# TRAINING OFFERING

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# NetApp    Using Astra Trident with Kubernetes

| CODE: | LENGTH: | PRICE: |
|---|---|---|
| NEP_UATWK | 16 Hours (2 days) | €2,040.00 |

## Description

In this course, you learn how to install, configure, and use NetApp® Astra Trident™ to manage Kubernetes with NetApp ONTAP® storage. You deploy Astra Trident by using the Trident operator and use the tridentctl and kubectl methods of managing configurations. You configure NFS-backed and iSCSI-backed storage by using Astra Trident and manage Snapshot™ copies, expand volumes, and import non-Astra Trident volumes to become managed volumes. You deploy Astra Trident in a multiple container storage interface (CSI) environment. Written for Kubernetes v1.23.0 and Astra Trident 22.01, this course includes an appendix on how to monitor Astra Trident.

## Objectives

- 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 Astra Trident-managed storage
- Use Astra Trident to manage common use scenarios
- Monitor Astra Trident by using Prometheus and Grafana

## Audience

- Systems Administrator
- Systems Architect
- Systems Operator
- Integration Engineer

## Prerequisites

Kubernetes Administration knowledge/experience is required in addition to the 3 day course below..  **OT-CLU-A - Cluster Administration**

## Programme

**Module 1: Kubernetes storage overview**
Persistent storage in Kubernetes
Container storage
Kubernetes storage concepts
Dynamic provisioning with Astra Trident

**Module 2: Astra Trident Installation**
Astra Trident details
Astra Trident installation

**Module 3: Astra Trident configuration**
Configure back ends
Manage storage classes
Persistent volumes using Astra Trident

**Module 4: Managing Storage with Astra Trident**
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

**Appendix 1: Kubernetes-related certifications**
Cloud Native Computing Foundation exams
NetApp Kubernetes-related exams

**Appendix 2: An introduction to operators**
Design patterns for extending Kubernetes
Operators
Example operator implementation

**Appendix 3: Astra Trident monitoring**
Available options for monitoring Astra Trident
Monitor Astra Trident with Prometheus

## Session Dates

| Date | Location | Time Zone | Language | Type | Guaranteed | PRICE |
|------|----------|-----------|----------|------|------------|-------|
| 19 Aug 2024 | Virtual Classroom (CET +1 / UTC +2) | | English | Classroom | | €2,040.00 |
| 07 Oct 2024 | Virtual Classroom (CET +1 / UTC +2) | | English | Classroom | | €2,040.00 |
| 09 Dec 2024 | Virtual Classroom (CET +1 / UTC +2) | | English | Classroom | | €2,040.00 |

## Additional Information

This training is also available as onsite training. Please contact us to find out more.