

Course Description: This five-day instructor-led course provides students with the knowledge and skills to work with Network Infrastructure and Active Directory technologies in Windows Server 2008. This course is intended for individuals who already have experience with Network Infrastructure and Active Directory technologies in Windows Server 2000 or Windows Server 2003 to upgrade their skills to Windows Server 2008.

Who Should Attend: 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. Students should also have working knowledge of networking, for example, TCP/IP and Domain Name System (DNS). In addition, students should have 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 is recommended.

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

- Install and configure Windows Server 2008.
- Add and configure Windows Server Core roles.
- Explain the new backup infrastructure, including Volume Shadow Copy Service.
- Identify new and improved networking features with Windows Server 2008.
- Configure Hyper-V virtual machines.
- Identify considerations when upgrading from a Windows Server 2003 to a Windows Server 2008 Active Directory infrastructure.
- Install and configure Active Directory Federation Services, Active Directory Lightweight Directory Services, and Active Directory Rights Management Services.
- Use Read-Only Domain Controllers.
- Identify new features in AD DS auditing.
- Implement AD DS auditing.
- Configure Windows Server 2008 Failover Clustering.
- Configure Windows Server 2008 Network Load Balancing.

Course Outline:

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

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

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

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

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

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

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

Module 8: Planning for Windows Server 2008 Active Directory Services

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

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

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

Active Directory Federation Services for identity access solution.
Active Directory Lightweight Directory Services (replaces Active Directory Account Management with Windows Server 2003), providing directory services for applications.
Active Directory Right Management Services, enabling the creation of information-protection solutions.
Active Directory Federation Services
Active Directory Lightweight Directory Services
Active Directory Rights Management Services
Lab : 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

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

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

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

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

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

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