



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

## **Cloud Volumes ONTAP**

Ben Cammett  
March 16, 2021

This PDF was generated from [https://docs.netapp.com/us-en/cloud-volumes-ontap/reference\\_new\\_98.html](https://docs.netapp.com/us-en/cloud-volumes-ontap/reference_new_98.html) on March 18, 2021. Always check docs.netapp.com for the latest.

# Table of Contents

- What's new in Cloud Volumes ONTAP 9.8. . . . . 1
  - 9.8 GA (5 Jan 2021) . . . . . 1
  - Changes introduced with Cloud Manager 3.9.2 (4 Jan 2021) . . . . . 1
  - E48s\_v3 now supported with HA pairs (21 Dec 2020). . . . . 1
  - Supported EC2 instances (11 Dec 2020). . . . . 1
  - 9.8 RC1 update (12 Nov 2020) . . . . . 1
  - 9.8 RC1 (8 Nov 2020) . . . . . 1
  - Required version of the Cloud Manager Connector. . . . . 3
  - Upgrade notes . . . . . 3

# 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.

## Copyright Information

Copyright © 2021 NetApp, Inc. All rights reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means-graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system-without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

## Trademark Information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.