



6421 Configuring and Troubleshooting a Windows Server 2008 Network Infrastructure

Course Outlines

6421 Configuring and Troubleshooting a Windows Server 2008 Network Infrastructure

Days of Training: 5

Overview

This five-day instructor-led course provides students with the knowledge and skills to configure and troubleshoot Windows Server 2008 and Windows Server 2008 R2 Sp1 network infrastructures. It will cover networking technologies most commonly used with Windows Server 2008 and Windows Server 2008 R2 Sp1 such as DNS, DHCP, IPv4 and IPv6 network addressing, Network Policy server and Network Access Protection, and configuring secure network access. It also covers fault tolerant storage technologies, Network Storage, routing and remote access, monitoring and compliance updates as well as other relevant technologies. This course maps directly to the **70-642: TS: Windows Server 2008 Network Infrastructure, Configuring** exam.

Prerequisites

- Intermediate understanding of Windows Server operating systems.
- An understanding of security concepts and methodologies.
- An understanding of how TCP/IP functions.
- Basic understanding of addressing, name resolution and connection methods.
- Basic knowledge of Active Directory.

At Course Completion

Upon successful completion of this course, students will be able to:

- Plan and configure an IPv4 network infrastructure.
- Implement DHCP within their organization.
- Configure and troubleshoot DNS.
- Configure, transition to, and troubleshoot IPv6.
- Configure and troubleshoot Routing and Remote Access.
- Install, configure, and troubleshoot the Network Policy Server Role service.
- Implement Network Access Protection.
- Implement security features within Windows Server 2008 and Windows Server 2008 R2.
- Implement security features that help secure network communications.
- Configure and troubleshoot file and print services.
- Enable and configure services to optimize branch office data access.
- Control and monitor network storage.
- Recover data on Windows Server 2008 and Windows Server 2008 R2 servers.
- Monitor Windows Server 2008 and Windows Server 2008 R2 network infrastructure services.

Lesson 1: Planning and Configuring IPv4

Implementing an IPv4 Network Infrastructure
Overview of Name Resolution Services in and IPv4 Network Infrastructure
Configuring and Troubleshooting IPv4

Lesson 2: Configuring and Troubleshooting DHCP

Overview of the DHCP Server Role
Configuring DHCP Scopes
Configuring DHCP Options
Managing a DHCP Database
Monitoring and Troubleshooting DHCP
Configuring DHCP security

Lesson 3: Configuring and Troubleshooting DNS

Installing the DNS Server Role
Configuring the DNS Server Role
Configuring DNS Zones
Configuring DNS Zone Transfers
Managing and Troubleshooting DNS

Lesson 4: Configuring and Troubleshooting IPv6 TCP/IP

Overview of IPv6
IPv6 Addressing
Coexistence with IPv6
IPv6 Transition Technologies
Transitioning from IPv4 to IPv6

Lesson 5: Configuring and Troubleshooting Routing and Remote Access

Configuring Network Access
Configuring VPN Access
Overview of Network Policies
Overview of the Connection Manager Administration Kit
Troubleshooting Routing and Remote Access
Configuring DirectAccess

Lesson 6: Installing, Configuring, and Troubleshooting the Network Policy Server Role Service

Installing and Configuring a Network Policy Server
Configuring RADIUS Clients and Servers
NPS Authentication Methods
Monitoring and Troubleshooting a Network Policy Server

Lesson 7: Implementing Network Access Protection

Overview of Network Access Protection
How NAP Works
Configuring NAP
Monitoring and Troubleshooting NAP

Lesson 8: Increasing Security for Windows Server

Windows Security Overview
Configuring Windows Firewall with Advanced Security
Deploying Updates with Windows Server Update Services

Lesson 9: Increasing Security for Network Communication

Overview of IPsec
Configuring Connection Security Rules
Configuring NAP with IPsec Enforcement
Monitoring and Troubleshooting IPsec

Lesson 10: Configuring and Troubleshooting Network Files and Print Services

Configuring and Troubleshooting File Shares
Encrypting Network Files with EFS
Encrypting Partitions with BitLocker
Configuring and Troubleshooting Network Printing

Lesson 11: Optimizing Data Access for Branch Offices

Branch Office Data Access
DFS Overview
Overview of DFS Namespaces
Configuring DFS Replication
Configuring BranchCache

Lesson 12: Controlling and Monitoring Network Storage

Monitoring Network Storage
Controlling Network Storage Utilization
Managing File Types on Network Storage

Lesson 13: Recovering Network Data and Servers

Recovering Network Data with Volume Shadow Copies
Recovering Network Data and Servers with Windows Server Backup

Lesson 14: Monitoring Windows Server 2008 Network Infrastructure Servers

Monitoring Tools
Using Performance Monitor
Monitoring Event Logs

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