



Final Course Syllabus

Maintaining a Microsoft Windows Server 2003 Environment

Elements of this syllabus are subject to change.

This three-day instructor-led course provides students with the knowledge and skills that are needed to effectively maintain server resources, monitor server performance, and safeguard data on a computer running one of the operating systems in the Microsoft® Windows® Server 2003 family.

Key Data

Course #: 2275

Number of Days: 3

Format: Instructor-Led

Certification Exam:

This course helps you prepare for the following Microsoft Certified Professional exam:

- 70-290: *Managing and Maintaining a Microsoft Windows Server 2003 Environment*

Certification Track: MCSA, MCSE

Audience

This course is intended for individuals who are employed as or seeking employment as a systems administrator or systems engineer.

At Course Completion

After completing this course, students will be able to:

- Prepare to administer server resources.
- Configure a server to monitor system performance.
- Monitor system performance.
- Manage device drivers by configuring device driver signing and restoring a device driver.
- Manage hard disks.
- Manage data storage.
- Manage disaster recovery.
- Maintain software by using Microsoft Software Update Services.

Prerequisites

Before attending this course, students must have completed Course 2274, *Managing a Microsoft Windows Server 2003 Environment*, or have equivalent knowledge and skills.

Student Materials

The student kit includes a comprehensive workbook and other necessary materials for this class.

This course syllabus should be used to determine whether the course is appropriate for the students, based on their current skills and technical training needs.

Course content, prices, and availability are subject to change without notice.

For a referral to a Microsoft Certified Technical Education Center in your area, see the Microsoft Training and Certification Web site at <http://www.microsoft.com/traincert>. Call your local Microsoft Certified Technical Education Center for more information and to register for classes.

Module 1: Preparing to Administer a Server

This module explains how to administer a server. It describes how to manage servers remotely, what tools to use, and the rights and permissions that are needed to administer a server.

Lessons
<ul style="list-style-type: none">Administering a ServerConfiguring Remote Desktop to Administer a ServerManaging Remote Desktop Connections
Lab A: Preparing to Administer a Server
<ul style="list-style-type: none">Creating a Shared Folder on a Remote ComputerDefragmenting a Disk on a Remote ComputerConnecting to a Remote Console SessionCreating Shortcuts to Administration Tools

After completing this module, students will be able to:

- Explain the tasks, tools, and rights that are required to administer a server.
- Configure Remote Desktop for Administration and client preferences.
- Manage remote desktop connections.

Module 2: Preparing to Monitor Server Performance

This module explains how to monitor server performance by using performance tools, configure and manage performance logs, configure and manage alerts, and manage system monitor views.

Lessons
<ul style="list-style-type: none">Introduction to Monitoring Server PerformancePerforming Real-Time and Logged MonitoringConfiguring and Managing Counter LogsConfiguring Alerts
Lab A: Preparing to Monitor Server Performance
<ul style="list-style-type: none">Selecting the Appropriate Monitoring Technique

After completing this module, students will be able to:

- Establish a performance baseline.
- Perform real-time and logged monitoring.
- Configure and manage counter logs.
- Configure alerts.

Module 3: Monitoring Server Performance

This module explains how to collect performance data by monitoring primary server subsystems. It also covers how to identify system bottlenecks by using the Performance console and Task Manager in Microsoft Windows Server 2003.

Lessons
<ul style="list-style-type: none">▪ Monitoring Server Memory▪ Monitoring Processor Usage▪ Monitoring Disks▪ Monitoring Network Usage
Lab A: Monitoring Server Performance
<ul style="list-style-type: none">▪ Starting Performance with Administrative Controls▪ Configuring System Monitor to Track High CPU Usage▪ Creating and Configuring an Alert in Performance Logs and Alerts to Track High CPU Usage▪ Enabling the Messenger Service▪ Testing the High CPU Usage Alert

After completing this module, students will be able to:

- Explain how the four primary server subsystems affect server performance.
- Monitor server memory.
- Monitor processor usage.
- Monitor disks.
- Monitor network usage.
- Identify the guidelines for using counters and thresholds.
- Describe the best practices for monitoring server performance.

Module 4: Maintaining Device Drivers

This module explains how to maintain device drivers.

Lessons
<ul style="list-style-type: none">▪ Configuring Device Driver Signing Options▪ Using Device Driver Rollback
Lab A: Maintaining Device Drivers
<ul style="list-style-type: none">▪ Viewing the Current File Signature Verification Setting▪ Modifying the Default Setting▪ Adding a Computer to the Organizational Unit▪ Verifying the New File Signature Verification Setting

After completing this module, students will be able to:

- Configure device driver signing.
- Restore the previous version of a device driver.

Module 5: Managing Disks

This module explains how to manage disks and how to use the tools to manage and set up disks.

Lessons
<ul style="list-style-type: none">▪ Preparing Disks▪ Managing Disk Properties▪ Managing Mounted Drives▪ Converting Disks▪ Creating Volumes▪ Importing a Foreign Disk
Lab A: Managing Disks
<ul style="list-style-type: none">▪ Mounting Drive E to D:\Graphics▪ Changing Drive Letter D to X▪ Removing Mounted Drive E▪ Changing Drive Letter X to D

After completing this module, students will be able to:

- Initialize and partition a disk.
- View and update disk properties.
- Manage mounted drives.
- Create volumes on a disk.
- Convert a disk from basic to dynamic and from dynamic to basic.
- Import disks.

Module 6: Managing Data Storage

This module explains the Encrypting File System (EFS), which contributes to the safe storage of data and helps to keep the network from harm. It also explains how to administer disk quotas.

Lessons
<ul style="list-style-type: none">▪ Managing File Compression▪ Configuring File Encryption▪ Implementing Disk Quotas
Lab A: Managing Data
<ul style="list-style-type: none">▪ Configuring Disk Quota Entries▪ Exporting Disk Quota Entries▪ Importing Disk Quota Entries▪ Compressing a Folder▪ Encrypting a Folder

After completing this module, students will be able to:

- Manage NTFS file compression.
- Configure file encryption.
- Implement disk quotas.

Module 7: Managing Disaster Recovery

This module explains how to plan for a computer disaster and how to use the features of Windows Server 2003 to prevent a disaster or recover when one occurs.

Lessons
<ul style="list-style-type: none">▪ Preparing for Disaster Recovery▪ Backing Up Data▪ Scheduling Backup Jobs▪ Restoring Data▪ Recovering from Server Failure▪ Selecting Disaster Recovery Methods
Lab A: Managing Disaster Recovery
<ul style="list-style-type: none">▪ Installing the Recovery Console▪ Backing Up the System State Data▪ Creating a Windows Startup Disk▪ Recovering from a Corrupt Registry▪ Recovering from a Corrupt Boot File

After completing this module, students will be able to:

- Prepare for disaster recovery.
- Back up data.
- Schedule backup jobs.
- Restore data.
- Configure a shadow copy.
- Recover from server failure.
- Select a disaster recovery method.

Module 8: Maintaining Software by Using Software Update Services

This module explains how to use Microsoft Software Update Services to manage and distribute critical software updates that resolve known security vulnerabilities and other stability issues.

Lessons
<ul style="list-style-type: none">▪ Introduction to Software Update Services▪ Installing and Configuring Software Update Services▪ Managing a Software Update Services Infrastructure
Lab A: Maintaining Software by Using Software Update Services
<ul style="list-style-type: none">▪ Creating a Group Policy Object to Configure Automatic Updates▪ Preparing Sample Software Update Packages for Your Clients▪ Verifying the Updates Are Available to the Clients

After completing this module, students will be able to:

- Explain Microsoft Software Update Services.
- Install and configure client computers to use Software Update Services.
- Install and configure servers to use Software Update Services.
- Manage the Software Update Services infrastructure.

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