

(10977B) –Updating Your SQL Skills to Microsoft® SQL Server® 2014

OBJECTIVE

This instructor-led course teaches students how to use the enhancements and new features that have been added to SQL Server and the Microsoft data platform since the release of SQL Server 2008. The course focuses on teaching individuals how to use SQL Server 2014 product features and other Microsoft data platform components.

COURSE TOPICS

Module 1: Introduction to SQL Server 2014

- Overview of SQL Server 2014
- SQL Server 2014 Editions and Components
- Installing SQL Server 2014
- Enhancements to SQL Server Management Studio

Module 2: What's New in SQL Server Database Development?

- Transact-SQL Enhancements
- New and Enhanced Transact-SQL Functions
- Enhancements to Spatial Data Support
- Storing and Querying Documents with SQL Server 2014

Module 3: In-Memory Database Capabilities

- The Buffer pool Extension
- Column store Indexes
- Memory-Optimized Tables

Module 4: Scripting SQL Server 2014

- New and Enhanced Dynamic Management Views
- Using PowerShell to Manage SQL Server

Module 5: Implementing Security in Microsoft SQL Server 2014

- Security Management Enhancements
- Contained Databases

Module 6: High Availability and Data Recovery Enhancements

- Always On High Availability
- Enhancements to Data Recovery

Module 7: New and Enhanced Features in SQL Server Integration Services

- Using the CDC Control Task for Incremental Data Loads
- Deploying and Operating SSIS Packages

Module 8: Data Quality Services

- Introduction to Data Quality
- Using Data Quality Services to Cleanse Data
- Using Data Quality Services to Match Data

Module 9: Master Data Services

- Introduction to Master Data Services
- Implementing a Master Data Services Model
- Using the Master Data Services Add-in for Excel

Module 10: SQL Server 2014 Reporting Services

- Reporting Services Overview
- Reporting Services and Microsoft SharePoint Server
- Introduction to Data Alerts

Module 11: Implementing an Analysis Services Tabular Data Model

- Introduction to Analysis Services Tabular Data Model Projects
- Creating a Tabular Model
- Using an Analysis Services Tabular Data Model in the Enterprise

Module 12: Self-Service BI with Microsoft Excel

- PowerPivot for Excel
- PowerPivot for SharePoint Server
- Power Query
- Power View
- Power Map
- Collaborative Analysis with Power BI for Office 365

Module 13: Introduction to Cloud Data Solutions

- Overview of Cloud Computing
- Microsoft Azure Services for Data

Module 14: Microsoft Azure SQL Database

- Introduction to Microsoft Azure SQL Database
- Microsoft Azure SQL Database Security
- Implementing and Managing Databases

Module 15: SQL Server in Microsoft Azure Virtual Machines

- Introduction to Microsoft Azure Virtual Machines
- Microsoft Azure Virtual Machine Connectivity and Security
- Creating Databases in a Microsoft Azure Virtual Machine

Module 16: Implementing Big Data Solutions

- Introduction to Big Data
- Microsoft Azure HDInsight
- Consuming HDInsight Results in Excel
- Obtaining Data from the Microsoft Azure Marketplace

After completing this course, students will be able to:

- Describe key features and capabilities of SQL Server 2014.
- Leverage new and enhanced features to develop database in SQL Server 2014.
- Use in-memory database capabilities in SQL Server 2014.
- Manage SQL Server 2014 by using dynamic management views and PowerShell.
- Implement security in SQL Server 2014.
- Implement high-availability and data recovery techniques in SQL Server 2014.
- Use SQL Server 2014 Integration Services.
- Use SQL Server 2014 Data Quality Services.
- Use SQL Server 2014 Master Data Services.
- Manage SQL Server 2012 Agent and Jobs.
- Implement a tabular data model in SQL Server 2014 Analysis Services.
- Implement a Self-Service BI solution with Microsoft Excel 2013.
- Describe key elements of cloud solutions for data.
- Implement a database in Microsoft Azure SQL Database.
- Implement a SQL Server database in a Microsoft Azure virtual machine.
- Implement a Big Data solution with Microsoft Azure HDInsight and the Microsoft Azure Marketplace.

PREREQUISITES

This course requires that you meet the following prerequisites:

- Experience of building and managing database, data warehouse, and business intelligence (BI) solutions with SQL Server 2008.
- Familiarity with the Windows Server 2012 operating system and networking.
- Familiarity with Microsoft Excel and Microsoft SharePoint Server 2013.
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TRAINING APPROACH

This course includes lectures, course notes, exercises and hands-on practice.

COURSE DURATION

24 Hours (in 3 days)

CERTIFICATION COMPLETION

A certificate of completion is provided for all trainees attending the course