



ONTAP Cluster Administration (ONTAP9ADM)

ID ONTAP9ADM Price 2,700.— €(excl. tax) Duration 3 days

Course Overview

Learn the basic administration tasks of a NetApp® ONTAP® 9.14 cluster. Use the clustershell and NetApp ONTAP System Manager to manage cluster storage and network resources. Discover how to configure basic data protection and data efficiency functions and common cluster maintenance tasks.

Who should attend

Systems administrator, cloud architect, operator, data protection specialist, enterprise architect, and integration engineer

This course is part of the following Certifications

NetApp Certified Data Administrator, ONTAP (NCDA)

Prerequisites

- ONTAP Cluster Foundations [ONTAP Cluster Foundations \(ONTAPCF\)](#)
- ONTAP NAS Fundamentals (WBT)
- ONTAP SAN Fundamentals (WBT)

Course Objectives

This course focuses on enabling you to do the following:

- Define NetApp ONTAP cluster components
- Describe the role of a storage VM (storage virtual machine, also known as SVM) in the NetApp storage architecture
- Configure an ONTAP cluster
- Configure and manage both networking and storage resources
- Create and configure a storage VM
- Create, manage, and protect NetApp FlexVol® volumes
- Implement storage efficiency features
- Manage ONTAP administrator access and user accounts
- Maintain NetApp storage systems

Course Content

Module 1: NetApp ONTAP 9 Clusters

- ONTAP deployment options
- The ONTAP cluster
- Storage VMs
- Software-defined storage

Module 2: Cluster Setup

- Supported ONTAP cluster configurations
- Setting up a Cluster
- Administration Interfaces
- ONTAP licensing
- Policies and Schedules

Module 3: Physical storage management

- Drives, RAID, and aggregates
- Advanced Disk Partitioning
- Flash Cache and Flash Pool features
- FabricPool aggregates

Module 4: Logical Storage Management

- Flexible Volumes
- FlexGroup volumes
- FlexCache volumes
- Moving Storage Resources

Module 5: Storage Efficiency

- Thin provisioning
- Deduplication and compression
- Flash efficiency
- Volume and file clones

Module 6: Network Management

- NetApp ONTAP Network Review
- Network Ports
- Network Traffic Segregation
- Logical network interfaces
- Nondisruptive LIF configuration
- Network security
- Routing Management



Module 7: NAS Data Access

- Using NAS protocols to access data
- Use the NFS protocol to access data
- Use the SMB protocol to access data
- Use the S3 protocol to access data

Module 8: SAN data access

- Use SAN protocols to access data
- Use the iSCSI protocol to access data
- Use the FC protocol to access data
- Use the NVMe protocol to access data

Module 9: Data Protection

- Manage Snapshot Copies
- Restore data from a Snapshot copy
- Backup and replicate data
- Compliance

Module 10: ONTAP security

- Access control
- Storage encryption
- Ransomware protection

Module 11: Cluster Maintenance

- Data collection, monitoring and automation tools
- Upgrading your cluster
- Technical support

Detailed Course Outline

Module 1: NetApp ONTAP 9 Clusters

- ONTAP deployment options
- The ONTAP cluster
- Storage VMs
- Software-defined storage

Module 2: Cluster Setup

- Supported ONTAP cluster configurations
- Setting up a Cluster
- Administration Interfaces

Module 3: Cluster Management

- Access control
- ONTAP licensing
- Policies and Schedules

Module 4: Network Management

- NetApp ONTAP Network Review
- Network Ports
- Network Traffic Segregation
- LIFs
- Nondisruptive LIF configuration
- Network security
- Routing Management

Module 5: Physical Storage Management

- Drives, RAID and Aggregates
- Advanced Drive Partitioning
- Flash Cache and Flash Pool features
- FabricPool Aggregates

Module 6: Logical Storage Management

- Flexible Volumes
- FlexGroup volumes
- FlexCache volumes
- Moving Storage Resources

Module 7: Data Access

- Using NAS protocols to access data
- Use SAN protocols to access data
- Use object protocols to access data

Module 8: Data Protection

- Manage Snapshot Copies
- Restore data from a Snapshot copy
- Backup and replicate data
- Compliance
- Storage encryption
- Ransomware protection

Module 9: Storage Efficiency

- Thin provisioning
- Deduplication and compression
- Flash efficiency
- Logical space reporting
- Volume and file clones

Module 10: Cluster Maintenance



- Data collection, monitoring and automation tools
- Backing up and restoring your cluster configuration
- Upgrading your cluster
- Recommended practices for performance
- Technical support
- Documentation

Module 11: Course Review and post-class assessment

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