Rolling Quarter Income Statement

Rolling Quarter Income Statement

The Rolling Quarter Income Statement is a summary of the revenues and expenses of a business over a specific period of time.

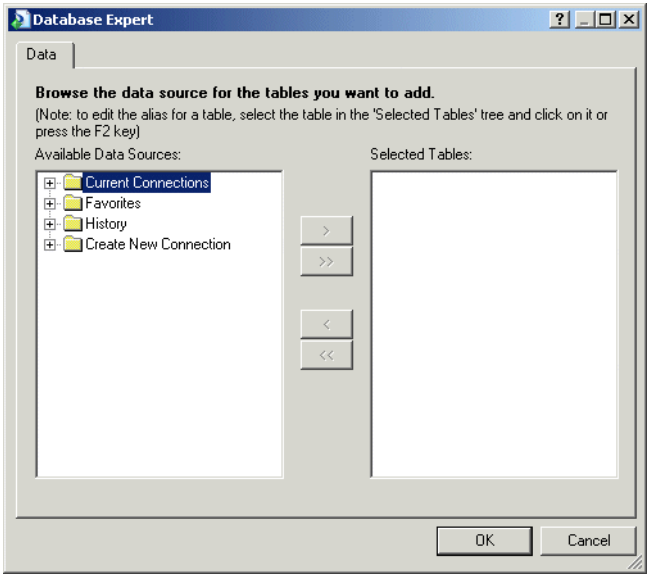
Introduction

The following tutorial assumes that you have completed the “Quick start for new users” tutorial in the *Crystal Reports XI User’s Guide*, which is located in the `Docs` folder of your product distribution.

Creating the report

On the Start Page in Crystal Reports, click Blank Report.

The Database Expert dialog box appears.



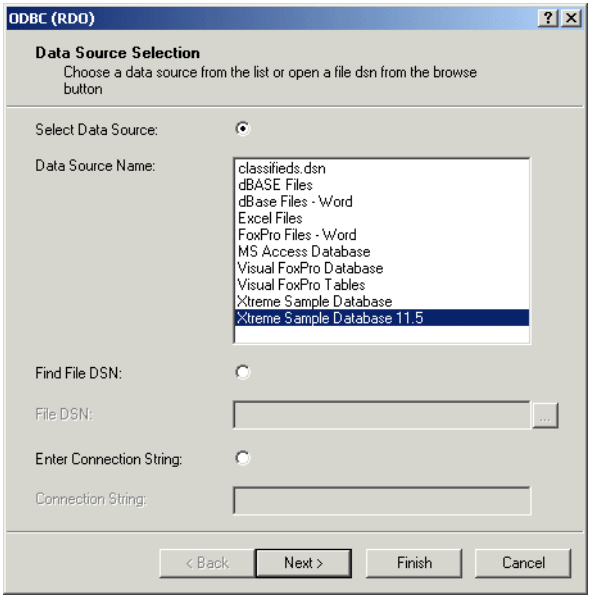
Selecting a database to use

When you create a report, the first thing that you must do is to select a database for the report to use.

▶ To select a database

1. In the Database Expert dialog box, expand the **Create New Connection** folder.
2. Double-click **ODBC (RDO)**.

   The ODBC (RDO) dialog box appears and displays a list of data sources.



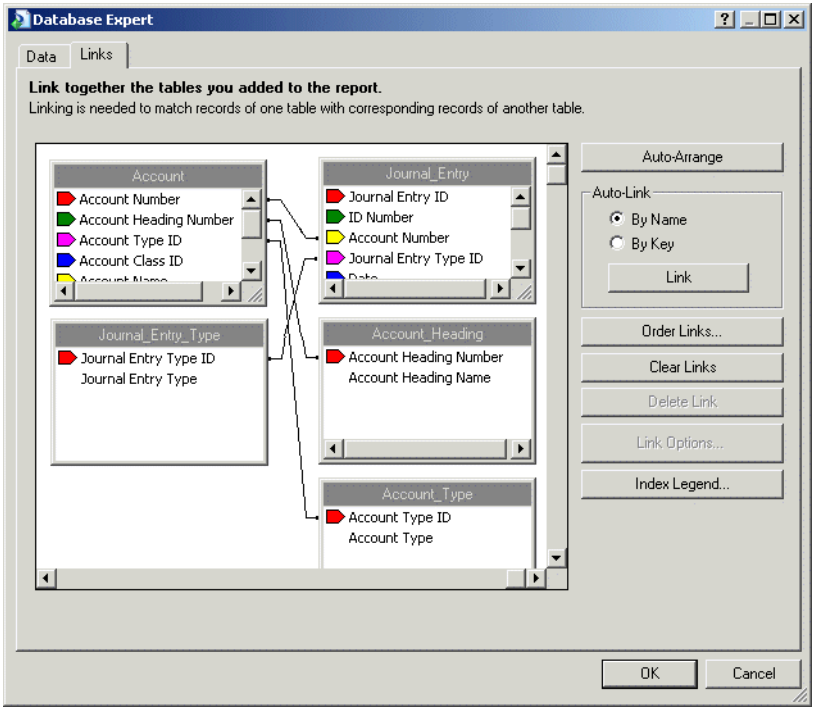
3. From the list, select **Xtreme Sample Database 11.5**, and click **Finish**.

   The Database Expert displays a list of available tables from the Xtreme Sample Database.
4. Select the **Account**, **Account Type**, **Account Heading**, **Journal Entry**, and **Journal Entry Type** tables, and click **>** to add them to the Selected Tables list.

   Tip: You can use CTRL+click to select multiple tables simultaneously.

5. Click **OK**.

   The Links tab is displayed.



6. Verify that the links between the tables are consistent with what is displayed in the screenshot above. If necessary, create the appropriate links by dragging fields from one table to corresponding fields in another table.

   Note: Ensure that the following links exist:

   - `Account.Account Type ID` to `Account Type.Account Type ID`
   - `Account.Account Number` to `Journal Entry.Account Number`
   - `Account.Account Heading Number` to `Account Heading.Account Heading Number`
   - `Journal Entry.Journal Entry Type ID` to `Journal Entry Type.Journal Entry Type ID`

7. Click **OK**.

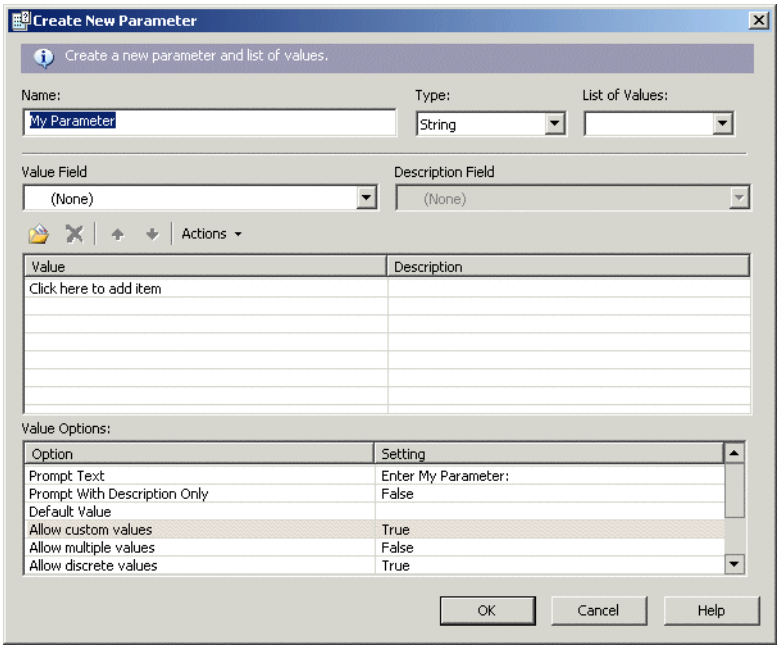
Setting up the report date

To set up the report date, you need to create a parameter.

▶ **To set up the report date**

1. Click **Field Explorer**.
2. In the Field Explorer, right-click **Parameter Fields**, and click **New**.

   The Create New Parameter dialog box appears.



3. In the **Name** field, type `End Date`.
4. From the Type list, select **Date Time**, and click **OK**.

Setting up selection criteria

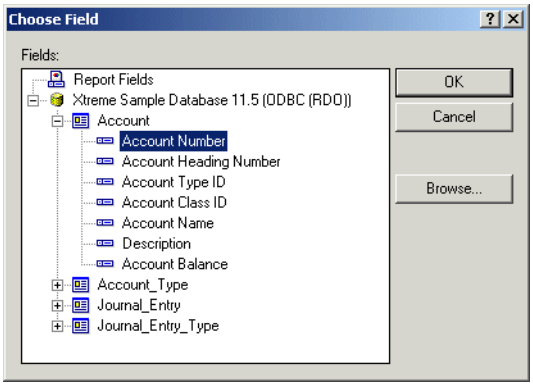
A selection criteria restricts the range of journal entries that are included in the report. For this report, you need to restrict the journal entries to those that fall between January 1st of the End Date year (for YTD calculations) and the End Date parameter. For example, if the End Date parameter has a value of November 14, 2005, then the journal entries are restricted to those between January 1, 2005 and November 14, 2005.

In addition to restricting journal entries based on dates, you need to restrict journal entries based on type. On January 1st of each year, the process of closing accounts is performed. These closing entries include the closure of all revenue and expense accounts and adjustments to Retained Earnings to reflect a net gain or net loss. Therefore, closing entries must not be included in the calculations; such entries must be restricted. You also need to restrict journal entries to display only Revenue and Expense accounts.

▶ To create selection criteria

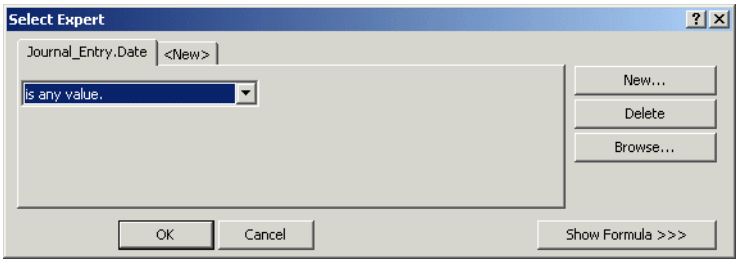
1. Click **Select Expert**.

   The Choose Field dialog box appears.



2. Expand the **Journal_Entry** table, and select **Date**.
3. Click **OK**.

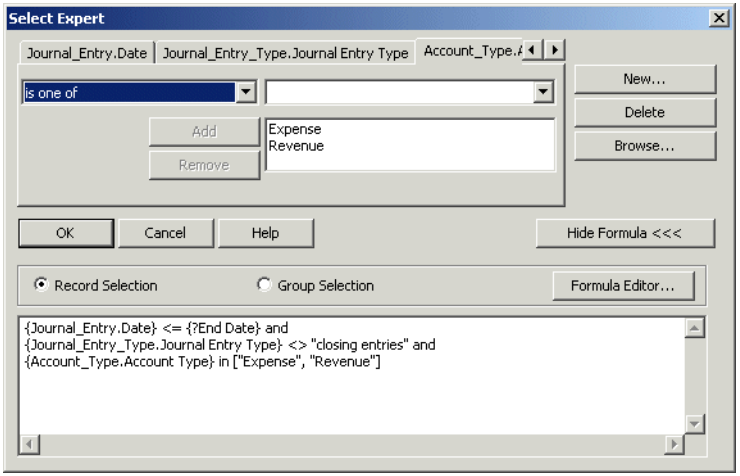
   The Select Expert dialog box appears.



4. Ensure that the Journal_Entry.Date tab is selected, and from the list, choose **is less than or equal to**.
5. From the list that appears, select **{?End Date}**.

6. Now that the journal entry dates are restricted, you need to add criteria to restrict the closing entries. In the Select Expert dialog box, click the <New> tab.
7. In the Choose Field dialog box, expand the **Journal_Entry_Type** table, and select **Journal Entry Type**.
8. Click **OK**.
9. Ensure that the Journal_Entry_Type.Journal Entry Type tab is selected, and from the list, choose **is not equal to**.
10. From the list that appears, select **closing entries**.
11. Click the <New> tab.
12. In the Choose Field dialog box, expand the **Account_Type** table, and select **Account Type**.
13. Click **OK**.
14. Ensure that the Account_Type.Account Entry Type tab is selected, and, from the list, choose **is one of**.
15. From the list that appears, select **Revenue** and **Expense**.
16. Click **Show Formula >>>**.

    The dialog box displays your selection criteria.



17. Click **OK**.

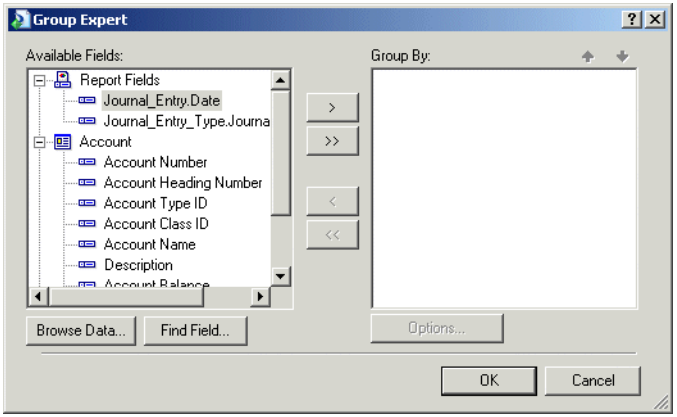
Setting up groupings

For this report, you must group records based on Account Type and Account Name.

▶ To create report groupings

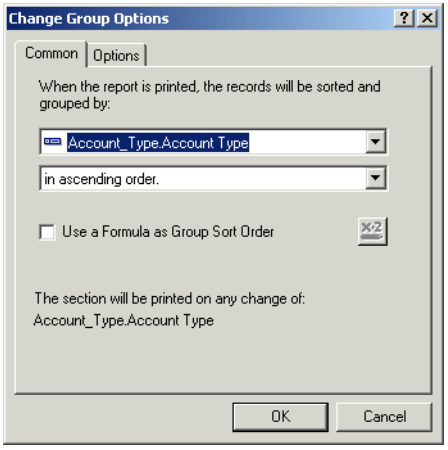
1. Click **Group Expert**.

   The Group Expert dialog box appears.



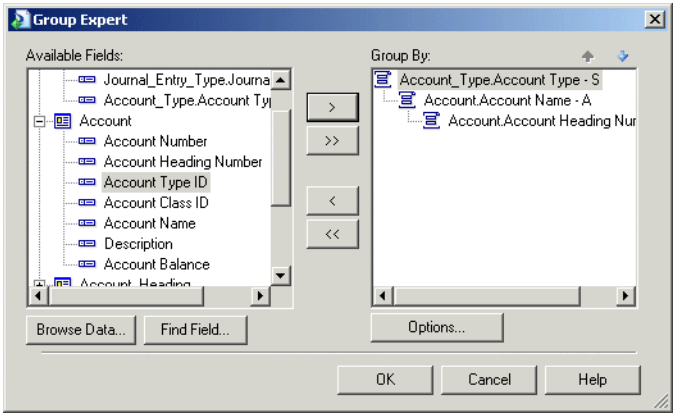
2. In the Available Fields area, expand the **Account_Type** table, select the **Account Type** field, and click **>**.
3. Click **Options...**.

   The Change Group Options dialog box appears.



4. From the second list, select **in specified order**.
5. From the Named Group: list, select the following values in order:
   - Revenue
   - Expense
6. Click **OK**.
7. Expand the **Account** table, select the **Account Name** field, and click **>** to create a second group.
8. Expand the **Account** table, select the **Account Heading Name** field, and click **>** to create a second group.

   The dialog box displays your groupings.



9. Click **OK**.

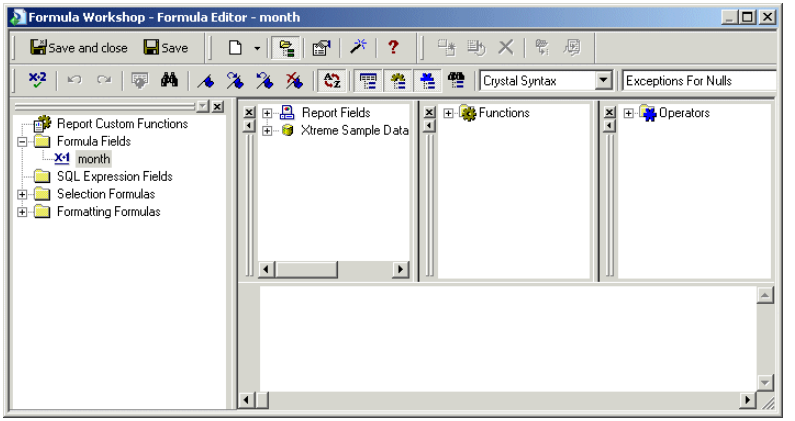
Creating formula fields

The Rolling Quarter Income Statement report uses several formula fields. You must create the necessary fields and add them to the report.

▶ **To create formula fields**

1. Click **Field Explorer**.
2. In the Field Explorer, right-click **Formula Fields**, and click **New**.
3. In the Formula Name dialog box, type `2_month_previous`, and click **OK**.

The Formula Workshop appears.



4. Type the following formula:

```
monthname(month(DateAdd ('m', -2 , {?End Date})))
```

This formula displays the textual representation of the month, two months prior to the End Date.

5. Click **Check** to verify that the syntax of the formula is correct.
6. Click **Save and close**.
7. Repeat steps 2 through 6 to create the following formula fields:
   - **2_month_previous_balance**: This formula field returns the amount of the journal entries for the month, two months prior to the End Date. Otherwise, '0' is returned. Because all of the values in the journal entries are positive, you need to reverse the sign for all of the credit amounts to distinguish between the debits and the credits.

```
if {Journal_Entry.Date} <
   dateserial(year(dateadd('m',-1,{?End Date})),
month(dateadd('m',-1,{?End Date})),1) and
{Journal_Entry.Date} >= DateSerial(year(dateadd('m',-
   2,{?End Date})),
month(dateadd('m',-2,{?End Date})), 1) then
(
if {Journal_Entry.Debit Or Credit} = 'Credit' then
(
{Journal_Entry.Amount} * -1;
)
else
(
{Journal_Entry.Amount};
)
)
```

- **month**: This formula field displays the textual representation of the End Date month.

```
MonthName(month({?End Date}))
```

- **month_balance**: This formula field returns the amount of the journal entries for the reporting month. Otherwise, '0' is returned. If the date falls in the reporting month, the same calculations for the debits and credits are used.

```
if {Journal_Entry.Date} >= DateSerial(year({?End
   Date}), month({?End Date}), 1) then
(
if {Journal_Entry.Debit Or Credit} = 'Credit' then
(
{Journal_Entry.Amount} * -1;
)
else
(
{Journal_Entry.Amount};
)
)
```

- **previous_month**: This formula field displays the textual representation of the previous month to the End Date.

```
monthname(month(DateAdd ('m', -1 , {?End Date})))
```

- **previous_month_balance**: This formula field returns the amount of the journal entries of the previous month relative to the End Date. Otherwise, '0' is returned. If the date falls in the reporting month, the same calculations for the debits and credits are used.

```
if {Journal_Entry.Date} < DateSerial(year({?End
   Date}),month({?End Date}),1)
and {Journal_Entry.Date} >=
   DateSerial(year(Dateadd('m',-1,{?End Date})),
month(Dateadd('m',-1,{?End Date})), 1) then
(
if {Journal_Entry.Debit Or Credit} = 'Credit' then
(
{Journal_Entry.Amount} * -1;
)
else
(
{Journal_Entry.Amount};
)
)
```

- **type_total_heading**: This formula field sets the heading to either Net Sales or Total Operating Expenses.

```
if {Account_Type.Account Type} = 'Revenue' then
"Net Sales"
else
"Total Operating Expenses"
```

- **YTD_balance**: This formula field returns the amount of the journal entries. The same calculations for the debits and credits are used.

```
if {Journal_Entry.Date} >= dateserial(year({?End
   Date}),1,1) then
(
if {Journal_Entry.Debit Or Credit} = 'Credit' then
(
{Journal_Entry.Amount} * -1;
)
else
(
{Journal_Entry.Amount};
)
)
```

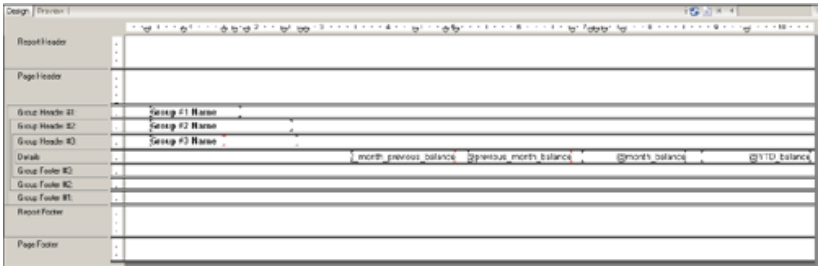
Adding fields to the report

After you create the formula fields, you can begin to add fields to the report.

▶ **To add fields to the report**

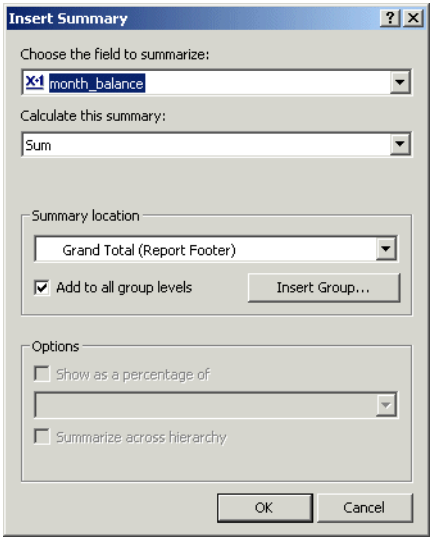
1. From the Field Explorer, drag the `YTD_balance` field to the right end of the **Details** section.
2. Drag the `month_balance` field to the left side of the `YTD_balance` field in the **Details** section.
3. Drag the `previous_month` field, and align it to the left side of the `month_balance` field in the **Details** section.
4. Drag the `2_month_previous` field, and align it to the left side of the `previous_month` field in the **Details** section.
5. Right-click each of the headings that were automatically created in the **Page Header** section, and click **Delete**.

The report should now look similar to the following screenshot:



6. Move the `Group #3 Name` field from the **Group Header** section to the **Group Footer #3** section.
7. Right-click the `month_balance` field, and choose **Insert** > **Summary**.

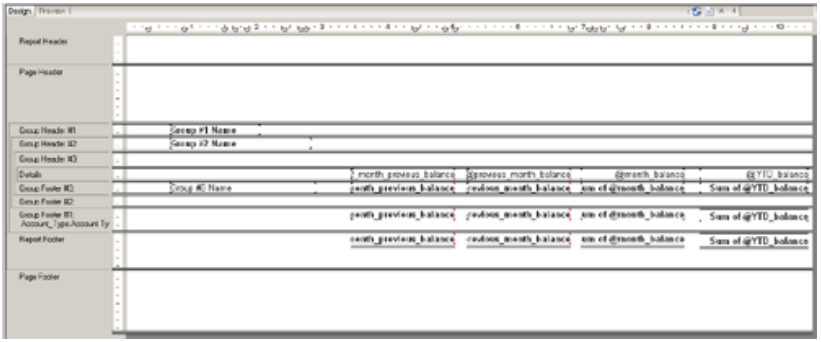
   The Insert Summary dialog box appears.



8. For the **Summary Location**, select Group #1, and click **OK**.
9. Apply a single top border to the Group #1 summary field.
10. Right-click the `month_balance` field, and choose **Insert** > **Summary**.
11. For the **Summary Location**, select Group #3, and click **OK**.
12. Right-click the `month_balance` field, and choose **Insert** > **Summary**.
13. For the **Summary Location**, select **Grand Total (Report Footer)**, and click **OK**.

14. Apply a single top border and double bottom border to the Grand Total summary.
15. Repeat steps 7 through 14 for the `previous_month_balance` and `2_previous_month_balance` fields.

    The report should now look similar to the following screenshot:

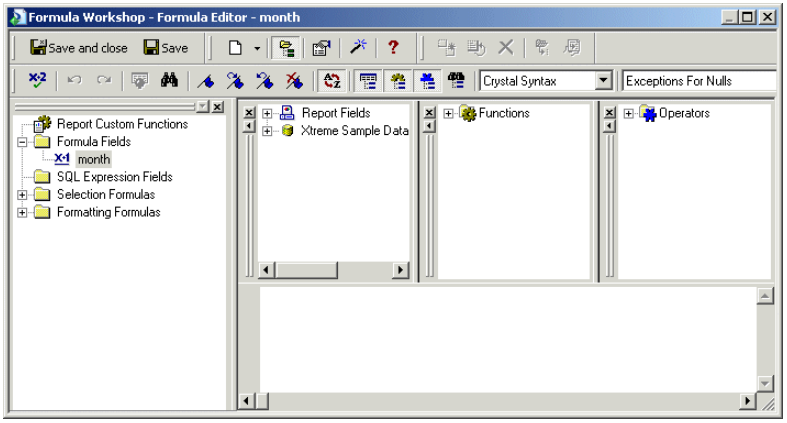


After you add the appropriate fields and create the necessary summary fields, you can apply conditional formatting to display credit account balances as positive values rather than negative.

▶ To apply conditional formatting

1. In the **Group Footer #3** section, right-click the sum of the `month_balance` field, and select **Format Field**.
2. On the Number tab, click **Customize ...**.
3. Select the **Reverse Sign for Display** option, and click the **Formula** button beside the option.

   The Formula Workshop appears.



4. Type the following formula, and then click **Save and close**:

   ```
   {Account_Type.Account Type} = 'Revenue'
   ```

5. In the **Group Footer #1** section, right-click the sum of the `month_balance` field, and select **Format Field**.
6. On the Number tab, click **Customize...**.
7. Select the **Reverse Sign for Display** option, and click the **Formula** button beside the option.
8. In the Formula Workshop, type the following formula, and click **Save and close**:

   ```
   {Account_Type.Account Type} = 'Revenue'
   ```

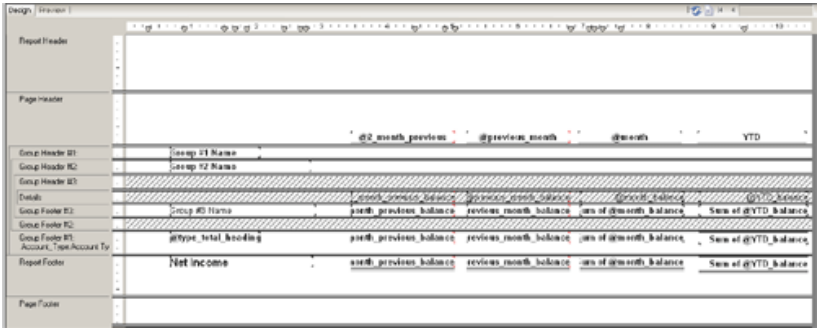
9. In the **Report Footer** section, right-click the sum of the `month_balance` field, and select **Format Field**.
10. On the Number tab, click **Customize...**.
11. Select the **Reverse Sign for Display** option, and click **OK**.
12. Repeat steps 1 through 11 to apply the same formatting to all of the other columns.
13. Right-click **Details**, and click **Suppress (No Drill-Down)**.
14. Right-click **Group Header #3**, and click **Suppress (No Drill-Down)**.
15. Right-click **Group Footer #2**, and click **Suppress (No Drill-Down)**.
16. Drag the `type_total_heading` field to the **Group Footer #1** section, and center it horizontally with the `Group #3 Name` field.
17. In the **Report Footer** section, create a text box and center it horizontally with the `type_total_heading` field. In the text box, type `Net Income`.

After you apply conditional formatting to the data in the report, you can create create column headings.

▶ **To create column headings**

1. From the **Field Explorer**, drag the `@month` formula field to the **Page Header** section, and center it with the `month_balance` fields.
2. Drag the `@previous_month` formula field to the **Page Header** section, and center it with the `previous_month_balance` field.
3. Drag the `@2_previous_month` formula field to the **Page Header** section, and center it with the `2_previous_month_balance` field.
4. For the final column heading, add a text box to the **Page Header** section, and place it above the YTD balances. In the text box, type `YTD`.
5. Format the column headings to show bold text, aligned to the center, with a single line bottom border.

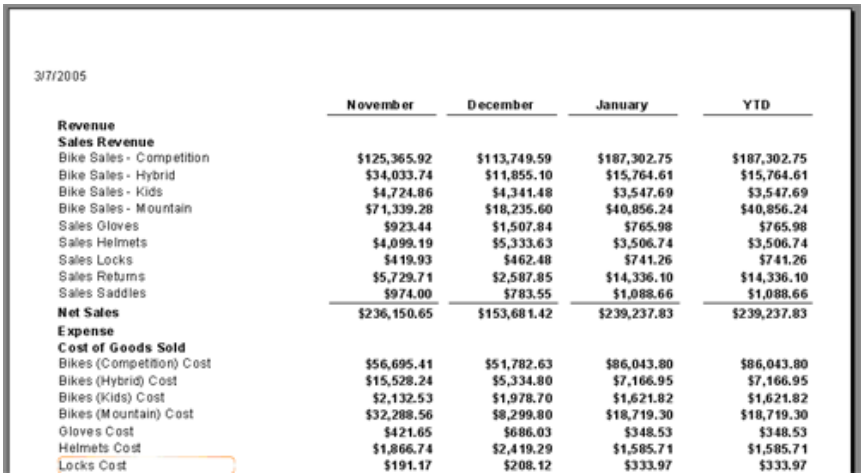
The report should now look similar to the following screenshot:



Reviewing your work

To see how the report looks with the fields in place, click **Print Preview** to activate the Preview tab.

The screen should look similar to this:



3/7/2005

	November	December	January	YTD
Revenue				
Sales Revenue				
Bike Sales - Competition	$125,365.92	$113,749.59	$187,302.75	$187,302.75
Bike Sales - Hybrid	$34,033.74	$11,855.10	$15,764.61	$15,764.61
Bike Sales - Kids	$4,724.86	$4,341.48	$3,547.69	$3,547.69
Bike Sales - Mountain	$71,339.28	$18,235.60	$40,856.24	$40,856.24
Sales Gloves	$923.44	$1,507.84	$765.98	$765.98
Sales Helmets	$4,099.19	$5,333.63	$3,506.74	$3,506.74
Sales Locks	$419.93	$462.48	$741.26	$741.26
Sales Returns	$5,729.71	$2,587.85	$14,336.10	$14,336.10
Sales Saddles	$974.00	$783.55	$1,088.66	$1,088.66
Net Sales	$236,150.65	$153,681.42	$239,237.83	$239,237.83
Expense				
Cost of Goods Sold				
Bikes (Competition) Cost	$56,695.41	$51,782.63	$86,043.80	$86,043.80
Bikes (Hybrid) Cost	$15,528.24	$5,334.80	$7,166.95	$7,166.95
Bikes (Kids) Cost	$2,132.53	$1,978.70	$1,621.82	$1,621.82
Bikes (Mountain) Cost	$32,288.56	$8,299.80	$18,719.30	$18,719.30
Gloves Cost	$421.65	$686.03	$348.53	$348.53
Helmets Cost	$1,866.74	$2,419.29	$1,585.71	$1,585.71
Locks Cost	$191.17	$208.12	$333.97	$333.97

After you finish reviewing the report, click the Design tab to correct any mistakes.

Completing the report

Now that the report has been built to display the correct data, you can add the report title, the report date, and the company logo.

▶ To add a report title and report date

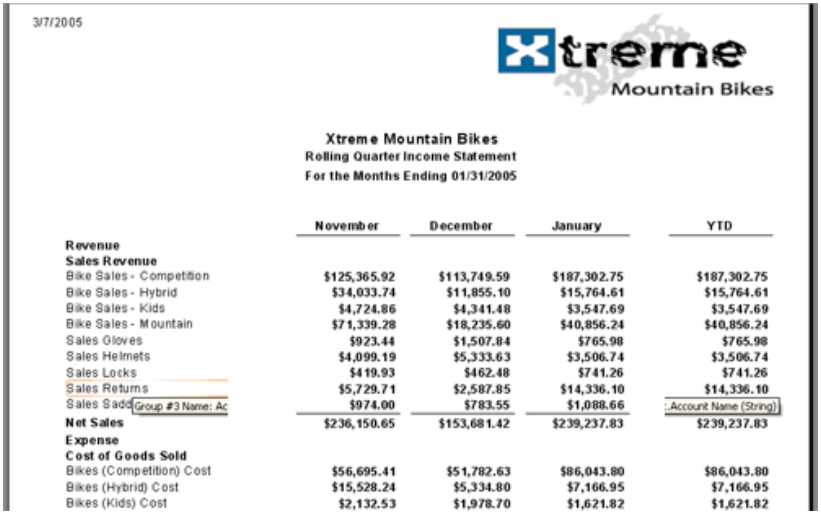
1. Expand the **Page Header** section to be approximately 2 inches in height.
2. Create a new text field at the center of the **Page Header** section, and type `Xtreme Mountain Bikes`.
3. Create another text field directly underneath the Xtreme Mountain Bikes text field, and type `Rolling Quarter Income Statement`.
4. Create another text field directly underneath the Rolling Quarter Income Statement text field, and type `For the months ending`.
5. Drag the **End Date** parameter field to anywhere in the **Page Header** section.
6. Right-click the **End Date** field, and click **Format Field**.

   The Format Editor appears.
7. Select **03/01/1999** as the Date and Time format, and click **OK**.
8. Drag the End Date field into the text field that contains **For the months ending**.

▶ To add a company logo to the report

1. Click **Insert Picture**.
2. Choose a bitmap (.bmp) logo file, and click **Open**.
3. Position the object frame in the upper right-hand corner of the **Report Header (RH)** section of the report.
4. Click the Preview tab.

The report should now look similar to the following screenshot:



3/7/2005

Xtreme Mountain Bikes

Xtreme Mountain Bikes
Rolling Quarter Income Statement
For the Months Ending 01/31/2005

	November	December	January	YTD
Revenue				
Sales Revenue				
Bike Sales - Competition	$125,365.92	$113,749.59	$187,302.75	$187,302.75
Bike Sales - Hybrid	$34,033.74	$11,855.10	$15,764.61	$15,764.61
Bike Sales - Kids	$4,724.86	$4,341.48	$3,547.69	$3,547.69
Bike Sales - Mountain	$71,339.28	$18,235.60	$40,856.24	$40,856.24
Sales Gloves	$923.44	$1,507.84	$765.98	$765.98
Sales Helmets	$4,099.19	$5,333.63	$3,506.74	$3,506.74
Sales Locks	$419.93	$462.48	$741.26	$741.26
Sales Returns	$5,729.71	$2,587.85	$14,336.10	$14,336.10
Sales Sadd	$974.00	$783.55	$1,088.66	$239,237.83
Net Sales	$236,150.65	$153,681.42	$239,237.83	$239,237.83
Expense				
Cost of Goods Sold				
Bikes (Competition) Cost	$56,695.41	$51,782.63	$86,043.80	$86,043.80
Bikes (Hybrid) Cost	$15,528.24	$5,334.80	$7,166.95	$7,166.95
Bikes (Kids) Cost	$2,132.53	$1,978.70	$1,621.82	$1,621.82

Group #3 Name: Ac

Account Name (String)

Saving the report

▶ **To save the report**

1. Click **Save**.

   Because this is the first time that you are saving the report, the Save As dialog box appears and displays the location where the file will be saved.

2. In the **File name** field, type `Rolling Quarter Income Statement.rpt`, and click **Save**.

   The report is saved to the location that you chose.