



Course 6430B:

Planning for Windows Server 2008 servers

Length: 3 Days
Language(s): English
Audience(s): IT Professionals
Level: 300
Technology: Windows Server 2008
Type: Course
Delivery Method: Instructor-led (classroom)

A course towards becoming:

Microsoft
CERTIFIED
IT Professional

Server Administrator

About this Course

This 3-day course is intended for IT pros who are interested in the knowledge and skills necessary to plan a Windows Server 2008 operating system infrastructure. This course is aimed at server administrators and is not a “how-to” course; therefore, it has a significant number of planning exercises with less focus on hands-on exercises than some courses. The course content and exercises direct you toward making decisions and providing guidance to others. This course reflects the decision-making tasks that a server administrator undertakes.

Audience Profile

This course is intended for a server administrator who:

- Is moving from a technical-specialist role to a decision-making role.
- Wants to acquire the necessary knowledge to be able to plan for Windows Server 2008 servers.

Microsoft
GOLD CERTIFIED
Partner

nuclei

Key Component of FRCI
Sibotie House - L'Anse Courtois - Pailles - Mauritius
T: (230) 286 96 36 - F: (230) 286 96 29
E: info@nuclei.mu - www.nuclei.mu



At Course Completion

After completing this course, students will be able to:

- Plan for both Windows Server 2008 installation and upgrade from a previous version of Windows Server to Windows Server 2008.
- Plan and implement network connectivity in Windows Server 2008 by using IPv4-related technologies and plan a migration strategy to IPv6.
- Plan the deployment of Active Directory-related services in Windows Server 2008.
- Apply the design considerations for implementing group policy.
- Plan the configuration of different applications services in Windows Server 2008.
- Create a plan for file and print services to meet an organization's printing, file storage, and access needs.
- Create a plan to secure the Windows Server 2008 environment.
- Create local and remote administration strategies for administering a Windows Server 2008 environment.
- Create a monitoring plan for the Windows Server 2008 environment.
- Create a plan that will help mitigate the effects of various disaster scenarios on the IT infrastructure.
- Create a plan for using virtualization in a Windows Server 2008 environment

Pre-requisites

Before attending this course, students must have:

- Skills equivalent to course 6418A (deployment)-Installation and configuration of Windows Server 2008, Windows Deployment Services, Active Directory directory service upgrades
- Skills equivalent to course 6420A (networking fundamentals)- TCP/IP configuration, server administration, network and data security
- Skills equivalent to course 6421A (core network infrastructure training)- Domain Name System (DNS) configuration, Windows Internet Name Service (WINS) configuration, IPv6 transition, remote access, network policies, Network Access Protection (NAP), Distributed File System (DFS)
- Skills equivalent to course 6424A (Active Directory fundamentals)- Configure Active Directory Domain Services (AD DS), configure Active Directory Lightweight Directory



Services (AD LDS), configure Active Directory Certificate Services (AD CS), configure Active Directory Federation Services (AD FS), create users and groups

- Skills equivalent to course 6425A (core Active Directory training)- Configure AD DS security, trusts, sites, replication, Group Policy
- Up to one year experience implementing server plans.

Additional Reading

To help you prepare for this class, review the following resources:

- Read the additional readings and references included on the Course Companion CD.
- Practice using the Microsoft product(s) and tools associated with Course 6430B, Planning for Windows Server 2008 Servers.
- Practice setting up the classroom by following the instructions in the Microsoft Virtual Server Classroom Setup Guide or the Microsoft Virtual Machine Build Guide.
- Review the Windows Server 2008 Web site at <http://go.microsoft.com/fwlink/?LinkId=123286> for updated information.
- Review the Course 6430B, Planning for Windows Server 2008 Servers error log, which is available in the Microsoft Download Center.



Course Outline

Module 1: Planning Windows Server 2008 Deployment

This module explains how to plan the deployment of Windows Server 2008 servers.

Lessons

- Overview of Change Management
- Planning a Single-Server Installation
- Performing a Single-Server Installation
- Automating Windows Server Deployment

Lab: Planning Windows Server 2008 Deployment

- Exercise 1: Creating a Planning Flowchart for a Windows Server 2008 Deployment
- Exercise 2: Planning a Windows Server 2008 Deployment

After completing this module, students will be able to:

- Describe how change management affects a deployment project
- Plan the deployment of a single computer running Windows Server 2008
- Describe how to perform a single-server installation
- Determine how to automatically deploy Windows Server 2008

Module 2: Planning Network Infrastructure for Windows Server 2008

This module explains how to plan the network infrastructure for Windows Server 2008 servers.

Lessons

- Planning IPv4 Addressing
- Planning for Name Resolution Services
- Determining the Need for WINS
- Planning a Perimeter Network
- Planning an IPv4 to IPv6 Transition Strategy



Lab: Planning Network Infrastructure for Windows Server 2008

- Exercise 1: Determining an Appropriate Network Addressing Scheme
- Exercise 2: Planning the Placement of Network Servers
- Exercise 3: Implementing the Planned Network Services

After completing this module, students will be able to:

- Plan an IPv4 addressing strategy.
- Plan the deployment and configuration of DNS servers.
- Determine how to handle NetBIOS names within your organization.
- Place appropriate servers in your perimeter network.
- Plan an IPv4 to IPv6 transition strategy

Module 3: Planning for Active Directory

This module explains how to plan the Active Directory environment.

Lessons

- Selecting a Domain and Forest Topology
- Selecting a Domain and Forest Functional Level
- Planning Identity and Access Services in Active Directory
- Implementing Active Directory in the Physical Network

Lab: Implementing Active Directory in the Physical Network

- Exercise 1: Selecting a Forest Topology
- Exercise 2: Planning Active Directory for a Branch Network
- Exercise 3: Deploying a Branch Domain Controller

After completing this module, students will be able to:

- Select an appropriate Active Directory topology.
- Configure the domain and forest functional level.
- Describe Active Directory identity and access services.
- Configure Active Directory to support your physical network.



Module 4: Planning for Group Policy

This module explains how to plan for Group Policy in a Windows Server 2008 network.

Lessons

- Planning Group Policy Application
- Planning Group Policy Processing
- Planning the Management of Group Policy Objects
- Planning the Management of Client Computers

Lab: Planning for Group Policy

- Exercise 1: Creating a Group Policy Plan
- Exercise 2: Implementing Group Policy

After completing this module, students will be able to:

- Plan group policy application.
- Plan group policy processing.
- Plan the management of group policy objects.
- Plan the management of client computers.

Module 5: Planning Application Servers

This module explains how to plan for application servers in a Windows Server 2008 network.

Lessons

- Overview of Application Servers
- Supporting Web-Based Applications
- Supporting SQL Server Databases
- Deploying Client Applications
- Planning Terminal Services

Lab: Planning Application Servers

- Exercise 1: Creating a Plan for Application Servers
- Exercise 2: Implementing Windows SharePoint Services
- Exercise 3: Implementing Terminal Services





After completing this module, students will be able to:

- Describe application servers.
- Plan support for Web-based applications.
- Plan support for SQL Server databases.
- Plan the deployment of client applications.
- Plan the implementation of Terminal Services.

Module 6: Planning File and Print Services

This module explains how to plan for File and Print services in your Windows Server 2008 environment.

Lessons

- Planning and Deploying the File Services Role
- Managing Storage
- Planning and Implementing the Distributed File System
- Planning and Implementing Shared Printing

Lab: Planning File and Print Services

- Exercise 1: Planning File and Print Services for a Branch Office
- Exercise 2: Implementing File and Print Services in a Branch Office

After completing this module, students will be able to:

- Plan and deploy the Windows Server 2008 File Services role
- Manage storage effectively
- Implement an appropriate Distributed File System infrastructure
- Implement shared printing

Module 7: Planning Server and Network Security

This module explains how to plan for server and network security in a Windows Server 2008 network.



Lessons

- Overview of Defense-in-Depth
- Planning for Windows Firewall with Advanced Security
- Planning Protection Against Viruses and Malware
- Managing Remote Access
- Planning for Network Access Protection (NAP)

Lab: Planning Server and Network Security

- Exercise 1: Creating a Plan for Server and Network Security
- Exercise 2: Implementing Windows Firewall Rules

After completing this module, students will be able to:

- Describe Defense-in-Depth
- Plan for Windows Firewall with Advanced Security
- Plan protection against viruses and malware
- Manage remote access
- Plan for NAP

Module 8: Planning Server Administration

This module explains how to plan for effective administration of a Windows Server 2008 network.

Lessons

- Selecting the Appropriate Administration Tool
- Planning Server Core Administration
- Delegating Administration

Lab: Planning Server Administration

- Exercise 1: Planning for Branch Office Administration
- Exercise 2: Delegating Administration to Branch Office Personnel

After completing this module, students will be able to:

- Select an appropriate administrative tool for a given situation.





- Determine where to deploy Server Core servers.
- Delegate administrative tasks.

Module 9: Planning and Implementing Monitoring and Maintenance

This module explains how to plan for and implement monitoring and maintenance in a Windows Server 2008 network.

Lessons

- Planning Monitoring Tasks
- Calculating a Server Baseline
- Tools for Monitoring Server Performance
- Planning Software Updates

Lab: Planning and Implementing Monitoring and Maintenance

- Exercise 1: Evaluating Performance Metrics
- Exercise 2: Monitoring Performance Metrics
- Exercise 3: Configuring Data Collector Sets
- Exercise 4: Evaluating Trends

After completing this module, students will be able to:

- Plan monitoring tasks.
- Calculate a server performance baseline.
- Select the appropriate monitoring and maintenance tool.
- Plan software updates.

Module 10: Planning High Availability and Disaster Recovery

This module explains how to plan for high availability and disaster recovery in a Windows Server 2008 environment.

Lessons

- Choosing a High-Availability Solution
- Planning a Backup and Restore Strategy





Lab: Planning High Availability and Disaster Recovery

- Exercise 1: Planning for Branch Office High Availability and Data Recovery
- Exercise 2: Implementing the High Availability and Disaster Recovery Plan

After completing this module, students will be able to:

- Select a high-availability solution.
- Select an appropriate backup and restore strategy.

Module 11: Planning Virtualization

This module explains how to plan virtualization to increase the efficiency and availability of applications and services.

Lessons

- Overview of Server Virtualization
- Business Scenarios for Server Virtualization
- Overview of System Center Virtual Machine Manager
- Planning Host Resources

Lab: Planning Virtualization

- Exercise 1: Creating a Virtualization Plan
- Exercise 2: Implementing Virtualization (Optional)

After completing this module, students will be able to:

- Describe virtualization and the technologies that can be used to implement virtualization.
- Describe the business scenarios for virtualization.
- Describe how System Center Virtual Machine Manager can be used to manage a virtual environment.
- Plan host resources.