



Networking Essentials

In association with : **DELL**EMC



Networking Essentials

5 days

Overview

The Networking Essentials course is part of the recommended training path leading to the Dell EMC Certified Associate | Networking certification. This course offers a blended learning experience that combines both online and instructor-led training to help the student gain an understanding of the functions and features of the X-Series and N-Series lines of networking products.

Prior to attending the five day training, students should complete the independent online study to gain an overview of the initial hardware setup and common hardware troubleshooting issues. In the instructor-led class, students will get hands-on training installing, configuring, managing, and troubleshooting networking hardware and software components and features.

Audience

This course is intended for deployment technicians and IT professionals supporting the installation and implementation of Dell EMC X-Series and N-Series lines of networking products.

Prerequisite Knowledge/Skills

Beginner to intermediate skill level

Course Objectives

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

- Access a switch via various methods and issue commands.
- Upgrade the firmware on a switch.
- Describe and configure basic layer 2 connectivity.
- Verify basic layer 2 connectivity using LLDP/ISDP.
- Describe and configure port mirroring/monitoring,
- Describe and configure VLANs.
- Configure and verify MSTP, RSTP, RSTP-PV operations.

- Configure spanning tree protection.
- Configure and verify static port channels.
- Configure and verify dynamic port channels.
- Configure and verify stacking between multiple switches.
- Identify routes in the routing table.
- Demonstrate the ability to configure static routes in an IP network.
- Identify the differences between static routing and dynamic routing.
- Demonstrate the ability to configure and validate a basic RIP infrastructure and a single area OSPF network.
- Configure and validate proper IPV6 addressing.
- Identify different types of IPV6 addresses.
- Configure Radius and 802.1x.
- Configure and validate port security.
- Configure and validate Access Control Lists.
- Configure and validate SNMP.
- Detect and troubleshoot POE issues at a basic level,
- Configure and validate DHCP.
- Configure and validate SNTP.

Course Outline

The content of this course is designed to support the course objectives.

- Initial Switch Configuration
- Interfaces and VLANs
- STP Protocols/Advanced STP Protocols
- Link Aggregation
- Stacking
- Basic Routing Concepts
- Dynamic Routing
- IPV6
- Switch Security
- ACL Traffic Control
- Switch Management
- IP Services

Thank You