

Enterprise Computing Solutions - Education Services

TRAINING OFFERING

Du kan nå os her

Email: training.ecs.dk@arrow.com Phone: +45 7025 4500

■ NetApp ONTAP 9 Cluster and Data Protection Administration

CODE: LENGTH: PRICE:

NEP OT-CLU-DPA 40 Hours (5 dage) kr 34,750.00

Description

This 5 day class is a combination of the 3 day Cluster Administration Class and the 2 day Data Protection Class.

Cluster Administration

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.

Data Protection

Explore key concepts and techniques for protecting data on NetApp® ONTAP® based storage systems. Learn about the data protection solutions that are integrated in ONTAP software and examine the tools to manage ONTAP data protection features. In the hands-on exercises, use NetApp ONTAP System Manager and the ONTAP CLI to perform key data protection tasks. This course is updated for ONTAP 9.14.1 software.

Objectives

- Define 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
- Manage NetApp storage systems
- Describe and distinguish the data protection features in ONTAP software
- · Administer the appropriate ONTAP data protection feature to address your data protection concern
- Configure NetApp SnapMirror® relationships for disaster recovery and data backup
- Demonstrate storage VM disaster recovery (SVM DR)
- Illustrate NDMP-enabled operations to back up NAS data to tape
- Integrate the cloud-based data protection solutions that complement your ONTAP based storage systems
- Structure NetApp MetroCluster components and functionality
- Illustrate SnapMirror active sync components and functionality

Audience

- Administrators
- Architects
- Operators

Prerequisites

ONTAP Cluster Fundamentals, NAS and SAN Fundamentals elearning is required. This is available free of charge via the NetApp Learning Center - please contact us via the link below if further support is required..

Contact Us

Programme

ONTAP deployment options

• The ONTAP cluster

Storage VMs

Module 1: NetApp ONTAP 9 Clusters • Software-defined storage Module 2: Cluster Setup

Supported ONTAP cluster configurations

Setting up a cluster

Administration interfaces Deploying an ONTAP cluster
ONTAP licences Exploring ONTAP management UIs

• Drives, RAID, and aggregates

Advanced Disk Partitioning

• Flash Cache and Flash Pool features Managing physical storage

Module 3: Physical Storage Management • FabricPool aggregates

Exercises Exploring RAID-TEC

Flexible volumes

• Moving storage resources

FlexGroup volumes
 FlexCache volumes
 Exercises Creating a FlexGroup volume

Module 4:Logical Storage Management • FlexCache volumes

Thin provisioningDeduplication and compression

- Deduplication and compression

• Flash efficiency Managing storage efficiency

Module 5:Storage Efficiency • Volume and file clones

Exercises Managing FlexClone volumes

ONTAP network review

Network ports

Network traffic segregation

Logical network interfaces

• Nondisruptive LIF configuration

Network security
 Managing physical and logical network resources

Use NAS protocols to access data
 Use the NFS protocol to access data
 Use the SMB protocol to access data
 Use the SMB protocol to access data
 Use the SMB protocol to access data
 Monitoring with ONTAP File System Analytics
 Configuring the NFS protocol in a storage VM
 Configuring the SMB protocol in a storage VM

• Use SAN protocols to access data

· Use the iSCSI protocol to access data

• Use the FC protocol to access data

Configuring iSCSI in a storage VM

Module 8: SAN Data Access • Use the NVMe protocol to access data Exercises Configuring NVMe in a storage VM

· Manage Snapshot copies

· Restore data from a Snapshot copy

• Back up and replicate data

Module 9: Data Protection • Compliance

Exercises Managing Snapshot copies

Access control

Storage encryption

Module 10: ONTAP Security • Ransomware protection Exercises Managing ONTAP Administrators

· Data collection, monitoring, and automation tools

Upgrading your cluster

Module 11: Cluster maintenance • Technical support

Exercises

Introduction to SnapMirror

Configuring SnapMirror relationships

Guidelines for intercluster networking

Installing and configuring Active IQ Config Advisor Module 1: SnapMirror Fundamentals • Cluster and storage VM peering Exercises Configuring cluster peering and storage VM peering Module 2: SnapMirror for Disaster Recovery and Backup

• SnapMirror for FlexVol volumes

· SnapMirror configuration considerations

• SnapMirror for disaster recovery

SnapMirror for backup

• Interaction between SnapMirror and other ONTAP features

S3 SnapMirror

• FabricPool Exercises

Using SnapMirror to mirror FlexVol volumes

Performing SnapMirror disaster recovery

Configuring SnapMirror for unified replication

Restoring data from a Snapshot copy

Configuring cluster and storage VM peering for a cascade relationship (optional)

Configuring a cascade relationship(optional)

• SnapMirror Synchronous

• Configuring SnapMirror Synchronous for disaster recovery

Module 3: SnapMirror Synchronous for Disaster Recovery • Additional SnapMirror Synchronous configuration

Exercises Configuring a SnapMirror Synchronous relationship Module 4: Storage VM Disaster Recovery (SVM DR)

- SVM DR introduction
- SVM DR requirements and configuration
- SVM data mobility

Exercises Configuring storage VM data recovery

- NDMP fundamentals
- NDMP topologies

Module 5: ONTAP Backup and Archive Solutions • NDMP management Module 6: Cloud-based Data Protection

- SnapMirror Cloud
- Cloud Volumes ONTAP
- Data protection with NetApp BlueXP Module 7: ONTAP Business Continuity Solutions
- · Consistency group management
- Introduction to SnapMirror active sync
- SnapMirror active sync configuration
- Failover operations and failure scenarios
- MetroCluster fundamentals

Session Dates

Date	Location	Time Zone	Language	Туре	Guaranteed	PRICE
16 Jun 2025	Virtual Classroom (GMT / UTC)	BST	English	Instructor Led Online		kr 34,750.00
14 Jul 2025	Virtual Classroom (GMT / UTC)	BST	English	Instructor Led Online		kr 34,750.00
18 Aug 2025	Virtual Classroom (GMT / UTC)	BST	English	Instructor Led Online		kr 34,750.00
15 Sep 2025	Virtual Classroom (GMT / UTC)	BST	English	Instructor Led Online		kr 34,750.00
13 Oct 2025	Virtual Classroom (GMT / UTC)	BST	English	Instructor Led Online		kr 34,750.00
10 Nov 2025	Virtual Classroom (GMT / UTC)	GMT	English	Instructor Led Online		kr 34,750.00
15 Dec 2025	Virtual Classroom (GMT / UTC)	GMT	English	Instructor Led Online		kr 34,750.00

Yderligere Information

Denne træning er også tilgængelig som træning på stedet. Kontakt os for at finde ud af mere.