

Administering and Automating Microsoft SQL Server 2005 Databases and Servers

- **Course Number:** 2789
- **Length:** 1 Day(s)

Certification Exam

This course will help you prepare for the following Microsoft Certified Professional exams:

- **MCITP Exam 70–444:** Optimizing and Maintaining a Database Administration Solution by Using Microsoft SQL Server 2005
- **MCITP Exam 70–447:** MCITP Upgrade for existing MCDBA Database Administrators.

Course Overview

This one-day course provides students with the knowledge and skills to administer and automate Microsoft SQL Server 2005 databases and servers. This course focuses on the need to maintain administration and automation information.

Prerequisites

Before attending this course, students must:

- Understand how replication works and how replication is implemented.
- Have working knowledge of source control software. Specifically, what it is used for and how it works.
- Have working knowledge of networking. Specifically, how to isolate a failure to identify where a failure is occurring.
- Have basic working knowledge of security infrastructures. Specifically, Active Directory infrastructure.
- Have some experience with database design. Specifically, they must fully understand Third Normal Form (3NF), be able to design a database to 3NF (fully normalized), and know the tradeoffs when backing out of the fully normalized design (denormalization; that is, designing for performance and/or business requirements). They should also be familiar with specific design models, such as Star and Snowflake schemas.
- Have basic monitoring and troubleshooting skills.
- Have working knowledge of the operating system and platform. That is, how the operating system integrates with the database, what the platform or operating system can do, and the interaction between the operating system and the database.
- Have basic knowledge of application architecture. That is, how applications can be designed in three layers, what applications can do, interactions between applications and the database, and interactions between the database and the platform or operating system.
- Have a Microsoft Certified Technology Specialist: Microsoft SQL Server 2005 credential, or equivalent experience.

In addition, it is recommended, but not required, that students have completed:

- Course 2778, Writing Queries Using Microsoft SQL Server 2005 Transact-SQL.
- Course 2779, Implementing a Microsoft SQL Server 2005 Database.
- Course 2780, Maintaining a Microsoft SQL Server 2005 Database.

Audience

This course is intended for current professional database administrators who have three or more years of on-the-job experience administering SQL Server database solutions in an enterprise environment.

Course Outline

- Module 1 - Managing and Automating Databases and Servers
- Lesson 1: An Automated System for Database Maintenance
- Automating Database Administration
- Using SQL Server Agent
- Assessing System Dependencies on the Database
- Identifying Maintenance Needs
- Automating Database Maintenance Plans
- Lesson 2: An Automated System for Server Maintenance
- Implementing Application Database Changes
- Implementing Windows and SQL Server Updates
- Lesson 3: Administration and Automation Information
- Maintaining a Run Book
- The SQL Health and History Tool
- Additional Automation Tools
- Lab 1 Introduction
- Module 2 - Review
- Module 2 - Managing SQL Server Supporting Services
- Lesson 1: SSIS Packages
- SSIS Packages
- Monitoring SSIS Packages
- Lesson 2: Replication
- Choosing Replication Monitoring Tools
- Lesson 3: Reporting Services
- Managing the Report Server Configuration
- Managing Report Services Databases
- Managing Report Servers
- Module 2 - Review