



Azure Blob storage documentation

Azure Blob storage

NetApp
August 29, 2024

Table of Contents

- Azure Blob storage documentation 1
- What's new with Azure Blob Storage in BlueXP 2
 - 5 June 2023 2
- Get started 3
 - View your Azure Blob storage accounts 3
- Manage Azure Blob storage accounts 6
 - Add Azure Blob storage accounts 6
 - Change Azure Blob storage account settings 8
 - Use NetApp data services with Azure Blob storage 9
- Knowledge and support 11
 - Register for support 11
 - Get help 15
- Legal notices 21
 - Copyright 21
 - Trademarks 21
 - Patents 21
 - Privacy policy 21
 - Open source 21

Azure Blob storage documentation

What's new with Azure Blob Storage in BlueXP

Learn what's new with Azure Blob Storage in BlueXP.

5 June 2023

Ability to add new storage accounts from BlueXP

You have had the ability to view Azure Blob Storage on the BlueXP Canvas for quite a while. Now you can add new storage accounts and change properties for existing storage accounts directly from BlueXP. [See how to add new Azure Blob storage accounts.](#)

Get started

View your Azure Blob storage accounts

After you install a Connector in Azure, BlueXP can automatically discover information about the Azure storage accounts that reside in the Azure Subscriptions where the Connector is installed. An Azure Blob working environment is added to the Canvas so you can view this information.

You can see details about your Azure storage accounts, including the location, resource group, used capacity, and more. These accounts can be used as destinations for BlueXP backup and recovery, BlueXP tiering, or BlueXP copy and sync operations.

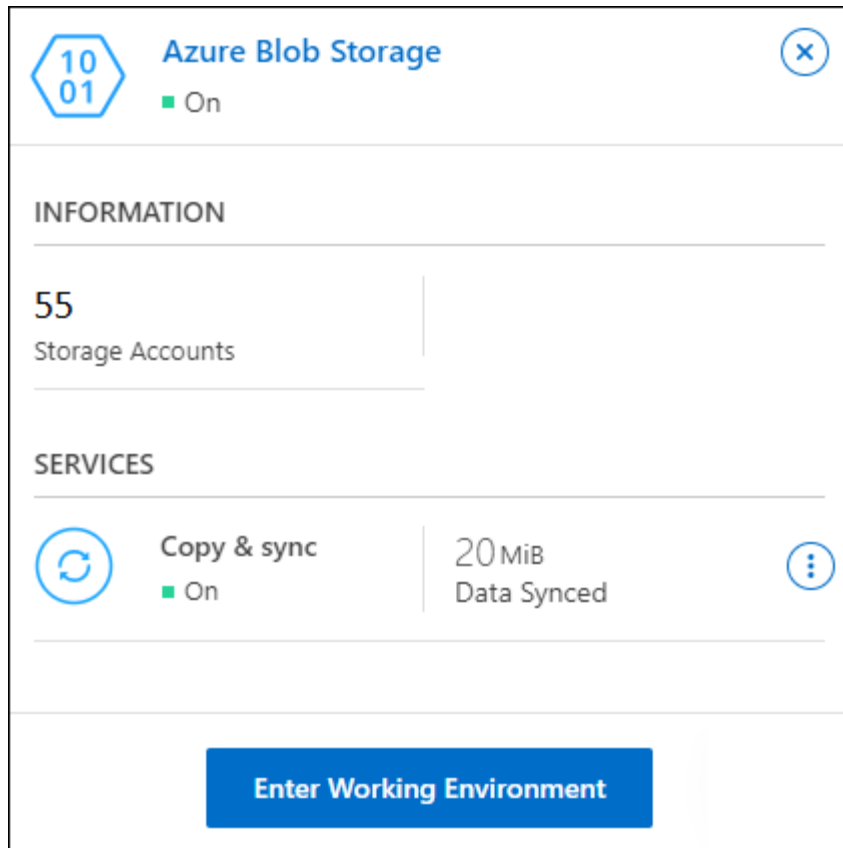
Steps

1. [Install a Connector](#) in the Azure account where you want to view your Azure Blob storage accounts.
2. From the navigation menu, select **Storage > Canvas**.

You should automatically see an Azure Blob Storage working environment shortly after.



3. Select the working environment and select an action from the right pane if you want to enable BlueXP services with your Azure Blob storage.



See which BlueXP services are available and learn how to use them with your Azure Blob Storage accounts.

4. Select **Enter Working Environment**, or double-click the working environment, to view details about the Azure storage accounts.

Storage Account Name	Subscription	Location	Creation Date	Resource Group	Blob Capacity
occsim13144343	OCCM QA1	East US 2	May 12, 2023	occm_group_eastus2	14 GiB
netappbackupvsaawtqbq3z	OCCM QA1	East US 2	April 7, 2023	occm_group_eastus2	13.3 GiB
occmforadizf55	OCCM QA1	East US	January 23, 2023	occm_group_for_adiz	13.15 GiB
netappbackupvsa44ech2k0	OCCM QA1	East US	January 16, 2023	occm_group_eastus	12.92 GiB
netappbackupvsalkdp7c1h	OCCM QA1	Central US	June 27, 2022	occm_group_uaenorth	12.87 GiB
netappbackupvsaulyomzpo	OCCM QA1	East US 2	April 4, 2023	occm_group_eastus2	12.75 GiB

In addition to the columns that appear by default, you can scroll the page to view additional properties for the storage account; for example, the number of tags, and the type of encryption that has been enabled.

What's next

You can change some storage account settings directly from BlueXP by clicking **...** for a storage account. [Go here for details.](#)

You can add new buckets by clicking **Add storage account.** [Go here for details.](#)

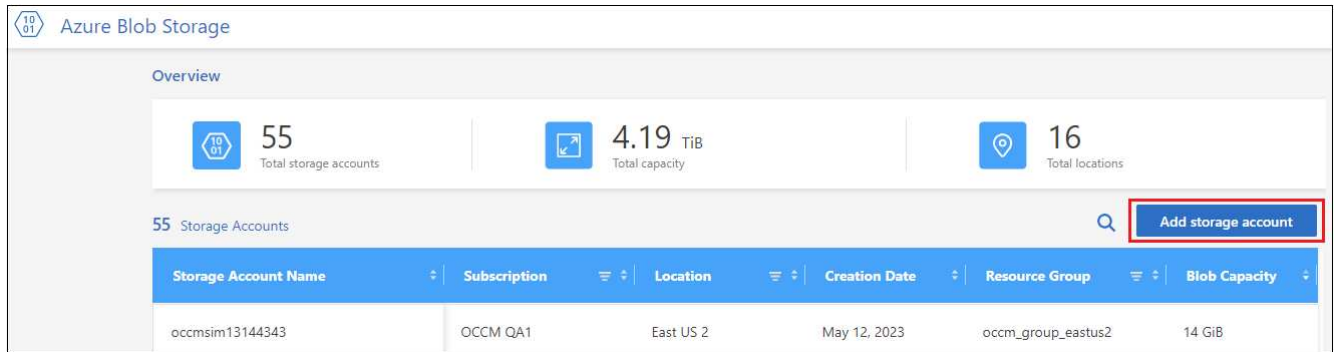
Manage Azure Blob storage accounts

Add Azure Blob storage accounts

Once your Azure Blob Storage working environment is available in the Canvas, you can add additional storage accounts directly from BlueXP.

Steps

1. From the Canvas, double-click the Azure Blob Storage working environment to view the Azure Blob Storage Overview page, and click **Add storage account**.



The *Add storage account* page is displayed.

The 'Add storage account' form is shown with the following details:

- Project details** (expanded):
 - Subscription: OCCM QA1
 - Resource group: occm_group_uaenorth
- Instance details** (collapsed): Mandatory fields
- Tags** (collapsed): N/A
- Encryption** (collapsed): Microsoft managed keys (MMK)

2. Enter the required information in the *Project details* section.

Field	Description
Subscription	Select the Azure subscription for the new storage account.
Resource group	Select an existing resource group for this storage account. Learn more about resource groups.

- In the *Instance details* section, enter the name for the storage account, and select a region (or regions) where the storage account will be created.

Field	Description
Storage account name	Enter the name you want to use for the storage account. The name must be between 3 and 24 characters in length, and it can contain numbers and lowercase letters only.
Azure Region	<p>Select a region from the list where the storage account will be created.</p> <p>Select the appropriate region for your storage account. See the Microsoft documentation for information about Azure regions and availability zones.</p> <p>Not all regions are supported for all types of storage accounts or redundancy configurations. See the Microsoft documentation for information about Azure Storage redundancy.</p> <p>Additionally, the choice of region can have a billing impact. See the Microsoft documentation for information about Azure Storage account billing.</p>
Performance type	<p>Select whether you want to use Standard or Premium performance storage. See the Microsoft documentation for information about Types of storage accounts.</p> <ul style="list-style-type: none"> <i>Standard</i> performance is used for general-purpose v2 storage accounts. This type of account is recommended for most scenarios. <i>Premium</i> performance is used for scenarios that require low latency. There are three types of premium storage accounts available: Block blobs, File shares, and Page blobs.

- In the *Tags* section, you can enter up to 10 tag key/value pairs to group your resources.

Tags are metadata that you can use to group resources to identify applications, environments, regions, cloud providers, and more. You can add tags to a storage account so that the tags are applied to objects when they are added to the storage account.

Tags are disabled by default in new storage accounts created by BlueXP. [Learn more about tagging from the Microsoft documentation.](#)

- In the *Encryption* section, choose the type of data encryption you want to use to protect access to the data in the storage account.

Data encryption type	Description
Microsoft-managed keys	By default, Microsoft-managed encryption keys are used to encrypt your data.

Data encryption type	Description
Customer-managed keys	<p>You can use your own customer-managed keys for data encryption instead of using the default Microsoft-managed encryption keys. If you're planning to use your own customer-managed keys, you'll need to have created them already so you can select the Key Vault and the Keys in this page.</p> <p>The keys can be in the same Subscription as the storage account, or you can select a different Subscription.</p>

See the Microsoft Azure documentation for [more information about Microsoft-managed keys](#), and [more information about Customer-managed keys](#).

6. Click **Add** and the bucket is created.

Change Azure Blob storage account settings

Once your Azure Blob Storage working environment is available in the Canvas, you can change some storage account properties directly from BlueXP.

Note that you can't change the storage account name, Azure region, or the performance type of the storage.

The storage account properties you can change includes:

- The Subscription and Resource Group for the storage account.
- Add, change, or remove tags for the objects that are added to the storage account.
- Whether or not new objects added to the storage account are encrypted, and the option used for encryption.

You can change these storage account settings directly from BlueXP by clicking **...** for a storage account.

Overview

483 Total storage accounts | 10.08 TiB Total capacity | 14 Total locations

483 Storage Accounts Add storage account

Storage Account Name	Subscription	Location	Creation Date	Resource Group	Blob Capacity	
occmgroupcanadacent	OCCM QA1	Canada Central	January 27, 2020	occm_group_canadacentral	676.87 KiB	...
netappbackupveah	OCCM QA1	East US 2	August 24, 2020	occm_group_eastasia	10.18	Edit project details
compliancedemo1rg	OCCM QA1	Central US	February 2, 2020	complianceDemo1-rg	795.2	Edit tags
u4yhkgkj44t9	OCCM QA1	Central US	February 3, 2020	azureCompliance-rg	603.2	Edit encryption

Change the Project details

In the *Project details* section you can change the Subscription and the Resource group for the storage account.

Field	Description
Subscription	Select a different Azure subscription for the storage account.
Resource group	Select a different resource group for the storage account. Learn more about resource groups.

Click **Save** to save the changes to the storage account.

Add or change tags for objects in the storage account

In the *Tags* section you can add up to 10 tag key/value pairs, or you can change or delete a tag key/value pair. Tags are applied to objects when they are added to the storage account. If you want to add more tags, click **Add new tag**.

[Learn more about tagging from the Microsoft documentation.](#)

Click **Save** to save the changes to the storage account.

Change the encryption setting

In the *Encryption* section, you can change the type of data encryption you want to use to protect access to the data in your storage accounts.

Data encryption type	Description
Microsoft-managed keys	By default, Microsoft-managed encryption keys are used to used to encrypt your data.
Customer-managed keys	You can use your own customer-managed keys for data encryption instead of using the default Microsoft-managed encryption keys. If you're planning to use your own customer-managed keys, you'll need to have created them already so you can select the Key Vault and the Keys in this page. The keys can be in the same Subscription as the storage account, or you can select a different Subscription.

See the Microsoft Azure documentation for [more information about Microsoft-managed keys](#), and [more information about Customer-managed keys](#).

Click **Save** to save the changes to the storage account.

Use NetApp data services with Azure Blob storage

After you discover Azure Blob storage accounts in BlueXP, you can use NetApp data services for backup, tiering, and data synchronization.

- Use **BlueXP backup and recovery** to back up data from your on-premises ONTAP and Cloud Volumes ONTAP systems to Azure Blob storage.

To get started, go to the Canvas and drag and drop an on-premises ONTAP or Cloud Volumes ONTAP

working environment on your Azure Blob Storage working environment.

[Learn more about backing up ONTAP data to Azure Blob storage.](#)

- Use **BlueXP tiering** to tier inactive data from on-premises ONTAP clusters to Azure Blob storage.

To get started, go to the Canvas and drag and drop an on-premises ONTAP working environment on your Azure Blob Storage working environment.

[Learn more about tiering ONTAP data to Azure Blob storage.](#)

- Use **BlueXP copy and sync** to synchronize data to or from Azure Blob storage accounts.

To get started, go to the Canvas and drag and drop the source working environment on the target working environment. Your Azure Blob Storage working environment can be either the source or target.

You can also select your Azure Blob Storage working environment and click **Copy & sync** from the Services panel to synchronize data to or from Azure Blob storage accounts.

[Learn more about the BlueXP copy and sync service.](#)

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.

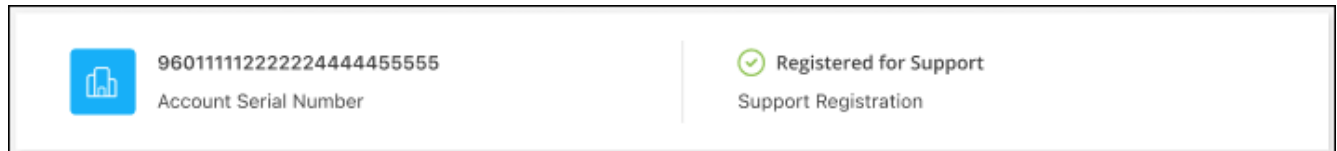
Existing customer with an NSS account

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

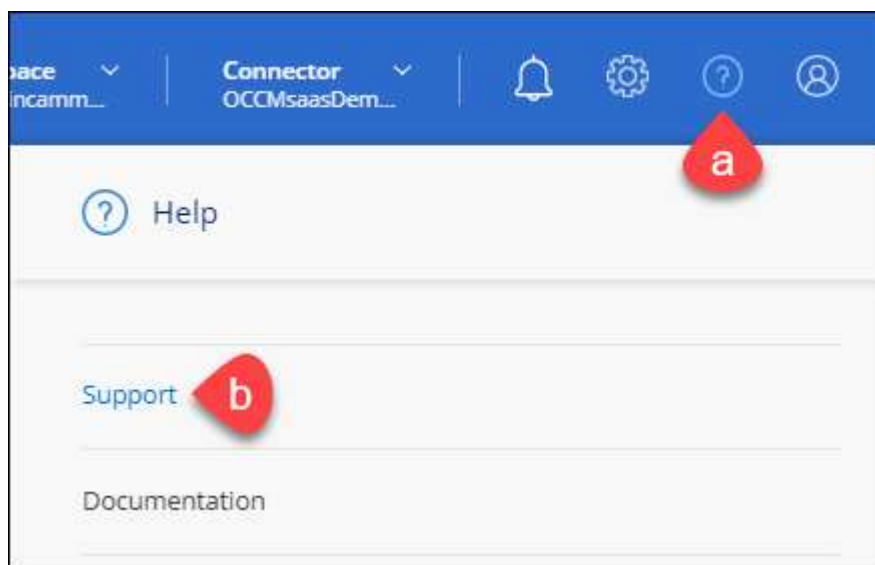
1. Create a NetApp Support Site account by completing the [NetApp Support Site User Registration form](#)
 - a. Be sure to select the appropriate User Level, which is typically **NetApp Customer/End User**.
 - b. Be sure to copy the BlueXP account serial number (960xxxx) used above for the serial number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

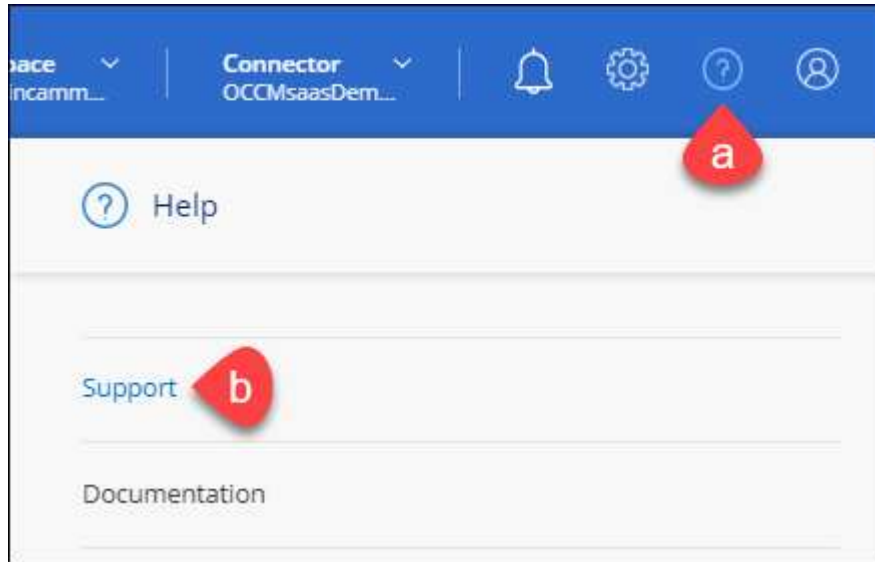
Associating NSS credentials with your BlueXP account is different than the NSS account that is associated with a BlueXP user login.

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 Working Environment


Select 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)  Upload 

No files selected  

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.

Search: Cases opened on the last 3 months ▼ Create a case

Date created	Last updated	Priority	Status (5)	
December 22, 2022	December 29, 2022	Medium (P3)	Assigned	...
December 21, 2022	December 28, 2022	Medium (P3)	Active	...
December 15, 2022	December 27, 2022	Medium (P3)	Pending customer	...
December 14, 2022	December 26, 2022	Low (P4)	Solution proposed	...

- Filter the contents of the columns.

Search: Cases opened on the last 3 months ▼ Create a case

Last updated	Priority	Status (5)	
December 29, 2022	Critical (P1)	<input checked="" type="checkbox"/> Active <input checked="" type="checkbox"/> Pending customer	...
December 28, 2022	High (P2)	<input checked="" type="checkbox"/> Solution proposed <input checked="" type="checkbox"/> Pending closed	...
December 27, 2022	Medium (P3)	<input type="checkbox"/> Closed	...
December 26, 2022	Low (P4)	Apply Reset	...

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

Search: Cases opened on the last 3 months ▼ Create a case

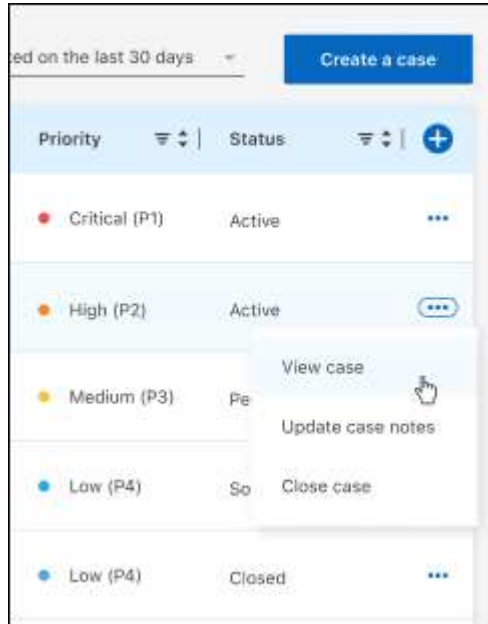
Last updated	Priority	Status (5)	
December 29, 2022	Critical (P1)	<input checked="" type="checkbox"/> Last updated <input checked="" type="checkbox"/> Priority	...
December 28, 2022	High (P2)	<input checked="" type="checkbox"/> Cluster name	...
December 27, 2022	Medium (P3)	<input type="checkbox"/> Case owner <input type="checkbox"/> Opened by	...
December 26, 2022	Low (P4)	Apply Reset	...

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**.



Legal notices

Legal notices provide access to copyright statements, trademarks, patents, and more.

Copyright

<https://www.netapp.com/company/legal/copyright/>

Trademarks

NETAPP, the NETAPP logo, and the marks listed on the NetApp Trademarks page are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.

<https://www.netapp.com/company/legal/trademarks/>

Patents

A current list of NetApp owned patents can be found at:

<https://www.netapp.com/pdf.html?item=/media/11887-patentspage.pdf>

Privacy policy

<https://www.netapp.com/company/legal/privacy-policy/>

Open source

Notice files provide information about third-party copyright and licenses used in NetApp software.

[Notice for BlueXP](#)

Copyright information

Copyright © 2024 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.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

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.