

CompTIA Network+ (N10-009) Practical Prep

CompTIA Network+ N10-009. Network configuration, management, troubleshooting, and automation.

IT Certifications Instructor: Brian Taylor • 5 sections • 41 lessons • 11.75h total

[View this course online](#) [Browse all courses](#)

About this course

Preparing for the CompTIA Network+ certification can feel overwhelming. This course cuts through the noise by focusing on practical learning that prepares you for the N10-009 exam and your day-to-day IT job. We focus on understanding the concepts so you can solve problems.

You will learn how to configure, manage, and troubleshoot modern networks through video guides, real case study analysis, and downloadable study checklists. We cover all key exam domains, from network fundamentals to security and automation.

Course curriculum

Foundations: Networking Basics & The Exam Landscape

- **Understanding the N10-009 Exam Blueprint (12m)**
We'll break down the five key exam domains so you know exactly what to study and where to focus your efforts. Includes a downloadable study plan template.
- **The OSI and TCP/IP Models Explained Simply (18m)**
Learn how data moves through a network with a clear, step-by-step guide to the layers. No jargon, just practical analogies.
- **Essential Network Hardware: Routers, Switches, and Firewalls (15m)**
See real-world examples of network devices and understand their specific roles in moving traffic and securing your network.
- **IPv4 vs. IPv6: A No-Nonsense Comparison (22m)**
Master the key differences, why the transition is happening, and how to work with both protocols in a real-world environment.
- **Subnetting Made Easy: The Fast Method (25m)**
A practical problem-solving session that teaches you a reliable method for subnetting quickly for the exam and on the job.
- **Cabling and Connectors: Choosing the Right Physical Layer (11m)**
We'll show you how to identify different cable types, connectors, and when to use them for optimal network performance.
- **Wireless Standards and Frequencies 802.11a/b/g/n/ac/ax (19m)**
Learn the practical differences between wireless standards to help you design and troubleshoot Wi-Fi networks effectively.

Core Concepts: Configuration and Implementation

- **Configuring Network Interfaces and IP Addresses (14m)**
A step-by-step guide to setting up static and dynamic IP addresses on Windows and Linux systems.
- **Understanding Routing Protocols: OSPF and BGP (28m)**
We'll explore how routers talk to each other and how to configure basic routing for a small to medium-sized network.
- **VLANs and Trunking: Segmenting Your Network (21m)**
Learn how to create virtual networks to improve security and performance, with a real case study on office network design.
- **DHCP and DNS: The Internet's Address Book (17m)**
A deep dive into configuring DHCP servers and managing DNS records to ensure your network runs smoothly.
- **Network Address Translation (NAT) and PAT (16m)**
Understand how your private network connects to the internet and how to configure NAT/PAT on a typical SOHO router.

- **Advanced TCP Concepts: Ports, Sockets, and Sessions (23m)**
Master how applications communicate over the network and how to identify traffic by port number.
- **Implementing Network Security Devices (18m)**
Learn the practical role of IDS/IPS, proxies, and load balancers in a modern network infrastructure.
- **Cloud Connectivity and Virtual Networking (20m)**
We'll cover how to connect to cloud providers and understand virtual switches and cloud networking concepts.
- **Documentation and Diagrams: Best Practices (9m)**
Learn how to create and maintain network diagrams and documentation that your team will actually use.

Deep Dive: Network Operations & Security

- **Essential Network Monitoring Tools (26m)**
A hands-on look at using tools like Wireshark, ping, traceroute, and netstat to analyze network traffic and performance.
- **Securing Devices: Switch Port Security and MAC Filtering (13m)**
Learn practical techniques to lock down network access at the switch level to prevent unauthorized devices.
- **Implementing VPNs: Site-to-Site and Remote Access (24m)**
A step-by-step guide to setting up secure connections for remote workers and branch offices.
- **Network Authentication Methods Explained (19m)**
We'll compare RADIUS, TACACS+, and Kerberos to help you understand how to secure network access.
- **Wireless Security: WPA, WPA2, and WPA3 (12m)**
A focused lesson on securing your wireless networks and avoiding common vulnerabilities.
- **Disaster Recovery and Backup Strategies (17m)**
Understand the importance of configuration backups and how to recover from common network failures.
- **Patch Management Best Practices (10m)**
Learn how to create a patching schedule and manage vulnerabilities without disrupting network services.

Advanced Application: Troubleshooting & Performance

- **The Network Troubleshooting Methodology (15m)**
We'll walk through a structured, step-by-step process for diagnosing and resolving any network issue.
- **Troubleshooting Connectivity: Physical to Network Layer (29m)**
A real case study analysis of a down network, showing you how to isolate the problem from the cable to the router.
- **Resolving Performance Issues: Latency, Jitter, and Packet Loss (22m)**
Learn how to identify and fix common performance problems that affect voice and video applications.
- **Advanced Wireless Troubleshooting (20m)**
A problem-solving session focused on solving interference, signal strength, and roaming issues.

- **Firewall and ACL Troubleshooting (16m)**
Learn how to diagnose and fix issues caused by misconfigured firewalls and access control lists.
- **Using Logs and Event Viewers for Diagnostics (25m)**
A practical guide to reading and interpreting logs on routers, switches, and servers to find the root cause.
- **Optimizing Network Hardware for Performance (11m)**
We'll cover QoS and other techniques to ensure critical traffic gets priority on your network.
- **Scripting Basics for Network Automation (32m)**
An introduction to simple scripts that can automate repetitive network tasks and save you hours of work.

Implementation & Next Steps: Exam Day & Beyond

- **Final Review: Key Concepts for the N10-009 Exam (18m)**
A comprehensive review of the most critical topics and common exam objectives to lock in your knowledge.
- **Practice Exam Strategy and Mindset (12m)**
Learn how to approach exam questions, manage your time, and avoid common traps.
- **Simulated Performance-Based Questions (PBQs) (28m)**
We'll walk through examples of the hands-on PBQs you'll see on the exam and how to solve them efficiently.
- **Creating Your Professional IT Portfolio (14m)**
A step-by-step guide to showcasing your new skills with lab projects and documentation for future employers.
- **Building a Home Lab for Continuous Practice (21m)**
Get recommendations for affordable hardware and software to build your own practice environment.
- **Career Paths After Network+ (10m)**
We'll explore common job roles like Network Administrator and Junior Network Engineer and what certifications to pursue next.
- **Staying Current: The Importance of Continuing Education (9m)**
Learn how to keep your skills sharp and stay up-to-date with the latest networking technologies and security threats.
- **Your 30-Day Post-Certification Action Plan (8m)**
A downloadable checklist to help you leverage your certification for a promotion or a new job in the first month.
- **Course Wrap-Up and Exam Booking Guide (6m)**
Final words of encouragement and a clear guide on how to register for and schedule your official CompTIA exam.
- **Accessing Your Bonus Study Materials (5m)**
A quick video showing you how to download all the bonus resources, including flashcards and subnetting cheat sheets.

Discover our blog

Learn more with free articles written by our professors and guest experts.

Latest article: **[Flight Attendant Preparation: What to Study Before You Apply](#)**

[Visit the blog](#) [All courses](#) [This course](#)