



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

Days: 5
Format: Instructor-Led
Class Code: 6416
Certification Exams: 70-649
Certification Track: 70-649

Recommended Course Sequence

Knowledge of prerequisites noted below.

Course content is subject to change without notice.

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.

Target Student:

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.

Certification Track:

- 70-649 - TS: Upgrading Your MCSE on Windows Server 2003 to Windows Server 2008, Technology Specialist.
- Also requires course 6417 - Updating your Applications Infrastructure Technology Skills to Windows Server 2008.
- After exam 70-649 - the requirements are fulfilled for the following certifications: (MCTS): Windows Server 2008 Active Directory Configuration, (MCTS): Windows Server 2008 Network Infrastructure Configuration, (MCTS): Windows Server 2008 Application Platform Configuration.
- The MCTS certifications earned with Exam 70-649 count as credit toward the following Professional Series certifications: MCITP: Server Administrator, and MCITP: Enterprise Administrator.

Prerequisites:

Before attending this course, the student 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.

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At Course Completion:

Upon successful 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

This module explains how to install and configure Windows Server 2008. It also explores using Server Manager to work with roles, features, PowerShell and other aspects of server configuration like Automatic Updates.

Lessons
<ul style="list-style-type: none">■ Server Manager Roles.■ Windows Server 2008 Features.■ Active Directory Improvements.
Lab: Configuring Windows Server 2008
<ul style="list-style-type: none">■ Initial Configuration Tasks.■ Server Manager Console.■ Server Manager Wizards.■ Windows PowerShell.

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Module 2 : Windows Deployment Services

This module explains how to use benefits and components of Windows Deployment Services, including image capture and management.

Lessons
<ul style="list-style-type: none">■ Introducing Windows Deployment Services.■ WDS Components.
Lab: Working With Windows Deployment Services
<ul style="list-style-type: none">■ Install and Configure Windows Deployment Services.■ Working with Images.■ Creating Images.■ Using Unattend Files.

Module 3: Windows Server 2008 Server Core

This module explains how to use key functionality and benefits of a Server Core installation, including adding and configuring roles.

Lessons
<ul style="list-style-type: none">■ Server Core Introduction.■ Configuring and Managing Server Core.
Lab : Server Core
<ul style="list-style-type: none">■ Installing Windows Server Core.■ Configure Server Core.■ Add and Configure Server Roles.■ Add Backup Feature.■ Managing Server Core

Module 4: Windows Backup

This module provides an overview of the new backup infrastructure in Windows Server 2008, including Volume Shadow Copy service, scheduled vs. manual backups, media, the Universal Disk Format (UDF), and restoring data.

Lessons
<ul style="list-style-type: none">■ Backup Infrastructure.■ Optical Media.■ Restore Utilities.
Lab: Backup and Restore System Data
<ul style="list-style-type: none">■ 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

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Module 5: Windows Server 2008 Updates to Networking

This module explains how to use new and improved networking features in Windows Server 2008, including server and domain isolation, IPv6, and DNS.

Lessons
<ul style="list-style-type: none">■ 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
<ul style="list-style-type: none">■ Review the Network Center.■ Creating Domain Isolation Policies.■ Create a Centralized QoS Policy.■ Communicate with Link-Local Addresses.
Lab: DNS Management Settings
<ul style="list-style-type: none">■ Creating Zones in Windows Server 2008.■ Create Resource Records.■ Configure Zone Transfers.

Module 6: Network Policies and Access Protection

This module explains how to use Network Access Protection (NAP) and related technologies to enforce security and client health policies.

Lessons
<ul style="list-style-type: none">■ Network Policies Access Protection.■ Enforcement Options.■ Network Access Protection Scenarios.■ Routing and Remote Access.
Lab: Using Network Access Protection
<ul style="list-style-type: none">■ Configuring Network Access Protection for DHCP.■ Configuring Network Access Protection for VPN.■ Configuring Network Access Protection for IPsec.

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Module 7: Hyper-V

This module explains how to use new capabilities and architecture in Hyper-V, including integrated management functions for physical and virtual environments.

Lessons
<ul style="list-style-type: none">■ Introducing Hyper-V.■ Configuring Hyper-V.
Lab: Configuring Hyper-V
<ul style="list-style-type: none">■ Install and Configure Hyper-V.■ Configure Virtual Networks.■ Add Virtual Machines.■ Monitoring and Optimization

Module 8: Planning for Windows Server 2008 Active Directory Services

This module explains how to install and configure the Active Directory Domain Services (AD DS) server role and administering it with Server Manager. It also explores planning for deploying an Active Directory Domain Services infrastructure.

Lessons
<ul style="list-style-type: none">■ Planning for AD DS Deployment.■ Upgrade Considerations.
Lab: Installing a Windows Server 2008 Forest
<ul style="list-style-type: none">■ Install a New Forest.
Lab: Installing Windows Server 2008 in an Existing Forest
<ul style="list-style-type: none">■ Install a Windows Server 2008 DC in an Existing Forest.■ Verify Active Directory Installation.

Module 9: Active Directory Domain Services

This module explains how to create and manage accounts, subnets, Site-Links, and Group Policy with new features in Active Directory Domain Services.

Lessons
<ul style="list-style-type: none">■ What's New in AD DS.■ Manageability and Reliability.
Lab: Exploring Active Directory Domain Services
<ul style="list-style-type: none">■ Create Accounts.■ Review Operations Masters Role.■ Review Sites.■ Working with Subnets.■ Working with Site-Links.■ AD DS and Group Policy.■ Review DNS Configuration.

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

This module introduces Windows Server 2008's new Active Directory Services:

- Active Directory Federation Services for identity access solution.
- Active Directory Lightweight Directory Services (replaces Active Directory Account3 Management with Windows Server 2003), providing directory services for applications.
- Active Directory Right Management Services, enabling the creation of information protection solutions.

Lessons
<ul style="list-style-type: none">■ Active Directory Federation Services.■ Active Directory Lightweight Directory Services.■ Active Directory Rights Management Services.
Lab: Active Directory Federation Services
<ul style="list-style-type: none">■ 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

This module explains how to set up and manage a read-only domain controller.

Lessons
<ul style="list-style-type: none">■ Read-Only Domain Controllers.■ Read-Only Domain Controller Operation.
Lab: Read-Only Domain Controllers
<ul style="list-style-type: none">■ Deploying an RODC.■ Administering an RODC.

Module 12: Auditing Active Directory Domain Services Changes

This module introduces Windows Server 2008's new Active Directory Services:

Lessons
<ul style="list-style-type: none">■ What's New in AD DS Auditing.■ Implementing AD DS Change Auditing.
Lab: Using AD DS Auditing
<ul style="list-style-type: none">■ Set-up AD DS Auditing.■ Create and View Auditing Events.

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

This module explains how to set up and manage Active Directory Certificate Services using PKIView.

Lessons
<ul style="list-style-type: none">■ Certificate Authority.
Lab: PKI Enhancements in Windows Vista and Windows Server 2008
<ul style="list-style-type: none">■ 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

This module explains how to use failover clustering and network load balancing.

Lessons
<ul style="list-style-type: none">■ Failover Clustering.■ Network Load Balancing.
Lab: High Availability Features
<ul style="list-style-type: none">■ Installing a Two-Node File Server Cluster.■ Configure Network Load Balancing with IIS.

Module 15: Performance Monitoring and Optimization

This module explains how to use Windows Server 2008's performance monitoring tools, including using Windows System Resource Manager to implement server resource controls.

Lessons
<ul style="list-style-type: none">■ Windows Reliability and Performance Monitor.■ Microsoft Windows System Resource Manager.■ Monitoring Events.
Lab: Performance Monitoring and Optimization
<ul style="list-style-type: none">■ 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.

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Module 16: Software Maintenance Using Windows Server Update Services

This module introduces Microsoft Windows Server Update Services (WSUS), a tool for managing and distributing software updates that resolve known security vulnerabilities and other stability issues in Microsoft Windows 2000 and newer operating systems, as well as other Microsoft applications. This module also describes how to install the client and server components of WSUS. It also provides necessary information about managing the WSUS infrastructure.

Lessons	
<input type="checkbox"/>	Introduction to Windows Server Update Services.
<input type="checkbox"/>	Installing and Configuring Windows Server Update Services.
<input type="checkbox"/>	Managing Windows Server Update Services.
Lab: Installing and Configuring Windows Server Update Services	
<input type="checkbox"/>	Install Prerequisites.
<input type="checkbox"/>	Install WSUS.
<input type="checkbox"/>	Restore a WSUS Installation.
<input type="checkbox"/>	Create a Computer Group and Manage Updates.