

# **ONTAP Cluster Administration (ONTAP9ADM)**

**Modality: Virtual Classroom**

**Duration: 3 Days**

**NATU: 36 Units**

## **About the Course:**

This 3-day, instructor-led course uses lecture and hands-on exercises to teach the basic administration tasks of a NetApp® ONTAP® 9.11 cluster. You use the clustershell and NetApp ONTAP System Manager to manage cluster storage and network resources. The course explains the configuration of basic data protection and data efficiency functions and common cluster maintenance tasks.

A NetApp Software Engineer can earn up to **\$99,827/-** on average, per annum.

## **Course Objectives:**

Once the course is complete, the candidate will have the skills to;

- 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 storage resources
- Configure and manage networking 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

## **Audience:**

The course is intended to be undertaken by;

- Network Engineers
- Channel Partners
- System Engineers
- NetApp Customers

## Prerequisites:

- ONTAP Cluster Fundamentals WBT (OCFWBT)
- NA-ONFWBT
- NA-OSFWBT
- Introduction to Networking in Clustered Data ONTAP (WBT)

## 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**