

Course WLC-SQL1401: New Features of Microsoft SQL Server 2014 for Administrator, Database Developer and BI Developer

Three Days, Instructor-Led

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

Audience

The primary audience for this course are DBA, Database Developer, Business Intelligence and other IT professionals who are using Microsoft platform as their back-end. They will become familiar in using MS SQL Server 2014 and other related Microsoft data technologies.

Pre-requisites

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 2010/2013 and Microsoft SharePoint Server 2013.

Course Objectives

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.
- Implement high-availability and data recovery techniques in SQL Server 2014.
- Implement a Self-Service BI solution with Microsoft Excel 2013.
- Describe key elements of cloud solutions for data.
- Implement a database in Windows Azure SQL Database.
- Implement a SQL Server database in a Windows Azure virtual machine.
- Implement a Big Data solution with Windows Azure HDInsight and the Windows Azure Marketplace.

Course Outline

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

Laboratory:

- Exploring SQL Server 2014

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

Laboratory:

- Developing SQL Server 2014 Databases

Module 3: In-Memory Database Capabilities

- The Buffer Pool Extension
- ColumnStore Indexes
- Memory-Optimized Tables

Laboratory

- Using In-Memory Database Capabilities

Module 4: High Availability and Data Recovery Enhancements

- AlwaysOn High Availability
- Enhancements to Data Recovery

Laboratory

- Using AlwaysOn Availability Groups

Module 5: Self-Service BI with Microsoft Excel

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

Laboratory

- Self-Service BI with Excel

Module 6: Introduction to Cloud Data Solutions

- Overview of Cloud Computing
- Windows Azure Services for Data

Laboratory

- Using Windows Azure

Module 7: Windows Azure SQL Database

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

Laboratory

- Using Windows Azure SQL Database

Module 8: SQL Server in Windows Azure Virtual Machines

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

Laboratory

- Using Windows Azure Virtual Machines

Module 9: Implementing Big Data Solutions

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

Laboratory

- Creating a Big Data Solution

Course Inclusions:

- Microsoft Official Curriculum (MOC) and/or Wizards Learning Courseware (WLC)
- Microsoft Certified Trainer (MCT)
- Lunch, AM and PM Snacks
- Certificate of Achievement
- Course Notes