Designing a Microsoft Windows 2000 Networking Services Infrastructure

Course 1562 is a four-day course that provides senior support professionals with the information and skills needed to create a networking services infrastructure design that supports the required network applications. Each module provides a solution based on the needs of the organization. Some Microsoft Windows 2000 network solutions require a single technology, such as DHCP, to provide Internet Protocol (IP) address configuration support. In other situations, several technology options exist, such as Open Shortest Path First (OSPF), Routing Information Protocol (RIP), and Internet Group Management Protocol (IGMP), to design an IP routing scheme. (Course 1560 or course 2154, is a prerequisite for course 1562.)

Topics:
- Designing a Networking Services Foundation
- Designing Internet Connectivity Solutions
- Designing Extranet Connectivity Solutions
- Creating an Integrated Network Services Infrastructure Design
- Creating Networking Service Design to Support Applications

Course Outline

Module 1: Windows 2000 Networking Overview

Topics
Introducing Windows 2000 networking services
Developing implementation and management designs

Skills

Students will be able to:
- Describe Windows 2000 networking services.
- Describe the process of designing a network.

Module 2: Developing a TCP/IP Networking Strategy

Topics
Role of TCP/IP in a network
Developing a TCP/IP implementation strategy
Developing a TCP/IP management strategy
Achieving TCP/IP business goals

Labs
Analyzing TCP/IP designs
Configuring IP addresses and installing networking services

Skills

*Students will be able to:*

- Describe the role of TCP/IP in a network design.
- Develop a strategy for implementing TCP/IP.
- Develop a strategy for managing TCP/IP.
- Define when the TCP/IP design achieves business goals.

Module 3: Developing a DHCP Strategy

Topics

Role of Dynamic Host Configuration Protocol (DHCP) in an enterprise network
Developing a DHCP implementation strategy
Developing a DHCP management strategy
Achieving DHCP business goals

Lab

Analyzing DHCP designs

Skills

*Students will be able to:*

- Define the role of DHCP in a network.
- Develop a DHCP implementation strategy.
- Develop a DHCP management strategy.
- Define when the DHCP design achieves business goals.

Module 4: Developing a DNS Strategy

Topics

Role of Domain Name System (DNS) in a network
Developing a DNS implementation strategy
Developing a DNS management strategy
Achieving DNS business goals

Labs
Analyzing DNS designs
Implementing a delegated zone for DNS

**Skills**

*Students will be able to:*

- Define the role of DNS in a network.
- Develop a DNS implementation strategy.
- Develop a DNS management strategy.
- Define when the DNS design achieves business goals.

**Module 5: Developing a WINS Strategy**

**Topics**

Role of Windows Internet Name Service (WINS) in a network
Developing a WINS implementation strategy
Developing a WINS management strategy
Achieving WINS business goals

**Lab**

Analyzing WINS designs

**Skills**

*Students will be able to:*

- Define the role of WINS in a network.
- Develop a WINS implementation strategy.
- Develop a WINS management strategy.
- Define when the WINS design achieves business goals.

**Module 6: Developing a Remote Access Strategy**

**Topics**

Role of remote access in a network
Developing a remote access implementation strategy
Developing a remote access management strategy
Achieving remote access business goals
Lab

Analyzing remote access designs

Skills

*Students will be able to:*

- Define the role of remote access in a network.
- Develop a remote access implementation strategy.
- Develop a remote access management strategy.
- Define when a remote access design achieves business goals.

**Module 7: Developing a RADIUS Strategy**

**Topics**

Role of RADIUS in a network
Developing a RADIUS implementation strategy
Developing a RADIUS management strategy
Achieving RADIUS business goals

**Labs**

Analyzing RADIUS designs
Implementing a RADIUS solution

Skills

*Students will be able to:*

- Define the role of RADIUS in a network.
- Develop a RADIUS implementation strategy.
- Develop a RADIUS management strategy.
- Define when the RADIUS design achieves business goals.

**Module 8: Developing a Connection Manager Strategy**

**Topics**

Role of Connection Manager in a network
Developing a Connection Manager implementation strategy
Developing a Connection Manager management strategy
Achieving Connection Manager business goals

Lab

Analyzing Connection Manager designs

Skills

Students will be able to:

- Define the role of Connection Manager in a network.
- Develop a Connection Manager implementation strategy.
- Develop a Connection Manager management strategy.
- Define when a Connection Manager design achieves business goals.

Module 9: Developing an IP Routing Strategy

Topics

Role of IP routing services in a network
Developing an IP routing implementation strategy
Developing an IP routing management strategy
Achieving IP routing business goals

Labs

Analyzing IP routing designs
Implementing OSPF in a single area

Skills

Students will be able to:

- Describe the role of IP routing in a network.
- Develop an IP routing implementation strategy.
- Develop an IP routing management strategy.
- Define when the IP routing design achieves business goals.

Module 10: Developing a Multicasting Strategy

Topics
Introduction to multicasting
Role of multicasting in a network
Developing a multicasting implementation strategy
Developing a multicasting management strategy
Achieving multicasting business goals

Lab
Analyzing multicasting designs

Skills

Students will be able to:

- Describe how multicasting works.
- Describe the role of multicasting in a network.
- Develop a multicasting implementation strategy.
- Develop a multicasting management strategy.
- Define when the multicasting design achieves business goals.

Module 11: Developing a Demand-Dial Routing Strategy

Topics
Role of demand-dial routing in a network
Developing a demand-dial implementation strategy
Developing a demand-dial management strategy
Achieving demand-dial business goals

Labs
Analyzing demand-dial designs
Implementing demand-dial routing

Skills

Students will be able to:

- Describe the role of demand-dial routing in a network.
- Develop a strategy for implementing demand-dial routing.
- Develop a strategy for managing demand-dial routing.
- Define when the demand-dial routing design achieves business goals.
Module 12: Developing a VPN Strategy

Topics
Role of VPN in a network
Developing a VPN implementation strategy
Developing a VPN management strategy

Labs
Analyzing VPN designs
Implementing a VPN

Skills
Students will be able to:
• Define the role of VPN in a network.
• Develop a VPN implementation strategy.
• Develop a VPN management strategy.
• Define when the VPN design achieves business goals.

Day 4
Module 13: Developing an IPSec Strategy

Topics
Role of IPSec in a network
Developing an IPSec implementation strategy
Developing an IPSec management strategy
Achieving IPSec business goals

Labs
Analyzing IPSec designs
Implementing IPSec

Skills
Students will be able to:
• Define the role of IPSec in a network.
• Develop an IPSec implementation strategy.
• Develop an IPSec management strategy.
• Define when an IPSec design achieves business goals.

Module 14: Developing a Connection Sharing Strategy

Topics
Role of Connection Sharing in a network
Developing a Connection Sharing implementation strategy
Developing a Connection Sharing management strategy
Achieving Connection Sharing business goals

Lab
Analyzing Connection Sharing designs

Skills
Students will be able to:
• Define the role of Connection Sharing in a network.
• Develop a Connection Sharing implementation strategy.
• Develop a Connection Sharing management strategy.
• Define when the Connection Sharing design achieves business goals.

Module 15: Developing a Proxy Server Strategy

Topics
Role of Proxy Server in a network
Developing a Proxy Server implementation strategy
Developing a Proxy Server management strategy
Achieving Proxy Server business goals

Lab
Analyzing Proxy Server designs

Skills
Students will be able to:
• Describe the role of Proxy Server in a network.
• Develop a Proxy Server implementation strategy.
• Develop a Proxy Server management strategy.
• Define when the Proxy Server design achieves business goals.