

Microsoft TCP/IP

Course Objectives:

This is an intensive course intended for network integrators, system engineers, and support professionals who implement and support TCP/IP in local and wide area network environments.

Prior Knowledge Required:

Students should have sound experience in implementing and supporting Microsoft Windows NT Server 4.0 or Microsoft Windows 2000 based products. Knowledge is required of the function and uses of local area network hardware (including network cards, cabling, bridges, and routers), and of the functions of the seven layers in the open systems interconnect (OSI) reference.

Course Duration: 3 days, but course contents can be tailored if required.

Overview of TCP/IP

What is TCP/IP?
Installing and configuring Microsoft TCP/IP
Microsoft Network Monitor

Architectural & Background Overview

Microsoft TCP/IP suite
Network interface technologies
Address resolution protocol (ARP)
Internet control message protocol (ICMP)
Internet group management protocol (IGMP)
IP
Ports and sockets
TCP
User Datagram Protocol (UDP)

Binary Classfull Addressing

IP Addressing & Binary Subnet Masks

What is an IP address?
Address classes
Assigning network IDs
Assigning host IDs
What is a subnet mask?
Addressing with IP version 6

Subnetting a Network

What is a subnet?
Implementing subnetting
What are subnet mask bits?
Defining a subnet mask
Defining subnet IDs
Defining host IDs for a subnet
Supernetting

Installing TCP/IP Using Static IP Address

Understanding the DHCP Server Process

What is DHCP?
How DHCP works
Implementation considerations
Installing and configuring a DHCP server
Enabling a DHCP relay agent

Configuring and Testing TCP/IP

Exploring TCP/IP Utilities

Using the IPCONFIG utility
Using the PING Utility
Using the TRACERT Utility

Classless Inter Domain Routing (CIDR)

Name Resolution (Host / NetBIOS)

Host Name Resolution

TCP/IP naming schemes
What is a host name?
What is host name resolution?
HOSTS file

DNS (Domain Name System)

DNS Name resolution
Configuring the DNS files
Planning a DNS implementation

Wins (Windows Internet Naming Service)

What is WINS and how it works
Implementation WINS



Quality Training (Scotland) Limited

T/F 01259 763332
E info@quality-training.co.uk
www.quality-training.co.uk

 Training for a brighter future