Get started

Kubernetes clusters

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Get started

Kubernetes data management in BlueXP

Astra Trident is a fully-supported open source project maintained by NetApp. Astra Trident integrates natively with Kubernetes and its Persistent Volume framework to seamlessly provision and manage volumes from systems running any combination of NetApp storage platforms. Learn more about Trident.

Features

Using BlueXP and a compatible version of Astra Trident deployed using the Trident operator, you can:

- Add and manage Kubernetes clusters
- Install, upgrade, or uninstall Astra Trident
- Add and remove storage classes
- View persistent volumes
- Remove Kubernetes clusters from the workspace
- Activate or view BlueXP backup and recovery

Supported Kubernetes deployments

BlueXP supports managed-Kubernetes clusters running in:

- Amazon Elastic Kubernetes Service (Amazon EKS)
- Microsoft Azure Kubernetes Service (AKS)
- Google Kubernetes Engine (GKE)

Supported Astra Trident deployments

One of the four most recent versions of Astra Trident deployed using the Trident operator is required.

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

You can install Astra Trident or upgrade to a supported version directly from BlueXP.

Review Astra Trident prerequisites

Supported backend storage

NetApp Astra Trident must be installed on each Kubernetes cluster and Cloud Volumes ONTAP or Amazon FSx for ONTAP must be configured as backend storage for the clusters.

Cost

There are no charges to *discover* your Kubernetes clusters in BlueXP, but you will be charged when you back up persistent volumes using Cloud Backup Service.

Get started with Kubernetes clusters

Using BlueXP you can start managing Kubernetes clusters in just a few steps.

Review prerequisites

Ensure your environment meets the prerequisites for your cluster type.

Requirements for Kubernetes clusters in AWS

Requirements for Kubernetes clusters in Azure

Requirements for Kubernetes clusters in Google Cloud

Add your Kubernetes clusters to BlueXP

You can add Kubernetes clusters and connect them to a Working Environment using BlueXP.

Add an Amazon Kubernetes cluster

Add an Azure Kubernetes cluster

Add a Google Cloud Kubernetes cluster

Start provisioning Persistent Volumes

Request and manage Persistent Volumes using native Kubernetes interfaces and constructs. BlueXP creates NFS and iSCSI storage classes that you can use when provisioning Persistent Volumes.

Learn more about provisioning your first volume with Astra Trident.

Manage your clusters using BlueXP

After adding Kubernetes clusters to BlueXP, you can manage the clusters from the BlueXP resource page.

Learn how to manage Kubernetes clusters.

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