Backing up data to Amazon S3

Cloud Manager

Ben Cammett, Tom Onacki
January 27, 2021

This PDF was generated from https://docs.netapp.com/us-en/occm/task_backup_to_s3.html on February 28, 2021. Always check docs.netapp.com for the latest.

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Backing up data to Amazon S3

Complete a few steps to get started backing up data from Cloud Volumes ONTAP to Amazon S3.

Quick start

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

Verify support for your configuration

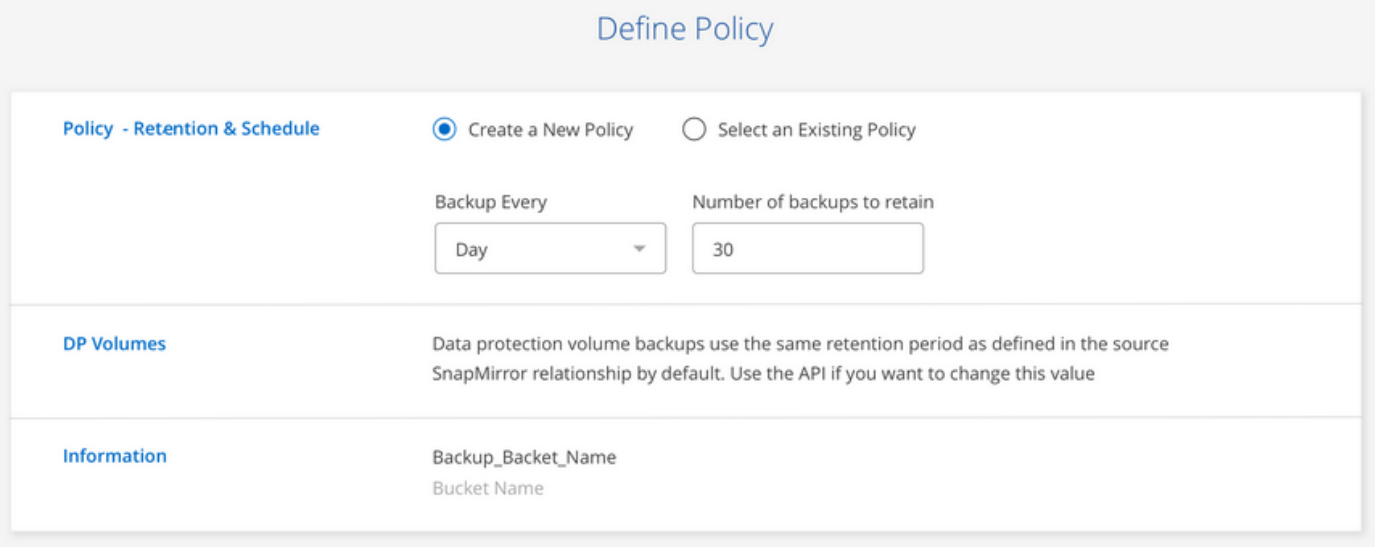
- You’re running Cloud Volumes ONTAP 9.6 or later in AWS.
- You have subscribed to the Cloud Manager Marketplace Backup offering, or you have purchased and activated a Cloud Backup BYOL license from NetApp.
- The IAM role that provides Cloud Manager with permissions includes S3 permissions from the latest Cloud Manager policy.

Enable Cloud Backup on your new or existing system

- New systems: Cloud Backup is enabled by default in the working environment wizard. Be sure to keep the option enabled.
- 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.

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. You can also change the number of backup copies to retain.



4 Select the volumes that you want to back up

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

5 Restore your data, as needed

Choose to restore an entire backup to a new volume, or to restore individual files from the backup to an existing volume. You can restore data to a Cloud Volumes ONTAP system in AWS, or to an on-premises ONTAP system.

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 S3.

Supported ONTAP versions

Cloud Volumes ONTAP 9.6 and later.

Supported AWS regions

Cloud Backup is supported in all AWS regions where Cloud Volumes ONTAP is supported.

License requirements

For Cloud Backup PAYGO licensing, a Cloud Manager subscription is available in the AWS Marketplace that enables deployments of Cloud Volumes ONTAP 9.6 and later (PAYGO) and Cloud Backup. You need to subscribe to this Cloud Manager subscription before you enable Cloud Backup. Billing for Cloud Backup is done through this subscription.

For Cloud Backup BYOL licensing, you do not need an AWS Cloud Backup subscription. 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 AWS subscription for the storage space where your backups will be located.

AWS permissions required

The IAM role that provides Cloud Manager with permissions must include S3 permissions from the latest Cloud Manager policy.

Here are the specific permissions from the policy:

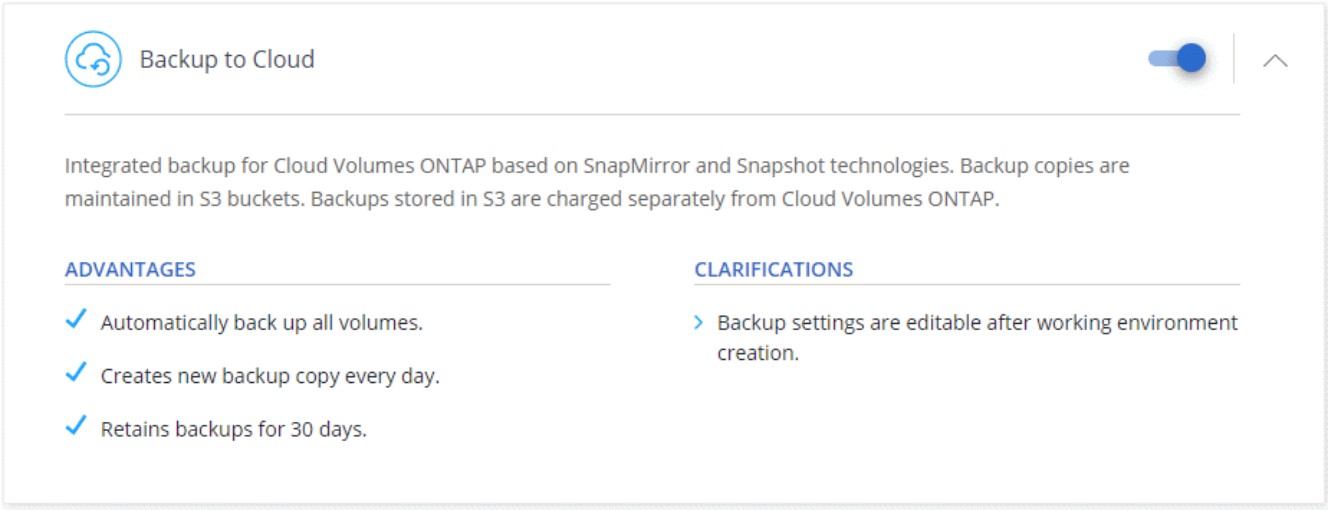
```
{
            "Sid": "backupPolicy",
            "Effect": "Allow",
            "Action": [
                "s3:DeleteBucket",
                "s3:GetLifecycleConfiguration",
                "s3:PutLifecycleConfiguration",
                "s3:PutBucketTagging",
                "s3:ListBucketVersions",
                "s3:GetObject",
                "s3:ListBucket",
                "s3:ListAllMyBuckets",
                "s3:GetBucketTagging",
                "s3:GetBucketLocation",
                "s3:GetBucketPolicyStatus",
                "s3:GetBucketPublicAccessBlock",
                "s3:GetBucketAcl",
                "s3:GetBucketPolicy",
                "s3:PutBucketPublicAccessBlock"
            ],
            "Resource": [
                "arn:aws:s3:::netapp-backup-*"
            ]
        },
```

Enabling Cloud Backup on a new system

Cloud Backup is enabled by default in the working environment wizard. Be sure to keep the option enabled.

Steps

1. Click **Create Cloud Volumes ONTAP**.
2. Select Amazon Web Services as the cloud provider and then choose a single node or HA system.
3. Fill out the Details & Credentials page.
4. On the Services page, leave the service enabled and click **Continue**.



5. Complete the pages in the wizard to deploy the system.

Result

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

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.

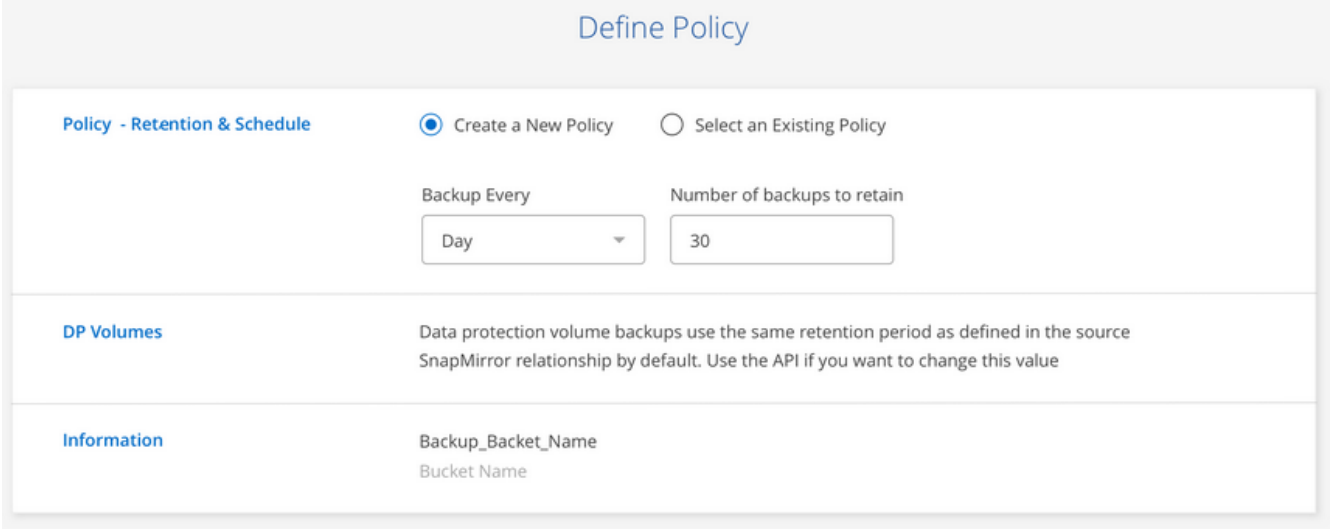
Enabling Cloud Backup on an existing system

Enable Cloud Backup at any time directly from the working environment.

Steps

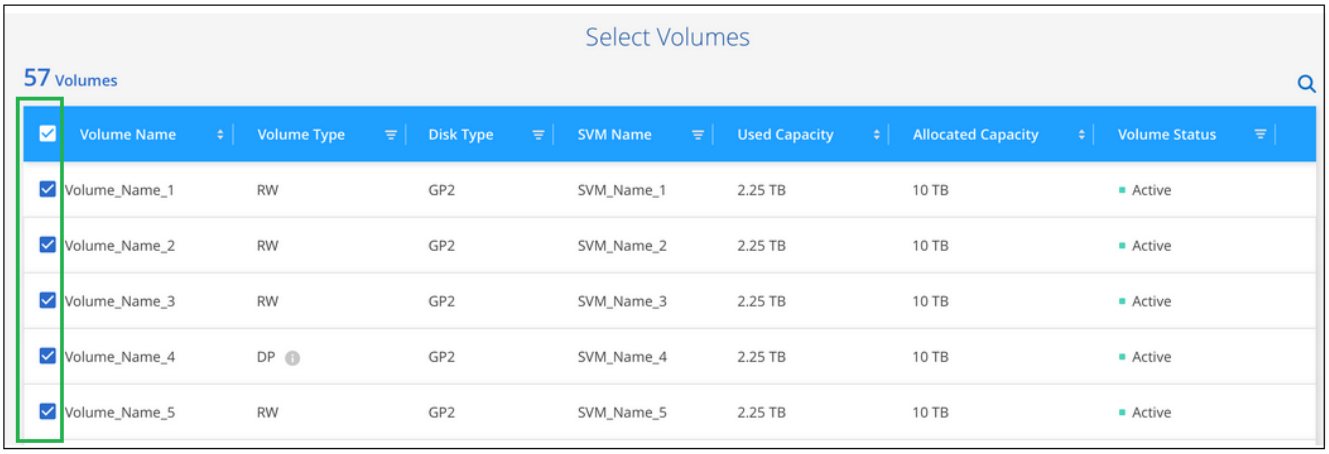
1. Select the working environment and click **Activate** next to the Cloud Backup service in the right-panel.

2. Define the backup schedule and retention value and click **Continue**.



See the list of existing policies.

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



- 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 or individual files from a backup file.

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