

# NetApp ONTAP Admin Training

3 days (21 hours)

## Overview

NetApp ONTAP is NetApp's distributed storage operating system. Designed to unify SAN, NAS and cloud, it offers advanced features such as high availability, replication, security and multi-cloud integration.

Our NetApp ONTAP Admin training course will teach you how to install, configure and administer ONTAP in a DevOps environment.

You'll learn how to create and manage volumes, configure high availability, optimize performance and integrate ONTAP with your automation tools (Ansible, Terraform) and Kubernetes environments.

You'll also learn how to secure your data, automate administration and operate ONTAP in hybrid cloud environments.

By the end of the course, you'll be able to deploy a complete ONTAP cluster, ensure its resilience and integrate it efficiently into your IT infrastructures and DevOps pipelines.

Like all our training courses, this one uses [the latest stable version of ONTAP](#) .

## Objectives

- Understand key ONTAP concepts
- Install and administer a NetApp ONTAP cluster
- Configure high availability, SnapMirror and SnapVault
- Optimize performance and ensure compliance
- Automate with REST API, Ansible and Terraform
- Integrate ONTAP with Kubernetes and the cloud

## Target audience

- DevOps engineers
- System administrators
- Cloud and infrastructure architects

## Prerequisites

- General knowledge of Linux/Windows
- SAN/NAS network concepts
- Notions of DevOps

# NetApp ONTAP Admin training program

## Introduction to NetApp ONTAP

- NetApp ONTAP overview and positioning
- Key concepts: SAN, NAS, objects, hybrid cloud
- Cluster architecture: nodes, aggregates, volumes
- Comparison with Dell EMC Unity, IBM Spectrum Scale, Ceph
- DevOps, cloud and virtualization use cases
- Workshop: Discover ONTAP System Manager

## ONTAP architecture and components

- Components: clusters, SVM, volumes, LIF
- Protocols: NFS, SMB, iSCSI, FC
- How clusters and disks work
- Namespace, unified architecture and peer HA
- Best-practice architecture rules
- Workshop: Creating an SVM and an NFS volume

## Basic administration

- Tools: System Manager, CLI, REST API
- Volumes, shares, export policies
- Users, permissions and AD/LDAP integration
- Snapshots and retention policies
- Monitoring & basic logs
- Workshop: Creating a CIFS/SMB share and configuring rights

## High availability and disaster recovery

- ONTAP clustering, fault tolerance and peer HA
- MetroCluster for remote sites
- SnapMirror replication (synchronous/asynchronous)

- Long-term backup with SnapVault
- DR failover plans (scheduled/unscheduled)
- Workshop: Configuring SnapMirror replication

## Performance and optimization

- I/O and workload performance
- Flash Cache, FabricPool, QoS
- Advanced monitoring (Active IQ, Prometheus/Grafana)
- Optimization for CI/CD pipelines
- ONTAP tuning best practices
- Workshop: Measuring & optimizing volume performance

## Security and compliance

- RBAC and role management
- Encryption at rest and in transit
- Centralized auditing and logging
- Integration with AD and LDAP
- Regulatory compliance (RGPD, ISO, HIPAA)
- Workshop: Enabling encryption and auditing a volume

## DevOps automation and integration

- REST API and ONTAP automation
- Integration with Ansible, Terraform, PowerShell
- Automated volume provisioning
- CI/CD use cases with ONTAP storage
- Automated monitoring and alerts
- Workshop: Deploying a volume via Terraform and Ansible

## Cloud and container integration

- ONTAP Cloud Volumes (AWS, Azure, GCP)
- Hybrid and multi-cloud management
- Kubernetes via CSI driver / NetApp Trident
- DevOps and microservices use cases
- Scale-out strategies
- Workshop: Deploying a persistent Kubernetes volume via Trident

## Summary and outlook

- Summary of ONTAP concepts
- Industry case studies (banking, healthcare, cloud providers)
- NetApp ONTAP roadmap and news
- Common pitfalls and limitations

- Evolution plan towards advanced ONTAP
- Workshop: Drawing up an ONTAP deployment roadmap

## Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced IT technology, or to acquire specific business knowledge or modern methods.

## Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the forthcoming course, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

## Teaching methods

Practical training: 60% hands-on, 40% theory. Training material distributed in digital format to all participants.

## Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

## Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

## Certification

A certificate will be awarded to each trainee who has completed the entire course.