VNX Unified Storage Deployment and Management

Duration: 5 Days **Course Code: GK4429**

Overview:

Explore the key elements of SAN/IP-SAN and NAS deployment via practical experience with EMC VNX Unified Storage systems.
This Specialist-level course is targeted for storage/cloud infrastructure administrators requiring in-depth knowledge and practical lab work with EMC VNX Unified Storage systems. This intensive training covers all the key elements of SAN/IP-SAN (block access) and NAS (file access) deployment.
You will cover a wide range of topics in detail, and you'll participate in hands-on lab exercises that reinforce the concepts, including:
Integrating VNX block access for open systems hosts (Linux, Windows, and VMware ESXi) through FC, iSCSI, and FCoE connectivity options
Configuring VNX file-level access for Windows, Linux, and VMware user/application environments via network file system (NFS) and common Internet file system (CIFS) environments
Initial storage system configuration, security, and availability using Unisphere
NAS configurations, including file system creation, export, permissions, and quotas in Linux, VMware ESXi, and Windows environments
Implementing local replications solutions
An end-of-class assessment validates that you have learned the knowledge or skills presented.

Target Audience:

IT professionals responsible for configuring, deploying, and managing block- and file-based VNX storage systems in heterogeneous host environments.

Objectives:

- Implement Unisphere security
- Provision block-level storage
- Manage host access to block storage
- Perform basic host integration tasks for block storage
- Integrate a Windows host to VNX block storage
- Integrate a Linux host to VNX block storage
- Details of a VMware ESXi/VNX block-level solution
- Implement advanced storage features
- Configure basic networking for VNX file-level access
- Configure VNX file systems
- Export VNX file systems for NFS access
- Usermapper operations and management
- Configure VNX file systems for CIFS access
- Create and manage Virtual Data Movers
- Manage permissions for CIFS
- Implement file system quotas
- Configure CIFS features
- Implement networking features
- Implement VNX SnapView snapshots
- Implement VNX SnapView clones
- Configure VNX SnapSure

Prerequisites:

- We strongly recommend that you have knowledge of and experience with:
- VNX system architecture
- Unisphere and Navisphere Secure CLI
- EMC PowerPath operations
- SAN configurations, including basic utilization of the software tools used to manage the major Fibre Channel, FCoE, and Ethernet switch environments
- TCP/IP networking

Testing and Certification

- This course is part of the following programs or tracks:
- Storage Administrator (EMCSA) Specialist - VNX Solutions

- Ethernet switch configuration, including managed switch features such as VLANs
- Ethernet settings, including duplex, throughput, and port channeling
- Basic Microsoft Windows administration skills (managing users/groups, files, and directories)
- Basic UNIX administration skills (managing users/groups, files, and directories)
- Basic VMware ESX/ESXi operations and management

Follow-on-Courses:

- There are no follow-ons for this course.

Content:

1. Unisphere Security and Basic Management

- Unisphere Security Features
- Unisphere Authentication using LDAP
- Control Station Auditing
- IP Address Filtering
- Unisphere SSL/TLS Certificates
- VNX File Notifications Methods

2. Block Storage Provisioning and Management

- Configuring RAID Groups and Traditional LUNs
- Pools and Pool LUNs

3. Managing Host Access to Block Storage

- Access Logix

4. Host Integration Basics

- Connectivity
- Software

5. Windows Host Installation and Integration

6. Linux Host Installation and Integration

7. ESXi Host Installation and Integration

8. Advanced Storage Concepts

- Configuring MetaLUNs
- LUN Migration
- FAST
- Data Compression
- FAST Cache

9. Basic Network Configuration

- Data Mover Network Devices
- Implementing DNS and Time Services
- Data Access Protocols and Services

10. Configuring File Systems

- File System Components
- Creating File Systems
- Managing File Systems
- File System Auto Extension/Virtual Provisioning

11. Exporting File Systems to Linux and ESXi

12. Networking Features

- Configuration
- Considerations

13. Configuring CIFS

- Create and Join a CIFS Server to a Windows Domain
- File System Access Via CIFS
- Computer Names, NetBIOS Names, and Aliasing

14. Virtual Data Movers

- Overview
- Configuration

15. Managing and Assigning Permissions in a CIFS-Only Environment

16. File System Quotas

- User and Group Quota Management
- Tree Quotas
- Managing Quotas from CIFS/NFS Clients

17. CIFS Features

- Auditing CIFS
- Home Directory Support
- Common AntiVirus Agent (CAVA)
- File Extension Filtering

18. Usermapper

19. VNX SnapSure

- Writeable Snapshots
- Creating and Accessing Snapshots
- Managing Snapshots
- Planning for SnapSure

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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