



Learn about Backup to Cloud

Cloud Manager

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Learn about Backup to Cloud

Backup to Cloud is an add-on service for Cloud Volumes ONTAP that delivers backup and restore capabilities for protection, and long-term archive of your cloud data. Backups are stored in an object store in your cloud account, independent of volume Snapshot copies used for near-term recovery or cloning.

Backup to Cloud is powered by the [Cloud Backup Service](#).



You must use Cloud Manager for all backup and restore operations. Any actions taken directly from ONTAP or from your cloud provider results in an unsupported configuration.

Features

- Back up independent copies of your data volumes to low-cost object storage in the cloud.

Backup data is secured with AES-256 bit encryption at-rest and TLS 1.2 HTTPS connections in-flight.

- Restore data from a specific point in time.
- Restore the data to the source Cloud Volumes ONTAP system or to a different system.

Supported object storage providers

Backup to Cloud is supported with the following types of working environments:

- Cloud Volumes ONTAP in AWS
- Cloud Volumes ONTAP in Azure

Cost

You'll need to pay your cloud provider for object storage costs and NetApp for backup licensing costs. The licensing costs are based on used capacity (before storage efficiencies).

- AWS: A 30-day free trial is available. [Go to the Cloud Manager Marketplace offering for pricing details.](#)
- Azure: A 30-day free trial is available. [Go to the Cloud Manager Marketplace offering for pricing details.](#)

How Backup to Cloud works

When you enable Backup to Cloud, the service performs a full backup of your data. After the initial backup, all additional backups are incremental, which means that only changed blocks and new blocks are backed up.

Where backups reside

Backup copies are stored in an S3 bucket or Azure Blob container that Cloud Manager creates in your cloud account. The object store is created in the same region where the Cloud Volumes ONTAP system is located. There's one object store per Cloud Volumes ONTAP system.

Cloud Manager names the object store as follows: `netapp-backup-clusteruid`

Be sure not to delete this object store.

Notes:

- In AWS, Cloud Manager enables the [Amazon S3 Block Public Access feature](#) on the S3 bucket.
- In Azure, Cloud Manager creates a new resource group with a storage account for the Blob container.

Supported S3 storage classes

In Amazon S3, backups start in the *Standard* storage class and transition to the *Standard-Infrequent Access* storage class after 30 days.

Supported Azure Blob access tiers

In Azure, each backup is associated with the *cold* access tier.

Backup settings are system wide

When you enable Backup to Cloud, *all* supported volumes on the system are backed up to the cloud.

The schedule and number of backups to retain are defined at the system level. The backup settings affect all volumes on the system.

The schedule is daily, or weekly, or monthly

You can choose daily, or weekly, or monthly backups of all volumes. A combination of these backup frequency options isn't supported.

Backups are taken at midnight

- Daily backups start just after midnight each day.

- Weekly backups start just after midnight on Sunday mornings.
- Monthly backups start just after midnight on the first of each month.

At this time, you can't schedule backup operations at a user specified time.

Backup copies are associated with your Cloud Central account

Backup copies are associated with the [Cloud Central account](#) in which Cloud Manager resides.

If you have multiple Cloud Manager systems in the same Cloud Central account, each Cloud Manager system will display the same list of backups. That includes the backups associated with Cloud Volumes ONTAP instances from other Cloud Manager systems.

Supported volumes

Backup to Cloud supports read-write volumes only.

FlexGroup volumes and data protection volumes aren't supported.

Limitations

- Volumes that you create outside of Cloud Manager aren't automatically backed up.

For example, if you create a volume from the ONTAP CLI, ONTAP API, or System Manager, then the volume won't be automatically backed up.

If you want to back up these volumes, you would need to disable Backup to Cloud and then enable it again.

- Backup to Cloud can maintain up to 1,019 total backups of a volume.
- In Azure, if you enable Backup to Cloud when Cloud Volumes ONTAP is deployed, Cloud Manager creates the resource group for you and you cannot change it. If you want to pick your own resource group when enabling Backup to Cloud, **disable** Backup to Cloud when deploying Cloud Volumes ONTAP and then enable Backup to Cloud and choose the resource group from the Backup to Cloud Settings page.
- WORM storage is not supported on a Cloud Volumes ONTAP system when Backup to Cloud is enabled.

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