

Course Details

Course 10775A

Administering Microsoft SQL Server 2012 Databases

Length: 5 Days

Published: January 14, 2013

Language(s): English

Audience(s): IT Professionals

Level: 200

Technology: Microsoft SQL Server 2012

Type: Course

Delivery Method: Instructor-led (classroom)

Prerequisites

Before attending this course, students must have:

In addition to their professional experience, students who attend this training should already have the following technical knowledge:

- Basic knowledge of the Microsoft Windows operating system and its core functionality.
- Working knowledge of Transact-SQL.
- Working knowledge of relational databases.
- Some experience with database design.

Students who attend this training can meet the prerequisites by attending the following courses, or obtaining equivalent knowledge and skills:

- 10774A: Writing T-SQL Queries for Microsoft SQL Server 2012

Course Outline

Module 1: Introduction to SQL Server 2012 and its Toolset

- Introduction to the SQL Server Platform
- Working with SQL Server Tools
- Configuring SQL Server Services

Module 2: Preparing Systems for SQL Server 2012

- Overview of SQL Server Architecture
- Planning Server Resource Requirements
- Pre-installation Testing for SQL Server

Module 3: Installing and Configuring SQL Server 2012

- Preparing to Install SQL Server
- Installing SQL Server
- Upgrading and Automating Installation

Module 4: Working with Databases

- Overview of SQL Server Databases
- Working with Files and Filegroups
- Moving Database Files

Module 5: Understanding SQL Server 2012 Recovery Models

- Backup Strategies
- Understanding SQL Server Transaction Logging
- Planning a SQL Server Backup Strategy

Module 6: Backup of SQL Server 2012 Databases

- Backing up Databases and Transaction Logs
- Managing Database Backups
- Working with Backup Options

Module 7: Restoring SQL Server 2012 Databases

- Understanding the Restore Process
- Restoring Databases
- Working with Point-in-time recovery
- Restoring System Databases and Individual Files

Module 8: Importing and Exporting Data

- Transferring Data To/From SQL Server
- Importing & Exporting Table Data
- Inserting Data in Bulk

Module 9: Authenticating and Authorizing Users

- Authenticating Connections to SQL Server
- Authorizing Logins to Access Databases
- Authorization Across Servers

Module 10: Assigning Server and Database Roles

- Working with Server Roles
- Working with Fixed Database Roles
- Creating User-defined Database Roles

Module 11: Authorizing Users to Access Resources

- Authorizing User Access to Objects
- Authorizing Users to Execute Code
- Configuring Permissions at the Schema Level

Module 12: Auditing SQL Server Environments

- Options for Auditing Data Access in SQL
- Implementing SQL Server Audit
- Managing SQL Server Audit

Module 13: Automating SQL Server 2012 Management

- Automating SQL Server Management
- Working with SQL Server Agent
- Managing SQL Server Agent Jobs

Module 14: Configuring Security for SQL Server Agent

- Understanding SQL Server Agent Security
- Configuring Credentials
- Configuring Proxy Accounts

Module 15: Monitoring SQL Server 2012 with Alerts and Notifications

- Configuration of Database Mail
- Monitoring SQL Server Errors
- Configuring Operators, Alerts and Notifications

Module 16: Performing Ongoing Database Maintenance

- Ensuring Database Integrity
- Maintaining Indexes
- Automating Routine Database Maintenance

Module 17: Tracing Access to SQL Server 2012

- Capturing Activity using SQL Server Profiler
- Improving Performance with the Database Engine Tuning Advisor
- Working with Tracing Options

Module 18: Monitoring SQL Server 2012

- Monitoring Activity
- Capturing and Managing Performance Data
- Analyzing Collected Performance Data

Module 19: Managing Multiple Servers

- Working with Multiple Servers
- Virtualizing SQL Server
- Deploying and Upgrading Data-Tier Applications

Module 20: Troubleshooting Common SQL Server 2012 Administrative Issues

- SQL Server Troubleshooting Methodology
- Resolving Service-related Issues
- Resolving Concurrency Issues
- Resolving Login and Connectivity Issues