

6430 – Planning for Windows Server 2008 Servers

Vendor Course Code: MS6430

Course Length: 3 days

Overview:

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.

Skills Gained:

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 organisation’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 virtualisation in a Windows Server 2008 environment.

Key Topics:

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 organisation.
- 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 Server

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 Defence-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 Defence-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 Virtualisation

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

Lessons
Overview of Server Virtualisation
Business Scenarios for Server Virtualisation
Overview of System Centre Virtual Machine Manager
Planning Host Resources

Lab : Planning Virtualisation
Exercise 1: Creating a Virtualisation Plan
Exercise 2: Implementing Virtualisation (Optional)

After completing this module, students will be able to:

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

Target Audience:

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.

Prerequisites:

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