

ONTAP Cluster Administration

Duration: 3 Days **Course Code: NEP_OT-CLU-A** **Delivery Method: Virtual Learning**

Overview:

In this course, you learn the basic administration tasks of a NetApp® ONTAP® 9.16 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.

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Target Audience:

Administrator Architect Operator

Objectives:

- This course focuses on enabling you to do the following:
 - 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

Prerequisites:

- *ONTAP Cluster Fundamentals* (web-based training [WBT]) or *ONTAP Cluster Foundation* (ILT)
- *ONTAP NAS Fundamentals* (WBT)
- *ONTAP SAN Fundamentals* (WBT)

Follow-on-Courses:

The following courses are recommended..

- ONTAP Data Protection Administration
- ONTAP SAN Implementation
- ONTAP SMB Administration
- ONTAP NFS Administration

Content:

Module 0 - Welcome

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 licences
- Policies and Schedules

Exercises

Deploying an ONTAP cluster

Exploring ONTAP management UIs

Module 3: Physical Storage Management

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

Exercises

Managing physical storage

Exploring RAID-TEC

Module 4: Logical Storage Management

- Flexible volumes
- Moving storage resources
- FlexGroup volumes
- FlexCache volumes

Exercises

Managing data volumes

Creating a FlexGroup volume

Module 5: Storage Efficiency

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

Exercises

Managing storage efficiency

Managing FlexClone volumes

Module 6: Network Management

- ONTAP network review
- Network ports
- Network traffic segregation
- Logical network interfaces
- Nondisruptive LIF configuration
- Routing management

Exercises

Managing physical and logical network resources

Managing virtual network resources

Module 7: NAS Data Access

- Use 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

Exercises

Monitoring with ONTAP File System Analytics

Configuring the NFS protocol in a storage VM

Configuring the SMB protocol in a storage VM

Configuring the S3 protocol in a storage VM

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

Exercises

Configuring iSCSI in a storage VM

Configuring NVMe in a storage VM

Module 9: Data Protection

- Manage Snapshot copies
- Restore data from a Snapshot copy
- Back up and replicate data
- Compliance

Exercises

Managing Snapshot copies

Module 10: ONTAP Security

- Access control
- Storage encryption
- Ransomware protection

Exercises

Managing ONTAP Administrators

Module 11: Cluster maintenance

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

Exercises

Installing and configuring Active IQ Config Advisor

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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