

MOC 55204 AC Writing Reports with Report Designer and SSRS Level 1

Course Summary

Description

In this 2-day course, students are introduced to the foundations of report writing with Microsoft® SQL Server® Report Designer and SSRS. The focus will be on report writing by connecting to a database and manipulating the data for presentation including: creating table and matrix reports, formatting reports, grouping report data, creating simple and complex expressions, displaying aggregated data, sorting and filtering data, charting data, and preparing reports for printing and exporting. Report Designer is available for all supported versions of Microsoft® SQL Server®.

Objectives

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

- Explore the Report Designer environment.
- Create table reports.
- Format reports.
- Create basic and complex expressions.
- Group report data.
- Create matrix reports.
- Sort and filter report data.
- Summarize data with charts.
- Print and export reports.

Topics

- SSRS and Report Designer
- Adding Data to Table Reports
- Formatting Data and Creating Expressions
- Grouping Report Data
- Matrix Reports
- Charts
- Printing and Exporting Reports

Audience

The primary audience for this course is persons who are new to reporting with Microsoft SQL Server Report Designer and SSRS, persons who are transitioning from another reporting software application, and persons who are existing Report Designer and SSRS report authors.

The secondary audience for this course is persons who are using Report Builder (SSRS).

Course participants may be business analysts, programmer analysts, data analysts, database administrators, or IT professionals and may or may not have experience with Microsoft SQL Server Report Designer and SSRS, programming (Visual Basic), and/or Transact-Structured Query Language (T-SQL) experience.

Prerequisites

Prior to taking this course, students should have the following skills:

- Familiarity with Windows.
- Creating and navigating folders.
- Opening programs.
- Manipulating windows.
- Copying and pasting objects.
- Formatting text.
- Saving files.
- Microsoft Office Access 2013: Level 1 or have equivalent experience with basic database concepts.

Duration

Two days

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Course Outline

I. SSRS and Report Designer

This module introduces the Report Designer application and its features. You will explore the Menu bar, the Toolbox, and the available Window panes for creating and manipulating reports, and the report design surface using Design and Preview modes.

- A. SQL Server Reporting Services
- B. The Report Designer Environment
- C. Working with Existing Reports

Lab 1: Exploring the Report Designer Application

- Navigating the Menu bar and the Toolbox
- View Existing Reports in Design and Preview modes

II. Adding Data to Table Reports

This module introduces report writers to populating a report with data and displaying the data in a table data region on the report. We will begin with defining the data source and continue with query building through data sets to bring data into the report. Next, we will explore the elements of the Tablix including rows, columns, cells, handles, and field choosers.

- A. Create Data Sources
- B. Create Datasets
- C. Create Table Reports

Lab 1: Creating Table Reports

- Create Queries Using the Report Designer Query Designer
- Create a Table Report using a Single Table
- Create Table Relationships using Query Designer
- Create a Table Report using Multiple Tables

III. Formatting Data and Creating Expressions in Reports

This module introduces report formatting techniques which allow a report writer to control how and where data displays in the report. Additional data may also be required and this can be accomplished by adding data from a source or adding a calculated field to the dataset. Simple and complex expressions will also be introduced in this topic.

- A. Format Tablix Columns
- B. Sorting and Filtering Report Data
- C. Adding Data to a Dataset
- D. Creating Simple and Complex Expressions

Lab 1: Formatting Reports

- Format Tablix Columns
- Format Data in a Tablix Cell using Properties
- Format Data in a Tablix Cell using Simple and Complex Expressions
- Sorting Data using Expressions
- Use Simple and Complex Expressions to Display Data in a Tablix

IV. Grouping Report Data

This module introduces data groupings in reports using dataset fields and expressions. This module also discusses group hierarchies and adding aggregates to summarize grouped data.

- A. Group Data in Reports
- B. Group Data Using an Expression
- C. Creating a Grouping Hierarchy and using Group Aggregates

Lab 1: Creating Reports with Groups and Aggregates

- Display Grouped Data in a Report
- Create a Group Hierarchy in a Report
- Group Data using a Complex Expression
- Add Aggregates to Tablix Rows

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Course Outline (cont'd)

V. Matrix Reports

This module introduces matrix data regions which are used in reports to control how cross tabular data can be used. While table reports rely on rows and columns, matrix reports rely on row groupings, column groupings, and aggregated values.

- A. Create and Modify Matrix Data Regions
- B. Create and Modify Column Groups

Lab 1: Creating Matrix Reports

- Create Matrix Reports
- Create Column Groups
- Use Expressions to Sort Group Data
- Use Expressions to Display Group Names
- Create Matrix Reports with Grouping Hierarchies

VI. Charts

This module introduces charting and the ability to create and add charts to reports. Chart reports allow us to visualize data with or without the details.

- A. Create Charts in Reports
- B. Modify Charts in Reports

Lab 1: Creating Charts and Chart Reports

- Create a Chart Report
- Add a Chart to an Existing Report
- Format Chart Elements
- Use Expressions in Charts

VII. Printing and Exporting Reports

This module introduces report printing and exporting. Reports can be created for electronic display, paper display, or display in another application. This module covers the basics of those three scenarios.

- A. Print Features and Print Options
- B. Export Reports

Lab 1: Printing and Exporting Reports

- Explore Page Layout View, Report Formatting, and Page Setup Options
- Export Reports