



Course Content

Course Description:

The Official CompTIA® Network+® (Exam N10-007) course builds on your existing user-level knowledge and experience with personal computer operating systems and networks to present the fundamental skills and concepts that you will need to use on the job in any type of networking career. It also addresses the content described in the exam objectives for the CompTIA Network+ certification. If you are pursuing a CompTIA technical certification path, obtaining the CompTIA® A+® certification is an excellent first step to take before preparing for the CompTIA Network+ examination.

The Official CompTIA® Network+® (Exam N10-007) course can benefit you in several ways:

- If you are preparing for any type of network-related career, it provides the background knowledge and skills you will require to be successful.
- It contains information and procedures that can help you if your job duties include network troubleshooting, installation, or maintenance.
- It can assist you in preparing for the CompTIA Network+ examination (Exam N10-007).

You will be able to:

- Identify basic network theory concepts and major network communications methods.
- Describe bounded network media.
- Describe unbounded network media.
- Identify the major types of network implementations.
- Identify TCP/IP addressing and data delivery methods.
- Analyze routing and switching technologies.
- Identify the components of a TCP/IP implementation.
- Analyze network security.
- Implement network security.
- Identify the components of a WAN implementation.
- Identify the components used in cloud computing and virtualization.
- Identify the components of a remote network implementation.
- Manage networks.
- Troubleshoot network issues.



CompTIA: Network+

Course ID#: 1200-400-10-W

Hours: 35

Prerequisites:

To ensure your success in this course, you will need basic Windows end-user computer skills.

Target Student:

This course is intended for entry-level computer support professionals with a basic knowledge of computer hardware, software, and operating systems who wish to increase their knowledge and understanding of networking concepts and acquire the required skills to prepare for a career in network support or administration, or who wish to prepare for the CompTIA Network+ certification (Exam N10-007). A typical student taking the CompTIA® Network+® (Exam N10-007) course should have a minimum of nine months of professional computer support experience as a PC or help desk technician. Networking experience is helpful but not mandatory; A+ certification or equivalent skills and knowledge is helpful but not mandatory.

Topics:

Lesson 1: Network Theory

Topic A: Network Types

Topic B: Network Standards and the OSI Model

Topic C: Data Transmission Methods

Lesson 2: Bounded Network Media

Topic A: Copper Media

Topic B: Fiber Optic Media

Topic C: Bounded Network Media Installation

Lesson 3: Unbounded Network Media

Topic A: Wireless Networking

Topic B: Wireless Network Devices and Components

Topic C: Implement Wireless Technology

Topic D: Internet of Things

Lesson 4: Network Implementations

Topic A: Physical Network Topologies

Topic B: Logical Network Topologies

Topic C: Ethernet Networks

Topic D: Network Devices

Lesson 5: TCP/IP Addressing and Data Delivery

Topic A: The TCP/IP Protocol Suite

Topic B: IPv4 Addressing

Topic C: Default IP Addressing Schemes

Topic D: Create Custom IP Addressing Schemes

Topic E: IPv6 Addressing

Lesson 6: Routing and Switching

Topic A: Switching

Topic B: Network Packet Routing

Topic C: Static and Dynamic IP Routing

Topic D: VLANs

Lesson 7: TCP/IP Implementation

Topic A: Configure IP Addresses

Topic B: Naming Services

Topic C: TCP/IP Utilities

Topic D: Common TCP/IP Protocols

Lesson 8: Network Security Analysis

Topic A: Introduction to Network Security

Topic B: Network Security Policies

Topic C: Physical Security

Topic D: Common Network Attacks



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Lesson 9: Network Security Implementation

Topic A: Authentication

Topic B: Access Control

Topic C: Port, Service, and Protocol Security

Topic D: Wireless Network Security

Topic E: Patches and Updates

Topic F: Mitigation Techniques

Lesson 10: WAN Infrastructure

Topic A: WAN Basics

Topic B: WAN Connectivity Methods

Topic C: WAN Transmission Technologies

Topic D: VoIP

Lesson 11: Cloud and Virtualization Techniques

Topic A: Virtualization Technologies

Topic B: Network Storage Technologies

Topic C: Cloud Computing

Lesson 12: Remote Networking

Topic A: Remote Network Architectures

Topic B: Remote Access Network Implementations

Topic C: Virtual Private Networking

Lesson 13: Network Management

Topic A: Monitor Networks

Topic B: Document the Network

Topic C: Establish Baselines

Topic D: Optimize Network Performance

Topic E: Ensure Business Continuity

Lesson 14: Troubleshooting Network Issues

Topic A: Network Troubleshooting Methodology

Topic B: Network Troubleshooting Tools

Topic C: Troubleshoot Wired Connectivity and Performance Issues

Topic D: Troubleshoot Wireless Connectivity and Performance Issues

Topic E: Troubleshoot Network Service Issues