

Course Outline

2276- Implementing a Microsoft Windows server 2003 network infrastructure: Network hosts



Duration: 2 days (12 hours)

Learning Objectives:

- Describe the Transmission Control Protocol/Internet Protocol (TCP/IP) protocol architecture.
- Convert Internet Protocol (IP) addresses between decimal and binary.
- Calculate a subnet mask.
- Create subnets using Variable-Length Subnet Mask (VLSM) and Classless Inter-Domain Routing (CIDR).
- Configure a host to use a static IP address.
- Assign IP addresses in a multiple subnet network.
- Describe the IP routing process.
- Configure a host to obtain an IP address automatically.
- Configure a host so that automatic private IP address configuration is disabled.
- Configure a host to use name servers.
- Isolate common connectivity issues.

Target Audience:

The target audience for this course includes individuals who are either employed by, or who are seeking employment as, a Systems Administrator in Medium and Large organizations (M/LORG).

Topics Covered:

- Reviewing the Suite TCP/IP protocols
 - Overview of the OSI Model
 - Overview of the TCP/IP Protocol Suite
 - Viewing Frames Using Network Monitor
- Assigning IP Addresses in a Multiple Subnet Network
 - Assigning IP Addresses
 - Creating a Subnet
 - Using IP Routing Tables
 - Overcoming Limitations of the IP Addressing Scheme
- Configuring a Client IP Address
 - Configuring a Client to Use a Static IP Address
 - Configuring a Host to Obtain an IP Address Automatically
 - Using Alternate Configuration
- Configuring a Client for Name Resolution
 - Resolving Client Names
 - Managing the ARP Cache

- Overview of NetBIOS
- Using Static Naming Methods
- Using Dynamic Naming Methods
- Summarizing the Name Resolution Process
- Isolating Common connectivity issues
 - Determining the Causes of Connectivity Issues
 - Network Utilities That You Can Use to Isolate Connectivity Issues
 - Exercise 1: Documenting Your Current Environment
 - Exercise 2: Resolving Connectivity Issues