
606-TCP/IP FOR NETWORKING PROFESSIONALS

Course Length: 3 Days

COURSE DESCRIPTION

Understanding how to use TCP/IP on a NetWare 5 network is critical to successfully using the NOS, especially for NetWare 3 and 4 CNEs who tend to be familiar only with IXP. This course discusses this subject in depth.

Course Objective: In this course, you will examine how to plan, configure, and troubleshoot a TCP/IP network. You will be taught advanced skills and abilities to handle more challenging network situations than those presented in the NetWare CNE curriculum and the Microsoft MCSE curriculum.

Target Student: This course is for Master CNE candidates, CDE candidates, and experienced network engineers.

Prerequisites: Students should have completed either their CNE or their MCSE certification. Students should also have knowledge of basic TCP/IP principles and procedures including one of the following courses:

- Course 1400: The Novell Guide to Network+
- Course 565: Networking Technologies
- Course 688: Internetworking Microsoft TCP/IP on Microsoft Windows NT 4.0

Delivery Method: Instructor led, group-paced, classroom-delivery learning model with structured hands-on activities.

COURSE CONTENT

Section 1 TCP/IP Review

- Objective 1 Describe the TCP/IP Protocol Suite
- Objective 2 Describe TCP/IP Addressing
- Objective 3 Describe Subnet Masking
- Objective 4 Describe Supernetting
- Objective 5 Describe TCP/IP Communications
- Objective 6 Describe the Ipv4 and Ipv6 Protocols
- Objective 7 Identify the Role of TCP/IP Ports
- Objective 8 Identify Sources of TCP/IP Information

Section 2 Protocols Used with TCP/IP

- Objective 1 Describe Internet Protocol (IP)
- Objective 2 Describe Transmission Control Protocol (TCP)
- Objective 3 Describe User Datagram Protocol (UDP)
- Objective 4 Describe Internet Control Message Protocol (ICMP)
- Objective 5 Describe Internet Group Management Protocol (IGMP)
- Objective 6 Describe Network Time Protocol (NTP)
- Objective 7 Describe Telenet Protocol (TELENET)
- Objective 8 Describe Hypertext Transport Protocol (HTTP)
- Objective 9 Describe File Transfer Protocol (FTP)
- Objective 10 Describe Trivial File Transfer Protocol (TFTP)
- Objective 11 Describe Simple Mail Transfer Protocol (SMTP)
- Objective 12 Describe Post Office Protocol (POP)
- Objective 13 Describe Internet Relay Chat (IRC) Protocol

Section 3 Protecting a TCP/IP Network from Security Threats

- Objective 1 List Sources of TCP/IP Security Information
- Objective 2 Describe the Role of Firewalls in a TCP/IP Network
- Objective 3 Describe the Role of Encryption in a TCP/IP Network
- Objective 4 Describe Denial of Service Attacks and How to Defend Against Them
- Objective 5 Describe Snooping

Section 4 TCP/IP Routing

- Objective 1 Describe Routing Fundamentals
- Objective 2 Describe Routing Information Protocol (RIP)
- Objective 3 Describe the Open Shortest Path First (OSPF) Protocol
- Objective 4 Compare RIP and OSPF
- Objective 5 Describe Exterior Gateway Protocol (EGP) and Border Gateway Protocol (BGP)
- Objective 6 Describe Other Routing Configurations

Section 5 Designing a TCP/IP Network

- Objective 1 Describe TCP/IP Network Design Criteria

Section 6 TCP/IP Troubleshooting

- Objective 1 Identify the Symptoms and Causes of Various TCP/IP Network Errors
- Objective 2 List the Steps for TCP/IP Address Resolution
- Objective 3 Identify the Purpose and Function of Troubleshooting Tools
- Objective 4 Troubleshoot TCP/IP Protocol Errors