

Course Outline

6416- Updating your Network Infrastructure and Active Directory Technology Skills to Windows Server 2008



Duration: 5 day (30 hours)

Target Audience:

This course is intended for IT Professionals experienced on the technologies included in Windows Server 2000 or Windows Server 2003, and who hold an MCSE or MCSA certification and/or equivalent knowledge.

Prerequisites:

Before attending this course, students must have:

- Experience planning, implementing, managing, maintaining, and securing Microsoft Windows Server 2000 or 2003, including Active Directory and Network Infrastructure server roles.
- Working knowledge of networking, for example, TCP/IP and Domain Name System (DNS).
- Experience installing, configuring, and administering Microsoft Windows 2000, Windows XP Professional, or Microsoft Vista.
- MCSA on Windows Server 2003 or MCSE on Windows Server 2003 recommended.

Topics Covered:

- Module 1: Installing and Configuring Windows Server 2008
 - Server Manager Roles
 - Windows Server 2008 Features
 - Active Directory Improvements
 - Lab: Configuring Windows Server 2008
 - Initial Configuration Tasks
 - Server Manager Console
 - Server Manager Wizards
 - Windows PowerShell

After completing this module, students will be able to:

- Describe Windows Server 2008 roles.
- Describe Windows Server 2008 features.
- Describe Windows Server 2008 Active Directory Improvements.

- Module 2: Windows Deployment Services
 - Introducing Windows Deployment Services
 - WDS Components
 - Lab: Working With Windows Deployment Services
 - Install and Configure Windows Deployment Services
 - Working with Images
 - Creating Images
 - Using Unattend Files

After completing this module, students will be able to:

- Describe Windows Deployment Services benefits.
- Describe Windows Deployment Services (WDS) components.

➤ Module 3: Windows Server 2008 Server Core

- Server Core Introduction
- Configuring and Managing Server Core
 - Lab: Server Core
 - Installing Windows Server Core
 - Configure Server Core
 - Add and Configure Server Roles
 - Add Backup Feature
 - Managing Server Core

After completing this module, students will be able to:

- Describe Windows Server Core.
- Add and configure Windows Server Core roles.

➤ Module 4: Windows Backup

- Backup Infrastructure
- Optical Media
- Restore Utilities
 - Lab: Backup and Restore System Data
 - Perform Installation Tasks
 - Schedule a Backup
 - Create a Manual Backup
 - Schedule Daily AD DS Backup via Command Line
 - Backup and Recovery with Vista Client
 - Restore Files and Folders
 - Perform Windows RE Tasks

After completing this module, students will be able to:

- Explain the new backup infrastructure, including Volume Shadow Copy Service.
- Identify backup-capable media in Windows Server 2008.
- Restore Windows Server 2008 backups.

➤ Module 5: Windows Server 2008 Updates to Networking

- Networking with Windows Server 2008
- New Networking Features
- DNS with Windows Server 2008
- Configuring Routing
- Configuring Wireless Settings in Server 2008
 - Lab 1: Reviewing Networking Defaults and Settings
 - Review the Network Center
 - Creating Domain Isolation Policies
 - Create a Centralized QoS Policy
 - Communicate with Link-Local Addresses
 - Lab 2: DNS Management Settings
 - Creating Zones in Windows Server 2008
 - Create Resource Records
 - Configure Zone Transfers

After completing this module, students will be able to:

- Describe the Windows Server 2008 network architecture.

- Identify new and improved networking features with Windows Server 2008.
- List new improvements to DNS with Windows Server 2008.
- Describe routing configuration components in Windows Server 2008.
- Describe new features for wireless networks.

➤ Module 6: Network Policies and Access Protection

- Network Policies Access Protection
- Enforcement Options
- Network Access Protection Scenarios
- Routing and Remote Access
 - Lab: Using Network Access Protection
 - Configuring Network Access Protection for DHCP
 - Configuring Network Access Protection for VPN
 - Configuring Network Access Protection for IPsec

After completing this module, students will be able to:

- Describe how Network Policies Access Protection (NAP) works.
- Identify NAP enforcement options.
- Identify scenarios for NAP usage.
- Describe Routing and Remote Access (RRAS).

➤ Module 7: Hyper-V

- Introducing Hyper-V
- Configuring Hyper-V
 - Lab: Configuring Hyper-V
 - Install and Configure Hyper-V
 - Configure Virtual Networks
 - Add Virtual Machines
 - Monitoring and Optimization

After completing this module, students will be able to:

- List the new features of Hyper-V.
- Configure Hyper-V virtual machines.

➤ Module 8: Planning for Windows Server 2008 Active Directory Services

- Planning for AD DS Deployment
- Upgrade Considerations
 - Lab 1: Installing a Windows Server 2008 Forest
 - Install a New Forest
 - Lab 2: Installing Windows Server 2008 in an Existing Forest
 - Install a Windows Server 2008 DC in an Existing Forest
 - Verify Active Directory Installation

After completing this module, students will be able to:

- Plan for a Windows Server 2008 Active Directory Domain Services deployment.
- Identify considerations when upgrading from a Windows Server 2003 to a Windows Server 2008 Active Directory infrastructure.

➤ Module 9: Active Directory Domain Services

- What's New in AD DS
- Manageability and Reliability
 - Lab: Exploring Active Directory Domain Services
 - Create Accounts
 - Review Operations Masters Role
 - Review Sites

- Working with Subnets
- Working with Site-Links
- AD DS and Group Policy
- Review DNS Configuration

After completing this module, students will be able to:

- Describe new features in AD DS.
- List manageability and reliability enhancements in AD DS.

➤ Module 10: Identity and Access Services in Windows Server 2008 Active Directory

- Active Directory Federation Services
- Active Directory Lightweight Directory Services
- Active Directory Rights Management Services
 - Lab 1: Active Directory Federation Services
 - Install AD FS
 - Configure Certificates
 - Configure Web Server
 - Configure the Account Federation Server
 - Configure the Resource Federation Server
 - Access Application from Client Computer
 - Lab 2: Active Directory Rights Management Services
 - Install and Configure AD RMS
 - Verify AD RMS Functionality

After completing this module, students will be able to:

- Install and configure Active Directory Federation Services.
- Install and configure Active Directory Lightweight Directory Services.
- Install and configure Active Directory Rights Management Services.

➤ Module 11: Read-Only Domain Controllers

- Read-Only Domain Controllers
- Read-Only Domain Controller Operation
 - Lab: Read-Only Domain Controllers
 - Deploying an RODC
 - Administering an RODC

After completing this module, students will be able to:

- Describe the Read-Only Domain Controllers role.
- Use Read-Only Domain Controllers.

➤ Module 12: Auditing Active Directory Domain Services Changes

- What's New in AD DS Auditing
- Implementing AD DS Change Auditing
 - Lab: Using AD DS Auditing
 - Set-up AD DS Auditing
 - Create and View Auditing Events

After completing this module, students will be able to:

- Identify new features in AD DS auditing.
- Implement AD DS auditing.

➤ Module 13: Enterprise PKI Active Directory Certificate Services (AD CS)

- Certificate Authority
 - Lab: PKI Enhancements in Windows Vista and Windows Server 2008
 - Add a Certificate Server Role
 - Exploring New Enrollment UI

- Introducing CA performance monitors UI
- Exploring delegated enrollment UI
- Introducing OCSP configuration UI
- Explore Certificate Revocation

After completing this module, students will be able to:

- List improvements to Certificate Services.

➤ Module 14: High Availability Features

- Failover Clustering
- Network Load Balancing
 - Lab: High Availability Features
 - Installing a Two-Node File Server Cluster
 - Configure Network Load Balancing with IIS

After completing this module, students will be able to:

- Configure Windows Server 2008 Failover Clustering.
- Configure Windows Server 2008 Network Load Balancing.

➤ Module 15: Performance Monitoring and Optimization

- Windows Reliability and Performance Monitor
- Microsoft Windows System Resource Manager
- Monitoring Events
 - Lab: Performance Monitoring and Optimization
 - Reviewing Performance and Reliability Monitoring
 - Key Scenarios for Monitoring Performance and Reliability
 - Add Windows System Resource Manager Feature
 - Windows System Resource Manager Scenarios
 - Configure Windows System Resource Manager for Terminal Services

After completing this module, students will be able to:

- Describe the features of Windows Reliability and Performance Monitor.
- Implement server resource controls using Windows System Resource Manager.
- Describe improvements to Windows Server 2008 event monitoring tools.

➤ Module 16: Software Maintenance Using Windows Server Update Services

- Introduction to Windows Server Update Services
- Installing and Configuring Windows Server Update Services
- Managing Windows Server Update Services
 - Lab: Installing and Configuring Windows Server Update Services
 - Install Prerequisites
 - Install WSUS
 - Restore a WSUS Installation
 - Create a Computer Group and Manage Updates

After completing this module, students will be able to:

- Explain Microsoft WSUS
- Install and configure WSUS
- Manage the WSUS infrastructure