

TOC - Course 10990-C: Analyzing Data with SQL Server Reporting Services

Module 1: Introduction to Reporting Services

This module introduces Microsoft SQL Server Reporting Services, its components, and the tools used to work with it.

Lessons

Introduction to reporting services

Reporting services components

Reporting services tools

Lab : Exploring reporting services

Exploring reports

Reporting services configuration

After completing this module, students will be able to:

Give a context for Reporting Services.

Describe the components of Reporting Services.

Explain Reporting Services tools.

Module 2: Reporting Services Data Sources

Almost every report that you publish by using SQL Server Reporting Services (SSRS) will be built using data that's obtained from one or more source systems. This lesson explains how to configure SSRS to interact with source data systems by working with data sources.

Lessons

Data sources

Connection strings

Datasets

Lab : Configuring data access with report builder

Configuring data access with report builder

Lab : Configuring data access with report designer

Configuring data access with report designer

After completing this module, you will be able to:

Describe data sources.

Work with connection strings.

Describe datasets.

Module 3: Creating Paginated Reports

Now that you have learned about BI and data modelling, and how to access data from Report Designer and Report Builder, you need to learn how to create reports. This module shows you how to create different types of reports in both applications, in addition to using the Report Wizard.

Lessons

Creating a report with the report wizard

Creating a report

Publishing a report

Lab : Creating reports

Use the report wizard – report designer

Use the report wizard – report builder

Creating and publishing a report – report designer

Creating and publishing a report – report builder

After completing this module, you will be able to:

Create a report with the report wizard.

Create a report using report builder or report designer.

Publish a report to reporting services.

Module 4: Working with Reporting Services Data

It is common for business requirements to change regarding the information they need and how they want data presented. On viewing a detailed report, senior management might ask for higher level, summarized, or filtered versions of the same report.

Report Builder and Report Designer support these scenarios via filtering, sorting, drilldowns, grouping and the parameterizing of reports.

In this module, you will see how to use filters and parameters to make reports more dynamic and useful to business users.

Lessons

Data filters

Report parameters

Implementing report filters and parameters

Lab : Create a parameterized report

Using parameters in report designer

Using parameters in report builder

After completing this module, students will be able to:

Filter data in reports

Use parameters in reports

Module 5: Visualizing Data with Report Services

As the amount of data being generated continues to grow, the need to make sense of its meaning increases. You use data visualization to make data easier to understand, and faster to interpret.

Data visualizations highlight comparisons, show trends, and convey scale much faster than a table of numbers could. The detail is important, but visualizations are a highly effective way of conveying meaning and insights quickly and accurately.

Lessons

Formatting data

Images and charts

Databars, sparklines, indicators, gauges, and maps

Lab : Manage formatting

Report designer

Report builder

After completing this module, you will be able to:

Format data in reports.

Use images and charts in your reports.

Use databars, sparklines, and indicators in reports.

Explain what a KPI is and how it's used.

Module 6: Summarizing Report Data

As the amount of data we need to deal with increases, so does the requirement to manage data by grouping and summarizing. In this module, you will learn how to create group structures, summarize data, and provide interactivity in your reports, so that users see the level of detail or summary that they need.

Lessons

Sorting and grouping

Report sub-reports

Drilldown and drill through

Lab : Summarizing report data

Sorting and grouping in report builder

Sorting and grouping in report designer

After completing this module, students will be able to:

Group and sort data in reports.

Create report sub-sections.

Use drill down and drill through.

Module 7: Sharing Reporting Services Reports

When you have published a Reporting Services report, users can view the report interactively. In some situations, it can be advantageous to run reports automatically, either to improve performance through caching and snapshots, or to deliver reports to users—by using e-mail or other mechanisms. To run reports automatically, you need to understand how Reporting Services manages scheduling. This module covers report scheduling, caching and the report life cycle, and automatic subscription and delivery of reports.

Lessons

Schedules

Report caching, snapshots, and comments

Report subscription and delivery

Lab : Sharing reporting services reports

Create a shared schedule

Configure caching

Subscribe to a report

After completing this module, students will be able to:

Explain schedules.

Describe report caching, report snapshots, and report comments.

Configure report subscriptions.

Module 8: Administering Reporting Services

System administrators take responsibility for the configuration and day-to-day operations of IT systems. In SQL Server Reporting Services (SSRS), administrative tasks include the configuration of the web portal and web service, branding the web portal, and ensuring that access to sensitive reports is carefully controlled. Administrators also monitor and optimize performance.

Lessons

Administering reporting services

Reporting services configuration

Reporting services performance

Lab : Administering reporting services

Authorize access to reports

Web portal branding

After completing this module, students will be able to:

Secure access to reports by using authentication, permissions, and SSL encryption.

Use report services configuration manager to reconfigure SSRS servers.

Monitor and optimize the performance of SSRS on a given set of server hardware.

Module 9: Extending and Integrating Reporting Services

Although Reporting Services is a powerful tool, its built-in capabilities might not always meet your needs. This module covers the methods for extending the functionality of Reporting Services with expressions and custom code. You will also learn about the methods for working with Reporting Services programmatically, and integrating Reporting Services reports into other applications.

Lessons

Expressions and embedded code

Extending reporting services

Integrating reporting services

Lab : Extending and integrating reporting services

Custom code – report designer

Custom code – report builder

URL access

After completing this module, students will be able to:

Work with expressions and embedded code.

Extend reporting services functionality with external assemblies.

Integrate reporting services with other software.

Module 10: Introduction to Mobile Reports

This module introduces the design and publication of reports that are intended for consumption on mobile devices, such as smartphones and tablets. Microsoft SQL Server Reporting Services (SSRS) includes support for mobile reports, although the tools that are used to design and publish mobile reports are different to the tools used for the paginated reports discussed in the earlier modules of this course.

Lessons

Overview of mobile reports

Preparing data for mobile reports

Mobile report publisher

Lab : Introduction to mobile reports

Format data for a mobile report

Create a mobile report

Create KPIs

After completing this module, students will be able to:

Describe considerations for mobile reports.

Prepare data for publication in mobile reports.

Use SQL Server mobile report publisher to create mobile reports.

Module 11: Developing Mobile Reports

In this module, you will learn about the element types that you can add to your Microsoft SQL Server Reporting Services mobile reports. You will also learn about working with dataset parameters, and how to add drillthrough actions to your reports.

Lessons

Designing and publishing mobile reports

Drillthrough in mobile reports

Lab : Developing mobile reports

Add a dataset with parameters

Design a mobile report

Publish a mobile report

Add a drillthrough to a custom URL

After completing this module, students will be able to:



Describe how to design and publish mobile reports.

Explain how to drillthrough from mobile reports.