

CompTIA N10-008 Network+ Exam Prep 2026

CompTIA N10-008 Network+ 2026. Network troubleshooting, infrastructure, and security practices.

[IT Certifications](#) Instructor: Brian Mitchell • 5 sections • 43 lessons • 12.75h total

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About this course

Preparing for the CompTIA Network+ N10-008 exam can feel overwhelming with the amount of topics to cover. This course cuts through the noise by focusing on the key areas you need for the 2026 edition.

We will walk you through the exam objectives with step-by-step explanations, practical case studies, and realistic practice questions. You will learn how to troubleshoot complex network issues, configure essential infrastructure, and apply security practices through focused video lessons and downloadable study aids.

Course curriculum

Foundations: Networking Concepts and Models

- **Understanding the OSI and TCP/IP Models (19m)**
We'll break down the layers of the OSI and TCP/IP models, so you can visualize how data actually moves across a network and troubleshoot more effectively.
- **Setting Up Your Home Lab Environment (12m)**
A practical guide to creating a safe, virtual lab using tools like Packet Tracer and VirtualBox for hands-on practice before the exam.
- **IPv4 vs. IPv6: What You Need to Know (23m)**
Learn the core differences between IPv4 and IPv6 addressing, why the transition is happening, and how to identify and configure both.
- **The Art of Subnetting: Step-by-Step Guide (32m)**
Demystify subnetting with a clear, repeatable method. We'll cover CIDR notation and help you solve subnetting problems quickly under pressure.
- **Essential Network Ports and Protocols (25m)**
A focused session on the most common protocols (TCP, UDP, HTTP, FTP, etc.) and their associated ports, crucial for both the exam and real-world networking.
- **Wireless Standards and Frequencies Explained (18m)**
Get a handle on 802.11 standards (a/b/g/n/ac/ax), channel bonding, and the difference between 2.4GHz and 5GHz frequencies.
- **Virtualization and Cloud Concepts (15m)**
Understand how virtual switches, VMs, and basic cloud models (IaaS, PaaS, SaaS) fit into modern network infrastructure.

Core Concepts: Infrastructure and Configuration

- **Choosing the Right Cabling and Connectors (14m)**
We'll compare fiber vs. copper, discuss termination standards, and show you how to identify common connectors and cable damage.
- **Configuring Routers and Switches: The Basics (28m)**
A practical look at initial switch and router setup, including basic CLI commands for VLANs and port configuration.
- **Understanding Routing Protocols: OSPF and EIGRP (21m)**
Learn the difference between distance-vector and link-state routing protocols and how to identify their use cases in a network diagram.
- **Network Address Translation (NAT) and PAT (16m)**
A real-world look at how NAT and PAT work to conserve public IP addresses and secure your internal network.
- **Implementing VLANs and Trunking (24m)**
Step-by-step guide to creating VLANs to segment traffic, configuring trunk ports, and understanding the benefits for network security.

- **Advanced Wireless Deployment and Security (22m)**
Moving beyond home Wi-Fi, we'll cover SSIDs, WPA2/WPA3, antenna types, and proper access point placement for optimal coverage.
- **Unified Communications and VoIP Fundamentals (11m)**
Get a quick overview of Voice over IP (VoIP) concepts, quality of service (QoS), and the protocols that make it all work.
- **SMB and Enterprise Network Designs (20m)**
Analyze common network topologies for small businesses vs. large enterprises, including considerations for redundancy and scalability.
- **Configuring DHCP and DNS Servers (27m)**
A hands-on walkthrough of setting up dynamic host configuration and domain name system services, and troubleshooting common issues.

Deep Dive: Network Operations and Security

- **Firewalls: Types, Rules, and Placement (26m)**
We'll explore stateless vs. stateful firewalls, how to interpret rule sets, and where to place firewalls for maximum security.
- **Introduction to VPNs and Remote Access (17m)**
Learn about different VPN types (IPsec, SSL), remote access solutions, and the security implications of a mobile workforce.
- **Identifying and Mitigating DoS Attacks (13m)**
A problem-solving session on Denial of Service attacks, covering common types like SYN floods and how to recognize them in logs.
- **Understanding Zero Trust and NAC (19m)**
A modern look at security frameworks, including Zero Trust principles and Network Access Control (NAC) for authenticating devices.
- **Securing Network Devices: Hardening Guide (15m)**
Practical steps for changing default credentials, disabling unnecessary services, and securing management planes on switches and routers.
- **Using IDS vs. IPS: A Comparative Analysis (12m)**
Understand the difference between Intrusion Detection and Prevention systems, and when to use signature-based vs. anomaly-based methods.
- **Applying Network Monitoring Tools (25m)**
We'll introduce tools like SNMP, syslog, and packet analyzers, showing you how to set up alerts and interpret performance data.

Advanced Application: Troubleshooting and Tools

- **The Network Troubleshooting Methodology (10m)**
Adopt a structured approach to problem-solving. We'll walk through CompTIA's troubleshooting model to help you think like a pro.
- **Using Command Line Tools: ping, tracert, and nslookup (29m)**
A deep dive into the essential command-line utilities for diagnosing connectivity, name resolution, and routing issues.

- **Troubleshooting Layer 1 Physical Issues (9m)**
Learn how to identify and resolve common physical layer problems like bad cables, port errors, and network interface card failures.
- **Diagnosing Layer 2 Data Link Problems (18m)**
A real case study analysis on resolving MAC address table issues, VLAN mismatches, and switch port errors.
- **Solving Layer 3 Network Connectivity Failures (22m)**
We'll work through scenarios involving routing table problems, incorrect gateway configurations, and ACLs blocking traffic.
- **Troubleshooting Application and Performance Issues (20m)**
This session focuses on high latency, jitter, and packet loss. You'll learn how to pinpoint if the network or the server is the culprit.
- **Interpreting Logs and Event Viewers (16m)**
A practical guide to reading system and firewall logs to find the root cause of a network incident.
- **Managed vs. Unmanaged vs. Smart Switches (11m)**
A quick comparison to help you choose the right hardware for a given scenario and understand management capabilities.
- **Documenting and Reporting Network Changes (8m)**
Why documentation is your best friend. Learn best practices for creating network diagrams and change logs that auditors will love.

Implementation & Next Steps: Exam Strategy

- **Tackling Performance-Based Questions (PBQs) (25m)**
We'll simulate common PBQs, like configuring a firewall or setting up a secure wireless network, so you know what to expect on exam day.
- **Deconstructing Exam Questions: How to Spot Tricky Wording (14m)**
Learn techniques for breaking down complex questions, eliminating wrong answers, and identifying keywords that guide you to the solution.
- **Full-Length Practice Test Walkthrough: Part 1 (35m)**
Let's work through a set of challenging practice questions together, discussing the logic behind each correct answer.
- **Full-Length Practice Test Walkthrough: Part 2 (33m)**
Continuing with our practice test, we'll focus on security and troubleshooting questions, areas where many students struggle.
- **Downloadable Study Sheets and Cheat Sheets (6m)**
A guide to the downloadable resources in this course, including port numbers, cable standards, and subnetting formulas.
- **Creating Your Final 7-Day Study Plan (12m)**
A step-by-step guide to structuring your final week of study, balancing review, practice tests, and rest before the exam.
- **What to Expect at the Testing Center (7m)**
A real-world overview of the exam day process, from check-in procedures to what you can and can't bring into the testing room.

- **After the Exam: Renewal and Continuing Education (9m)**
Understanding the CompTIA Continuing Education (CE) program and how to keep your Network+ certification current.
- **Career Paths for Network+ Certified Professionals (13m)**
We'll explore common job roles like Network Administrator, Systems Engineer, and IT Field Technician, and discuss next certifications.
- **Final Q&A and Exam Day Tips (10m)**
A wrap-up session addressing common student concerns and offering last-minute advice for staying calm and focused during the test.
- **Course Wrap-Up and Your Next Steps (5m)**
Congratulations on making it through! A quick recap of everything we've covered and how to leverage this knowledge in your career.

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