



# **BlueXP economic efficiency documentation**

## **BlueXP economic efficiency**

NetApp  
June 10, 2024

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# BlueXP economic efficiency documentation

# Release notes

## What's new

Learn what's new in BlueXP economic efficiency.

### 14 March 2024

If you have existing assets in place and want to determine whether a technology needs to be updated, you can use the BlueXP economic efficiency technology refresh options. You can either review a short assessment of your current workloads and get recommendations, or if you sent AutoSupport logs to NetApp within the past 90 days, the service can now provide a workload simulation to see how your workloads perform on new hardware.

You can also add a workload and exclude existing workloads from the simulation.

Previously, you could only take an assessment of your assets and identify whether a technology refresh is recommended.

The feature is now part of the Tech refresh option in the left navigation.

Learn more about the [Evaluate a technology refresh](#).

### 08 November 2023

This release of BlueXP economic efficiency includes a new option to take an assessment of your assets and identify whether a technology refresh is recommended. The service includes a new Tech refresh option in the left navigation, new pages where you can take an assessment of your current workloads and assets, and a report that provides recommendations to you.

### 02 April 2023

The new BlueXP economic efficiency service identifies storage assets with current or forecasted low capacity and provides recommendations on data tiering or additional capacity for on-premises AFF systems.

[Learn more about BlueXP economic efficiency](#).

# Get started

## Learn about BlueXP economic efficiency

BlueXP economic efficiency assesses two vital areas of your environment: your storage assets with current or forecasted low capacity and your systems that are nearing end of life. The service provides recommendations on data tiering or additional capacity (for AFF systems) and technology refresh options that meet your business needs.

BlueXP economic efficiency can help you accomplish the following goals.

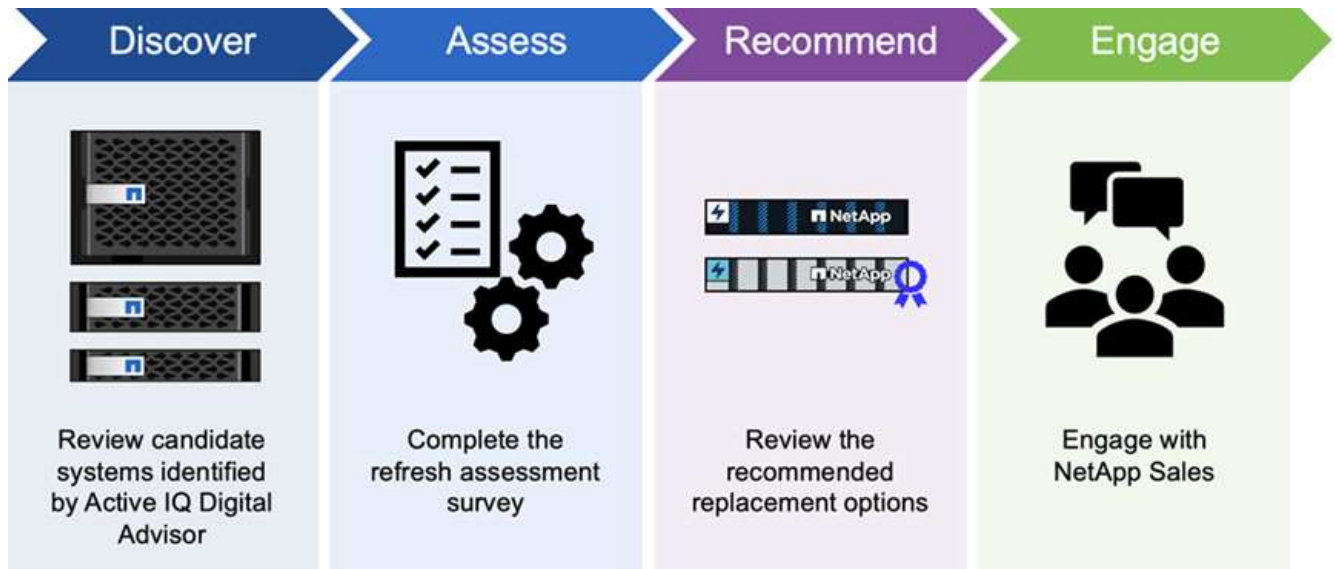
### Capacity planning

- Identify storage assets in your environment that are showing low capacity.
- Review assets for current and forecasted capacity.
- Review CPU utilization, IOPS performance, and latency performance to determine opportunities for capacity remediation.
- Obtain recommendations for capacity expansion relevant to your environment.

BlueXP economic efficiency capacity planning applies to on-premises AFF systems only (including unified AFF and all SAN array systems).

### Technology refresh assessment and simulation

- Perform a simulation of your workloads on new hardware and download the results.
- Review a list of systems that are nearing end of life or approaching other lifecycle events.
- Review an assessment of your current working environment and obtain recommendations on technology refresh options that meet your workload, capacity, performance, and budget requirements.



## Benefits of BlueXP economic efficiency

BlueXP economic efficiency offers the following benefits:

- Identifies systems that are approaching lifecycle events to help you plan for a technology refresh, either by taking a short assessment or performing a workload simulation on new hardware
- Provides a simple process to obtain additional capacity
- Offers a trusted advisor's recommendations to address capacity issues in your environment
- Reduces the time spent in planning for additional storage

## Cost

NetApp doesn't charge you for using the service.

If you decide to tier cold data to cloud storage, you'll need to check your cloud provider for applicable charges.

## Access

You can access this feature either through BlueXP economic efficiency (**Governance > Economic efficiency > Tech refresh**) or through NetApp Digital Advisor (**Dashboard > Planning widget > Tech refresh**).

## BlueXP economic efficiency prerequisites

Get started by verifying the readiness of your operational environment, login, network access, and web browser.

To use BlueXP economic efficiency, you should ensure that your environment meets all requirements.

- Your environment must meet all BlueXP requirements including a login and network access from a web browser.

Refer to the [BlueXP Quick start](#) and [BlueXP networking information](#).

- You need to have access credentials to the clusters.
- While not a requirement, it is helpful if the BlueXP Connector is in place and enabled and the ONTAP system is discovered. If not, the service walks you through those processes.
- If you plan on tiering cold data to cloud storage, ensure that the cluster is eligible per the license.

## Quick start for BlueXP economic efficiency

Here's an overview of the steps needed to get started with BlueXP economic efficiency. The links within each step take you to a page that provides more details.



### Review prerequisites

[Ensure your environment meets these requirements.](#)

**2**

## Set up the economic efficiency service

Complete steps to set up the service.

**3**

## What's next?

After you set up the service, here's what you might do next.

- [Take a tech refresh assessment or simulate your workloads on new hardware.](#)
- [Review capacity planning status.](#)
- [Add capacity.](#)
- [Tier cold data to cloud storage to free up storage.](#)
- [Optionally, set reminders to check again.](#)

## Set up BlueXP economic efficiency

To use BlueXP economic efficiency, perform a few steps to set it up.

- Review [prerequisites](#) to ensure that your environment is ready.
- Create a Connector in BlueXP.
- Discover the cluster in BlueXP.

You can create a Connector directly in BlueXP and use that Connector later in BlueXP economic efficiency. Or, you can create the Connector in the middle of the capacity remediation process.

Similarly, you can discover the cluster ahead of time using BlueXP or during the capacity remediation process.

### Create a Connector in BlueXP

A BlueXP Connector includes credentials to NetApp ONTAP machines.

To create a Connector in BlueXP before using the service, refer to the BlueXP documentation that describes [how to create a connector](#).

### Discover the cluster in BlueXP

Part of the setup involves identifying the cluster name, IP, user name, and password within BlueXP.

For instructions before using the service, refer to [Discover on-premises ONTAP clusters](#).

## Access BlueXP economic efficiency

You use NetApp BlueXP to log in to the economic efficiency service.

To log in to BlueXP, you can use your NetApp Support Site credentials or you can sign up for a NetApp cloud login using your email and a password. [Learn more about logging in.](#)



You can access this feature either through BlueXP economic efficiency (**Governance > Economic efficiency > Tech refresh**) or through NetApp Digital Advisor (**Dashboard > Planning widget > Tech refresh**).

### Steps

1. Open a web browser and go to the [BlueXP console](#).

The NetApp BlueXP login page appears.

2. Log in to BlueXP.
3. From the BlueXP left navigation, select **Governance > Economic efficiency**.

## Frequently asked questions for BlueXP economic efficiency

This FAQ can help if you're just looking for a quick answer to a question.

### Access to BlueXP economic efficiency

#### What's the BlueXP economic efficiency URL?

For the URL, in a browser, enter: <https://console.bluexp.netapp.com/> to access the BlueXP console.

### Licensing

#### Do you need a license to use BlueXP economic efficiency?

A NetApp License File (NLF) is not required.



# Use BlueXP economic efficiency

## Evaluate a technology refresh

If you have existing assets in place and want to determine whether a technology refresh is recommended, you can use the BlueXP economic efficiency Tech refresh options. You can either review a short assessment of your current workloads and get recommendations, or if you have sent AutoSupport logs to NetApp within the past 90 days, the service can provide a workload simulation to see how your workloads perform on new hardware.

- [Take a refresh assessment](#)
- [Simulate workloads on new hardware](#)

Systems are considered candidates for a tech refresh based on the following:

- Nearing the end of the Tech Support contract
- Nearing the end of the hardware lifecycle



You can access this feature either through BlueXP economic efficiency or through NetApp Digital Advisor.

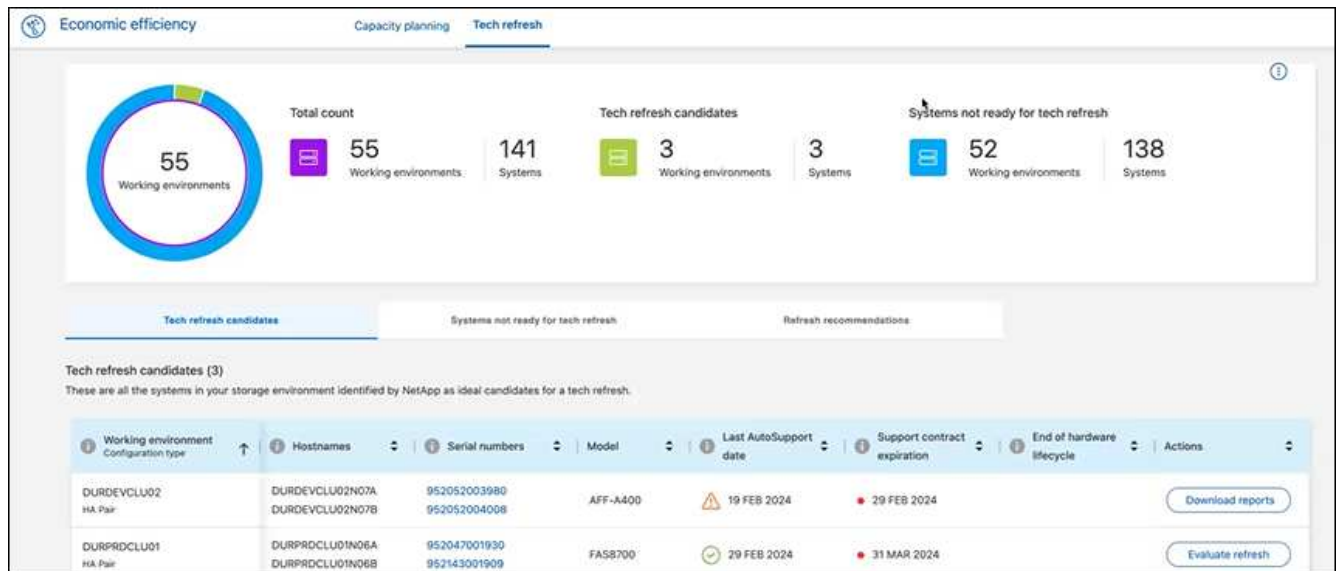
## Take a refresh assessment

The assessment includes the following steps:

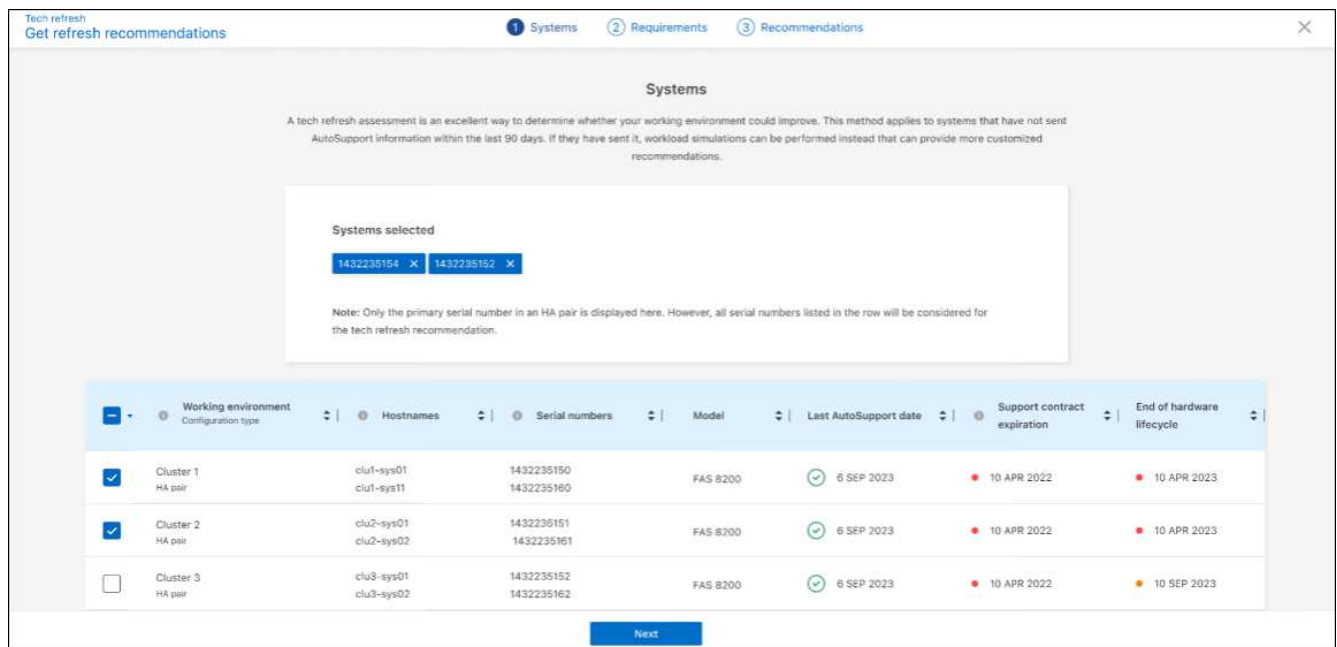
- Select the systems you want to assess.
- Specify your requirements regarding environments, workload types, capacity, performance, and budget.
- View the recommendations regarding appropriate products and cloud services that might improve performance in your environment.

### Steps

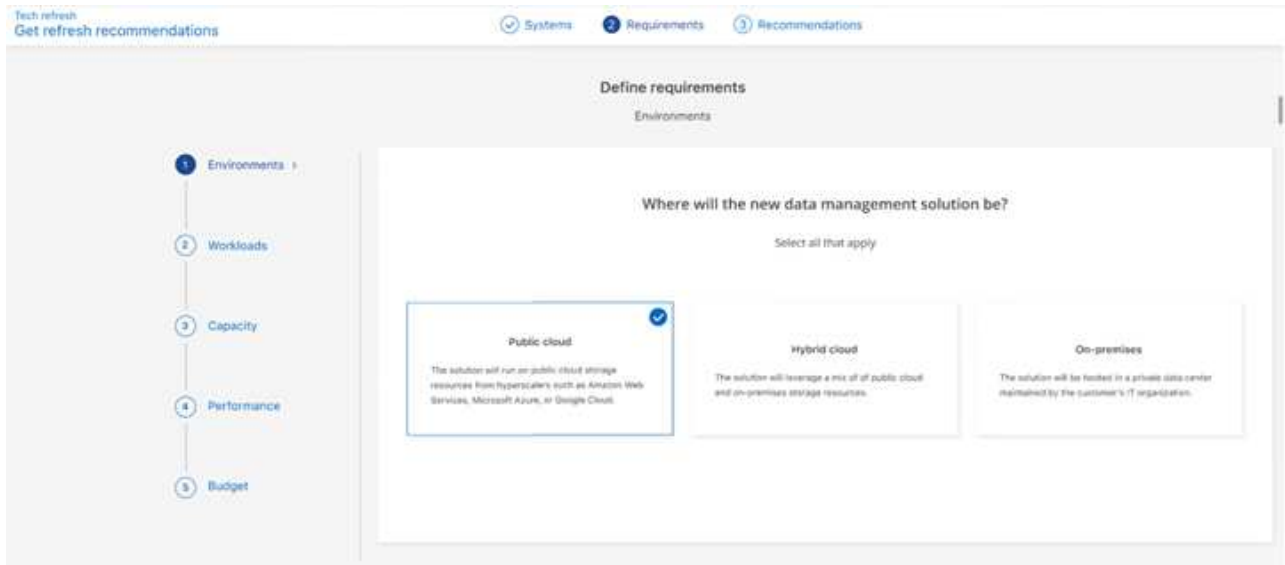
1. From the BlueXP left navigation, select **Governance > Economic efficiency > Tech refresh**.



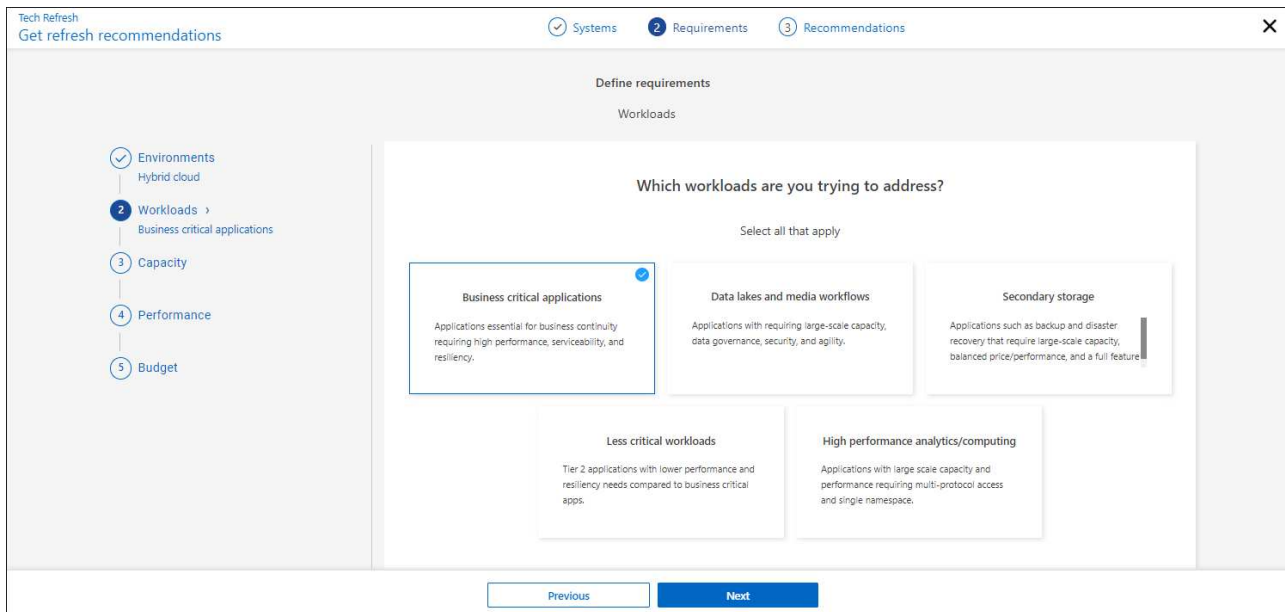
2. Look at the **Tech refresh candidates** tab, which lists all the working environments that might benefit from a tech refresh.
3. Select the working environment on which you want to obtain an assessment.
4. From the Actions column, select **Evaluate refresh**.



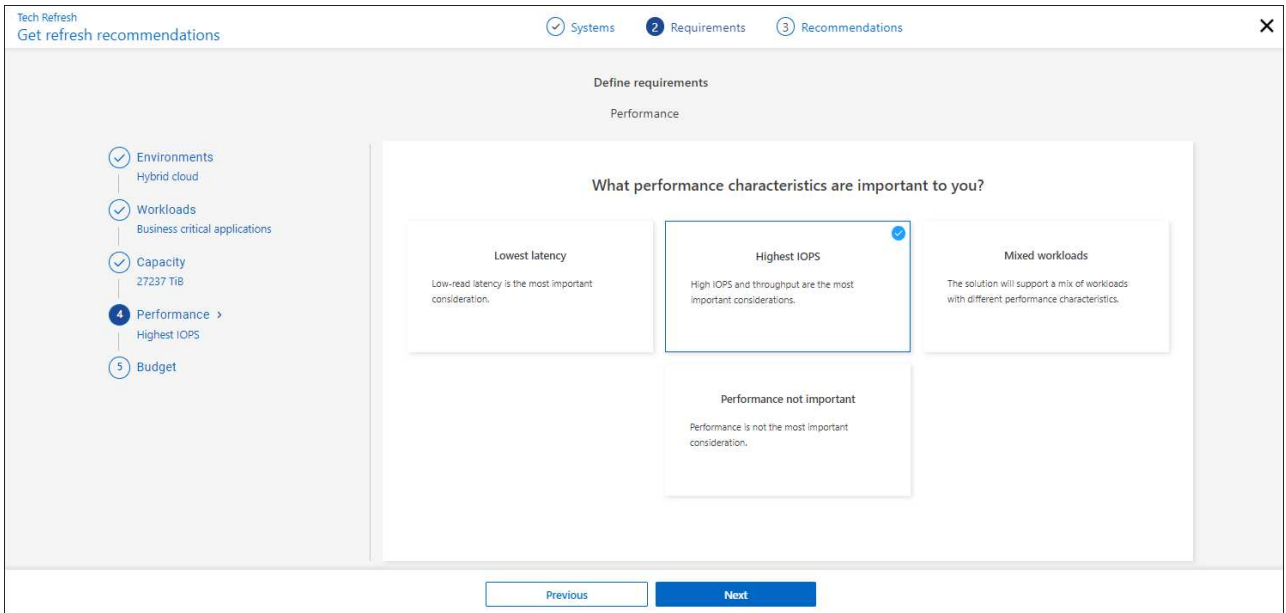
5. Select the system or systems on which you want the assessment performed and select **Next**.
6. Define the requirements:
  - a. **Environments:** Select the types of environment that you want: public cloud, hybrid cloud, or on-premises.



- b. **Workloads:** Select all the types of workloads that you want to handle: Business critical applications, high performance analytics and computing, data lakes and media workflows, secondary storage, or less critical workloads.



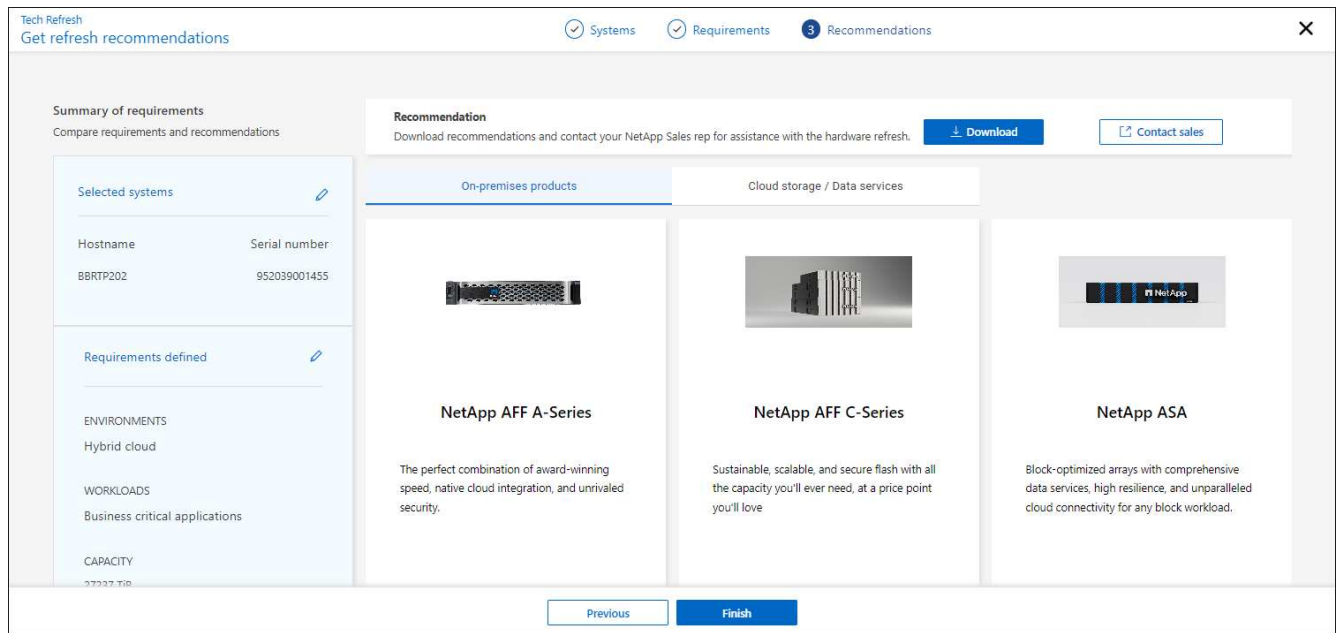
- c. **Capacity:** Enter the capacity requirements in TiB, slide the slider to the value, or place your cursor on the value in the slider and select **Next**.
- d. **Performance:** Select the performance aspects that you want to be able to handle: lowest latency, highest IOPS, mixed workloads, or performance not important and select **Next**.



e. **Budget:** Enter a budget in US dollars, slide the slider to the value, or place your cursor on the value in the slider and select **Next**.

A set of recommendations appears in different tabs for the options you chose.

7. Review the recommendations.



8. Do one or both of the following:

- a. To download a PDF of the recommendations, select **Download**.
- b. To connect with a NetApp Sales Representative regarding the recommendations, select **Contact Sales**. A web page shows options you can choose from to contact a NetApp Sales Representative.

9. Select **Finish**.

## View technology refresh assessments already taken

You might want to review the technology refresh assessments that you already took and review the recommendations again.

### Steps

1. From the BlueXP left navigation, select **Governance > Economic efficiency > Tech refresh**.
2. Select the **Tech refresh candidates** tab, which lists all the systems on which you took a technology refresh assessment. Then, from the Actions menu on the row for that system, select to view the assessments and recommendations for that system.
3. In the Evaluate refresh options page, select **View recommendation**.
4. View the refresh recommendations.

The screenshot displays the 'Tech Refresh' interface. At the top, there are three tabs: 'Systems', 'Requirements', and 'Recommendations' (which is active). Below the tabs, there's a 'Summary of requirements' section on the left, which includes a table for 'Selected systems' and a list of 'Requirements defined'. The 'Selected systems' table has columns for 'Hostname' and 'Serial number', with one entry: 'BBRTP202' and '952039001455'. The 'Requirements defined' section lists 'ENVIRONMENTS: Hybrid cloud', 'WORKLOADS: Business critical applications', and 'CAPACITY: 27227.7TB'. The main content area is titled 'Recommendation' and contains a 'Download' button and a 'Contact sales' button. Below this, there are three product cards: 'NetApp AFF A-Series', 'NetApp AFF C-Series', and 'NetApp ASA'. Each card has an image of the hardware and a brief description. At the bottom, there are 'Previous' and 'Finish' buttons.

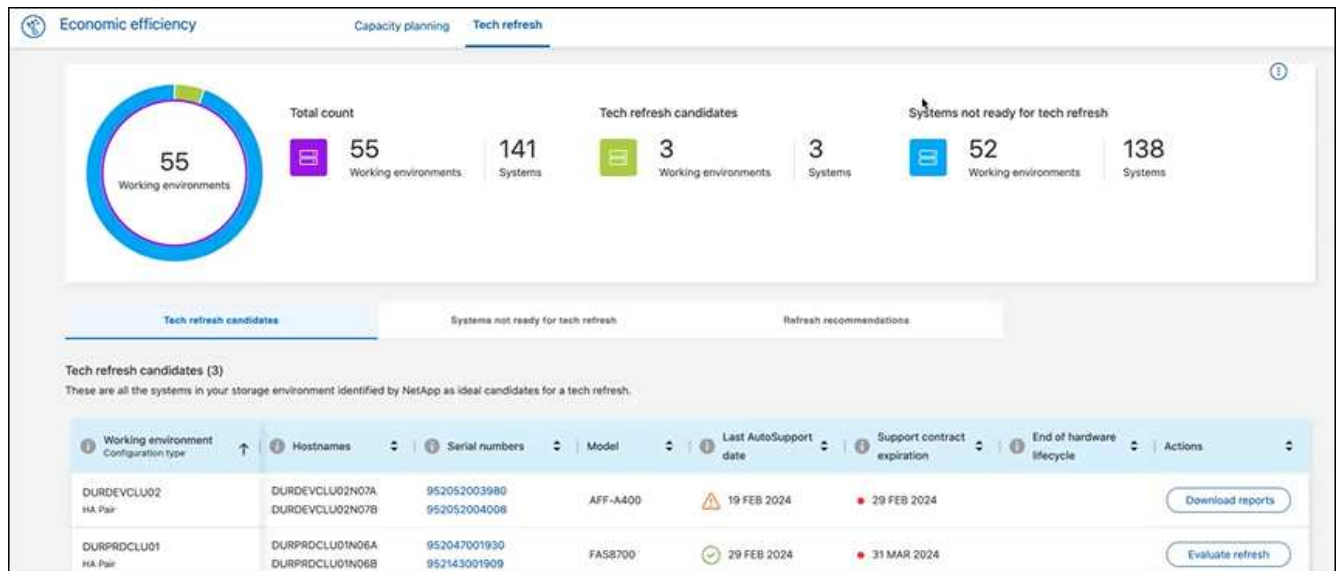
## Simulate workloads on new hardware

If you have sent AutoSupport logs in to NetApp within the past 90 days, NetApp is able to provide a simulation to see how your workloads perform on new hardware.

You can include or exclude specific workloads from the simulation. You can also add workloads if they don't appear in the existing workload list.

### Steps

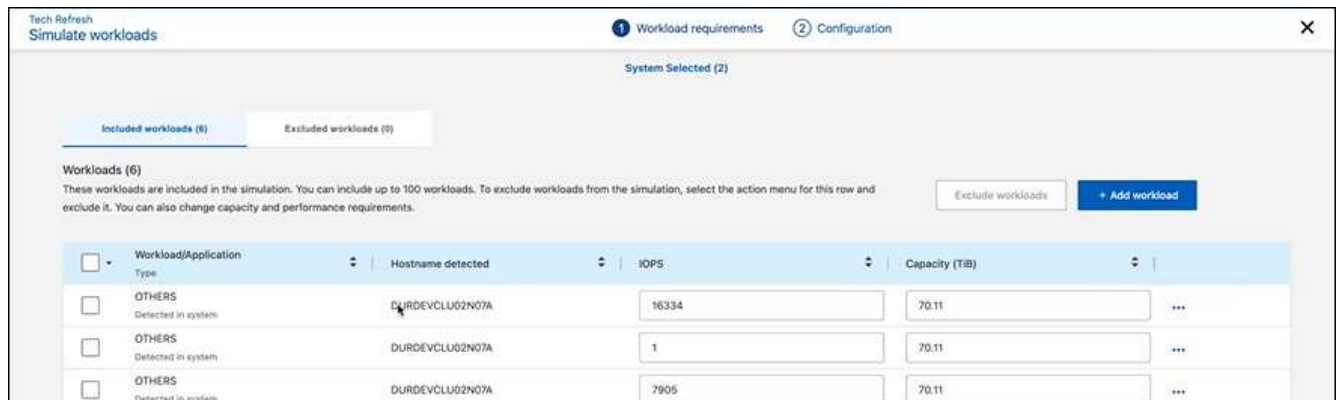
1. From the BlueXP left navigation, select **Governance > Economic efficiency > Tech refresh**.



- Look at the **Tech refresh candidates** tab, which lists all the working environments that might benefit from a tech refresh.
- Select the working environment on which you want to obtain an assessment.
- In the Actions column, select **Evaluate refresh**.



The service imports workload details in preparation for the simulation.



- In the Simulate workloads > Workload requirements page, do the following:
  - To add a workload not already in the list, select **Add workload**. For details, see [Add a workload](#).
  - IOPS**: Optionally, change the IOPs that you want for your new hardware.
  - Capacity (TiB)**: Optionally, change the capacity that you want for your new hardware.
- To exclude workloads, in the Actions column, select the **Exclude workload from simulation** option.



To include previously excluded workloads, select the **Excluded workloads** tab and select the **Include workload in simulation** option.  
.. Select **Next**.

- Review the simulated results on new hardware on the Configuration page:

Tech Refresh  
Simulate workloads

Workload requirements 2 Configuration

Summary of requirements  
Summary of your workload requirements

Selected systems

HOSTNAME	SERIAL NUMBER
DURDEVCLU02N07A	952052003980
DURDEVCLU02N07B	952052004008

Workload requirements

Included workloads  
6 workloads

Performance required

IOPS 29002+

Capacity in current selection

Raw 1129.53 TB

Recommendations  
Download recommendations and contact your NetApp Sales rep for assistance with the hardware refresh.

Download Contact

AFF A400A FC Bundle  
SSD

2 nodes 9.13.1 ONTAP

See specs

Max Performance ⓘ

IOPS 150114 Best

Throughput 3.17 GBps Best

AFF A250A  
NVMe SSD

2 nodes 9.13.1 ONTAP

See specs

Max Performance ⓘ

IOPS 0

Throughput 0 GBps

AFF A800A  
NVMe SSD

2 nodes 9.13.1 ONTAP

See specs

Max Performance ⓘ

IOPS 0

Throughput 0 GBps

Previous Finish



The best recommendations are denoted with a "Best" indication.

8. To download a PDF of the recommendations, select **Download**.
9. To connect with a NetApp Sales representative regarding the recommendations:
  - a. Select **Contact**.
  - b. Enter contact details.
  - c. Add special notes for the NetApp Sales Representative.
  - d. Select **Confirm and submit**.
10. Select **Finish**.

## Result

The recommendations from the workload simulation are sent to a NetApp Sales Representative. You will also receive an email confirming the recommendations. A NetApp Sales Representative will respond to your request.

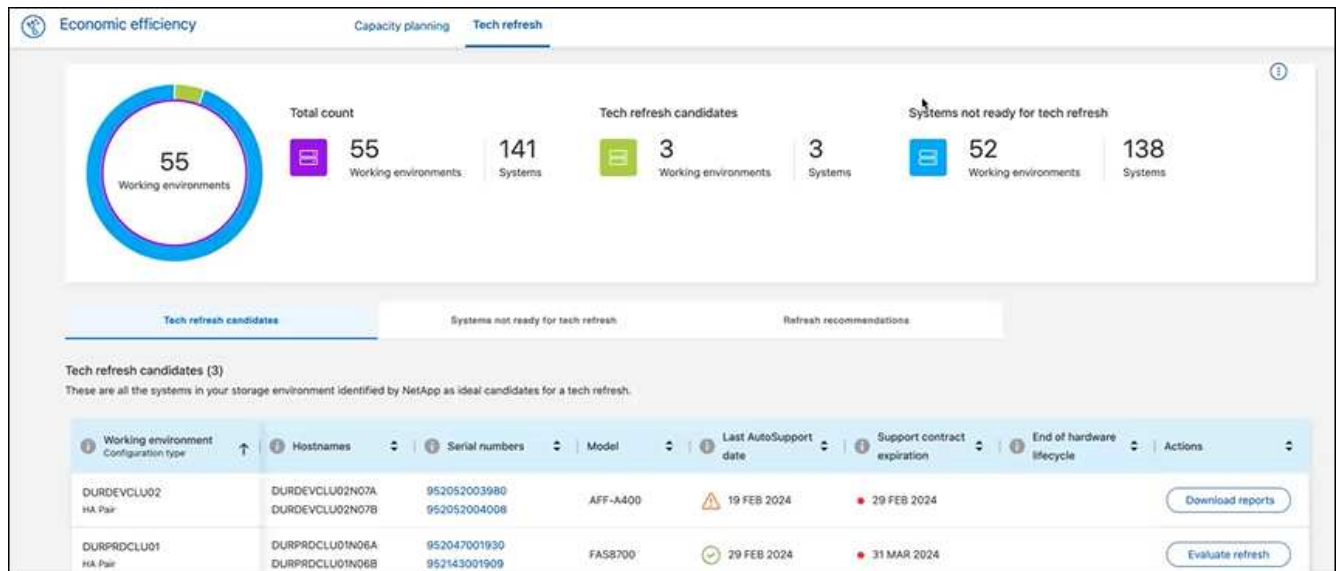
## Add a workload

You can add a workload that is not already listed to the workload simulation.

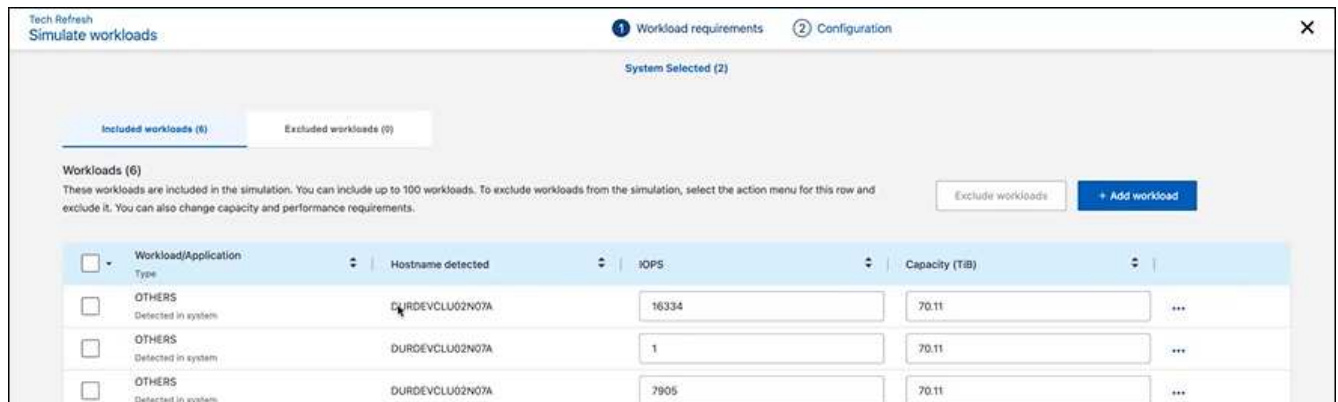
## Steps

1. From the BlueXP left navigation, select **Governance > Economic efficiency > Tech refresh**.

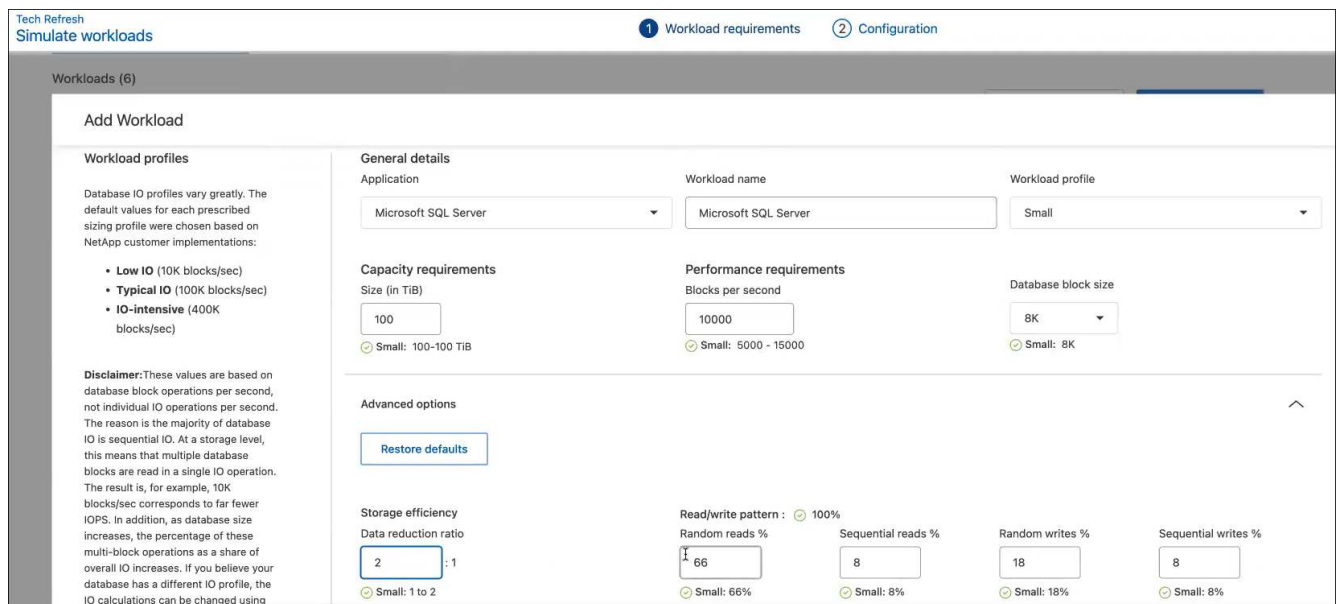




2. Select the working environment.
3. In the Actions column, select **Evaluate refresh**.



4. In the Simulate workloads > Workload requirements page, select **Add workload**.





5. Select the application, enter a workload name, and select a workload size.
6. Enter the workload's expected capacity and performance values.



If you chose the workload size of small, typical or one that is IO intensive, default values appear.

7. Optionally, select the Advanced options arrow and change the defaults for the following information:
  - **Storage efficiency:** A typical data reduction ratio might be 2 to 1.
  - **Random reads %:** A typical average IO size for a random read is 16K.
  - **Sequential reads %:** A typical read pattern is 50% random and 50% sequential.
  - **Random writes %:** A typical average IO size for a random write is 32K.
  - **Sequential writes %:** A typical write pattern is 50% random and 50% sequential.

## Review and remediate capacity issues

Capacity planning involves identifying low-capacity areas in your environment, both current and forecasted. BlueXP economic efficiency uses AI to forecast data growth to help in the planning process. The economic efficiency service identifies those low-capacity areas in your environment and provides recommendations on ways to resolve the issues.

Using BlueXP economic efficiency, you can accomplish these goals:

- [Review capacity planning status](#)
- [Add capacity](#)
- [Tier cold data to cloud storage and free up storage](#)
- [Select no action and set reminders to check again](#)

## Review capacity planning status

If storage assets in your environment are currently below or forecasted to be below the threshold of 90% capacity, the economic efficiency service identifies those as low-capacity resources and alerts you. Additionally, the economic efficiency service provides recommendations on whether you should tier data or obtain additional capacity.

You can review the following types of data to assist in the capacity issue resolution.

- Platform
- Country where asset is located
- Current and forecasted capacity by month
- Capacity utilization and percent
- Latency trends
- IOPS trends

## Steps

1. From the BlueXP left navigation, select **Governance > Economic efficiency > Capacity planning**.
2. Select **Evaluate Storage Options** for the asset.
3. Choose one of the options:
  - **Add Capacity**: Continue by [adding capacity](#).
  - **Tier cold data**: Continue by [tiering cold data to cloud storage and freeing up storage](#).
  - **No action needed**: Continue by [selecting no action and setting reminders to check again](#).

## Add capacity

BlueXP economic efficiency provides recommendations for AFF systems based on forecasted data growth. You can accept the forecast or enter your own forecast. Based on this, the service presents recommendations that satisfy the capacity growth projections and are most optimal for the asset configuration.

One of the recommendations might be to add capacity by adding shelves to your existing serial number.

You can easily submit the recommendation as a request for a quote or a request for alternative options to the NetApp Sales team.

## Steps

1. From the BlueXP left navigation, select **Governance > Economic efficiency > Capacity planning**.
2. Select **Evaluate Storage Options** for the asset.
3. Select **Add Capacity**.

The asset's data appears.

- Review the forecast, utilization, latency trend, and IOPS trend.
- To obtain recommendations, select **Evaluate Storage Options**.

The Define Capacity Requirements page shows a current and projected capacity forecast and recommended add-on storage based on projected growth.

4. Select one of the options on the right:
  - **Recommend add-on storage based on forecasted growth** and optionally add a buffer percentage.
  - **Recommend add-on storage based on custom data growth** and enter the total add-on capacity that you want, not what is recommended.
5. Select **Continue**.

A set of recommendations appears.

6. Review the recommendation for the asset serial numbers you selected.
7. Do one of the following:
  - To accept the recommendation, select **Next**. The request is sent to a NetApp Sales expert who will work with you to get you the additional capacity you need.
  - To request different options, select **Request Alternate Options**, enter your request, and select **Send email**. An email is forwarded to a NetApp Sales expert who will contact you to address capacity

requirements.

8. Review the request for additional capacity and select **Confirm and Submit**.

The Capacity Planning Status page appears.

9. Review the status on the Capacity Planning Status page.

## Tier cold data to cloud storage and free up storage

BlueXP economic efficiency provides recommendations based on forecasted data growth. You can accept the forecast or enter your own forecast. Based on this, the service presents recommendations that satisfy the projected capacity growth and are most optimal for the storage asset configuration. One of the recommendations might be to tier cold data to cloud storage to free up capacity. This recommendation initiates the connection to NetApp BlueXP tiering, another BlueXP service.

From there, you can tier the data and easily return to BlueXP economic efficiency to take action on other systems.

The cloud tiering process includes these processes:

- Deploy a Connector
- Discover the cluster
- Set up tiering to the cloud

### Steps

1. From the BlueXP left navigation, select **Governance > Economic efficiency > Capacity planning**.
2. Select **Evaluate Storage Options** for the asset.
3. Select **Tier Cold Data**.
4. The next steps depend on whether you have a BlueXP Connector deployed already and the cluster discovered:
  - If you need to deploy the BlueXP Connector, refer to the BlueXP documentation that describes [How to create a connector](#). Otherwise, if you already deployed the Connector, the option to deploy the connector does not appear.
  - If the service needs to discover the cluster, refer to [Discover on-premises ONTAP clusters](#). Otherwise, if the cluster has already been discovered, the option to discover the cluster does not appear.

BlueXP economic efficiency initiates the connection to the BlueXP tiering service.

5. Select **Add Connector**.
6. Choose a cloud provider, and select **Continue**.
7. Select **Continue** or **Skip to Deployment**.

After deploying a Connector, BlueXP tiering discovers the cluster, if not already discovered.

8. After the cluster is discovered, set up the tiering.

For details about tiering, refer to [BlueXP tiering documentation](#).

# Set reminders to check again

Rather than add capacity or tier cold data, you can choose no action required at this time and set reminders for yourself to check again after 30, 60, or 90 days.

## Steps

1. From the BlueXP left navigation, select **Governance > Economic efficiency > Capacity planning**.
2. Select **Evaluate Storage Options** for the asset.
3. Select **No action needed**.
4. Choose when you want to be notified again of a potential low-capacity issue: 30, 60, or 90 days.
5. Select **Save**.

## Result

After that time elapses, the risk appears again in the list of risks.

# 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 960xxxxxxxx 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 909201xxxxxxxx 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

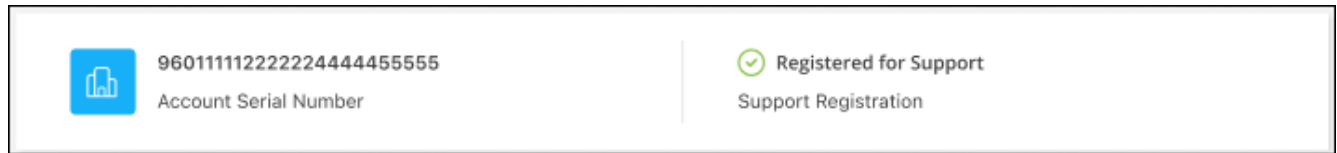
If you're a NetApp customer with an NSS account, you simply need to register for support through BlueXP.

#### 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

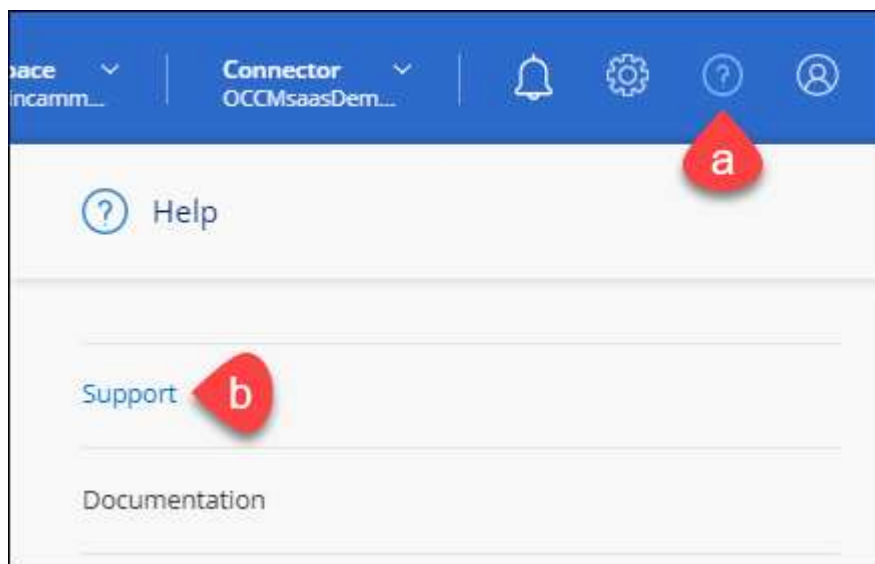
1. Create a NetApp Support Site account by completing the [NetApp Support Site User Registration form](#)
  - a. Be sure to select the appropriate User Level, which is typically **NetApp Customer/End User**.
  - b. Be sure to copy the BlueXP account serial number (960xxxx) used above for the serial number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

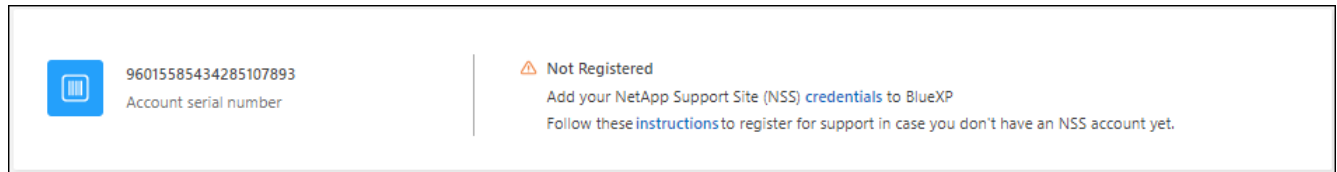
If you are brand new to NetApp and you don't have an NSS account, follow each step below.

#### 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.



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

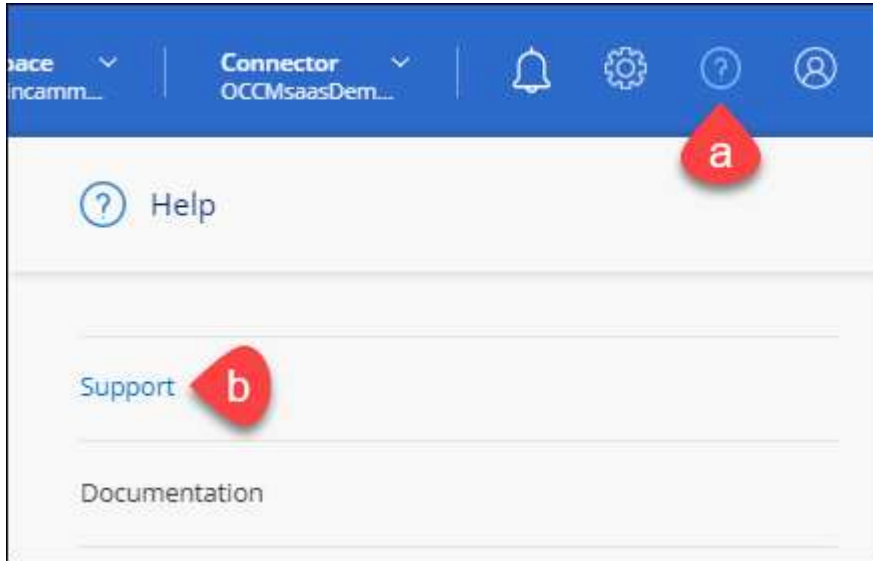
Associating NSS credentials with your BlueXP account is different than the NSS account that is associated with a BlueXP user login.

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)	<input type="checkbox"/> Closed

- 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

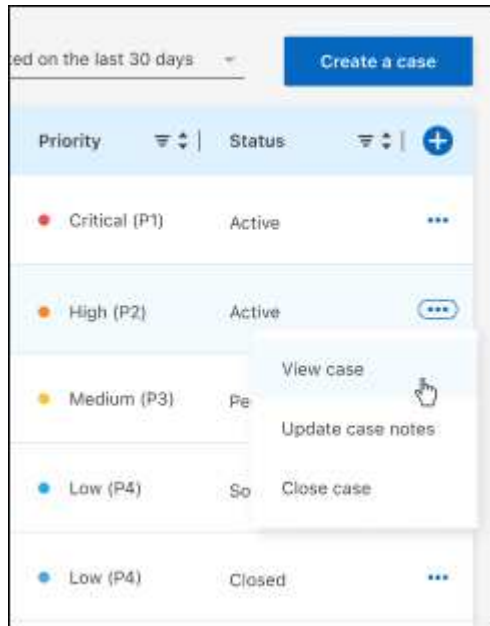
Last updated	Priority	Status (5)
December 29, 2022	Critical (P1)	<input checked="" type="checkbox"/> Last updated <input checked="" type="checkbox"/> Priority
December 28, 2022	High (P2)	<input checked="" type="checkbox"/> Cluster name
December 27, 2022	Medium (P3)	<input type="checkbox"/> Case owner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

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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