



# **Backing up data to Google Cloud Storage**

## **Cloud Manager**

Tom Onacki, Ben Cammett  
February 10, 2021

This PDF was generated from [https://docs.netapp.com/us-en/occm/task\\_backup\\_to\\_gcp.html](https://docs.netapp.com/us-en/occm/task_backup_to_gcp.html) on February 28, 2021. Always check docs.netapp.com for the latest.

# Table of Contents

- Backing up data to Google Cloud Storage . . . . . 1
  - Quick start . . . . . 1
  - Requirements . . . . . 2
  - Enabling Cloud Backup on a new system . . . . . 3
  - Enabling Cloud Backup on an existing system . . . . . 4

# Backing up 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

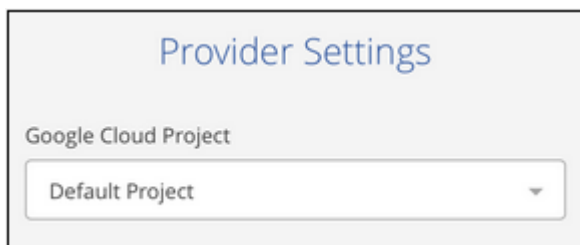
- New systems: Cloud Backup can be enabled when you complete the new working environment wizard.
- Existing systems: Select the working environment and click **Activate** next to the Cloud Backup service in the right-panel, and then follow the setup wizard.



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 form titled 'Provider Settings'. It contains a label 'Google Cloud Project' above a dropdown menu. The dropdown menu currently displays 'Default Project' and has a small downward arrow on the right side.

## 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 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

Backup Every

Day

Number of backups to retain

30

**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

**Storage Account**

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.

### 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. See [Adding and updating your Backup BYOL license](#).

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.

Details & Credentials

**Project1**  
 Google Cloud Project

**MPAWSSubscription1222**  
 Marketplace Subscription

[Edit Project](#)

**Details**

Working Environment Name (Cluster Name)

TamiVSA

Service Account ⓘ ☒

Service Account Name

ServiceAccount1

+ Add Labels
 Optional Field | Up to four labels

**Credentials**

User Name

admin

Password

\*\*\*\*\*

Confirm Password

\*\*\*\*\*

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

Services

Backup to Cloud

☒
v

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 additional volumes or change the backup schedule](#) and you can [restore entire volumes 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 **Activate** next to the Cloud Backup service in the right-panel.



2. Select the Google Cloud Project where you want the Google Cloud Storage bucket to be created for backups, and click **Continue**. This can be a different Project than where the Cloud Volumes ONTAP system resides.

Note that the Project must have a Service Account that has the predefined Storage Admin role, and that you cannot change the Project after the service has started.

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

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

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

Select Volumes								
57 Volumes								
<input checked="" type="checkbox"/>	Volume Name	Volume Type	Disk Type	SVM Name	Used Capacity	Allocated Capacity	Volume Status	
<input checked="" type="checkbox"/>	Volume_Name_1	RW	GP2	SVM_Name_1	2.25 TB	10 TB	Active	
<input checked="" type="checkbox"/>	Volume_Name_2	RW	GP2	SVM_Name_2	2.25 TB	10 TB	Active	
<input checked="" type="checkbox"/>	Volume_Name_3	RW	GP2	SVM_Name_3	2.25 TB	10 TB	Active	
<input checked="" type="checkbox"/>	Volume_Name_4	DP ⓘ	GP2	SVM_Name_4	2.25 TB	10 TB	Active	
<input checked="" type="checkbox"/>	Volume_Name_5	RW	GP2	SVM_Name_5	2.25 TB	10 TB	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.

## What's next?

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



## 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.