

Planning and Administering Windows Server 2008 Servers

Course 6430A: Five days; Instructor-Led

Introduction

This five-day instructor-led course provides students with the knowledge and skills to implement, monitor, and maintain Windows Server 2008 servers.

Audience

This course is intended for entry-level server administrators or information technology (IT) professionals who are interested in becoming server administrators as the next step in their career path.

At Course Completion

After completing this course, students will be able to:

- Plan a Windows Server 2008 deployment.
- Plan and implement server commissioning and decommissioning for Windows Server 2008.
- Plan the installation of server roles for Windows Server 2008.
- Create a configuration change plan for Windows Server 2008.
- Plan and implement Windows Server 2008 security.
- Manage application versioning in Windows Server 2008.
- Plan for a high-availability Windows Server 2008 deployment.
- Plan a server update maintenance schedule for Windows Server 2008.
- Maintain a Distributed File System (DFS) in Windows Server 2008.
- Define server backup requirements and policies for Windows Server Backup.
- Plan and implement a Windows Server 2008 restore.
- Plan Windows Server 2008 monitoring.
- Troubleshoot hardware issues.
- Troubleshoot software issues.
- Troubleshoot network issues.

Prerequisites

Before attending this course, students should have up to one year of experience with implementing server plans although they have probably not yet had full responsibility for planning.

This course requires that students meet the following prerequisites:

- A strong familiarity with Windows deployment technologies and implementation.
- A strong familiarity with Windows networking technologies and implementation.
- A strong familiarity with Active Directory directory service technologies and implementation.

Recommended Courses

- Course 6418A: Deploying Windows Server 2008
- Course 6420A: Fundamentals of Windows Server 2008 Network and Applications Infrastructure
- Course 6421A: Configuring and Troubleshooting a Windows Server 2008 Network Infrastructure
- Course 6424A: Fundamentals of Windows Server 2008 Active Directory
- Course 6425A: Configuring Windows Server 2008 Active Directory Domain Services

Course Outline

Module 1: Planning for Windows Server 2008 Deployment

This module explains how to deploy Windows Server 2008.

Lessons

- Overview of Windows Server 2008 Deployment
- Identifying Windows Server 2008 Compatibility Issues
- Developing a Windows Server 2008 Deployment Plan

Lab: Planning for a Windows Server 2008 Server Deployment

- Reviewing the Existing Server Environment
- Reviewing Business Requirements and SLAs
- Creating a Deployment Plan
- Reviewing Deployment Plans

After completing this module, students will be able to:

- Explain the advantages of deploying Windows Server 2008.
- Identify Windows Server 2008 compatibility issues.
- Develop a Windows Server 2008 deployment plan.

Module 2: Managing Server Migration

This module explains how to commission and decommission Windows Server 2008.

Lessons

- Creating a Windows Server 2008 Deployment Plan
- Planning the Server Decommissioning Process
- Commissioning a Windows Server 2008 File Server

Lab: Migrating a Server to Windows Server 2008

- Reviewing the Existing Server Environment
- Planning for a Windows Server 2008 Server
- Reviewing Deployment Plans
- Deploying a Windows Server 2008 DNS Server

After completing this module, students will be able to:

- Create a deployment plan for Windows Server 2008.
- Identify server decommissioning steps.
- List Windows Server 2008 deployment and migration tools.

Module 3: Planning Windows Server 2008 Server Roles

This module explains how to plan the installation of server roles in Windows Server 2008.

Lessons

- Planning for Windows Server 2008 Hardware
- Combining Windows Server 2008 Server Roles
- Planning for Windows Server 2008 File Servers
- Planning for Windows Server 2008 Server Core
- Planning for Windows Server 2008 Hyper-V

Lab: Planning Windows Server 2008 Servers

- Planning a Windows Server 2008 Server Configuration
- Planning a Windows Server 2008 File Server
- Deploying a Windows Server 2008 File Server

After completing this module, students will be able to:

- Identify hardware configuration options for Windows Server 2008.
- Identify performance implications when combining server roles.
- List guidance for installing file servers.
- Plan for Windows Server 2008 Server Core.
- Plan for Windows Server 2008 Hyper-V.

Module 4: Creating a Configuration Change Plan for Windows Server 2008

This module explains how to create a configuration change plan in Windows Server 2008.

Lessons

- Developing a Change Control Process

- Developing Configuration Changes
- Reviewing Configuration Changes

Lab: Creating a Configuration Change Plan

- Completing a Change Request Form
- Sharing Best Practice
- Implementing a New Print Server

After completing this module, students will be able to:

- Design a change control process for implementing configuration changes.
- Plan for configuration changes.
- Evaluate the success of configuration changes.

Module 5: Managing Windows Server 2008 Security

This module explains how to plan and implement security in Windows Server 2008.

Lessons

- Planning a Defense-in-Depth Strategy
- Implementing Host-Level Security for Windows Server 2008
- Implementing Network Security for Windows Server 2008

Lab: Managing Windows Server 2008 Security

- Planning a Windows Server 2008 Security Configuration
- Implementing File Server Security

After completing this module, students will be able to:

- Plan a defense-in-depth strategy for Windows Server 2008 security.
- Implement host-level security for Windows Server 2008.
- Implement network security for Windows Server 2008.

Module 6: Planning for the Application Server Role

This module explains how to manage versioning and related frameworks in Windows Server 2008.

Lessons

- Determining Application Server Role Requirements
- Overview of the Application Server Role Components
- Supporting the .NET Framework

Lab: Planning for the Application Server Role

- Identifying the Application Server Role Services That Are Required to Support the Application
- Determining Whether There Are Any Compatibility Issues with Existing Applications on the Server
- Configuring the Application Server

After completing this module, students will be able to:

- Determine the requirement for application servers.
- Identify application server role components.
- Plan for supporting the Microsoft .NET Framework.

Module 7: Planning for Windows Server 2008 High Availability

This module explains how to plan for high availability in Windows Server 2008.

Lessons

- Planning for Network Load Balancing
- Overview of Failover Clustering in Windows Server 2008
- Creating Clusters in Windows Server 2008

Lab: Planning for Failover Clusters in Windows Server 2008

- Planning Hardware Requirements for Windows Server 2008
- Planning for Network Load Balancing
- Planning for a High-Availability LOB Application
- Implementing Network Load Balancing

After completing this module, students will be able to:

- Develop a plan for network load balancing (NLB).
- Describe the improved failover clustering support in Windows Server 2008.
- Plan for failover clustering in Windows Server 2008.

Module 8: Maintaining Windows Server 2008 Servers

This module explains how to plan a server update maintenance schedule in Windows Server 2008.

Lessons

- Overview of Windows Server 2008 Management Tasks
- Planning for Security Update Management
- Automating Windows Server 2008 Maintenance

Lab: Developing a Maintenance Plan for Windows Server 2008

- Evaluating Log Files and Reports
- Planning the Maintenance Schedule
- Automating Maintenance Tasks

After completing this module, students will be able to:

- Create a server management task schedule for Windows Server 2008.
- Plan for security update management plan by using Windows Server Update Services (WSUS).
- List automated maintenance tools for Windows Server 2008.

Module 9: Maintaining a Distributed File System on Windows Server 2008

This module explains how to maintain a DFS on Windows Server 2008.

Lessons

- Planning Components Required for DFS
- Planning for High Availability in DFS
- Tools for Managing DFS

Lab: Planning for DFS

- Evaluating the Existing Server Environment
- Deployment Considerations for DFS
- Designing a High-Availability DFS Solution
- Implementing a High-Availability DFS Solution

After completing this module, students will be able to:

- Identify services that are required for DFS.
- Explain DFS fault tolerance.
- Identify DFS management tools.

Module 10: Planning for Windows Server 2008 Backup

This module explains how to define backup requirements and policies for administering Windows Server 2008.

Lessons

- Planning Backups with Windows Server 2008
- Planning Backup Policy on Windows Server 2008

Lab: Planning Windows Server 2008 Backup Policy

- Evaluating the Existing Backup Plan
- Updating the Backup Policy
- Reviewing Backup Policy and Plans
- Implementing the Backup Policy

After completing this module, students will be able to:

- Create a backup and recovery plan by using Windows Server Backup.
- Develop a backup policy for using Windows Server Backup.

Module 11: Managing Windows Server 2008 Restore

This module explains how to plan and implement a Windows Server 2008 restore.

Lessons

- Planning a Server Restore Policy
- Planning an EFS Restore Policy
- Verifying Restored Data

Lab: Planning Windows Server 2008 Restore

- Evaluating Backup Data
- Planning a Restore
- Investigating a Failed Restore
- Restoring System State Data

After completing this module, students will be able to:

- Create a server restore plan.
- Create a plan for restoring Encrypting File System (EFS) files.
- Verify the restore procedure.

Module 12: Monitoring Windows Server 2008 Servers

This module explains how to plan for monitoring Windows Server 2008.

Lessons

- Planning Monitoring Tasks
- Calculating a Server Baseline
- Measuring Performance Objects
- Selecting Appropriate Monitoring Tools
- Planning Notification Methods

Lab: Identifying Windows Server 2008 Monitoring Requirements

- Evaluating Performance Metrics
- Monitoring Performance Metrics
- Configuring Data Collector Sets
- Evaluating Trends
- Monitoring Extension Exercise

After completing this module, students will be able to:

- Plan monitoring tasks.
- Determine an appropriate server baseline.
- Determine objects and counters to monitor based on server role.
- Select the appropriate monitoring tools.
- Identify appropriate notification methods.

Module 13: Troubleshooting Windows Server 2008 Hardware

This module explains how to troubleshoot hardware issues in Windows Server 2008.

Lessons

- Identifying Hardware Support Issues
- Handling Hardware Component Failures
- Handling Device Driver Failures

Lab: Troubleshooting Hardware Issues

- Troubleshooting Network Connectivity
- Troubleshooting Disk Problems
- Planning for Future Capacity Requirements
- Reviewing Troubleshooting Plans

After completing this module, students will be able to:

- Identify hardware issues.

- Explain hardware component failure.
- Manage device driver failure.

Module 14: Troubleshooting Software Problems

This module explains how to troubleshoot software issues in Windows Server 2008.

Lessons

- Planning for Business Continuity
- Reviewing Log Files
- Reviewing Core Operating System Components
- Evaluating Security Issues

Lab: Troubleshooting Software on Windows Server 2008

- Resolving Driver Update Issues
- Rolling Back an Update
- Creating a Plan to Resolve Version Incompatibilities
- Reconfiguring Software Settings

After completing this module, students will be able to:

- Evaluate the effect of software problems.
- Identify troubleshooting log files.
- Identify core operating system components.
- Evaluate software security issues.

Module 15: Troubleshooting Windows Server 2008 Networks

This module explains how to troubleshoot network issues in Windows Server 2008.

Lessons

- Analyzing the Scale of Network Issues
- Correcting IP Connectivity Issues
- Resolving Names in Windows Server 2008

Lab: Troubleshooting Network Problems

- Resolving Server Connectivity Problems
- Resolving Name Resolution Problems
- Resolving Slow Server Response Times

After completing this module, students will be able to:

- Identify common types of network problems.
- Resolve IP connectivity issues.
- Resolve name resolution issues.