Manage Kubernetes clusters

Kubernetes clusters

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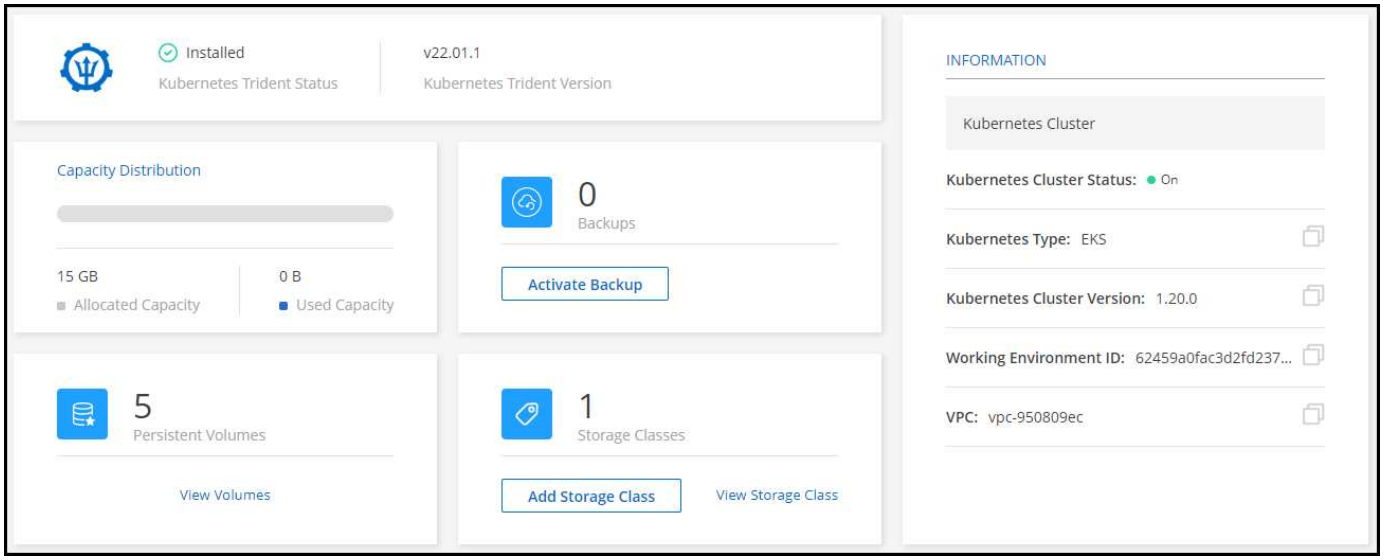
You can use Cloud Manager to install or upgrade Astra Trident, configure storage classes, remove clusters, and enable data services.

Astra Trident deployed using `tridentctl` is not supported. If you deployed Astra Trident using `tridentctl`, you cannot use Cloud Manager to manage your Kubernetes clusters. You must uninstall using `tridentctl` and reinstall using the Trident operator or using Cloud Manager.

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 a compatible version of Astra Trident is installed, or upgrade to the latest version of Astra Trident. 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 or upgrade Astra Trident

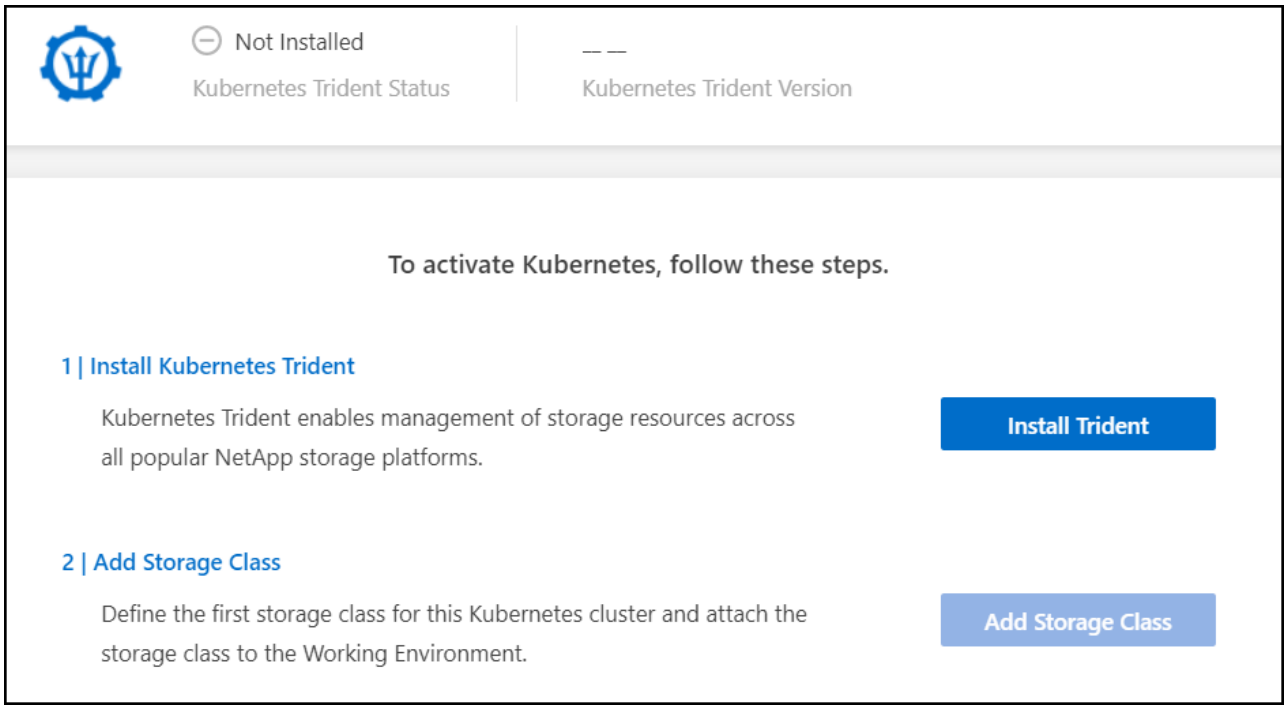
After you add a managed Kubernetes cluster to the Canvas, you can use Cloud Manager to confirm a compatible Astra Trident installation or install or upgrade Astra Trident to the latest version.

- If Astra Trident is not installed, or an incompatible version of Astra Trident is installed, the cluster will show there is an action required.
- One of the four most recent versions of Astra Trident deployed using the Trident operator—either manually or using Helm chart—is required.
- Astra Trident deployed using `tridentctl` is not supported. If you deployed Astra Trident using `tridentctl`, you cannot use Cloud Manager to manage your Kubernetes clusters. You must uninstall using `tridentctl` and reinstall using the Trident operator or using the steps below.

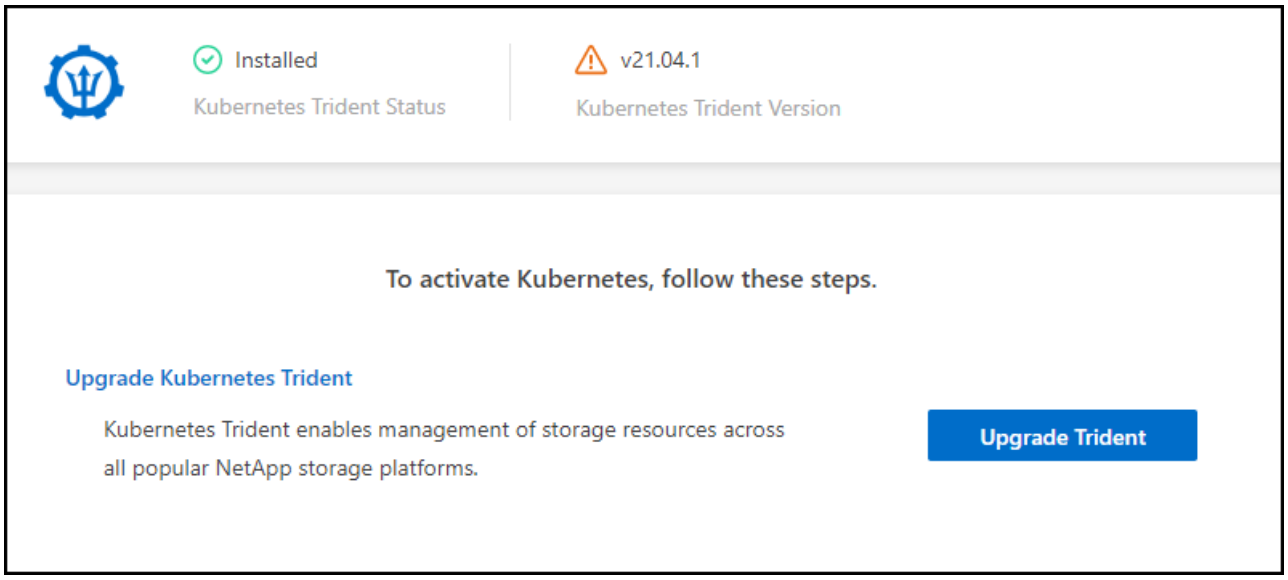
To learn more about Astra Trident, see Astra Trident documentation.

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 an unsupported version of Astra Trident is installed, click **Upgrade Trident**.



Results

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

Manage storage classes

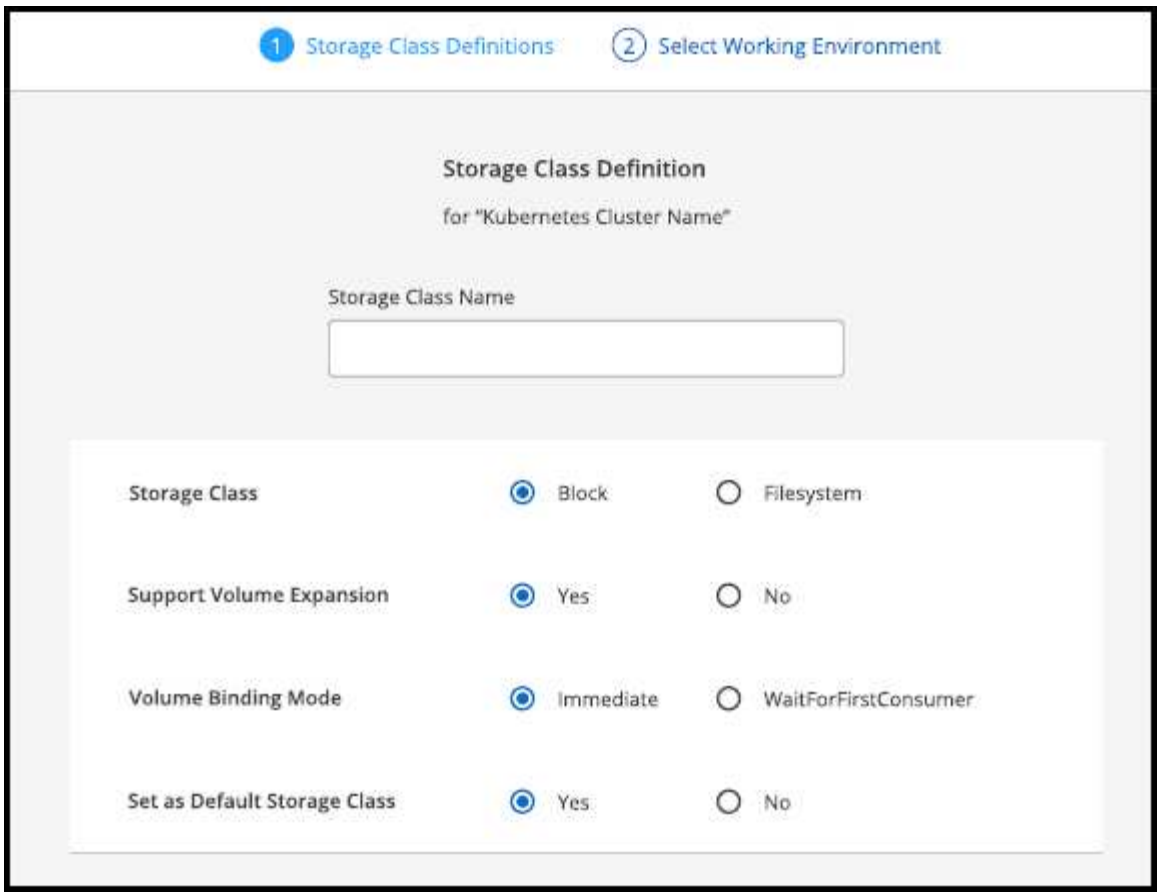
After you add a managed Kubernetes cluster to the Canvas, you can use Cloud Manager to manage storage classes.

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.

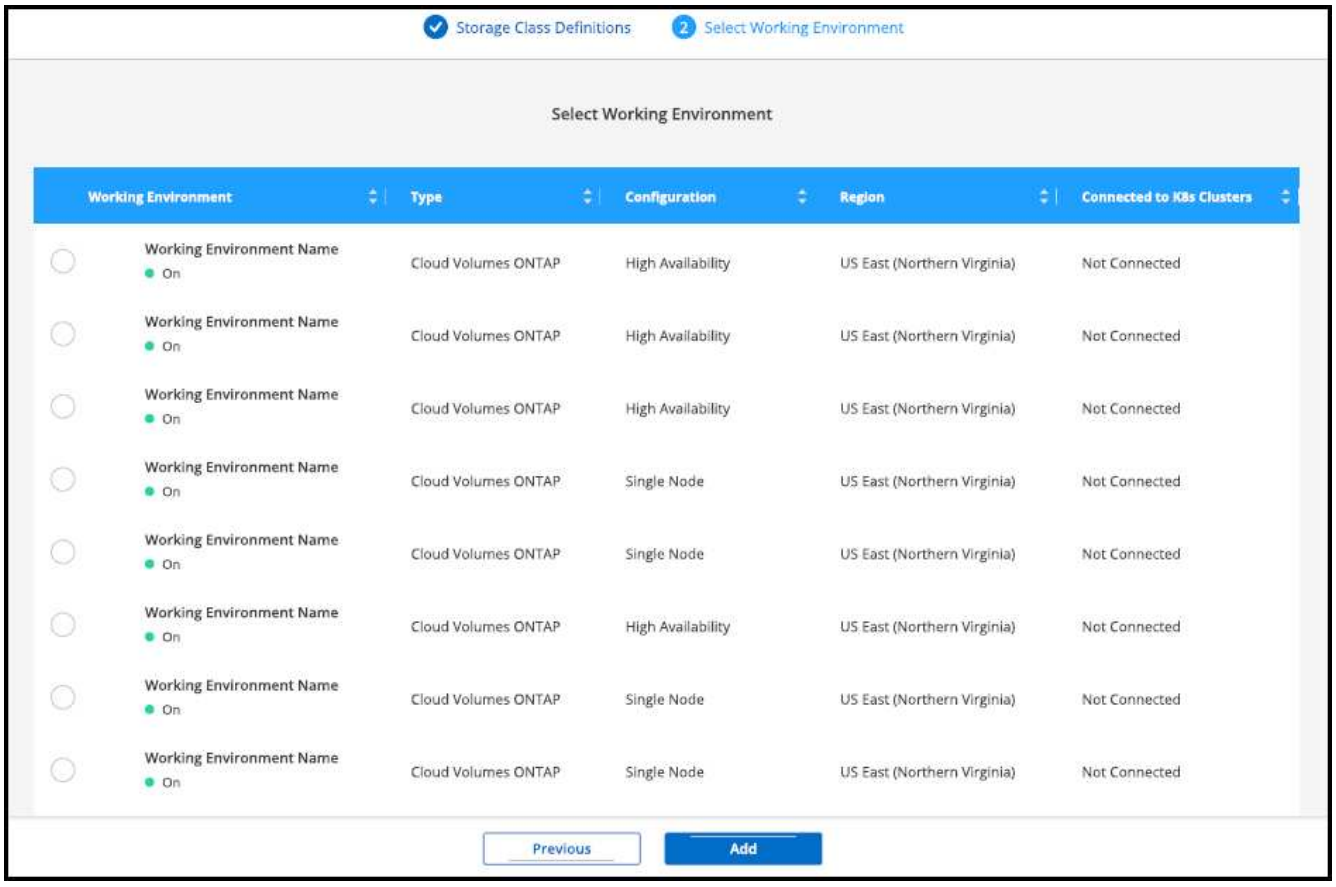
Add storage class

Steps

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

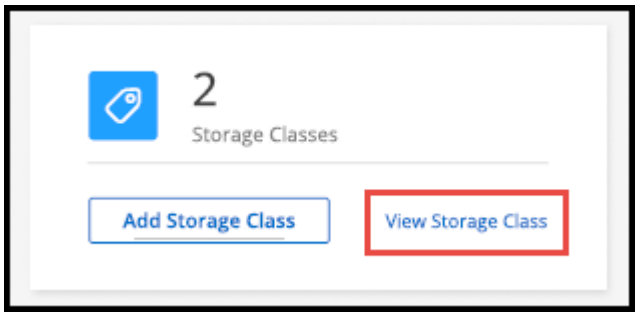


3. Select a working environment to connect to the cluster. Click **Add**.



Results

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



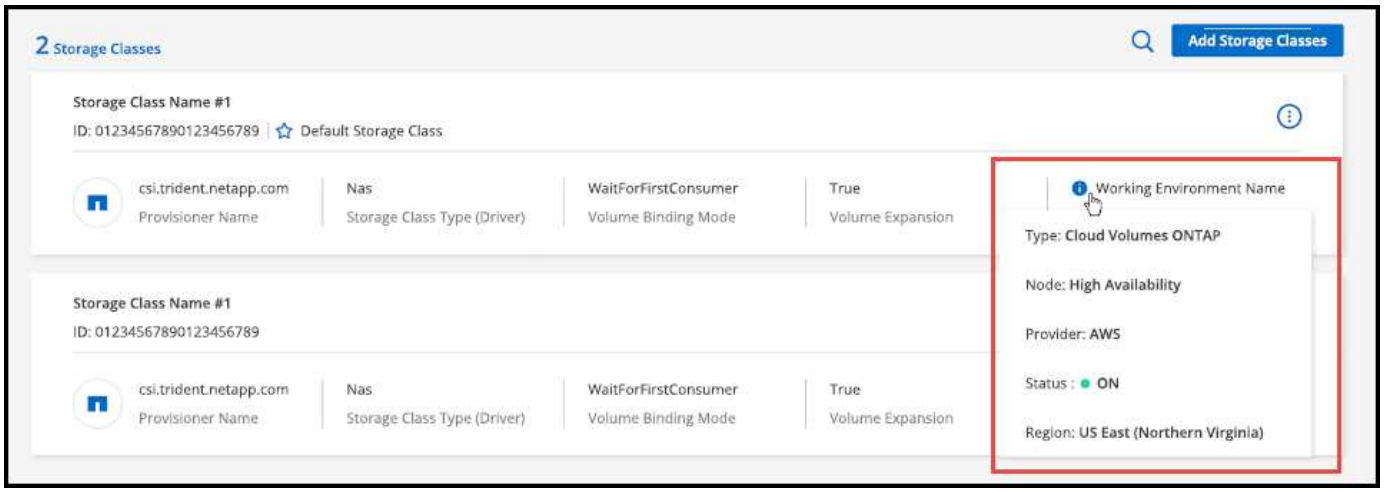
View working environment details

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.



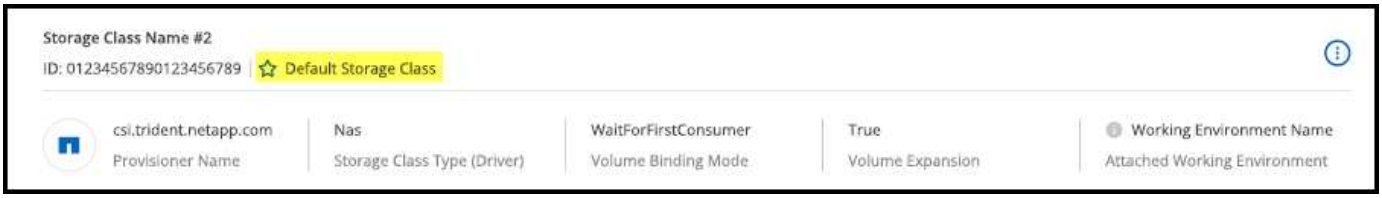
Set default storage class

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

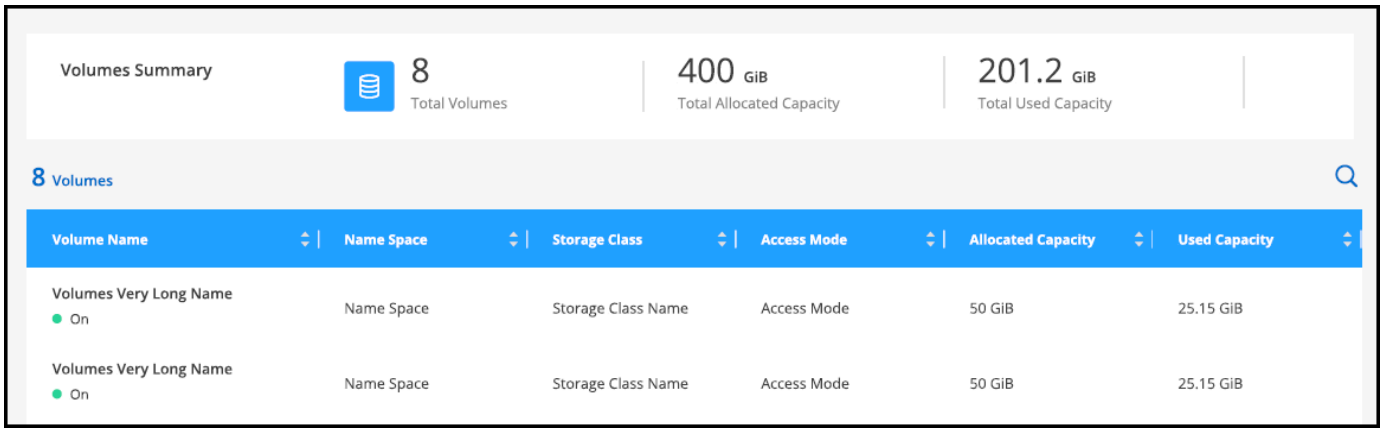
After you add a managed Kubernetes cluster to the Canvas, you can use Cloud Manager to view persistent volumes.

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.

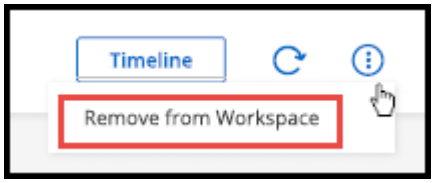


Remove Kubernetes clusters from the workspace

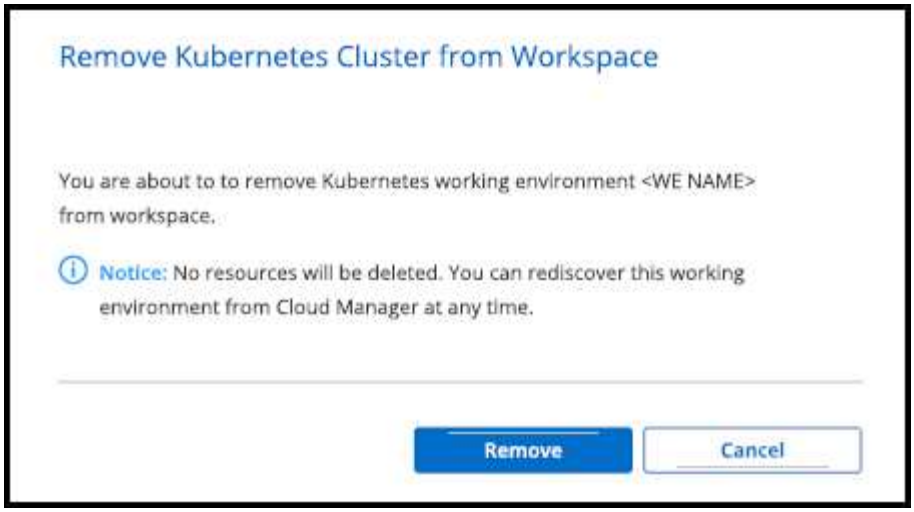
After you add a managed Kubernetes cluster to the Canvas, you can use Cloud Manager to remove clusters from the workspace.

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.

You can use Cloud Backup to back up persistent volumes to object storage.

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