

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

**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.

**Days:** 5

**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.

**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.

### 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

- Server Manager Roles
- Windows Server 2008 Features
- Active Directory Improvements

#### Lab: Configuring Windows Server 2008

### Module 2: Windows Deployment Services

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

#### Lessons

- Introducing Windows Deployment Services
- WDS Components

#### Lab: Working With Windows Deployment Services

### 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

- Server Core Introduction
- Configuring and Managing Server Core

#### Lab: 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**

- Backup Infrastructure
- Optical Media
- Restore Utilities

**Lab: Backup and Restore System Data**

**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**

- 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**

**Lab 2: DNS Management Settings**

**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**

- Network Policies Access Protection
- Enforcement Options
- Network Access Protection Scenarios
- Routing and Remote Access

**Lab: Using Network Access Protection**

**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**

- Introducing Hyper-V
- Configuring Hyper-V

**Lab: Configuring Hyper-V**

**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**

- Planning for AD DS Deployment
- Upgrade Considerations

**Lab 1: Installing a Windows Server 2008 Forest**

**Lab 2: Installing Windows Server 2008 in an Existing Forest**

**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**

- What's New in AD DS
- Manageability and Reliability

**Lab: Exploring Active Directory Domain Services**

**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 Account Management with Windows Server 2003), providing directory services for applications.

Active Directory Right Management Services, enabling the creation of information-protection solutions.

**Lessons**

- Active Directory Federation Services
- Active Directory Lightweight Directory Services
- Active Directory Rights Management Services

**Lab 1: Active Directory Federation Services****Lab 2: Active Directory Rights Management Services****Module 11: Read-Only Domain Controllers**

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

**Lessons**

- Read-Only Domain Controllers
- Read-Only Domain Controller Operation

**Lab: Read-Only Domain Controllers****Module 12: Auditing Active Directory Domain Services Changes**

This module explores new auditing features in Active Directory Domain Services and how to set up and manage auditing events.

**Lessons**

- What's New in AD DS Auditing
- Implementing AD DS Change Auditing

**Lab: Using AD DS Auditing****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**

- Certificate Authority

**Lab: PKI Enhancements in Windows Vista and Windows Server 2008****Module 14: High Availability Features**

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

**Lessons**

- Failover Clustering
- Network Load Balancing

**Lab: High Availability Features****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**

- Windows Reliability and Performance Monitor
- Microsoft Windows System Resource Manager
- Monitoring Events

**Lab: Performance Monitoring and Optimization****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**

- 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****Upcoming Classes**

May 21, 2012 - May 25, 2012

Jun 25, 2012 - Jun 29, 2012

Jul 30, 2012 - Aug 03, 2012

Sep 10, 2012 - Sep 14, 2012

Oct 15, 2012 - Oct 19, 2012