CompTIA Network+ Certification (N10-006)

Course Length: 5 days (virtual)

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Overview:

The CompTIA Network+ certification (Exam N10-006) is an internationally recognized validation of the technical knowledge required of foundation-level IT network practitioners.

This exam will certify that the successful candidate has the knowledge and skills required to troubleshoot, configure, and manage common network wireless and wired devices, establish basic network design and 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 emerging technologies including unified communications, mobile, cloud, and virtualization technologies.

Course Outline

1.0 Network architecture

- 1.1 Explain the functions and applications of various network devices
- 1.2 Compare and contrast the use of networking services and applications
- 1.3 Install and configure the following networking services/applications
- 1.4 Explain the characteristics and benefits of various WAN technologies
- 1.5 Install and properly terminate various cable types and connectors using appropriate tools
- 1.6 Differentiate between common network topologies
- 1.7 Differentiate between network infrastructure implementations
- 1.8 Given a scenario, implement and configure the appropriate addressing schema
- 1.9 Explain the basics of routing concepts and protocols
- 1.10 Identify the basics elements of unified communication technologies
- 1.11 Compare and contrast technologies that support cloud and virtualization
- 1.12 Given a set of requirements, implement a basic network

2.0 Network operations

- 2.1 Given a scenario, use appropriate monitoring tools
- 2.2 Given a scenario, analyze metrics and reports from monitoring and tracking performance tools
- 2.3 Given a scenario, use appropriate resources to support configuration management
- 2.4 Explain the importance of implementing network segmentation
- 2.5 Given a scenario, install and apply patches and updates
- 2.6 Given a scenario, configure a switch using proper features
- 2.7 Install and configure wireless LAN infrastructure and implement the appropriate technologies in support of wireless capable devices

3.0 Network security

- 3.1 Compare and contrast risk related concepts
- 3.2 Compare and contrast common network vulnerabilities and threats
• 3.3 Given a scenario, implement network hardening techniques
• 3.4 Compare and contrast physical security controls
• 3.5 Given a scenario, install and configure a basic firewall
• 3.6 Explain the purpose of various network access control models
• 3.7 Summarize basic forensic concepts

4.0 Troubleshooting

• 4.1 Given a scenario, implement the following network troubleshooting methodology
• 4.2 Given a scenario, analyze and interpret the output of troubleshooting tools
• 4.3 Given a scenario, troubleshoot and resolve common wireless issues
• 4.4 Given a scenario, troubleshoot and resolve common copper cable issues
• 4.5 Given a scenario, troubleshoot and resolve common fiber cable issues
• 4.6 Given a scenario, troubleshoot and resolve common network issues
• 4.7 Given a scenario, troubleshoot and resolve common security issues
• 4.8 Given a scenario, troubleshoot and resolve common WAN issues

5.0 Industry standards, practices, and network theory

• 5.1 Analyze a scenario and determine the corresponding OSI layer
• 5.2 Explain the basics of network theory and concepts
• 5.3 Given a scenario, deploy the appropriate wireless standard
• 5.4 Given a scenario, deploy the appropriate wired connectivity standard
• 5.5 Given a scenario, implement the appropriate policies or procedures
• 5.6 Summarize safety practices
• 5.7 Given a scenario, install and configure equipment in the appropriate location using best practices
• 5.8 Explain the basics of change management procedures
• 5.9 Compare and contrast the following ports and protocols
• 5.10 Given a scenario, configure and apply the appropriate ports and protocols

Target Student:

It is recommended for CompTIA Network+ candidates to have the following:

• CompTIA A+ certification or equivalent knowledge, though CompTIA A+ certification is not required.
• Have at least 9 to 12 months of work experience in IT networking