

Backing up Cloud Volumes ONTAP data to Google Cloud Storage

Cloud Manager

Tom Onacki, Ben Cammett May 27, 2021

This PDF was generated from https://docs.netapp.com/us-en/occm/task_backup_to_gcp.html on July 20, 2021. Always check docs.netapp.com for the latest.

Table of Contents

Back	ing up Cloud Volumes ONTAP data to Google Cloud Storage.	1
Qι	uick start	1
Re	equirements	2
En	nabling Cloud Backup on a new system	3
En	abling Cloud Backup on an existing system	Ę

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.



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.



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.





Enter the provider details

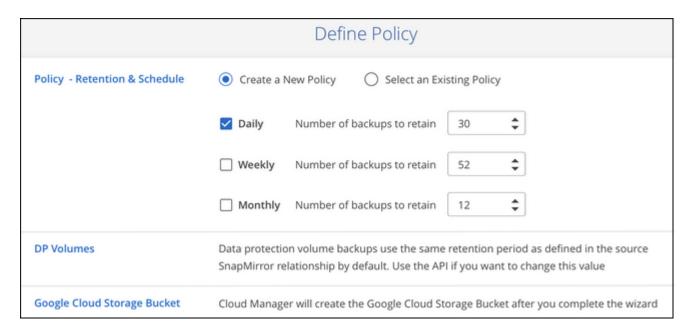
Select the Google Cloud Project where you want the Google Cloud Storage bucket to be created for backups.





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 daily, weekly, or monthly backups, or select one of the system-defined policies that provide more options.





Select the volumes that you want to back up

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



Restore your data, as needed

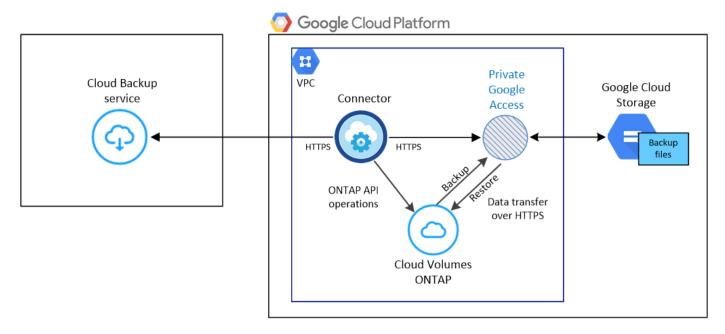
Restore a backup to a new volume. You can restore data to a Cloud Volumes ONTAP system in Google. A Service Account is required on the Cloud Volumes ONTAP system where you are performing the restore.

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. See Managing 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.

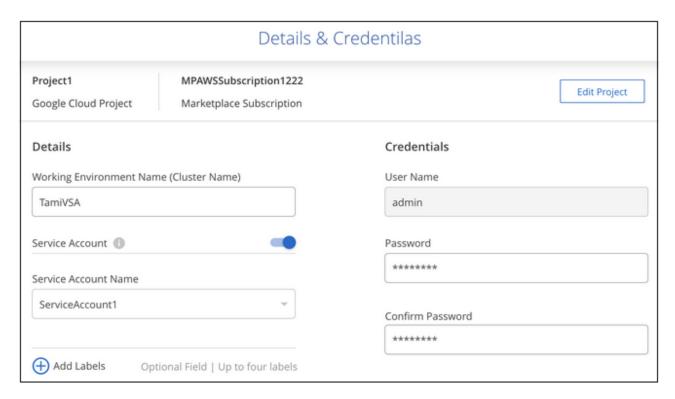
See Launching Cloud Volumes ONTAP in GCP for requirements and details for creating your Cloud Volumes ONTAP system.

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.



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



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.

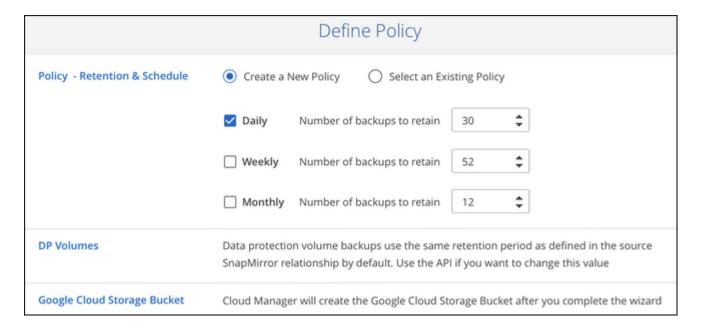


Select the Google Cloud Project and region where you want the Google Cloud Storage bucket to be created for backups, and click Next.



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

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



See the list of existing policies.

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



- 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.

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.