



# Configuring and Monitoring NetApp E-Series and EF-Series Storage Systems (CMESERIES)

ID CMESERIES Prix CHF 4 680,- (Hors Taxe) Durée 4 jours

#### A qui s'adresse cette formation

This course is designed for Professional Services workers who are NetApp employees, NetApp partners, or NetApp customers.

#### Cette formation prépare à la/aux certifications

NetApp Certified Implementation Engineer – SAN Specialist, E-Series (NCIE SAN E-SERIES)

#### Pré-requis

- Basic Windows administrative experience
- <u>Technical Overview of NetApp E-Series Storage Systems</u>

#### **Objectifs**

By the end of this course, you should be able to:

- Identify and use administrative and support tools for E-Series storage systems
- Install SANtricity Storage Manager software on host platform
- Recommend and create logical configurations on E-Series storage system
- Manage volume group and dynamic disk pools using SANtricity System Manager
- Perform routine E-Series administrative tasks using SANtricity System Manager
- Configure and administer E-Series features such SANtricity Snapshot image, volume copy and mirroring technologies
- Collect E-Series storage system information such as the event log, profile and support bundle

#### Contenu

In this course, you learn how to recommend configurations based on a pre-deployment assessment for a new NetApp E-Series or EF-Series storage system. In the deployment phase, you use both the NetApp SANtricity® storage management (v11.30) and system

management software to create the configuration, perform administrative tasks and employ data protection features. During post-deployment, you use SANtricity system management software to collect storage system information for trend analysis, troubleshooting, performance monitoring and tuning.

#### Module 1: Introduction to E-Series and EF-Series Storage

- E-Series and EF-Series storage products
- Data-protection features
- NetApp SANtricity Storage Manager functionality
- · Available plug-ins, APIs and providers

#### Module 2: E-Series and EF-Series Functionality

- · Configuration and theory of operation concepts
- · Controller cache and battery functionality
- Data Assurance (DA) feature functionality
- · Media scan functionality
- Drive security feature implementation
- Path-management concepts

#### Module 3: configuration Concepts and Initial Setup

- Storage system configuration tools and resources
- NetApp SANtricity simulator functionality and usage
- Host-side configuration concepts
- Disk-side configuration concepts
- General disk pool and volume group configuration concepts
- Storage system initial setup steps

#### **Module 4: Volume Group Administration**

- Volume group concepts
- Create volume groups and volumes
- General volume group system administration tasks
- Manage volume group disks

#### Module 5: Dynamic Disk Pool Administration

- · Disk pool concepts
- · Create disk pools and volumes

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- · Disk pool system administration tasks
- Manage disk pool disks

#### **Module 6: SSD Cache Administration**

- SSD Cache concepts
- Create a solid-state drive (SSD) cache
- · Assign and unassign an SSD cache
- · SSD cache administration

#### **Module 7: Snapshot Administration**

- · SANtricity Snapshot features
- · SANtricity Snapshot image administrative tasks
- Initiate the Snapshot process
- Snapshot volume administration
- Snapshot consistency group administration

#### **Module 8: Volume Copy Administration**

- Volume copy function
- Volume copy administration
- Volume copy work flow steps

#### **Module 9: Mirroring Administration**

- Mirroring technology
- Use cases
- · Synchronous mirroring features
- Synchronous mirroring administration
- Asynchronous mirroring features
- Asynchronous mirroring administration
- SANtricity feature considerations

#### Module 10: Data Collection and Monitoring

- Data collection and monitoring resources
- Storage array component information
- AutoSupport feature configuration
- Storage array operability and state files
- Performance metrics for different objects

#### **Module 11: General Administrative Tasks**

- · General tasks
- Alerts management
- Storage array, controller and drive tasks
- Managing upgrades

#### Labs:

• Installing SANtricity storage manager software

- Adding a storage array to the EMW management domain
- Exploring system manager
- Exploring E-Series and EF-Series information resources
- Install the SANtricity simulator
- Using the Setup Wizard to configure the storage array
- Creating volume group configurations
- Managing volumes in volume groups
- Managing hot spares
- · Creating volume groups from the command line
- Deleting a volume group configuration
- · Creating disk pool configurations
- Managing volumes in disk pools
- Managing failed drives
- Using the command line to create disk pools
- · Creating and SSD cache drive
- Creating and preparing disk pool volumes for I/O
- Creating a Snapshot environment
- · Rolling back a file system
- · Creating a Snapshot volume
- · Mounting and accessing a Snapshot volume
- Perform an online volume copy operation
- Perform an offline volume copy operation
- · Creating a mirroring environment
- · Creating a synchronous mirror relationship
- · Creating an asynchronous mirror relationship
- Data collection
- · Taking a controller offline for servicing
- Upgrading a storage array

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#### Centres de formation dans le monde entier





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