Upgrading Your SQL Server Skills to Microsoft SQL Server 2014

Varighed: 5 Days      Kursus Kode: M10977

Beskrivelse:

This five-day 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.

Målgruppe:

The primary audience for this course is database and business intelligence (BI) professionals who are familiar with SQL Server 2008 and want to update their skills to SQL Server 2014, and become familiar with related Microsoft data technologies.

Agenda:

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

Forudsætninger:

Before attending this course, students must have:

- 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.
Indhold:

Module 1: Introduction to SQL Server 2014

This module introduces key features of SQL Server 2014.

Lessons

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

Lab : Exploring SQL Server 2014

- Reviewing Installed Components
- Using SQL Server Management Studio

After completing this module, you will be able to:

- Describe the common workloads for SQL Server 2014.
- Describe the SQL Server 2014 Editions and Components.
- Install SQL Server 2014 Components.
- Use the new features in SQL Server Management Studio.
- Describe the enhancements to Transact-SQL.
- Describe new and enhanced Transact-SQL functions.
- Describe the enhancements to Spatial Data Support.
- Explain how to store and query documents with SQL Server 2014.
- Use the Buffer Pool Extension to improve performance for read-heavy OLTP workloads.
- Use Columnstore Indexes to improve performance in data warehouse query workloads.
- Use memory-optimized tables to improve performance for latch-bound workloads.
- Describe new and enhanced dynamic management views.
- Describe how to use PowerShell to Manage SQL Server.
- Describe the security enhancements in SQL Server 2014.
- Explain how to use contained databases.
- Describe high availability features in SQL Server 2014.
- Describe data recovery enhancements in SQL Server 2014.
- Use the CDC Control task to perform incremental data extractions in an ETL solution.
- Deploy and operate an SSIS project.
- Describe how Data Quality Services can help you manage data quality.
- Use Data Quality Services to cleanse your data.

Lab : Using an Analysis Services Tabular Data Model

- Transact-SQL Enhancements
- New and Enhanced Transact-SQL Functions
- Enhancements to Spatial Data Support
- Storing and Querying Documents with SQL Server 2014
- AlwaysOn High Availability
- Enhancements to Data Recovery
- Introduction to Windows Azure SQL Database
- Windows Azure SQL Database Security
- Implementing and Managing Databases
- Introduction to Windows Azure Virtual Machines
- Windows Azure Virtual Machine Connectivity and Security
- Creating Databases in a Windows Azure Virtual Machine

Lab : Creating an AlwaysOn Availability Group

- Creating an AlwaysOn Availability Group
- Using an AlwaysOn Availability Group
- Observing Availability Group Failover Behavior

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- Describe how Data Quality Services can help you manage data quality.
- Use Data Quality Services to cleanse your data.
- Use Data Quality Services to match data.
- Use Master Data Services tools to create a master data hub.
- Use Master Data Services tools to manage master data.
- Use Master Data Services tools to create a master data hub.
- Describe the key capabilities of Reporting Services.
Module 2: What’s New in SQL Server
Database Development

This module describes enhancements to Transact-SQL and other database development features since SQL Server 2008.

Module 12: Self-Service BI with Microsoft Excel

This module introduces the self-service BI capabilities that can be delivered through Microsoft Excel 2013 and related technologies.

Lessons

- Use Data Quality Services to match data.
- Describe key Master Data Services concepts.
- Implement a Master Data Services model.
- Use Master Data Services tools to manage master data.
- Use Master Data Services tools to create a master data hub.
- Describe the key capabilities of Reporting Services.
- Install and configure Reporting Services in SharePoint Mode.
- Use data alerts to notify users of changes to report data.
- Describe Analysis Services tabular data model projects.
- Implement an Analysis Services tabular data model.
- Use an Analysis Services tabular data model.
- Use PowerPivot to create tabular data models in Excel.
- Share a PowerPivot workbook in SharePoint Server.
- Use Power Query to discover and import data from multiple data sources into Excel.
- Use Power View to create interactive data visualizations in Excel and SharePoint Server.
- Use Power Map to create visualizations of geographic data.
- Use Power BI for Office 365 to create a cloud-based collaborative solution for self-service BI.
- Describe key features and benefits of cloud computing.
- Describe Windows Azure service for data.
- Describe key features and benefits of Windows Azure SQL Database.
- Implement security for Windows Azure SQL Database.
- Implement and manage databases in Windows Azure SQL Database.
- Describe considerations for using Virtual Machines in Windows Azure.
- Create and configure Windows Azure virtual machines.
- Create databases in Windows Azure virtual machines.
- Describe key features of big data.
- Process big data with Windows Azure HDInsight.
- Consume big data processing results from Windows Azure HDInsight in Microsoft Excel.

Module 2: What’s New in SQL Server

SQL Server 2014.
- Use the CDC Control task to perform incremental data extractions in an ETL solution.
- Deploy and operate an SSIS project.
- Describe how Data Quality Services can help you manage data quality.
- Use Data Quality Services to cleanse your data.
- Use Data Quality Services to match data.
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- Implement security for Windows Azure SQL Database.
- Implement and manage databases in Windows Azure SQL Database.
- Describe considerations for using Virtual Machines in Windows Azure.
- Create and configure Windows Azure virtual machines.
- Create databases in Windows Azure virtual machines.
- Describe key features of big data.
- Process big data with Windows Azure HDInsight.
- Consume big data processing results from Windows Azure HDInsight in Microsoft Excel.

Module 2: What’s New in SQL Server
Database Development

This module describes enhancements to Transact-SQL and other database development features since SQL Server 2008.
After completing this module, you will be able to:

- Describe the common workloads for SQL Server 2014.
- Describe the SQL Server 2014 Editions and Components.
- Install SQL Server 2014 Components.
- Use the new features in SQL Server Management Studio.
- Describe the enhancements to Transact-SQL.
- Describe new and enhanced Transact-SQL functions.
- Describe the enhancements to Spatial Data Support.
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- Use the Buffer Pool Extension to improve performance for read-heavy OLTP workloads.
- Use Columnstore Indexes to improve performance in data warehouse query workloads.
- Use memory-optimized tables to improve performance for latch-bound workloads.
- Describe new and enhanced dynamic management views.
- Describe how to use PowerShell to manage SQL Server.
- Describe the security enhancements in SQL Server 2014.
- Explain how to use contained databases.
- Describe high availability features in SQL Server 2014.
- Describe data recovery enhancements in SQL Server 2014.
- Use the CDC Control task to perform

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

This module describes enhancements to SQL Server Integration Services since SQL Server 2008.

Lessons
- The Buffer pool Extension
- Columnstore Indexes
- Memory-Optimized Tables
- New and Enhanced Dynamic Management Views
- Using PowerShell to Manage SQL Server
- Security Management Enhancements
- Contained Databases
- Using the CDC Control Task for Incremental Data Loads
- Deploying and Operating SSIS Packages
- Introduction to Data Quality
- Using Data Quality Services to Cleanse Data
- Using Data Quality Services to Match Data
- Introduction to Master Data Services
- Implementing a Master Data Services Model
- Using the Master Data Services Add-in for Excel
- Reporting Services Overview
- Reporting Services and Microsoft SharePoint Server
- Introduction to Data Alerts
- Introduction to Analysis Services Tabular Data Model Projects
- Creating a Tabular Model
- Using an Analysis Services Tabular Data Model in the Enterprise
- PowerPivot for Excel
- PowerPivot for SharePoint Server
- Power Query
- Power View
- Power Map
- Power BI for Office 365
- Overview of Cloud Computing
- Windows Azure Services for Data
- Introduction to Big Data
- Windows Azure HDInsight
- Consuming HDInsight Results in Excel
- Obtaining Data from the Windows Azure Marketplace

Lab: Developing SQL Server 2014 Databases

- Using Sequence Objects
- Using the THROW statement
- Implementing Paging
- Querying Documents

Lab: Self-Service BI with Excel

- Creating a Data Model with PowerPivot
- Importing Data with Power Query
- Visualizing Data with Power View
- Visualizing Geographic Data with Power Map

After completing this module, you will be able to:

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- Describe the enhancements to Transact-SQL.
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- Use data alerts to notify users of changes to report data.
- Describe key features and benefits of cloud computing.
- Describe Windows Azure service for data.
- Describe key features and benefits of Windows Azure SQL Database.
- Implement security for Windows Azure SQL Database.
- Implement and manage databases in Windows Azure SQL Database.
- Describe considerations for using Virtual Machines in Windows Azure.
- Create and configure Windows Azure virtual machines.
- Create databases in Windows Azure virtual machines.
- Describe key features of big data.
- Process big data with Windows Azure HDInsight.
- Consume big data processing results from Windows Azure HDInsight in Microsoft Excel.

Module 3: In-Memory Database Capabilities

- Describe the common workloads for SQL Server 2014.
- Describe the SQL Server 2014 Editions and Components.
- Install SQL Server 2014 Components.
- Use the new features in SQL Server Management Studio.
- Describe the enhancements to Transact-SQL.
- Describe new and enhanced Transact-SQL functions.
- Describe the enhancements to Spatial Data Support.
- Explain how to store and query documents with SQL Server 2014.
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- Describe new and enhanced dynamic management views.
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- Describe the security enhancements in SQL Server 2014.
- Explain how to use contained databases.
- Describe high availability features in SQL Server 2014.
- Describe data recovery enhancements in SQL Server 2014.
- Use the CDC Control task to perform incremental data extractions in an ETL solution.
- Deploy and operate an SSIS project
- Describe how Data Quality Services can help you manage data quality.
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- Implement an Analysis Services tabular data model.
- Use an Analysis Services tabular data model.
- Use PowerPivot to create tabular data models in Excel.
- Share a PowerPivot workbook in SharePoint Server.
- Use Power Query to discover and import data from multiple data sources into Excel.
- Use Power View to create interactive data visualizations in Excel and SharePoint Server.
- Use the new features in SQL Server Management Studio.
- Use Columnstore Indexes to improve performance in data warehouse query workloads.
- Use memory-optimized tables to improve performance for latch-bound workloads.
- Describe new and enhanced dynamic management views.
- Describe how to use PowerShell to Manage SQL Server.
- Describe the security enhancements in SQL Server 2014.
- Use Data Quality Services to cleanse your data.
- Use data alerts to notify users of changes to report data.
- Use Data Quality Services to match data.
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- Use Power BI for Office 365 to create a cloud-based collaborative solution for self-service BI.
- Describe key features and benefits of cloud computing.
- Describe Windows Azure service for data.
- Describe key features and benefits of Windows Azure SQL Database.
- Implement security for Windows Azure SQL Database.
- Implement and manage databases in Windows Azure SQL Database.
- Describe considerations for using Virtual Machines in Windows Azure.
- Create and configure Windows Azure virtual machines.
- Create databases in Windows Azure virtual machines.
- Describe key features of big data.
- Process big data with Windows Azure HDInsight.
- Consume big data processing results from Windows Azure HDInsight in Microsoft Excel.
This module describes how SQL server 2014 enables you to leverage in-memory technologies to enhance database performance.

**Lessons**

- The Buffer pool Extension
- Columnstore Indexes
- Memory-Optimized Tables
- New and Enhanced Dynamic Management Views
- Using PowerShell to Manage SQL Server
- Security Management Enhancements
- Contained Databases
- Using the CDC Control Task for Incremental Data Loads
- Deploying and Operating SSIS Packages
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- Obtaining Data from the Windows Azure Marketplace

**Lab: Using In-Memory Database Capabilities**

- Enabling the Buffer Pool Extension
- Creating Columnstore Indexes
- Working with Memory-Optimized Tables

After completing this module, you will be able to:

- Describe the common workloads for SQL Server 2014.
- Describe the SQL Server 2014 Editions and Components.
- Install SQL Server 2014 Components.
- Use the new features in SQL Server
- Use Power Query to discover and import data from multiple data sources into Excel.
- Use Power View to create interactive data visualizations in Excel and SharePoint Server.
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- Use Power BI for Office 365 to create a cloud-based collaborative solution for self-service BI.
- Describe key features and benefits of cloud computing.
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- Describe key features and benefits of Windows Azure SQL Database.
- Implement security for Windows Azure SQL Database.
- Implement and manage databases in Windows Azure SQL Database.
- Describe considerations for using Virtual Machines in Windows Azure.
- Create and configure Windows Azure virtual machines.
- Create databases in Windows Azure virtual machines.
- Describe features of big data.
- Process big data with Windows Azure HDInsight.
- Consume big data processing results from Windows Azure HDInsight in Microsoft Excel.

**Module 8: Data Quality Services**

This module explains how to use the SQL Server 2014 Data Quality Services (DQS) to provide a computer assisted process for cleansing data values and identifying and removing duplicate data entities.

**Lessons**

- The Buffer pool Extension
- Columnstore Indexes
- Memory-Optimized Tables
- New and Enhanced Dynamic Management Views
- Using PowerShell to Manage SQL Server
- Security Management Enhancements
- Contained Databases
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- Windows Azure Services for Data
- Introduction to Big Data
- Windows Azure HDInsight
- Consuming HDInsight Results in Excel

**Module 13: Introduction to Cloud Data Solutions**

This module introduces some of the key Microsoft technologies that you can use to implement a cloud solution for data.

**Lessons**

- The Buffer pool Extension
- Columnstore Indexes
- Memory-Optimized Tables
- New and Enhanced Dynamic Management Views
- Using PowerShell to Manage SQL Server
- Security Management Enhancements
- Contained Databases
- Using the CDC Control Task for Incremental Data Loads
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- Power Query
- Power View
- Power BI for Office 365
- Overview of Cloud Computing
- Windows Azure Services for Data
- Introduction to Big Data
- Windows Azure HDInsight
- Consuming HDInsight Results in Excel
Use Power Map to create visualizations of SQL Server.

Use Power Query to discover and import SharePoint data.

Use PowerPivot workbooks in performance in data warehouse query models in Excel.

Use Columnstore Indexes to improve performance in data warehouse query workloads.

Use memory-optimized tables to improve performance for latch-bound workloads.

Describe how to use PowerShell to Manage SQL Server.

Describe the common workloads for SQL Server 2014.

Describe how to use contained databases.

Describe high availability features in SQL Server 2014.

Describe data recovery enhancements in SQL Server 2014.

Use the CDC Control task to perform incremental data extractions in an ETL solution.

Deploy and operate an SSIS project.

Describe how Data Quality Services can help you manage data quality.

Use Data Quality Services to cleanse your data.

Use Data Quality Services to match data.

Describe key Master Data Services concepts.

Implement a Master Data Services model.

Use Master Data Services tools to manage master data.

Use Master Data Services tools to create a master data hub.

Describe the key capabilities of Reporting Services.

Install and configure Reporting Services in SharePoint Mode.

Use data alerts to notify users of changes to report data.

Describe Analysis Services tabular data model projects.

Implement an Analysis Services tabular data model.

Use an Analysis Services tabular data model.

Use PowerPivot to create tabular data models in Excel.

Share a PowerPivot workbook in SharePoint Server.

Use Power Query to discover and import data from multiple data sources into Excel.

Use Power View to create interactive data visualizations in Excel and SharePoint Server.

Use Power Map to create visualizations of data.
This module introduces Windows Azure SQL Database, a Platform-as-a-Service (PaaS) solution for cloud-based relational database storage.

**Lessons**
- Transact-SQL Enhancements
- New and Enhanced Transact-SQL Functions
- Enhancements to Spatial Data Support
- Storing and Querying Documents with SQL Server 2014
- AlwaysOn High Availability
- Enhancements to Data Recovery
- Introduction to Windows Azure SQL Database
- Windows Azure SQL Database Security
After completing this module, you will be able to:

- Describe the common workloads for SQL Server 2014.
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- Describe new and enhanced Transact-SQL functions.
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- Use Data Quality Services to match data.
- Describe key Master Data Services concepts.
- Implement a Master Data Services model.

Lab : Managing SQL Server with Scripts

- Using Dynamic Management Views
- Using PowerShell

Lab : Implementing Master Data Services

- Creating a Basic Model
- Editing a model by Using the Master Data

Module 9: Master Data Services

This module introduces Master Data Services and describes its key configuration options and how to import and export data.

Lessons

- The Buffer pool Extension
- Columnstore Indexes
- Memory-Optimized Tables
- New and Enhanced Dynamic Management Views
- Using PowerShell to Manage SQL Server
- Security Management Enhancements
- Contained Databases
- Using the CDC Control Task for Incremental Data Loads
- Deploying and Operating SSIS Packages
- Introduction to Data Quality
- Using Data Quality Services to Cleanse Data
- Using Data Quality Services to Match Data
- Introduction to Master Data Services
- Implementing a Master Data Services Model
- Using the Master Data Services Add-in for Excel
- Reporting Services Overview
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- Windows Azure HDInsight
- Consuming HDInsight Results in Excel
- Obtaining Data from the Windows Azure Marketplace

Lab : Using Windows Azure SQL Database

- Provisioning Windows Azure SQL Database
- Configuring Windows Azure SQL Database Security
- Migrating a SQL Server Database to Windows Azure SQL Database

After completing this module, you will be able to:

- Describe the common workloads for SQL Server 2014.
- Describe the SQL Server 2014 Editions and Components.
- Install SQL Server 2014 Components.
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- Describe the security enhancements in SQL Server 2014.
- Explain how to use contained databases.
- Describe high availability features in SQL Server 2014.
- Describe data recovery enhancements in SQL Server 2014.
- Use the CDC Control task to perform incremental data extractions in an ETL solution.
- Deploy and operate an SSIS project
- Describe how Data Quality Services can help you manage data quality.
- Use Data Quality Services to cleanse your data.
- Use Data Quality Services to match data.
- Describe key Master Data Services concepts.
Module 5: Implementing Security in Microsoft SQL Server 2014

This module describes the enhancements to security features since SQL Server 2008.

Lessons
- The Buffer pool Extension
- Columnstore Indexes
- Memory-Optimized Tables
- New and Enhanced Dynamic Management
- Services Add-in for Excel
- Loading Data into a Model
- Enforcing Business Rules
- Consuming Master Data Services Data

After completing this module, you will be able to:
- Describe the common workloads for SQL Server 2014.
- Describe the SQL Server 2014 Editions and Components.
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- Use the new features in SQL Server Management Studio.
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- Implement a Master Data Services model.
- Use Master Data Services tools to manage master data.
- Use Master Data Services tools to create a master data hub.
- Describe the key capabilities of Reporting Services.
- Install and configure Reporting Services in SharePoint Mode.
- Use data alerts to notify users of changes to report data.
- Describe Analysis Services tabular data model projects.
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- Use Power BI for Office 365 to create a cloud-based collaborative solution for self-service BI.
- Describe key features and benefits of cloud computing.
- Describe Windows Azure service for data.
- Describe key features and benefits of Windows Azure SQL Database.
- Implement security for Windows Azure SQL Database.
- Implement and manage databases in Windows Azure SQL Database.
- Describe considerations for using Virtual Machines in Windows Azure.
- Create and configure Windows Azure virtual machines.
- Create databases in Windows Azure virtual machines.
- Describe key features of big data.
- Process big data with Windows Azure HDInsight.
- Consume big data processing results from Windows Azure HDInsight in Microsoft Excel.

Module 15: SQL Server in Windows Azure Virtual Machines

This module explores how you can use Windows Azure virtual machines in which SQL Server is installed to create a cloud-based solution for data.

Lessons
- Transact-SQL Enhancements
- New and Enhanced Transact-SQL
After completing this module, you will be able to:

- Describe the common workloads for SQL Server 2014.
- Describe the SQL Server 2014 Editions and Components.
- Install SQL Server 2014 Components.
- Use the new features in SQL Server Management Studio.
- Describe the enhancements to Transact-SQL.
- Describe new and enhanced Transact-SQL functions.
- Describe the enhancements to Spatial Data Support.
- Explain how to store and query documents with SQL Server 2014.
- Use the Buffer Pool Extension to improve performance for read-heavy OLTP workloads.
- Use Columnstore Indexes to improve performance in data warehouse query model projects.
- Implement an Analysis Services tabular data model.
- Use an Analysis Services tabular data model.
- Use PowerPivot to create tabular data models in Excel.
- Share a PowerPivot workbook in SharePoint Server.
- Use Power Query to discover and import data from multiple data sources into Excel.
- Use Power View to create interactive data visualizations in Excel and SharePoint Server.
- Use Power Map to create visualizations of geographic data.
- Use Power BI for Office 365 to create a cloud-based collaborative solution for self-service BI.
- Describe key features and benefits of cloud computing.
- Describe Windows Azure service for data.
- Describe key features and benefits of Windows Azure SQL Database.
- Implement security for Windows Azure SQL Database.
- Implement and manage databases in Windows Azure SQL Database.
- Describe considerations for using Virtual Machines in Windows Azure.
- Create and configure Windows Azure virtual machines.
- Create databases in Windows Azure virtual machines.
- Describe key features of big data.
- Process big data with Windows Azure HDInsight.
- Consume big data processing results from Windows Azure HDInsight in Microsoft Excel.

Module 10: SQL Server 2014 Reporting Services

This module describes new and enhanced features in SQL Server Reporting Services.

Lessons

- The Buffer pool Extension
- Columnstore Indexes
- Memory-Optimized Tables
- New and Enhanced Dynamic Management Views
- Using PowerShell to Manage SQL Server Security Management Enhancements
- Contained Databases
- Using the CDC Control Task for Incremental Data Loads
- Deploying and Operating SSIS Packages
- Introduction to Data Quality
- Using Data Quality Services to Cleanse
workloads.
- Use memory-optimized tables to improve performance for latch-bound workloads.
- Describe new and enhanced dynamic management views.
- Describe how to use PowerShell to Manage SQL Server.
- Describe the security enhancements in SQL Server 2014.
- Explain how to use contained databases.
- Describe high availability features in SQL Server 2014.
- Describe data recovery enhancements in SQL Server 2014.
- Use the CDC Control task to perform incremental data extractions in an ETL solution.
- Deploy and operate an SSIS project
- Describe how Data Quality Services can help you manage data quality.
- Use Data Quality Services to cleanse your data.
- Use Data Quality Services to match data.
- Describe key Master Data Services concepts.
- Implement a Master Data Services model.
- Use Master Data Services tools to manage master data.
- Use Master Data Services tools to create a master data hub.
- Describe the key capabilities of Reporting Services.
- Install and configure Reporting Services in SharePoint Mode.
- Use data alerts to notify users of changes to report data.
- Describe Analysis Services tabular data model projects.
- Implement an Analysis Services tabular data model.
- Use an Analysis Services tabular data model.
- Use PowerPivot to create tabular data models in Excel.
- Share a PowerPivot workbook in SharePoint Server.
- Use Power Query to discover and import data from multiple data sources into Excel.
- Use Power View to create interactive data visualizations in Excel and SharePoint Server.
- Use Power Map to create visualizations of geographic data.
- Use Power BI for Office 365 to create a cloud-based collaborative solution for self-service BI.
- Describe key features and benefits of cloud computing.
- Describe Windows Azure service for data.
- Describe key features and benefits of Windows Azure SQL Database.
- Implement security for Windows Azure SQL Database.
- Implement and manage databases in Windows Azure SQL Database.
- Describe considerations for using Virtual Machines in Windows Azure.

**Lab : Using SQL Server 2014 Reporting Services**

- Viewing SharePoint Mode Configuration
- Authoring, Publishing, and Viewing a Report
- Creating and Managing Data Alerts

**After completing this module, you will be able to:**

- Describe the common workloads for SQL Server 2014.
- Describe the SQL Server 2014 Editions and Components.
- Install SQL Server 2014 Components.
- Use the new features in SQL Server Management Studio.
- Describe the enhancements to Transact-SQL.
- Describe new and enhanced Transact-SQL functions.
- Describe the enhancements to Spatial Data Support.
- Explain how to store and query documents with SQL Server 2014.
- Use the Buffer Pool Extension to improve performance for read-heavy OLTP workloads.
- Use Columnstore Indexes to improve performance in data warehouse query workloads.
- Use memory-optimized tables to improve performance for latch-bound workloads.
- Describe new and enhanced dynamic big data, and the Microsoft technologies that

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**Module 16: Implementing Big Data Solutions**

This module describes the main features of big data, and the Microsoft technologies that
Machines in Windows Azure.
- Create and configure Windows Azure virtual machines.
- Create databases in Windows Azure virtual machines.
- Describe key features of big data.
- Process big data with Windows Azure HDInsight.
- Consume big data processing results from Windows Azure HDInsight in Microsoft Excel.

Module 6: High Availability and Data Recovery Enhancements

This module describes enhancements to SQL Server availability and data recovery features since SQL Server 2008.

You can use to build big data analytical solutions. In particular, the module focuses on Windows Azure HDInsight and the Windows Azure Marketplace as core elements of the Microsoft solution for big data.

Lessons
- The Buffer pool Extension
- Columnstore Indexes
- Memory-Optimized Tables
- New and Enhanced Dynamic Management Views
- Using PowerShell to Manage SQL Server
- Security Management Enhancements
- Contained Databases
- Using the CDC Control Task for Incremental Data Loads
- Deploying and Operating SSIS Packages
- Introduction to Data Quality
- Using Data Quality Services to Cleanse Data
- Using Data Quality Services to Match Data
- Introduction to Master Data Services
- Implementing a Master Data Services Model
- Using the Master Data Services Add-in for Excel
- Reporting Services Overview
- Reporting Services and Microsoft SharePoint Server
- Introduction to Data Alerts
- Introduction to Analysis Services Tabular Data Model Projects
- Creating a Tabular Model
- Using an Analysis Services Tabular Data Model in the Enterprise
- PowerPivot for Excel
- PowerPivot for SharePoint Server
- Power Query
- Power View
- Power Map
- Power BI for Office 365
- Overview of Cloud Computing
- Windows Azure Services for Data
- Introduction to Big Data
- Windows Azure HDInsight
- Consuming HDInsight Results in Excel
- Obtaining Data from the Windows Azure Marketplace

Lab: Creating a Big Data Solution
- Provisioning an HDInsight Cluster
- Processing Data with HDInsight
- Analyzing Big Data in Excel
- Obtaining Data from the Windows Azure Marketplace

After completing this module, you will be able to:
- Describe the common workloads for SQL Server 2014.
Module 11: Implementing an Analysis Services Tabular Data Model

This module describes Analysis Services tabular data models and explains how to develop a tabular data model by using the SQL Server Data Tools for BI add-in for Visual Studio.

Lessons

- The Buffer pool Extension
- Columnstore Indexes
- Memory-Optimized Tables
- New and Enhanced Dynamic Management Views
- Using PowerShell to Manage SQL Server
- Security Management Enhancements
- Contained Databases
- Using the CDC Control Task for Incremental Data Loads
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- Using the Master Data Services Add-in for Excel
- Reporting Services Overview
- Reporting Services and Microsoft SharePoint Server
- Introduction to Data Alerts
- Introduction to Analysis Services Tabular Data Model Projects
- Creating a Tabular Model
- Using an Analysis Services Tabular Data Model in the Enterprise
- PowerPivot for Excel
- PowerPivot for SharePoint Server
- Power Query
- Power View
- Power Map
- Power BI for Office 365
- Overview of Cloud Computing
- Windows Azure Services for Data
- Introduction to Big Data
- Windows Azure HDInsight
- Consuming HDInsight Results in Excel
- Obtaining Data from the Windows Azure HDInsight
- Describe the SQL Server 2014 Editions and Components.
- Install SQL Server 2014 Components.
- Use the new features in SQL Server Management Studio.
- Describe the enhancements to Transact-SQL.
- Describe new and enhanced Transact-SQL functions.
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- Use memory-optimized tables to improve performance for latch-bound workloads.
- Describe new and enhanced dynamic management views.
- Describe how to use PowerShell to Manage SQL Server.
- Describe the security enhancements in SQL Server 2014.
- Explain how to use contained databases.
- Describe high availability features in SQL Server 2014.
- Describe data recovery enhancements in SQL Server 2014.
- Use the CDC Control task to perform incremental data extractions in an ETL solution.
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- Use an Analysis Services tabular data model.
- Use PowerPivot to create tabular data models in Excel.
- Share a PowerPivot workbook in SharePoint Server.
- Use Power Query to discover and import data from multiple data sources into Excel.

- Create and configure Windows Azure virtual machines.
- Create databases in Windows Azure virtual machines.
- Describe key features of big data.
- Process big data with Windows Azure HDInsight.
- Consume big data processing results from Windows Azure HDInsight in Microsoft Excel.
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Flere Informationer:
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