



## **Known limitations**

### **Cloud Volumes ONTAP release notes**

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# Table of Contents

- Known limitations ..... 1
  - Limitations in all cloud providers ..... 1
  - Known limitations in AWS..... 2
  - Known limitations in Azure ..... 3
  - Known limitations in Google Cloud ..... 3

# Known limitations

## Limitations 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.

### 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 Volumes ONTAP supports 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 Cloud Manager

Upgrades of Cloud Volumes ONTAP must be completed from Cloud Manager. 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 Cloud Manager creates and manages can impact system stability and Cloud Manager's ability to manage the system.

### Disks and aggregates must be managed from Cloud Manager

All disks and aggregates must be created and deleted directly from Cloud Manager. 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.

## Unsupported ONTAP features

The following features are not supported with Cloud Volumes ONTAP:

- 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
- RAID4, RAID-DP, RAID-TEC (RAID0 is supported)
- Service Processor
- SnapLock Compliance and Enterprise modes (only Cloud WORM is supported)
- SnapMirror Synchronous
- VLANs

## Known limitations in AWS

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

### HA pairs not supported with AWS Outposts

Single node systems are supported with AWS Outposts but HA pairs aren't 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.

You can choose no storage efficiency when creating a volume from Cloud Manager, 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.](#)

## Limitations in the AWS C2S environment

View limitations in the Cloud Manager docs: [Get started in the AWS C2S environment](#)

## Known limitations in Azure

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

### Flash Cache limitations

The Standard\_L8s\_v2 VM type includes local NVMe storage, which Cloud Volumes ONTAP uses as *Flash Cache*. Note the following limitations for Flash Cache:

- Compression must be disabled on all volumes to take advantage of the Flash Cache performance improvements.

You can choose no storage efficiency when creating a volume from Cloud Manager, 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.

### HA limitations

The following limitations affect Cloud Volumes ONTAP HA pairs in Microsoft Azure:

- NFSv4 isn't supported. NFSv3 is supported.
- HA pairs aren't supported in some regions.

[See the list of supported Azure regions](#)

## Known limitations in Google Cloud

There are no known limitations specific to Cloud Volumes ONTAP in Google Cloud Platform. See the [Limitations in all cloud providers](#).

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