## **SQL Server 2014 Reporting Services**

**Duration:** 3 Days (Face-to-Face & Remote-Live), or 21 Hours (On-Demand)

Price: CDN\$2,275 (Face-to-Face & Remote-Live), or CDN\$1,995 (On-Demand)

**Discounts:** We offer multiple discount options. <u>Click here</u> for more info.

Delivery Options: Attend face-to-face in the classroom, remote-live or on-demand

training.

## Students Will Learn

- Creating, deploying and configuring SQL Server Reporting Services
- Working with tables and using the Tablix control to manage row-level and/or column-level groups
- Displaying pivot-table style data using the Matrix control
- Adding images, page headers, page footers and textboxes to reports
- Adding charts and gauges to reports
- Rendering reports as Excel, Word or PDF files
- Defining input parameters to allow

users to filter data at runtime

- Using Report Builder 3.0 to create reports
- Linking reports and using sub-reports
- Using Expression Builder to define custom fields and conditional formatting
- Defining which users and groups can view/manage reports and report models
- Defining snapshot reports to automate report generation and delivery
- Configuring report caching to improve performance

### Course Description

This course introduces Microsoft's SQL Server Reporting Services 2014 (SSRS) utility. It begins with a discussion of the Reporting Services architecture and how to set up Reporting Services servers. Students will install and configure Reporting Services, and perform hands-on exercises where they create various types of reports, including basic table-based reports, parameterized reports, drilldown reports, linked reports, sub-reports, matrix reports (pivot tables), free-form reports and reports with charts and gauges. Students learn how to group data and add subtotals and totals to reports, as well as how to add custom calculations using the built-in functions or using custom functions written in .NET. Also demonstrated are all of the data sources for reports that Reporting Services supports including: SQL Server databases, Access databases, XML files, Oracle databases, data warehouses and Analysis Services data cubes.

Report Models, and how they can support end users creating ad-hoc reports, are covered

and students practice with them in comprehensive hands on exercises. This includes a demonstration of Report Builder, which is a free report authoring tool from Microsoft. The course ends with a complete overview of Report Server administration, including how to deploy and secure reports, how to schedule automatic report generation and delivery, how to backup reports, how to store previous copies of reports in history folders, and how to maintain and troubleshoot Report Servers.

Students who wish to attend 2-day coverage of SSIS and SSAS in addition to 3 days of SSRS coverage, should instead sign up for the 5-day <u>SQL Server 2014</u> <u>Business Intelligence Application Development (SSRS, SSIS, SSAS)</u> course. The <u>SQL Server 2014 Business Intelligence Application Development (SSRS, SSIS, SSAS)</u> course covers everything in the <u>SQL Server 2014 Reporting Services</u> course, plus a 1-day overview each for Integration Services and Analysis Services.

Students requiring more in-depth coverage of SSIS and SSAS, as well as SSRS coverage should attend the 3-day <u>SQL Server 2014 Reporting Services</u> course followed by the 5-day <u>SQL Server 2014 Business Intelligence: Integration Services and Analysis Services</u> course, which provides 5-days of coverage for SSIS and SSAS capabilities. An 8-day training pass is available for \$3,690.

#### Course Prerequisites

Familiarity with database concepts, Windows desktop navigation and software installation techniques. Attendance at HOTT's <u>SQL Programming</u> course or <u>Microsoft Transact-SQL Programming</u> course is highly recommended although not required.

#### Course Overview

#### **Reporting Services Architecture**

- All Report Server Components Defined
- Review of the Report Server Databases
- Managing the Report Manager Web Interface
- 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

#### **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 TablixControl

#### Implementing Report Models

- Understanding Report Models
- Defining and Deploying Report Models

#### **Report Builder Utility**

- Creating Reports with Report Builder
- Connecting to Report Models

- Setting Friendly Names for Source Data
- Managing and Securing Report Models
- Adding Charts and Gauges in Report Builder
- 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
- Using the ReportViewer Control in ASP.NET Applications

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