Microsoft SQL Server 2008 Reporting Services

Course Summary

Description

This course teaches students the techniques for using SQL Server 2008 Reporting Services. They will learn about tabular and list reports that employ datasets and data regions. This course will also teach students how to add custom expressions, custom functions and format reports using Visual Studio 2008 and SQL Server 2008 Business Intelligence Studio. The reports created in the course will employ shared data sources, interactive sorting, and drill-down capabilities. Students will learn how Reporting Services parameters work and create parameters in ad-hoc SQL. They will also build Matrix reports and charts to help understand the use of Reporting Services gauges. Deployment of Reporting Services projects using a variety of formats and client-side printing will be covered. Students will learn how SSRS Security works for managing user roles and accounts. They will also learn how to empower users to create ad-hoc reports using Report Builder and Report Model projects.

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

- Create tabular and list reports
- Build expressions and understand how they are used within SSRS
- Use global, field and parameter collections
- Create Groups using the grouping pane for Details Group and Row Groups
- Use parameters with stored procedures, with values on reports and unbound parameters
- Create Matrix reports and see the new features of Matrix reports for SSRS 08
- Deploy reports and use the report manager
- Use SSRS Security, SSL and Data Source Security
- Use Reporting Services APIs and Report Viewer Controls
- Create a Web Service, a Web Service Subscription and Custom Assemblies

Topics

- Introducing SQL Server Reporting Services
- Creating Tabular and List Reports
- Calculation and Formatting
- Grouping and Sorting
- Working with Parameters
- Creating Matrix Reports and Charts

- Managing Reporting Services
- Security
- Programming Reporting Services
- Advanced Reporting Services Programming
- Snapshots and Subscriptions
- Ad-Hoc Reporting with Report Builder 2.0

Audience

This course is designed for individuals who are SQL Server 2008 Reporting Services users.

Prerequisites

This course requires knowledge of SQL Server 2008 and the use of SQL Server Management Studio for development, Visual Studio 2008 using Visual Basic and administrative tasks.

Duration

Three days

Microsoft SQL Server 2008 Reporting Services

Course Outline

I. Introducing SQL Server Reporting Services
   A. Investigate what SQL Server Reporting Services can do
   B. Explore the basic architecture of SQL Server Reporting Services
   C. Gain a basic understanding of the components behind SQL Server Reporting Services
   D. Learn how to create a basic report using the SQL Server Reporting Services Wizard

II. Creating Tabular and List Reports
   A. Learn how to create a tabular report from scratch
   B. Learn about datasets and data regions
   C. Discover how to add textboxes and other controls to reports
   D. Investigate the list data region
   E. Learn how to work with rich text to produce mail merge style reports

III. Calculation and Formatting
   A. Explore how to create expressions in your reports using
   B. Learn how to create custom functions using the Code window
   C. Discover the various global collections that you can reference in your expressions
   D. Learn how to format report items using the formatting toolbars, the Properties window, and the Textbox Properties dialog box
   E. Find out how you can use conditional formatting to make your reports more dynamic
   F. Learn about report variables and when you might need to use them

IV. Grouping and Sorting
   A. Explore creating groups
   B. Master the Reporting Services Grouping pane
   C. Learn how to calculate group totals and percentages
   D. Understand scope as it applies to aggregate functions
   E. Discover interactive sorting
   F. Find out how to create drill-down reports

V. Working with Parameters
   A. Understanding how Reporting Services parameters work with stored procedure parameters
   B. Learn how to create parameters in ad-hoc SQL
   C. Find out how to display parameter values in report headers
   D. Discover how to improve parameter prompts using drop-down list parameters
   E. Dig into the use of unbound, multi-valued, and cascading parameters
   F. Learn how to solve common parameter issues

VI. Creating Matrix Reports and Charts
   A. Learn how to create matrix reports
   B. Investigate Reporting Services charts
   C. Explore the use of Reporting Services gauges

VII. Managing Reporting Services
   A. Understand how to plan and configure for deployment
   B. Learn how to deploy Reporting Services projects and individual reports and data sources
   C. Explore exporting reports to a variety of formats and using the client-side printing feature of Reporting Services
   D. Investigate how to manage Reporting Services projects using Report Manager
   E. Explore creating linked reports

VIII. Security
   A. Investigate how Reporting Services secures access to reports and other Reporting Services resources
   B. Find out how to use Report Manager to manage user accounts and roles
   C. Learn how to enable basic authentication for reports and how to require SSL for report operations
   D. Explore the storing of credentials within a data source

Microsoft SQL Server 2008 Reporting Services

Course Outline (cont'd)

IX. Programming Reporting Services
- A. Discover the many application programming interfaces of Reporting Services
- B. Learn how to use URL to integrate Reporting Services reports into your applications
- C. Explore the use of the Report Viewer controls to create Web pages and Windows Forms that render Reporting Services reports in place
- D. Investigate how to use the Report Views controls in local mode to display reports that don't involve Reporting Services

X. Advanced Reporting Services Programming
- A. Discover the classes and methods exposed by the Reporting Services Web Service API
- B. Learn how to call the Report Server Web Service
- C. Investigate how to call a custom assembly from a report
- D. Explore the potential deployment and security issues that might arise when working with custom assemblies

XI. Snapshots and Subscriptions
- A. Learn how to enable and control report caching
- B. Investigate the scheduling of report snapshots
- C. Explore the maintenance of report history
- D. Discover how to create standard report subscriptions
- E. Learn how to create data-driven report subscriptions

XII. Ad-Hoc Reporting with Report Builder 2.0
- A. Learn the differences between Report Builder 1.0 and Report Builder 2.0
- B. Explore how to use Report Builder to build ad-hoc tabular, matrix and chart reports
- C. Discover how to create Report Builder reports without using the wizards
- D. Learn how to create Report Model projects using Visual Studio and deploy them to a Reporting Services server