SQL Server 2019 Reporting Services

Duration: 21 hours

Prerequisites: Familiarity with database concepts

Course Description: This course includes an overview of the SQL Server business intelligence architecture focusing the role of Reporting services. All reports are developed utilizing SQL Server Data Tools (SSDT), however Report Designer is also introduced. Students will complete hands-on exercises creating a number of reports including table-based, cross tabular and forms based designs. Reports utilizing the newly designed charts, gauges, KPIs, spark lines, data bars and tree maps will be built. Exercises will incorporate the use of report parameters and features such as drill down, interactive sorting, hyperlinks, book marks and report maps.

Consuming data from relational, multi-dimensional and the new tabular data sources will be incorporated into report designs. Students will become familiar with report deployment to the new Reporting Service Web Portal (replaced Report Manager) and learn how to use the portal management tools to configure report caches, snapshots and subscriptions. Instruction and practice in designing report security to insure protection of enterprise data will be provided.

The student will gain experience with the new Report Services Web portal, which enables publishing content other than paginated reports, such as Excel and Power BI visualizations. Students will also learn how to include KPIs (Key Performance Indicators) directly from a shared data set.

Students Will Learn

- Installing and configuring SQL Server Reporting Services
- Designing reports using SQL Server Data Tools (SSDT)
- Creating multi-dimensional, two-dimensional and tabular data sources and sets
- Using the Tablix object to display information in Tables, Matrix (pivot tables) and free form Lists
- Using visualization objects to create Charts, Spark Lines, Data Bars and Tree Maps
- Adding images, page headers and footers and report metadata
- Including report parameterization enabling filtering by users
- Configuring report interactivity, including drill-downs, report maps and book marks
- Linking to parameterized child reports via hyperlinks or sub-reports
- Creating calculated fields and custom report formatting
- Deploying reports to the new Reporting Services Web Portal
- Configuring report snapshots, caches and subscriptions
- Securing reports and data sources

Overview

Reporting Services Architecture

- Defining Report Server Components
- Reviewing the Report Server Databases
- Managing the Report Server Web Portal
- Creating Mobile Reports and Dashboards
- Report Lifecycle Step by Step

Creating Basic Reports

- Creating Table Reports
- Formatting Options
- Adding Headers and Footers
- Using Subtotals and Formulas
- Adding Charts and Gauges
- Using Lists for Free-Form Reports
- Paging and Sorting
- Managing Data Sources
- Adding Key Performance Indicators (KPIs)

Advanced Report Features

- Setting Up Input Parameters
- Adding Custom Report Navigation
- Adding Drill-Down for Master-Detail Reports
- Linking Reports
- Using Sub-Reports
- Adding Conditional Formatting

Matrix Reports

- Pivoting Data with Matrix Controls
- Adding Multiple Data Regions
- Grouping and Sorting
- Adding Subtotals
- Adding Custom Aggregate Formulas
- Using the Tablix object

Implementing BI Semantic Model

- Understanding Multi-Dimensional Models
- Using Tabular Models
- Creating MDX Data Sources and Data Sets

Report Designer

- Creating Reports with Report Designer
- Adding Charts and Gauges in Report Designer
- Differences Between SQL Server Data Tools and Report Builder

Reporting Services Security

- Organizing Reports in Folders
- Setting Permissions on Reports and Folders
- Managing Security Roles
- Securing Data Sources and Report Models
- Logging Activity on the Report Server

Automating Report Creation and Delivery

- Creating Snapshot Reports
- Storing Previous Versions of Reports
- Caching Reports to Improve Performance
- Defining Subscriptions to Automate Report Delivery
- Rending Reports in Excel, MS Word or as a PDF
- Hiding Reports from Users

Adding Custom Code

- Querying the Report Server
- Creating Custom Data Extensions
- Creating Command Objects
- Creating Data Reader Objects
- Generating Report Definition Language

.NET Integration with Reporting Services

- Writing User-Defined Functions in .NET
- Using Custom Functions
- Referencing .NET Libraries
- Managing Report Servers from .NET Applications
    - Accessing SSRS from .NET Applications
    - Retrieving Report Items
    - Listing Report Metadata

Related Bootcamps

Track	Duration	Price
SQL Server Business Intelligence Analyst	112 hours	$3,580

Contact Us

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