Network+: *2002 Objectives*

Five Days – Instructor-led
Exam N10-002, $207, not included

Course Description

This course is designed to prepare students for the 2002 CompTIA's Network+ Exam N10-002. Earning the Network+ Certification means that students have the knowledge needed to use and maintain a wide range of network technologies. From this exam, students often move on to more advanced IT certifications, including Microsoft's MCSA and MCSE, and Novell's CNE.

Prerequisites: Designed for the student with 18 to 24 months of professional computer support experience. It is assumed that you have a general working knowledge of personal computers, some network experience, and have taken the following courses or have equivalent experience:

- Windows 98: Introduction
- Windows 2000: Introduction
- A+ Certification: Core Hardware
- A+ Certification: Operating Systems

Performance-Based Objectives

- Describe basic networking and identify different networking models.
- Describe the basics of data movement, physical media, and network connectivity devices.
- Use the OSI model and understand Ethernet, Token Ring, FDDI, and wireless networks.
- Understand data routing and common network protocols such as NetBEUI and TCP/IP.
- Discover a TCP/IP services.
- Understand older network protocols still used today, such as IPX/SPX, AppleTalk, Apple Open Transport, and IPv6.
- Examine the infrastructure of a local area network.
- Distinguish the different methods used to connect networks together through the public carrier services.
- Understand the different methods of remote networking.
- Understand and implement relevant aspects of network security.
- Apply disaster recovery principles.
- Describe and employ advanced data storage techniques.
- Understand and implement network troubleshooting procedures.
- Describe the basics of the network operating systems in use today.

Course Content

Lesson 1: Basic Network Theory
>   Topic 1A: Network Definitions
>   Topic 1B: Network Models
>   Topic 1C: Connectivity
>   Topic 1D: Network Addressing
>   Topic 1E: Signaling Concepts

Lesson 2: Network Connectivity
>   Topic 2A: The Data Package
>   Topic 2B: Establishing a Connection
>   Topic 2C: Reliable Delivery
>   Topic 2D: Network Connectivity
>   Topic 2E: Noise Control
>   Topic 2F: Building Codes
>   Topic 2G: Connection Devices

Lesson 3: Advanced Network Theory
>   Topic 3A: The OSI Model
>   Topic 3B: Ethernet
>   Topic 3C: Network Resources
>   Topic 3D: Token Ring/IEEE 802.5
>   Topic 3E: FDDI
>   Topic 3F: Wireless Networking

Lesson 4: Common Network Protocols
>   Topic 4A: Families of Protocols
>   Topic 4B: NetBEUI
>   Topic 4C: Bridges and Switches
>   Topic 4D: The TCP/IP Protocol
>   Topic 4E: Building a TCP/IP Network
>   Topic 4F: The TCP/IP Suite

Lesson 5: TCP/IP Services
>   Topic 5A: Dynamic Host Configuration
>   Protocol
>   Topic 5B: DNS Name Resolution
>   Topic 5C: NetBIOS Support
>   Topic 5D: SNMP
>   Topic 5E: TCP/IP Utilities
>   Topic 5F: Upper Layer Services: FTP

Lesson 6: Alternate Network Protocols
>   Topic 6A: Introduction to IPX/SPX
>   Topic 6B: AppleTalk
>   Topic 6C: Introduction to Apple Open
>   Transport
>   Topic 6D: Introduction to IPv6

Lesson 7: Network LAN Infrastructure
>   Topic 7A: Implement LAN Protocols on a
>   Network
>   Topic 7B: IP Routing
>   Topic 7C: IP Routing Tables
>   Topic 7D: Router Discovery Protocols
>   Topic 7E: Data Movement in a Routed
>   Network
>   Topic 7F: Virtual LANs (VLANs)

Lesson 8: Network WAN Infrastructure
>   Topic 8A: The WAN Environment
>   Topic 8B: WAN Transmission Technologies
>   Topic 8C: WAN Connectivity Devices
>   Topic 8D: Voice Over Data Services

Lesson 9: Remote Networking
>   Topic 9A: Remote Networking
>   Topic 9B: Remote Access Protocols
>   Topic 9C: VPN Technologies

Lesson 10: Network Security
>   Topic 10A: Introduction to Network Security
>   Topic 10B: Virus Protection
>   Topic 10C: Local Security
>   Topic 10D: Network Access
>   Topic 10E: Internet Security

Lesson 11: Disaster Recovery
>   Topic 11A: The Need for Disaster Recovery
>   Topic 11B: Disaster Recovery Plan
>   Topic 11C: Data Backups
>   Topic 11D: Fault Tolerance

Lesson 12: Advanced Data Storage Techniques
>   Topic 12A: Enterprise Data Storage
>   Topic 12B: Clustering
>   Topic 12C: Network Attached Storage
>   Topic 12D: Storage Area Networks

Lesson 13: Network Troubleshooting
>   Topic 13A: Using a Systematic Approach to
>   Troubleshooting
>   Topic 13B: Network Support Tools: Utilities
>   Topic 13C: The Network Baseline

Lesson 14: Network Operating Systems
>   Topic 14A: Novell NetWare
>   Topic 14B: Microsoft BackOffice
>   Topic 14C: Linux History and Operation
>   Topic 14D: Macintosh