



Cloud Volumes Service for Google Cloud documentation

Cloud Volumes Service for Google Cloud

NetApp
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Cloud Volumes Service for Google Cloud documentation

Release notes

What's new

Learn what's new with Cloud Volumes Service for Google Cloud in BlueXP.

9 September 2020

Support for Cloud Volumes Service for Google Cloud

You can now manage Cloud Volumes Service for Google Cloud directly from BlueXP:

- Set up and create a working environment
- Create and manage NFSv3 and NFSv4.1 volumes for Linux and UNIX clients
- Create and manage SMB 3.x volumes for Windows clients
- Create, delete, and restore volume snapshots

Get started

Learn about Cloud Volumes Service for Google Cloud

NetApp Cloud Volumes Service for Google Cloud enables you to quickly add multi-protocol workloads as well as build and deploy both Windows-based and UNIX-based apps.

Key features

- Migrate data between on-premises and Google Cloud.
- Provision volumes from 1 to 100 TiB in seconds.
- Multiprotocol support (you can create an NFS or SMB volume).
- Protect data with automated, efficient snapshots.
- Accelerate app development with rapid cloning.

Cost

Volumes created by the Cloud Volumes Service for Google Cloud are charged to your subscription to the service, not through BlueXP.

There are no charges to discover a Cloud Volumes Service for Google Cloud region or volume from BlueXP.

[View pricing in the Google Cloud Marketplace](#)

Supported regions

[View supported Google Cloud regions](#)

Before you get started

BlueXP can discover existing Cloud Volumes Service for Google Cloud subscriptions and volumes. See the [NetApp Cloud Volumes Service for Google Cloud documentation](#) if you haven't set up your subscription yet.

Getting help

Use the BlueXP chat for general questions about Cloud Volumes Service operation in BlueXP.

For general questions about Cloud Volumes Service for Google Cloud, email NetApp's Google Cloud Team at gcinfo@netapp.com.

For technical issues associated with your cloud volumes, you can create a technical support case from the Google Cloud Console. See [obtaining support](#) for details.

Related links

- [NetApp BlueXP: Cloud Volumes Service for Google Cloud](#)
- [NetApp Cloud Volumes Service for Google Cloud documentation](#)

Getting started workflow

Get started with Cloud Volumes Service for Google Cloud by setting up Google Cloud and then creating a working environment.

1

Set up Google Cloud

From Google, enable the Cloud Volumes Service API and create a service account.

2

Create a working environment

From BlueXP, click **Add Working Environment > Google Cloud > Cloud Volumes Service** and then provide details about the service account and Google Cloud project.

Set up Google Cloud

BlueXP needs access to the Cloud Volumes Service API and the right permissions through a Google Cloud service account.

Step 1: Enable the Cloud Volumes Service API

Enable the Cloud Volumes Service API so that BlueXP can manage the subscription and cloud volumes.

Steps

1. From Google Cloud, launch a Cloud Shell session.

[Google Cloud documentation: Launch Cloud Shell](#)

2. Run the following command to enable the Cloud Volumes Service API:

```
gcloud --project=<my-cvs-project> services enable cloudvolumesgcp-  
api.netapp.com
```

Step 2: Set up a service account

Complete the following tasks so that BlueXP can access your Google Cloud project:

- Create a new service account
- Add the new service account member to your project and assign it specific roles (permissions)
- Create and download a key pair for the service account that is used to authenticate to Google

Steps

1. In the Google Cloud console, [go to the Service accounts page](#).
2. Click **Select a project**, choose your project, and click **Open**.
3. Click **Create service account**.
4. Enter the service account name (friendly display name) and description.

The Cloud Console generates a service account ID based on this name. Edit the ID if necessary - you cannot change the ID later.

5. To set access controls now, click **Create** and then **DONE** from the bottom of the page, and continue to the next step.
6. From the *IAM page* click **Add** and fill out the fields in the *Add Members* page:
 - a. In the New Members field, enter the full service account ID.

For example: user1-service-account-cvs@project1.iam.gserviceaccount.com

- b. Add these roles:
 - *NetApp Cloud Volumes Admin*
 - *Compute Network Viewer*
 - c. Click **Save**.
7. Click the Service Account name, and then from the *Service account details* page, click **Add key > Create new key**.
8. Select **JSON** as the key type and click **Create**.

By clicking **Create** your new public/private key pair is generated and downloaded to your system. It serves as the only copy of the private key. Store this file securely because it can be used to authenticate as your service account.

For detailed steps, refer to Google Cloud documentation:

- [Creating and managing service accounts](#)
- [Granting, changing, and revoking access to resources](#)
- [Creating and managing service account keys](#)

Create a Cloud Volumes Service for Google Cloud working environment

Create a Cloud Volumes Service for Google Cloud working environment in BlueXP so that you can create and manage volumes and snapshots.

Regardless of whether you have already created volumes from the Google Cloud Console, or if you just signed up for Cloud Volumes Service for Google Cloud and have no volumes yet, the first step is to create a working environment for the volumes based on your Google Cloud subscription.

If cloud volumes already exist for this subscription, then the volumes will appear in the new working environment. If you haven't added any cloud volumes yet for the Google Cloud subscription, then you do that after you create the new working environment.



If you have subscriptions and volumes in multiple Google Cloud projects, you need to perform this task for each project.

Before you begin

You must have the following information available when adding a subscription for each project:

- Service account credentials (JSON private key you downloaded)
- Project name

Steps

1. From the BlueXP navigation menu, select **Storage > Canvas**.
2. On the Canvas page, click **Add Working Environment** and select **Google Cloud Platform**.
3. Next to Cloud Volumes Service, select **Discover**.
4. Provide information about your Cloud Volumes Service subscription:
 - a. Enter the Working Environment Name you want to use.
 - b. Copy/paste the JSON private key you downloaded in the previous steps.
 - c. Select the name of your Google Cloud project.
 - d. Click **Continue**.

Cloud Volumes Service Credentials

Working Environment Name

Service Account Credentials

Paste the contents of the JSON file here

Apply

Project

Select project

Result

BlueXP displays your Cloud Volumes Service for Google Cloud working environment.



If cloud volumes already exist for this subscription, then the volumes appear in the new working environment. You can add additional cloud volumes from BlueXP.

If no cloud volumes exist for this subscription, create them now.

What's next?

[Start creating volumes.](#)

Use Cloud Volumes Service for Google Cloud

Create and mount volumes

BlueXP enables you to create cloud volumes based on your Cloud Volumes Service for Google Cloud subscription. After you create a volume, get the relevant mount commands so that you can mount the volume to a client.

Create volumes

You can create NFS or SMB volumes in a new or existing Cloud Volumes Service for Google Cloud account. Cloud volumes currently support NFSv3 and NFSv4.1 for Linux and UNIX clients, and SMB 3.x for Windows clients.

Before you begin

- If you want to use SMB in Google Cloud, you must have set up DNS and Active Directory.
- When planning to create an SMB volume, you must have a Windows Active Directory server available to which you can connect. You will enter this information when creating the volume. Also, make sure that the Admin user is able to create a machine account in the Organizational unit (OU) path specified.

Steps

1. Select the working environment and click **Add New Volume**.
2. In the Details & Location page, enter details about the volume:
 - a. Enter a name for the volume.
 - b. Specify a size within the range of 1 TiB (1024 GiB) to 100 TiB.
[Learn more about allocated capacity.](#)
 - c. Specify a service level: Standard, Premium, or Extreme.
[Learn more about service levels.](#)
 - d. Select the Google Cloud region.
 - e. Select the VPC Network from which the volume will be accessible. Note that the VPC cannot be changed or edited after the volume is created.
 - f. Click **Continue**.
3. In the Protocol page, select NFS or SMB and then define the details. Required entries for NFS and SMB are shown in separate sections below.
4. For NFS:
 - a. In the Volume Path field, specify the name of the volume export you will see when you mount the volume.
 - b. Select NFSv3, NFSv4.1, or both depending on your requirements.
 - c. Optionally, you can create an export policy to identify the clients that can access the volume. Specify the:

- Allowed clients by using an IP address or Classless Inter-Domain Routing (CIDR).
- Access rights as Read & Write or Read Only.
- Access protocol (or protocols if the volume allows both NFSv3 and NFSv4.1 access) used for users.
- Click **+ Add Export Policy Rule** if you want to define additional export policy rules.

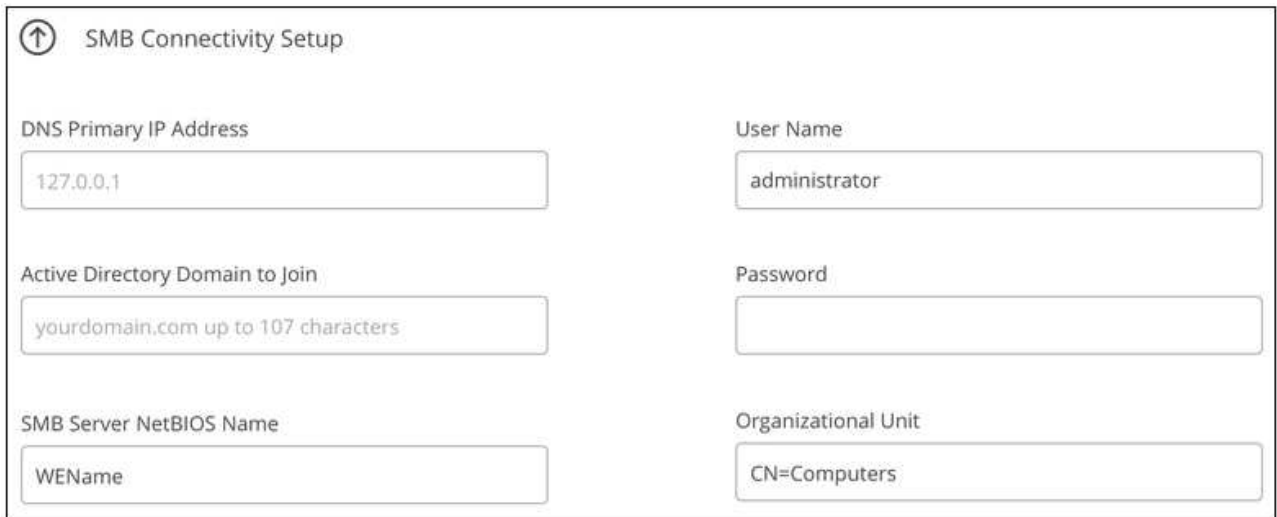
The following image shows the Volume page filled out for the NFS protocol:

5. For SMB:

- In the Volume Path field, specify the name of the volume export you will see when you mount the volume and click **Continue**.
- If Active Directory has been set up, you see the configuration. If it is the first volume being set up and no Active Directory has been set up, you can enable SMB session encryption in the SMB Connectivity Setup page:

Field	Description
DNS Primary IP Address	The IP addresses of the DNS servers that provide name resolution for the SMB server. Use a comma to separate the IP addresses when referencing multiple servers, for example, 172.31.25.223, 172.31.2.74..
Active Directory Domain to join	The FQDN of the Active Directory (AD) domain that you want the SMB server to join.
SMB Server NetBIOS name	A NetBIOS name for the SMB server that will be created.
Credentials authorized to join the domain	The name and password of a Windows account with sufficient privileges to add computers to the specified Organizational Unit (OU) within the AD domain.
Organizational Unit	The organizational unit within the AD domain to associate with the SMB server. The default is CN=Computers for connections to your own Windows Active Directory server.

The following image shows the Volume page filled out for the SMB protocol:



The screenshot shows a form titled "SMB Connectivity Setup" with a back arrow icon. It contains six input fields arranged in three rows and two columns. The first row has "DNS Primary IP Address" (127.0.0.1) and "User Name" (administrator). The second row has "Active Directory Domain to Join" (yourdomain.com up to 107 characters) and "Password" (empty). The third row has "SMB Server NetBIOS Name" (WEName) and "Organizational Unit" (CN=Computers).

DNS Primary IP Address	User Name
127.0.0.1	administrator
Active Directory Domain to Join	Password
yourdomain.com up to 107 characters	
SMB Server NetBIOS Name	Organizational Unit
WEName	CN=Computers

6. Click **Continue**.
7. If you want to create the volume based on a snapshot of an existing volume, select the snapshot from the Snapshot Name drop-down list. Otherwise just click **Continue**.
8. In the Snapshot Policy page, you can enable Cloud Volumes Service to create snapshot copies of your volumes based on a schedule. You can do this now by moving the selector to the right, or you can edit the volume later to define the snapshot policy.

Learn how to [create a snapshot policy](#).

9. Click **Add Volume**.

Result

The new volume is added to the working environment.

Continue with mounting the cloud volume.

Mount cloud volumes

Access mounting instructions from within BlueXP so you can mount the volume to a host.



Use the highlighted protocol/dialect supported by your client.

Steps

1. Open the working environment.
2. Hover over the volume and click **Mount the volume**.

NFS and SMB volumes display mount instructions for that protocol.

3. Hover over the commands and copy them to your clipboard to make this process easier. Just add the destination directory/mount point at the end of the command.

NFS example:

Mount the volume - testk

Setting up your instance

1. Open an SSH client and connect to your instance.
2. Install the nfs client on your instance.

On Red Hat Enterprise Linux or SuSE Linux instance:

```
$ sudo yum install -y nfs-utils
```

On an Ubuntu or Debian instance:

```
$ sudo apt-get install nfs-common
```

Mounting your volume

1. Create a new directory on your instance:

```
$ sudo mkdir /dir
```

2. Mount your NFSv3 volume using the command below:

```
sudo mount -t nfs -o rw,hard,rsize=65536,wsiz=65536,vers=3,tc...
```

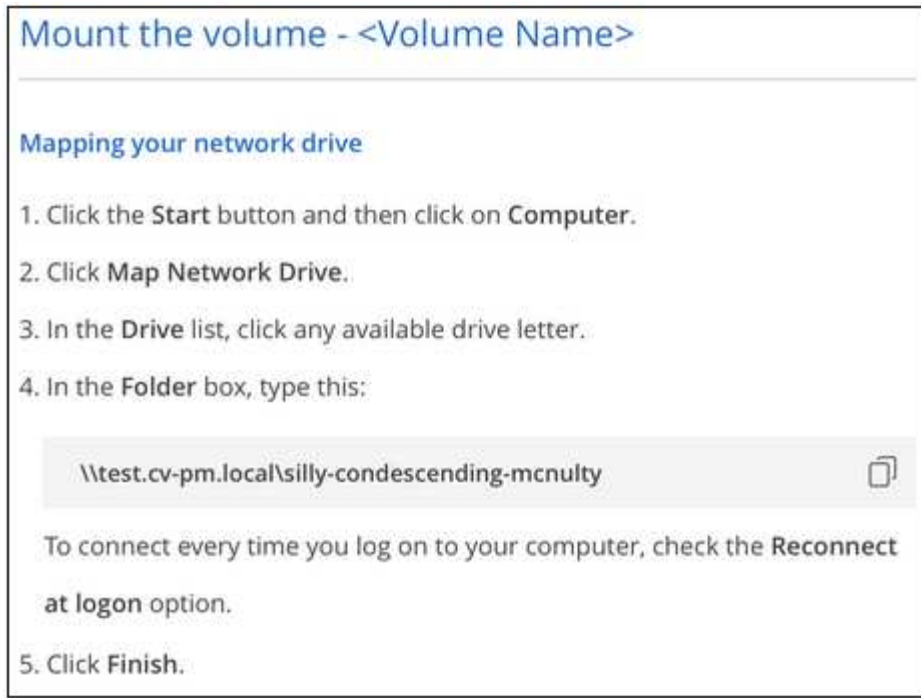
3. Mount your NFSv4.1 volume using the command below:

```
sudo mount -t nfs -o rw,hard,rsize=65536,wsiz=65536,vers=4.1,t...
```

The maximum I/O size defined by the `rsiz` and `wsiz` options is 1048576, however 65536 is the recommended default for most use cases.

Note that Linux clients will default to NFSv4.1 unless the version is specified with the `vers=<nfs_version>` option.

SMB example:



4. Map your network drive by following the mount instructions for your instance.

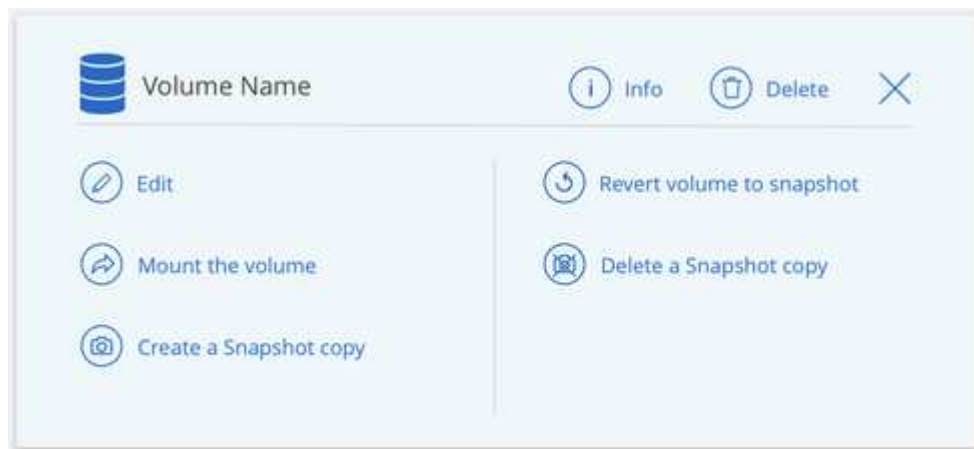
After completing the steps in the mount instructions, you have successfully mounted the cloud volume to your Google Cloud instance.

Manage existing volumes

You can manage existing volumes as your storage needs change. You can view, edit, restore, and delete volumes.

Steps

1. Open the working environment.
2. Hover over the volume.



3. Manage your volumes:

Task	Action
View information about a volume	Click Info .
Edit a volume (including snapshot policy)	a. Click Edit . b. Modify the volume's properties and then click Update .
Get the NFS or SMB mount command	a. Click Mount the volume . b. Click Copy to copy the command(s).
Create a Snapshot copy on demand	a. Click Create a Snapshot copy . b. Change the name, if needed, and then click Create .
Replace the volume with the contents of a Snapshot copy	a. Click Revert volume to snapshot . b. Select a Snapshot copy and click Restore .
Delete a Snapshot copy	a. Click Delete a Snapshot copy . b. Select the snapshot and click Delete . c. Click Delete again when prompted to confirm.
Delete a volume	a. Unmount the volume from all clients: <ul style="list-style-type: none"> ◦ On Linux clients, use the <code>umount</code> command. ◦ On Windows clients, click Disconnect network drive. b. Select a volume, and then click Delete . c. Click Delete again to confirm.

Manage cloud volumes snapshots

You can create a snapshot policy for each volume so that you can recover or restore the entire contents of a volume from an earlier time. You can also create an on-demand snapshot of a cloud volume when needed.

Create an on-demand snapshot

You can create an on-demand snapshot of a cloud volume if you want to create a snapshot with the current volume state.

Steps

1. Open the working environment.
2. Hover over the volume and click **Create a snapshot copy**.
3. Enter a name for the snapshot, or use the automatically generated name, and click **Create**.

Create a Snapshot Copy - <Volume Name>

A NetApp Snapshot copy is a read-only, point-in-time image of a volume. The image protects your data with no performance impact and requires minimal storage.

Snapshot Copy Name

manually.2020-05-04_1722

Create

The snapshot is created.

Create or modify a snapshot policy

You can create or modify a snapshot policy as necessary for a cloud volume. You define the snapshot policy from the *Snapshot Policy* tab either when creating a volume or when editing a volume.

Steps

1. Open the working environment.
2. Hover over the volume and click **Edit**.
3. From the *Snapshot Policy* tab, move the enable snapshots slider to the right.
4. Define the schedule for snapshots:
 - a. Select the frequency: **Hourly**, **Daily**, **Weekly**, or **Monthly**
 - b. Select the number of snapshots you want to keep.
 - c. Select the day, hour, and minute when the snapshot should be taken.

Schedule Snapshot Policies:

<input checked="" type="checkbox"/> Hourly	Number of Snapshot to Keep	Minute	
	<input type="text" value="12"/>	<input type="text" value="30"/>	
<input type="checkbox"/> Daily	Number of Snapshot to Keep	Hour	Minute
	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
<input checked="" type="checkbox"/> Weekly	Number of Snapshot to Keep	Days	Hour Minute
	<input type="text" value="3"/>	<div>Sunday x</div>	<input type="text" value="0"/> <input type="text" value="0"/>
<input type="checkbox"/> Monthly	Number of Snapshot to Keep		Hour Minute
	<input type="text" value="0"/>	<input type="checkbox"/> Sunday <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday	<input type="text" value="0"/> <input type="text" value="0"/>

5. Click **Add volume** or **Update volume** to save your policy settings.

Disable a snapshot policy

You can disable a snapshot policy to stop snapshots from being created for a short period of time while retaining your snapshot policy settings.

Steps

1. Open the working environment.
2. Hover over the volume and click **Edit**.
3. From the *Snapshot Policy* tab, move the enable snapshots slider to the left.

Enable automatic Snapshot copies

When disabled, Cloud Volumes Service does not create Snapshot copies of your volumes.

4. Click **Update volume**.

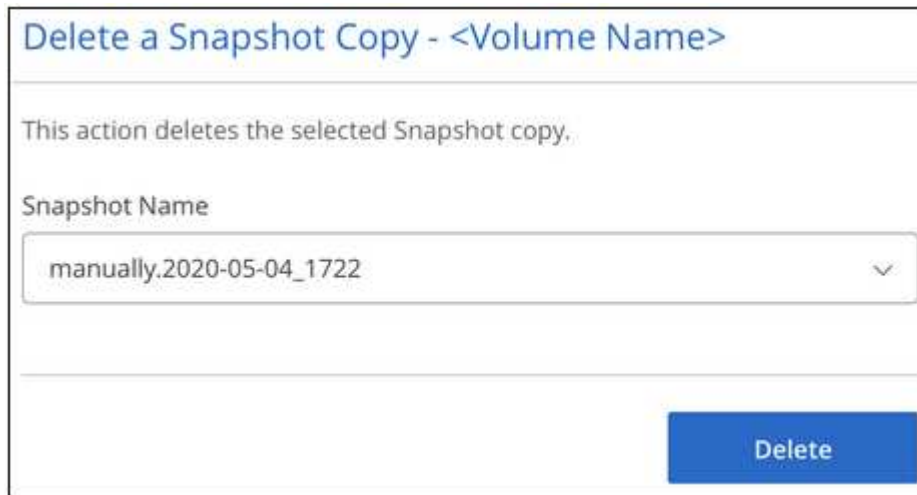
When you want to re-enable the snapshot policy, move the enable snapshots slider to the right and click **Update volume**.

Delete a snapshot

You can delete a snapshot if it is no longer needed.

Steps

1. Open the working environment.
2. Hover over the volume and click **Delete a Snapshot copy**.
3. Select the snapshot from the drop-down list and click **Delete**.



The screenshot shows a dialog box titled "Delete a Snapshot Copy - <Volume Name>". Inside the dialog, there is a message: "This action deletes the selected Snapshot copy." Below this message, there is a label "Snapshot Name" followed by a dropdown menu. The dropdown menu is open, showing the selected value "manually.2020-05-04_1722" and a downward arrow. At the bottom right of the dialog, there is a blue button labeled "Delete".

4. In the confirmation dialog box, click **Delete**.

Restore a snapshot to a new volume

You can restore a snapshot to a new volume as necessary.

Steps

1. Open the working environment.
2. Hover over the volume and click **Restore to a new volume**.
3. Select the snapshot that you want to use to create the new volume from the drop-down list.
4. Enter a name for the new volume and click **Restore**.

Restore to a new volume - <Volume Name>

This operation restores data from a Snapshot copy to a new volume.

Snapshot Name

manually.2020-05-04_1722

Restored Volume Name:

vol_restore

Restore

The volume is created in the working environment.

5. If you need to change any of the volume attributes, such as volume path or service level:
 - a. Hover over the volume and click **Edit**.
 - b. Make your changes and click **Update volume**.


After you finish


Continue with [Mounting the cloud volume](#).

Manage your Active Directory configuration

If you changed your DNS servers or Active Directory domain, you need to modify the SMB server in Cloud Volumes Service so that it can continue to serve storage to clients.

Steps

1. Open the working environment.
2. Click the  button at the top of the page and click **Manage Active Directory**.

If no Active Directory is configured, you can add one now. If one is configured, you can modify or delete the settings using the  button.

3. Specify the settings for the SMB server:

Field	Description
DNS Primary IP Address	The IP addresses of the DNS servers that provide name resolution for the SMB server. Use a comma to separate the IP addresses when referencing multiple servers, for example, 172.31.25.223, 172.31.2.74.

Field	Description
Active Directory Domain to join	The FQDN of the Active Directory (AD) domain that you want the SMB server to join.
SMB Server NetBIOS name	A NetBIOS name for the SMB server that will be created.
Credentials authorized to join the domain	The name and password of a Windows account with sufficient privileges to add computers to the specified Organizational Unit (OU) within the AD domain.
Organizational Unit	The organizational unit within the AD domain to associate with the SMB server. The default is CN=Computers for connections to your own Windows Active Directory server.

4. Click **Save** to save your settings.


Remove Cloud Volumes Service from BlueXP

You can remove a Cloud Volumes Service for Google Cloud subscription and all existing volumes from BlueXP. The volumes are not deleted, they are just removed from the BlueXP interface.



Deleting your Cloud Volumes Service for Google Cloud subscription from BlueXP isn't supported. You can do this only through the Google Cloud Console.

Steps

1. Open the working environment.
2. Click the  button at the top of the page and click **Remove Cloud Volumes Service**.
3. In the confirmation dialog box, click **Remove**.

Knowledge and support

Register for support

Support registration is required to receive technical support specific to BlueXP and its storage solutions and services. Support registration is also required to enable key workflows for Cloud Volumes ONTAP systems.

Registering for support does not enable NetApp support for a cloud provider file service. For technical support related to a cloud provider file service, its infrastructure, or any solution using the service, refer to "Getting help" in the BlueXP documentation for that product.

- [Amazon FSx for ONTAP](#)
- [Azure NetApp Files](#)
- [Cloud Volumes Service for Google Cloud](#)

Support registration overview

There are two forms of registration to activate support entitlement:

- Registering your BlueXP account ID support subscription (your 20 digit 960xxxxxxx serial number located on the Support Resources page in BlueXP).

This serves as your single support subscription ID for any service within BlueXP. Each BlueXP account-level support subscription must be registered.

- Registering the Cloud Volumes ONTAP serial numbers associated with a subscription in your cloud provider's marketplace (these are 20 digit 909201xxxxxxx serial numbers).

These serial numbers are commonly referred to as *PAYGO serial numbers* and get generated by BlueXP at the time of Cloud Volumes ONTAP deployment.

Registering both types of serial numbers enables capabilities like opening support tickets and automatic case generation. Registration is completed by adding NetApp Support Site (NSS) accounts to BlueXP as described below.

Register your BlueXP account for NetApp support

To register for support and activate support entitlement, one user in your BlueXP account must associate a NetApp Support Site account with their BlueXP login. How you register for NetApp support depends on whether you already have a NetApp Support Site (NSS) account.

Existing customer with an NSS account

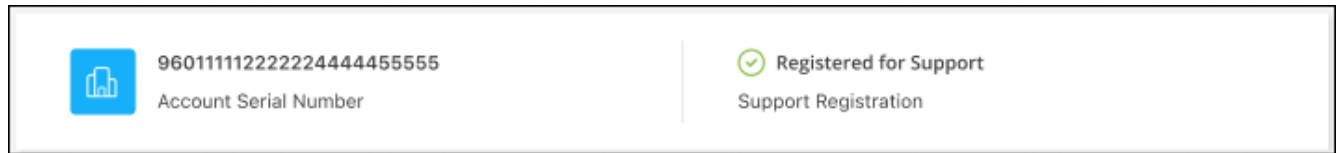
If you're a NetApp customer with an NSS account, you simply need to register for support through BlueXP.

Steps

1. In the upper right of the BlueXP console, select the Settings icon, and select **Credentials**.
2. Select **User Credentials**.

3. Select **Add NSS credentials** and follow the NetApp Support Site (NSS) Authentication prompt.
4. To confirm that the registration process was successful, select the Help icon, and select **Support**.

The **Resources** page should show that your account is registered for support.



Note that other BlueXP users will not see this same support registration status if they have not associated a NetApp Support Site account with their BlueXP login. However, that doesn't mean that your BlueXP account is not registered for support. As long as one user in the account has followed these steps, then your account has been registered.

Existing customer but no NSS account

If you're an existing NetApp customer with existing licenses and serial numbers but *no* NSS account, you need to create an NSS account and associate it with your BlueXP login.

Steps

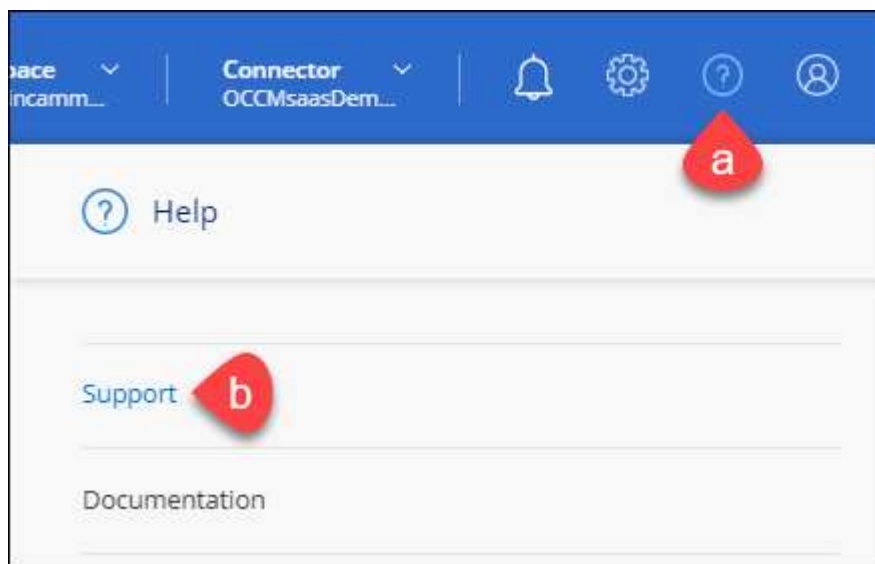
1. Create a NetApp Support Site account by completing the [NetApp Support Site User Registration form](#)
 - a. Be sure to select the appropriate User Level, which is typically **NetApp Customer/End User**.
 - b. Be sure to copy the BlueXP account serial number (960xxxx) used above for the serial number field. This will speed up the account processing.
2. Associate your new NSS account with your BlueXP login by completing the steps under [Existing customer with an NSS account](#).

Brand new to NetApp



If you are brand new to NetApp and you don't have an NSS account, follow each step below.

Steps

1. In the upper right of the BlueXP console, select the Help icon, and select **Support**.



2. Locate your account ID serial number from the Support Registration page.

 96015585434285107893 Account serial number	 Not Registered Add your NetApp Support Site (NSS) credentials to BlueXP Follow these instructions to register for support in case you don't have an NSS account yet.
--	--

3. Navigate to [NetApp's support registration site](#) and select **I am not a registered NetApp Customer**.
4. Fill out the mandatory fields (those with red asterisks).
5. In the **Product Line** field, select **Cloud Manager** and then select your applicable billing provider.
6. Copy your account serial number from step 2 above, complete the security check, and then confirm that you read NetApp's Global Data Privacy Policy.

An email is immediately sent to the mailbox provided to finalize this secure transaction. Be sure to check your spam folders if the validation email doesn't arrive in few minutes.

7. Confirm the action from within the email.

Confirming submits your request to NetApp and recommends that you create a NetApp Support Site account.

8. Create a NetApp Support Site account by completing the [NetApp Support Site User Registration form](#)
 - a. Be sure to select the appropriate User Level, which is typically **NetApp Customer/End User**.
 - b. Be sure to copy the account serial number (960xxxx) used above for the serial number field. This will speed up the account processing.

After you finish

NetApp should reach out to you during this process. This is a one-time onboarding exercise for new users.

Once you have your NetApp Support Site account, associate the account with your BlueXP login by completing the steps under [Existing customer with an NSS account](#).

Associate NSS credentials for Cloud Volumes ONTAP support

Associating NetApp Support Site credentials with your BlueXP account is required to enable the following key workflows for Cloud Volumes ONTAP:

- Registering pay-as-you-go Cloud Volumes ONTAP systems for support

Providing your NSS account is required to activate support for your system and to gain access to NetApp technical support resources.

- Deploying Cloud Volumes ONTAP when you bring your own license (BYOL)

Providing your NSS account is required so that BlueXP can upload your license key and to enable the subscription for the term that you purchased. This includes automatic updates for term renewals.

- Upgrading Cloud Volumes ONTAP software to the latest release

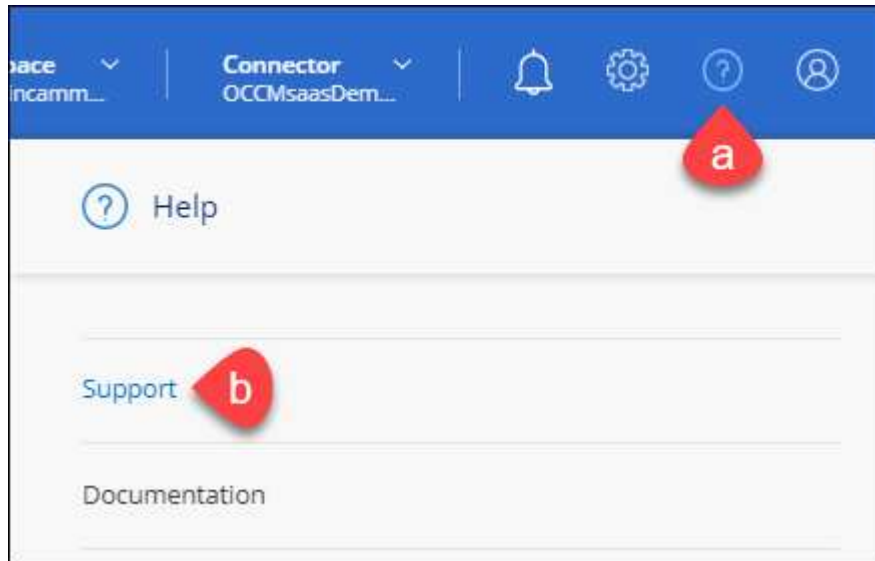
Associating NSS credentials with your BlueXP account is different than the NSS account that is associated with a BlueXP user login.

These NSS credentials are associated with your specific BlueXP account ID. Users who belong to the BlueXP account can access these credentials from **Support > NSS Management**.

- If you have a customer-level account, you can add one or more NSS accounts.
- If you have a partner or reseller account, you can add one or more NSS accounts, but they can't be added alongside customer-level accounts.

Steps

1. In the upper right of the BlueXP console, select the Help icon, and select **Support**.



2. Select **NSS Management > Add NSS Account**.
3. When you're prompted, select **Continue** to be redirected to a Microsoft login page.

NetApp uses Microsoft Entra ID as the identity provider for authentication services specific to support and licensing.

4. At the login page, provide your NetApp Support Site registered email address and password to perform the authentication process.

These actions enable BlueXP to use your NSS account for things like license downloads, software upgrade verification, and future support registrations.


Note the following:


- The NSS account must be a customer-level account (not a guest or temp account). You can have multiple customer-level NSS accounts.
- There can be only one NSS account if that account is a partner-level account. If you try to add customer-level NSS accounts and a partner-level account exists, you'll get the following error message:

"The NSS customer type is not allowed for this account as there are already NSS Users of different type."

The same is true if you have pre-existing customer-level NSS accounts and try to add a partner-level account.

- Upon successful login, NetApp will store the NSS user name.

This is a system-generated ID that maps to your email. On the **NSS Management** page, you can display your email from the  menu.

- If you ever need to refresh your login credential tokens, there is also an **Update Credentials** option in the  menu.

Using this option prompts you to log in again. Note that the token for these accounts expire after 90 days. A notification will be posted to alert you of this.

Get help

NetApp provides support for BlueXP and its cloud services in a variety of ways. Extensive free self-support options are available 24x7, such as knowledgebase (KB) articles and a community forum. Your support registration includes remote technical support via web ticketing.

Get support for a cloud provider file service

For technical support related to a cloud provider file service, its infrastructure, or any solution using the service, refer to "Getting help" in the BlueXP documentation for that product.

- [Amazon FSx for ONTAP](#)
- [Azure NetApp Files](#)
- [Cloud Volumes Service for Google Cloud](#)

To receive technical support specific to BlueXP and its storage solutions and services, use the support options described below.

Use self-support options

These options are available for free, 24 hours a day, 7 days a week:

- Documentation

The BlueXP documentation that you're currently viewing.

- [Knowledge base](#)

Search through the BlueXP knowledge base to find helpful articles to troubleshoot issues.

- [Communities](#)

Join the BlueXP community to follow ongoing discussions or create new ones.

Create a case with NetApp support

In addition to the self-support options above, you can work with a NetApp Support specialist to resolve any issues after you activate support.

Before you get started

- To use the **Create a Case** capability, you must first associate your NetApp Support Site credentials with your BlueXP login. [Learn how to manage credentials associated with your BlueXP login.](#)
- If you're opening a case for an ONTAP system that has a serial number, then your NSS account must be associated with the serial number for that system.

Steps

1. In BlueXP, select **Help > Support**.
2. On the **Resources** page, choose one of the available options under Technical Support:
 - a. Select **Call Us** if you'd like to speak with someone on the phone. You'll be directed to a page on netapp.com that lists the phone numbers that you can call.
 - b. Select **Create a Case** to open a ticket with a NetApp Support specialist:
 - **Service:** Select the service that the issue is associated with. For example, BlueXP when specific to a technical support issue with workflows or functionality within the service.
 - **Working Environment:** If applicable to storage, select **Cloud Volumes ONTAP** or **On-Prem** and then the associated working environment.


The list of working environments are within scope of the BlueXP account, workspace, and Connector you have selected in the top banner of the service.

- **Case Priority:** Choose the priority for the case, which can be Low, Medium, High, or Critical.

To learn more details about these priorities, hover your mouse over the information icon next to the field name.

- **Issue Description:** Provide a detailed description of your problem, including any applicable error messages or troubleshooting steps that you performed.
- **Additional Email Addresses:** Enter additional email addresses if you'd like to make someone else aware of this issue.
- **Attachment (Optional):** Upload up to five attachments, one at a time.

Attachments are limited to 25 MB per file. The following file extensions are supported: txt, log, pdf, jpg/jpeg, rtf, doc/docx, xls/xlsx, and csv.

ntapitdemo 


NetApp Support Site Account

Service

Select ▼

Working Enviroment


Select ▼

Case Priority 

Low - General guidance ▼

Issue Description



Provide detailed description of problem, applicable error messages and troubleshooting steps taken.



Additional Email Addresses (Optional) 

Type here

Attachment (Optional)

No files selected

 Upload 

After you finish

A pop-up will appear with your support case number. A NetApp Support specialist will review your case and get back to you soon.

For a history of your support cases, you can select **Settings > Timeline** and look for actions named "create support case." A button to the far right lets you expand the action to see details.

It's possible that you might encounter the following error message when trying to create a case:

"You are not authorized to Create a Case against the selected service"

This error could mean that the NSS account and the company of record it's associated with is not the same company of record for the BlueXP account serial number (ie. 960xxxx) or the working environment serial number. You can seek assistance using one of the following options:

- Use the in-product chat
- Submit a non-technical case at <https://mysupport.netapp.com/site/help>

Manage your support cases (Preview)

You can view and manage active and resolved support cases directly from BlueXP. You can manage the cases associated with your NSS account and with your company.

Case management is available as a Preview. We plan to refine this experience and add enhancements in upcoming releases. Please send us feedback by using the in-product chat.

Note the following:

- The case management dashboard at the top of the page offers two views:
 - The view on the left shows the total cases opened in the past 3 months by the user NSS account you provided.
 - The view on the right shows the total cases opened in the past 3 months at your company level based on your user NSS account.

The results in the table reflect the cases related to the view that you selected.

- You can add or remove columns of interest and you can filter the contents of columns like Priority and Status. Other columns provide just sorting capabilities.

View the steps below for more details.

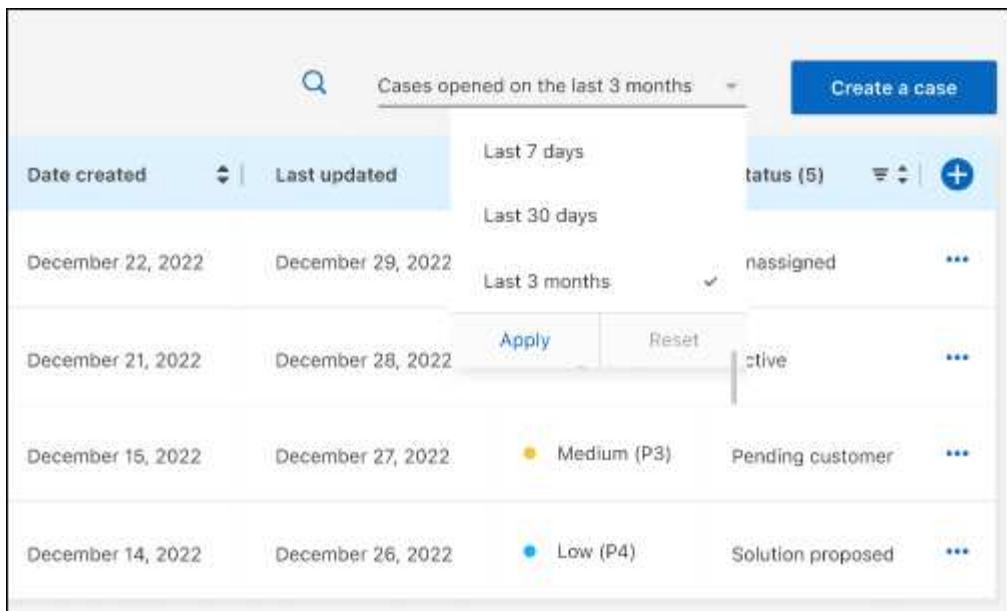
- At a per-case level, we offer the ability to update case notes or close a case that is not already in Closed or Pending Closed status.

Steps

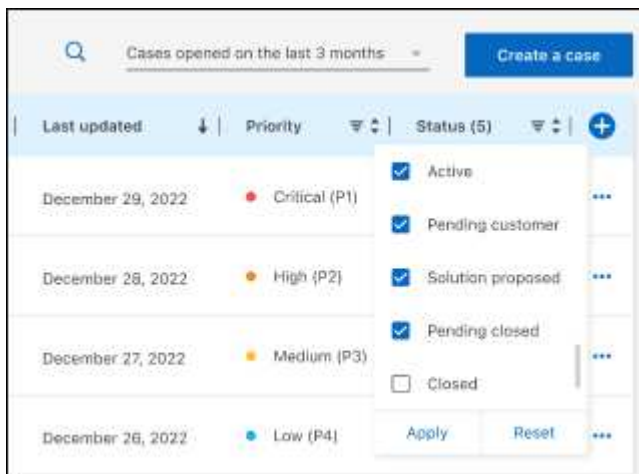
1. In BlueXP, select **Help > Support**.
2. Select **Case Management** and if you're prompted, add your NSS account to BlueXP.

The **Case management** page shows open cases related to the NSS account that is associated with your BlueXP user account. This is the same NSS account that appears at the top of the **NSS management** page.

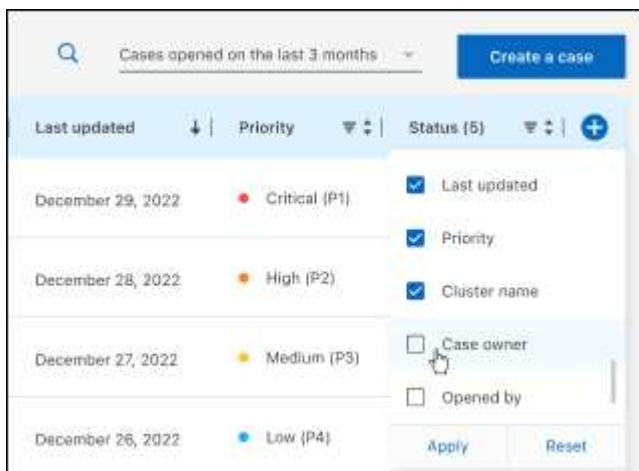
3. Optionally modify the information that displays in the table:
 - Under **Organization's cases**, select **View** to view all cases associated with your company.
 - Modify the date range by choosing an exact date range or by choosing a different time frame.



- Filter the contents of the columns.



- Change the columns that appear in the table by selecting  and then choosing the columns that you'd like to display.

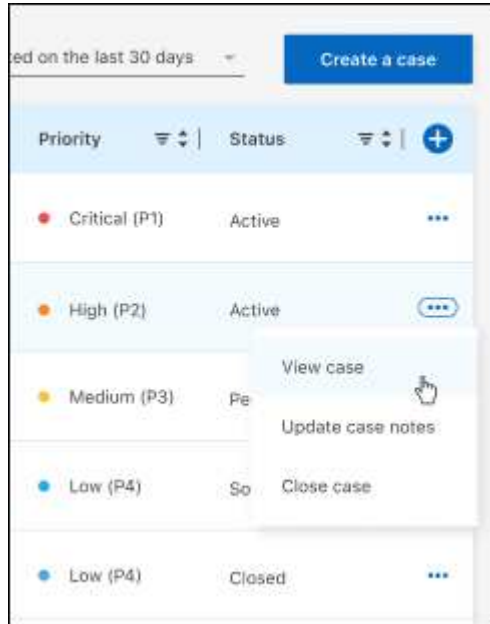


4. Manage an existing case by selecting ... and selecting one of the available options:

- **View case:** View full details about a specific case.
- **Update case notes:** Provide additional details about your problem or select **Upload files** to attach up to a maximum of five files.

Attachments are limited to 25 MB per file. The following file extensions are supported: txt, log, pdf, jpg/jpeg, rtf, doc/docx, xls/xlsx, and csv.

- **Close case:** Provide details about why you're closing the case and select **Close case**.



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