Hands-On

Network +

Course Description

BTS works with clients to deliver appropriate material to become CompTIA NET+ certified.

This course uses the latest texts and other materials over a one or two week period based on client needs. The two week design includes extensive hands-on with actual networking equipment, routers, switches, wireless devices, etc. Time is allowed after each Instructor presentation and demonstration for student hands-on work on actual equipment, labs, practice exams and NET+ related drills. Students take the exam soon after class to become NET+ Certified. Based on the class design student pass rates are often 100

The CompTIA Network+ certification is the sign of a competent networking professional. It is an international, vendor-neutral certification that proves a technicians competency in managing, maintaining, troubleshooting, installing and configuring basic network infrastructure.

Since its introduction in 1999, more than 235,000 people have become CompTIA Network+ certified. Microsoft includes CompTIA Network+ in their Microsoft Certified Systems Administrator (MCSA) program, and other corporations such as Novell, Cisco and HP also recognize CompTIA Network+ as part of their certification tracks.

For IT professionals requiring re-certification

The newest version of the CompTIA Network+ certification exam was launched in early 2009. IT professionals who are encouraged or required by their employers to remain current on their certifications have two options They can take the new version of the exam, or they can take the CompTIA Network+ bridge exam, which covers the new objectives. The test, exam code BR0-002, is a 60-minute, 50-question test. A passing score is 500 on a scale of 100-900. Only professionals who are currently CompTIA Network+ certified under the 2005 objectives are eligible to become CompTIA Network+ 2009 certified by taking the bridge exam.

Students Will Learn

- Identify network topologies, cabling, connectors, and components
- Install and configure a network card and client software
- Identify network protocols and define the concepts of network layers
- Understand and implement the TCP/IP protocol
- Identify the features of network and client operating systems (Windows, NetWare, Linux, Mac OS)
- Configure remote and wireless network connections
- Configure user and security settings for an operating system
- Use test equipment to troubleshoot network connectivity
- Describe basic networking and identify different networking models.
- Describe the basics of data movement, physical media, and network connectivity devices.
- Use the OSI model and understand Ethernet, Token Ring, FDDI, and wireless networks.
- Understand data routing and common network protocols such as NetBEUI and TCP/IP.
- Discover a TCP/IP services.
- Understand older network protocols still used today, such as IPX/SPX, AppleTalk, Apple Open Transport, and IPv6.
- Examine the infrastructure of a local area network.
- Distinguish the different methods used to connect networks together through the public carrier services.
- Understand the different methods of remote networking.
- Understand and implement relevant aspects of network security.
- Apply disaster recovery principles.
- Describe and employ advanced data storage techniques.
- Understand and implement network troubleshooting procedures.
- Describe the basics of the network operating systems in use today.

Target Audience

Computer / Technical / Help Desk Support personnel. This course is designed for individuals

interested in learning the subjects that are necessary to prepare them for their certification testing.

Prerequisites

A general working knowledge of personal computers, some networking experience, and have taken the following courses/certifications as a prerequisite
A+ Essentials Certification
CCNT Certification (if possible)

Course Outline

Module 1: Basic Network Theory

a) Network Definitions
b) Network Models
c) Connectivity
d) Network Addressing
e) Signaling Concepts

Module 2: Network Connectivity

a) The Data Package
b) Establishing a Connection
c) Reliable Delivery
d) Network Connectivity
e) Noise Control
f) Building Codes
g) Connection Devices

Module 3: Advanced Network Theory

a) The OSI Model
b) Ethernet
c) Network Resources
d) Token Ring/IEEE 802.5
e) FDDI
f) Wireless Networking

Module 4: Common Network Protocols

a) Families of Protocols
b) NetBEUI
c) Bridges and Switches
d) The TCP/IP Protocol
e) Building a TCP/IP Network
f) The TCP/IP Suite

Module 5: TCP/IP Services

a) Dynamic Host Configuration Protocol
b) DNS Name Resolution
c) NetBIOS Support
d) SNMP
e) TCP/IP Utilities
f) Upper Layer Services: FTP

Module 6: Alternate Network Protocols

a) Introduction to IPX/SPX
b) AppleTalk
c) Introduction to Apple Open Transport

d) Introduction to IPv6

Module 7: Network LAN Infrastructure

a) Implement LAN Protocols on a Network
b) IP Routing
c) IP Routing Tables
d) Router Discovery Protocols
e) Data Movement in a Routed Network
f) Virtual LANs (VLANs)

Module 8: Network WAN Infrastructure

a) The WAN Environment
b) WAN Transmission Technologies
c) WAN Connectivity Devices
d) Voice Over Data Services

Module 9: Remote Networking

a) Remote Networking
b) Remote Access Protocols
c) VPN Technologies

Module 10: Network Security

a) Introduction to Network Security
b) Virus Protection
c) Local Security
d) Network Access
e) Internet Security

Module 11: Disaster Recovery

a) The Need for Disaster Recovery
b) Disaster Recovery Plan
c) Data Backups
d) Fault Tolerance

Module 12: Advanced Data Storage Techniques

a) Enterprise Data Storage
b) Clustering
c) Network Attached Storage
d) Storage Area Networks

Module 13: Network Troubleshooting

a) Using a Systematic Approach to Troubleshooting
b) Network Support Tools: Utilities
c) The Network Baseline

Module 14: Network Operating Systems

a) Novell NetWare
b) Microsoft BackOffice
c) Linux History and Operation
d) Macintosh (optional)

Notes

Course Length

5 - 10 Days

This course can be delivered as the standard Network+ Certification Track over 10 days. Our BTS Accelerated course was developed per numerous companies and can be delivered in a 5-7 day Accelerated format (to also include Security+) depending on the experience level of the students attending, this format requires longer training days plus required study time and materials.

Delivery Method

Instructor led with numerous "Hands-On demonstrations and exercises.

Equipment Requirements

(This apply's to our hands-on courses only)

BTS always provides equipment to have a very successful Hands-On course. BTS also encourages all attendees to bring their own equipment to the course. This will provide attendees the opportunity to incorporate their own gear into the labs and gain valuable training using their specific equipment.

Course Length

10 Days