

What's New in SQL Server 2016 (2 days)



Overview

This instructor-led course teaches students how to use the enhancements and new features that have been added to SQL Server 2016 and the Microsoft data platform since the release of SQL Server 2014. The course focuses on teaching individuals how to use SQL Server 2016 product features and other Microsoft data platform components.

Target Audience

The primary audience for this course is database and business intelligence (BI) professionals who are familiar with SQL Server 2014 and want to update their skills to SQL Server 2016, and become familiar with related Microsoft data technologies.

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 2014.
- Familiarity with the Windows Server 2012 R2 operating system and networking.
- Familiarity with Microsoft Excel and Microsoft SharePoint Server 2013.

Course Summary

- Describe key capabilities and components of SQL Server 2016.
- Describe new and enhanced features in SQL Server Performance.
- Describe new and enhanced features in SQL Server Security.
- Describe new and enhanced features in SQL Server availability and scalability.
- Describe new and enhanced features in SQL Server reporting and BI.
- Describe new and enhanced features in SQL Server data access.
- Describe new and enhanced features in SQL Server OLAP.
- Describe new and enhanced features for SQL Server cloud deployments.

Course Outline

Module 1: Introduction to SQL Server 2016

- Module Overview
- Lesson 1: Overview of SQL Server 2016
- Lesson 2: SQL Server 2016 Editions and Components
- Lesson 3: Installing SQL Server 2016
- Lesson 4: SQL Server Management Studio Enhancements
- Lab: Exploring SQL Server 2016

Module 2: What's New in SQL Server Performance?

- Module Overview
- Lesson 1: Operational Analytics
- Lesson 2: In-Memory OLTP Enhancements
- Lesson 3: Query Store
- Lesson 4: Live Query Statistics
- Lesson 5: Native JSON
- Lesson 6: Temporal Tables
- Lab: Implementing SQL Server 2016 Performance Improvements

Module 3: What's New in SQL Server Security

- Module Overview
- Lesson 1: Using Always Encrypted
- Lesson 2: Row-Level Security
- Lesson 3: Dynamic Data Masking
- Lab: SQL Server 2016 Security Improvements

Module 4: What's New in SQL Server Availability and Scalability?

- Module Overview
- Lesson 1: Enhanced AlwaysOn Availability Groups
- Lesson 2: What's New with tempdb?
- Lesson 3: Use Windows Server 2016 with SQL Server 2016
- Lab: Monitoring tempdb

Module 5: What's New in SQL Server Reporting and BI

- Module Overview
- Lesson 1: Reporting Services Enhancements
- Lesson 2: Power BI Enhancements
- Lesson 3: Mobile Report Publisher
- Lab: Implementing Power BI

Module 6: What is New in SQL Server Data Access

- Module Overview
- Lesson 1: PolyBase
- Lesson 2: Enhancements in SQL Server Integration Services in SQL Server 2016
- Lab: Exploring the New Features of SQL Server Integrated Services (SSIS)

Module 7: New and Enhanced Features in SQL Server OLAP

- Module Overview
- Lesson 1: New and Enhanced Features in SQL Server OLAP
- Lesson 2: What's New in SQL Server Analysis Services
- Lab: OLAP with SQL Server

Module 8: What's New for SQL Server in the Cloud?

- Module Overview
- Lesson 1: Stretch Database
- Lesson 2: Enhanced Backup to Azure
- Lesson 3: Introduction to SQL Server 2016 Hybrid Cloud
- Lesson 4: What's New in Azure SQL Database?
- Lab: Using Stretch Database