



Backing up Cloud Volumes ONTAP data to Google Cloud Storage

Cloud Manager

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Backing up Cloud Volumes ONTAP data to Google Cloud Storage

Complete a few steps to get started backing up data from Cloud Volumes ONTAP to Google Cloud Storage.

Quick start

Get started quickly by following these steps or scroll down to the remaining sections for full details.

1

Verify support for your configuration

- You're running Cloud Volumes ONTAP 9.7P5 or later in GCP.
- You have a valid GCP subscription for the storage space where your backups will be located.
- You have a service account in your Google Cloud Project that has the predefined Storage Admin role.
- You have subscribed to the [Cloud Manager Marketplace Backup offering](#), or you have purchased [and activated](#) a Cloud Backup BYOL license from NetApp.

2

Enable Cloud Backup on your new or existing system

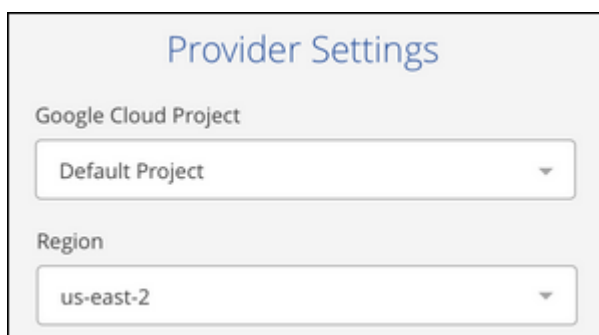
- New systems: Cloud Backup can be enabled when you complete the new working environment wizard.
- Existing systems: Select the working environment and click **Enable** next to the Backup & Restore service in the right-panel, and then follow the setup wizard.



3

Enter the provider details

Select the Google Cloud Project where you want the Google Cloud Storage bucket to be created for backups.

A screenshot of a 'Provider Settings' form. It contains two dropdown menus. The first is labeled 'Google Cloud Project' and has 'Default Project' selected. The second is labeled 'Region' and has 'us-east-2' selected. The form has a light gray background and a thin border.

4

Define the backup policy

The default policy backs up volumes every day and retains the most recent 30 backup copies of each volume. Change to hourly, daily, weekly, or monthly backups, or select one of the system-defined policies that provide more options.

Define Policy

Policy - Retention & Schedule

☒ Create a New Policy
 ☐ Select an Existing Policy

☐ Hourly
 Number of backups to retain

☒ Daily
 Number of backups to retain

☐ Weekly
 Number of backups to retain

☐ Monthly
 Number of backups to retain

DP Volumes

Data protection volume backups use the same retention period as defined in the source SnapMirror relationship by default. Use the API if you want to change this value

Google Cloud Storage Bucket

Cloud Manager will create the Google Cloud Storage Bucket after you complete the wizard

5

Select the volumes that you want to back up

Identify which volumes you want to back up in the Select Volumes page.

6

Restore your data, as needed

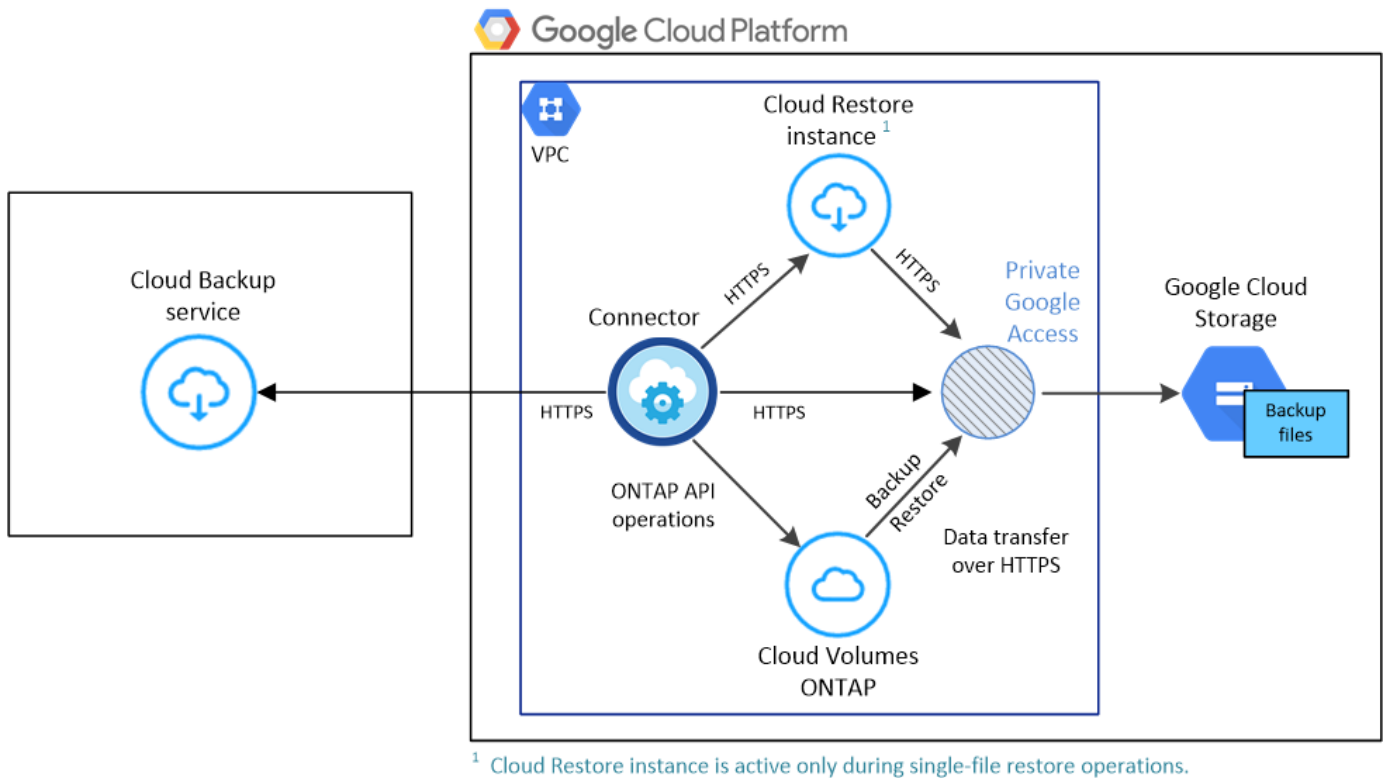
Restore a backup to a new volume. You can restore data to a Cloud Volumes ONTAP system in Google. A Service Account is required on the Cloud Volumes ONTAP system where you are performing the restore.

See [Restoring volume data from backup files](#) for details.

Requirements

Read the following requirements to make sure that you have a supported configuration before you start backing up volumes to Google Cloud storage.

The following image shows each component and the connections that you need to prepare between them:



Supported ONTAP versions

Cloud Volumes ONTAP 9.7P5 and later.

Supported GCP regions

Cloud Backup is supported in all GCP regions [where Cloud Volumes ONTAP is supported](#).

License requirements

For Cloud Backup PAYGO licensing, a subscription through the [GCP Marketplace](#) is required before you enable Cloud Backup. Billing for Cloud Backup is done through this subscription. [You can subscribe from the Details & Credentials page of the working environment wizard](#).

For Cloud Backup BYOL licensing, you need the serial number from NetApp that enables you to use the service for the duration and capacity of the license. [Learn how to manage your BYOL licenses](#).

And you need to have a Google subscription for the storage space where your backups will be located.

GCP Service Account

You need to have a service account in your Google Cloud Project that has the predefined Storage Admin role. [Learn how to create a service account](#).

Enabling Cloud Backup on a new system

Cloud Backup can be enabled when you complete the working environment wizard to create a new Cloud Volumes ONTAP system.

You must have a Service Account already configured. If you don't select a service account when you create the Cloud Volumes ONTAP system, then you'll need to turn off the system and add the service account to Cloud Volumes ONTAP from the GCP console.

See [Launching Cloud Volumes ONTAP in GCP](#) for requirements and details for creating your Cloud Volumes

ONTAP system.

Steps

1. On the Working Environments page, click **Add Working Environment** and follow the prompts.
2. **Choose a Location:** Select **Google Cloud Platform**.
3. **Choose Type:** Select **Cloud Volumes ONTAP** (either single-node or high-availability).
4. **Details & Credentials:** Enter the following information:
 - a. Click **Edit Project** and select a new project if the one you want to use is different than the default Project (where Cloud Manager resides).
 - b. Specify the cluster name.
 - c. Enable the **Service Account** switch and select the Service Account that has the predefined Storage Admin role. This is required to enable backups and tiering.
 - d. Specify the credentials.

Make sure that a GCP Marketplace subscription is in place.

The screenshot shows the 'Details & Credentials' configuration page. At the top, there are two tabs: 'Project1' (Google Cloud Project) and 'MPAWSSubscription1222' (Marketplace Subscription). An 'Edit Project' button is located in the top right. The main content is divided into two columns: 'Details' and 'Credentials'. In the 'Details' column, there is a 'Working Environment Name (Cluster Name)' field with the value 'TamiVSA'. Below it is a 'Service Account' section with an information icon and a toggle switch that is turned on. Under the toggle is a 'Service Account Name' dropdown menu showing 'ServiceAccount1'. At the bottom of the 'Details' column is a '+ Add Labels' button and the text 'Optional Field | Up to four labels'. In the 'Credentials' column, there are three fields: 'User Name' with the value 'admin', 'Password' with masked characters '*****', and 'Confirm Password' also with masked characters '*****'.

5. **Services:** Leave the Cloud Backup service enabled and click **Continue**.

The screenshot shows the 'Services' configuration page. It features a single service entry, 'Backup to Cloud', which includes a cloud icon, the service name, a toggle switch that is turned on, and a dropdown arrow on the right.

6. Complete the pages in the wizard to deploy the system as described in [Launching Cloud Volumes ONTAP in GCP](#).

Result

Cloud Backup is enabled on the system and backs up the volume you created every day and retains the most recent 30 backup copies.

You can [start and stop backups for volumes](#) or [change the backup schedule](#) and you can [restore entire volumes or individual files from a backup file](#).

Enabling Cloud Backup on an existing system

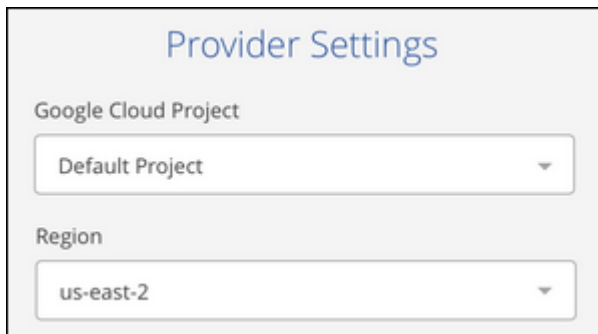
You can enable Cloud Backup at any time directly from the working environment.

Steps

1. Select the working environment and click **Enable** next to the Backup & Restore service in the right-panel.



2. Select the Google Cloud Project and region where you want the Google Cloud Storage bucket to be created for backups, and click **Next**.

A screenshot of a 'Provider Settings' form. It has a title 'Provider Settings' in blue. Below it, there are two sections: 'Google Cloud Project' with a dropdown menu showing 'Default Project', and 'Region' with a dropdown menu showing 'us-east-2'.

Note that the Project must have a Service Account that has the predefined Storage Admin role.

3. In the *Define Policy* page, select the backup schedule and retention value and click **Next**.

Define Policy

Policy - Retention & Schedule

☒ Create a New Policy
 ☐ Select an Existing Policy

☐ Hourly

Number of backups to retain

24

☒ Daily

Number of backups to retain

30

☐ Weekly

Number of backups to retain

52

☐ Monthly

Number of backups to retain

12

DP Volumes

Data protection volume backups use the same retention period as defined in the source SnapMirror relationship by default. Use the API if you want to change this value

Google Cloud Storage Bucket

Cloud Manager will create the Google Cloud Storage Bucket after you complete the wizard

See [the list of existing policies](#).

4. Select the volumes that you want to back up and click **Activate Backup**.

Select Volumes

57 Volumes Q

<input checked="" type="checkbox"/>	Volume Name	Volume Type	SVM Name	Used Capacity	Allocated Capacity	Backup Status
<input checked="" type="checkbox"/>	Volume_Name_1	RW	SVM_Name_1	0.25 TB	10 TB	⊖ Not Active
<input checked="" type="checkbox"/>	Volume_Name_2	RW	SVM_Name_2	0.25 TB	10 TB	⊖ Not Active
<input checked="" type="checkbox"/>	Volume_Name_3	RW	SVM_Name_3	0.25 TB	10 TB	⊖ Not Active
<input checked="" type="checkbox"/>	Volume_Name_4	DP	SVM_Name_4	0.25 TB	10 TB	⊖ Not Active
<input checked="" type="checkbox"/>	Volume_Name_5	RW	SVM_Name_5	0.25 TB	10 TB	⊖ Not Active

- To back up all volumes, check the box in the title row (☒ Volume Name).
- To back up individual volumes, check the box for each volume (☒ Volume_1).

Result

Cloud Backup starts taking the initial backups of each selected volume and the Backup Dashboard is displayed so you can monitor the state of the backups.

What's next?

You can [start and stop backups for volumes](#) or [change the backup schedule](#) and you can [restore entire volumes or individual files from a backup file](#).

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