



CompTIA Network+

Duration: 5 Days **Course Code: G005**

Overview:

CompTIA's Network+ certification is a foundation-level certification designed for IT professionals with around one year of experience, whose job role is focused on network administration.

The CompTIA Network+ exam will certify the successful candidate has the knowledge and skills required to troubleshoot, configure, and manage common network devices; establish basic network connectivity; understand and maintain network documentation; identify network limitations and weaknesses; and implement network security, standards, and protocols. The candidate will have a basic understanding of enterprise technologies, including cloud and virtualization technologies.

The Official CompTIA® Network+® (Exam N10-007): 2019 Update will teach you the fundamental principles of installing, configuring, and troubleshooting network technologies and help you to progress a career in network administration. In this course, you will build on your existing user-level knowledge and experience with personal computer operating systems and networks to master the fundamental skills and concepts that you will need to use on the job in any type of networking career.

Target Audience:

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. CompTIA Network+ is the first certification IT professionals specializing in network administration and support should earn. Network+ is aimed at IT professionals with job roles such as network administrator, network technician, network installer, help desk technician, and IT cable installer.

This course is also designed for students who are seeking the CompTIA Network+ certification and who want to prepare for the CompTIA Network+ N10-007 Certification Exam.

Objectives:

- **After you complete this course you will be able to:**
 - Explain the OSI and TCP/IP Models
 - Explain properties of network traffic
 - Install and configure switched networks
 - Configure IP networks
 - Install and configure routed networks
 - Configure and monitor ports and protocols
 - Explain network application and storage issues
 - Monitor and troubleshoot networks
 - Explain network attacks and mitigations
 - Install and configure security devices
 - Explain authentication and access controls
 - Deploy and troubleshoot cabling solutions
 - Implement and troubleshoot wireless technologies
 - Compare and contrast WAN technologies
 - Use remote access methods
 - Identify site policies and best practices
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Prerequisites:

Attendees should meet the following prerequisites:

A typical student taking the CompTIA Network+ course should have a minimum of nine months of professional computer support experience as a PC or help desk technician. To ensure your success in this course, you should possess basic Windows® and

Linux® user skills and a fundamental understanding of computer and networking concepts. You can obtain this level of skills and knowledge by taking the following official CompTIA courses:

- The Official CompTIA® A+® Core 1 (Exam 220-1001)
 - The Official CompTIA® A+® Core 2 (Exam 220-1002)
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Content:

Lesson 1: Explaining the OSI and TCP/IP Models

- Topic A: Explain OSI Model Layers
- Topic B: Explain the TCP/IP Suite

Lesson 2: Explaining Properties of Network Traffic

- Topic A: Explain Media Types and Access Methods
- Topic B: Deploy Ethernet Standards
- Topic C: Configure and Monitor Network Interfaces

Lesson 3: Installing and Configuring Switched Networks

- Topic A: Install and Configure Hubs and Bridges
- Topic B: Install and Configure Switches
- Topic C: Compare and Contrast Network Topologies
- Topic D: Compare and Contrast Network Types

Lesson 4: Configuring IP Networks

- Topic A: Configure IPv4 Addressing Components
- Topic B: Test IP Interfaces with Command Line Tools
- Topic C: Configure IPv4 Subnets
- Topic D: Configure Private and Public IPv4 Addressing Schemes
- Topic E: Configure IPv6 Addressing Components
- Topic F: Configure DHCP Services

Lesson 5: Installing and Configuring Routed Networks

- Topic A: Explain Characteristics of Routing
- Topic B: Install and Configure Routers

Lesson 6: Configuring and Monitoring Ports and Protocols

- Topic A: Explain the Uses of Ports and Protocols
- Topic B: Use Port Scanners and Protocol Analyzers
- Topic C: Explain the Use of Name Resolution Services
- Topic D: Configure DNS and IPAM Services

Lesson 7: Explaining Network Application and Storage Services

- Topic A: Explain the Uses of Network Applications
- Topic B: Explain the Uses of Voice Services and Advanced Networking Devices
- Topic C: Explain the Uses of Virtualization and Network Storage Services
- Topic D: Summarize the Concepts of Cloud Services

Lesson 8: Monitoring and Troubleshooting Networks

- Topic A: Monitor Network Interfaces and Logs
- Topic B: Explain Network Troubleshooting Methodology
- Topic C: Troubleshoot Common Network Services Issues

Lesson 9: Explaining Networking Attacks and Mitigations

- Topic A: Summarize Common Networking Attacks
- Topic B: Explain the Characteristics of VLANs
- Topic C: Explain the Characteristics of NAT and Port Forwarding

Lesson 10: Installing and Configuring Security Devices

- Topic A: Install and Configure Firewalls and Proxies
- Topic B: Explain the Uses of IDS/IPS and UTM

Lesson 11: Explaining Authentication and Access Controls

- Topic A: Explain Authentication Controls and Attacks
- Topic B: Explain the Uses of Authentication Protocols and Directory Services
- Topic C: Explain the Uses of Port Security and NAC
- Topic D: Implement Network Device Hardening
- Topic E: Explain Patch Management and Vulnerability Scanning Processes

Lesson 12: Deploying and Troubleshooting Cabling Solutions

- Topic A: Deploy Structured Cabling Systems
- Topic B: Deploy Twisted Pair Cabling

Lesson 13: Implementing and Troubleshooting Wireless Technologies

- Topic A: Install and Configure Wireless Technologies
- Topic B: Troubleshoot Wireless Performance Issues
- Topic C: Secure and Troubleshoot Wireless Connectivity

Lesson 14: Comparing and Contrasting WAN Technologies

- Topic A: Compare and Contrast WAN Core Service Types
- Topic B: Compare and Contrast WAN Subscriber Service Types
- Topic C: Compare and Contrast WAN Framing Service Types
- Topic D: Compare and Contrast Wireless and IoT WAN Technologies

Lesson 15: Using Remote Access Methods

- Topic A: Use Remote Access VPNs
- Topic B: Use Remote Access Management Methods

Lesson 16: Identifying Site Policies and Best Practices

- Topic A: Manage Networks with Documentation and Diagrams
- Topic B: Summarize the Purposes of Physical Security Devices
- Topic C: Compare and Contrast Business Continuity and Disaster Recovery Concepts
- Topic D: Identify Policies and Best Practices

Appendix A: Mapping Course Content to CompTIA® Network+® (ExamN10-007)

Solutions

- Topic C: Test and Troubleshoot Twisted Pair Cabling Solutions
- Topic D: Deploy Fiber Optic Cabling Solutions

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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