Supported configurations for Cloud Volumes ONTAP 9.8 in GCP

Cloud Volumes ONTAP

Ben Cammett
March 10, 2021

Table of Contents

Supported configurations for Cloud Volumes ONTAP 9.8 in GCP

Cloud Volumes ONTAP is available in Google Cloud Platform 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 GCP.
  - There are no hourly software charges, but GCP infrastructure charges still apply (compute, storage, and networking).
  - When the free trial ends, you'll be charged hourly according to the selected license, as long as you subscribed. If you haven't subscribed, the system shuts down.
- 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 Google Cloud Platform 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 GCP.

	Explore	Standard	Premium	BYOL
Supported machine types [1]	• custom-4-16384 • n2-standard-4	• n1-standard-8 • n2-standard-8	• n1-standard-32 • n2-standard-32	• custom-4-16384 • n1-standard-8 • n1-standard-32 • n2-standard-4 • n2-standard-8 • n2-standard-32
Supported disk types [2]	Zonal persistent disks (SSD and standard)			
Cold data tiering to object storage	Not supported	Supported		
Maximum system capacity (disks + object storage)	2 TB	10 TB	368 TB [3]	368 TB per license [3]

Notes:

1. The custom machine type has 4 vCPUs and 16 GB of memory. For details about standard machine types, refer to Google Cloud Documentation: Machine Types.
2. Enhanced write performance is enabled when using SSDs.
3. Disk limits prevent you from reaching the 368 TB capacity limit by using disks alone. You can reach the 368 TB capacity limit by tiering inactive data to object storage.

   Learn more about disk limits in GCP.

4. The Cloud Manager interface shows an additional supported machine type for Standard and BYOL: n1-highmem-4. However, this machine type isn't meant for production environments. We've made it available for a specific lab environment only.
5. For Google Cloud Platform 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 GCP.

	Explore	Standard	Premium	BYOL
Supported machine types	• custom-4-16384 • n2-standard-4	• n1-standard-8 • n2-standard-8	• n1-standard-32 • n2-standard-32	• custom-4-16384 • n1-standard-8 • n1-standard-32 • n2-standard-4 • n2-standard-8 • n2-standard-32
Supported disk types [1]	Zonal persistent disks (SSD and standard)			
Cold data tiering to object storage	Not supported	Supported		
Maximum system capacity (disks + object storage)	2 TB	10 TB	368 TB [2]	368 TB per license [2]

Notes:

1. The custom machine type has 4 vCPUs and 16 GB of memory. For details about standard machine types, refer to Google Cloud Documentation: Machine Types.
2. Enhanced write performance is enabled when using SSDs.
3. Disk limits prevent you from reaching the 368 TB capacity limit by using disks alone. You can reach the 368 TB capacity limit by tiering inactive data to object storage.

   Learn more about disk limits in GCP.

4. The Cloud Manager interface shows an additional supported machine type for Standard and BYOL: n1-highmem-4. However, this machine type isn't meant for production environments. We've made it available for a specific lab environment only.
5. For Google Cloud Platform 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.

Supported disk sizes

In GCP, an aggregate can contain up to 6 disks that are all the same type and size. The following disk sizes are supported:

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

- 16 TB
- 64 TB