Telerik Training for Mercury 3

Telerik training is intended for IT professionals and Power Users familiar with constructing reports based on raw data from databases or spreadsheets. You will learn how to use the Telerik Stand Alone Report Writer to create and configure sophisticated reports based on Mercury 3.0.x data. Sample reports are provided for the class and demonstrations in both a form ready to edit and runnable.

The class is offered as a three day introductory class followed by either an additional two day advanced class and/or focused consultation time to assist with your specific reporting needs.

Clients are encouraged to come to class with a query or idea for a report they are interested in. While we cannot build SQL for a complicated report during class, we can look at and possibly modify existing SQL queries.

The class is offered at the RMS office in Raleigh, NC and available at your location by request.

Prerequisites

Three Day Introductory Class

Attendees for the three day introductory class should be familiar with the RMS & Mercury applications and be able to construct or modify SQL queries used to extract data for reporting.

Two Day Advanced Class

Attendees for the two day advanced class should be able to create moderately complex SQL queries utilizing sub queries, joins and advanced 'where' clauses, understand basic XML file structure, have some background in application development and prior experience with desktop publishing applications.

After the Class

After attending the class, attendees must have Read Only access to all Mercury databases at their institution and the ability to either construct SQL queries or have them written for you in order to fully utilize the skills gained.

Dedicated Report Consulting

Dedicated consulting and individualized tutoring sessions are available either by WebEx or onsite after a class. Please contact RMS for details or to schedule an evaluation to determine if you can benefit from a dedicated consultation.

Syllabus – Three Day Introductory Class

Day 1	1. **Overview of Telerik Capabilities.** A review of reports written to demonstrate Telerik capability and address initial questions and concerns (1 hour) 2. **Introduction to Telerik** Learn the mechanics of the Telerik Design Interface, accessing data, wizard assistants, displaying and formatting simple data, calculations, conditional formatting, shapes, sorting, grouping and previewing reports (4 hours) 3. **Overview of Mercury data** Explore Mercury data in either MS SQL Server Management Studio or Oracle SQL Developer with a focus on the tables and views commonly used in reports (1 hour)
Day 2	1. **Parameters and Filters** Introduce parameters and the difference between server and client parameters. Learn how to build and debug queries that utilize parameters in SQL Server Management Studio (SSMS) or SQL Developer. Learn how to build filters to activate client side parameters. Learn how to configure additional data sources to be used with parameters and construct parameters for special situations. We will also discuss performance considerations (3 hours) 2. **Database Connections** We will look at the basic steps necessary to connect Telerik on your desktop to your Mercury database. The actual configuration of your connection may happen before or after the class and may involve a WebEx with either RMS Support or the Telerik instructor (0.5 hours) 3. **Styles** Learn how to create and apply styles such as font, color, background, padding, borders, etc. Styles facilitate giving your reports a standardized look and feel of your school with minimal effort (1 hour) 4. **Modifying Easy Reports** Learn how to modify reports created with the Easy Report Builder (0.5 hours) 5. **Practice** (1 hour)

Day 3	1. **Complex Report Elements** We will learn how to insert Dynamic Images (Profile and Inspection), Tables and Crosstabs (Pivot Tables) into reports (2 hours) 2. **Building Reports intended for Excel Export** Designing reports that export data cleanly to Excel has been identified as highly important for Housing Administration offices. This module provides instruction on how to create a report with the intention of exporting the result to an Excel file. We will learn how to edit the TRDX file for the purpose of cleaning up small errors introduced using the Telerik Report Designer (1 hour) 3. **Telerik Data Browser and Query Builder** (0.5 hours) 4. **Telerik Educational Resources** Introduction to the WIKI, RMS documentation, Report Exchange and Getting Support, gotcha's (0.5 hours) 5. **Practice or optional demonstrations of reports featuring advanced topics** Students may bring their own reports or use provided reports as a basis for their own experimentation and report building with input from other students and the instructor (2 hours)

Advanced Topics

Clients can choose their own modules from the list below for the two day Advanced Training. There is a choice of an interactive lesson or a demonstration. This list is not presented in order of precedence or importance. Each module is independent of other modules and can be abbreviated or expanded as desired.

The time shown for interactive modules allows sufficient time for students to practice building or modifying a base report. These times are flexible and can be sped up or slowed down at the client's request. There are approximately 6 working hours of instruction every day.

1. **Building reports for consumption on Dynamic Lists and Templates**
   Learn how to build, install and link reports to Dynamic Lists and Templates
   (2 hours interactive; 0.5 hours demonstration)

2. **Consuming Mercury Labels**
   Learn how to pass default or custom labels from Mercury Design module to be used as column headers and field identifiers on reports
   (1 hour interactive; 0.5 hours demonstration)

3. **Label Reports**
   Design sheet fed label reports
   (0.25 hours)

4. **Charts**
   Learn how to create, format and edit Pie (two data columns) and Bar (three data columns) Charts. Explore other chart types available in Telerik
   (1.5 hours interactive; 0.5 hours demonstration)

5. **Dynamic Visibility, Sort & Filters**
   Change the visibility of data using conditional formatting, report sorting and filtering after the report has loaded via client side parameters
   (1 hour interactive, 0.5 hours demonstration)

6. **Sub Reports**
   Sub Reports offer the ability to embed one report within another report. They can be used to embed several unrelated reports together on the same screen/page; or the main report can pass parameters to the sub report enabling additional data to be presented. In addition to building and incorporating sub reports, we will look at factors used in determining when sub reports are necessary
   (3 hours interactive, 0.5 hours demonstration)

7. **External Reports**
   Reporting against INTRCONFIG or joined RMSREAL/RMSLOGIN/CAMPUS ENTERPRISE data sources require credentials to be embedded in the report itself. We will learn how to configure External Reports, Data source configuration considerations, ODBC configuration and how to import & run External reports in Mercury
   (1 hour interactive, 0.25 hours demonstration)

8. **Interactive Reports:**
   In addition to parameter specification, Interactive Reports offer additional display options available to the runner. We will create or explore reports that have:
   a. collapsible and Expandable Regions that hide and show regions of a report with (+/-) links
   b. data driven clickable links, opening a new tab in the browser. For example, opening a URL to view images of different room types
   c. a Table of Contents, enabling the runner to jump to different report groups
   d. clickable links that open a sub report (for example, given a list of names, click the name and open the person's invoice)
   (2 hours interactive, 0.5 hours demonstration)

9. **Crystal Report and RMS Report Migration**
   Migrating SQL from existing .rpt files and building a new Telerik report. The Crystal Report Interactive module section is only available onsite with clients who have Crystal Report Writer installed and accessible in the training. Otherwise it will be a lecture
   (1 hour interactive, 0.5 hours lecture)

10. **Reports based on Position**
    Mercury 3 introduces the concept of administrative positions for users, such as Residence Hall Director for a specific residence hall. Reports can be constructed wherein different data is delivered to the report runner based on their position. For example, reports can be designed that will produce different results when run by different Hall Directors without the use of parameters
    (1 hour interactive, 0.5 hours demonstration)

11. **Correcting malformed easy reports**
    Due to SQL query limitations, reports generated by the Easy Query Builder occasionally join tables in such a way that data disappears from the report. We will learn how to detect when this occurs and how to fix it using Telerik
    (0.5 hours interactive, 0.25 hours demonstration)

12. **Edit TRDX files**
    We will open Telerik reports using Notepad++ and will learn about the different report sections and which ones can be safely edited. Learn how to speed report creation by copying sections from one report to another
    (1 hour interactive, 0.25 hours demonstration)

13. **Report Templates**
    Learn the pros and cons of Telerik report templates and how to use them as the basis for a new report. RMS does not recommend the use of Telerik Templates and instead suggests copying report components using text file data editors. This module compliments the "Edit TRDX Files" module.
    (1 hour interactive, 0.25 hours demonstration)

14. **HTML Text Boxes**
    HTML Text Boxes accommodate the use of basic html tags to format and stylize data. We will learn how to insert line breaks, suppress empty data lines (such as address1b) and change font characteristics within a block of text
    (1.5 hours interactive, 0.5 hours demonstration)

15. **Embedded Formatting and Advanced Expressions**
    Learn how to format complex report expressions that mix data with text to produce proper formats
    and grammatically correct sentences. Examples might include displaying report parameters entered
    as "Room Occupied on Monday, July 3, 2017 through Friday, July 7, 2017" or "There is 1 student
    living here" vs "there are 5 students living here"
    (2 hours interactive, 0.5 hours demonstration)

16. **Telerik Functions**
    Examination and details related to the "In" and "Like" SQL operators and several Telerik functions,
    such as "iif," "format," "Trim,""SubStr," and "Split" that are helpful when formatting data for reports
    (1 hour follow along demonstration)

17. **Practice**
    Students may bring their own reports or use provided reports as a basis for their own
    experimentation and report building with input from other students and the instructor
    (? hours interactive)