



# **VMware Hybrid Cloud Use Cases**

## **NetApp Solutions**

NetApp  
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# Table of Contents

- VMware Hybrid Cloud Use Cases ..... 1
  - Use Cases for NetApp Hybrid Multicloud with VMware ..... 1
  - NetApp Solutions for Amazon VMware Managed Cloud (VMC) ..... 2
  - NetApp Solutions for Azure VMware Solution (AVS) ..... 2
  - NetApp Solutions for Google Cloud Virtualization Engine (GCVE) ..... 3

# VMware Hybrid Cloud Use Cases

## Use Cases for NetApp Hybrid Multicloud with VMware

An overview of the use cases of importance to IT organization when planning hybrid-cloud or cloud-first deployments.

### Popular Use Cases

Use cases include:

- Disaster recovery,
- Hosting workloads during data center maintenance, \* quick burst in which additional resources are required beyond what's provisioned in the local data center,
- VMware site expansion,
- Fast migration to the cloud,
- Dev/test, and
- Modernization of apps leveraging cloud supplemental technologies.

Throughout this documentation, cloud workload references will be detailed using the VMware use-cases. These use-cases are:

- Protect (includes both Disaster Recovery and Backup / Restore)
- Migrate
- Extend

### Inside the IT Journey

Most organizations are on a journey to transformation and modernization. As part of this process, companies are trying use their existing VMware investments while leveraging cloud benefits and exploring ways to make the migration process as seamless as possible. This approach would make their modernization efforts very easy because the data is already in the cloud.

The easiest answer to this scenario is VMware offerings in each hyperscaler. Like NetApp® Cloud Volumes, VMware provides a way to move or extend on-premises VMware environments to any cloud, allowing you to retain existing on-premises assets, skills, and tools while running workloads natively in the cloud. This reduces risk because there will be no service breaks or a need for IP changes and provides the IT team the ability to operate the way they do on-premises using existing skills and tools. This can lead to accelerated cloud migrations and a much smoother transition to a hybrid Multicloud architecture.

### Understanding the Importance of Supplemental NFS Storage Options

While VMware in any cloud delivers unique hybrid capabilities to every customer, limited supplemental NFS storage options have restricted its usefulness for organizations with storage-heavy workloads. Because storage is directly tied to hosts, the only way to scale storage is to add more hosts—and that can increase costs by 35–40 percent or more for storage intensive workloads. These workloads just need additional storage, not additional horsepower. But that means paying for additional hosts.

Let's consider this scenario:

A customer requires just five hosts for CPU and memory, but has a lot of storage needs, and needs 12 hosts to meet the storage requirement. This requirement ends up really tipping the financial scale by having to buy the additional horsepower, when they only need to increment the storage.

When you're planning cloud adoption and migrations, it's always important to evaluate the best approach and take the easiest path that reduces total investments. The most common and easiest approach for any application migration is rehosting (also known as lift and shift) where there is no virtual machine (VM) or data conversion. Using NetApp Cloud Volumes with VMware software-defined data center (SDDC), while complementing vSAN, provides an easy lift-and-shift option.

## NetApp Solutions for Amazon VMware Managed Cloud (VMC)

Learn more about the solutions that NetApp brings to AWS.

VMware defines the cloud workloads into one of three categories:

- Protect (including both Disaster Recovery and Backup / Restore)
- Migrate
- Extend

Browse the available solutions in the following sections.

### Protect

- [Disaster Recovery with VMC on AWS \(guest connected\)](#)
- [Veeam Backup & Restore in VMC with FSx for ONTAP](#)
- [Disaster Recovery \(DRO\) with FSx for ONTAP and VMC](#)

### Migrate

- [Migrate Workloads to FSxN datastore using VMware HCX](#)

### Extend

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## NetApp Solutions for Azure VMware Solution (AVS)

Learn more about the solutions that NetApp brings to Azure.

VMware defines the cloud workloads into one of three categories:

- Protect (including both Disaster Recovery and Backup / Restore)
- Migrate
- Extend

Browse the available solutions in the following sections.

**Protect**

- [Disaster Recovery with ANF and JetStream \(supplemental NFS datastore\)](#)
- [Disaster Recovery with ANF and CVO \(guest connected storage\)](#)
- [Disaster Recovery \(DRO\) with ANF and AVS](#)

**Migrate**

- [Migrate Workloads to Azure NetApp Files datastore using VMware HCX](#)

**Extend**

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## NetApp Solutions for Google Cloud Virtualization Engine (GCVE)

Learn more about the solutions that NetApp brings to GCP.

VMware defines the cloud workloads into one of three categories:

- Protect (including both Disaster Recovery and Backup / Restore)
- Migrate
- Extend

Browse the available solutions in the following sections.

**Protect**

- [Application Disaster Recovery with SnapCenter, Cloud Volumes ONTAP and Veeam Replication](#)
- [Application Consistent Disaster Recovery with NetApp SnapCenter and Veeam Replication to NetApp CVS on GCVE](#)

**Migrate**

- [Workload Migration using VMware HCX to NetApp Cloud Volume Service NFS datastore](#)
- [VM Replication using Veeam to NetApp Cloud Volume Service NFS datastore](#)

**Extend**

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