Manage Kubernetes clusters

Kubernetes clusters

NetApp
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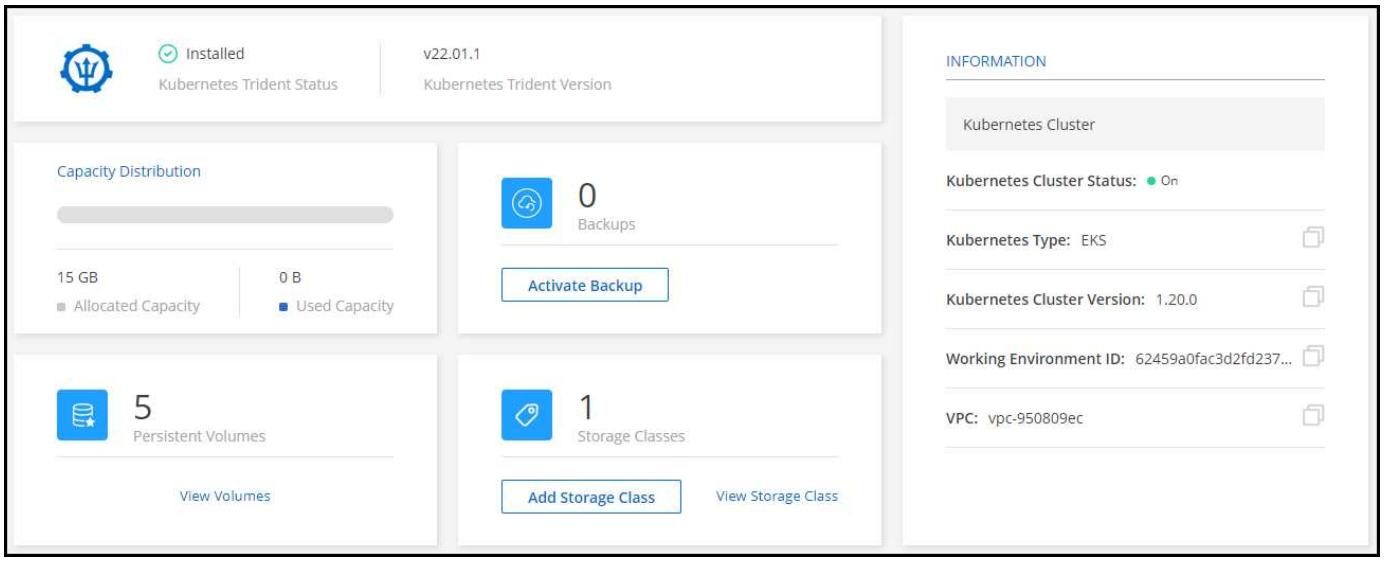
You can use Cloud Manager to install Astra Trident, configure storage classes, remove clusters, and enable data services.

Features

After adding Kubernetes clusters to Cloud Manager, you can manage the clusters from the resource page. To open the resource page, double-click the Kubernetes working environment on the Canvas.



From the resource page you can:

- View the Kubernetes cluster status.
- Confirm Astra Trident is installed. See Install Astra Trident.
- Add and remove storage classes. See Manage storage classes.
- View persistent volumes. See View persistent volumes.
- Remove Kubernetes clusters from the workspace. See Remove clusters.
- Activate or view Cloud Backup. See Use NetApp cloud data services.

Install Astra Trident

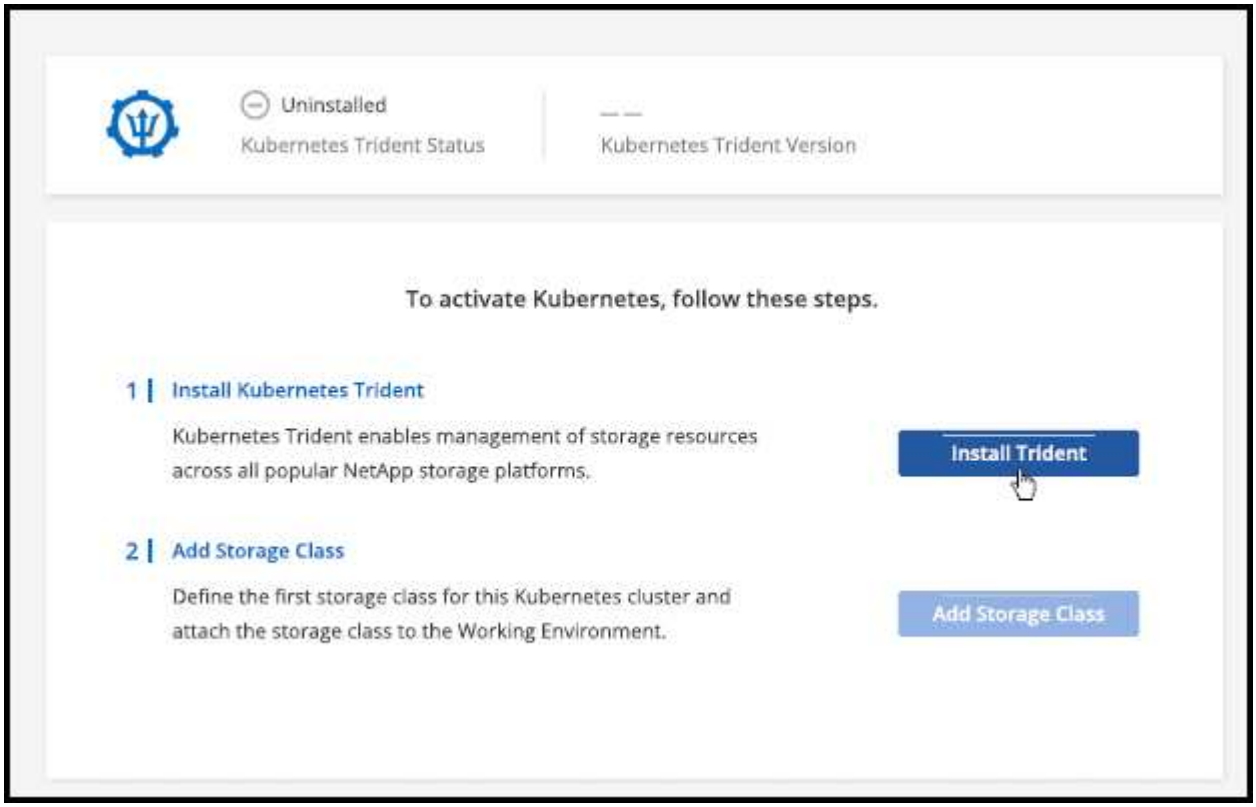
After you add a managed-Kubernetes cluster to the Canvas, you can use Cloud Manager to confirm a compatible Astra Trident installation or install Astra Trident. One of the four most recent versions of Astra Trident is required.

To learn more about Astra Trident, see Astra Trident documentation.

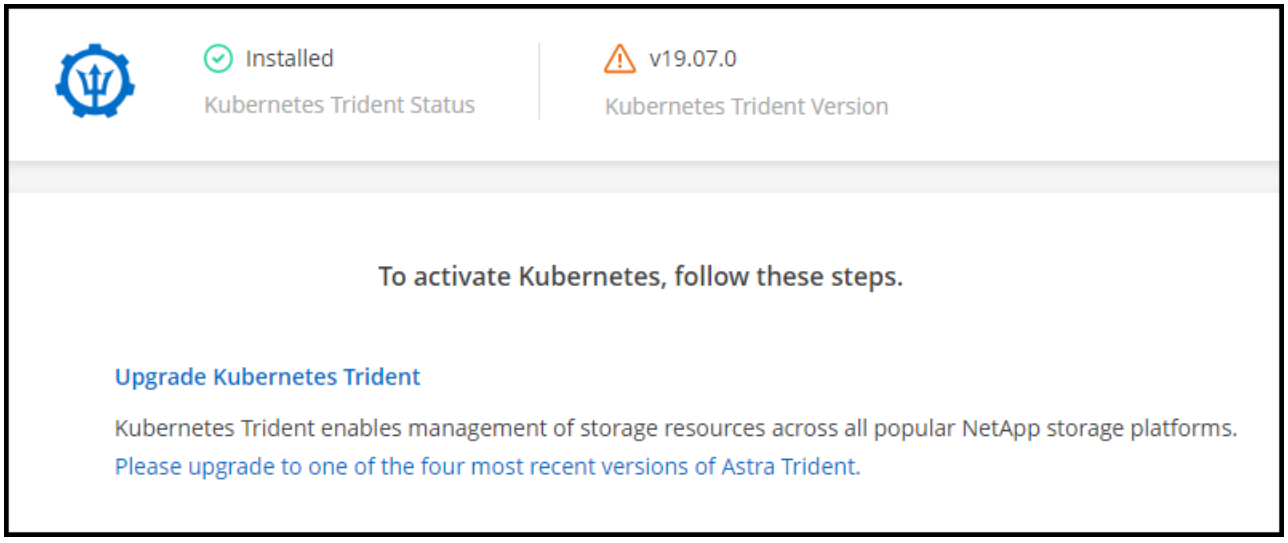
If Astra Trident is not installed, or an incompatible version of Astra Trident is installed, the cluster will show there is an action required.

Steps

1. Double-click the Kubernetes working environment on the Canvas or click **Enter Working Environment**.
   a. If Astra Trident is not installed, click **Install Trident**.



   b. If a back level version of Astra Trident is installed, go to the Astra Trident docs for upgrade steps.



Results

The latest version of Astra Trident is installed. You can now add storage classes.

Manage storage classes

After you add a managed-Kubernetes cluster to the Canvas, you can use Cloud Manager

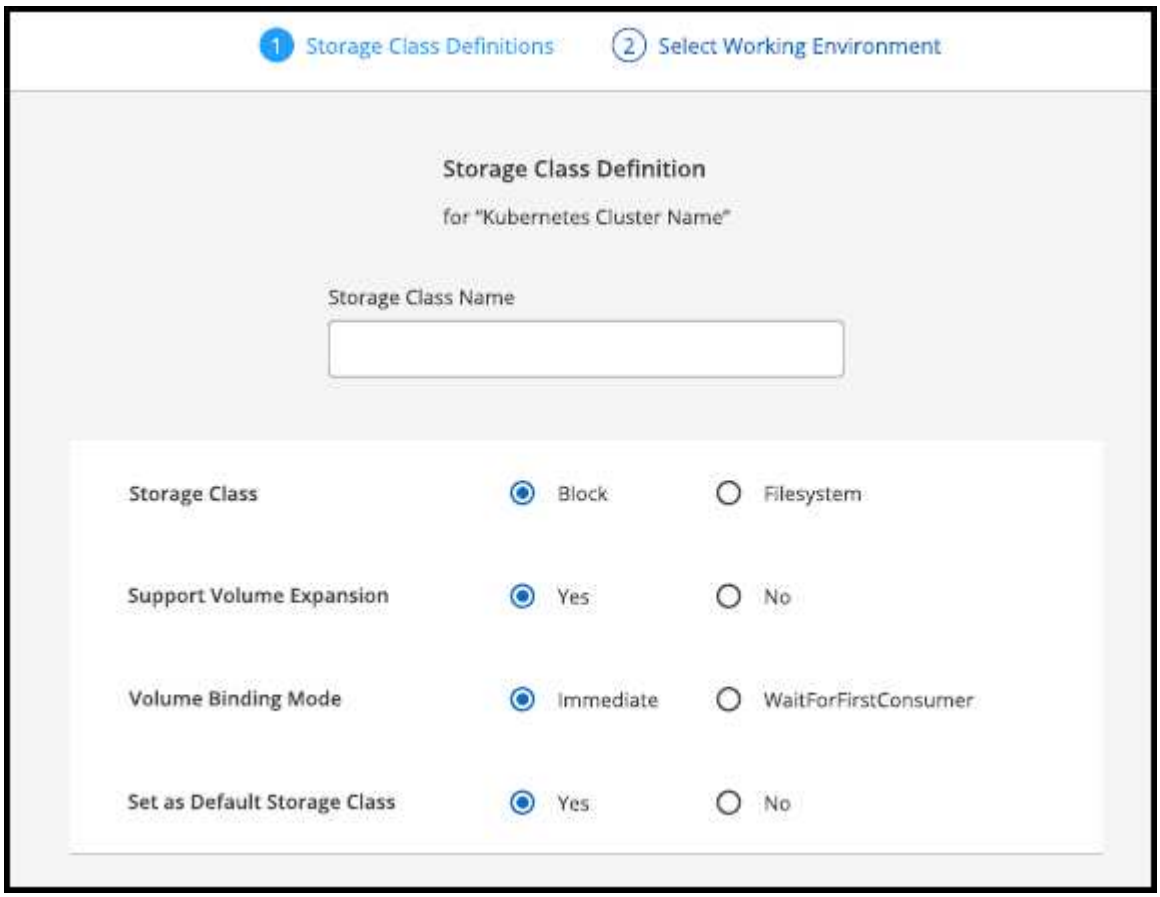
to manage storage classes.

> If no storage class is defined, the cluster will show there is an action required. Double-clicking the cluster on the Canvas opens the action page to add a storage class.

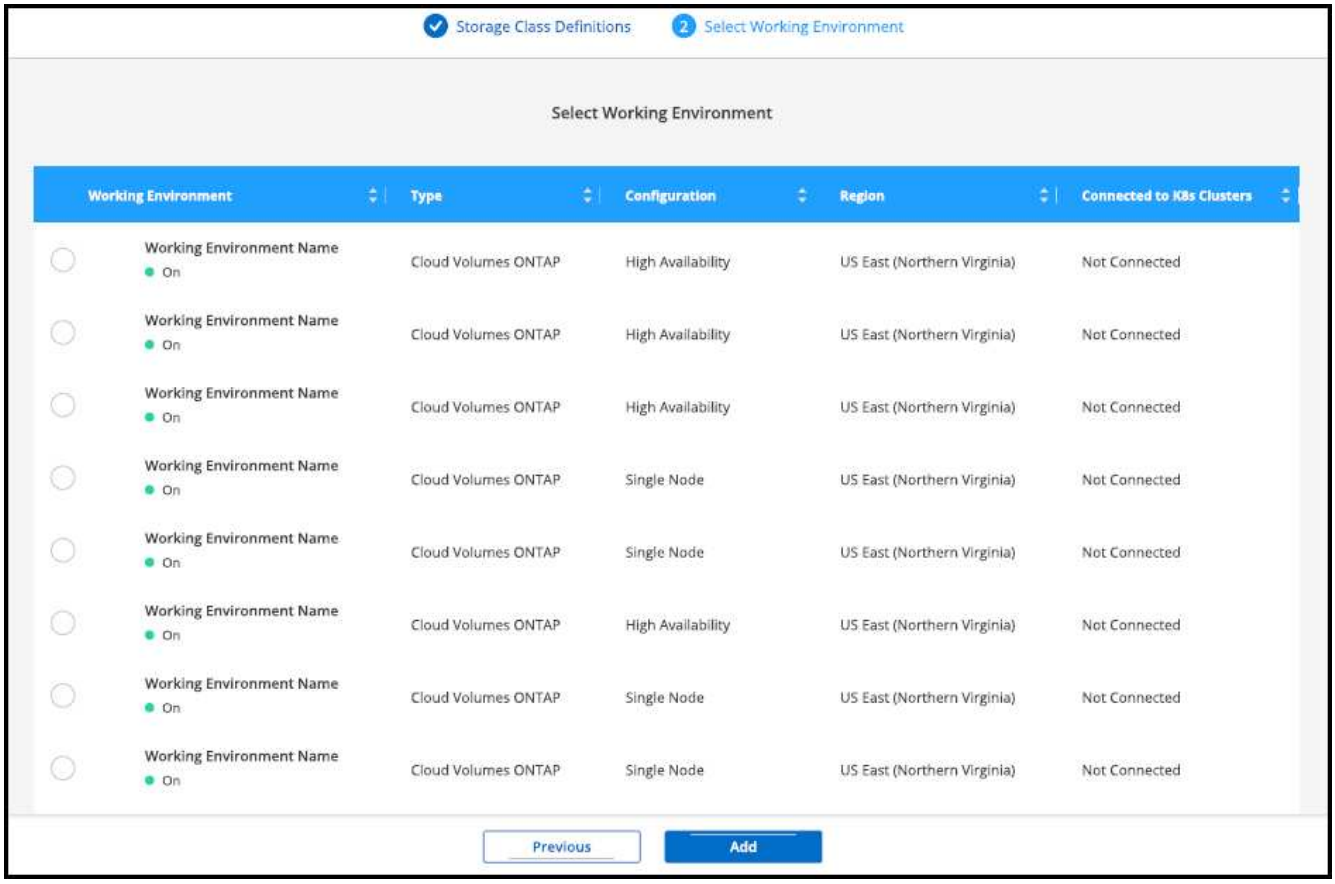
Add storage class

Steps

1. From the Canvas, drag and drop the Kubernetes working environment on the Cloud Volumes ONTAP working environment to open the storage class wizard.
2. Provide a name for the storage class, select definition options, and click **Next**.

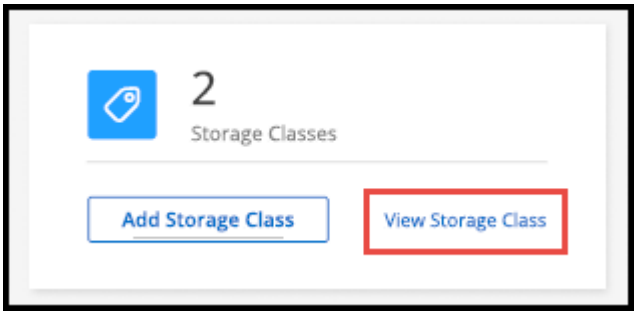


3. Select a working environment to connect to the cluster. Click **Add**.



Results

You can click to view the storage class from the resource page for the Kubernetes cluster.



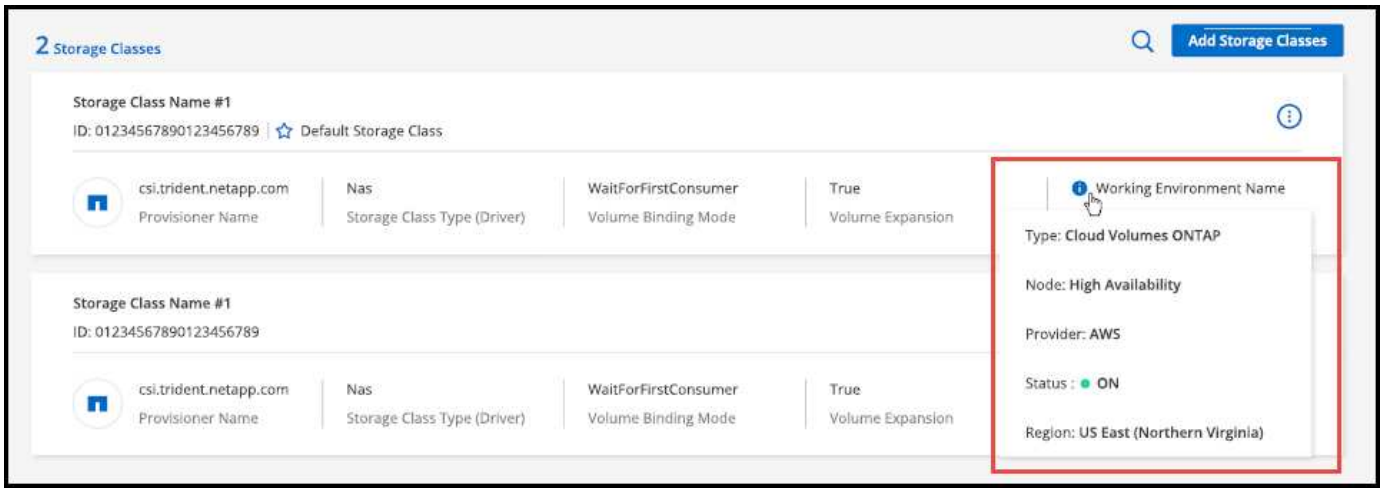
View working environment details

Steps

1. Double-click the Kubernetes working environment on the Canvas or click **Enter Working Environment**.
2. Click the **Storage Classes** tab.
3. Click the information icon to view details for the working environment.

Results

The working environment details panel opens.



Set default storage class

Steps

1. Double-click the Kubernetes working environment on the Canvas or click **Enter Working Environment**.
2. Click the **Storage Classes** tab.
3. Click the action menu for the storage class and click **Set as Default**.

Results

The selected storage class is set as the default.

Remove storage class

Steps

1. Double-click the Kubernetes working environment on the Canvas or click **Enter Working Environment**.
2. Click the **Storage Classes** tab.
3. Click the action menu for the storage class and click **Set as Default**.

4. Click **Remove** to confirm removal of the storage class.

Results

The selected storage class is removed.

View persistent volumes

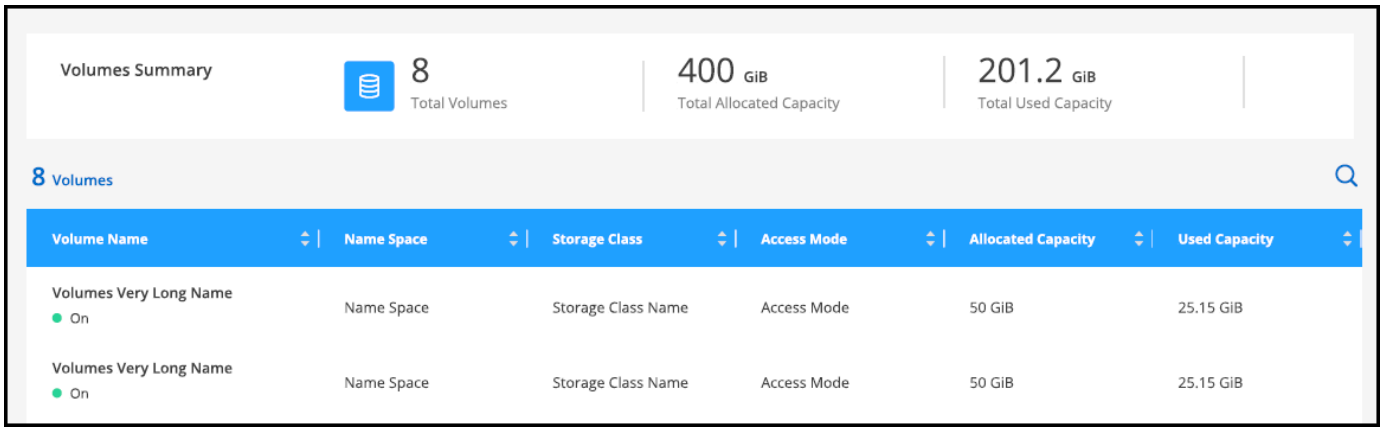
After you add a managed-Kubernetes cluster to the Canvas, you can use Cloud Manager to view persistent volumes.

Steps

1. Double-click the Kubernetes working environment on the Canvas or click **Enter Working Environment**.
2. Click **View Volumes** from the **Overview** tab or click the **Persistent Volumes** tab. If no persistent volumes are configured, see Provisioning for details on provisioning volumes in Astra Trident.

Results

A table of the configured persistent volumes displays.

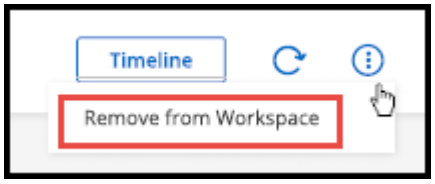


Remove Kubernetes clusters from the workspace

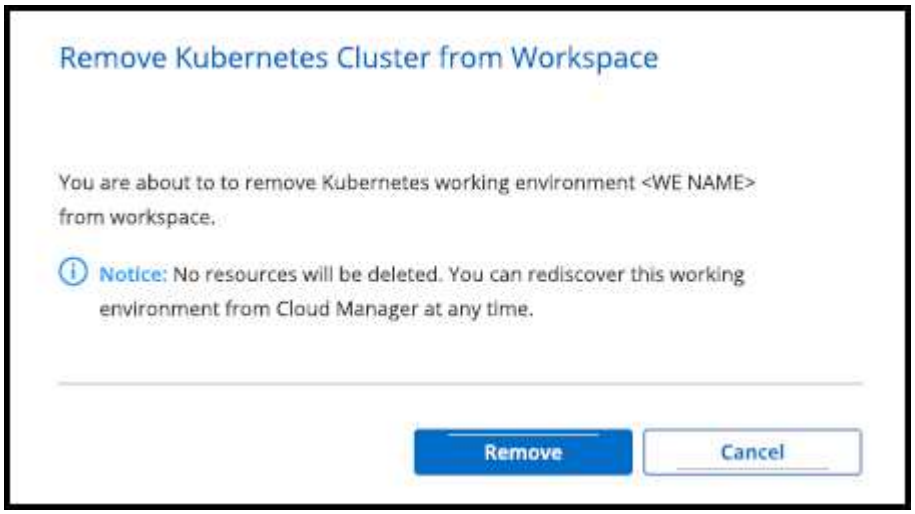
After you add a managed-Kubernetes cluster to the Canvas, you can use Cloud Manager to remove clusters from the workspace.

Steps

1. Double-click the Kubernetes working environment on the Canvas or click **Enter Working Environment**.
2. At the top right of the page, select the actions menu and click **Remove from Workspace**.



3. Click **Remove** to confirm removal of the cluster from the workspace. You can rediscover this cluster at any time.



Results

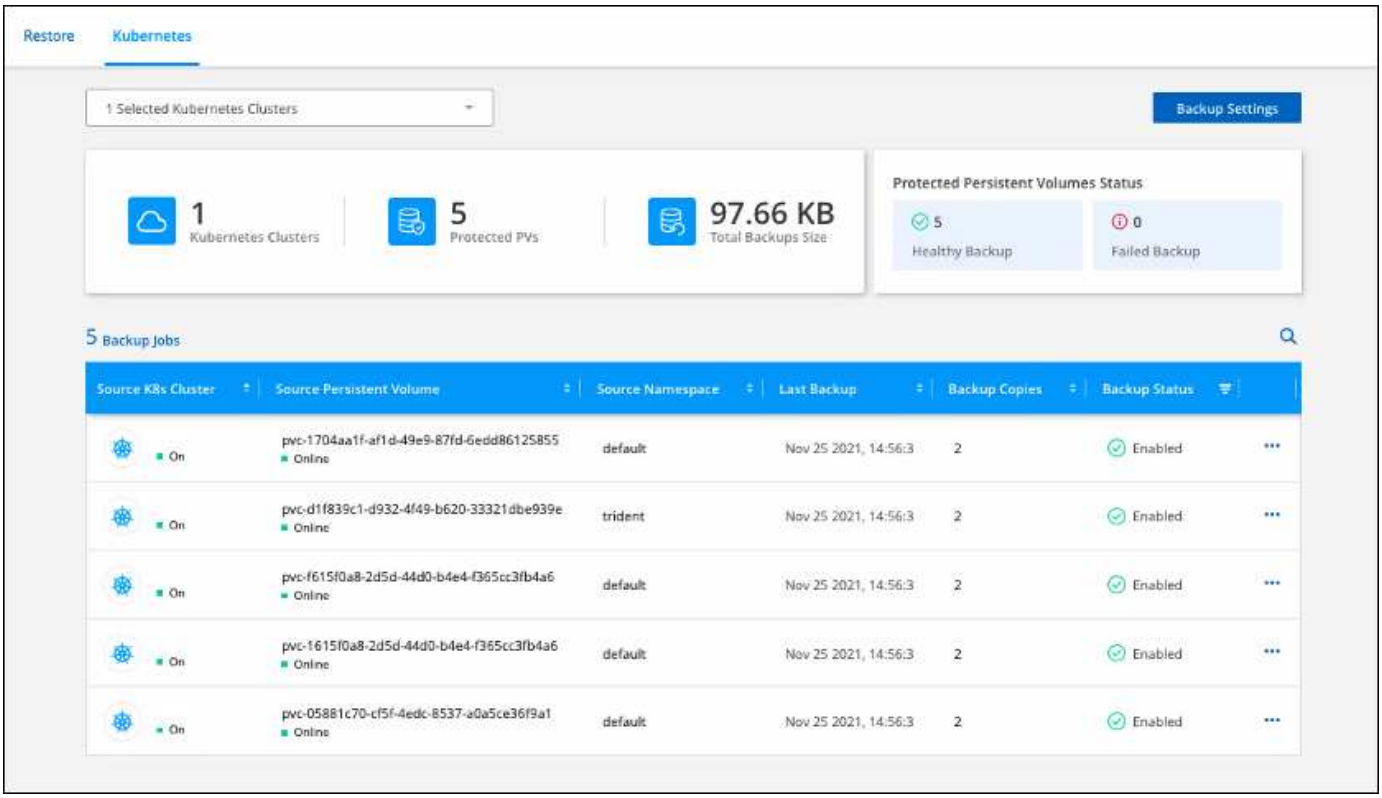
The Kubernetes cluster is removed from the workspace and is no longer visible on the Canvas.

Use NetApp cloud data services with Kubernetes clusters

After you add a managed-Kubernetes cluster to the Canvas, you can use NetApp cloud data services for advanced data management.

At this time, Cloud Backup is supported with Kubernetes clusters. You can use Cloud Backup to back up persistent volumes to object storage.

Learn how to protect your Kubernetes cluster data using Cloud Backup.


Restore
Kubernetes
1 Selected Kubernetes Clusters
Backup Settings
1
Kubernetes Clusters
5
Protected PVs
97.66 KB
Total Backups Size
Protected Persistent Volumes Status
5
Healthy Backup
0
Failed Backup
5 Backup Jobs
Source K8s Cluster
Source Persistent Volume
Source Namespace
Last Backup
Backup Copies
Backup Status
On
pvc-1704aa1f-af1d-49e9-87fd-6edd86125855
Online
default
Nov 25 2021, 14:56:3
2
Enabled
On
pvc-d1f839c1-d932-4f49-b620-33321dbe939e
Online
trident
Nov 25 2021, 14:56:3
2
Enabled
On
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Online
default
Nov 25 2021, 14:56:3
2
Enabled
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2
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Online
default
Nov 25 2021, 14:56:3
2
Enabled