

MICROSOFT
TRAINING
AND CERTIFICATION

Administering a Microsoft SQL Server 2000 Database

Delivery Guide

Course Number: 2072A

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About This Course

This section provides you with a brief description of the course, audience, suggested prerequisites, and course objectives.

Description

This course provides students with the knowledge and skills required to install, configure, administer, and troubleshoot the client-server database management system of Microsoft® SQL Server™ 2000. Course 2072A is a revision of course 832, *System Administration for Microsoft SQL Server 7.0*.

Audience

This course is designed for database administrators whose job is to install, configure, and support SQL Server and databases, including managing storage, setting up user accounts, assigning permissions, securing SQL Server, backing up and restoring databases, performing other administrative tasks, transferring data into and out of SQL Server databases; diagnosing system problems, and ensuring high-availability.

Student Prerequisites

This course requires that students meet the following prerequisites:

- Experience using the Microsoft Windows® 2000 operating system to:
 - Connect clients running Windows 2000 to networks and the Internet.
 - Configure the Windows 2000 environment.
 - Create and manage user accounts.
 - Manage access to resources by using groups.
 - Configure and manage disks and partitions, including disk striping and mirroring.
 - Manage data by using NTFS.
 - Implement Windows 2000 security.
 - Optimize performance in Windows 2000.

For students who do not meet these prerequisites, the following courses provide students with the necessary knowledge and skills:

- Course 2151, *Microsoft Windows 2000 Network and Operating System Essentials*
- Course 2152, *Supporting Microsoft Windows 2000 Professional and Server*
- An understanding of basic relational database concepts, including:
 - Logical and physical database design.
 - Data integrity concepts.
 - Relationships between tables and columns (primary key and foreign key, one-to-one, one-to-many, many-to-many).

- How data is stored in tables (rows and columns).

For students who do not meet these prerequisites, the following course provides students with the necessary knowledge and skills:

- Course 1609, *Designing Data Services and Data Models*

- Knowledge of basic Transact-SQL syntax (SELECT, INSERT, UPDATE, and DELETE statements).

For students who do not meet these prerequisites, the following course provides students with the necessary knowledge and skills:

- Course 2071, *Querying Microsoft SQL Server 2000 with Transact-SQL*

- Familiarity with the role of the database administrator.

Course Objectives

After completing this course, the student will be able to:

- Describe SQL Server architecture.
- Plan for a SQL Server installation, and then install an instance of SQL Server.
- Manage files and databases, including determining resource requirements.
- Choose a login security method, configure login security, plan and implement database permissions, and describe how to secure SQL Server in an enterprise network.
- Perform and automate administrative tasks and create custom administrative tools.
- Back up databases and implement a backup strategy.
- Restore databases.
- Monitor and optimize SQL Server performance.
- Transfer and migrate data into databases.
- Maintain the high availability of SQL Server.
- Describe how to replicate data from one computer running SQL Server to another.

Course Timing

The following schedule is an estimate of the course timing. Your timing may vary.

Day 1

Start	End	Module
9:00	9:30	Introduction
9:30	10:30	Module 1: SQL Server Overview
10:30	10:45	Break
10:45	11:00	Lab A: SQL Server Overview
11:00	12:00	Module 2: Planning to Install SQL Server
12:00	1:00	Lunch
1:00	1:45	Lab A: Installing SQL Server
1:45	3:15	Module 3: Managing Database Files
3:15	3:30	Break
3:30	4:00	Lab A: Managing Database Files

Day 2

Start	End	Module
9:00	9:30	Day 1 review
9:30	10:00	Module 4: Managing Security
10:00	10:30	Lab A: Managing Security
10:30	10:45	Break
10:45	11:15	Module 4: Managing Security (<i>continued</i>)
11:15	11:45	Lab B: Managing Permissions
11:45	12:00	Module 4: Managing Security (<i>continued</i>)
12:00	12:30	Lab C: Managing Application Security
12:30	12:45	Module 4: Managing Security (<i>continued</i>)
12:45	1:45	Lunch
1:45	2:15	Module 5: Performing Administrative Tasks
2:15	2:45	Lab A: Configuring SQL Server
2:45	3:00	Break
3:00	3:45	Module 5: Performing Administrative Tasks (<i>continued</i>)

Day 3

Start	End	Module
9:00	9:30	Day 2 review
9:30	10:30	Lab B: Creating Jobs and Operators
10:30	10:45	Break
10:45	11:15	Module 5: Performing Administrative Tasks (<i>continued</i>)
11:15	12:00	Lab C: Creating Alerts
12:00	12:15	Module 5: Performing Administrative Tasks (<i>continued</i>)
12:15	1:15	Lunch
1:15	2:45	Module 6: Backing Up Databases
2:45	3:00	Break
3:00	3:45	Lab A: Backing Up Databases

Day 4

Start	End	Module
9:00	9:30	Day 3 review
9:30	10:30	Module 7: Restoring Databases
10:30	10:45	Break
10:45	11:30	Lab A: Restoring Databases
11:30	1:15	Module 8: Monitoring SQL Server for Performance
1:15	2:15	Lunch
2:15	3:15	Lab A: Monitoring SQL Server
3:15	3:30	Break
3:30	4:30	Module 9: Transferring Data

Day 5

Start	End	Module
9:00	9:30	Day 4 review
9:30	10:15	Lab A: Transferring Data
10:15	11:15	Module 10: Maintaining High-Availability
11:15	11:30	Break
11:30	12:15	Lab A: Automating the Maintenance of a Standby Server
12:15	1:15	Lunch
1:15	2:15	Module 11: Introducing Replication
2:15	2:30	Break
2:30	4:00	Lab A: Implementing Replication (optional)

Trainer Materials Compact Disc Contents

The Trainer Materials compact disc contains the following files and folders:

- *Default.htm*. This file opens the Trainer Materials Web page.
- *Readme.txt*. This file contains a description of the compact disc contents and setup instructions in ASCII format (non-Microsoft Word document).
- *2072A_ms.doc*. This file is the Manual Classroom Setup Guide. It contains the steps for manually installing the classroom computers.
- *2072A_sg.doc*. This file is the Classroom Setup Guide. It contains a description of classroom requirements, classroom configuration, instructions for using the automated classroom setup scripts, and the Classroom Setup Checklist.
- *Errorlog*. This folder contains a template that is used to record any errors and corrections that you find in the course.
- *Fonts*. This folder contains fonts that are required to view the Microsoft PowerPoint® presentation and Web-based materials.
- *Mplayer*. This folder contains files that are required to install Microsoft Windows Media™ Player.
- *Powerpnt*. This folder contains the PowerPoint slides that are used in this course.
- *Pptview*. This folder contains the PowerPoint Viewer, which is used to display the PowerPoint slides.
- *Studentcd*. This folder contains the Web page that provides students with links to resources pertaining to this course, including additional reading, review and lab answers, lab files, multimedia presentations, and course-related Web sites.
- *Tprep*. This folder contains the Trainer Preparation Presentation, a narrated presentation that explains the instructional strategy for the course and presentation tips and caveats. To open the presentation, on the Trainer Materials Web page, click **Trainer Preparation Presentation**.

Student Materials Compact Disc Contents

The Student Materials compact disc contains the following files and folders:

- *Default.htm*. This file opens the Student Materials Web page. It provides you with resources pertaining to this course, including additional reading, review and lab answers, lab files, multimedia presentations, and course-related Web sites.
- *Readme.txt*. This file contains a description of the compact disc contents and setup instructions in ASCII format (non-Microsoft Word document).
- *AddRead*. This folder contains additional reading pertaining to this course.
- *Answers*. This folder contains answers to any questions in the modules and hands-on labs.
- *Fonts*. This folder contains fonts that are required to view the Microsoft PowerPoint® presentation and Web-based materials.
- *Labfiles*. This folder contains files that are used in the hands-on labs. These files may be used to prepare the student computers for the hands-on labs.
- *Media*. This folder contains files that are used in multimedia presentations for this course.
- *Mplayer*. This folder contains files that are required to install Microsoft Windows Media™ Player.
- *Pptview*. This folder contains the PowerPoint Viewer, which is used to display the PowerPoint presentations that accompany the additional reading.
- *Webfiles*. This folder contains the files that are required to view the Student Materials Web page.
- *Wordview*. This folder contains the Word Viewer that is used to view any Word document (.doc) files that are included on the compact disc.

Document Conventions

The following conventions are used in course materials to distinguish elements of the text.

Convention	Use
◆	Indicates an introductory page. This symbol appears next to a topic heading when additional information on the topic is covered on the page or pages that follow it.
bold	Represents commands, command options, and syntax that must be typed exactly as shown. It also indicates commands on menus and buttons, dialog box titles and options, and icon and menu names.
<i>italic</i>	In syntax statements or descriptive text, indicates argument names or placeholders for variable information. Italic is also used for introducing new terms, for book titles, and for emphasis in the text.
Title Capitals	Indicate domain names, user names, computer names, directory names, and folder and file names, except when specifically referring to case-sensitive names. Unless otherwise indicated, you can use lowercase letters when you type a directory name or file name in a dialog box or at a command prompt.
ALL CAPITALS	Indicate the names of keys, key sequences, and key combinations—for example, ALT+SPACEBAR.
monospace	Represents code samples or examples of screen text.
[]	In syntax statements, enclose optional items. For example, <i>[filename]</i> in command syntax indicates that you can choose to type a file name with the command. Type only the information within the brackets, not the brackets themselves.
{ }	In syntax statements, enclose required items. Type only the information within the braces, not the braces themselves.
	In syntax statements, separates an either/or choice.
►	Indicates a procedure with sequential steps.
...	In syntax statements, specifies that the preceding item may be repeated.
.	Represents an omitted portion of a code sample.
.	
.	