



Official CompTIA learning resources for Instructor-Led Training:

Comptia Network+ (2019 Update)

Official CompTIA learning resources for Instructor-Led Training are designed with the instructor in mind, providing insights and tools for successfully training learners pursuing their CompTIA Network+ certification.

OVERVIEW

The Official CompTIA Network+ Instructor and Student Guides 2019 Update (Exam N10-007) are developed exclusively by CompTIA, combining market-leading content with instructor input and the latest instructional design techniques. A refreshed organization of content, additional assessments, scenario-based exercises and exclusive videos from ITProTV deliver an integrated solution for preparing students for the Network+ certification exam.

OFFICIAL LEARNING RESOURCES

- The Official CompTIA Network+ Instructor Guide 2019 Update (Exam N10-007)
- The Official CompTIA Network+ Student Guide 2019 Update (Exam N10-007)
- · CompTIA Learning Center Digital Learning Platform included with purchase of print and eBook
- The Official CompTIA Network+ CompTIA Labs 2019 Update (Exam N10-007)
- CompTIA CertMaster Practice for Network+ (Exam N10-007)

NEW FEATURES IN THE 2019 UPDATE

- Alignment and Consistency Across Book, Labs and Assessment: With CompTIA developing all learning materials, the book, labs and assessments work together with a similar approach and voice ensuring that instructors and students have a cohesive "single-sourced" solution for their Network+ courses.
- Reorganization Lessons: Moving from 14 lessons to 16 lessons, the content sequence has been revised, with early lessons following the OSI model, before proceeding through monitoring and troubleshooting to network security concepts. The course concludes by revisiting lower layer OSI model concepts in more detail, looking at site-based implementation of cabling, wireless, WAN links, and operations management.
- **Comprehensive Activities:** Hands-on activities have been re-conceived as longer, more comprehensive, lab-style exercises. In addition, extensive review and discussion activities have been added.
- Hands-on Practice with Virtual Labs: CompTIA Labs hosted by Learn on Demand Systems allows learning in actual software-applications through a remote environment. The labs in the 2019 Update align with the new hands-on activities in The Official CompTIA Instructor and Student Guides and allow students to practice what they are learning using real, hands-on experiences. Students have 180 days of access, providing a fantastic resource for students to practice their skills.
- **Engaging Video Program by ITProTV:** New videos developed exclusively for CompTIA by ITProTV provide short, engaging demonstrations of key activities in the course. The videos provide an alternative to hands-on demonstrations.
- Robust Assessments: The Network+ 2019 Update provides practice questions for each lesson and a final assessment covering all lessons, more than 250 questions in total. Additionally, performance-based questions help students apply what they have learned in actual scenarios.
- **Refreshed Interior Design and Image Program:** A modernized interior design updates the presentation of content. More images have been added throughout to complement the narrative and provide visual interest.

KEY FEATURES AND BENEFITS

- **Designed for Instructors by Instructors:** More than 50 instructors were involved in the development of Network+ Official Content providing feedback through focus groups, reviews and surveys. The result is a suite of resources that works together seamlessly to address the challenges faced by instructors and students in these courses.
- Rigorously Evaluated to Ensure Adequate Coverage of Exam Objectives: CompTIA employs trusted third-party subject matter experts to review the content against the exam objectives and validate that an appropriate breadth and depth of coverage has been achieved. This process helps ensure that students using The Official CompTIA Network+ Guides are adequately prepared for the CompTIA Network+ certification exam.
- Flexible and Customizable Based on Course Format: Class resources can be easily configured based on modality.

LABS

CompTIA Labs, hosted by Learn on Demand Systems, allow students to learn in actual software applications through a remote lab environment. Labs allow students to practice what they are learning using real, hands-on experiences. Students have access to the software environment for 180 days after a CompTIA Labs access key is redeemed, providing a post-class resource for students to practice their skills.

LABS AVAILABLE:

ACTIVITY 2-4: Exploring the Lab Environment

ACTIVITY 2-5: Configuring Ethernet Networking

ACTIVITY 4-3: Configuring IPv4 Networking

ACTIVITY 4-6: Configuring IPv4 Subnets

ACTIVITY 4-10: Configuring IPv6 Networking

ACTIVITY 4-12: Configuring Address Assignments

ACTIVITY 5-4: Configuring Routing

ACTIVITY 6-3: Using Port Scanning Tools

ACTIVITY 6-6: Configuring DNS Servers

ACTIVITY 7-2: Configuring Application Protocols

ACTIVITY 8-2: Using Event Management and Performance Monitors

ACTIVITY 10-2: Configuring a NAT Firewall

ACTIVITY 11-3: Securing Appliance Administration with RADIUS

Authentication

ACTIVITY 15-3: Configuring Secure Access Channels

OTHER ADDITIONAL ACTIVITIES IN ADDITION TO THE REVIEW QUESTIONS INCLUDE:

ACTIVITY 3-5: Scenario: Designing a Switch Topology

ACTIVITY 4-5: Scenario: Designing an IP Subnet

ACTIVITY 4-8: Scenario: Designing VLSM Subnets

ACTIVITY 5-2: Scenario: Designing a Branch Office Internetwork

ACTIVITY 8-4: Scenario: Troubleshooting Network Issues

ACTIVITY 13-4: Configuring a Wireless Router

PERFORMANCE-BASED QUESTIONS AVAILABLE:

Lesson 3: Installing and Configuring Switched Networks

Lesson 5: Installing and Configuring Routers

Lesson 9: Explaining Networking Attacks and Mitigations

Lesson 13: Deploying and Troubleshooting Cabling Solutions

Lesson 15: Comparing and Contrasting WAN Technologies

ENHANCED LEARNING RESOURCES

The Official CompTIA Network+ Guides include the accompanying resources:

Comprehensive **INSTRUCTOR** resources ensure successful course delivery by providing:

- **Course-specific delivery tips** provide the instructor with additional insights to deliver the course successfully
- Facilitator notes in instructor guide
- **Solutions** to activities and discussions
- PowerPoint slides: A complete set of slides to facilitate the class including lists, tables, diagrams, illustrations, annotated screens and activity summaries
- Presentation Planners help plan and schedule courses based on different course lengths
- Solutions: Instructors have solutions to Activities and Discussion Questions embedded within the Instructor Guide.
- **Transition Guide**s help instructors transition to the 2019 Update Instructor-Led Training resources.

Comprehensive **STUDENT** resources engage students by providing:

- **eBook:** An interactive online version of the book, along with secure PDF and downloadable versions
- · Files: Any course files available to download
- Videos: Brief videos, developed exclusively for CompTIA by ITProTV, provide demonstrations of key activities in the course
- Assessment: A series of different assessments for each lesson as well an overall self-assessment
- PowerPoint slides
- Solutions to activities and discussions
- Strengths and Weaknesses Dashboard: Students
 assessments results are aggregated in the Strengths and
 Weaknesses dashboard to provide an indicator of their
 overall performance in the course.

EXAM PREP OPTION

CompTIA CertMaster Practice is an online knowledge assessment and remediation tool designed to help learners feel more confident and prepared for the CompTIA exam.

COURSE OVERVIEW

This course is for students who are preparing for the CompTIA Network+ certification exam N10-007.

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.

JOB ROLES

- Junior Network Administrator
- Computer Technician
- Network Field Technician
- Help Desk Technician
- Junior Systems Engineer
- Systems Engineer
- IS Consultant
- Network Support
- Network Field Engineer
- Network Analyst



Lesson 1: Explaining the OSI Model and TCP/IP	Lesson 2: Explaining Properties of Network Traffic	Lesson 3: Installing and Configuring Switched Networks
Models Topic 1A: Explain OSI Model Layers Topic 1B: Explain the TCP/IP Suite	Topic 2A: Explain Media Types and Access Methods Topic 2B: Deploy Ethernet Standards Topic 2C: Configure and Monitor Network Interfaces	Topic 3A: Install and Configure Hubs and Bridges Topic 3B: Install and Configure Switches Topic 3C: Compare and Contrast Network Topologies Topic 3D: Compare and Contrast Network Types
Lesson 4: Configuring IP Networks Topic 4A: Configure IPv4 Addressing Components Topic 4B: Test IP Interfaces with Command Line Utilities Topic 4C: Configure IPv4 Addressing Components Topic 4D: Configure Private and Public IPv4 Addressing Schemes Topic 4E: Configure IPv6 Addressing Components Topic 4F: Configure DHCP Services	Lesson 5: Installing and Configuring Routed Networks Topic 5A: Explain Characteristics of Routing Topic 5B: Install and Configure Routers	Lesson 6: Configuring and Monitoring Ports and Protocols Topic 6A: Explain the Uses of Ports and Protocols Topic 6B: Use Port Scanners and Protocol Analyzers Topic 6C: Explain the Use of Name Resolution Services Topic 6D: Configure DNS and IPAM Services
Lesson 7: Explaining Network Applications and Storage Services Topic 7A: Explain the Uses of Network Applications Topic 7B: Explain the Uses of Voice Services and Advanced Networking Devices Topic 7C: Explain the Uses of Virtualization and Network Storage Services Topic 7D: Summarize the Concepts of Cloud Services	Lesson 8: Monitoring and Troubleshooting Networks Topic 8A: Monitor Network Interfaces and Logs Topic 8B: Explain Network Troubleshooting Methodology Topic 8C: Troubleshoot Common Network Services Issues	Lesson 9: Explaining Networking Attacks and Mitigations Topic 9A: Summarize Common Networking Attacks Topic 9B: Explain the Characteristics of VLANs Topic 9C Explain the Characteristics of NAT and Port Forwarding
Lesson 10: Installing and Configuring Security Devices Topic 10A: Install and Configure Firewalls and Proxies Topic 10B: Explain the Uses of IDS/IPS and UTM	Lesson 11: Explaining Authentication and Access Controls Topic 11A: Explain Authentication Controls and Attacks Topic 11B: Explain the Uses of Authentication Protocols and Directory Services Topic 11C: Explain the Uses of Port Security and NAC Topic 11D: Implement Network Device Hardening Topic 11E: Explain Patch Management and Vulnerability Scanning Processes	Lesson 12: Deploying and Troubleshooting Cabling Solutions Topic 12A: Deploy Structured Cabling Systems Topic 12B: Deploy Twisted-pair Cabling Solutions Topic 12C: Test and Troubleshoot Twisted-pair Cabling Solutions Topic 12D: Deploy Coax and Fiber Optic Cabling Solutions
Lesson 13: Implementing and Troubleshooting Wireless Technologies Topic 13A: Install and Configure Wireless Technologies Topic 13B: Troubleshoot Wireless Performance Issues Topic 13C: Secure and Troubleshoot Wireless Connectivity	Lesson 14: Comparing and Contrasting WAN Technologies Topic 14A: Compare and Contrast WAN Core Service Types Topic 14B: Compare and Contrast WAN Subscriber Service Types Topic 14C: Compare and Contrast WAN Framing Service Types Topic 14D: Compare and Contrast Wireless and IoT WAN Technologies	Lesson 15: Using Remote Access Methods Topic 15A: Use Remote Access VPNs Topic 15B: Use Remote Access Management and File Transfer Methods
Lesson 16: Identifying Site Policies and Best Practices Topic 16A: Manage Networks with Documentation and Diagrams Topic 16B: Summarize the Purposes of Physical Security Devices Topic 16C: Compare and Contrast Business Continuity and Disaster Recovery Concepts Topic 16D: Identify Policies and Best Practices Appendix A: Mapping Course Content to CompTIA	Appendix A: Mapping Course Content to CompTIA Network+ (Exam N10-007) Solutions (Student Guide only, solutions are included "in line" in the Instructor Guide) Glossary Index	

PURCHASE EVERYTHING IN ONE PLACE

Official CompTIA learning resources are available on the CompTIA Store at https://store.comptia.org/, which means partners will be able to obtain Official CompTIA learning resources, CompTIA CertMaster products and exam vouchers all in one place. Please contact your CompTIA business development representative for more information.

