get cloud elasticity, storage efficiency, and savings with the performance and availability of proven enterprise storage.

The Multicloud Challenge

Thanks to continuous innovation from cloud providers, companies are faced with a dazzling array of continually evolving choices. The savings from infinite, elastic, affordable public clouds are impossible to ignore. Major cloud providers continually add capabilities and lower the price points of their offerings.

In today's rapidly changing business environment, how can you tell which clouds and cloud types are right for your organization now and in the future? Wouldn't it be great to use a public cloud for more workloads, even those with sensitive data and compliance requirements?

Your Cloud, Your Terms

Instead of searching for one cloud to meet all your needs, why not opt for a more flexible solution that lets you choose the right clouds for business at hand?

Quick and Easy Multicloud Access

With NetApp Private Storage (NPS) for Cloud solutions, you keep your data on NetApp storage in close proximity to the cloud. You get the freedom to connect to the clouds you want while maintaining complete control of your data on your own dedicated, private NetApp storage systems.

Expand your cloud choices

Choose from an expanding global network of cloud service providers, including:

- Amazon Web Services
- Microsoft Azure
- SoftLayer, an IBM Company

With the NPS for Cloud approach, your NetApp storage is located in Equinix data centers, next to major networks and in close proximity to all of those major clouds, with more to come. Establishing secure, dedicated, high-speed connections to all of those clouds is quick and easy. Dedicated connections in Equinix outperform and bypass the Internet.

Match your clouds to your workloads

With access to multiple clouds, you can match your clouds to your workloads and choose the right mix of clouds for business at hand. For example, you may decide to run an analytics application in Amazon Web Services, but prefer to use Microsoft Azure to cloudburst from your existing on-premises Microsoft infrastructure.

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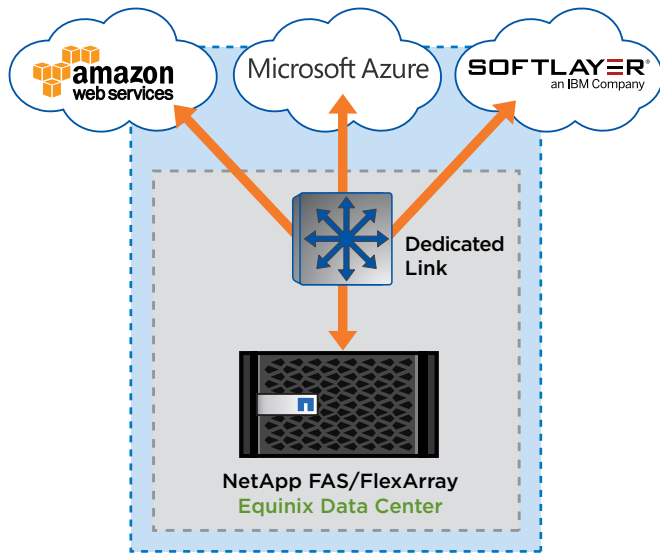


Figure 1) Once you make your first cloud connection in an Equinix colocation facility, it's easy to add new clouds or switch clouds without moving your data.

Eliminate lock-in and costly data migrations

NPS for Cloud eliminates time-consuming, costly data migrations that cause cloud lock-in. You can turn off connectivity to one cloud and spin up connectivity to another in minutes without having to move your data.

Diversify risk

Using more than one cloud to run your applications reduces business risks. If the first cloud does not respond, your application can instantly move to a second one.

Maximize your cloud buying power

As major competitors continue to innovate on price and feature set, the NPS for Cloud approach puts you in the driver's seat to get the service, capabilities, and price you want from your cloud providers.

Maintain Complete Control over Your Data for Data Compliance and Sovereignty

When you control your storage, you can meet the strictest possible data compliance and sovereignty requirements because you know where your data lives at all times. With advanced data protection features such as NetApp SnapLock® technology and NetApp disk encryption, you can achieve compliance standards in even the strictest industries.

Move your data any time

NetApp ONTAP® makes it easy to move data between any NetApp FAS/AFF-based infrastructures, including private, public, and hybrid clouds. You can change your mix of public and private cloud resources to meet dynamic business needs or move data back on the premises any time you want. NetApp SnapMirror® enables data movement to NetApp on the premises.

Gain world-class physical security for your data

Placing NetApp storage in Equinix gives you unmatched physical and environmental security for your data.

Protect your critical applications

Your business-critical applications will benefit from NetApp Integrated Data Protection features such as space-efficient Snapshot® copies for backup and rapid recovery.

The Hybrid and Multicloud Approach

Private cloud services let companies retain control, but they do not offer low-cost commodity compute power and scalability of public cloud services. And public cloud services, although they provide great flexibility and scalability, require giving up control and putting your data into the hands of external providers. No single cloud type is just right.

NPS for Cloud is unique because it blends private and public resources to give you the benefits of both.

Public cloud benefits with dedicated, proven enterprise storage

The NPS for Cloud approach gives you the elasticity and savings of a public cloud with the performance and availability of dedicated enterprise storage. When you connect your data to major public clouds with a dedicated high-speed connection to cloud compute in Equinix, your compute will feel local, while your data remains secure and protected in a colocation facility. Your enterprise applications will get the high performance and low latency they need. With NPS for Cloud, you leverage high-throughput, direct connections with latency as low as 1ms round trip and gain a 98% faster cloud import compared to SFTP standards.¹

Leverage the Experience of Industry Leaders

With NetApp Private Storage for Cloud, you can move your business to the cloud with confidence by leveraging the experience of industry leaders in storage and cloud computing. According to Gartner, Amazon Web Services and Microsoft are the industry leaders, and SoftLayer is a strong niche player.² Over one billion end users rely on cloud services built on NetApp; 77% of Fortune 500 companies have built their storage infrastructure on NetApp.

1. Source: Silverton Consulting Lab Validation Report: Multi-Cloud Data Mobility and Performance, 2016.

2. Magic Quadrant for Cloud Infrastructure as a Service, 2016.

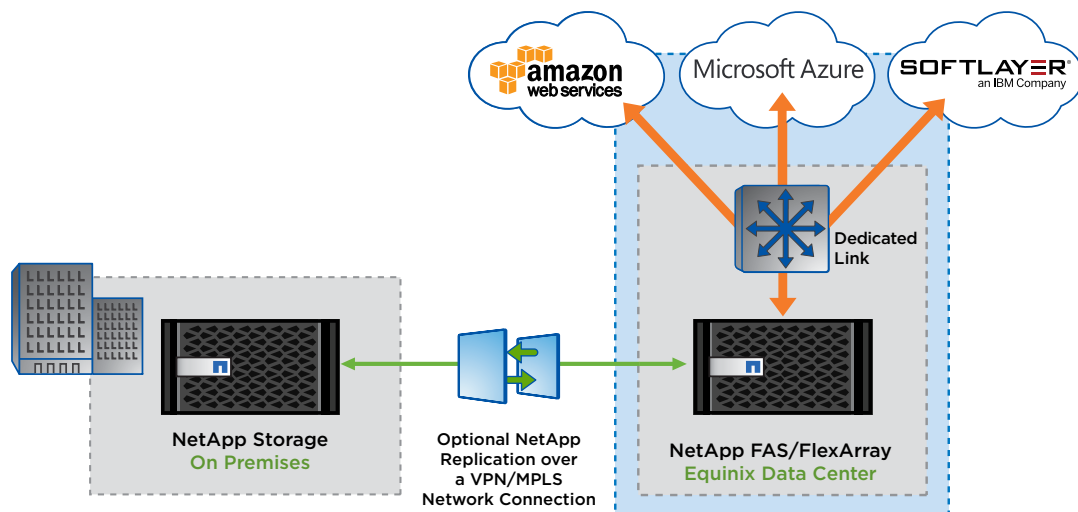


Figure 2) Moving data back on the premises is quick and easy with a dedicated VPN/MPLS line and NetApp SnapMirror® data replication software.

USE CASE	DESCRIPTION
Use cloud compute for enterprise workloads	Reap cloud elasticity with the speed, reliability, and availability of NetApp storage for enterprise workloads such as Oracle Database and Microsoft SQL Server.
Use cloud compute for variable workloads	You can match compute resources to utilization and avoid the large capex investments required for peak, unforecasted, or seasonal workloads with enterprise applications.
Accelerate innovation and time to market	Gain cloud agility for development and test. Then, run in the cloud you choose or deploy on the premises.
Provide disaster recovery at a lower cost	Deploy cost-effective single or multiregion, multicloud DR by activating your cloud only in test and failover scenarios.
Leverage temporary cloud resources for data center migration and consolidation	Maintain operations in the cloud as old data centers are decommissioned, then keep using the cloud or move your data to a new data center.
Adjust your capex-opex spending throughout your SaaS lifecycle	Pay as you go for cloud compute, then repatriate data to a private cloud based on NetApp as you grow.

Table 1) Common use cases.



Figure 3) Your NetApp systems are physically deployed in racks located within a cage in an Equinix data center. The minimum is two nodes for high availability.

About Amazon Web Services

Amazon Web Services offers a complete set of infrastructure and application services that enable you to run virtually everything in the cloud, from enterprise applications and big data projects to social games and mobile apps. Learn more at www.aws.amazon.com.

About Equinix

Equinix connects more than 4,500 companies directly to their customers and partners inside the world's most networked data centers. Today, businesses leverage the Equinix interconnection platform in 32 strategic markets across the Americas, EMEA and Asia-Pacific. Learn more at www.equinix.com.

About Microsoft Azure

Microsoft is the worldwide leader in software, services, and solutions that help people and businesses realize their full potential. The Microsoft Azure cloud offering lets Microsoft customers leverage their existing skills. Learn more at www.microsoft.com.

About SoftLayer, an IBM Company

SoftLayer, an IBM Company, provides cloud infrastructure as a service for customers of all sizes: from web startups to global enterprises worldwide. The company was acquired by IBM in 2013, and is part of IBM's Global Technology Services business unit. Learn more at www.softlayer.com.

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