

Network + Support Skills

Overview

This five-day practical "hands-on" course is designed to produce competent network support technicians, capable of taking and passing the Network+ 2009 exam. This course is intended for delegates who wish to learn skills in installing, maintaining and troubleshooting local area networks, with a particular emphasis on core routing & switching technologies & Microsoft Client & Server technologies

Pre-request: Delegates are required to meet the following prerequisites as recommended as preparation for exam(s):

- Experience of supporting end-users and PC-based systems
- Equivalent knowledge and experience of PC hardware and software support

Course duration: 40 Hours

Objective

- Install and configure a network card
- Define the concepts of network layers
- Understand and implement the TCP/IP protocol
- Install and manage Windows NT
- Use test equipment to troubleshoot network connectivity

Course Content:

Networking concepts

- Networking fundamentals, topologies, network design
- The OSI Model
- Troubleshooting network adapter problems
- Introduction to protocols
- Transport Remote access & security protocols

Network cabling and devices

- Network communication methods
- Cables and connectors, Ethernet devices
- Internetworking components
- Introduction to internetworking

Introducing bridges, routers and switches

- Remote and WAN connectivity
- Introduction to remote connectivity
- Topic B: Installing and configuring a modem
- Topic C: Remote Access Service (RAS) and remote access clients
- Topic D: WAN connectivity
- Troubleshooting hardware components

TCP/IP fundamentals

- Evolution of TCP/IP
- TCP/IP addressing and subnetting
- IP addressing
- Subnetting and special addressing
- TCP/IP installation and configuration

Security - Firewalls and proxies Firewalls & Proxy servers

- TCP/IP troubleshooting tools
- Telnet, Topic C: File Transfer Protocol

Identifying network operating system

- Microsoft Windows , UNIX, Linux,
- Directory services
- Windows networking concepts
- Directory services planning and implementation
- Introduction to Active Directory

Accessing and managing resources in a Windows Network

- Creating and managing Active Directory user accounts
- Introduction to group accounts
- The NTFS file system and permissions
- Working with shared folders: Introduction to printing concepts

Monitoring and troubleshooting a Windows Server

- Introduction to server monitoring
- Troubleshooting with Event Viewer
- Working with the Performance console

Fault tolerance and disaster recovery

- System fault tolerance, Replication, Backup and UPS
- Troubleshooting procedures
- Troubleshooting scenarios

Target Audience

This course is intended for delegates who wish to take their first steps in their IT careers by learning Network concepts and prepare for the Network + 2009 exam.