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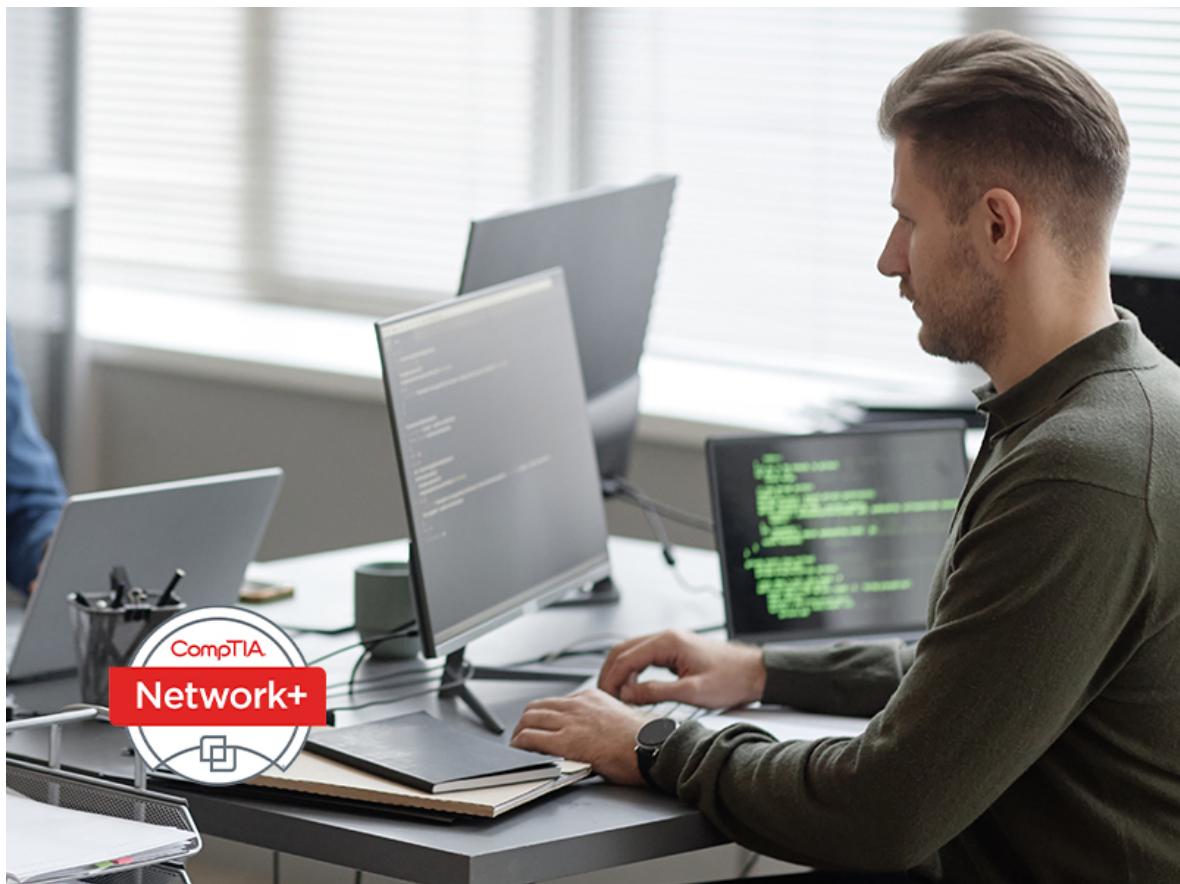
Learning Style: On Demand

Technology: CompTIA

Difficulty: Beginner

Course Duration: 12 Hours

CompTIA Network+ Exam N10-009

About the Course:

With the passage of time, data networks have become more and more critical and their significance have grown over the years. Those healthcare, financial, and information services which are highly confidential in nature are given a lifeline using data networks. By obtaining a CompTIA Network+ certification, you will be able to

configure, troubleshoot and manage systems in order to keep your organization or the organization you work for, productive.

The course has been designed to provide the students with the knowledge as well as key skills needed for maintaining, installing, managing, operation, configuring, and troubleshooting basic network infrastructure, explain basic design principles along with networking technologies, use testing tools, and adhere to wiring standards. If you wish to begin your network career, then this the first step, right here! The certification is recognized by different vendors like Novell, Microsoft, Red Hat, and Cisco within their certification tracks.

If you plan to take and clear the CompTIA Network+ (Exam N10-009) exam, then this course will help you in preparing for it. However, having only a certification is not going to cut it for the competitive job market of today, you need to exhibit exceptional skills as well. This course will help you in developing the right skills set, especially when it comes to security, so that all duties can be performed diligently.

An IT Network Specialist can earn up to **$92,000/-** on average, per annum.

Course Objectives:

Once the course is complete, the candidate will be able to

- Explain what bounded networking media is

- Identify major network communication methods along with basic network theory concepts.

- Explain what unbounded network media is

- Identify TCP/IP data delivery and addressing methods

- Analyze switching and routing technologies

- Identity the major kinds of network deployments

- Identify TCP/IP deployment components

- Deploy network security

- Analyze network security

- Identify virtualization and cloud computing components

- Identity WAN deployment components

- Identify remote network deployment components

- Troubleshoot network issues

- Manage networks

Audience:

The course is intended to be undertaken by computer support professionals who may be either looking for or occupying entry level positions, having a basic knowledge of computer software, hardware, and operating systems. It is also intended to be opted for by those who wish to take the CompTIA® Network+® (Exam N10-008). Additionally, anybody who wants to enhance their understanding and knowledge of networking concepts while gaining the skills needed to excel in network support career or administration career, then this course is a must for them.

The candidate opting for this course must have at least 9 months of computer support experience as a help desk or PC technician. Having prior experience in networking or A+ certification will become a huge advantage, but it is not mandatory for the candidate to have these before enrolling in this course.

Prerequisites:

Regardless of whether you have passed A+, it is recommended that you have the following skills and knowledge before starting this course:

- Configure and support PC, laptop, mobile (smartphone / tablet), and print devices.

- Know basic network terminology and functions (such as Ethernet, TCP/IP, switches, routers).

- Configure and manage users, groups, and shared resources in a simple SOHO network.

- Understand the use of basic access control measures, such as authentication, security policy, encryption, and firewalls.

- Understand TCP/IP addressing, core protocols and troubleshooting tools.

Course Outline:

- Module 1: Explaining Network Topologies
    - Lesson 1.1: Networking Overview
    - Lesson 1.2: OSI Model Concepts
    - Lesson 1.3: SOHO Networks
    - Lesson 1.4: Troubleshooting Methodology
- Module 2: Supporting Cabling and Physical Installations
    - Lesson 2.1: Ethernet
    - Lesson 2.2: Copper Cables and Connectors
    - Lesson 2.3: Wiring Implementation

- Lesson 2.4: Fiber Optic Cables and Connectors
  - Lesson 2.5: Physical Installation Factors
  - Lesson 2.6: Cable Troubleshooting
- Module 3: Configuring Interfaces and Switches
  - Lesson 3.1: Network Interfaces
  - Lesson 3.2: Ethernet Switches
  - Lesson 3.3: Switch Port Configuration
  - Lesson 3.4: Switch Troubleshooting
- Module 4: Configuring Network Addressing
  - Lesson 4.1: Internet Protocol Basics
  - Lesson 4.2: IP Version 4 Addressing
  - Lesson 4.3: IP Version 4 Subnetting
  - Lesson 4.4: IP Troubleshooting Tools
  - Lesson 4.5: IP Version 6
- Module 5: Configuring Routing and Advanced Switching
  - Lesson 5.1: Routing Technologies
  - Lesson 5.2: Dynamic Routing Technologies
  - Lesson 5.3: Network Address Translation
  - Lesson 5.4: Firewalls
  - Lesson 5.5: Enterprise Network Topologies
  - Lesson 5.6: Virtual LANs
  - Lesson 5.7: Routing and VLAN Troubleshooting
- Module 6: Implementing Network Services
  - Lesson 6.1: Transport and Application Layer Protocols
  - Lesson 6.2: Dynamic Host Configuration Protocol
  - Lesson 6.3: APIPA and SLAAC
  - Lesson 6.4: DHCP Relay and Troubleshooting
  - Lesson 6.5: Domain Name System
  - Lesson 6.6: DNS Troubleshooting
- Module 7: Explaining Application Services
  - Lesson 7.1: Application Security and Time Synchronization
  - Lesson 7.2: Web, File/Print, and Database Services
  - Lesson 7.3: Email and Voice Services
  - Lesson 7.4: Disaster Recovery and High Availability
- Module 8: Supporting Network Management
  - Lesson 8.1: Organizational Policies and Documentation
  - Lesson 8.2: Host Discovery and Monitoring
  - Lesson 8.3: Simple Network Management Protocol
  - Lesson 8.4: Event Management
  - Lesson 8.5: Packet Capture and Analysis
  - Lesson 8.6: Traffic Monitoring
- Module 9: Explaining Network Security Concepts
  - Lesson 9.1: Security Concepts
  - Lesson 9.2: Network Threats and Attacks
  - Lesson 9.3: Spoofing Attacks
  - Lesson 9.4: Rogue System Attacks
  - Lesson 9.5: Social Engineering
- Module 10: Applying Network Security Features
  - Lesson 10.1: Authentication
  - Lesson 10.2: Authentication and Account Management

- Lesson 10.3: Network Hardening
- Lesson 10.4: Switch Security
- Lesson 10.5: Network Security Rules
- Module 11: Supporting Network Security Design
  - Lesson 11.1: Zone-Based Security
  - Lesson 11.2: Internet of Things
  - Lesson 11.3: Physical Security
- Module 12: Configuring Wireless Networks
  - Lesson 12.1: Wireless Concepts and Standards
  - Lesson 12.2: Enterprise Wireless Network Design
  - Lesson 12.3: Wireless Security
  - Lesson 12.4: Wireless Troubleshooting
- Module 13: Comparing Remote Access Methods
  - Lesson 13.1: WAN and Internet Connectivity
  - Lesson 13.2: Comparing Remote Access Methods
  - Lesson 13.3: Remote Management
- Module 14: Summarizing Cloud Concepts
  - Lesson 14.1: Datacenter and Storage Networks
  - Lesson 14.2: Cloud Concepts
  - Lesson 14.3: Cloud Networking

  - Lesson 14.4: Modern Network Environments