Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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NetApp ONTAP SAN Implementation & Administration

CODE:	LENGTH:	PRICE:
NEP_OT-SANIA	16 Hours (2 days)	€2,040.00

Description

Learn how to implement and administer NetApp ONTAP SAN solutions by examining SAN protocols and architecture. Learn about ONTAP capabilities for iSCSI, FCP and NVMe over IP and FC fabric.

Objectives

This course focuses on enabling you to do the following:

• Define and describe SAN environments that use iSCSI, FC, FCoE, and NVMe protocols
• Explain ONTAP block protocol features and recommendations
• Examine FC switch fabric, LUN masking, and zoning
• Configure Microsoft Windows Server, Linux, and ONTAP based SAN storage systems for IP and FC connectivity
• Illustrate SAN configuration and provisioning
• Demonstrate block storage space efficiency configurations in a SAN environment
• Discover ONTAP availability strategies and data protection for LUNs and namespaces
• Examine SAN performance considerations
• Perform SAN-specific manageability configurations

Audience

• Administrator

Prerequisites

These 2 elearning options are available free of charge via NetApp Learning Services:
• Introduction to ASA
• ONTAP ASA Fundamentals

Programme

This course includes the following modules, lessons, and exercises:

Module 1: ONTAP SAN Configuration overview
Lessons
• IP SAN configuration
• FC SAN configuration
• LUN provisioning
Exercises
• Explore System Manager
• Create an SVM

Module 2: ONTAP iSCSI configuration concepts
Lessons
• iSCSI configuration recommendations
• iSCSI feature overview
• iSCSI configuration workflow
Exercises
• Create iSCSI LUNs

Module 3: ONTAP FC configuration concepts
Lessons
• FC configuration recommendations
• FC and FCoE zoning
• Cisco switches
• Brocade switches
Exercises
• Connect to a Brocade switch
• Perform discovery
• Create FC LUNs

Module 4: NVMe-oF configuration
Lessons
• NVMe
• NVMe-oF
• NVMe integration into ONTAP software
Exercises
• Create NVMe namespaces

Module 5:NetApp ONTAP SAN resource provisioning
Lessons
• Volume and LUN provisioning
• Additional ONTAP CLI considerations
Exercises
• Examine volumes and LUNs from ONTAP CLI

Module 6:Host integration
Lessons
• Host considerations
• Windows hosts
• Linux and UNIX hosts
• LUN offset
Exercises
• Install Host Utilities for Windows
• Install Host Utilities for Linux

Module 7:IP SAN connectivity
Lessons
• Windows iSCSI configuration
• Windows iSCSI implementation
• Linux iSCSI configuration
• Linux iSCSI implementation
Exercises
• Configure Windows for iSCSI SAN
• Configure NetApp ONTAP software for Windows iSCSI LUNs
• Discover iSCSI LUNs from Windows
• Configure Linux for NMVe/TCP
• Discover an NVMe namespace from Linux

Module 8:FC SAN connectivity
Lessons
• Configure a Windows host for FC
• Identify the WWNN and WWPN on a Windows host
• Implement and verify multipath FC connectivity on a Windows host
• Configure a Linux host for FC
• Identify WWPNs on a Linux host
• Implement and verify multipath FC connectivity on a Linux host
Exercises
• Configure a Brocade switch for a Windows FC environment
• Configure to an FC LUN from Windows

Module 9:SAN availability and data protection
Lessons
• High availability and host multipathing
• Data protection in SAN environments
Exercises
• Examine multipathing behavior

Module 10:Management of NetApp ONTAP SAN environments
Lessons
• LUN mobility
• Volume and LUN reconfiguration
• SAN performance recommendations
Exercises
• Move a LUN
• Resize a LUN and extend a volume

Appendix A:ONTAP SAN fundamentals
Lessons
• Implementing iSCSI, FCP, and NVMe in ONTAP software
• SAN architecture
• Interoperability Matrix tool
• SAN scalability and maximums

Further Information

Session Dates

On request. Please Contact Us

Additional Information

This training is also available as onsite training. Please contact us to find out more.