



# **What's new in Cloud Volumes ONTAP 9.8**

## **Cloud Volumes ONTAP**

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# What's new in Cloud Volumes ONTAP 9.8

Cloud Volumes ONTAP 9.8 includes several new features and enhancements.

Additional features and enhancements are also introduced in the latest versions of Cloud Manager. See the [Cloud Manager Release Notes](#) for details.

## 9.8 GA (5 Jan 2021)

The General Availability (GA) release of Cloud Volumes ONTAP 9.8 is now available. The GA release includes bug fixes. Cloud Manager will prompt you to upgrade existing 9.8 RC1 and 9.7 systems to this release.

## Changes introduced with Cloud Manager 3.9.2 (4 Jan 2021)

The Cloud Manager 3.9.2 release includes several enhancements for Cloud Volumes ONTAP, including support for AWS Outposts, larger disks in GCP, and more.

Go to the [Cloud Manager Release Notes](#) for more details about the 3.9.2 release.

## E48s\_v3 now supported with HA pairs (21 Dec 2020)

The E48s\_v3 VM type is now supported with Cloud Volumes ONTAP HA pairs in Microsoft Azure.

## Supported EC2 instances (11 Dec 2020)

Starting with the 9.8 release, c4, m4, and r4 EC2 instance types are not supported with new Cloud Volumes ONTAP systems. Changing an existing 9.8 system to one of these instance types isn't supported either.

If you have an existing Cloud Volumes ONTAP 9.7 system that's running on a c4, m4, or r4 instance type, you can still upgrade to the 9.8 release.

## 9.8 RC1 update (12 Nov 2020)

Similar to single node systems, Cloud Manager now allocates a core disk to new 9.8 HA pair deployments in AWS when you use a C5, M5, or R5 instance type. The core disk expands the ability to switch between supported instance types, enhances the system's ability to collect core files when issues occur, and provides the ability to support larger instance types in the future.

The core disk is a General Purpose SSD (gp2) with 540 GB.



With the addition of this core disk, one less data disk is now supported on systems that use these instance types. [Learn more about storage limits in AWS.](#)

## 9.8 RC1 (8 Nov 2020)

Cloud Volumes ONTAP 9.8 RC1 is now available in AWS, Azure, and Google Cloud Platform. In Azure, 9.8 RC1 is available for upgrades only at this time.

In addition to the features introduced with [ONTAP 9.8](#), this release of Cloud Volumes ONTAP includes the

following:

- [High-availability pairs in Google Cloud](#)
- [Fixes for Azure NIC detach events and maintenance events](#)
- [High write speed with HA pairs in AWS and Azure](#)
- [\[Support for 24 storage VMs in AWS\]](#)
- [Core disk for single node systems in AWS](#)

## High-availability pairs in Google Cloud

Cloud Volumes ONTAP high-availability (HA) pairs are now available in Google Cloud.

An HA pair provides enterprise reliability and continuous operations in case of failures in your cloud environment. Similar to Cloud Volumes ONTAP in AWS, an HA pair in Google Cloud includes two Cloud Volumes ONTAP nodes whose data is synchronously mirrored between each other, and a mediator instance that provides a communication channel to assist in storage takeover and giveback.

View [supported configurations](#) and [storage limits](#).

[Learn more about HA pairs in Google Cloud.](#)

## Fixes for Azure NIC detach events and maintenance events

This release provides several improvements for how Cloud Volumes ONTAP handles Azure freeze events, Azure NIC detach events, and other Azure maintenance activities (for example, Virtual Function Revoke). Cloud Volumes ONTAP is more fault tolerant in this release and will handle Azure events more gracefully, with a reduced likelihood of service disruption or cluster degradation.

## High write speed with HA pairs in AWS and Azure

Cloud Volumes ONTAP now supports high write speed with HA pairs in AWS and Azure when using a specific instance or VM type. High write speed is a good choice if fast write performance is required for your workload and you can withstand the risk of data loss in the event of an unplanned system outage.

Before you choose a write speed, you should understand the differences between the normal and high settings and the risks and recommendations when using high write speed.

[Learn more.](#)

## Support for up to 24 storage VMs in AWS

Up to 24 storage VMs are now supported with Cloud Volumes ONTAP in AWS when you use a C5, M5, or R5 instance type and bring your own license. Of those 24 storage VMs, up to 12 can be configured for disaster recovery (DR).

The limit can be lower, depending on the EC2 instance type that you use.

An add-on license is required for each additional *data-serving* storage VM beyond the first storage VM that comes with Cloud Volumes ONTAP by default. Contact your account team to obtain an SVM add-on license.

Storage VMs that you configure for disaster recovery (DR) don't require an add-on license (they are free of charge), but they do count against the storage VM limit.

[Learn more about storage VM limits.](#)

[Learn how to create data-serving storage VMs for Cloud Volumes ONTAP in AWS.](#)

## Core disk for single node systems in AWS

Cloud Manager now allocates a core disk to new 9.8 single node deployments in AWS when you use a C5, M5, or R5 instance type. The core disk expands the ability to switch between supported instance types, enhances the system's ability to collect core files when issues occur, and provides the ability to support larger instance types in the future.

The core disk is a General Purpose SSD (gp2) with 540 GB.



With the addition of this core disk, one less data disk is now supported on single node systems that use these instance types. [Learn more about storage limits in AWS.](#)

## Required version of the Cloud Manager Connector

The Cloud Manager Connector must be running version 3.9.0 or later to deploy new Cloud Volumes ONTAP 9.8 systems and to upgrade existing systems to version 9.8.

## Upgrade notes

- 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.
- You can upgrade to Cloud Volumes ONTAP 9.8 from the 9.7 release. Cloud Manager will prompt you to upgrade your existing Cloud Volumes ONTAP 9.7 systems to the 9.8 release.

[Learn how to upgrade when Cloud Manager notifies you.](#)

- The upgrade of a single node system takes the system offline for up to 25 minutes, during which I/O is interrupted.
- Upgrading an HA pair is nondisruptive and I/O is uninterrupted. During this nondisruptive upgrade process, each node is upgraded in tandem to continue serving I/O to clients.

## c4, m4, and r4 instance types

Starting with the 9.8 release, c4, m4, and r4 instance types aren't supported with new Cloud Volumes ONTAP systems. If you have an existing Cloud Volumes ONTAP system that's running on a c4, m4, or r4 instance type, you can still upgrade to this release.

We recommend changing to an instance type in the c5, m5, or r5 instance family.

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