



# Supported configurations for Cloud Volumes ONTAP 9.5

## Cloud Volumes ONTAP

Ben Cammett  
April 09, 2021

# Table of Contents

- Supported configurations for Cloud Volumes ONTAP 9.5 ..... 1
  - Cloud Volumes ONTAP for AWS ..... 1
  - Cloud Volumes ONTAP for Azure ..... 2

# Supported configurations for Cloud Volumes ONTAP 9.5

Cloud Volumes ONTAP is available in AWS and Azure in two pricing options: pay-as-you-go and Bring Your Own License (BYOL). For pay-as-you-go, you can choose from three configurations: Explore, Standard, or Premium.

## Cloud Volumes ONTAP for AWS

In AWS, you can deploy Cloud Volumes ONTAP as a single node system or as an HA pair.

	Explore	Standard	Premium	BYOL
<b>EC2 instance types</b>	<ul style="list-style-type: none"> <li>• m4.xlarge</li> <li>• m5.xlarge</li> </ul>	<ul style="list-style-type: none"> <li>• m4.2xlarge</li> <li>• m5.2xlarge</li> <li>• r4.xlarge</li> <li>• r5.xlarge</li> </ul>	<ul style="list-style-type: none"> <li>• c4.4xlarge</li> <li>• c4.8xlarge</li> <li>• c5d.4xlarge*</li> <li>• c5d.9xlarge*</li> <li>• m4.4xlarge</li> <li>• m5.4xlarge</li> <li>• r4.2xlarge</li> <li>• r5.2xlarge</li> <li>• r5d.2xlarge*</li> </ul>	<ul style="list-style-type: none"> <li>• c4.4xlarge</li> <li>• c4.8xlarge</li> <li>• c5d.4xlarge*</li> <li>• c5d.9xlarge*</li> <li>• m4.xlarge</li> <li>• m4.2xlarge</li> <li>• m4.4xlarge</li> <li>• m5.xlarge</li> <li>• m5.2xlarge</li> <li>• m5.4xlarge</li> <li>• r4.xlarge</li> <li>• r4.2xlarge</li> <li>• r5.xlarge</li> <li>• r5.2xlarge</li> <li>• r5d.2xlarge*</li> </ul>
<b>Underlying storage</b>	General Purpose SSDs (gp2), Provisioned IOPS SSDs (io1), and Throughput Optimized HDDs (st1), up to 16 TB per disk			
<b>Maximum system capacity (disks + object storage)</b>	2 TB	10 TB	368 TB	368 TB per license

Notes:

1. The instance types denoted with a \* include local NVMe storage, which Cloud Volumes ONTAP uses as *Flash Cache*. Flash Cache speeds access to data through real-time intelligent caching of recently read user data and NetApp metadata. It is effective for random read-intensive workloads, including databases, email, and file services. Compression must be disabled on all volumes to take advantage of the Flash Cache performance improvements. [Learn more](#).

- For some configurations, disk limits prevent you from reaching the 368 TB capacity limit by using disks alone. In those cases, you can reach the 368 TB capacity limit by [tiering inactive data to object storage](#). For information about disk limits, refer to [storage limits](#).
- If you enable data tiering, a system's capacity limit stays the same. The capacity limit includes both disks and object storage.
- Data tiering is supported with Cloud Volumes ONTAP Standard, Premium, and BYOL.
- When you choose an EC2 instance type, you can specify whether it is a shared instance or a dedicated instance.
- Cold HDDs are not supported with HA pairs.
- Enhanced write performance is enabled when using EBS SSDs with Cloud Volumes ONTAP Standard, Premium, and BYOL.
- For AWS region support, see [Cloud Volumes Global Regions](#).

## Cloud Volumes ONTAP for Azure

In Azure, you can deploy Cloud Volumes ONTAP as a single node system or as an HA pair.

### Single node systems

You can choose from the following configurations when deploying Cloud Volumes ONTAP as a single-node system in Azure:

	Explore	Standard	Premium	BYOL
<b>Virtual machine types</b>	DS3_v2	<ul style="list-style-type: none"> <li>DS4_v2</li> <li>DS13_v2</li> </ul>	<ul style="list-style-type: none"> <li>DS5_v2</li> <li>DS14_v2</li> </ul>	<ul style="list-style-type: none"> <li>DS3_v2</li> <li>DS4_v2</li> <li>DS5_v2</li> <li>DS13_v2</li> <li>DS14_v2</li> </ul>
<b>Underlying storage</b>	Standard HDD Managed Disks, Standard SSD Managed Disks, and Premium SSD Managed Disks, up to 32 TB per disk			
<b>Maximum system capacity (disks + object storage)</b>	2 TB	10 TB	368 TB	368 TB per license

Notes:

- If you enable data tiering, a system's capacity limit stays the same. The capacity limit includes both disks and object storage.
- Data tiering is not supported with the DS3\_v2 virtual machine type.
- Enhanced write performance is enabled when using Azure Premium Storage disks, but not when using the DS3\_v2 virtual machine type.
- For Azure region support, see [Cloud Volumes Global Regions](#).

## HA pairs

You can choose from the following configurations when deploying Cloud Volumes ONTAP as an HA pair in Azure:

	<b>Explore</b>	<b>Standard</b>	<b>Premium</b>	<b>BYOL</b>
<b>Virtual machine types</b>	Not supported	<ul style="list-style-type: none"><li>• DS4_v2</li><li>• DS13_v2</li></ul>	<ul style="list-style-type: none"><li>• DS5_v2</li><li>• DS14_v2</li></ul>	<ul style="list-style-type: none"><li>• DS4_v2</li><li>• DS5_v2</li><li>• DS13_v2</li><li>• DS14_v2</li></ul>
<b>Underlying storage</b>	Not supported	Premium page blobs, up to 8 TB per disk		
<b>Maximum system capacity</b>	Not supported	10 TB	368 TB	368 TB per license

Notes:

1. Data tiering is not supported with HA pairs.
2. For Azure region support, see [Cloud Volumes Global Regions](#).

## 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.