

# N10-008 CompTIA Net+, Part 2 of 7: Network Communication

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**Meet the expert:** Patrick Loner has certifications for MCSA, MCSE, MCITP, A+, Network+, Security+, and more. He has been working as a Microsoft Certified Trainer, network administrator, and network consultant for over ten years. He has over a decade of experience working with and teaching about Windows networks with client and server operating systems. He has guided many students toward Microsoft and CompTIA certifications. Most recently, he has worked as a freelance trainer and network consultant specializing in Windows Server 2008 and Microsoft Exchange 2007 and Exchange 2010 implementations, design, and upgrades. Patrick continues to branch out now working with and training on Windows Server 2012, Windows 8, Exchange 2013, and System Center Configuration Manager 2012.

**Prerequisites:** This course assumes the user has some experience with computer hardware, software, and understands the concept of a computer network.

**Runtime:** 03:08:02

**Course description:** This course is a part of the CompTIA Net+ body of knowledge focusing on the N10-008 Exam. This course covers: Cabling and Connectors, Ports and Protocols, as well as IP Addressing.

## Course outline:

### Cabling and Connectors

- Introduction
- Cabling and Connectors
- Serial vs. Parallel
- Baseband vs. Broadband
- Data Access Methods
- Communication Domains
- Multiplexing
- Digital Signals
- Transmission Media
- Twisted Pair Cabling
- Cable Media Categories
- Twisted PAir Connectors
- Copper Media Types
- Wiring Differences
- Coaxial Cabling
- Demo: Media Types
- Fiber Optic Cabling
- Demo: Cables and Connectors
- Summary

### Ports and Protocols

- Introduction
- NP2\_TopicB\_Slides
- TCP-IP Layers
- Core Protocols
- Transport Protocols
- TCP
- User Datagram Protocol
- What is a Socket

- Internet Layer
- Core Internet Layer Protocols
- IP Diagrams
- Application Layer
- Well Known Ports
- Demo: Ports and Protocols
- Exam Objective 1.5
- Summary
- Global Unicast
- Special Addresses
- Demo: viewing and Configuring IPv6
- Summary

### IP Addressing Part 1

- Introduction
- Introduction to IP Addresses
- Subnet Masks
- Demo: Binary IP Addresses
- Demo: Configuring IP address
- IPV4
- Valid Masks
- Default Gateway
- Address Categories
- Public vs. Private
- Classful Addressing
- Classless Addressing
- Demo: CIDR Notation
- Summary

### IP Addressing Part 2

- Introduction
- Create IPv4 Subnets
- Simple Subnetting
- complex Subnetting
- Demo: Creating Subnets
- IPv6