

Supported configurations for Cloud Volumes ONTAP 9.9.0 in Azure

Cloud Volumes ONTAP

Ben Cammett March 08, 2021

This PDF was generated from https://docs.netapp.com/us-en/cloud-volumes-ontap/reference_configs_azure_990.html on March 18, 2021. Always check docs.netapp.com for the latest.

Table of Contents

S	upported configurations for Cloud Volumes ONTAP 9.9.0 in Azure	•
	Pay-as-you-go overview	
	BYOL overview	•
	Supported configurations by license	
	Supported disk sizes	(

Supported configurations for Cloud Volumes ONTAP 9.9.0 in Azure

Cloud Volumes ONTAP is available in Azure as a single node system or an HA pair. Two pricing options are available: pay as you go and Bring Your Own License (BYOL).

Pay-as-you-go overview

- Offers Cloud Volumes ONTAP in three different configurations: Explore, Standard, and Premium.
- A 30-day free trial is available for the first Cloud Volumes ONTAP system that you deploy in Azure.

There are no hourly software charges, but Azure infrastructure charges still apply (compute, storage, and networking).

- Conversions from PAYGO to BYOL aren't currently supported.
- Basic technical support is offered, but you must register and activate the NetApp serial number associated with your system.

Register pay-as-you-go systems in Cloud Manager

BYOL overview

- Single node or HA license with term-based subscription options like 12 months, 24 months, and more.
- Support is included for the length of the subscription term.
- You can purchase multiple licenses for a Cloud Volumes ONTAP BYOL system to allocate more than 368 TB of capacity.

For example, you might purchase two licenses to allocate up to 736 TB of capacity to Cloud Volumes ONTAP. Or you could purchase four licenses to get up to 1.4 PB.

Supported configurations by license

Cloud Volumes ONTAP is available in Azure as a single node system and as a high-availability (HA) pair of nodes for fault tolerance and nondisruptive operations.

Upgrading a single node system to an HA pair is not supported. If you want to switch between a single node system and an HA pair, then you need to deploy a new system and replicate data from the existing system to the new system.

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
Supported virtual	DS3_v2	• DS4_v2	• DS5_v2	• DS3_v2
machine types		• DS13_v2	• DS14_v2	• DS4_v2
			• DS15_v2	• DS5_v2
			• E32s_v3 ¹	• DS13_v2
			• E48s_v3	• DS14_v2
				• DS15_v2
				• E32s_v3 ¹
				• E48s_v3
				• L8s_v2 ²
Supported disk	Standard HDD Mana	ned Dieke Standard S	SD Managed Disks, at	nd Premium SSD
types ³	Standard HDD Managed Disks, Standard SSD Managed Disks, and Premium SSD Managed Disks			ila Freiiliaili 33D
Cold data tiering to Blob storage ⁴	Not supported	Supported		
Maximum system capacity (disks + object storage)	2 TB	10 TB	368 TB	368 TB per license

Notes:

- 1. This VM type uses an Ultra SSD for VNVRAM, which provides better write performance.
- 2. This VM type includes 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.
- 3. Enhanced write performance is enabled when using SSDs, but not when using the DS3_v2 virtual machine type.
- 4. Data tiering is not supported with the DS3 v2 virtual machine type.
- 5. For Azure region support, see Cloud Volumes Global Regions.
- 6. Cloud Volumes ONTAP can run on either a Reserved or On-demand VM instance from your cloud provider. Solutions that use other VM instance types aren't supported.

HA pairs

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

	Explore	Standard	Premium	BYOL
Supported virtual machine types	Not supported	• DS4_v2	• DS5_v2 1	• DS4_v2
		• DS13_v2	• DS14_v2 ¹	• DS5_v2 ¹
			• DS15_v2 ¹	• DS13_v2
			• E48s_v3 ¹	• DS14_v2 ¹
				• DS15_v2 ¹
				• E48s_v3 ¹
Supported disk types	Not supported	Premium page blobs		
Cold data tiering to Blob storage ²	Not supported	Supported		
Maximum system capacity (disks + object storage)	Not supported	10 TB	368 TB	368 TB per license

Notes:

- Cloud Volumes ONTAP supports high write speed with these VM types when using an HA pair. High write speed is supported with all instance types when using a single node system. Learn more about choosing a write speed.
- 2. For Azure region support, see Cloud Volumes Global Regions.
- 3. Cloud Volumes ONTAP can run on either a Reserved or On-demand VM instance from your cloud provider. Solutions that use other VM instance types aren't supported.

Supported disk sizes

In Azure, an aggregate can contain up to 12 disks that are all the same type and size.

Single node systems

Single node systems use Azure Managed Disks. The following disk sizes are supported:

Premium SSD	Standard SSD	Standard HDD
• 500 GB	• 100 GB	• 100 GB
• 1 TB	• 500 GB	• 500 GB
• 2 TB	• 1 TB	• 1 TB
• 4 TB	• 2 TB	• 2 TB
• 8 TB	• 4 TB	• 4 TB
• 16 TB	• 8 TB	• 8 TB
• 32 TB	• 16 TB	• 16 TB
	• 32 TB	• 32 TB

HA pairs

HA pairs use Premium page blobs. The following disk sizes are supported:

- 500 GB
- 1 TB
- 2 TB
- 4 TB
- 8 TB

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.