

## **Microsoft 2596**

# **Managing Microsoft Systems Management Server 2003**

**Course Length: 5 Days**

### **Introduction**

This five-day instructor-led course provides students with the knowledge and skills to manage Microsoft Systems Management Server (SMS). Students will learn how to configure SMS components and how to manage the ongoing operations of an SMS infrastructure.

### **Audience**

This course is intended for SMS Administrators who are responsible for configuring and managing one or more SMS sites and all supporting systems. They have one to three years of experience supporting multiple desktop and server computers running Microsoft Windows® 2000 or Windows 2003 in medium to large enterprise organizations.

### **At Course Completion**

After completing this course, students will be able to:

- Describe the features and infrastructure of Systems Management Server 2003 (SMS).
- Configure a site system.
- Deploy SMS clients.
- Discover SMS resources.
- Collect inventory and monitor software usage.
- Query and report data.
- Distribute software.
- Implement Software Update Tools.
- Use SMS Remote Tools for client support.
- Perform site maintenance, backup, and recovery tasks.

### **Microsoft Certified Professional Exams**

No Microsoft Certified Professional exams are associated with this course currently.

### **Prerequisites**

Before attending this course, students must have:

- Completed course 2277, Implementing, Managing, and Maintaining a Microsoft Windows Server 2003 Network Infrastructure: Network Services, or equivalent knowledge.
- Completed course 2272, Implementing and Supporting Microsoft Windows XP Professional, or equivalent knowledge.
- System administrator–level working knowledge of:
  - Deployment, configuration, and troubleshooting for Windows-based personal computers
  - TCP/IP networking
  - SQL Server™
  - Active Directory® directory servi

## Course Materials

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

## Course Outline

### Module 1: Overview of Systems Management Server 2003

Microsoft Systems Management Server (SMS) 2003 provides powerful desktop administration tools for managing hardware inventory, software inventory, software distribution, and remote client troubleshooting. As an SMS administrator, you will need to know how to configure and manage these tools. This module introduces the key features of SMS 2003, explains differences between SMS 2.0 and SMS 2003, and describes the primary components of the SMS 2003 infrastructure.

Lessons:

- Where SMS Fits in the Windows Server System
- Describing How SMS 2003 Features Provide Change and Configuration Management
- Explaining SMS Hierarchies
- Explaining SMS Site-to-Site Communication
- Explaining SMS Site and Roaming Boundaries
- Discussion: Overview of Systems Management Server 2003

Practices

- Identifying Products in the Windows Server System
- Describing the Features of SMS
- Identifying SMS Site Roles
- Identifying Site-to-Site Communication Considerations
- Identifying SMS Site Boundaries

After completing this module, students will be able to:

- Describe the position of SMS in the Windows Server System.
- Describe the features of SMS 2003 and how they provide change and configuration management.
- Describe SMS site hierarchies.
- Describe SMS site-to-site communication.
- Describe the role of SMS site boundaries and roaming boundaries.

### Module 2: Exploring SMS Site Architecture

In this module, you will learn how Microsoft Systems Management Server (SMS) 2003 is implemented as a site. You will explore the properties of the principal site system—the SMS site server. You will learn how to install and use the SMS Administrator console and other tools that allow administration and support of an SMS implementation. You will also learn about the new role of the Active Directory directory service in SMS and how SMS uses related technologies such as Background Intelligent Transfer Service (BITS), Microsoft Windows Management Instrumentation (WMI), and the Windows Installer (MSI).

Lessons:

- Introduction to the SMS Site Server
- Exploring the SMS Administrator Console and the SMS 2003 Toolkit 1

- Explaining the Role of Active Directory in SMS 2003
- Explaining How SMS Uses Dependent Technologies
- Discussion: Exploring SMS Site Architecture

#### Practices

- Reviewing the SMS Site Server Installation Log and Verifying Installed Services
- Exploring the SMS Administrator Console and the SMS 2003 Toolkit 1
- Exploring the System Management Container
- Verifying SMS Settings in WMI

After completing this module, students will be able to:

- Describe the SMS site server and its components.
- Use the SMS Administrator console and the SMS 2003 Toolkit 1.
- Describe how SMS uses Active Directory.
- Describe how SMS uses dependent technologies such as Internet Information Server (IIS), BITS, WMI, and MSI.

#### Module 3: Preparing to Deploy the SMS Clients

In this module, you will learn how to prepare for Microsoft Systems Management Server (SMS) client deployment. This process involves configuring and deploying the site systems required to support clients and using discovery methods to identify resources.

#### Lessons

- Introduction to the SMS Clients
- Discovering Resources
- Deploying the Site Systems That Support Client Installation and Client/Server Communication
- Discussion: Preparing to Deploy the SMS Clients

#### Practices

- Determining Which Clients to Deploy
- Discovering Resources
- Deploying the Site Systems That Support Client Installation

After completing this module, students will be able to:

- Describe the Legacy Client and Advanced Client, how to determine which SMS client to use, and how the SMS client gets assigned to a site.
- Describe resource discovery and the methods used to discover resources.
- Explain the guidelines to configure, deploy, and troubleshoot the site systems used by SMS to support clients.

#### Module 4: Deploying SMS Clients

In this module, you will learn to deploy the Microsoft Systems Management Server (SMS) Advanced Client and the SMS Legacy Client. You will learn about available installation methods and their benefits. You will also learn how to isolate problems that you might encounter during Advanced Client installation.

#### Lessons

- Deploying the Advanced Client
- Deploying the Legacy Client
- Isolating Problems When Installing SMS Clients
- Discussion: Deploying SMS Clients

#### Practices

- Installing the Advanced Client
- Explaining the Differences Between the Installation Methods and When to Use Each Method
- Installing the Legacy Client Using a Logon Script
- Describing the Characteristics of the Legacy Client Installation Methods
- Identifying the Common Causes of Installation Problems
- Using Troubleshooting Techniques to Solve Common Installation Problems

After completing this module, students will be able to:

- Deploy the SMS Advanced Client.
- Deploy the SMS Legacy Client.
- Isolate problems that you might encounter during Advanced Client installation.

#### **Module 5: Collecting Inventory and Software Metering**

In this module, you will learn to use Microsoft Systems Management Server (SMS) hardware and software inventory collection features to collect a wide variety of information about client computers and files in an SMS hierarchy. By collecting hardware and software inventory data with SMS 2003, you can build a rich database of details about the computers in your company. You will also learn to use software metering to identify which applications are being used in your company.

#### Lessons

- Introduction to Inventory Collection
- Collecting Inventory Information
- Extending Inventory Collection
- Configuring Software Metering
- Discussion: Collecting Inventory and Software Metering

#### Practices

- Explaining How Your Organization Can Use Inventory Collection
- Collecting Software Inventory Information
- Extending an Inventory Collection
- Using the Software Metering Client Agent

After completing this module, students will be able to:

- Describe the inventory collection process.
- Collect hardware and software inventory information.
- Extend inventory collection.
- Use the Software Metering Client Agent.

## **Module 6: Querying and Reporting Data**

You can create and run queries to locate objects in a Microsoft Systems Management Server (SMS) site database that match your query criteria. Queries are most useful for extracting information related to resource discovery, inventory data, and status messages. Reports allow systems administrators to easily organize and display information about the computers managed by SMS. Reports are managed in the SMS Administrator console, but they are viewed in either the SMS Administrator console or Internet Explorer. In this module, you will create, run, and view queries and reports. You will also learn how to deploy the reporting point site system.

### Lessons

- Introduction to the Architecture of Data and Status Queries
- Creating and Running Queries
- Configuring and Deploying a Reporting Point
- Configuring and Running Reports
- Creating and Running Dashboards
- Discussion: Querying and Reporting Data

### Practices

- Describing the Architecture of Data and Status Queries
- Creating and Running Queries
- Configuring and Deploying a Reporting Point
- Configuring and Running Reports
- Creating and Running Dashboards

After completing this module, students will be able to:

- Describe the architecture of data and status queries.
- Create and run queries.
- Configure and deploy a reporting point.
- Configure and run reports.
- Create and run dashboards.

## **Module 7: Preparing an SMS Site for Software Distribution**

In this module, you will learn about the Microsoft Systems Management Server SMS software distribution process. You will learn about the flow of software distribution and the roles played by the site, the SMS objects used to distribute software, and the SMS client. Finally, you will learn how to prepare the site for software distribution by allocating distribution points and configuring the SMS client.

### Lessons

- Explaining How SMS Distributes Software
- Managing Distribution Points
- Configuring Software Distribution and the Advertised Programs Client Agent
- Discussion: Preparing an SMS Site for Software Distribution

### Practices

- Explaining How SMS Distributes Software

- Managing Distribution Points
- Configuring Software Distribution and the Advertised Programs Client Agent

After completing this module, students will be able to:

- Explain how SMS distributes software.
- Explain how to manage distribution points.
- Configure software distribution and the Advertised Program Client Agent.

### **Module 8: Managing Software Distribution**

The Microsoft Systems Management Server (SMS) software distribution feature automates the distribution of programs to SMS clients. These programs run on the client computers to perform tasks such as installing software or scanning the client's hard drives for viruses.

In this module, you will learn to distribute software to SMS clients by creating a package and then advertising a program from the package to a collection of clients. In Module 7, the first stage of the software distribution sequence was discussed. This module will build upon the previous module and discuss the three remaining stages of the distribution sequence.

#### Lessons

- Configuring Software Distribution Objects Using a Software Distribution Methodology
- Creating and Configuring Collections
- Creating and Configuring Packages
- Creating and Configuring Advertisements
- Managing Software Installation at the Client
- Monitoring Software Distribution
- Discussion: Managing Software Distribution

#### Practices

- Configuring Software Distribution Objects Using a Software Distribution Methodology
- Creating a Collection with a Direct Membership Rule
- Creating a Collection with a Rule Based on a Query
- Creating and Configuring Collections
- Creating a Package
- Configuring Packages
- Creating an Advertisement to Install the Visio Viewer
- Running an Advertised Program on a Client
- Running Standard Reports on Software Distribution

#### Lab A:

- Using SMS Software Distribution to Deploy an Office Application
- Creating a System-targeted Application Deployment
- Verifying the Application Distribution

After completing this module, students will be able to:

- Configure software distribution objects.
- Create and configure collections.

- Create and configure packages.
- Create and configure advertisements.  
Manage software installation at the client.
- Monitor software distribution.

## **Module 9: Implementing SMS Software Update Tools and Managing Update Deployment**

In this module, you will learn to implement Microsoft Systems Management Server (SMS) software update scanning tools and manage the deployment of security and Microsoft Office updates.

### Lessons

- Explaining How the Software Update Process Works
- Installing the Software Update Scanning Tools
- Performing Software Update Inventory
- Deploying and Verifying Software Updates
- Discussion: Implementing SMS Software Update Tools and Managing Update Deployment

### Practices

- Explaining How the Software Update Process Works
- Installing the Software Update Scanning Tools
- Deploying and Verifying the Software Update Scanning Tools
- Distributing a Software Update

After completing this module, students will be able to:

- Describe the SMS software update process.
- Install the software update scanning tools.
- Perform a software update inventory.
- Deploy and verify software updates.

## **Module 10: Using Remote Tools for Client Support**

Microsoft Systems Management Server (SMS) 2003 Remote Tools is a suite of complementary applications that you can use to access any client in an SMS hierarchy that has the Remote Tools Client Agent components installed. By using Remote Tools, you can provide assistance and troubleshooting support from your computer to clients within your site. You can use Remote Tools to access and control clients that are using the Legacy Client or the Advanced Client.

You can use Remote Tools across a wide area network (WAN) or Microsoft Remote Access Service (RAS) links to assist clients at remote locations. Remote Tools supports RAS connections with a minimum speed of 28.8 kilobits per second (Kbps). You can also establish a connection to your organization and then access clients on your network.

In addition to SMS Remote Tools, SMS 2003 integrates Remote Assistance and Remote Desktop Connection into the SMS Administrator console for assisting applicable clients. You can also use the SMS Administrator console to manage and configure Remote Assistance settings for applicable clients on a site-wide basis.

In this module, you will learn to configure and use Remote Tools to assist the help desk and to provide troubleshooting support to clients.

#### Lessons

- Introduction to Remote Tools
- Configuring the Remote Tools Client Agent
- Using SMS Remote Tools in Troubleshooting
- Discussion: Using SMS Remote Tools

#### Practices

- Identifying Remote Tools That Can Be Used to Troubleshoot Client Issues
- Configuring the Remote Tools Client Agent
- Using SMS Remote Tools in Troubleshooting

After completing this module, students will be able to:

- Describe the tools available for remote control of SMS clients.
- Configure the Remote Tools Client Agent.
- Use Remote Tools in troubleshooting.

#### **Module 11: Working with SMS Hierarchies**

In this module, you will learn how to work within a Microsoft Systems Management Server (SMS) site hierarchy. The sites in your organization can be connected to create a single site hierarchy. Occasionally, site hierarchies must be modified and new sites must be created and added. The SMS secondary site is ideal for simplifying the installation and management of small branch offices. In this module, you will learn how to configure sites and work within a site hierarchy.

#### Lessons

- Introduction to the SMS Site Hierarchy
- Configuring Site Communications
- Installing a Secondary Site Server
- Managing Roaming Clients in an SMS Hierarchy
- Discussion: Working with SMS Hierarchies

#### Practices

- Applying SMS Hierarchy Principles to your Organization
- Configuring Site Communications
- Installing the Secondary Site
- Configuring Roaming Boundaries to Allow an Advanced Client at a Secondary Site to Download Software

After completing this module, students will be able to:

- Describe the site hierarchy architecture.
- Configure communication between SMS sites.
- Install an SMS secondary site server.
- Manage roaming clients in an SMS hierarchy.

## **Module 12: Performing Site Maintenance, Backup, and Recovery Tasks**

In this module, you will learn how to perform site maintenance tasks and prepare for Microsoft Systems Management Server (SMS) backup and recovery operations.

Planning is essential so that you can recover SMS sites and hierarchies quickly with the least possible amount of data loss.

### Lessons

- Performing Site Maintenance
- Performing an SMS Site Backup
- Recovering an SMS Site
- Discussion: Performing Site Maintenance, Backup, and Recovery Tasks

### Practices

- Creating a Customized Maintenance Task
- Performing an SMS Site Backup
- Recovering an SMS Site

After completing this module, students will be able to:

- Perform site maintenance.
- Perform an SMS site backup.
- Recover an SMS site.