



Enterprise Computing Solutions - Education Services

## OFERTA FORMATIVA

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# VNX Unified Storage Management

<b>CÓDIGO:</b>	<b>DURACIÓN:</b>	<b>Precio:</b>
EMC_MR-1CP-VNXUNIDIM	40 Hours (5 días)	€1,923.00

## Description

This Specialist level course provides participants with hands on experience implementing the EMC VNX series storage systems in a Block (FC, iSCSI, FCoE) and File (NFS, pNFS, CIFS) environment. Initial array configuration, domain management, security and availability using Unisphere are covered in detail. SAN host attach and SAN configurations with Linux, Windows and VMware ESXi are covered. SAN configurations with Linux and Windows are covered in practical lab exercises. NAS configuration, file system creation, export, permissions, quotas, in Linux, VMware ESXi, and Windows environments using NFS, pNFS and CIFS protocols are explored, and detailed hands on lab exercises are available for Windows and Linux environments.

## Objetivos

Upon successful completion of this course, participants should be able to:

- Implement security for VNX Unisphere
- Configure and/or verify VNX system configurations (SP networking, SP memory, SP cache, software revisions and NTP)
- Provision and manage RAID Groups, LUNs, Pools and Pool LUNs
- Manage host access to block-level storage
- Describe basic host integration components, tasks and concepts
- Integrate Windows hosts with VNX block-level storage
- Integrate Linux hosts with VNX block-level storage
- Describe an ESXi host integration with VNX block-level storage
- Describe VNX advance storage concepts (metaLUNs, LUN migration, FAST, data compression, FAST cache)
- Configure basic network setting for VNX Data Movers
- Create and manage file systems
- Implement NFS
- Describe basic Usermapper operations
- Create and configure Virtual Data Movers
- Implement CIFS
- Configure CIFS features
- Configure networking features on a Data Mover (EtherChannel, LACP, FSN, VLAN Tagging)
- Describe VNX SnapView and SnapSure business uses
- Configure VNX SnapView Snapshots
- Configure VNX SnapView Clones
- Configure VNX SnapSure

## Público

This course is intended for information technology professionals responsible for the implementation and configuration of block and file based VNX Unified Storage in heterogeneous host environments.

## Requisitos Previos

To understand the content and successfully complete this course, a student must have a suitable knowledgebase/skill set. The student must have an understanding of:

- VNX hardware and software architecture (hardware, software, management interfaces)
- EMC PowerPath operations and management
- Connectrix/SAN switch architecture and management for FC and FCoE
- Ethernet switch features (VLANs, duplex, port channeling)
- TCP/IP networking
- Basic Microsoft Windows administration skills (managing users/groups, files and directories, and domain infrastructures)
- Basic UNIX/Linux administration skills, including (managing users/groups, files and directories)
- Basic VMware ESXi Server logical volume management and connectivity

## Programa

The content of this course are designed to support the course objectives. The following focus areas are included in this course:

- Implementing Unisphere Security
  - Implement Unisphere Security
  - Describe LDAP/AD Security
  - User Authentication on VNX Control Station
  - Audit Control Station Events
  - Describe IP Address Filtering
  - Explain SSL/TLS Certificates Objectives
  - Explain VNX File Notification Methods
- Block Storage Provisioning and Management
  - Configuring RAID Groups and Traditional LUNs
  - Pools and Pool LUNs
- Host Installation and Integrations - Windows
  - Windows Host Integration
- Host Installation and Integrations - Linux
  - Linux Host Integration
- Host Installation and Integrations - ESXi
  - ESXi Host Integration
- Advanced Storage Concepts
  - MetaLUNs
  - LUN Migration
  - FAST
  - Data Compression
  - FAST Cache
- Basic Network Configuration
  - Hardware Parameters
  - IP Addressing
  - Routing
  - DNS
  - Time Services
- Configuring File Systems
  - File System Components
  - Automatic Volume Manager
  - Managing File Systems
  - File System Extension and Virtual Provisioning
- Exporting File Systems to UNIX/Linux and ESXi (NFS)
  - Exporting a File System
  - Mounting a File System from an NFS Client
  - NFS User Authentication
- Usermapper
- Configuring CIFS (Windows only)
  - Configuring a CIFS Server in a Windows Domain and as a Stand-alone Server
  - Making VNX File Systems available in a Windows Environment
- Virtual Data Movers
- File System Quotas
  - User and Group Quotas
  - Tree Quotas
  - Managing Quotas from Unisphere
- CIFS Features (Windows only)
  - Home Directories
  - VNX AntiVirus
  - File Extension Filtering
- Networking Features
  - Ethernet Channel
  - LACP
  - FSN
  - VLAN Tagging

- Configuring Event Monitor and Alerts
- VNX SnapView - Snapshots
  - Terminology
  - Snapshot Operations
  - Reserved LUN Pool
  - Configure and Manage Snapshots and Sessions
  - Configure and Manage Snapshots and Sessions with Unisphere
- VNX SnapView - Clones
  - Clone Operations
  - Operations of the Clone Private LUN
  - Configuring and Managing Clones
  - Clone Consistency Operations
  - Configuring Clone Private LUN
  - Creating and Populating Clone Groups
  - Synchronizing and Reversing Synchronizing Clones
  - Retrieving Clone Status Information
  - Managing and Configuring Clones with Unisphere
- VNX SnapSure
  - Writeable Snaps
  - Accessing a Checkpoint using CVFS (Checkpoint View File System)
  - Managing Checkpoints
  - Scheduling Checkpoints

In addition to lecture and demonstrations, this course includes labs designed to allow practical experience for the participant.

## **Fechas Programadas**

A petición. Gracias por [contactarnos](#).

## **Información Adicional**

[Esta formación también está disponible en modalidad presencial. Por favor contáctenos para más información.](#)