

HP Select Audit Software

for the Windows®, HP-UX®, Linux®, and Solaris® operating systems

Software Version: 1.02

Report Designer's Guide

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Contents

1	Overview	9
	What is the Report Designer?	9
	What's in This Guide?	9
	What This Guide Is and Is Not	10
	How to Use this Guide	10
	The Select Audit Documentation Set	11
	11
2	User Interface Overview	13
	Opening the Report Designer	13
	User Interface	15
	User Interface Sections	15
	Tabs	16
	Design	16
	Preview	16
	RDL	17
	Tree View	17
	Properties Area	17
	Design Pane	17
	Design Pane Objects	17
	Selecting an Object	18
	Opening an Object	18
	Other Elements of the Design Pane	18
	Girders	18
	Rulers	18
	Sidebar	19
	Toolbar Icons	19
	Status Bar	19
	Error Pane	20
3	Creating a Query	21
	Launching the Query Wizard	21
	Saving the Query to the Catalog	25
	Modifying the Query	26
4	Creating a Simple Table	29
	Creating the Table	29
	Modifying the Table Content	31
	Changing the Table Text	31

Changing the Date Mask	31
Changing the Money Mask	32
Deleting Table Elements	33
Improving the Layout	33
Alternate Row Styling	33
Changing Alignments	33
Resizing Columns	33
Increase the Height of the Title	34
Optional Next Steps	34
Adding a Column Selector Control	34
Using the Column Selector Control	34
Uploading the Report to the Library	35
Adding a Group to a Table	35
5 Creating a Group Table	37
Inserting a Group Table	37
Modifying Table Content	39
Changing Footer Summaries	39
Adding Text to Footers	40
Improving the Layout	40
Resizing Columns	40
A Note About Columns	40
Widening the Table	40
Custom Alternate Row Styling	41
Optional Next Steps	41
Changing the Grouping	41
Making a Group Collapsible	43
Adding a Sorting Link	43
Changing the Theme	44
6 Creating a Free-form Group Table	47
Getting Started	47
Downloading a Query from the Catalog	47
Inserting a Table	48
Improving the Content and Layout	49
Editing and Styling the Title	49
Deleting Text Elements	49
Adding Text to a Data Field	50
Adding Data to the Group Header	50
Resizing and Positioning Elements	52
Adding Space Between Groups	52
Adding “Column” Headers at the Group Level	52
Applying Custom Styling to a Table	52
Styling Table Sections with the Toolbar	52
Adding Borders Around the Entire Table	53
Adding a Single Border to a Text Element	53

7	Creating a Crosstab	55
	Launch the Layout Wizard	55
	Adjusting the Layout	57
	Changing the Title	57
	Eliminating a Subtitle	57
	Setting Row Headers	58
	Setting Column Headers	58
	Adding Another Summarized Data Field	59
	Changing the “Bucketing”	60
8	Creating a Chart	63
	Creating the Query	63
	Editing the Query	64
	Upload the Query to the Catalog	64
	Creating the Layout for a Pie Chart	65
	Converting the Layout to Another Chart Type	67
	Turning Off Data Labels	68
9	Creating a Multi-component Report	69
	Adding a Simple Table	69
	Creating a Crosstab	70
	Changing the Crosstab Labels	71
	Putting Borders Around the Crosstab	72
	Adding Fields to the Layout	73
	Adding a Label to the Crosstab	73
	Adding a Label to the Simple Table	74
	Adding a Report Title	74
	Adding an Image	75
10	Controls and Parameters	77
	Using Controls	78
	Using Fixed-list and Free-text Controls	78
	Creating the Parameters	79
	Creating a Fixed-list Parameter	79
	Creating Free Text Parameters	80
	Modifying the Query	81
	Add the Parameter	81
	Creating the Component	82
	Adding Controls	82
	Adding a Download Control	82
	Adding a Check Box Control	82
	Adding the Free-text Controls	83
	Adding the Submit Control	84
	Making Parameters Mandatory	84
	Creating Controls Bound to Query-based Parameters	85
	Creating a Query for the Parameter	85
	Creating the Parameter	86

Adding the Parameter to the Query	86
Adding the Control	86
Rearranging the Controls.	87
Add Labels to the Controls.	87
Add the Selected Text Element to the Header	87
11 Using Report Links and Drilldowns	89
Creating a Parameterized Target Report	89
Creating a Query for the Parameter	89
Creating the Parameter	90
Modifying the Chart Query	91
Creating the Pie Chart	93
Adding a Parameterized Title	93
Publishing the Target Report.	95
Adding a Report Link to a Table	95
12 Other Topics	97
Adding Headers and Footers	97
Adding a Footer	97
Adding Summaries	98
Conditional Formatting	99
Adding a Formula to a Query	100
Using JavaScript	102
Index	105

1 Overview

This guide describes how to use the Report Designer to create reports.

What is the Report Designer?

The Report Designer is a Java-based graphical user interface that lets you create interactive or printed reports. The reports can contain any number of tables, crosstabs, and charts. The tables can be simple or grouped by rows, and you can easily modify the layout to make more complex free-form tables. Your reports can use data from one or several data sources. You can position text elements and images anywhere you want, inside or outside the tables. You can preview your report, using live data, without leaving the Report Designer.



The desktop system used to run the Report Designer Java application makes SOAP calls back to the Report Center. Consequently the JVM installed on the desktop used to run the Report Designer should NOT be setup to use a proxy server for network connections. If using this setting, the SOAP calls will be sent to the proxy server instead of the Report Center, resulting in an inability to connect to the Report Center.

What's in This Guide?

The chapters in this guide are shown in [Table 1](#).



See the *HP Select Audit 1.02 Release Notes* ([sAudit_release_notes_1.02.html](#)) on the Select Audit installation CD for known installation issues at the time of this release.

Table 1 Chapter Summary

Chapter	Description
Chapter 1, Overview	Gives an overview of the <i>HP Select Audit 1.02 Report Designer's Guide</i> .
Chapter 2, User Interface Overview	Defines the terms and concepts used in Select Audit reports.
Chapter 3, Creating a Query	Shows how to make the SQL query that you will use to create the reports in this guide.
Chapter 4, Creating a Simple Table	Shows how to create a basic rows-and-columns table. Also introduces basic styling concepts.

Table 1 Chapter Summary (cont'd)

Chapter	Description
Chapter 5, Creating a Group Table	Shows how to create a table with row grouping.
Chapter 6, Creating a Free-form Group Table	Shows how to move data and text elements of a table around the layout to create a custom table design.
Chapter 7, Creating a Crosstab	Shows how to create a crosstab.
Chapter 8, Creating a Chart	Shows how to create a chart.
Chapter 9, Creating a Multi-component Report	Shows how to create a report with multiple components. This example contains a table, a crosstab, text elements and image fields.
Chapter 10, Controls and Parameters	Shows how to add end-user controls to your report, and how to create the parameters that apply the user's choices to the report output.
Chapter 11, Using Report Links and Drilldowns	Shows how to link one report to another to give the end user additional information about a specific data value.
Chapter 12, Other Topics	This section shows how to add headers and footers if you've deleted or omitted them. You'll start with a table that has had the footer removed. After adding a footer, you'll add summaries to it.

What This Guide Is and Is Not

This guide shows how to build several representative reports. The reports illustrate the various functions available to you in the Report Designer. These reports are not designed to be realistic and are not templates for real reports.

This guide does not provide an exhaustive description of the user interface, nor does it tell you every way to accomplish a given task. Like most graphical user interfaces, Report Designer provides many different ways to perform certain tasks. This document only shows one way to perform a task. Typically, there are many others as well.

Finally, this book does not show how to use RDL. RDL is Select Audit's XML-based report definition language. You can edit RDL within the Report Designer at any time by editing the text in the **RDL** tab. This document does not show how to hand-edit RDL.

How to Use this Guide

Make sure to read [Chapter 3, Creating a Query](#). The other reports that you will create will use the query in that chapter. Also, if possible, follow the rest of the guide sequentially, since in some cases, chapters rely on information in previous chapters.

This guide's examples assume the default preferences. If you make any changes to the defaults, for example, by selecting a check box preventing a dialog from reappearing, these examples may not work exactly as stated.

The Select Audit Documentation Set

This manual refers to the following Select Audit documents. These documents are available on the Select Audit CD.

- *HP Select Audit 1.02 Administration Guide*, © Copyright 2006 - 2007 Hewlett-Packard Development Company, L.P. (administration_guide.pdf).
- *HP Select Audit 1.02 Installation Guide*, © Copyright 2006 - 2007 Hewlett-Packard Development Company, L.P. (installation_guide.pdf).
- *HP Select Audit 1.02 User's Guide*, © Copyright 2006 - 2007 Hewlett-Packard Development Company, L.P. (user_guide.pdf).
- *HP Select Audit 1.02 Sarbanes-Oxley Model Guide*, © Copyright 2006 - 2007 Hewlett-Packard Development Company, L.P. (sb_model_guide.pdf)
- *HP Select Audit 1.02 Concepts Guide*, © Copyright 2006 - 2007 Hewlett-Packard Development Company, L.P. (concepts_guide.pdf)
- *HP Select Audit 1.02 Report Center User's Guide*, © Copyright 2006 - 2007 Hewlett-Packard Development Company, L.P. (rpt_center_guide.pdf)
- *HP Select Audit 1.02 Report Designer's Guide*, © Copyright 2006 - 2007 Hewlett-Packard Development Company, L.P. (rpt_design_guide.pdf)
- *HP Select Audit 1.02 Report Developer's Guide*, © Copyright 2006 - 2007 Hewlett-Packard Development Company, L.P. (rpt_devel_guide.pdf)

Online help is available with the Audit Portal.

2 User Interface Overview

This chapter gives a very high-level description of the Report Designer user interface.

Opening the Report Designer

The Report Designer is only available to users with Select Audit Report Developers.



Select Audit Report Developers must also be a member of another Select Audit group to access the Audit Portal.

When you first install Select Audit, you must install the Report Designer in the Developers Center.

- 1 Open the Developers Center using the following URL:

```
http://<servername>/scopeserver/
```

where <servername> is the address of the Report server. The **Developers Center** opens.

HP OpenView Select Audit User: weblogic
Home | Sign Out

Developer Center

Test Run

Select a File:

Samples

File Name	
BandedTableAndCrosstab.rdl	<input type="button" value="View RDL"/>
ChartAndTable.rdl	<input type="button" value="View RDL"/>
ComplexDashboard.rdl	<input type="button" value="View RDL"/>
ConditionalFormatting.rdl	<input type="button" value="View RDL"/>
ControlsPage.rdl	<input type="button" value="View RDL"/>
DashboardControls.rdl	<input type="button" value="View RDL"/>
GroupTableWithDrilldown.rdl	<input type="button" value="View RDL"/>
ParameterizedCrosstab.rdl	<input type="button" value="View RDL"/>
ParameterizedGroupBy.rdl	<input type="button" value="View RDL"/>
ParameterizedTable.rdl	<input type="button" value="View RDL"/>
ReadMe.html	<input type="button" value="View RDL"/>
SampleInvoice.rdl	<input type="button" value="View RDL"/>
TableWithConditionalFormattingAndJavascript.rdl	<input type="button" value="View RDL"/>
TableWithSorting.rdl	<input type="button" value="View RDL"/>
drilldowns/ComplexDashboardDrilldownTQ.rdl	<input type="button" value="View RDL"/>
drilldowns/ComplexDashboardDrilldownTS.rdl	<input type="button" value="View RDL"/>
drilldowns/ControlsPageDetails.rdl	<input type="button" value="View RDL"/>
drilldowns/GroupTableDrilldown.rdl	<input type="button" value="View RDL"/>
drilldowns/ParameterizedGroupByDrilldown.rdl	<input type="button" value="View RDL"/>

- 2 Click **Install Report Designer**. The **Report Designer Installation** screen opens.

hp invent Developer Center
Welcome: weblogic

Report Designer Installation

Install

The Hewlett-Packard Report Designer is a Java GUI application that enables report developers to create Hewlett-Packard reports. The Report Designer application executes on your local machine and can be installed from this page.

1. You must have Windows 2000 SP4 or Windows XP Pro.
2. You must have Java Virtual Machine (JVM) version 1.5. JRE 1.5.0_06 is bundled with this product release. You can also download the J2SE JRE or SDK [here](#).
3. [Click here to install](#) Report Designer via Java Web Start.



You must have JVM 1.5 or higher to install the Report Designer.

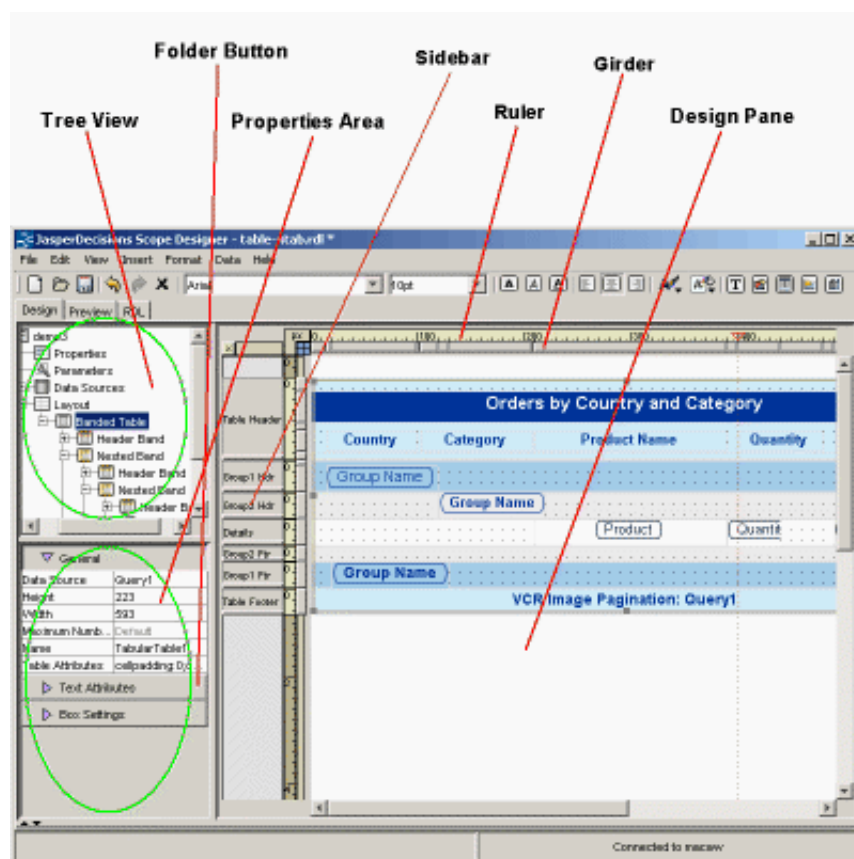
- 3 Click **Click here to install** in step 3 to install the Report Designer. When the Report Designer finishes installing, an icon is placed on your desktop. Once it is installed, you start the Report Designer using this icon.

User Interface

The Report Designer contains the following areas:

- Menu Bar
- Toolbar
- Tabs
- Tree View
- Properties Area
- Design Pane
- Status Bar
- Error Pane

Figure 1 User Interface



User Interface Sections

You'll do most of your layout design in the Design Pane, which provides a graphical representation of how your report will display.

When a table is in Edit mode in the Design Pane, a sidebar is on the left of the table. This sidebar indicates the headers, footers, and bands. By selecting the appropriate sidebar, you can style or resize the entire header, footer, or details section.

The Properties Area enables you to fine-tune the layout. Though you can usually create your report using only the Design Pane, for some advanced settings you must use the Properties Area. Every setting in the Design Pane except positioning is also available in the Properties Area.

The Tree View shows the report in a hierarchical fashion. It is based on RDL, Select Audit's XML-based report definition language. The two most important high-level nodes are **Data Sources** and **Layout**. Each element of the report is represented by a node on the tree. When you select an item in the Tree View, the element is highlighted in the Design Pane and you can edit it in the Properties Area. You can also drag a data field from the Tree View into a text element in Edit mode in the Design Pane.

Tabs

The Report Designer has three tabs:

- Design
- Preview
- RDL

Design

Most of the time, you'll use the **Design** tab to develop your reports. In the Design tab, the Tree View, Properties Area, and Design Pane are visible.

Preview

Use the **Preview** tab to see how your report looks using real data. If you aren't currently connected to a data source, you will be prompted to do so.

In the Preview tab, you can choose whether to display a PDF or HTML view. If you choose HTML, the data is displayed roughly as in a browser, although some elements (for example, certain controls) don't appear exactly as they would in a browser.

You can also choose how many rows of returned data to use to generate the report. Use the **number-of-rows** button to control the time it takes for the report preview to display.



The number of returned rows is meaningful only for simple tables. If your returned data set is large and you set the number of rows to "all", you may get an out-of-memory error. As a general rule, set this control to "all" only for crosstabs, and even then, only when necessary to view your output correctly.

Typically, you will alternate between the Design tab and the Preview tab. After making some changes, check the Preview tab for a better idea of how the report actually looks.

RDL

The **RDL** tab displays the RDL code that defines the report. RDL is Select Audit's XML-based report definition language. This tab is for fine-tuning by advanced report developers.



This document does not discuss RDL or the RDL tab.

Tree View

The **Tree View** shows a hierarchical view of your report. Its top-level nodes include Parameters, Data and Layout. The Data node shows the data available to populate the report.

If you have created a spot for it in the layout, you can drag a data field into the spot in the Design Pane.

The highest-level subnodes of the Layout mode are *components*. In Select Audit, a component is a table (called **Banded Table** in the Tree View), crosstab, or chart. You can create combinations of these components to create a complete report. The subnodes of each component are different for each component type.

Properties Area

The **Properties Area** allows you to view and edit details of each item that you have selected in the Design Pane or in the Tree View. The Properties Area contains **Folder** buttons, which expand to reveal editable properties. The number of Folder buttons and properties depends on the element selected.

Design Pane

The **Design Pane** graphically shows the report in its current state. It's not a WYSIWYG view (that is available in the Preview tab) but it does show the layout in an abstract form.

Design Pane Objects

The Design Pane can contain the following objects:

- Components (tables, crosstabs, and charts)
- Text elements
- Image elements
- Controls (see [Chapter 10, Controls and Parameters](#))
- Layout

Selecting an Object

Click an object in the Design Pane to select it. To select the layout, click anywhere in the Design Pane outside all other objects.

When an object is selected, you can do the following:

- Edit it by right-clicking or by using the menus.
- Style it from the toolbar.
- Move it.
- Resize it.

Opening an Object

Double-click an object to open it.

The objects below can be opened so that you can edit them directly within the Design Pane, without using the menus, toolbar or dialog:

- tables
- crosstabs
- text elements and crosstab labels

When you open a table, the sidebar is shown, which enables you to resize the headers, footers and details section. You can also directly select elements in the table by clicking them.

When you open a crosstab, you can directly select elements in the crosstab by clicking them.

When you open a text element, you can modify the text directly without using a dialog, and you can drag a data element from the Tree View into the text element.

Other Elements of the Design Pane

Surrounding the Design Pane, are girders, rulers and the sidebar.

Girders

Immediately surrounding the Design Pane is a narrow horizontal area containing vertical lines, and a narrow vertical area containing horizontal lines. These lines are called *girders*. They represent the edges of all the elements in the layout. (When a table is in Edit mode, they represent the edges of elements within the table.) You can drag these girders to change the size of elements inside the layout.

Rulers

Surrounding the girders are *rulers*. By default, they measure pixels but by clicking the L-shaped area surrounding connecting the rulers, you can change the measurement to inches or centimeters.









Sidebar

If a table is in Edit mode, a *sidebar* is shown to the left of it. The sidebar delineates areas that represent the headers, footers and bands of the table. By dragging the lines within the sidebar, you can resize the table's bands, headers and footers.

Toolbar Icons

The Report Designer toolbar icons are described in [Table 2](#) on page 19.

Table 2 **Toolbar Icons**

Icon	Description
	Text alignment
	Insert Text Element
	Bold
	Select Background Color
	Insert Table
	Insert Chart
	Insert Crosstab
	Insert Image

Status Bar

The **Status** bar optionally appears on the bottom of the Report Designer. The status bar indicates whether you are connected to a server and, if so, to which server. It also indicates whether there are errors.

Error Pane

The **Error** pane shows errors found in the report. If there are error messages, they may contain hyperlinks to the part of the report that caused the error.

To show or hide the Error pane, use the up and down arrows underneath the Properties Area. You can also open the Error pane by double-clicking the arrow icon in the Status bar.

3 Creating a Query

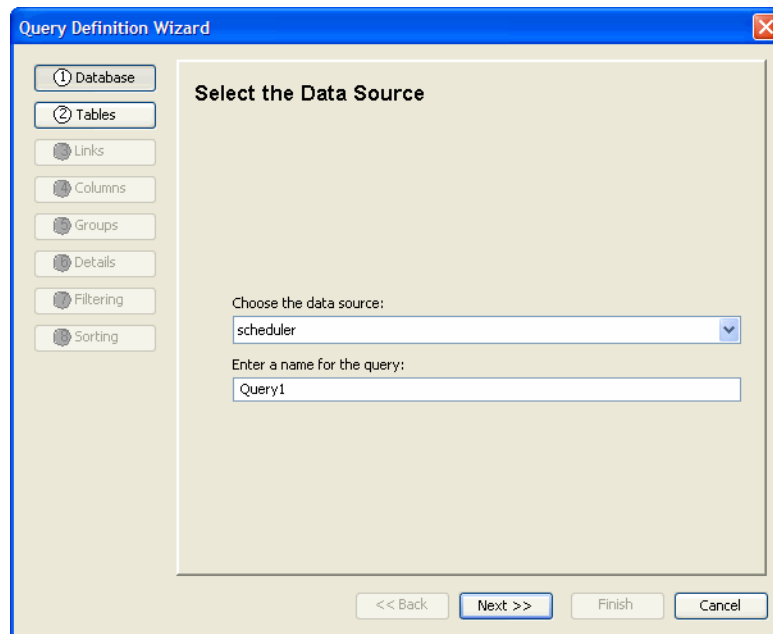
This chapter shows how to create a query and save it to the Catalog for reuse. The query that you create in this chapter will be used to create a simple table, a crosstab and a banded table.

To create a query from scratch, use the **Query Wizard**. To edit an existing query, use the **Query Editor**. (See [Modifying the Query](#) on page 26.)

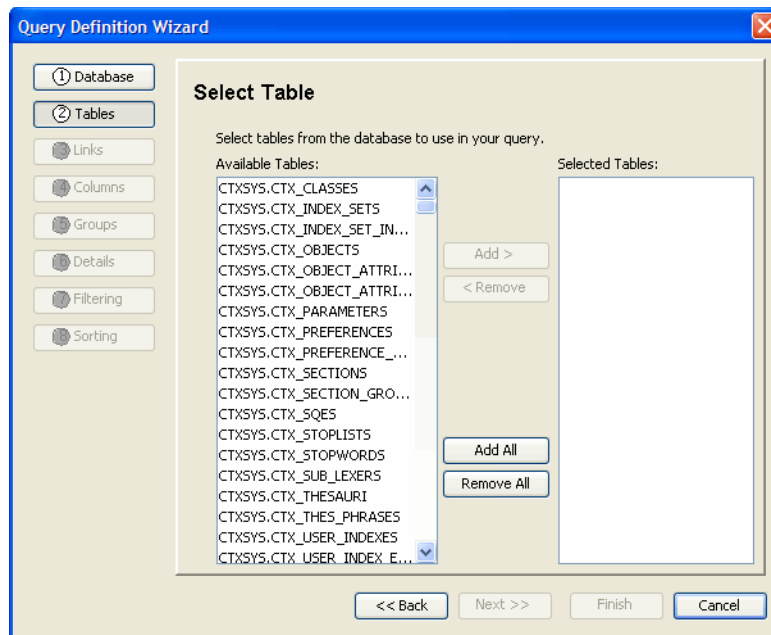
The Query Wizard helps you write SQL queries. Once you have created a query, you can use it to provide data to a table, crosstab, or chart or query-driven parameter.

Launching the Query Wizard

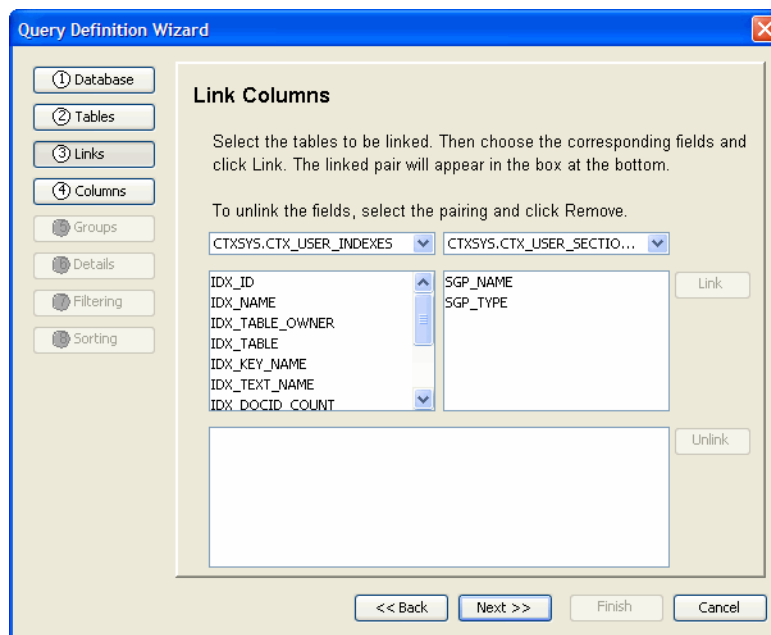
- 1 Select **Data** → **Query Wizard** to launch the Query Wizard. The **Query Wizard** opens.



- 2 Select a data source from the **Choose the data source** field.
- 3 Type a name for the query the **Enter a name for the query** field.
- 4 Click **Next**. The **Select Tables** screen opens.

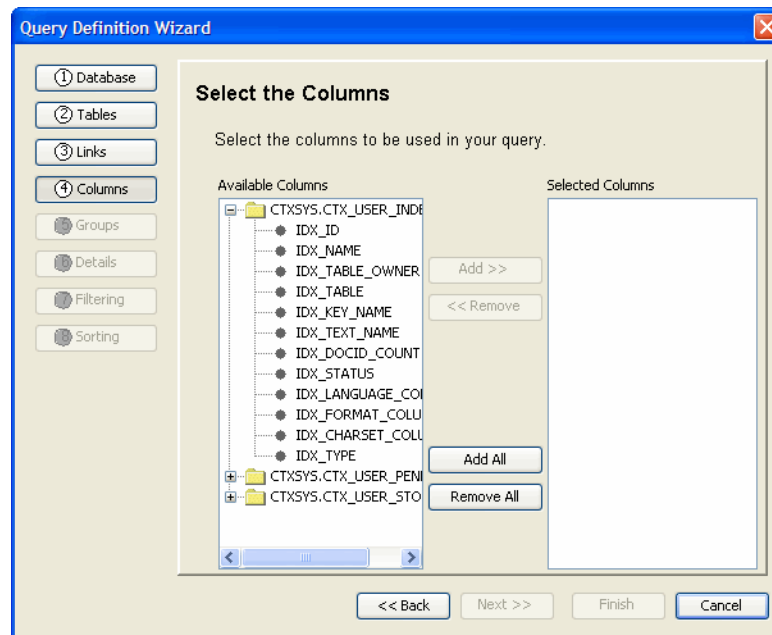


- 5 Select the tables you want to use in the query and click **Add**.
 - ▶ Use the **CTRL** key to select multiple tables. Click **Add All** to select all tables in the database.
- 6 Click **Next**. The **Link Columns** screen opens.



You need to link tables. Links correspond to joins in the database.

- 7 Select the tables you want to link from the drop-down lists.
- 8 Select the fields on each side and then click **Link**. The linked fields are shown in the box at the bottom of the screen.
- 9 Click **Next**. The **Select the Columns** screen opens.

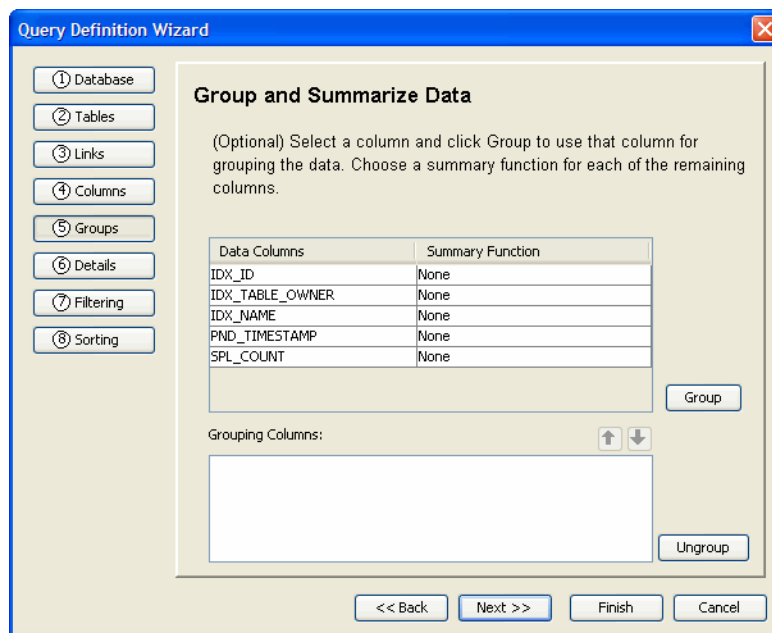


10 Select the columns that you will use to build your report and click **Add**.

➤ Use the **CTRL** key to select multiple columns. Click **Add All** to select all the columns in the database.

11 Click **Next**. The **Group and Summarize Data** screen opens.

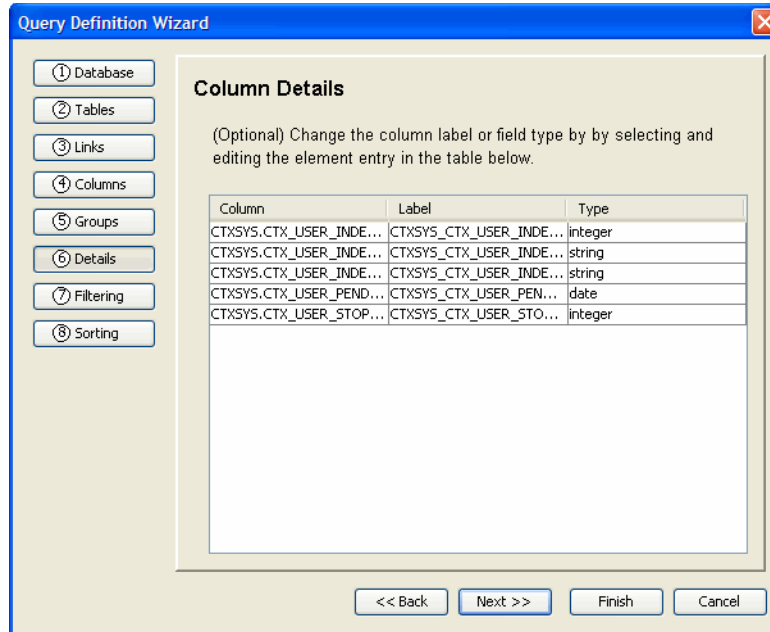
This screen allows you to group and aggregate your data when creating queries for charts or generating summarized data. Click **Next** to skip this screen and proceed to the next step.



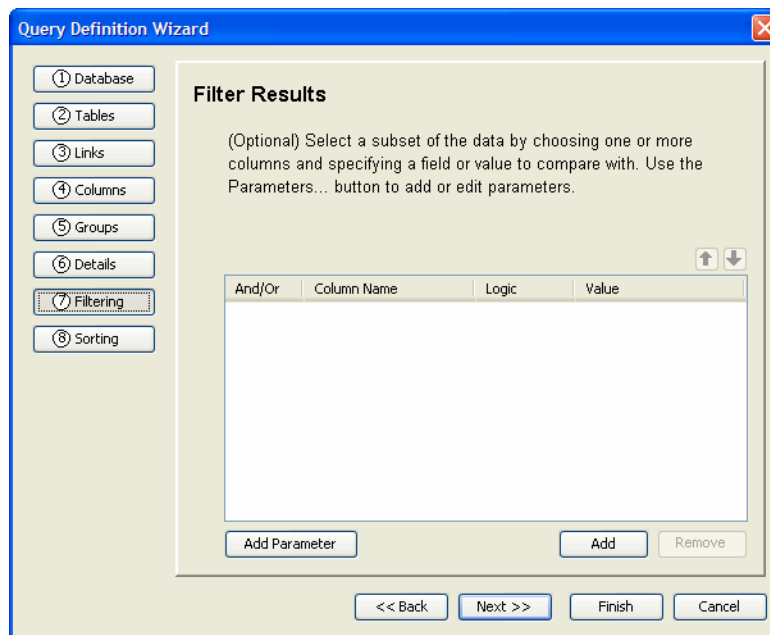
12 Optionally, select a column name and click **Group** to use that column to group data.

13 Click the **Summary Function** column for each of the remaining fields and select a function from the drop-down list.

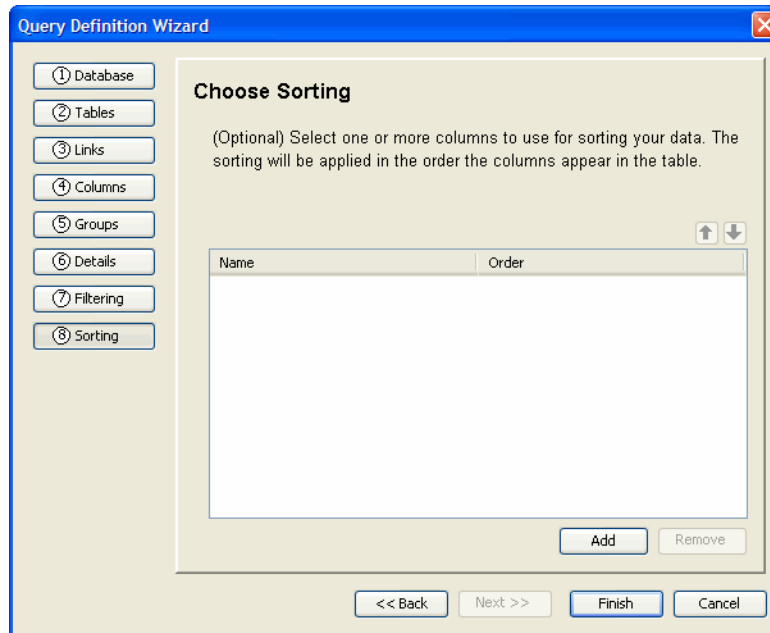
- 14 Click **Next**. The **Column Details** screen opens.



- 15 Optionally, change the column labels by double-clicking the label in the **Label** column and typing a new name.
- 16 Click **Next**. The **Filtering Results** screen opens.



- 17 Optionally, filter the results using a subset of data by clicking **Add**. A new row is displayed in the text box.
- 18 Click the **Column Name**, **Logic** and **Value** columns and select a value from the drop-down lists.
- 19 Click **Add Parameters** to add or edit parameters.
- 20 Click **Next**. The **Choose Sorting** screen opens.



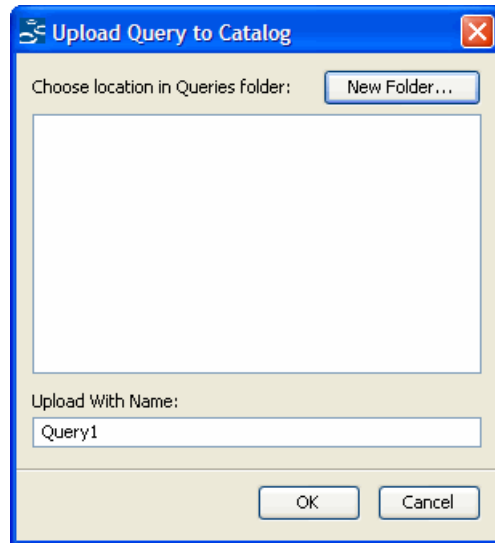
- 21 Optionally, sort the column data by clicking **Add**. A new row is shown in the text box.
- 22 Click the **Name** column and select a database column from the drop-down list.
- 23 Click the **Order** column and select **Ascending** or **Descending** from the drop-down list.
- 24 Click **Finish**. If you are prompted to start the Layout Wizard, click **No**.

The Query Wizard closes and the query is listed under **Data Sources** in the Report Designer Tree View.

Saving the Query to the Catalog

As well as saving the query to the file system, you can also easily upload the query to the Report server to reuse later. Once on the server, you can either copy the query into a report or reference it without copying it.

- 1 Expand **Data Source** in the Tree View.
- 2 Right-click the query and click **Upload Datasource**. The **Upload Query to Catalog** dialog box opens.



- 3 Select a location in the **Queries** folder.
 - ▶ Click **New Folder** to save the query in a different folder.
- 4 Click **OK**.

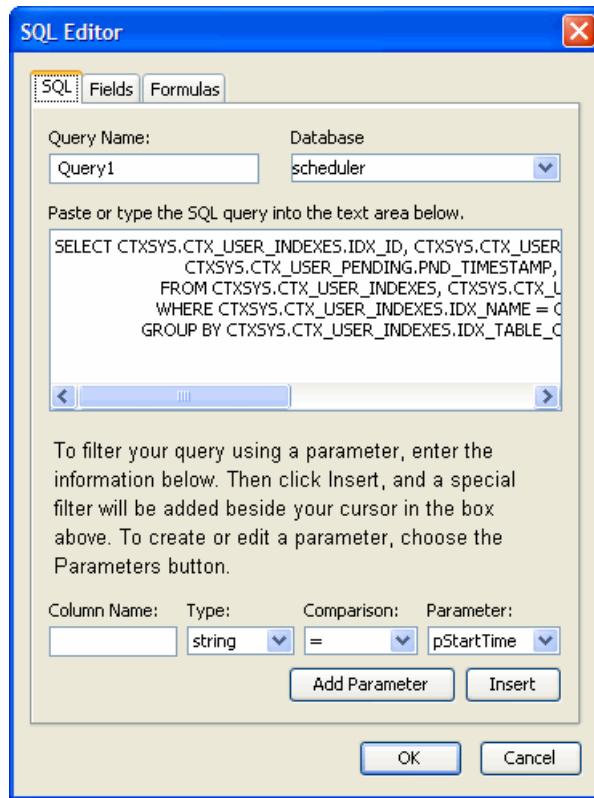
The query is now saved in the Catalog on the server. You can see the contents of the Catalog using the Report Center. See the *HP Select Audit 1.02 Report Center User's Guide* for details.

In later chapters, you will fetch the query that you have just saved to the Catalog.

Modifying the Query

You can invoke an SQL editor to modify the query.

- 1 Expand **Data Sources** in the Tree View.
- 2 Right-click the query and click **Edit SQL Query**. The **SQL Editor** opens.



For now, do not modify the query. In [Chapter 10, Controls and Parameters](#) you will use this dialog to add parameters to the query.

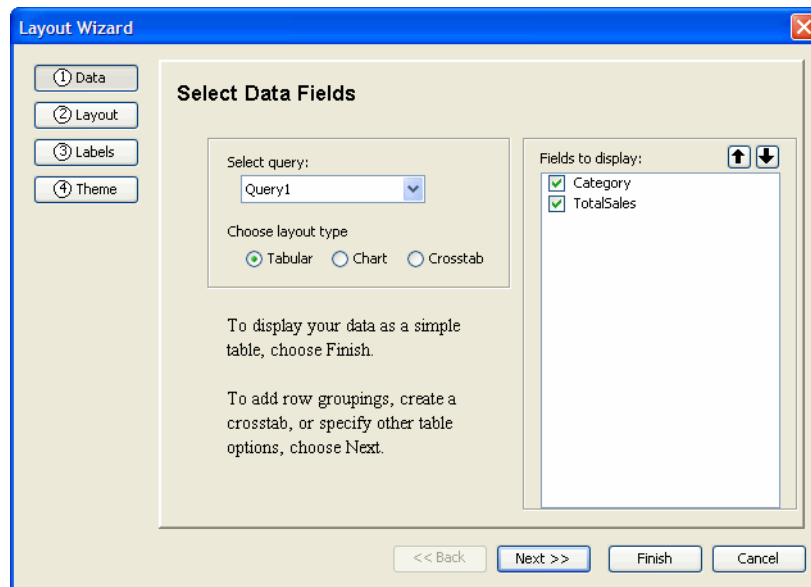
4 Creating a Simple Table

This chapter describes how to create a simple table that consists only of headers, footers and data rows. It also describes how to use the Layout Wizard to make common adjustments to your table.

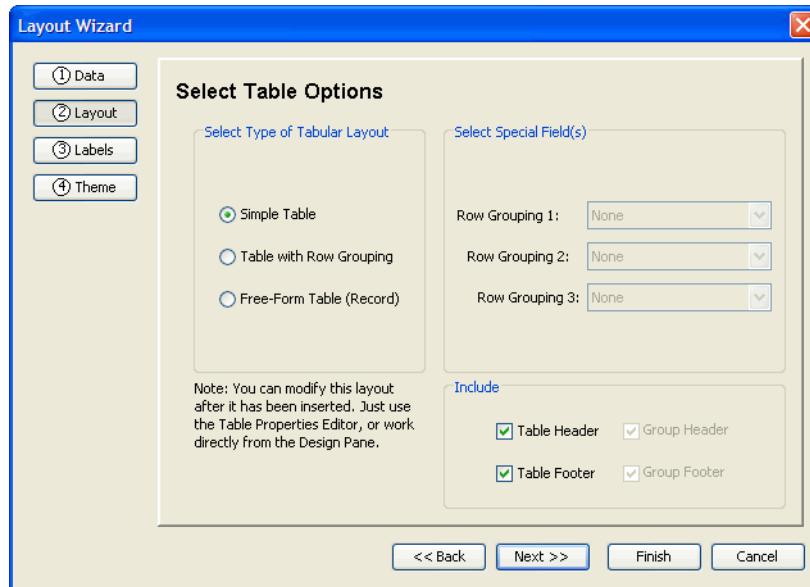
- ▶ When saving tables, do not include a combination of blank spaces and the “+” character in the report name. The Report server will not recognize this combination.

Creating the Table

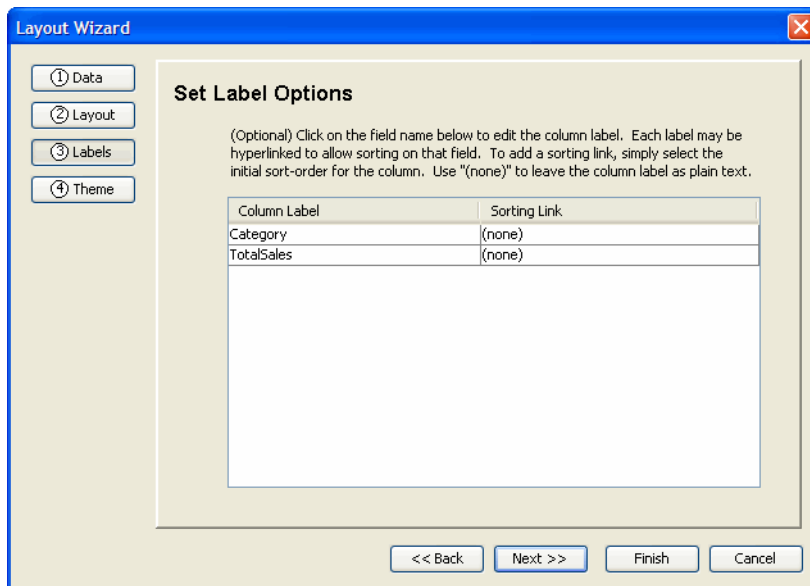
- 1 Open the Layout Wizard by doing one of the following:
 - Click **Insert** → **Table**.
 - Open the RDL file that you created in [Chapter 3, Creating a Query](#). The **Layout Wizard** prompt opens. Click **OK** to launch the Layout Wizard.



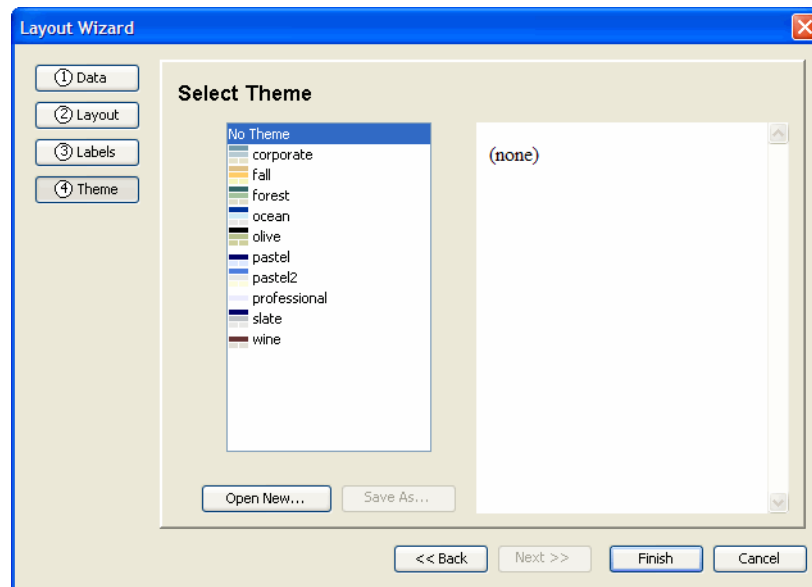
- 2 Select the required query from the **Select query** drop-down list.
- 3 Select the **Tabular** radio button in the **Choose Layout type** section.
- 4 Select the check boxes beside the fields you want to display the **Fields to Display** section.
- 5 Reorganize the fields using the up and down arrow.
- 6 Click **Next**. The **Select Table Options** screen opens.



- 7 Select **Simple Table** in the **Select Type of Tabular Layout** section.
- 8 Select the **Table Header** and **Table Footer** check boxes in the **Include** area.
- 9 Click **Next**. The **Set Label Options** screen opens.



- 10 Double-click the column name in the **Column Labels** column and type a new label.
- 11 Click the **Sorting Link** column and select **Ascending** or **Descending** from the drop-down list. Sorting links allow the end user to change the sorting in the table by clicking on a column header.
- 12 Click **Next**. The **Select Theme** screen opens.



- 13 Click a theme name.
 - 14 Click **Finish**. The Layout Wizard closes.
 - 15 Click the **Preview** tab in the Report Designer to preview the report.
 - 16 Select a file type in the **Preview as** field.
 - 17 Select a value from the **Number of Data Rows** drop-down list.
 - 18 Click **Refresh**.
 - 19 Save the table.
- Report names cannot include a combination of blank spaces and the “+” character. The Report server will not recognize this combination.

Modifying the Table Content

You can modify the table content after you create it using the Layout Wizard.

Changing the Table Text

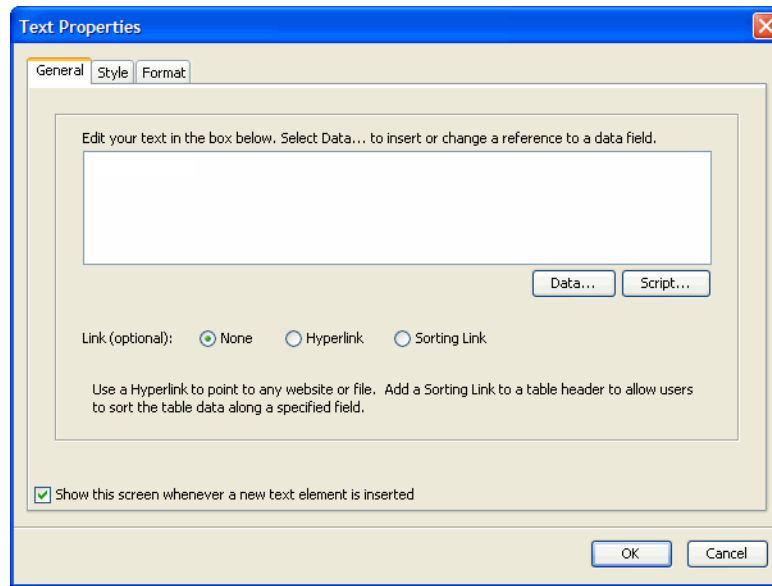
- 1 Double-click the table in the Design Pane to open it and then double-click a table element to make it editable.
- 2 Type the new text.
- 3 Preview and save the report.

Changing the Date Mask

Use the **Text Properties Format** tab to change the date the format.

- 1 Double-click the table in the Design Pane to open it.

- 2 Right-click the text element containing the date and click **Edit Text Element**. The **Text Properties** dialog opens.

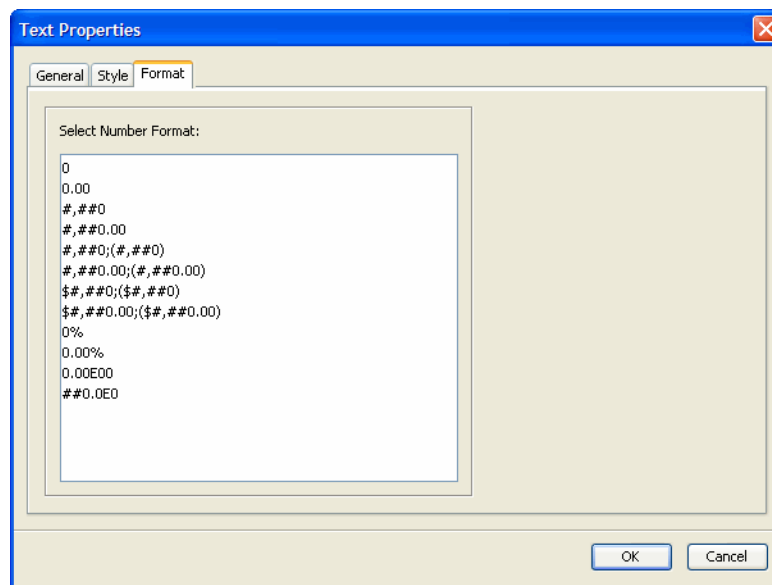


- 3 Click the **Format** tab and select a date format.
- 4 Click **OK**.

Changing the Money Mask

Use the **Text Properties Format** tab to change the money format to standard money formatting.

- 1 Double-click the table in the Design Pane to open it, right-click the text element containing monetary data and click **Edit Text Element**. The **Text Properties** dialog opens.



- 2 Click the **Format** tab and select the `$#,##0.00;(#,##0.00)` number format.
- 3 Click **OK**.

- 4 Preview and save the report.

Deleting Table Elements

You can delete table elements as required.

- 1 Double-click the table in the Design Pane to open it.
- 2 Right-click the element and click **Delete**.
- 3 Preview and save the report.

Improving the Layout

This section describes how to make a additional improvements to the layout.

Alternate Row Styling

The table may be hard to read because the detail rows all have the same styling. Style odd- and even-numbered rows differently.

- 1 Click outside the table to exit Edit mode.
- 2 Right-click the table and click **Edit Table**. The **Tabular Editor** opens showing the **General** tab.
- 3 Select the **Use separate styles for odd and even records** check box in the **Alternate Data Row Styling** section.
- 4 Click **OK**.
- 5 Re-apply the theme to the table by selecting the table and clicking **Format** → **Apply Theme**.
- 6 Preview the report.

Changing Alignments

- 1 Double-click the table in the Design Pane to open it.
- 2 Select an element and click one of the alignment icons on the toolbar.
- 3 Preview the report.

Resizing Columns

Column data may wrapping because the column is too narrow. To fix this, move the girders just beneath the horizontal ruler.

- 1 Double-click the table the Design Pane to put it in Edit mode.
- 2 To narrow or expand a column, move your mouse over the first line until the cursor changes to a double-headed arrow. Click and drag the girder until it is the required width.
- 3 Preview the report.

Increase the Height of the Title

You can change the height of a row of text elements using the girders in the same way that you changed the width of a column.

- 1 Double-click the table in the Design Pane to put it in Edit mode. To the right of the vertical ruler, immediately to the left of the table, there is a gray bar containing horizontal lines or girders.
- 2 Click the first line and drag it down to change the height of the element.
- 3 Preview and save the report.

Optional Next Steps

Adding a Column Selector Control

You can add a **Column Selector** control to the table. This control allows the report viewer to remove or reorder columns in the table while viewing the report in HTML.

- 1 Select the entire table. If you are in Edit mode, first click outside the table to close the edit and then click the table to select it.
- 2 Click **Insert** → **Column Selector**. The control is shown in the Table Header.
- 3 Select the title element and mouse over the small white box in the center of the top edge.
- 4 Click and drag the white box down.
- 5 Move the column selector into the empty space above the title.
- 6 Preview the report.

Using the Column Selector Control

When viewing the report in HTML, you will see now a small icon button in the table header.

- 1 Click the button. The **Column Selector** dialog opens, showing the column names as they appear in the table.
- 2 Clear some check boxes and click **Apply**. The table will redraw without the unchecked columns.
- 3 Click the **Column Selector** dialog and drag it to one side to clear your view of the table.
- 4 Select one or more column names and use the arrow keys to re-order them.
- 5 Click **OK**. The **Column Selector** dialog closes and the table is redrawn in the new order.
- 6 Click **Refresh** on the Preview Pane to restore the table to its original view.

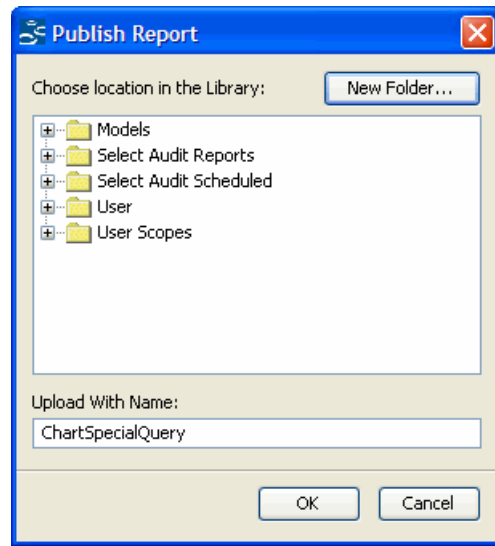
► Tables created by hand or with an earlier version of Scope Designer must be modified before they will work with the **Column Selector**. For each column you want to include in the Selector, click the Header text element and locate the `columnSelectorLabel` property in the `General` folder of the Property Pane. The value of this property should be the name of the column as it appears in the table header. This is the text that will be shown in the **Column Selector** dialog.

- A Column Selector cannot be inserted into a table that has no header.

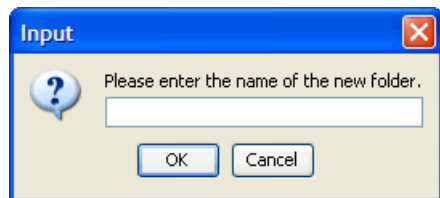
Uploading the Report to the Library

You can upload the report to the Library on the Report server. This makes the report accessible to anyone with the appropriate permissions. It also allows you to schedule report output.

- 1 Click **File** → **Publish**. The **Publish Report** dialog box opens.



- 2 Expand the **User** folder and click **New Folder**. The **Input** dialog box opens.



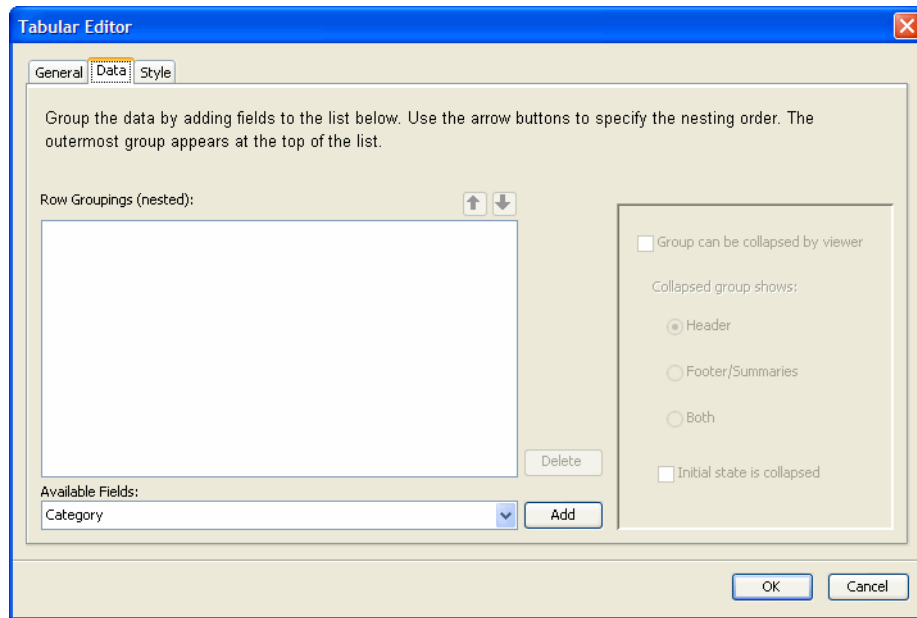
- 3 Type a folder name in the field.
- 4 Click **OK**. The new folder is shown in the tree under the **User** folder.
- 5 Select the new folder.
- 6 Type a name in the **Upload With Name** field.
- 7 Click **OK**. The report is now stored in the Library.

For more information on managing reports in the Library, see the *HP Select Audit 1.02 Report Center User's Guide*.

Adding a Group to a Table

You can convert a simple table to a group table or add a group to an existing group table.

- 1 If the table is still open, click outside the table in the Design Pane to close it.
- 2 Right-click the table and click **Edit Table**. The **Tabular Editor** opens.



- 3 Click the **Data** tab.
- 4 Select a field from the **Available Fields** drop-down list and click **Add**. The field is shown in the **Row Groupings (nesting)** box.
- 5 Click **OK**.
- 6 Preview the report. The table is now grouped by the field.
- 7 Save the report.

For more information about Group Tables, see [Chapter 5, Creating a Group Table](#).

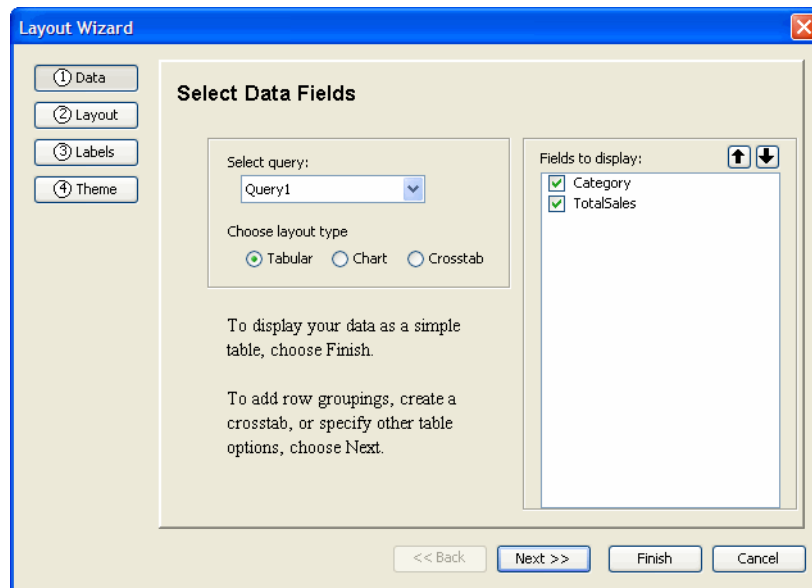
5 Creating a Group Table

This chapter describes how to create a basic group table. After you have created the table, you will make some adjustments to it and explore some options that are specific to group tables.

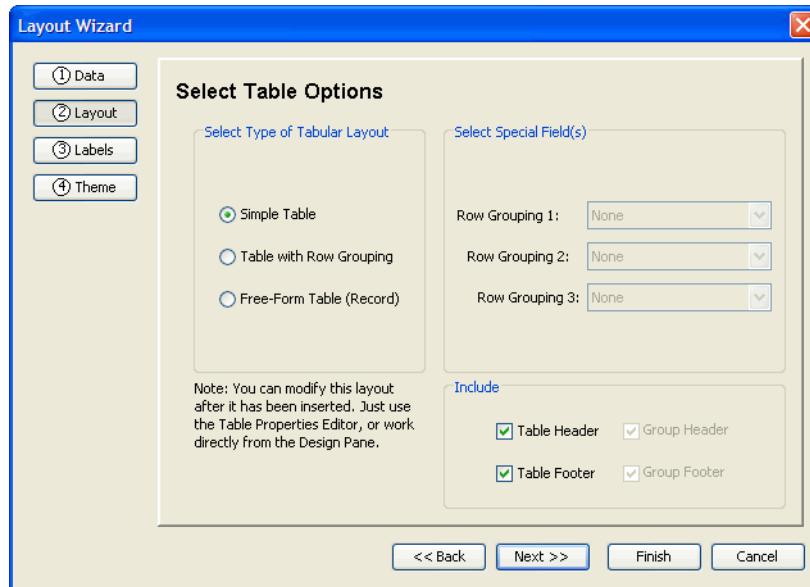
- ▶ When saving tables, do not include a combination of blank spaces and the “+” character in the report name. The Report server will not recognize this combination.

Inserting a Group Table

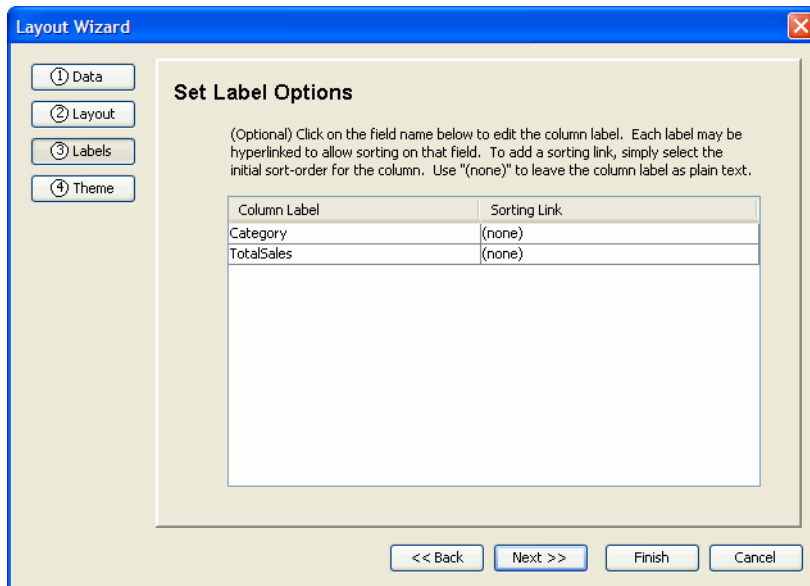
- 1 Click **Insert** → **Table**. The **Layout Wizard** opens.



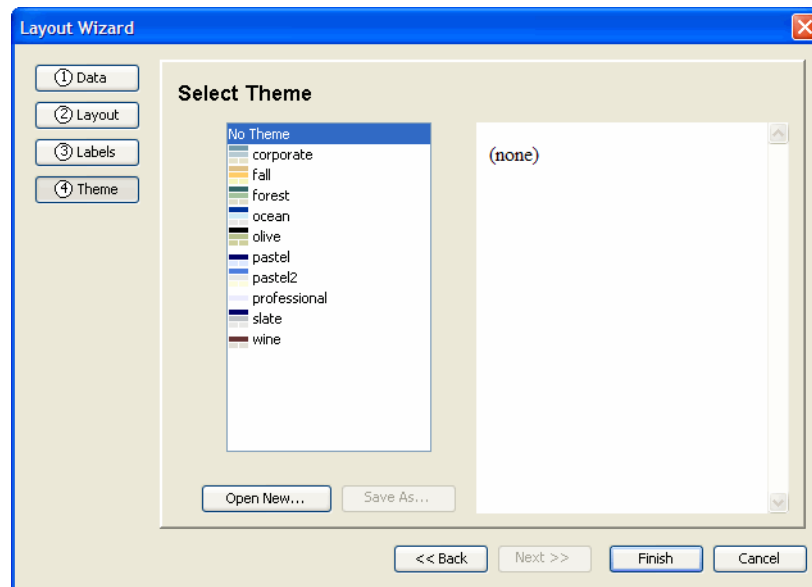
- 2 Select the required query from the **Select query** drop-down list.
- 3 Select the **Tabular** radio button in the **Choose Layout type** section.
- 4 Select the check boxes beside the fields you want to display the **Fields to Display** section.
- 5 Reorganize the fields using the up and down arrow.
- 6 Click **Next**. The **Select Table Options** screen opens.



- 7 Select **Table with Row Grouping** in the **Tabular Layout** pane.
- 8 Select a column name from the **Row Grouping 1** drop-down list. (This should be pre-selected.)
- 9 If required, select column names from the **Row Grouping 2** and **Row Grouping 3** drop-down lists.
- 10 Select the check boxes you want to include in the **Include** section.
- 11 Click **Next**. The **Set Label Options** screen opens.



- 12 Double-click the column name in the **Column Labels** column and type a new label.
- 13 Click the **Sorting Link** column and select **Ascending** or **Descending** from the drop-down list. Sorting links allow the end user to change the sorting in the table by clicking on a column header.
- 14 Click **Next**. The **Select Theme** screen opens.

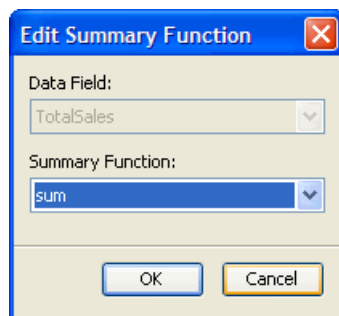


- 15 Click a theme name.
- 16 Click **Finish**. The Layout Wizard closes.
- 17 Preview and save the report.

Modifying Table Content

Changing Footer Summaries

- 1 In the Tree View, click **Layout** → **Banded Table**.
- 2 Right-click the summary and click **Edit Summary**. The **Edit Summary Function** dialog box opens.



- 3 Select a function from the **Summary function** drop-down list.
- 4 Click **OK**.
- 5 Preview the report. The summary values have changed.
- 6 Save the report.

Adding Text to Footers

- 1 Double-click the table to open it and then select the **Table Footer** area.
- 2 Click the **Insert Text Element** icon in the toolbar. The **Text Properties** dialog opens.
- 3 Type the text in the box on the **General** tab.
- 4 Click **OK**. The text field is shown at the left side of the bottom footer.
- 5 Preview and save the report.

Improving the Layout

Resizing Columns

Column data may wrapping because the column is too narrow. To fix this, move the girders just beneath the horizontal ruler.

- 1 Double-click the table the Design Pane to put it in Edit mode.
- 2 To narrow or expand a column, move your mouse over the first line until the cursor changes to a double-headed arrow. Click and drag the girder until it is the required width.
- 3 Preview the report.

A Note About Columns

There are not necessarily any real “columns” in a table created in the Report Designer, since you can move header, footer and details elements around at will. However, in a newly-created simple or group table, the columns still exist, and you can resize them with the girders.

For information about resizing elements when they are not arranged in proper columns, see [Chapter 6, Creating a Free-form Group Table](#).

Widening the Table

You can add a margin by widening the table.

- 1 Click the small white box at the center of the right edge of the table in the Design Pane. Drag it to the right about three ticks.
- 2 Preview the report. The margin is visible, but now the title doesn’t span the whole width of the table.
- 3 Return to the Design Pane and click the table title. Click the right edge and drag it to the right until it reaches the edge of the table.
- 4 Preview the report.

Custom Alternate Row Styling

You can change that by setting a custom alternate row style.

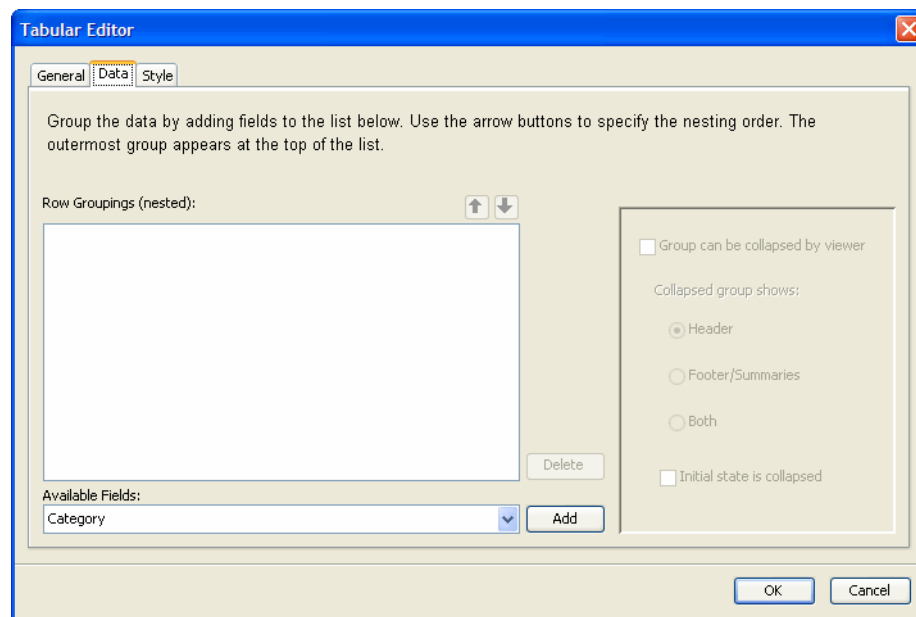
- 1 Click outside the table to exit Edit mode.
- 2 Right-click in the table and click **Edit Table**. The **Tabular Editor** opens.
- 3 Select the **Use separate styles for odd and even records** check box in the **Alternate Data Row Styling** section.
- 4 Click the **Style** tab.
- 5 Select **Repeating Details – even** from the **Styles for:** drop-down list.
- 6 Select a color from the **Background** drop-down list.
- 7 Click **OK**.
- 8 Preview and save the report.

Optional Next Steps

Changing the Grouping

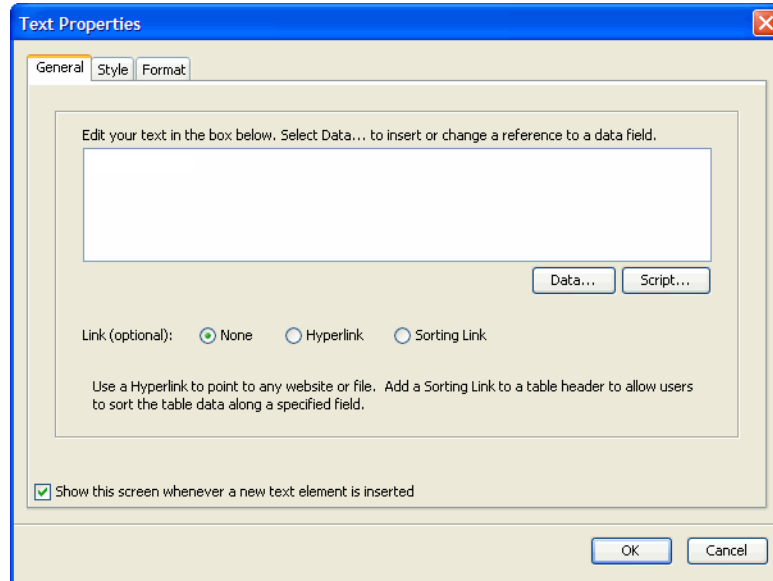
After creating a group table, you may decide to group the data in a different way. If you haven't made many adjustments to the table, the simplest solution is to delete it and start over with the Layout Wizard. However, if you have made substantial changes, you can use the Tabular Editor to change your grouping.

- 1 Right-click in the table and click **Edit Table**. The **Tabular Editor** opens.
- 2 Click the **Data** tab.

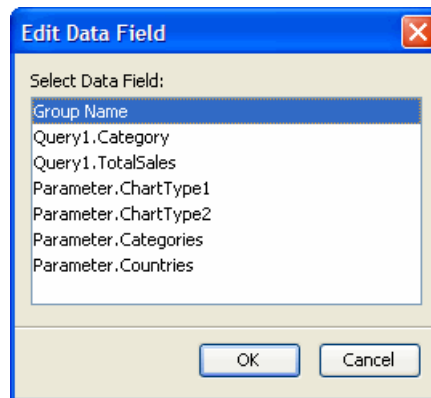


- 3 Select a grouping and click **Delete**.
- 4 Select an new field from the **Available Fields** drop-down list and click **Add**.

- 5 Click **OK**. The **Group 2 Hdr** and **Group 2 Ftr** sections are deleted and then added back again. As a result, they are empty and unstyled.
- 6 Double-click the table to open it.
- 7 Select **Group 2 Hdr** in the sidebar.
- 8 Click **Format** → **Apply Theme** and select the theme. The header style is restored.
- 9 Add the grouping field to the header. With **Group 2 Hdr** still selected, click the **Insert Text Element** icon. The **Text Properties** dialog opens.



- 10 Click **Data**. The **Edit Data Field** dialog box opens.

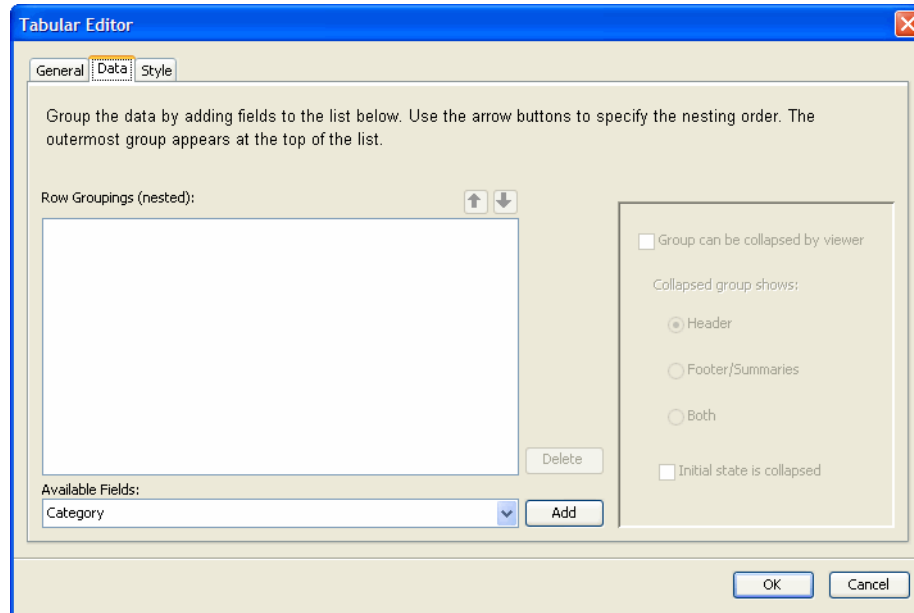


- 11 Select **Group Name** and click **OK**.
- 12 Click **OK** to close the **Text Properties** dialog. The new text element is shown in the text box.
- 13 Preview the report.

Making a Group Collapsible

Making a group collapsible gives the end user a control that will allow her to see only the country data if she wants.

- 1 Click outside the table to exit Edit mode.
- 2 Right-click the table and click **Edit Table**. The **Tabular Editor** opens.



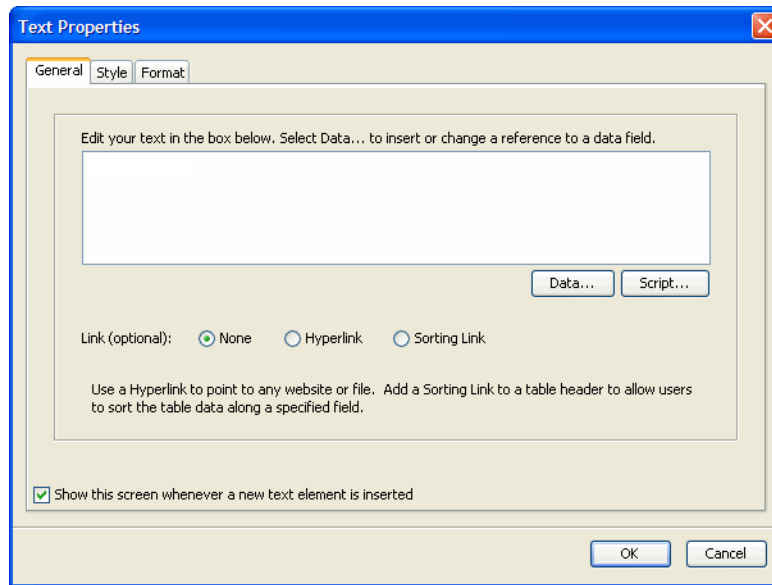
- 3 Click the **Data** tab.
- 4 Select a group in the **Row Groupings (nested)** section.
- 5 Select the **Group can be collapsed by viewer** check box. Leave the **Header** radio button selected.
- 6 Click **OK**.
- 7 Preview the report. An icon is shown at the left edge of each of the headers. Click the icon to see that group collapse and expand.
- 8 Position the icon closer to the group name by clicking the plus sign and dragging it closer to the group name text element.
- 9 Preview and save the report.



Pressing **Ctrl** on the keyboard while clicking and dragging allows you to override the grid and move smoothly in the Design Pane. You can also use your keyboard's arrow keys.

Adding a Sorting Link

- 1 Double-click the table in the Design Pane.
- 2 Right-click the element in the table header and click **Edit Text Element**. The **Text Properties** dialog opens.



- 3 Select the **Sorting Link** radio button.
- 4 Select a field from the **Data Field** drop-down list.
- 5 Select **Ascending** or **Descending** from the **Initial Direction** drop-down list.
- 6 Click **OK**.
- 7 Preview the report. You'll see the column header is now a hyperlink, which the end user can use to reorder the table data.

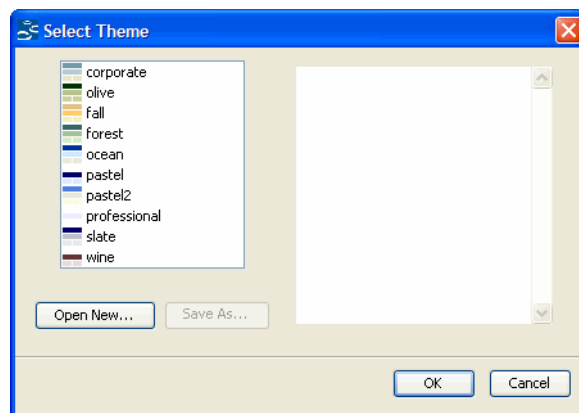
Changing the Theme

If you change your mind about your report's theme, you can always change it.



In general, themes override most custom styling, with the exception of styles applied to individual elements in a table. The title element is the only element directly styled by a theme.

- 1 Click outside the table to select the layout.
- 2 Click **Format** → **Apply Theme** → **Select**. The **Select Theme** dialog box opens.



- 3 Click different theme names to view the thumbnail preview at the right.

- 4 Double-click a theme and click **OK**. The table and the empty space around it change to reflect the new theme.
- 5 Preview and save the report.



By applying a theme, you override any existing styles on that object and its children. In this case, the custom alternate row styling you did earlier is replaced by the fall theme's alternate row style.

6 Creating a Free-form Group Table

In this chapter, you will create a free-form group table. Some data will be in the outermost group header, not the details, so you will add these data fields after you have done the initial layout. Also, because this table is free-form, themes are not useful for styling. Instead, you will learn some custom styling techniques.

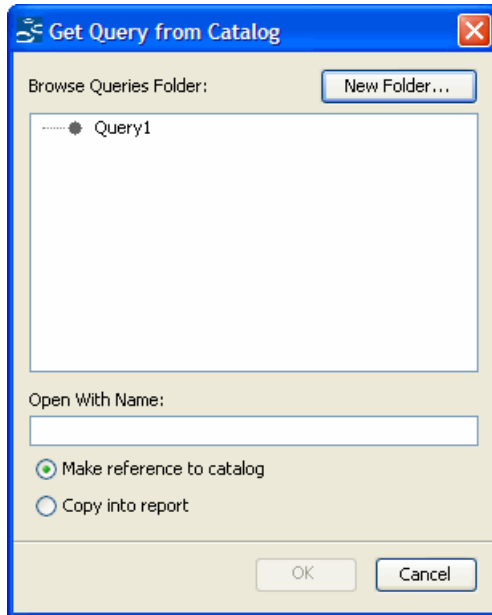
- ▶ When saving tables, do not include a combination of blank spaces and the “+” character in the report name. The Report server will not recognize this combination.

Getting Started

Downloading a Query from the Catalog

For this report, you'll reference the query in the Catalog rather than opening it from the file system.

- 1 Click **Data** → **Get Datasource**. The **Get Query from Catalog** dialog box opens.

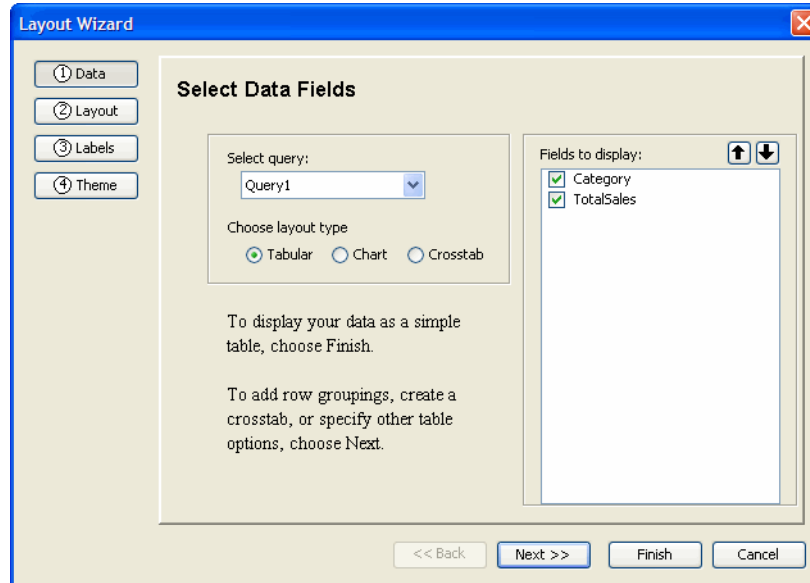


- 2 Select a query and click **OK**.

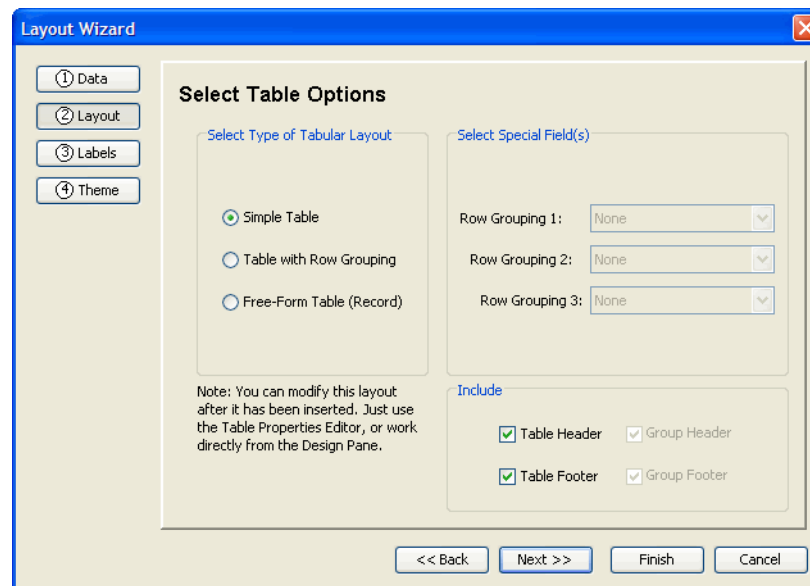
Inserting a Table

The dialog to launch the Layout Wizard opens automatically if you open a report that contains a query but no layout. You can also launch the Layout Wizard at any time by clicking **Insert** → **Table**, **Insert** → **Chart** or **Insert** → **Crosstab**.

- 1 Click **Insert** → **Table**. The **Layout Wizard** opens.



- 2 Select the required query from the **Select query** drop-down list.
- 3 Select the **Tabular** radio button in the **Choose Layout type** section.
- 4 Select the check boxes beside the fields you want to display the **Fields to Display** section.
- 5 Reorganize the fields using the up and down arrow.
- 6 Click **Next**. The **Select Table Options** screen opens.



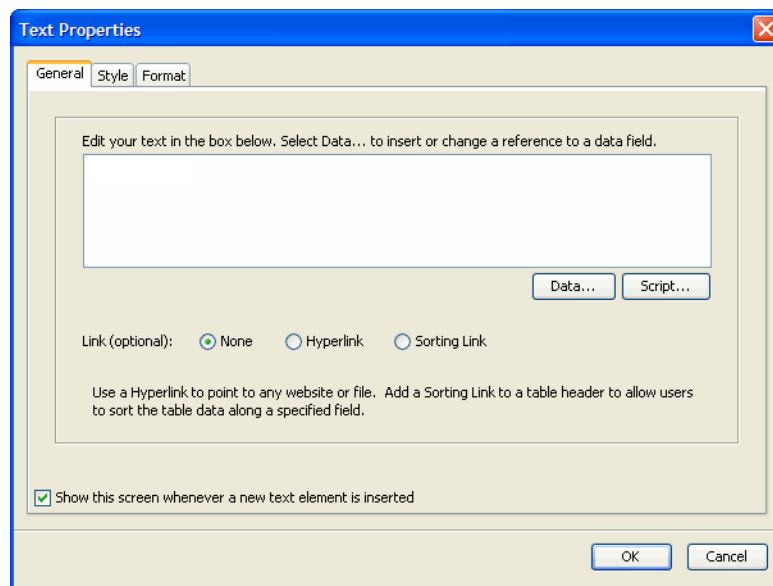
- 7 Select **Table with Row Grouping** in the **Tabular Layout** pane.

- 8 Select a column name from the **Row Grouping 1** drop-down list. (This should be pre-selected.)
- 9 If required, select column names from the **Row Grouping 2** and **Row Grouping 3** drop-down lists.
- 10 Select the check boxes you want to include in the **Include** section.
- 11 Click **Finish**. A preliminary view of the layout is shown in the Design Pane.
- 12 Preview and save the report.

Improving the Content and Layout

Editing and Styling the Title

- 1 Double-click the table to open it.
- 2 Right-click the title text element and click **Edit Text Element**. The **Text Properties** dialog opens.



- 3 Edit the title text.
- 4 Click the **Style** tab and change the values as required.
- 5 Click **OK**.

Deleting Text Elements

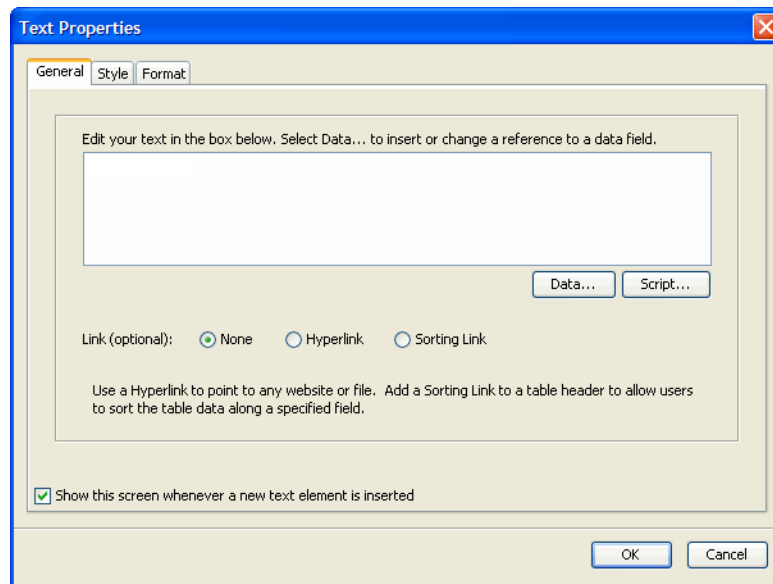
- 1 To delete text elements, right-click a text element and click **Delete**.

Adding Text to a Data Field

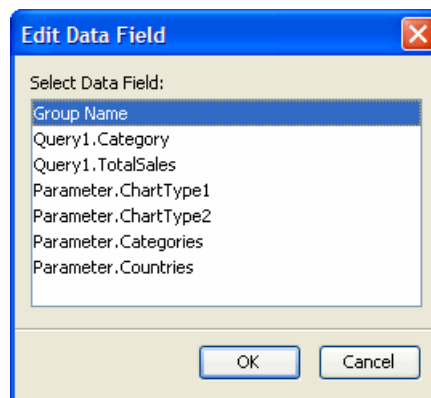
- 1 Double-click a text element. A gray oval opens with the text inside it. Your cursor is positioned to the left of the oval.
- 2 Type the text and then click the **Group 1 Hdr** sidebar to end the edit.
- 3 Preview the report.

Adding Data to the Group Header

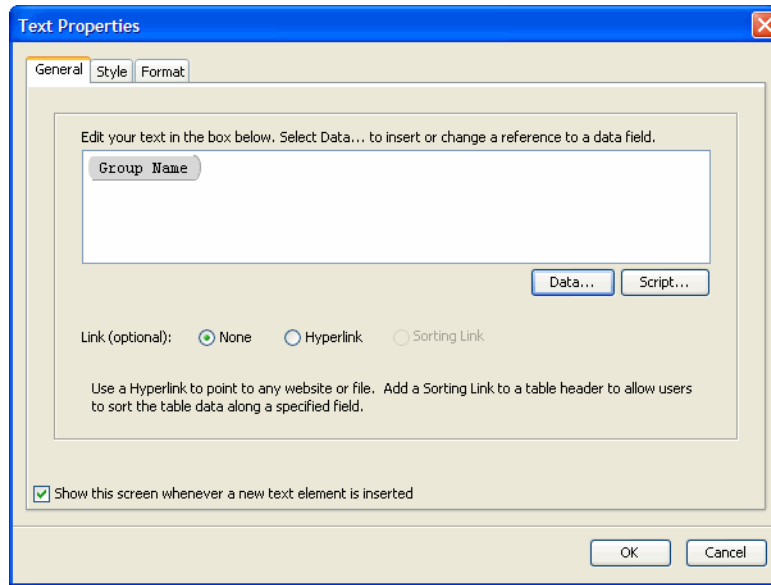
- 1 Select the **Group 1 Hdr** section in the table or the sidebar.
- 2 Click the **Insert Text Element** icon on the toolbar. The **Text Properties** dialog opens.



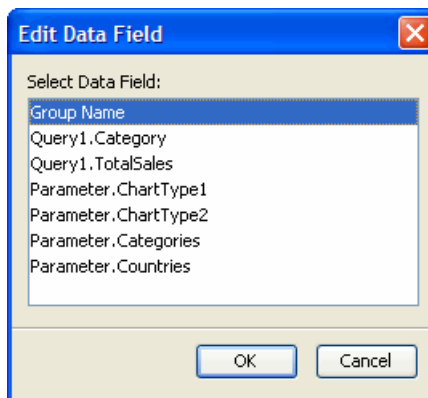
- 3 Click **Data**. The **Edit Data Field** dialog box opens.



- 4 Select a data field and then click **OK**. The **Text Properties** dialog now contains an oval representing the field.



- 5 Click to the left of the oval in the **Text** field and type the new data field name.
- 6 Click **OK** to close the **Text Properties** dialog.
- 7 Without changing the selected element, click the **Text Element** icon on the toolbar.
- 8 Type the new text element name in the **General** tab.
- 9 Click **OK**.
- 10 Click the **Text Element** icon on the toolbar. The **Text Properties** dialog opens.
- 11 Click **Data**. The **Edit Data Field** dialog opens.



- 12 Select the data field and then click **OK**.
- 13 If required, select a format in the **Format** tab.
- 14 Click **OK** to close the **Text Properties** dialog.
- 15 Preview and save the report.

Resizing and Positioning Elements

Some of the new elements may be too narrow, so the data wraps. You will need to move and resize these elements.

- 1 Select the edge of the text element and drag it to resize it.
- 2 Preview the report. Continue to move and resize the elements in the header until they are to your liking.

Adding Space Between Groups

- 1 Click the bottom boundary of **Group 1 Hdr** in the sidebar of the Design Pane and drag it down a few grid points.
- 2 Move each text element in the **Group 1 Hdr** section down to the bottom of the section.
- 3 Preview the report. You will now see empty space above the top-level headers.

Adding “Column” Headers at the Group Level

- 1 Click the bottom boundary of the **Group 2 Hdr** section in the sidebar in the Design Pane and drag it down several ticks.
- 2 Click the **Text Element** icon on the toolbar. The **Text Properties** dialog opens.
- 3 Type the new header name in the box in the **General** tab.
- 4 Click the **Style** tab and modify the settings as you wish.
- 5 Click **OK**.
- 6 Preview and save the report.

Applying Custom Styling to a Table

You have already styled individual text elements in the table. Now add styling to some table sections and to the table itself.

Styling Table Sections with the Toolbar

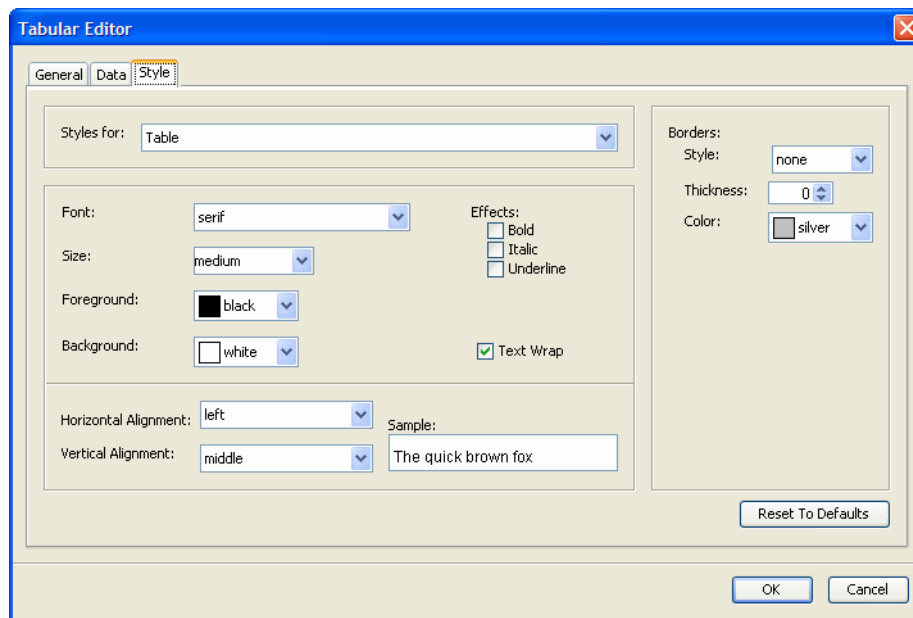
Using the toolbar to style your table allows you to see your changes as you make them. It also lets you style the table without opening a dialog or leaving Edit mode.

- 1 Select the **Group 1 Hdr** section in the sidebar of the Design Pane.
- 2 Click the **Bold** icon on the toolbar. The text in the header will turn bold.
- 3 Click the **Select Background Color** icon in the toolbar.
- 4 Select **lime** from the drop-down list. The header background will turn bright green.
- 5 Select the **Details** section in the sidebar.
- 6 Select a font from the **Font type** drop-down list in the toolbar.
- 7 Select a size from the **Font size** drop-down list.

- 8 Click an alignment icon.
- 9 Preview the report.

Adding Borders Around the Entire Table

- 1 Click outside the table in the Design Pane to exit Edit mode.
- 2 Right-click the table and select **Style Component**. The **Tabular Editor** opens showing the **Style** tab.
 - ▶ You can select the entire table without leaving Edit mode. To do this, click the **plus** button at the top left corner of the layout, where the two sets of girders meet. Right-click this button to access the **Table** menu.



- 3 Select the values for the border using the following:
 - The **Borders** drop-down list.
 - The **Thickness** selection box.
 - The **Color** drop-down list.
- 4 Click **OK**.
- 5 Preview and save the report.

Adding a Single Border to a Text Element

You can add a set of four identical borders around an element by using the Text Properties editor but to add a single border you must use the Properties Area.

- 1 Double-click the table in the Design Pane to open it.
- 2 Click the element.
- 3 Click **Box Settings** in the **Properties Area** in the Design Pane. The folder opens.

▼ Box Settings	
Background Color	Default
Bottom Border ...	Default
Bottom Border ...	Default
Border Color	Default
Left Border Style	Default
Left Border Width	Default
Right Border St...	Default
Right Border W...	Default
Top Border Style	Default
Top Border Width	Default
Bottom Padding	Default
Left Padding	Default
Right Padding	Default
Top Padding	Default

- 4 Select values for the **Bottom Border Style**, **Bottom Border Width** and **Border Color** fields.
- 5 Preview and save the report.

7 Creating a Crosstab

This chapter shows how to create and modify a crosstab.

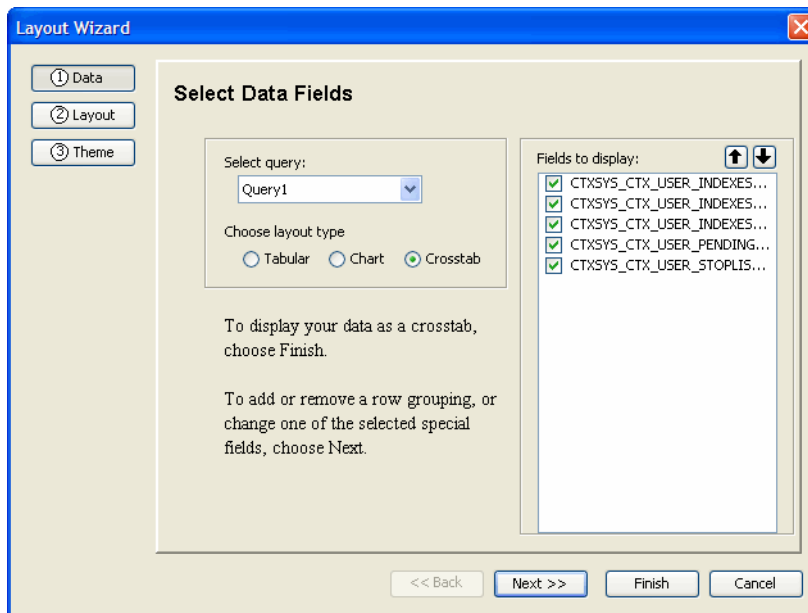


When saving crosstabs, do not include a combination of blank spaces and the “+” character in the report name. The Report server will not recognize this combination.

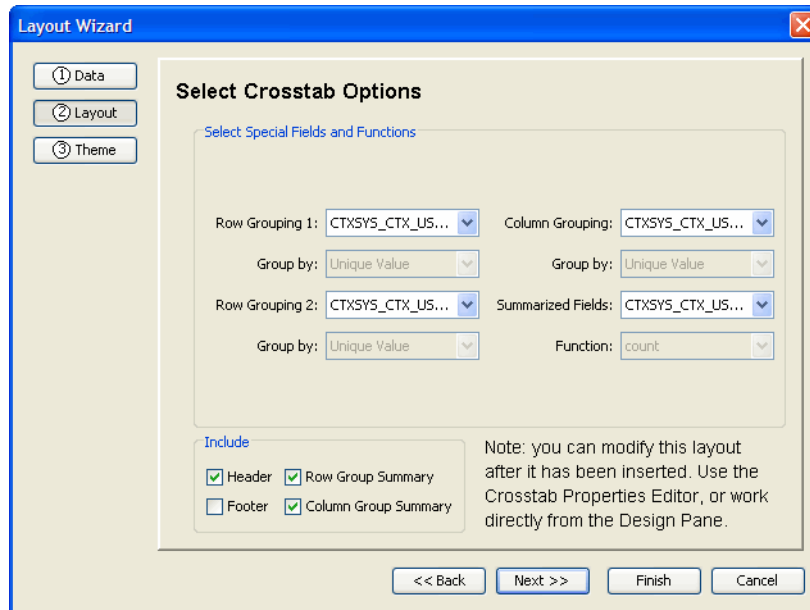
Launch the Layout Wizard

The Layout Wizard launches automatically if you open a report that contains a query but no layout. You can also launch the Layout Wizard at any time by clicking **Insert** → **Table**, **Insert** → **Chart** or **Insert** → **Crosstab**.

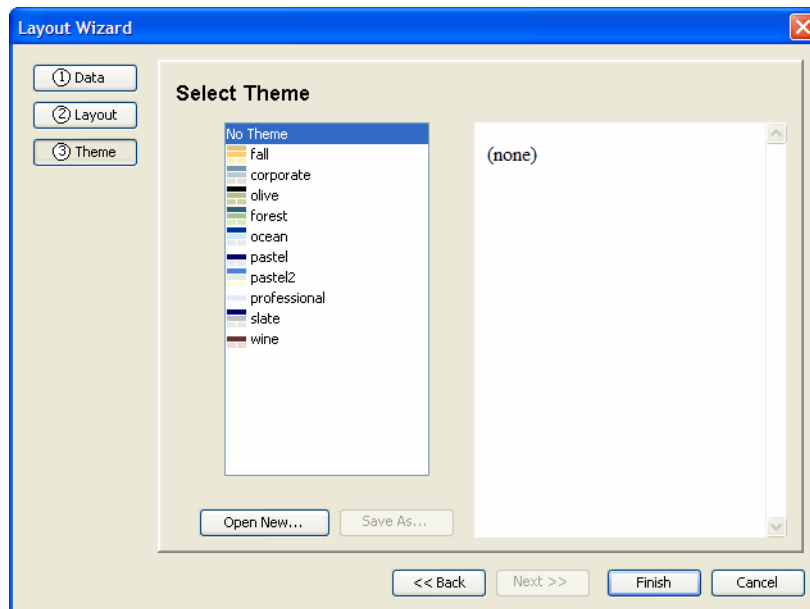
- 1 Click **Insert** → **Crosstab**. The **Layout Wizard** opens.



- 2 Select the required query from the **Select query** drop-down list.
- 3 Select the **Crosstab** radio button in the **Choose Layout type** section.
- 4 Select the check boxes beside the fields you want to display the **Fields to Display** section.
- 5 Reorganize the fields using the up and down arrow.
- 6 Click **Next**. The **Select Crosstab Options** screen opens.



- 7 Select a column name from the **Row Grouping 1** drop-down list. (This should be pre-selected.)
- 8 If required, select column names from the **Row Grouping 2** and **Row Grouping 3** drop-down lists.
- 9 Select a field from the **Column Grouping** drop-down list.
- 10 Select a field from the **Group by** drop-down list.
- 11 Select a field from the **Summarized Fields** drop-down list.
- 12 Select a function from the **Function** drop-down list.
- 13 Select the check boxes you want to include in the **Include** section.
- 14 Click **Next**. The **Select Theme** screen opens.



- 15 Click a theme name.

16 Click **Finish**. The Layout Wizard closes.

17 Preview and save the report.



In general, select **All** in the **Number of Data Rows** field only for crosstabs and only when 100 returned rows does not provide enough data to get an idea how the crosstab will look. Returning all rows, especially for simple tables, may exceed the server's memory limits.

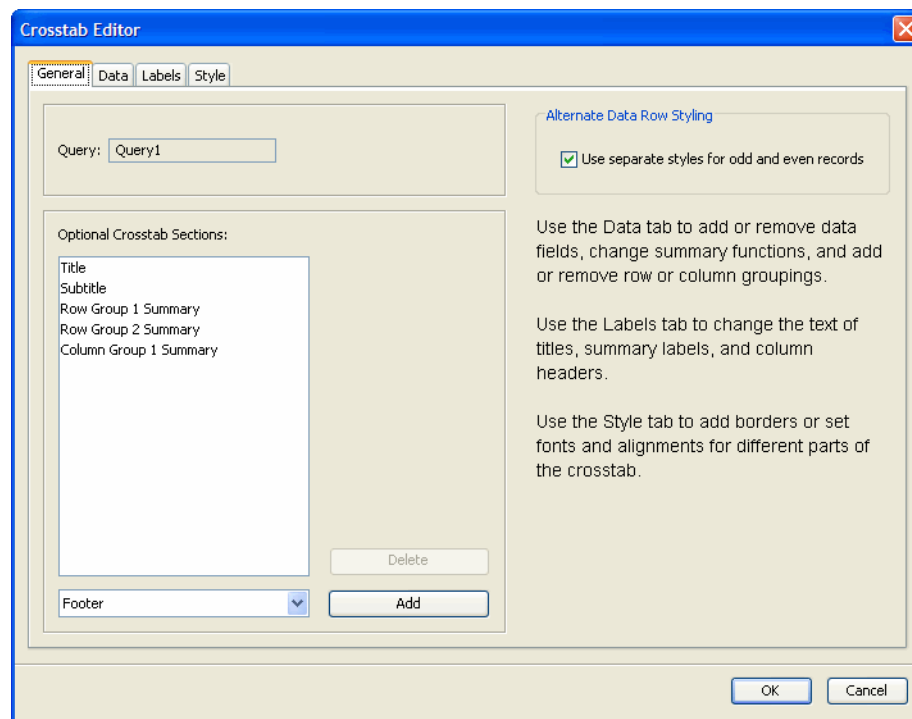
Adjusting the Layout

Changing the Title

- 1 Double-click the crosstab in the Design Pane to open it and then double-click the report title.
- 2 Replace the text as required.

Eliminating a Subtitle

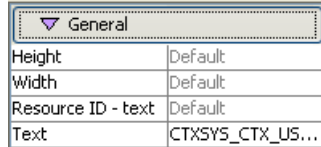
- 1 Right-click anywhere in the crosstab and click **Edit Crosstab**. The **Crosstab Editor** opens.



- 2 Select **Subtitle** in the **Optional Crosstab Sections** box and click **Delete**.
- 3 Click **OK**.

Setting Row Headers

- 1 Click **Crosstab** → **Crosstab Row Group** → **Crosstab Header** in the Tree View. The appropriate cell is automatically selected in the Design Pane.
- 2 Click **General** in the **Properties Area** in the Design Pane. The folder opens.



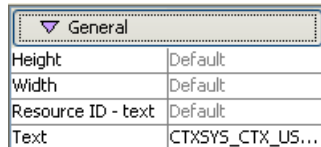
A screenshot of the 'General' properties folder in the Design Pane. The folder is expanded, showing a list of properties and their values:

General	
Height	Default
Width	Default
Resource ID - text	Default
Text	CTXSYS_CTX_US...

- 3 Click the **Text** field and type the new header.
- 4 Click **Preview** to see your changes.

Setting Column Headers

- 1 Click **Crosstab** → **Crosstab Column Group** → **Crosstab Header** in the Tree View. The appropriate cell is automatically selected in the Design Pane.
- 2 Click **General** in the **Properties Area** in the Design Pane. The folder opens.



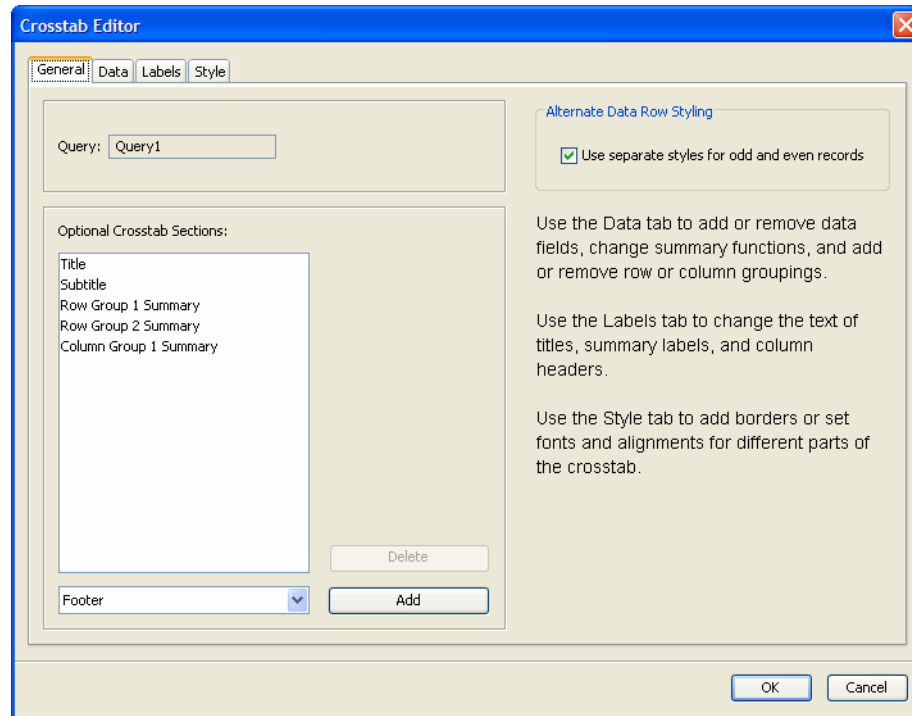
A screenshot of the 'General' properties folder in the Design Pane. The folder is expanded, showing a list of properties and their values:

General	
Height	Default
Width	Default
Resource ID - text	Default
Text	CTXSYS_CTX_US...

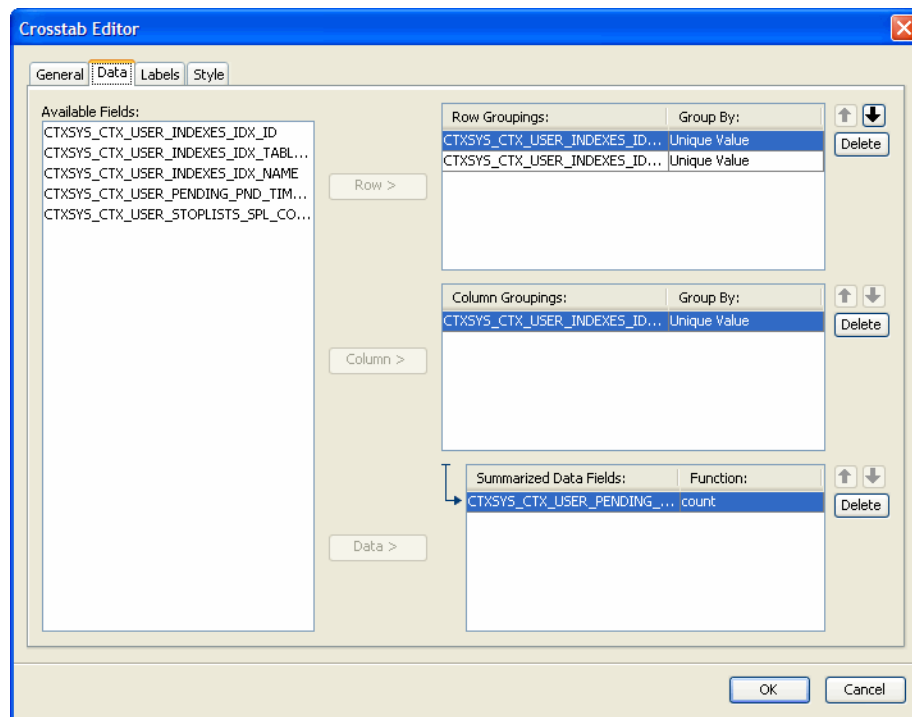
- 3 Click the **Text** field and type the new header.
- 4 Click **Preview** to see your changes.

Adding Another Summarized Data Field

- 1 Right-click the crosstab in the Design Pane and click **Edit Crosstab**. The **Crosstab Editor** opens.



- 2 Click the **Data** tab.

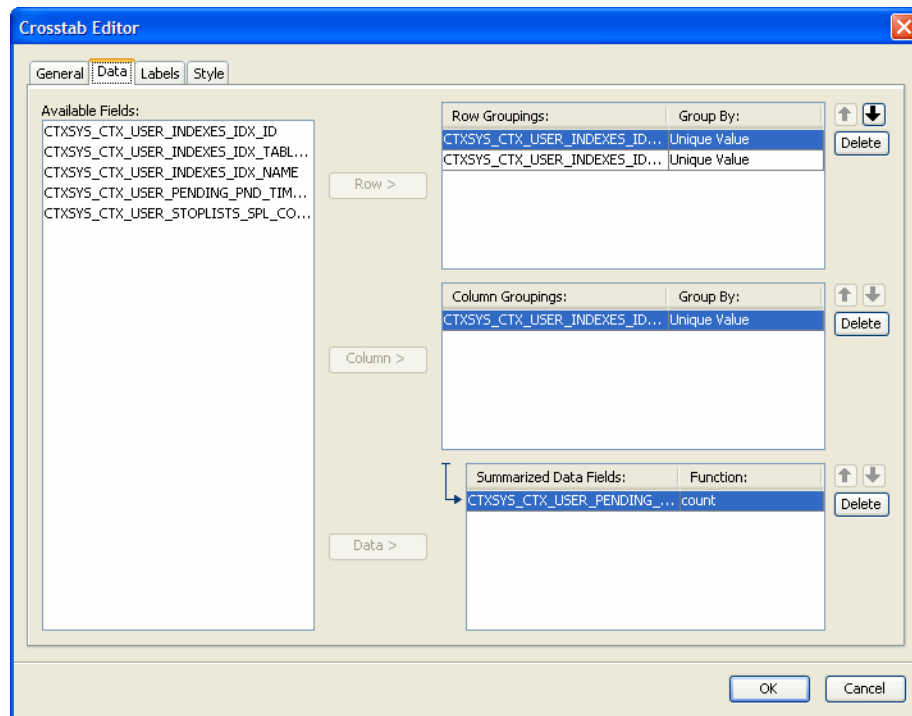


- 3 Select a field in the **Available Fields** box.

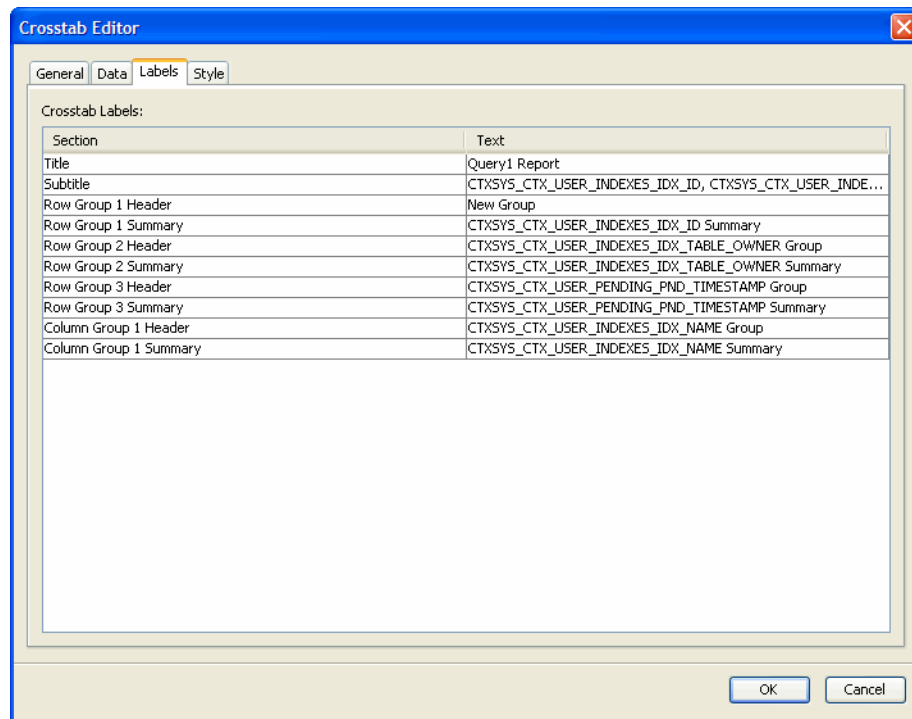
- 4 Click **Data**. The field is added to the **Summarized Data Fields** box.
- 5 Click the **Function** field and select a function from the drop-down list.
- 6 Click **OK**.
- 7 Preview the report.

Changing the “Bucketing”

- 1 Right-click the crosstab in the Design Pane and click **Edit Crosstab**. The **Crosstab Editor** opens.
- 2 Click the **Data** tab.



- 3 Click the **Group By** field and select a value from the drop-down list.
- 4 Click the **Labels** tab.



- 5 Double-click a field in the **Text** column and type a new label.
- 6 Click the cursor elsewhere in the table and click **OK**.
- 7 Save and preview the report.

8 Creating a Chart

When creating a chart with the Report Designer, you'll notice some differences from tables and crosstabs:

- 1 In the Design Pane, you'll always see the same image for the chart. Use the **Preview** tab to see how your chart appears.
- 2 You handle grouping in the query instead of in the layout. You have to modify SQL code. This chapter assumes you are familiar with the SQL language.

In this chapter, you'll create a query for the chart, create the chart and modify the chart type.



When saving charts, do not include a combination of blank spaces and the “+” character in the report name. The Report server will not recognize this combination.

Creating the Query

- 1 Select **Data** → **Query Wizard**. The **Query Wizard** opens.

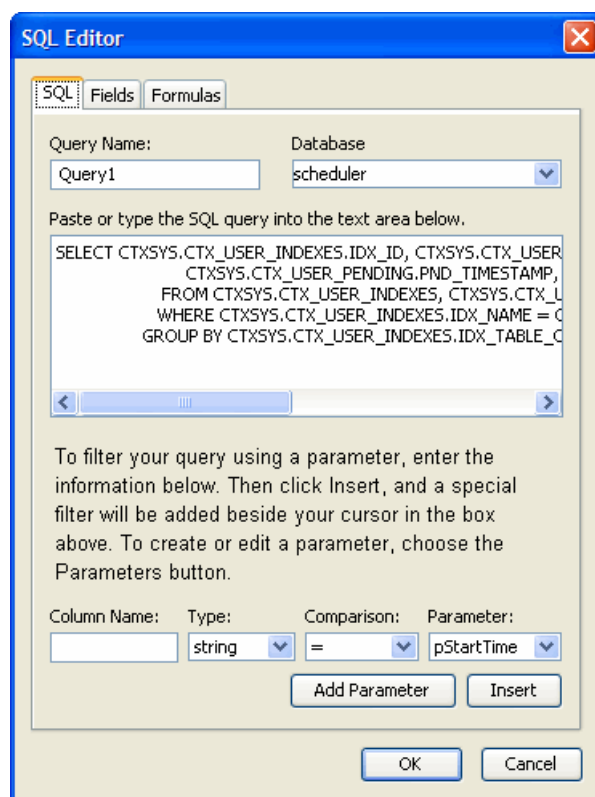


- 2 Create the query following the steps described in [Chapter 3, Creating a Query](#).
- 3 Click **Finish**.
- 4 Save the file.

Editing the Query

Edit the query to handle grouping in the layout.

- 1 Expand **Data Sources** in the Tree View.
- 2 Right-click the query and click **Edit SQL Query**. The **SQL Editor** opens.

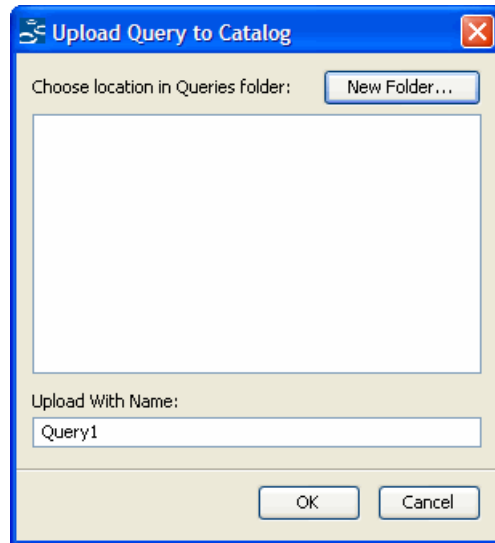


- 3 Edit the **SELECT** statement in the text area as required.
- 4 Click **Fields** tab.
- 5 Click the **Type** column and select a type from the drop-down list for each field.
- 6 Click **OK** to save the query.

Upload the Query to the Catalog

Save this query in the Catalog to reuse later.

- 1 Expand **Data Source** in the Tree View.
- 2 Right-click the query and click **Upload Datasource**. The **Upload Query to Catalog** dialog box opens.

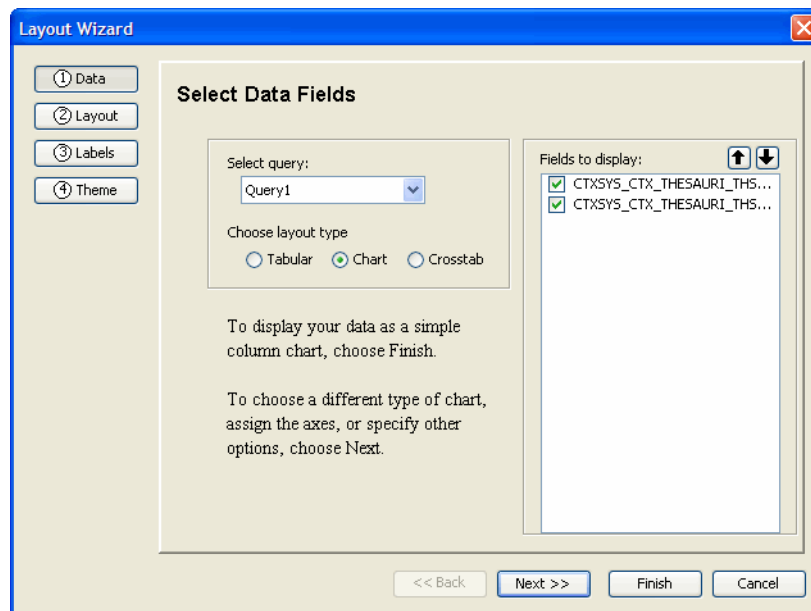


- 3 Select a location in the **Queries** folder.
 - ▶ Click **New Folder** to save the query in a different folder.
- 4 Click **OK**.

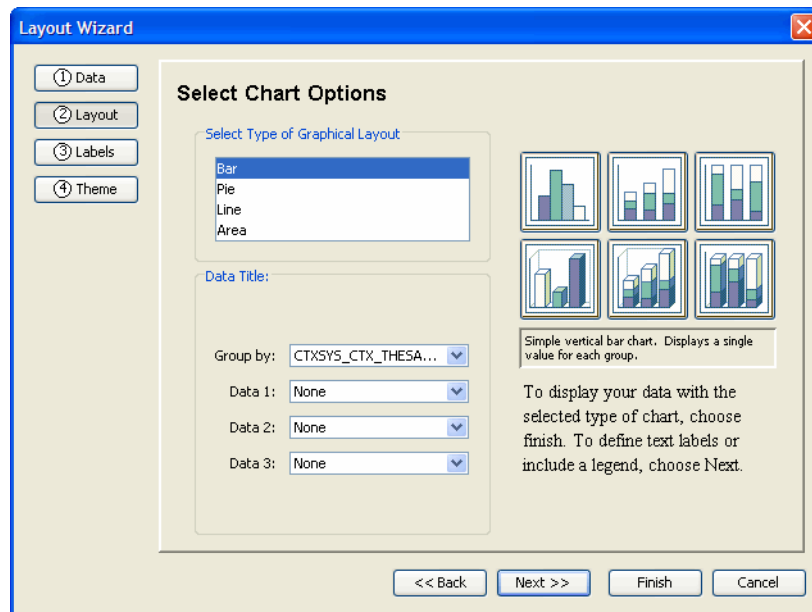
Creating the Layout for a Pie Chart

Use the query to create a 3-D pie chart that displays percentage values.

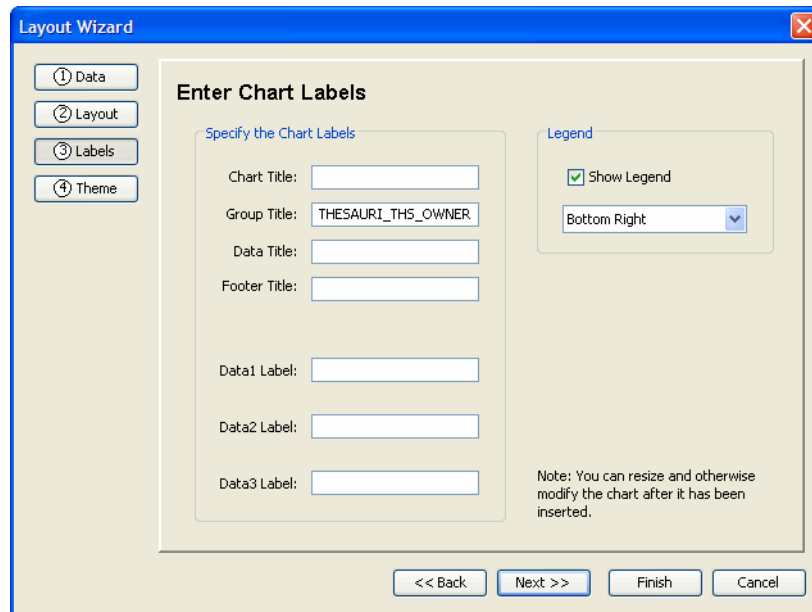
- 1 Click the **Insert Chart** icon on the toolbar. The **Layout Wizard** opens.



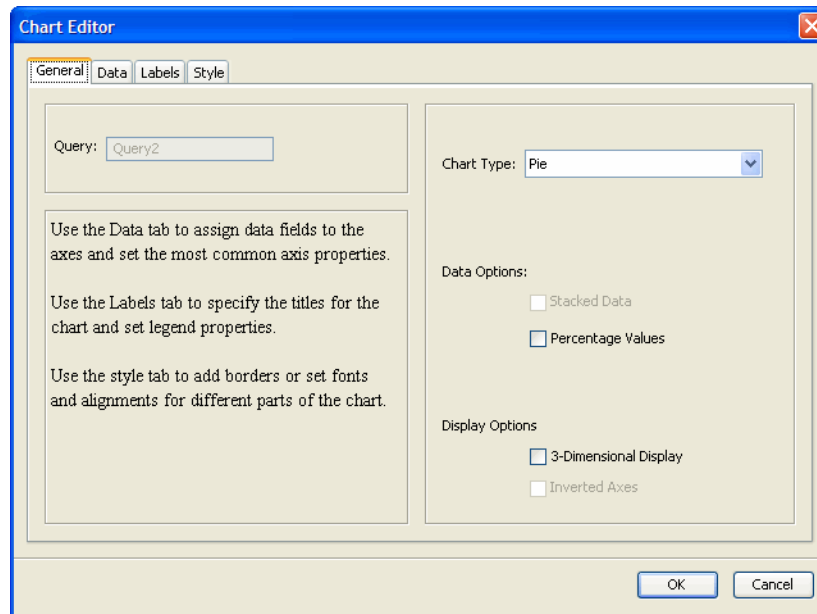
- 2 Leave the **Chart** radio button selected in the **Choose layout type** section.
- 3 Click **Next**. The **Choose Chart Options** screen opens.



- 4 Click a type in the **Select Type of Graphical Layout** section.
- 5 Select a field from the **Group By** drop-down list.
- 6 Select a field from the **Data 1**, **Data 2** and **Data 3** drop-down lists.
- 7 Click **Next**. The **Edit Chart Labels** screen opens.



- 8 Select the **Show Legend** check box.
- 9 Select a position for the legend from the drop-down list in the **Legend** section.
- 10 Click **Finish**.
- 11 Preview the report.
- 12 Right-click the chart in the Design Pane and click **Edit Chart**. The **Chart Editor** opens showing the **General** tab.

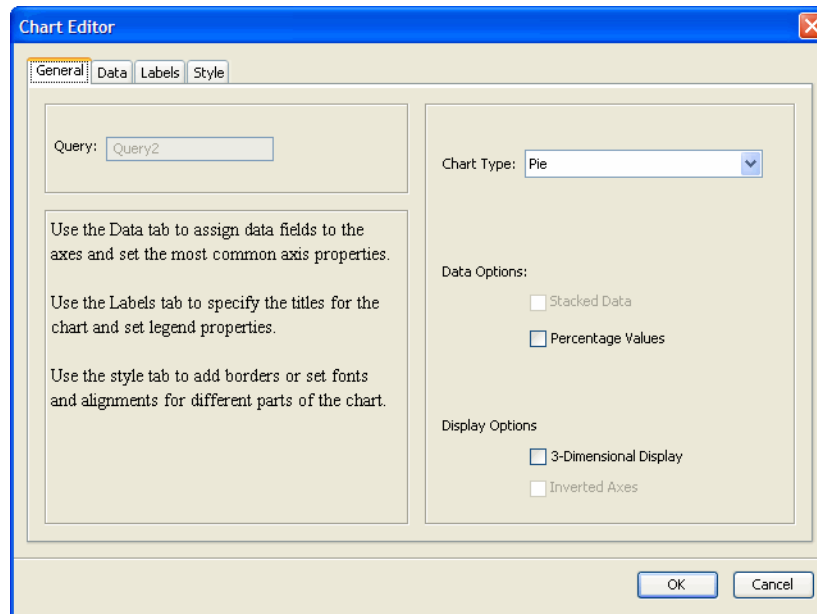


- 13 Select the **Percentage Values** and **3-Dimensional Display** check boxes.
- 14 Click **OK**.
- 15 Click **PieChart** → **ChartHeader** in the Tree View.
- 16 Click **General** in the Properties Area.
- 17 Type a value in the **Height** field.
- 18 Preview and save the report.

Converting the Layout to Another Chart Type

Convert the pie chart you just created to a 2-D bar chart with inverted axes and two data fields.

- 1 Right-click the chart in the Design Pane and click **Edit Chart**. The **Chart Editor** opens.



- 2 Select **Bar** in the **Chart Type** field on the **General** tab.
- 3 Select the **Inverted Axes** check box and clear the **3-Dimensional Display** check box in **Display Options**.
- 4 Click the **Data** tab.
- 5 Select a field from the **Available Fields** list and click **Data**. The field is shown in the **Data Fields** box.
- 6 Select the **Show Ticks** and **Show Grid** check boxes below the **Data Fields** box.
- 7 Click the **Labels** tab.
- 8 Double-click a title in the **Chart Labels** box and type a new title.
- 9 Double-click a label in the **Data Fields** box and type a new label.
- 10 Click **OK**.
- 11 Preview the chart.

Turning Off Data Labels

You can turn off the data labels.

- 1 Click **BarChart** → **ChartDataLabel** in the Tree View.
- 2 Click **General** in the Properties Area.
- 3 Select **false** from the **Visible** drop-down list.
- 4 Preview the chart.

9 Creating a Multi-component Report

In Select Audit report terms, a *component* is a single table, crosstab or chart. All the reports that you have created in previous chapters consisted of a single component. In fact, you can easily create a report containing multiple components as well as text elements or images that belong to none of the components.

This chapter shows how to create a report that contains two components: the simple table that you created in a previous chapter and a crosstab that presents the same data in a different format. You will also include text elements and images associated with neither component.

There is no limit to the number of components and fields that you can add to your report.

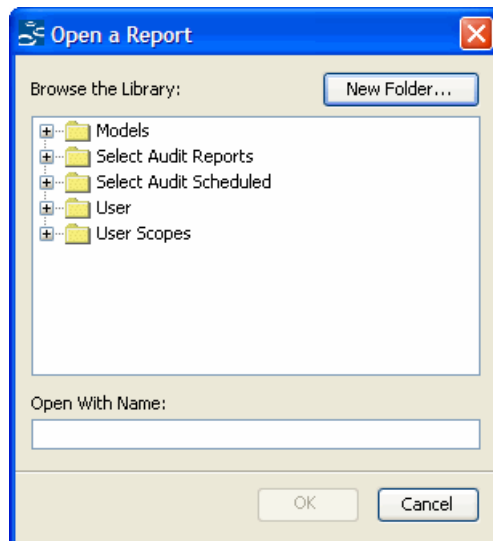


When saving reports, do not include a combination of blank spaces and the “+” character in the report name. The Report server will not recognize this combination.

Adding a Simple Table

You will start by using the simple table that you created in [Chapter 4, Creating a Simple Table](#) and stored in the Library.

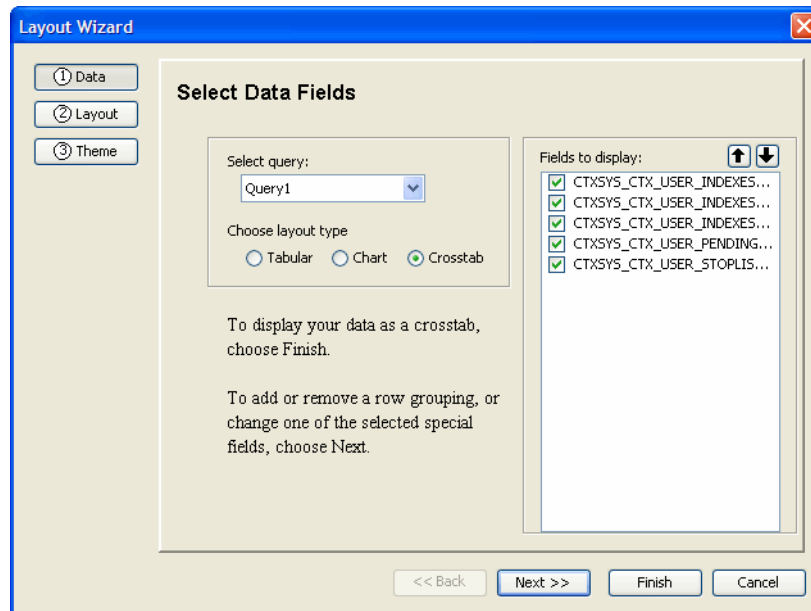
- 1 Click **File** → **Open From Server**. The **Open a Report** dialog box opens.



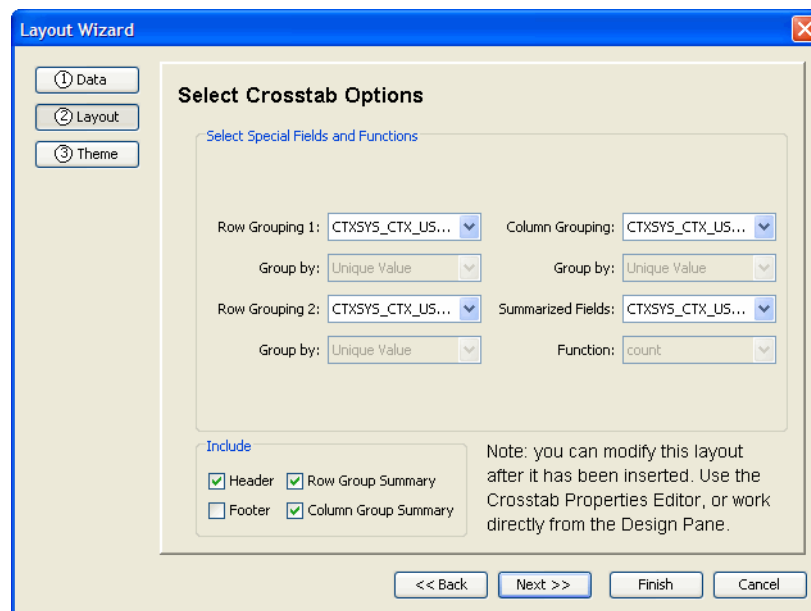
- 2 Select a report that you saved previously and click **OK**.
- 3 Save the report.

Creating a Crosstab

- 1 Click the simple table and drag it down.
- 2 Click the area above the simple table. Notice that the entire layout is selected.
- 3 Click the **Insert Crosstab** icon on the toolbar. (If the icon isn't visible, either enlarge the Report Designer window or click **Insert** → **Crosstab**.) The **Layout Wizard** opens.



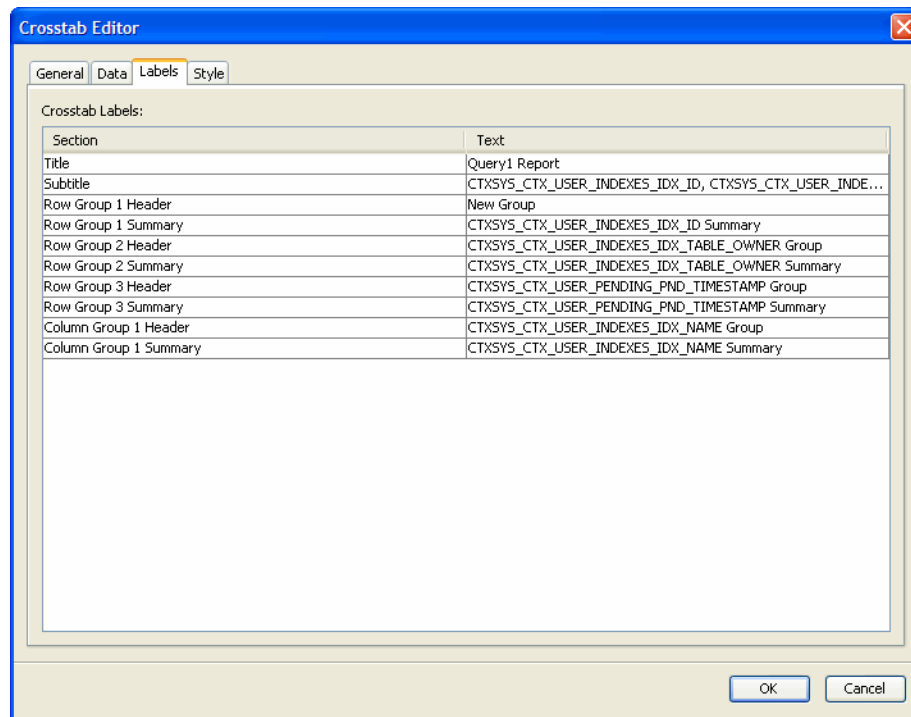
- 4 Leave default query in the **Query** field and **Crosstab** radio button selected.
- 5 Select the check boxes beside the fields you want to display the **Fields to Display** section.
- 6 Reorganize the fields using the up and down arrow.
- 7 Click **Next**. The **Select Crosstab Options** screen opens.



- 8 Select a column name from the **Row Grouping 1** drop-down list. (This should be pre-selected.)
- 9 If required, select column names from the **Row Grouping 2** and **Row Grouping 3** drop-down lists.
- 10 Select a field from the **Column Grouping** drop-down list.
- 11 Select a field from the **Group by** drop-down list.
- 12 Select a field from the **Summarized Fields** drop-down list.
- 13 Select a function from the **Function** drop-down list.
- 14 Select the check boxes you want to include in the **Include** section.
- 15 Click **Finish**. The crosstab is shown in the Design Pane.

Changing the Crosstab Labels

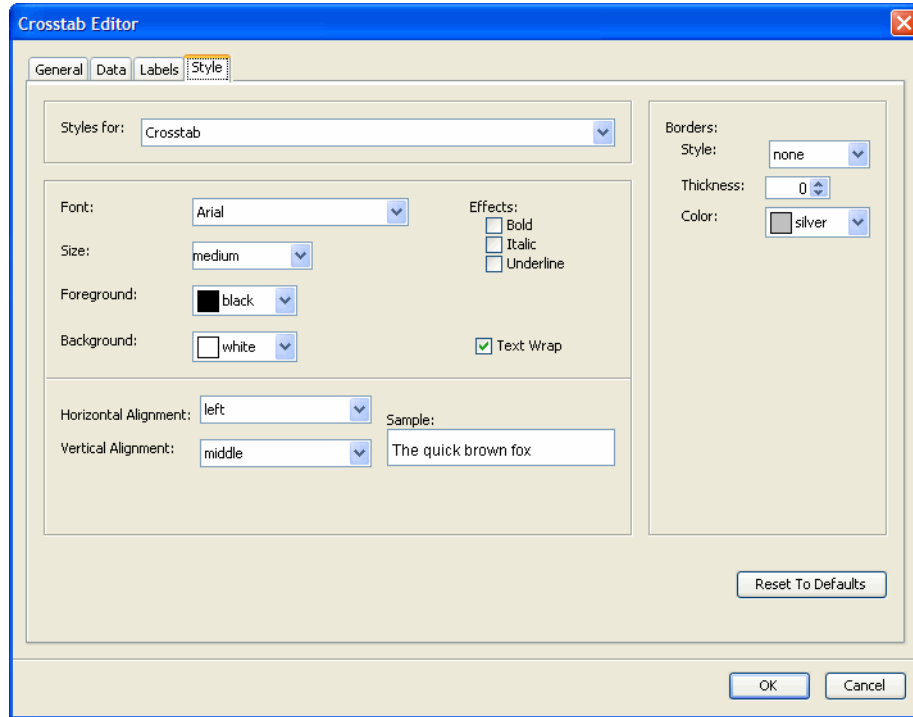
- 1 Right-click the crosstab and click **Edit Crosstab**. The **Crosstab Editor** opens.
- 2 Click the **Labels** tab.



- 3 Double-click a field in the **Text** column and type a new label.
- 4 Click the cursor elsewhere in the table and click **OK**.
- 5 Save and preview the report.

Putting Borders Around the Crosstab

- 1 Click the **Style** tab.

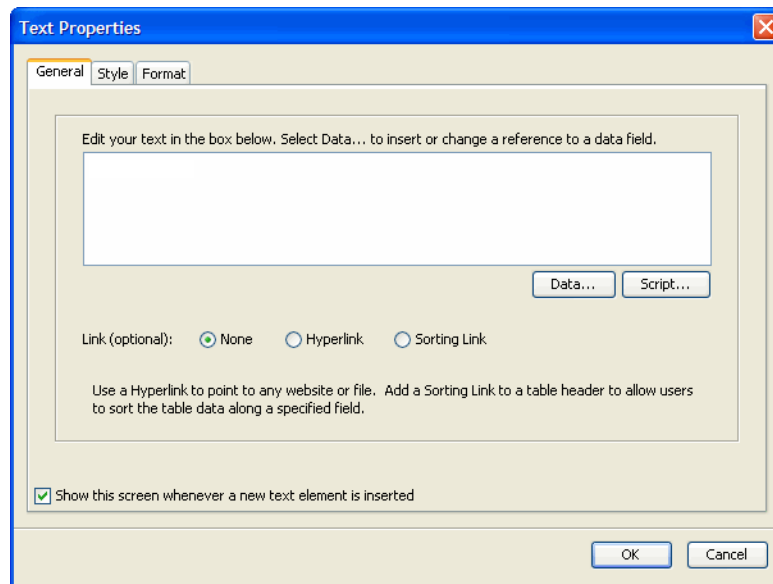


- 2 Select **Crosstab** from the **Styles for:** drop-down list.
- 3 Select values for the border using the following:
 - The **Style** drop-down list.
 - The **Thickness** scroll box.
 - The **Color** drop-down list.
- 4 Click **OK** to close the **Crosstab Editor**.

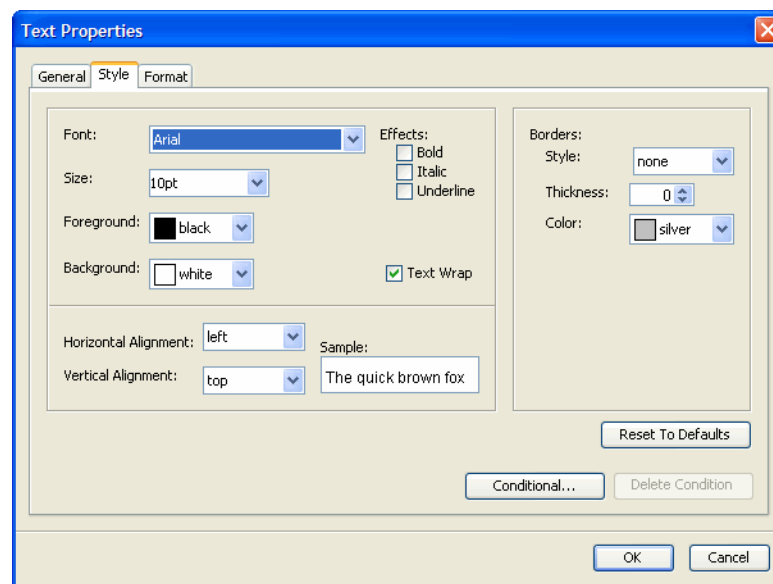
Adding Fields to the Layout

Adding a Label to the Crosstab

- 1 Click the **Insert Text** icon. The **Text Properties** dialog opens.



- 2 Type a name in the **Text** field.
- 3 Click the **Style** tab.



- 4 Select values for the style using the following:
 - The **Font** drop-down list.
 - The **Size** drop-down list.
 - The **Effects** check boxes.

- 5 Click **OK**.
- 6 The new text element may be shown to the right of the crosstab. If so, drag it to the left and place it above and to the left of the crosstab so that the lower-right-hand corner of the text element is at the same height as the upper-left-hand corner of the crosstab.

Adding a Label to the Simple Table

Add a label to the left of the simple table. If you try to select and drag the table to the right, you may not be able to. This is because the table has taken up the whole allotted width of the layout.

- 1 Click somewhere in the layout other than on one of the tables.
- 2 Drag the right side of the layout to the right. You may have to scroll to the right to see the right side of the layout.
- 3 Now move the table by selecting it and dragging it to the right. Leave the same amount of room on the left side as you did for the crosstab.
- 4 Repeat the process in [Adding a Label to the Crosstab](#) on page 73 to create a new text element. Drag it to the left of the simple table and place it so the lower-right-hand corner of the text element is at the same height as the upper-left-hand corner of the simple table.

Adding a Report Title

So far, the only report titles used are headers inside a component. For this report, you'll create a text header that is not part of any component.

- 1 Click outside the components to select the entire layout.
- 2 Click the **Insert Text Element** icon. The **Text Properties** dialog opens.
- 3 Type a title in the **General** tab.
- 4 Click the **Style** tab.
- 5 Select values for the style using the following:
 - The **Font** drop-down list.
 - The **Size** drop-down list.
 - The **Effects** check boxes.
- 6 Click **OK**.
- 7 Drag the new text element to the top of the layout.
- 8 Drag the right side of the text element to increase its width.

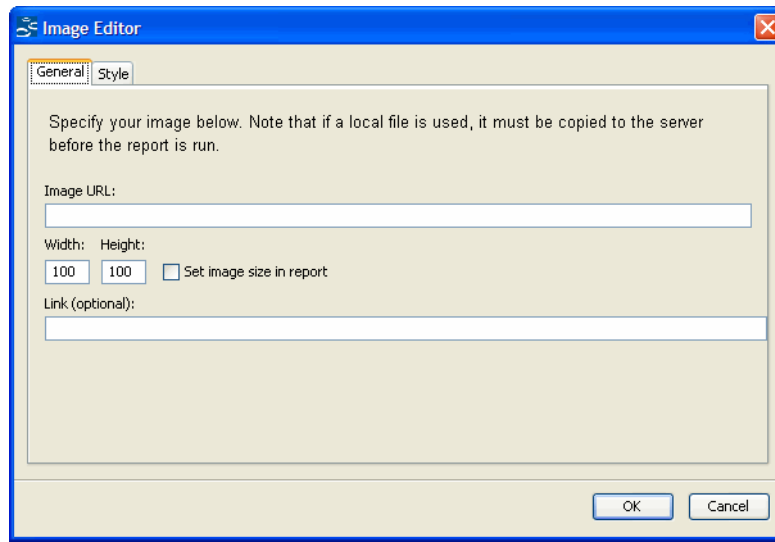
Adding an Image

Now you'll add an image beneath the report title. The image must be on the server to appear in the report. Upload the image to the server before creating your report.



You cannot overlap the image with a text element or component. If you do, the image will spring back to its original location. To avoid this, either use the Image Editor to reduce the image's size and width or move the other objects around to make more room for the image.

- 1 Click the **Insert Image** icon on the toolbar. The **Image Editor** dialog opens.



- 2 Type the image URL in the **Image URL** fields.
- 3 Type values in the **Width** and **Height** field.
- 4 Select the **Set image size in report** check box.
- 5 Click **OK**.
- 6 Drag the icon underneath the report title.
- 7 Preview the report.
- 8 If the image is too small, click the image in the Design Pane to select it and then drag the lower-right-hand corner of the image to make it slightly bigger.
- 9 Preview and save the report.



If **Set image size in report** is not selected, the image always maintains its original size even if the containing object is enlarged.

10 Controls and Parameters

A control performs one of two functions in a report:

- It performs an action pre-defined by Select Audit, such as download, export, profile selection or creation. For an example of adding a pre-defined control, see [Adding a Download Control](#) on page 82.
- It allows the end user to restrict the values that appear in a component (table, crosstab, or chart). For example, the control can let the end user restrict the report to show only orders for a certain product or ship date. See [Using Fixed-list and Free-text Controls](#) on page 78 for instructions on adding some of these controls.

Controls that restrict shown values are bound to parameters. You must create the parameter before you bind it to a control. You must also alter the query that provides data for the component whose value you want to restrict.



To create controls that restrict values, you should be familiar with the SQL language.

There are three kinds of parameter values:

fixed-list	You provide a pre-defined list of values for the end user to choose from. Fixed-list parameters are bound to check box, list menu, and radio button controls. (See Creating a Fixed-list Parameter on page 79.)
allow any value	The end user can type any text into a box. These parameters are associated with text fields and calendar controls. (See Creating Free Text Parameters on page 80.)
query-based	These parameters are based on queries defined in the report. They are typically associated with a list menu control. You must create a new query to use this kind of parameter. (See Creating Controls Bound to Query-based Parameters on page 85.)

In this chapter, you'll create these three kinds of parameters as well as the controls to bind them to. You'll also create a control that performs a pre-defined action (download).

It's better to plan for the controls the report will contain before you create the query that provides data to the components. This allows you to design the original query to include the parameters that will be bound to the controls. It is possible to add a parameter to the query after you have already designed the component, but to do this you must alter the query that provides data for the component.

Using Controls

The Select Audit controls are listed below:

Download	Loads the report into a browser in any of several output formats, including HTML or PDF format.
Export	Saves the report to the Report server in any of a variety of formats.
Push Button	A button that is defined either to submit the report to the server or to reset the controls in the report. (Using JavaScript, you can also assign some other action to a push button.)
Radio Buttons	A set of buttons allowing a single choice among a closed set of choices.
Check boxes	A set of boxes allowing multiple choices among a closed set of choices.
List	A drop-down list or fixed-size list containing single or multiple choices.
Image Button	Like a submit push button, but displays an image of your choosing rather than a button. If the image source that you specify is not a full URL, it may not display correctly in the Preview pane.
Print Button	An icon that prints the report.
Profile Manager	A drop-down list that lets you choose from a list of profiles, or create a new profile. (In Select Audit terms, a profile is a saved set of parameter values.)
Calendar	A control that lets you choose the month, day and year.
Download	Loads the report into a browser in any of several output formats, including HTML or PDF format.



You can fine-tune the action of a control by using the **Actions** tab in the **Controls Editor**. You can use JavaScript to define the action when end-user action triggers an event.



This chapter shows how to make a working report with various types of parameters. It does not show how to style the report. For examples of styling a report, see [Chapter 4, Creating a Simple Table](#).

Using Fixed-list and Free-text Controls

In this example, you'll begin with the query that you created in [Chapter 3, Creating a Query](#), modify it to incorporate some parameters, create the parameters and bind them to controls. You can create the following controls:

- A check box control consisting of some of the products in the table. (See [Creating a Fixed-list Parameter](#) on page 79.)

- Two free-text controls, one for the minimum order number and one for the maximum. (See [Creating Free Text Parameters](#) on page 80.)
- A download control, which lets you view the report in a browser.
- A submit button, which sends the end user's control values to the Report server.

Creating the Parameters

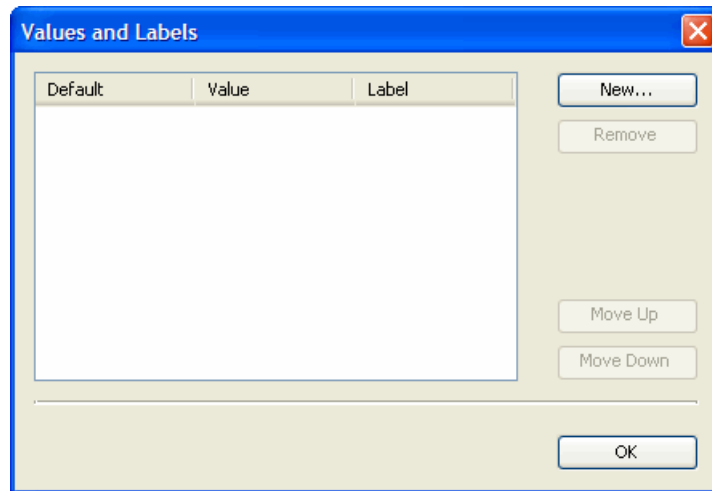
This section shows how to create the fixed-list and free-text parameters.

Creating a Fixed-list Parameter

Create a fixed-list parameter, that you will later bind to a check box control. (You could also bind it to a radio button or list control in much the same way.)

- 1 Click **Data** → **Add Parameter**. The **Parameter Editor** opens.

- 2 Type a name in the **Parameter name** field.
- 3 Select the **Fixed List** radio button.
- 4 Click **Set Values**. The **Values and Labels** dialog box opens.

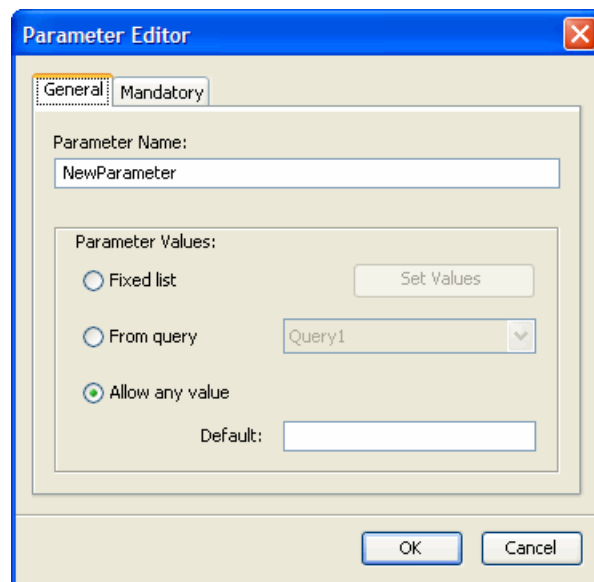


- 5 Click **New**. A new row is added to the **Value** box.
- 6 Double-click the **Value** field and type a value.
- 7 Select the **Default** check box next to the value.
- 8 Click **OK** to close the **Values and Labels** dialog box.
- 9 Click **OK** to close the **Parameter Editor**. The parameter is shown in the tree.

➤ For information about the **Mandatory** tab, see [Making Parameters Mandatory](#) on page 84.

Creating Free Text Parameters

- 1 Click **Data** → **Add Parameter**. The **Parameter Editor** opens.



- 2 Type a name in the **Parameter name** field.
- 3 Select the **Allow any value** radio button.
- 4 Select and type a value in the **Default** field.

- 5 Click **OK**. The parameter is shown in the Tree View.

Modifying the Query

Add the parameters to the query from which you'll create the component.

Add the Parameter

- 1 Expand **Data Sources** in the Tree View.
- 2 Right-click the query and click **Edit SQL Query**. The **SQL Editor** opens.

SQL Editor

Query Name: Query1 Database: scheduler

Paste or type the SQL query into the text area below.

```
SELECT CTXSYS.CTX_USER_INDEXES.IDX_ID, CTXSYS.CTX_USER_PENDING.PND_TIMESTAMP,
FROM CTXSYS.CTX_USER_INDEXES, CTXSYS.CTX_U
WHERE CTXSYS.CTX_USER_INDEXES.IDX_NAME = C
GROUP BY CTXSYS.CTX_USER_INDEXES.IDX_TABLE_C
```

To filter your query using a parameter, enter the information below. Then click Insert, and a special filter will be added beside your cursor in the box above. To create or edit a parameter, choose the Parameters button.

Column Name: Type: string Comparison: = Parameter: pStartTime

Add Parameter Insert

OK Cancel

- 3 Copy the parameter from the **SELECT** statement and paste it into the **Column Name** field below. (If you prefer, you can just type it directly into the field without copying and pasting.)
- 4 Leave the **Type** field as **String** and the **Comparison** field as “=”.
- 5 Select **FixedListParameter** from the **Parameter** drop-down list.
- 6 Place the cursor at the very end of the **WHERE** clause, hit the carriage return and then type the word **And** with a space after it.
- 7 Click **Insert**. The parameter should be in the SQL query.
- 8 Click **OK**.

➤ This example uses a query that already contains a **WHERE** clause. If the query has no **WHERE** clause (this typically happens when the query was built on a single database table and you have not yet added any other parameters), instead of typing **And** or **Or** in the SQL editor, type the word **WHERE** instead.

Creating the Component

Create a component based on the query that you've just added parameters to. In this example, the component is an extremely simple table.

- 1 Click the **Insert Table** icon in the toolbar. The **Layout Wizard** opens.
- 2 Leave the query as the default name.
- 3 Select the **Tabular** radio button in the **Choose Layout type** section.
- 4 Select the check boxes beside the fields you want to display the **Fields to Display** section.
- 5 Click **Next**. The **Select Table Options** screen opens.
- 6 Select **Simple Table** in the **Select Type of Tabular Layout** section.
- 7 Clear the **Table Footer** check box in the **Include** section.
- 8 Click **Finish**. The table is shown in the Design Pane.

Adding Controls

Add the controls to the layout.



In **Preview** mode, some controls are disabled.

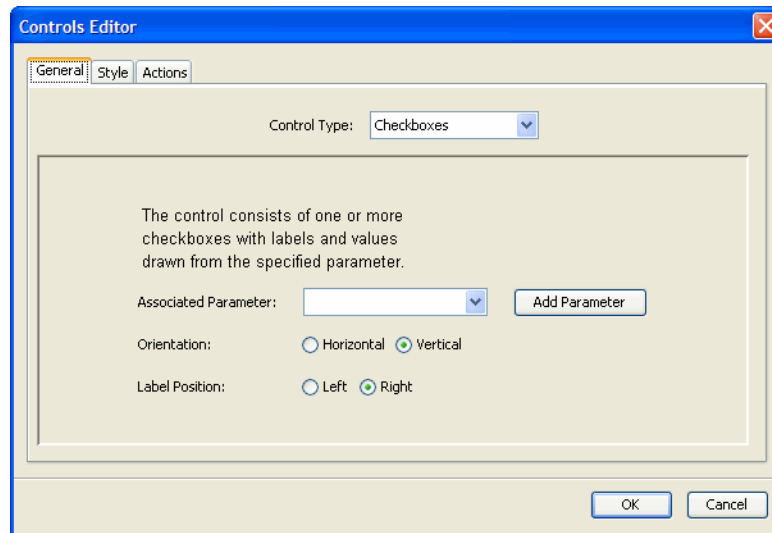
Adding a Download Control

A download control enables the end user to view her report in a browser. Adding a download control is very straightforward. (Export and profile controls are equally simple.)

- 1 Click the table in the Design Pane to select it.
- 2 Click somewhere outside the component in the Design Pane to select the entire layout and then click **Insert** → **User Control** → **Download**.

Adding a Check Box Control

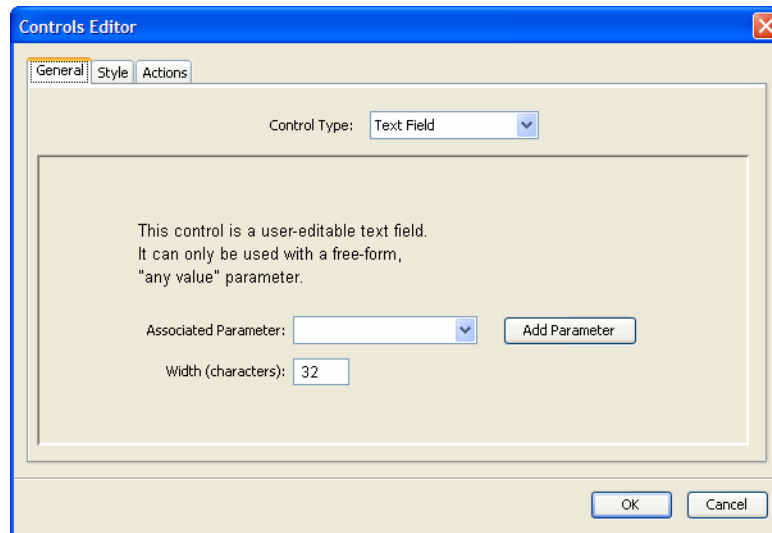
- 1 Click somewhere outside the component and download control in the Design Pane and then click **Insert** → **User Control** → **Checkboxes**. The **Controls Editor** opens.



- 2 Leave the **Control Type** drop-down list as **Checkboxes**.
- 3 Select **FixedListParameter** from the **Associated Parameter** drop-down list.
- 4 Select the **Horizontal** radio button in the **Orientation** section.
- 5 Select the **Right** radio button in the **Label Position** section.
- 6 Select **OK**.
- 7 Preview the report. You should see the download control and the check boxes.
- 8 Save the report.

Adding the Free-text Controls

- 1 Click somewhere outside the component and download control in the Design Pane and then click **Insert** → **User Control** → **Text Field**. The **Controls Editor** opens.

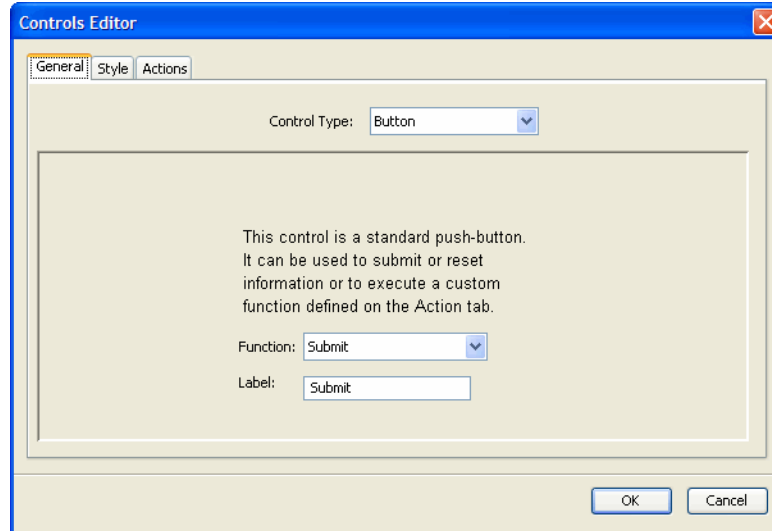


- 2 Select a value from the **Associated Parameter** drop-down list.
- 3 Type a value in the **Width** field.
- 4 Click **OK**.

Adding the Submit Control

The report needs a **Submit** button so that the end user can send her choices, made through controls, to the server:

- 1 Right-click the layout outside the component and controls and click **Insert** → **User Control** → **Button**. The **Controls Editor** opens.

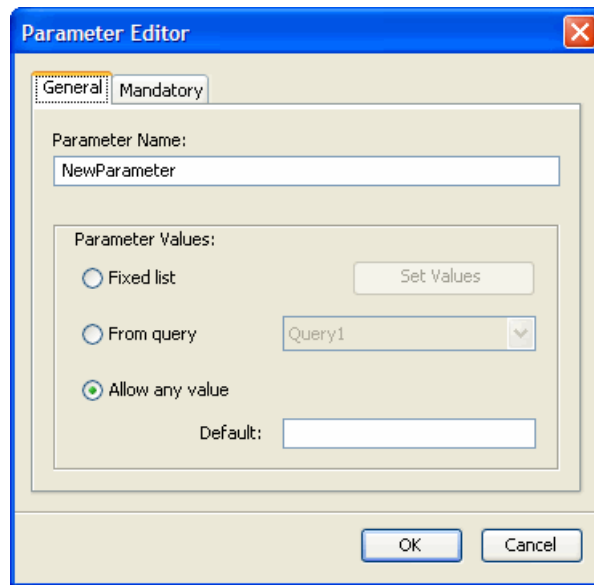


- 2 Leave the default function drop-down list and label as **Submit**.
- 3 Click **OK**.
- 4 Preview and save the report.

Making Parameters Mandatory

You can define a parameter to be mandatory, that is, required within a particular query. If a parameter is mandatory, the report viewer must specify a value for it. For instance, if the parameter is mapped to a set of check boxes, at least one check box must be selected. If the report viewer tries to submit the report with no check boxes selected, a warning message will be shown.

- 1 Expand **Parameters** in the Tree View.
- 2 Right-click a parameter and click **Edit Parameter**. The **Parameter Editor** opens.



3 Click the **Mandatory** tab. A list of available queries is shown.

4 Select the checkbox next to the query and click **OK**.

► If you run the report and clear out the default values from the text fields, a red asterisk is shown next to each text field along with the following message:

Please specify the missing parameters.

Creating Controls Bound to Query-based Parameters

The values in a list control can be populated in one of two ways:

- By pre-defining the values in the list. See [Using Fixed-list and Free-text Controls](#) on page 78 for instructions on how to define a fixed-value parameter.
- By defining a query to populate the control.

In this section, you'll create a drop-down list control that enables the end user to restrict the report results to certain countries. A database query populates the list.

Creating a Query for the Parameter

- 1 Right-click **Data Sources** in the Tree View and click **Query Wizard**. The **Query Wizard** opens.
- 2 Create a query using the steps described in [Launching the Query Wizard](#) on page 19.
- 3 Right-click the query in the Tree View and click **Edit SQL Query**. The **SQL Editor** opens.
- 4 Type the word `DISTINCT` in the query after `SELECT`.
- 5 Click **OK** to close the **SQL Editor**.

Creating the Parameter

- 1 Right-click the query in the Tree View and click **Edit SQL Query**. The **SQL Editor** opens.
- 2 Click **Add Parameter**. The **Parameter Editor** opens.
- 3 Type a name in the **Parameter Name** field.
- 4 Click **From query** and select the query from the drop-down list.
- 5 Click **OK** to close the **Parameter Editor**.
- 6 Click **OK** to close the **SQL Editor**.

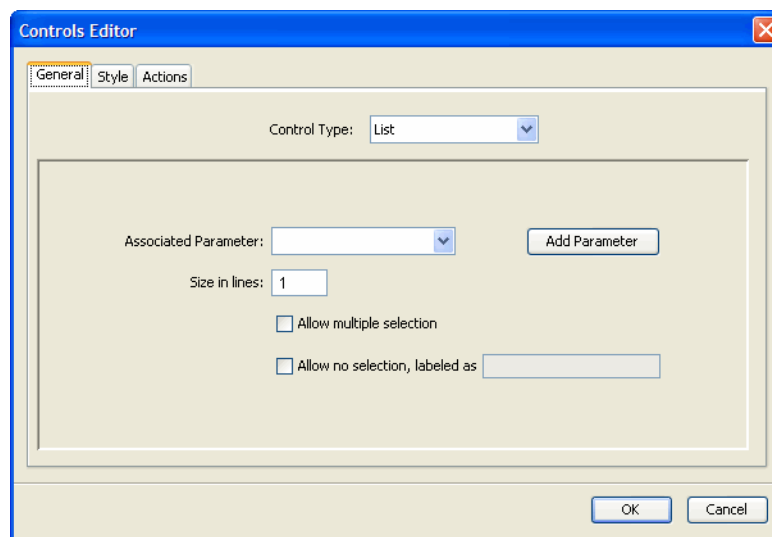
Adding the Parameter to the Query

- 1 Right-click the query in the Tree View and click **Edit SQL Query**.
- 2 Place the cursor at the very end of the SQL query, press **Enter** and then type the word `And` with a space after it.
- 3 Copy the parameter from the query and paste it into the **Column Name** field.
- 4 Leave the **Type** field as `string` and the **Comparison** field as `"="` (equals).
- 5 Select the parameter name from the **Parameter** drop-down list.
- 6 Click at the end of the query.
- 7 Click **Insert**.
- 8 Click **OK** to close the SQL editor.

Adding the Control

Create a list control populated by the results of the query.

- 1 Right-click outside the controls in the Design Pane and click **Insert** → **User Control** → **List**. The **Controls Editor** opens.



- 2 Select the parameter in the **Associated Parameter** field.

- 3 Type a value in the **Size in lines** field.
- 4 Do not select the **Allow multiple selection** check box.
- 5 Do not select the **Allow no selection, labeled as** check box.
- 6 Click **OK** to close the **Controls Editor**.

- ▶ If you select the **Allow multiple selection** check box, all items in the list can be deselected at once. Therefore, if you allow multiple selection, you do not need to (and cannot) enter a default label for **Allow no selection**.
- ▶ Selecting the **Allow no selection, labeled as** check box would give the end user the option to bypass all items in the list.

Rearranging the Controls

- 1 Drag the download control to the right of the list control in the Design Pane.
- 2 Drag the list control to underneath the check boxes control.
- 3 Drag the text fields under the download control, the one associated with the control associated with the minimum parameter on top.

Add Labels to the Controls

- 1 Right-click to the left of the check boxes control in the Design Pane and click **Insert Text Element**.
- 2 Type a name in the **Text Properties** dialog box.
- 3 Drag the new element to left of the check boxes control.
- 4 Add a text elements next to the list control and add the free-text controls.

Add the Selected Text Element to the Header

- 1 Click the table to select it and then double-click it to make it editable.
- 2 Right-click the top row of the table header and click **Edit Text Element**.
- 3 Delete the text from the field.
- 4 Click **Data**. The **Edit Data Field** dialog opens.
- 5 Select the parameter in the **Select Data Field** box.
- 6 Click **OK** to close the **Edit Data Field** dialog. An oval representing the parameter value is shown.
- 7 Click the cursor to the left of the symbol for the parameter in the **Text Properties** dialog.
- 8 Type a new name.
- 9 Click **OK** to close the **Text Properties** dialog.
- 10 Save and preview the report.

11 Using Report Links and Drilldowns

You can link one report to another to give the end user additional information about a specific data value. This type of special hyperlink is called a **report link**.

The report that contains the link is the source report. Clicking the link brings you to the target report. The target report typically includes one or more parameters. The relevant values for these parameters are passed from the source report through the report link to the target report.



When saving reports, do not include a combination of blank spaces and the “+” character in the report name. The Report server will not recognize this combination.

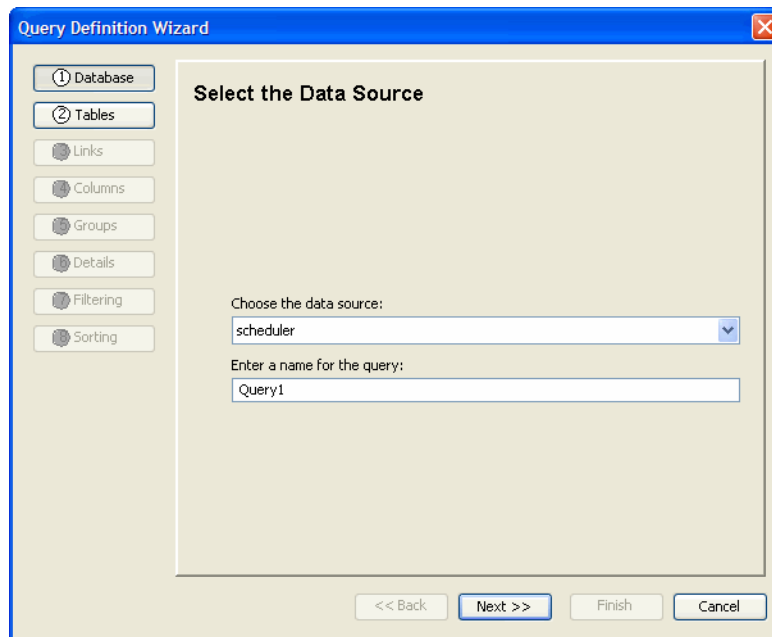
This chapter describes how to create a parameterized target report with a pie chart and a label.

Creating a Parameterized Target Report

The target report uses a query-driven parameter (see [Chapter 10, Controls and Parameters](#)). You will define the query, add the parameter and modify the chart query. Finally, you will create a new pie chart and add a parameterized title.

Creating a Query for the Parameter

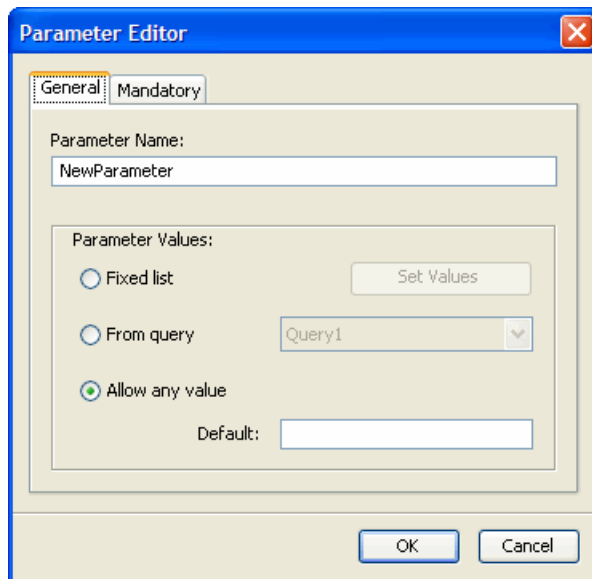
- 1 Click the **New** toolbar icon to start a new report.
- 2 Right-click **Data Sources** in the Tree View and click **Query Wizard**. The **Query Wizard** opens.



- 3 Create the query using the steps described in [Launching the Query Wizard](#) on page 21.
- 4 Click **Finish**. Cancel the prompt for the Layout Wizard if it opens.
- 5 Save the file.

Creating the Parameter

- 1 Right-click **Parameters** in the Tree View and click **Add Parameter**. The **Parameter Editor** opens.

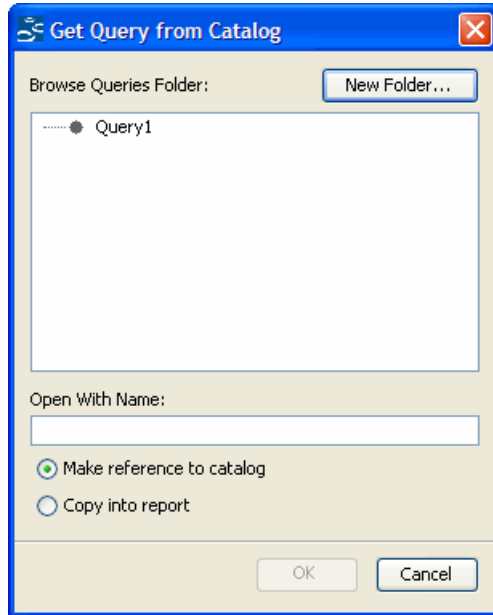


- 2 Type a name in the **Parameter name** field.
- 3 Select the **From query** check box.
- 4 Select the query name from the drop-down list.

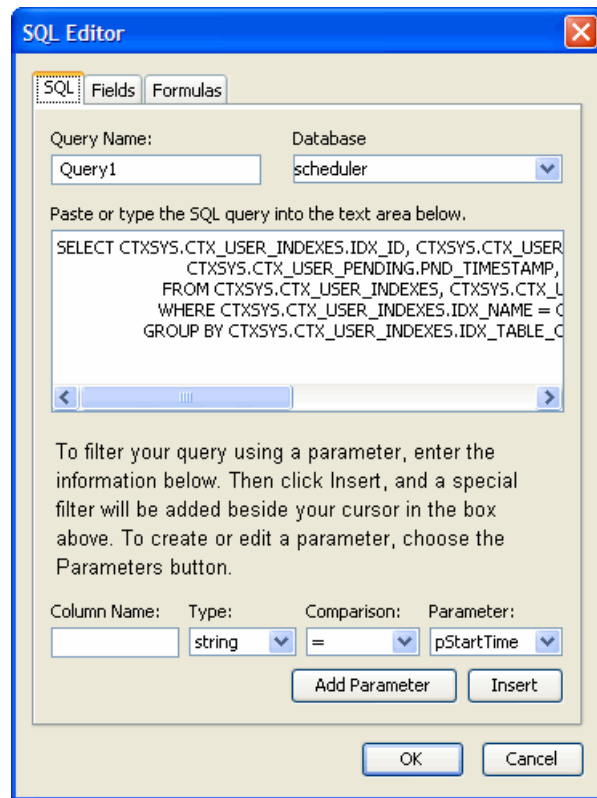
- 5 Click **OK**.

Modifying the Chart Query

- 1 Right-click **Data Sources** in the Tree View and click **Get Datasource**. The **Get Query from Catalog** dialog box opens.



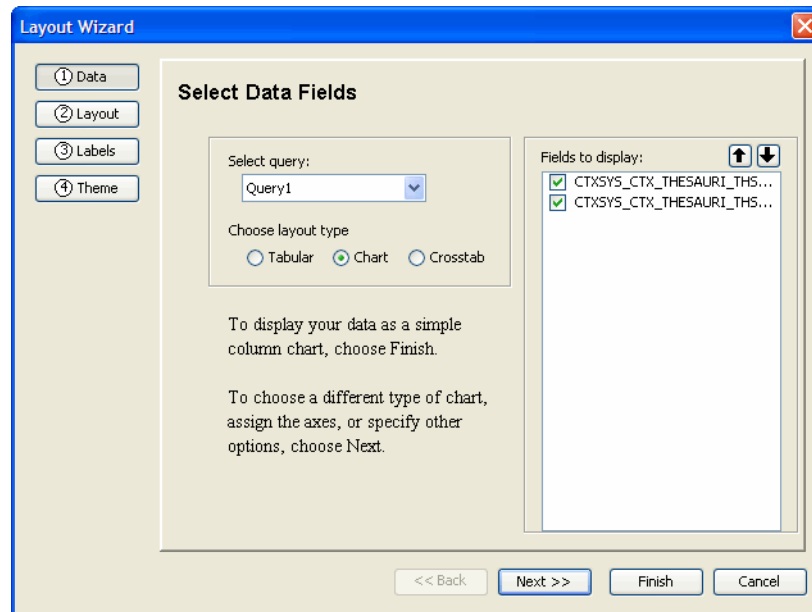
- 2 Select the query and select the **Copy from catalog** check box.
- 3 Click **OK**. The query is shown in the Tree View.
- 4 Right-click the query in the Tree View and click **Edit SQL Query**. The **SQL Editor** opens.



- 5 Type the query name in the **Query name** field.
- 6 Copy the parameter from the `SELECT` statement and paste it into the **Column Name** field below. (If you prefer, you can just type it directly into the field without copying and pasting.)
- 7 Leave the **Type** field as `String` and the **Comparison** field as `=`.
- 8 Select **FixedListParameter** from the **Parameter** drop-down list.
- 9 Place the cursor at the very end of the `WHERE` clause, press **Enter** and then type the word `And` with a space after it.
- 10 Click **Insert**. The parameter should be in the SQL query.
- 11 Click **OK**.
- 12 Save the file.

Creating the Pie Chart

- 1 Click the **Insert Chart** icon on the toolbar. The **Layout Wizard** opens.

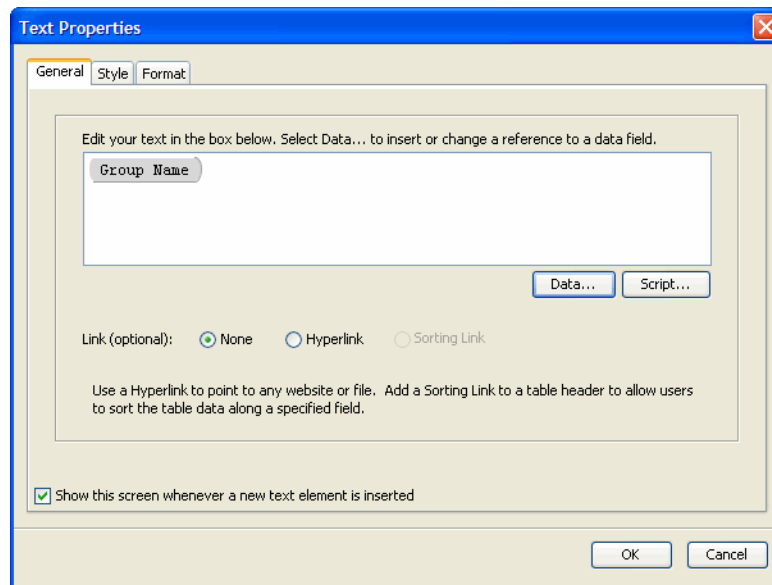


- 2 Select **TargetQuery** from the **Select query** drop-down list.
- 3 Click **Next**.
- 4 Create the pie chart using the steps described in [Creating the Layout for a Pie Chart](#) on page 65.
- 5 Click **Finish**.
- 6 Preview the report and save the file.

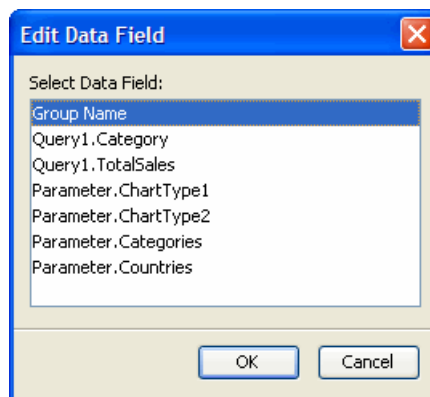
Adding a Parameterized Title

Add a chart title that changes with the value of the parameter.

- 1 Click in the center of the chart image and drag it down so that the top lines up with the number 1 on the vertical ruler.
- 2 Click outside the chart to select the layout.
- 3 Click the **Insert Text Element** icon on the toolbar. The **Text Properties** dialog opens.



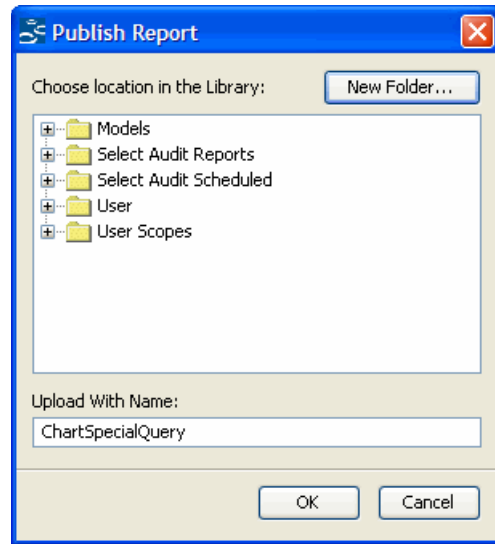
- 4 Type the title in the **Text Properties** field.
- 5 Click **Data**. The **Edit Data Field** dialog box opens.



- 6 Select the parameter and click **OK**.
- 7 Click **OK** to close the **Text Properties** dialog. The new text element is shown in the **Text Properties** text box.
- 8 Click the **Style** tab and change the values as required.
- 9 Click **OK**.
- 10 Drag the new text element to a position above the chart. Line up the left edges using the girders as a guide.
- 11 Drag the edges of the text element until all the text is visible.
- 12 Preview the report.
- 13 Save the file.

Publishing the Target Report

- 1 Click **File** → **Publish**. The **Publish Report** dialog box opens.



- 2 Click the **User** folder to select and open it.
- 3 Click **OK** to upload **TargetReport** to the **User** folder.

Adding a Report Link to a Table

The target report you have just created shows inventory value by product, with a parameter that can limit the results to a specific product category. You will create a report link that passes a single category as a value for this parameter. The report link will be associated with a text element that shows the category value.

The free-form group table you created in [Chapter 6, Creating a Free-form Group Table](#) includes the category value in its **Group 2 Header**. You will modify this element to include a link to your target report.

- 1 Open `FancyGroup.rdl`.
- 2 Double-click the table.
- 3 Select the text element containing the group name in the **Group2 Hdr** section. This should be the first element in the header.
- 4 Right-click the element and click **Edit Text Element**. The words **Group Name** are visible in the gray oval in the **Text Properties** dialog.
- 5 Select the **Hyperlink** option in the **Link (optional)** section below the text box.
- 6 Select **_blank** from the **Target** drop-down list and then click **Report Link**.
- 7 Click **Browse** at the top and double-click the **User Report** folder.
- 8 Select **TargetReport** and click **OK**.
- 9 Click in the **Value** field for **CategoriesParam** and select **Category** from the drop-down list.
- 10 Click **OK** to close the **Report Link Editor**.
- 11 Click **OK** to close the **Text Properties** dialog.

- 12 Preview the report. The category names appear as hyperlinks.
- 13 Test the hyperlinks in the **Preview** pane.
- 14 Select **File** → **Publish**, click the **User Reports** folder and upload your report.
- 15 (Optional) Go to Report Center and run the report (see the *HP Select Audit 1.02 Report Center User's Guide* for more information). Click a hyperlink that says **Produce**. A new browser window opens showing the target report titled *Inventory Value by Product: Produce* that includes only products from the **Produce** category.
- 16 Save the file.

12 Other Topics

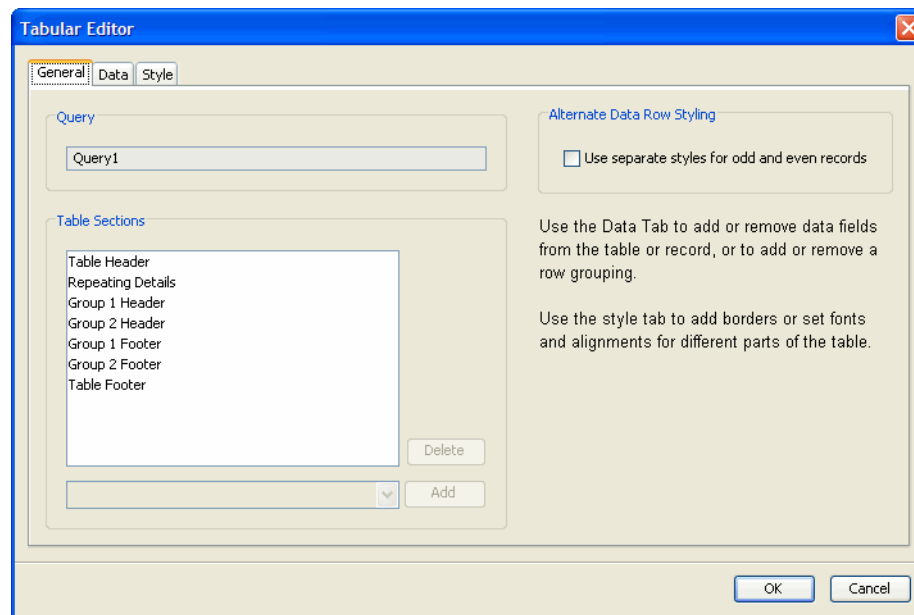
Adding Headers and Footers

This chapter shows you how to add headers and footers if you've deleted or omitted them. After adding a footer, you'll add summaries to it.

- ▶ When saving reports, do not include a combination of blank spaces and the “+” character in the report name. The Report server will not recognize this combination.

Adding a Footer

- 1 Open a report that does not have footers.
- 2 Right-click in the table and click **Edit Table**. The **Tabular Editor** opens.

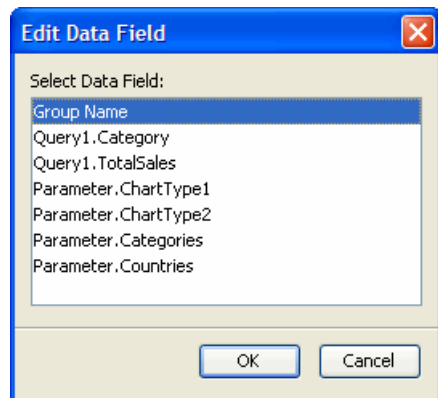


- 3 The **Table Sections** box lists of all the sections currently in your table. Underneath this list is a drop-down list of additional sections. Select **Group 2 Footer** in the drop-down list and click **Add**.
- 4 Click **OK**. The table now includes the group footer.

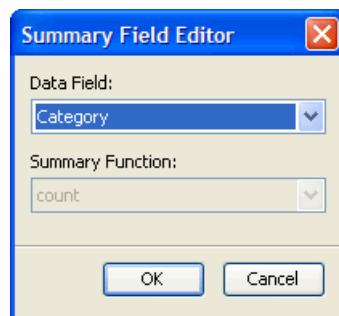
Adding Summaries

Add summaries to the footer you have just created.

- 1 Double-click the table to open it.
- 2 Select the **Group2 Ftr** section and then click the text icon in the toolbar. The **Text Properties** dialog opens.
- 3 Click **Data**. The **Edit Data Field** dialog box opens.



- 4 Click **Add Summary**. The **Summary Field Editor** dialog box opens.



- 5 Select a field from the **Data Field** drop-down list.
- 6 Select a function from the **Summary Function** drop-down list.
- 7 Click **OK** to close the **Summary Field Editor**. The data field is now shown in the **Select Data Field** box of the **Edit Data Field** dialog box.
- 8 Click **OK** to close the **Edit Data Field** dialog. A gray oval with the summary field is shown in the **Text Properties** box.
- 9 Click the **Style** tab and change the values as required.
- 10 Click the **Format** tab and select the **0.00** mask.
- 11 Click **OK** to close the **Text Properties** dialog.
- 12 Preview the report.

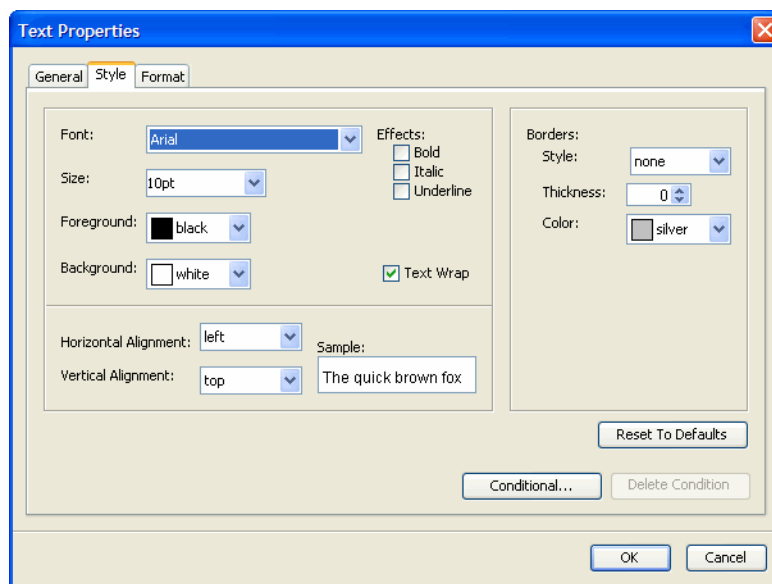


When you add a summary field, you are actually adding a new object to the report. This object is shown in the Tree inside the appropriate **Nested Band** or at the bottom of the **Banded Table**. Deleting a text element that contains a summary field does not remove the object. The object continues to be shown as an option in the **Edit Data Field** drop-down list in the appropriate context.

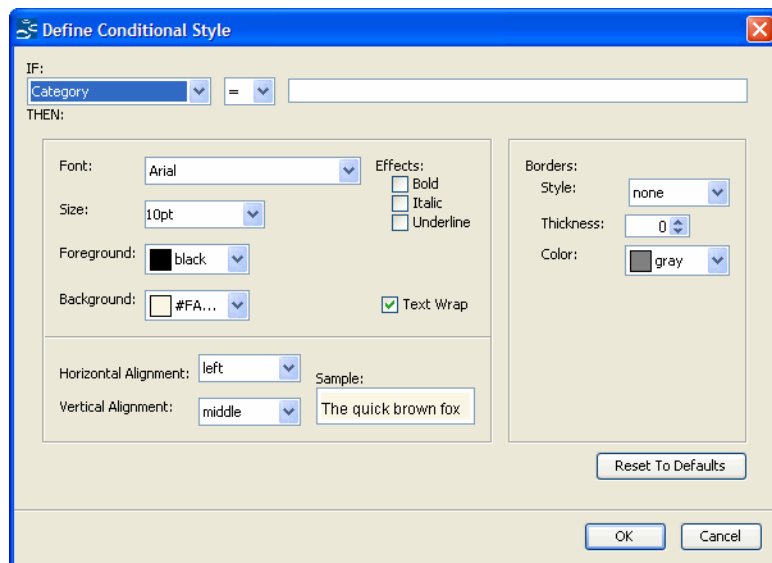
Conditional Formatting

You can change the format for cells in a table based on a condition. For example, you can specify that numbers below a certain value are shown with a certain color or background.

- 1 Open a simple table and save the report with a new name.
- 2 Double-click the table in the **Design** view to open it.
- 3 Right-click a cell and click **Style Element**. The **Text Properties** dialog opens showing the **Style** tab.



- 4 Click **Conditional**. The **Define Conditional Style** dialog opens.



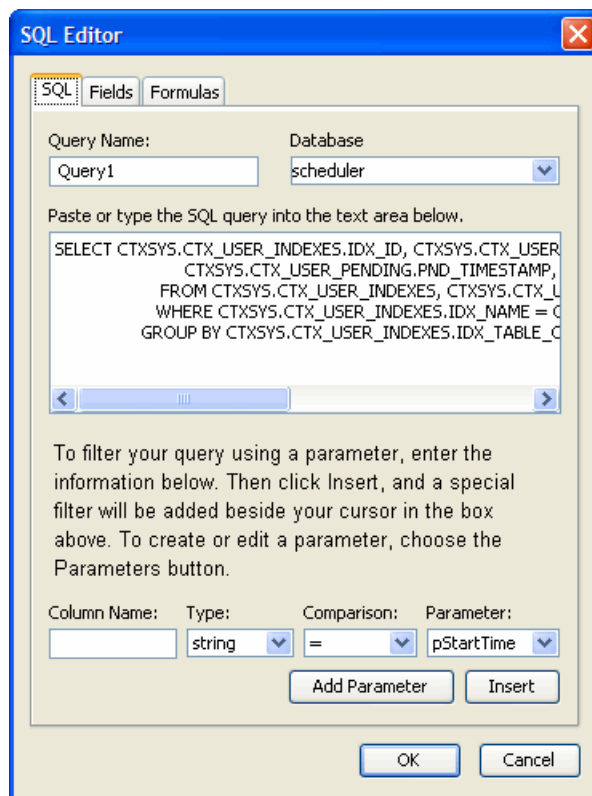
- 5 Select a field from the **IF** drop-down list.
- 6 Select an operator from the drop-down list.
- 7 Type a value in the field to the right of the operator.

- 8 Select a color from the **Foreground** drop-down list in the **THEN** section.
- 9 Click **OK** to close the **Define Conditional Style** dialog box.
- 10 Click **OK** to close the **Text Properties** dialog box.
- 11 Preview the report and save the report.

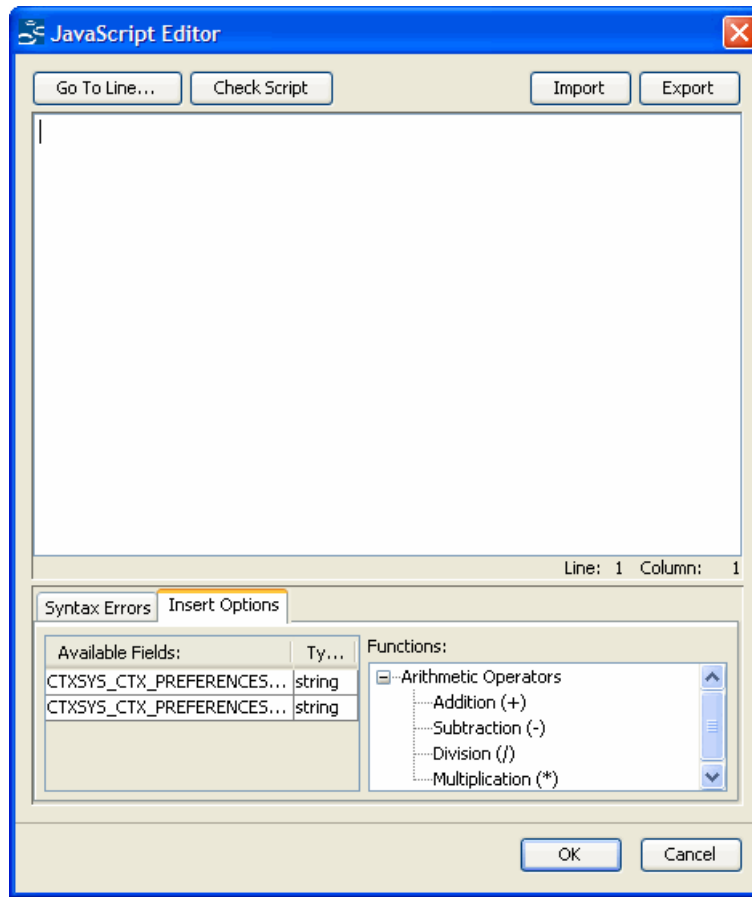
Adding a Formula to a Query

You can add a formula to your query that computes a value based on other data fields. This computed field can then be used like any other field in the query in tables, charts and crosstabs. This section describes how to create a simple formula.

- 1 Click **File** → **Open** and open an RDL file.
- 2 In the Tree View, under **Data Sources**, right-click the query and select **Edit SQL Query**. The **SQL Editor** opens.



- 3 Click the **Formulas** tab and click **Add**. The **JavaScript Editor** opens with a special **Insert Options** tab at the bottom.

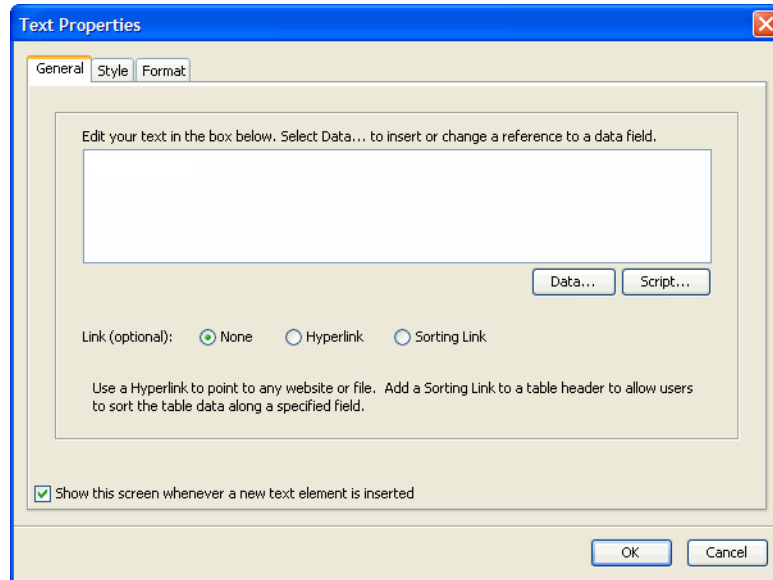


- 4 Double-click a field in the **Available Fields** list. The field information is added to the text box.
- 5 Double-click a function in the **Functions** list. The function is added to the text box.
- 6 Click **OK**.
- 7 Double-click **formula1** in the **Label** column of the SQL Editor and rename the label.
- 8 Select a type from the **Type** drop-down list.
- 9 Click **OK**.
- 10 Click the plus sign beside the query under **Data Sources** in the Tree View. The script is shown at the bottom of the list.
- 11 Save the file.
- 12 To view the output of the formula, create a table or crosstab using this query and include the field. Preview the report.

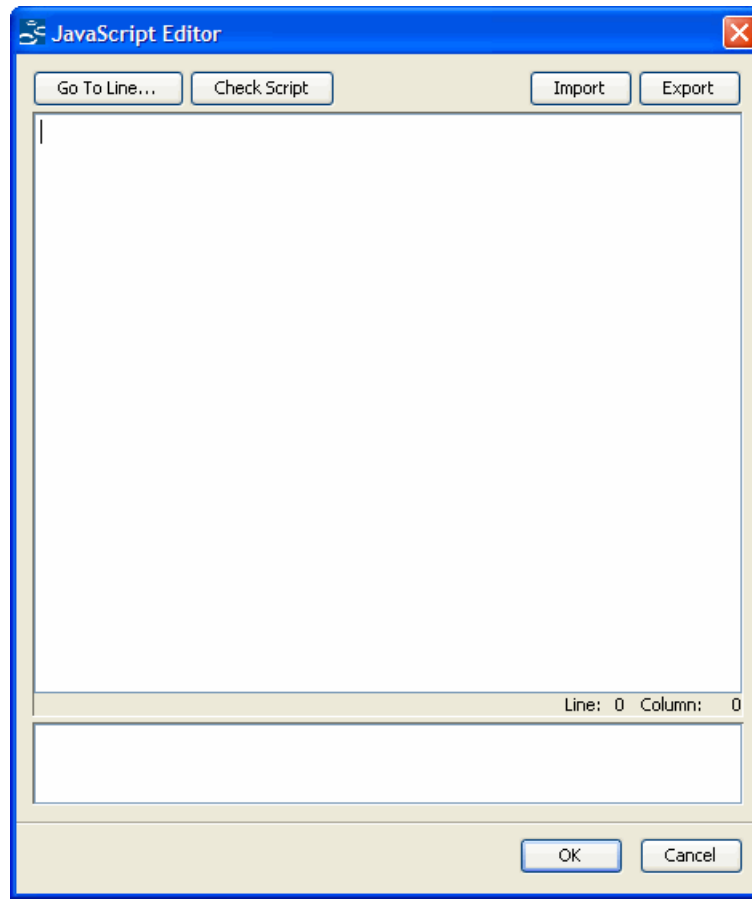
Using JavaScript

You can attach JavaScript to a text element to control the values it displays. This section gives an example of using JavaScript to display the current date in a text element.

- 1 Click **Insert** → **Text Element**. A new text element opens.
- 2 Right-click the text element and select **Edit Text Element**. The **Text Properties** dialog opens.



- 3 Click **Script**. The **JavaScript Editor** opens.



- 4 Insert the following code in the text box:

```
function todayStr() { var today=new Date(); return  
today.getMonth()+1+"/"+today.getDate()+"/"+(today.getYear() + 1900) }  
todayStr();
```
- 5 Click **OK**. A gray circle representing the script is shown in the **Text Properties** dialog.
- 6 Click **OK**. The text element will show the current date when run.

Index

B

- border
 - around a crosstab, 72
 - around a table, 53
 - around a text element, 53
- bucketing, changing in a crosstab, 60

C

- charts, creating, 63
- check box control, 82
- conditional formatting, setting, 99
- control
 - check box, 82
 - download, 78, 82
 - export, 78
 - free-text, 83
 - function, 77
 - image button, 78
 - print button, 78
 - profile manager, 78
 - push button, 78
 - Submit button, 84
- crosstab, creating, 55

D

- data, grouping, 23
- date mask
 - changing, 31
 - defined, 31
- Design Pane
 - defined, 17
 - elements, 18
 - girders, 18
 - objects in, 17
 - rulers, 18
 - sidebar, 19
- Design tab, 16
- download control, 78, 82

E

- Error Pane, defined, 20

- export control, 78

F

- footers, adding, 97
- formulas, adding to queries, 100
- free-text control, 83

G

- girder, defined, 18
- grouping data, 23
- group table
 - converting to from a simple table, 35
 - creating, 37

H

- headers, adding, 97
- hyperlinks in the Report Designer, 89

I

- icons, toolbar, 19
- image button control, 78

J

- JavaScript, using to Report Designer, 102

L

- label
 - changing the database, 24
 - for control, 87
- Library, uploading to from the Report Designer, 35
- linking tables, 22

M

- mandatory parameters, 84
- mask
 - date, 31
 - money, 32
- money mask, 32

multi-component report, creating, 69

O

object

- opening, 18
- selecting, 18

opening objects, 18

P

parameter

- fixed-list, 77
- mandatory, 84
- query-based, 77, 85
- types, 77

Preview tab, 16

print button control, 78

profile manager control, 78

Properties Area, defined, 17

push button control, 78

Q

query

- adding formulas, 100
- creating, 21, 63
- modifying, 26

query-based parameter, 85

Query Wizard

- defined, 21
- invoking, 21, 63

R

RDL tab, 17

report, creating a multi-component, 69

Report Designer

- defined, 9
- Design Pane, 17
- Design Pane elements, 18
- Error Pane, 20
- grouping data, 23
- JavaScript, using, 102
- opening, 13
- Properties Area, 17
- Status bar, 19
- tabs, 16
- toolbar icons, 19
- Tree View, 17
- user interface elements, 15

report link, defined, 89

ruler, defined, 18

S

selecting objects, 18

sidebar, defined, 19

simple table, creating, 29

Status bar, defined, 19

Submit button control, 84

T

tab

- Design, 16
- Preview, 16
- RDL, 17

table

- creating a group, 37
- creating a simple, 29
- linking, 22

Tree View, defined, 17

U

uploading from Report Designer, 35

user interface

- Report Designer, 15
- sections, 15