

Course Syllabus

Duration: 5 days

Cost: 44 credits

Module 1

NETAPP MATERIAL

- General presentation of product line
- Presentation of 2500 series
- Presentation of 8000 series
- Disk shelves
- Console & RLM / SP
- Administration switches
- Virtual Storage Tiering (Flash Cache, Flash Pool)
- All-Flash FAS

Module 2

INTRODUCTION TO NETAPP

- Data ONTAP
- Differences between NAS & SAN
- Back-end / Front-end
- Administration tools
- Protocols : CIFS, NFS, FCP, iSCSI
- Introduction to disk spaces
- Introduction to features

Module 3

CDOT - CONCEPTS

- Clustered Data ONTAP – Concepts
- Terminology
- Differences between 7-Mode & CDOT
- Possible configurations
- Switch presentation
- Model compatibility & limitations
- CDOT internal operation

Module 4

ADMINISTRATION TOOLS

- OnCommand System Manager
- Command line (CLI)
- Service Processor
- Computer Management
- PowerShell
- Workflow Automation

Module 5

DISK SPACE

- Disks
- RAID
- Aggregate (Flash Pool, Advanced Disk Partitioning, CFO vs SFO, ARL)
- Volume
- Qtree
- Calculating disk space
- WAFL (definition, features)

Module 6

PHYSICAL COMPONENTS MANAGEMENT

- Disk shelves management
- Disk management
- Ethernet ports management
- FC/FCoE ports management

Module 7

LOGICAL COMPONENTS MANAGEMENT

- Aggregate management
- Flash Pool & ARL
- Schedule management
- Storage Virtual Machine (LIF, Volumes, Qtree, Namespace, LUN)
- Quality of Service (QoS)

Module 8

PROTOCOLS

- NAS protocols (NFS, CIFS)
- SAN protocols (FC/FCoE, iSCSI, LUN management)

Module 9

FEATURES

- Volume Datamotion
- Thin provisionning
- SnapShot / SnapRestore
- FlexClone
- Quota
- Deduplication
- Compression
- SnapMirror / SnapVault

Module 10

CLUSTER MONITORING

- NetApp (netapp.com) support site
- Incident opening at NetApp
- AutoSupport
- Status controls
- Journaling
- Alerting
- Performance analysis
- Daily operations

Module 11

MAINTENANCE

- Stop, reboot and failover
- Update – Overview
- Update of the disk qualification file
- Firmware update
- ONTAP update
- Volume defragmentation

Module 12

BACKUP

- Backup of NAS data backup
- Backup of SAN data backup
- VMware backup
- NDMP configuration
- NetApp configuration backup