

# Administering and Automating Microsoft SQL Server 2005 Databases and Servers

Course 2789: One day; Instructor-Led

## Introduction

This one-day instructor-led 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.

## 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.

## At Course Completion

After completing this course, students will be able to:

- Manage and automate databases and servers.
- Manage supporting services.

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.

## Course Outline

### Module 1: Managing and Automating Databases and Servers

This module provides you with the guidelines and considerations for planning automated systems for databases and servers. This module also provides you with the knowledge required to maintain a run book.

#### Lessons

- Planning an Automated System for Database Maintenance.
- Planning an Automated System Server Maintenance.
- Documenting Administration and Automation Information.

### Lab 1: Managing and Automating Databases and Servers

- Creating Maintenance Plans.
- Creating Database Change Control Procedures.
- Configuring And Using the SQL H2 Tool.

After completing this module, students will be able to:

- Plan an automated system for database maintenance.
- Plan an automated system for server maintenance.
- Document administration and automation information in a run book.

### Module 2: Managing SQL Server Supporting Services

This module introduces the concept of SQL Server Integration Services (SSIS) packages and provides the guidelines to deploy and manage SSIS packages. This module also provides the guidelines and considerations for maintaining replication and reporting services.

#### Lessons

- Managing SSIS Packages.
- Managing Replication.
- Managing Reporting Services.

### Lab 2: Managing SQL Server Supporting Services

- Moving Packages Between Database Servers.
- Initializing a Transactional Subscription From a Backup.
- Configuring Reporting Services.

After completing this module, students will be able to:

- Manage SSIS packages.
- Manage replication.

- Manage reporting services.