

## Network+ Certification (Fourth Edition) 2009 Objectives

Days of Training: 5

### Overview

This course provides the skills and knowledge necessary to prepare for the CompTIA Network+ 2009 Certification Exam. The course certification proves competence in managing, troubleshooting, installing, and configuring a basic network infrastructure.

### Prerequisites

There are no enforced prerequisites, however the recommended prerequisites are the CompTIA A+ certification and nine months of networking experience. A+ Certification (2009 Objectives)

### Next Steps

In order to obtain the Network+ certification students must pass the Network+ 2009 Objectives exam code N10-004

### Lesson 1: Network Theory

- Networking Terminology
- Network Building Blocks
- Standard Network Models
- Physical Network Topologies
- Logical Network Topologies
- Network Categories

### Lesson 2: Network Communications

**Methods**

- Transmission Methods
- Media Access Methods
- Signaling Methods

### Lesson 3: Network Data Delivery

- Data Addressing and Delivery
- Delivery Techniques

### Lesson 4: Network Media and Hardware

- Bounded Network Media
- Unbounded Network Media
- Noise Control
- Network Connectivity Devices
- Wiring Distribution Components

### Lesson 5: Network Implementations

- The OSI Model
- Ethernet Networks
- Token Ring Networks
- Fiber Distributed Data Interface (FDDI) Networks
- Wireless Technologies and Standards

### Lesson 6: Networking with TCP/IP

- Families of Protocols
- The TCP/IP Protocol
- IP Address Basics
- Custom IP Addresses
- The IP Version 6 Protocol
- The TCP/IP Protocol Suite

### Lesson 7: TCP/IP Services

- IP Address Assignment Methods
- Host Name Resolution
- TCP/IP Utilities
- TCP/IP Upper-Layer Services
- TCP/IP Interoperability Services

### Lesson 8: Local Area Network

#### Infrastructure

- Bridges and Switches
- IP Routing
- Static IP Routing
- Dynamic IP Routing
- Control Data Movement with Filters and VLANs

### Lesson 9: WAN Infrastructure

- WAN Switching Technologies
- WAN Transmission Technologies
- WAN Connectivity Methods
- Voice Over Data Systems

### Lesson 10: Network Security

- Computer Security Basics
- Authentication
- Data Encryption
- Protect Network Traffic with IP Security (IPsec)
- Internet Security
- Local Security
- Common Threats
- Threat Mitigation Techniques
- Intrusion Detection and Prevention
- Educate Users

### Lesson 11: Remote Networking

- Remote Network Architectures
- Remote Access Networking Implementations
- Virtual Private Networking
- Remote Control Computing

### Lesson 12: Disaster Recovery

- Examine Configuration Management Documentation
- Plan for Disaster Recovery
- Fault Tolerance Methods
- Data Backup

### Lesson 13: Network Data Storage

- Enterprise Data Storage
- Network-Attached Storage (NAS)
- Storage Area Network (SAN) Implementations
- Clustering

### Lesson 14: Network Operating Systems

- UNIX and Linux Operating Systems
- Apple Mac OS X
- Microsoft Operating Systems
- Novell Open Enterprise Server

## Network+ Certification (Fourth Edition) 2009 Objectives (Continued)

Days of Training: 5

### Overview

This course provides the skills and knowledge necessary to prepare for the CompTIA Network+ 2009 Certification Exam. The course certification proves competence in managing, troubleshooting, installing, and configuring a basic network infrastructure.

### Prerequisites

There are no enforced prerequisites, however the recommended prerequisites are the CompTIA A+ certification and nine months of networking experience.  
A+ Certification (2009 Objectives)

### Next Steps

In order to obtain the Network+ certification students must pass the Network+ 2009 Objectives exam code N10-004

### Lesson 15: Network Management

- Monitoring Tools
- Network Baselineing
- Network Optimization

### Lesson 16: Network Troubleshooting

- Troubleshooting Models
- TCP/IP Troubleshooting Utilities
- Hardware Troubleshooting Tools
- Common Connectivity Issues