

Designing BI Solutions with Microsoft SQL Server 2014

Course: 20467

Course Details

Audience(s): IT Professional(s)

Technology: Microsoft SQL Server 2014

Duration: 40 Hours

ABOUT THIS COURSE

This training course teaches database and business intelligence (BI) professionals how to plan and design a BI solution that is based on Microsoft SQL Server 2014 and other Microsoft BI technologies.

AUDIENCE PROFILE

This course is not designed for students who are new to SQL Server 2014 BI technologies; it is targeted at BI professionals with experience of implementing solutions with SQL Server database Engine, SQL Server Integration Services, SQL Server Analysis Services, and SQL Server Reporting Services.

Course Content

Module 1: Planning a BI Solution

Lessons

- Elements of a BI Solution
- Planning a BI Project
- The Microsoft BI Platform

Lab: Planning BI Solutions

Module 2: Planning SQL Server Business Intelligence Infrastructure

Lessons

- Considerations of BI Infrastructure
- Planning Data Warehouse Hardware

Lab: Planning BI Infrastructure

Module 3: Designing a Data Warehouse

Lessons

- Data Warehouse Design Overview
- Designing Dimension Tables
- Design FACT tables

Lab: Designing a Data Warehouse Logical Schema

Module 4: Designing an ETL solution

Lessons

- ETL Overview
- Planning for Data Extraction
- Planning for Data Transformations
- Planning for Data Loading

Lab: Designing an ETL Solution

Module 5: Designing Analytical Data Models

Lessons

- Introduction to Analytical data Models
- Designing Analytical Data Models

Lab: Designing Analytical Data Model

Lab: Designing Dimensions and Hierarchies

Module 6: Planning a BI Delivery Solution

Lessons

- Considerations for BI delivery
- Common Reporting Scenarios
- Choosing a Reporting Tool

Lab: Planning a BI Delivery Solution

Module 7: Designing a Reporting Services Solution

Lessons

- Planning a Reporting Solution
- Designing Reports
- Planning Report Consistency

Lab: Designing a Reporting Services Solution

Module 8: Designing an Excel Based reporting Solution

Lessons

- Using Excel for Data Reporting and Analysis
- PowerPivot in Excel
- Power View in Excel

Lab: Designing and Excel Reporting Solution

Module 9: Planning a SharePoint Server BI Solution

Lessons

- Introduction to SharePoint Server as a BI Platform
- Planning Security for a SharePoint Server BI Solution
- Planning Reporting Services Configuration
- Planning PowerPivot Configuration
- Planning for PerformancePoint Services

Lab: Implementing a SharePoint Server BI Solution

Lab: Implementing PerformancePoint Services

Module 10: Monitoring and Optimizing a BI Solution

Lessons

- Overview of BI Monitoring
- Monitoring and Optimizing the Data Warehouse
- Monitoring and Analyzing Analysis Services
- Monitoring and Optimizing Reporting Services

Lab: Monitoring and Optimizing a BI Solution

Module 11: Operating a BI Solution

Lessons

- Overview of BI Operations
- ETL Operations
- Data Warehouse Operations
- Analysis Services Operations
- Reporting Services Operations

Lab: Operating a BI Solution

At This Course Completion

At completing this course the student will be able to:

- Plan a BI solution.
- Plan SQL Server BI infrastructure.
- Design a data warehouse.
- Design an extract, transform and load (ETL) solution.
- Design analytical data models.
- Plan a BI delivery solution.
- Design a Reporting Services solution.
- Design a Microsoft Excel-based reporting solution.
- Plan a SharePoint Server BI solution.
- Monitor and optimize a BI solution.
- Operate a BI solution.