

Using Astra Trident with Kubernetes (NA-UATWK)

Course Description

Learn how to install, configure, and use NetApp® Astra Trident to manage Kubernetes with NetApp ONTAP® based storage systems. Deploy Astra Trident by using the Trident operator and use the tridentctl and kubectl methods to manage configurations. Configure NFS-backed, iSCSI-backed, and NVMe over TCP (NVMe/TCP) backed storage by using Astra Trident. Also, manage Snapshot copies, expand volumes, and import non-Astra Trident volumes to become managed volumes.

Course Duration

2 days.

Prerequisites

- Basic Linux administration skills

Objectives

This course focuses on enabling you to do the following:

- Review how containers use persistent storage
- Describe the storage concepts that are available in Kubernetes
- Explain how Astra Trident makes managing persistent storage easier
- Install Astra Trident in a Kubernetes cluster
- Configure back ends, storage classes, and persistent volumes to use storage that is managed by Astra Trident
- Use Astra Trident to manage frequently seen use scenarios
- Monitor Astra Trident by using Prometheus and Grafana

Course Outlines

- **Module 1: Kubernetes storage overview**
 - Persistent storage in Kubernetes
 - Container storage
 - Kubernetes storage concepts
 - Dynamic provisioning with Astra Trident
- **Module 2: Installation**
 - Astra Trident details
 - Astra Trident installation

- **Module 3: Configuration**
 - Configure back ends
 - Manage storage classes
 - Create persistent volumes by using Astra Trident
 - Astra Trident
- **Module 4: Usage scenarios**
 - Manage Snapshot copies with Astra Trident
 - Expand volumes by using Astra Trident
 - Import volumes by using Astra Trident
 - Manage multiple-zone storage by using Astra Trident
 - Astra Trident
- **Module 5: Next steps**
 - Next Steps

Who Should Attend

- Systems administrator, architect, operator, and integration engineer