

Managing and Maintaining Windows Server 2008 Servers



Course 6430A: Five days; Instructor-Led Preliminary Course Syllabus

Note: You are viewing a Preliminary Course Syllabus. This course is not yet available. Because some parts of the course are currently in development, some elements of this syllabus are subject to change.

Introduction

Elements of this syllabus are subject to change.

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 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 Distributed File System (DFS) in Windows Server 2008.
- Define server backup requirements and policies for Windows Server 2008 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 1 year experience implementing server plans although 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 technologies and implementation.

Recommended Courses

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

Course Outline

Module 1: Planning for Windows Server 2008 Deployment

Course Outline

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
- Discussion – Reviewing the 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 File Server to Windows Server 2008

- Reviewing the Existing Server Environment
- Planning for the Windows Server 2008 File Server
- Deploying a Windows Server 2008 File Server
- Verifying the Windows Server 2008 File Server Deployment

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
- Planning for Windows Server 2008 Server Roles
- Planning for Windows Server 2008 File Servers
- Planning for Windows Server 2008 Core

Lab: Planning Windows Server 2008 Servers

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

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.

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
- Planning configuration changes
- Evaluating configuration changes

Lab: Creating a Configuration Change Plan

- Plan a Windows Server 2008 server configuration
- Discussion – Sharing best practice

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 server security by using Group Policies
- 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 server security by using Group Policy.
- Implement network security for Windows Server 2008 servers.

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 server roles required to support a LOB application
- Identifying .NET framework requirements
- Planning security requirements for the application

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 support 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 failover clusters
- Planning for Network Load Balancing
- Planning for a high availability LOB application

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

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
- Reviewing the maintenance plan

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 Distributed File System (DFS) on Windows Server 2008

Lessons

- Planning components required for DFS
- Planning for fault tolerance in DFS
- Tools for managing DFS

Lab: Planning for DFS

- Evaluating the existing server environment
- Deployment considerations for DFS
- Designing a fault tolerant DFS solution

After completing this module, students will be able to:

- Identify services required for Distributed File System (DFS).
- Explain DFS fault tolerance.
- Identify DFS management tools.

Module 10: Planning Windows Server 2008 Backup

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

Lessons

- Plan Backups by Using the Windows Server 2008 Backup Feature
- Plan a backup policy for Windows Server 2008

Lab: Managing Windows Server 2008 Backup

- Evaluating the existing backup plan
- Updating the backup policy
- Reviewing backup policy and plans
- Backing up a server

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 a 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 the backup data
- Planning a restore including System State Data
- Investigating a failed restore

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 Microsoft 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
- Remote monitoring extension

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 Microsoft Windows Server 2008 Hardware

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

Lessons

- Identifying hardware support issues
- Dealing with physical failures
- Dealing with device driver failures

Lab: Troubleshooting Hardware Issues

- Evaluating disk issues
- Planning for server availability
- Planning for future capacity requirements
- Discussion – Server Hardware Issues

After completing this module, students will be able to:

- Identify hardware issues.
- Explain physical component failure.
- Manage device driver failure.

Module 14: Troubleshooting Microsoft Windows Server 2008 Software

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

Lessons

- Planning for business continuity
- Reviewing log files
- Reviewing core OS components
- Evaluating security issues

Lab: Troubleshooting Software Issues

- Resolving driver update issues
- Rolling back a patch
- Fixing 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 Microsoft 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 15: Troubleshooting Network Problems

- Resolving high network usage issues
- 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.