

MOC 10337 Updating Your Microsoft SQL Server 2008 BI Skills to SQL Server 2008 R2

Course Summary

Description

This ILT course focuses on the new features SQL Server 2008 R2 for BI specialists.

Objectives

At the end of this course, students will be able to:

- Describe the new and enhanced features in SQL Server 2008 R2 that relate to Business Intelligence, describe how SQL Server 2008 R2 can be integrated with Microsoft SharePoint technologies in a BI infrastructure, and describe the options available for implementing large-scale data warehousing solutions built on SQL Server 2008 R2.
- Use SQL Server PowerPivot to create self-service BI solutions
- Use new and enhanced Reporting Services tools to create and manage self-service reporting solutions
- Use new report features to create compelling reports
- Use StreamInsight to create an application that captures and analyzes streams of event data.
- Use Master Data Services to enable data consistency across the enterprise to help increase the accuracy of BI solutions.
- Integrate data from SQL Azure into a SQL Server BI solution.
- Describe the new features of SQL Server 2008 R2, and use them to manage BI applications.

Topics

- Overview of SQL Server 2008 R2
- Implementing Self-Service BI with PowerPivot
- SQL Server 2008 R2 Reporting Services Tool and API
- SQL Server 2008 R2 Report Authoring Enhancements
- Building Complex Event Processing Solutions with
- Master Data Services
- Introduction to SQL
- Managing SQL Server 2008

Audience

The primary audience for this course is BI Professionals who have 3-4 years of experience with SQL Server. The audience has an understanding of how to use SQL Server 2008 BI tools to implement a BI infrastructure and solution.

Prerequisites

Before attending this course, students must have:

- Three to four years of experience using SQL Server 2008 BI components
- Knowledge of relational and multi-dimensional database schemas
- Experience creating and deploying SQL Server Reporting Services (SSRS) reports
- Experience debugging, monitoring, and troubleshooting BI solutions
- Experience working with the Microsoft .NET Framework
- Experience in using **the** following tools:
 - Microsoft SQL Server 2008 BI Development Studio
 - Microsoft SQL Server 2008 Management Studio
 - Report Builder and Report Manager
- Possible experience in using Microsoft Visual Studio

Duration

Two days

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Course Outline

I. Overview of SQL Server 2008 R2

This module discusses the key themes and features of the SQL Server 2008 R2 release, and the business issues that it was designed to address. It then discusses integration between SQL Server 2008 R2 and SharePoint technologies before introducing data warehousing in SQL Server 2008 R2.

- A. Introduction to SQL Server 2008 R2
- B. SQL Server 2008 R2 and SharePoint 2010
- C. SQL Server 2008 R2 data Warehousing

After completing this module, students will be able to:

- Identify the key features and scenarios addressed by SQL Server 2008 R2.
- Describe the ways in which SQL Server 2008 R2 and SharePoint 2010 can be integrated to create a comprehensive self-service BI platform.
- Identify the options available for data warehousing with SQL Server and describe the key features of SQL Server 2008 R2 Parallel Data Warehouse.

Implementing Self-Service BI with PowerPivot

This module introduces PowerPivot for Excel 2010 and PowerPivot for SharePoint 2010 and describes how they can be used to empower business users to create their own business analyses by using familiar tools.

- A. Introduction to PowerPivot
- B. Power Pivot for Excel 2010
- C. Data Analysis Expressions (DAX)
- D. Power Pivot for SharePoint 2010

Lab: Implementing Self-Service BI with PowerPivot

- Using PowerPivot for Excel 2010
- Using PowerPivot for SharePoint

After completing this module, students will be able to:

- Install and configure PowerPivot for Excel and PowerPivot for SharePoint.
- Use PowerPivot for Excel to create a PowerPivot workbook.
- Use Data Analysis Expressions to build formulas in PowerPivot.
- Use PowerPivot for SharePoint to manage PowerPivot workbooks.

II. SQL Server 2008 R2 Reporting Services Tool and API Enhancements

This module describes the enhancements to Reporting Services tools and APIs in SQL Server 2008 R2 (enhanced reporting functionality is covered in the next module; this module is specifically focused on changes to the management and development tools and APIs).

- A. Deploying and Managing Reporting Services
- B. Reporting Services Authoring Tool Enhancements
- C. Enabling Self-Service BI Through Item Re-Use
- D. Developing Custom Reporting Services Solutions

Lab: Working with Reporting Services

- Viewing and Managing Reports
- Using Report Builder 3.0
- Working with Shared Datasets and Report Parts

After completing this module, students will be able to:

- Use the enhanced Reporting Services management tools
- Use the enhanced Reporting Services authoring tools
- Collaborate with other report developers by using shared datasets and report parts
- Use the enhanced Reporting Services development APIs

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Course Outline (cont'd)

III. SQL Server 2008 R2 Report Authoring Enhancements

This module describes the enhancements to Reporting Services in SQL Server 2008 R2.

- A. Overview of Report Authoring Enhancements
- B. Visualizing Data
- C. Visualizing Spatial Data with Maps

Lab: Authoring Reports

- A. Using Lookups
- B. Paginating Reports
- C. Visualizing Data with Databars and Sparklines
- D. Visualizing Data with Indicators
- E. Visualizing Spatial Data

After completing this module, students will be able to:

- Use new features to create reports that include rotated text boxes, linked data from multiple datasets, include rollup aggregations, and custom pagination behavior.
- Create reports that include graphic visualizations of data with Sparklines, Data Bars, and Indicators.
- Create reports that include visualizations of spatial data.

IV. Building Complex Event Processing Solutions with StreamInsight

This module introduces StreamInsight with an emphasis on its use to enable analytical solutions for real-time streams of data.

- A. Introduction to StreamInsight
- B. StreamInsight Core Concepts
- C. Developing a StreamInsight Solution

Lab: Building a StreamInsight Solution

- Creating a StreamInsight Application
- Using Filters and Aggregates
- Using the StreamInsight Debugger

After completing this module, students will be able to:

- Describe scenarios where Complex Event Processing can be used effectively
- Describe the core concepts related to Microsoft StreamInsight.
- Create a basic StreamInsight application

V. Master Data Services

This module introduces Master Data Services with an emphasis on its use to enable data consistency across the enterprise to help increase the accuracy of BI solutions.

- A. Introduction to MDS
- B. Key Concepts in Master Data Services
- C. Importing and Browsing Data
- D. Business Rules
- E. Exporting Data to Subscribing Systems
- F. Securing Master Data Services

Lab: Working with Master Data Services

- Installing and Configuring Master Data Services
- Creating Master Data Services Objects
- Importing Data from a Source System
- Creating a Business Rule
- Exporting Data to a Subscribing System

After completing this module, students will be able to:

- Describe the key scenarios and benefits of MDS
- Describe core MDS concepts
- Import data into MDS
- Implement MDS Business Rules
- Export MDS data
- Secure MDS

VI. Introduction to SQL Azure

This module introduces SQL Azure and cloud-based data solutions.

- A. Overview of SQL Azure and Cloud Services
- B. Using SQL Azure

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Course Outline (cont'd)

C. Introduction to "Dallas"

After completing this module, students will be able to:

- Identify suitable scenarios for cloud-based data solutions
- Use SQL Azure for cloud-based data storage
- Use the Dallas cloud-data service

VII. Managing SQL Server 2008 R2

This module introduces new and enhanced manageability features in SQL Server 2008 R2.

- A. Database Server Provisioning by Using SQL Server SysPrep
- B. Application Management by Using Data-Tier Applications
- C. Managing Multiple Servers by Using Utility Control Points

Lab: Managing SQL Server 2008 R2

- Working with Data-Tier Applications
- Managing Multiple Servers with a UCP

After completing this module, students will be able to:

- Use SQL Server SysPrep to provision database and reporting servers
- Use data-tier applications to manage BI databases
- Use Utility Control Points to manage BI database server resource utilization