



Known limitations

Cloud Volumes ONTAP release notes

NetApp
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Known limitations

Known limitations for Cloud Volumes ONTAP in all cloud providers

Known limitations identify platforms, devices, or functions that are not supported by this release of the product, or that do not interoperate correctly with it. Review these limitations carefully.

The following limitations apply to Cloud Volumes ONTAP in all cloud providers: AWS, Azure, and Google Cloud.

Unsupported ONTAP features

Some ONTAP features are not supported with Cloud Volumes ONTAP, including but not limited to:

- Aggregate-level inline deduplication
- Aggregate-level background deduplication
- Disk maintenance center
- Disk sanitization
- FabricPool mirroring
- Fibre Channel (FC)
- Flash Pools
- Infinite Volumes
- Interface groups
- Intranode LIF failover
- MetroCluster
- Multi-admin verification

Enabling multi-admin verification on Cloud Volumes ONTAP will result in an unsupported configuration.

- RAID4, RAID-DP, RAID-TEC (RAID0 is supported)
- Service Processor
- SnapLock Compliance and Enterprise modes (only Cloud WORM is supported)
- SnapMirror Synchronous
- VLANs
- Onboard Key Manager (OKM) for encryption
- SMB Continuous Availability (CA)

[Continuously available SMB shares](#) for nondisruptive operations are not supported.

Maximum concurrent replication operations

The maximum number of concurrent SnapMirror or SnapVault transfers for Cloud Volumes ONTAP is 100 per node, regardless of the instance type or machine type.

Cloud provider snapshots must not be used for your backup and recovery plans

You shouldn't use your cloud provider's snapshots as part of your backup and recovery plan for Cloud Volumes ONTAP data. You should always use ONTAP Snapshot copies or third-party backup solutions to back up and restore data hosted on Cloud Volumes ONTAP.

[Learn how to use NetApp Backup and Recovery to back up and restore ONTAP data.](#)



ONTAP consistency points in the WAFL file system determine data consistency. Only ONTAP can quiesce the WAFL file system to make a crash-consistent backup.

Cloud Volumes ONTAP supports only Reserved and On-demand VM instances

Cloud Volumes ONTAP can run on either a Reserved or On-demand VM instance from your cloud provider. Other types of VM instances aren't supported.

Automatic application resource management solutions shouldn't be used

Automatic application resource management solutions should not manage Cloud Volumes ONTAP systems. Doing so can result in a change to an unsupported configuration. For example, the solution might change Cloud Volumes ONTAP to an unsupported VM instance type.

Software updates must be completed by NetApp Console

Upgrades of Cloud Volumes ONTAP must be completed from the NetApp Console. You should not upgrade Cloud Volumes ONTAP by using System Manager or the CLI. Doing so can impact system stability.

Cloud Volumes ONTAP deployment must not be modified from your cloud provider's console

Changes to a Cloud Volumes ONTAP configuration from your cloud provider's console results in an unsupported configuration. Any changes to the Cloud Volumes ONTAP resources that the Console creates and manages can impact system stability and the ability of the Console to manage the system.



After initial deployment, modification of the Azure Subscription name used for Cloud Volumes ONTAP resources is supported.

Disks and aggregates must be managed from the Console

All disks and aggregates must be created and deleted directly from the Console. You should not perform these actions from another management tool. Doing so can impact system stability, hamper the ability to add disks in the future, and potentially generate redundant cloud provider fees.

SnapManager licensing limitation

SnapManager per-server licenses are supported with Cloud Volumes ONTAP. Per-storage system (SnapManager suite) licenses are not supported.

Limitations with third-party agents and extensions

Third-party agents and VM extensions are not supported on Cloud Volumes ONTAP virtual machine instances.

Known limitations for Cloud Volumes ONTAP in AWS

The following known limitations are specific to Cloud Volumes ONTAP in Amazon Web Services. Be sure to also review [Limitations for Cloud Volumes ONTAP in all cloud providers](#).

AWS Outpost limitations

If you have an AWS Outpost, you can deploy Cloud Volumes ONTAP in that Outpost by selecting the Outpost VPC during deployment. The experience is the same as any other VPC that resides in AWS. Note that you will need to first deploy a Console agent in your AWS Outpost.

There are a few limitations to point out:

- Only single node Cloud Volumes ONTAP systems are supported at this time
- The EC2 instances that you can use with Cloud Volumes ONTAP are limited to what's available in your Outpost
- Only General Purpose SSDs (gp2) are supported at this time

Flash Cache limitations

C5D and R5D instance types include local NVMe storage, which Cloud Volumes ONTAP uses as *Flash Cache*. Note the following limitations:

- Compression must be disabled on all volumes to take advantage of the Flash Cache performance improvements up to Cloud Volumes ONTAP 9.12.0. When you deploy or upgrade to Cloud Volumes ONTAP 9.12.1, you don't need to disable compression.

You can choose no storage efficiency when creating a volume from the NetApp Console, or you can create a volume and then [disable data compression by using the CLI](#).

- Cache rewarming after a reboot is not supported with Cloud Volumes ONTAP.

False alarms reported by Amazon CloudWatch

Cloud Volumes ONTAP does not release CPUs when idle, so [Amazon CloudWatch](#) can report a high CPU warning for the EC2 instance because it sees 100% usage. You can ignore this alarm. The ONTAP statistics command displays the true usage of the CPUs.

Cloud Volumes ONTAP HA pairs do not support immediate storage giveback

After a node reboots, the partner must sync data before it can return the storage. The time that it takes to resync data depends on the amount of data written by clients while the node was down and the data write speed during the time of giveback.

[Learn how storage works in a Cloud Volumes ONTAP HA pair running in AWS.](#)

Known limitations for Cloud Volumes ONTAP in Azure

The following known limitations are specific to Cloud Volumes ONTAP in Microsoft Azure. Be sure to also review [Limitations for Cloud Volumes ONTAP in all cloud providers](#).

Limitations with using Azure VM extensions

Cloud Volumes ONTAP does not support Azure virtual machine (VM) extensions because they affect the management operations in the NetApp Console. During deployment, the Console prevents the installation of any extensions on your VMs. If extensions are already installed on your existing Cloud Volumes ONTAP VMs, contact Microsoft Azure Support to remove them. For guidance, refer to the knowledge base (KB) article [Can Azure VM Management Extensions be installed into Cloud Volume ONTAP?](#)

Starting July 14, 2025, NetApp will send emails and notify you in the Console if VM extensions are detected on your Cloud Volumes ONTAP VMs.

Premium SSD v2 disks limitations for HA configurations

Premium SSD v2 Managed Disks have the following limitations for high-availability (HA) deployments in Azure:

- Not supported in HA deployments in non-zonal regions.
- Not supported in HA deployments across multiple availability zones.
- Only supported in HA configurations deployed within single availability zones.

To use Premium SSD v2 Managed Disks with Cloud Volumes ONTAP HA configurations, ensure the following requirements are met:

- Cloud Volumes ONTAP version is 9.15.1 or later.
- The HA deployment is in an Azure single availability zone.
- The selected regions and zones support Premium SSD v2 Managed Disks. For information about the supported regions, refer to the [Microsoft Azure website: Products available by region](#).

For more information, refer to [Support for Premium SSD v2 Managed Disks in Azure](#).

Limitations with HA deployments in single availability zones

Beginning with Cloud Volumes ONTAP 9.15.1, you can deploy virtual machine (VM) instances in HA mode in single availability zones (AZs) in Azure. For information about the criteria supporting this feature, refer to [Deploy HA pairs in single availability zones in Azure](#).

If the Cloud Volumes ONTAP version is earlier than 9.15.1 or if any of these conditions are not met, the previous deployment model utilizing availability sets becomes effective. This applies to only HA configurations.

Flash Cache limitations

Cloud Volumes ONTAP uses the local NVMe storage in some VM types as *Flash Cache*. Note this limitation:

- Cache rewarming after a reboot is not supported.

Limitations with HA deployments

HA pairs aren't supported in some regions.

[View the list of supported Azure regions.](#)

Known limitations for Cloud Volumes ONTAP in Google Cloud

The following known limitations are specific to Cloud Volumes ONTAP in Google Cloud Platform. Be sure to also review [Limitations for Cloud Volumes ONTAP in all cloud providers](#).

Limitation with packet mirroring

[Packet mirroring](#) must be disabled in the Google Cloud VPC in which you deploy Cloud Volumes ONTAP.

Cloud Volumes ONTAP can't operate properly if packet mirroring is enabled.

Google Private Service Connect limitations

If you leverage [Google Private Service Connect](#) within the VPC that you are deploying Cloud Volumes ONTAP into, you will need to implement DNS records that forward traffic to the required [API Endpoints](#).

Tiering data from Cloud Volumes ONTAP into a Google Cloud Storage bucket is not currently supported with Private Service Connect.

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