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Overview

SmartLists with Export Options Used for ad-hoc queries in Great Plains. Queries can be saved as Smartlist favorites to be used again. The user enters restrictions and changes the columns displayed. This can be used to export query results to Excel and as a shortcut to data in GP. Reports are not formatted unless Export Options is used to run macros to format the Excel file.

SmartList Builder/Excel Reporter Used to create Smartlists other than those out-of-the-box with GP. Smartlists can be built to combine companies, pull third party data, and pull data from other databases. Excel Reporter was added to Smartlist Builder with the version 10 Feature Pack for Dynamics GP. Excel Reporter is used to create refreshable Excel reports similar to Smartlist exports except that the data may be refreshed in Excel.

Excel (MS Office) A powerful reporting tool that integrates with SQL data, FRx, Smartlists, Analysis Cubes, and SQL Reporting Services. Pivot tables allow users to summarize and "slice and dice" a set of data in many ways.

Analysis Cubes Used to allow users who are not familiar with database structures to write reports. The cubes store a fraction of the data in the ERP system to allow users to dig into data. Excel is the primary delivery method, but there are sophisticated OLAP viewers available.

Dynamics GP has 2 cubes available:

- Financial – GL, AR, AP, Bank Rec.
- Distribution – SOP, POP, Inventory

SQL Reporting Services (SQL Server) SRS is used to deliver reports via an intranet/internet to users throughout the organization – regardless of whether or not they are GP users. SRS can combine data from multiple sources and multiple companies. Reports are accessed using Internet Explorer and the security is controlled via the server. Reports are designed in Visual Studio.

- SRS Reports from MS – approx. 90 report templates available with version 10. These can be modified in Visual Studio.
- SRS Report Builder – a "light" version of SRS that uses report models to define the data that is available to users. Users can create simple reports and make them available in the SRS Report Manager.

Microsoft FRx (Report Designer, Report Launcher, Drilldown Viewer, Report Server, WebPort, Report Manager) Used for Financial Statements. FRx pulls data from Microsoft Dynamics GP General Ledger, Excel, FRx Forecaster.

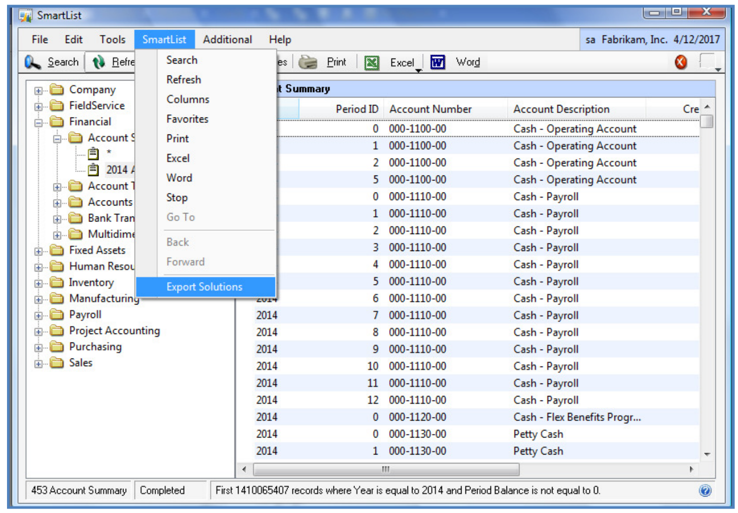
**Report Manager creates Report Books that allow you to combine multiple files in one package.

Smartlists with Export Solutions

Creating export solutions

Use the Export Solutions window to create an export solution. Export solutions allow you to export search results to a template and run Excel or Word macros before or after exporting.

To create export solutions:



1. Open the Export Solutions window. (With SmartList open choose SmartList >> Export Solutions)

2. Enter a name for the export solution.

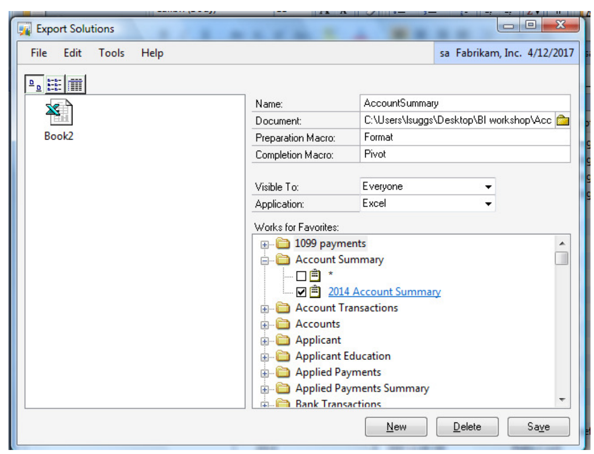
3. In the Document field, enter the path to the file containing the template that you want to use, or choose the file lookup button to locate the file.

4. Enter the preparation macro—that is, the macro that you want to run before exporting to Excel or Word. For example, you could use a preparation macro to clear data out of a pivot table in Excel before exporting.

To run a macro after exporting to Excel or Word, enter the completion macro name.

5. Select the users that this export solution should be visible to.

6. Select the application to export to—Word or Excel.



7. Expand an object in the Works for Favorites list and mark the box next to the favorite that you want to use the export solution for.

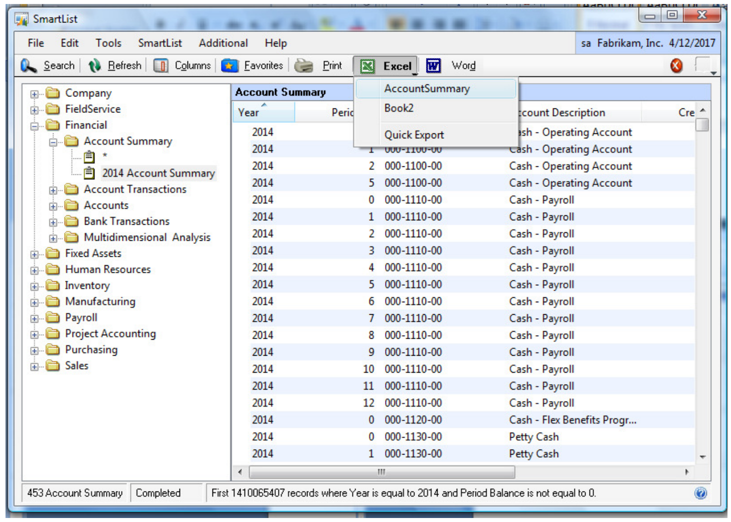
8. Choose Save to save the export solution.

To delete an export solution, select it and choose Delete.

Choose New to clear the fields in the Export Solutions window. Then you can enter data to create a new export solution.

To export search results to Excel or Word:

Be sure that the results to export are displayed in the SmartList window.



Choose the Excel button or the Word button on the toolbar.

If you have created an export solution to format your search results, choose the Excel or Word button to open a list of export solutions. Choose the Quick Export option to generate a spreadsheet or table automatically from your list of export solutions.

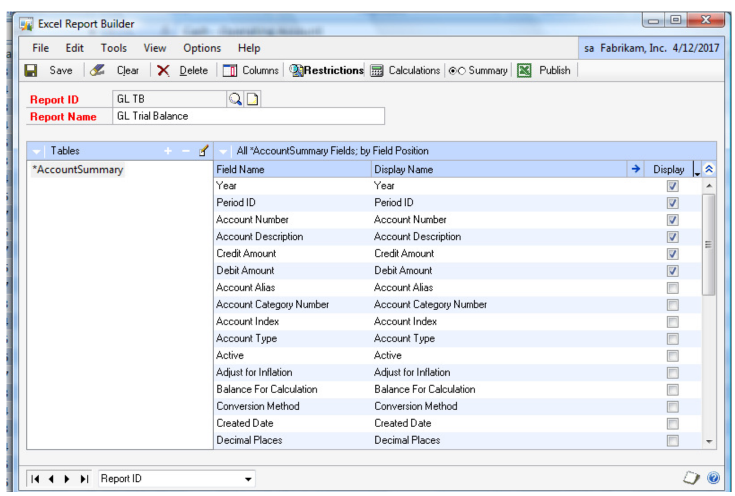
If you have not created an export solution, choose the Excel or Word button to generate a spreadsheet or table automatically. Column names in the spreadsheet or table correspond to column names in SmartList.

**Be sure that the Preparation macro ends in cell A1 on Sheet1 so that the export will work correctly. The preparation macro should include steps to clear old data so that the refreshed sheet contains only the data you expect.

**If the file specified in the Document Field is an existing file in Word or Excel, the export will overwrite the information in the file. If you would like to have a new file created on each export, the file listed in the Document field will need to be set up as a template.

Smartlist Builder/Excel Reporter

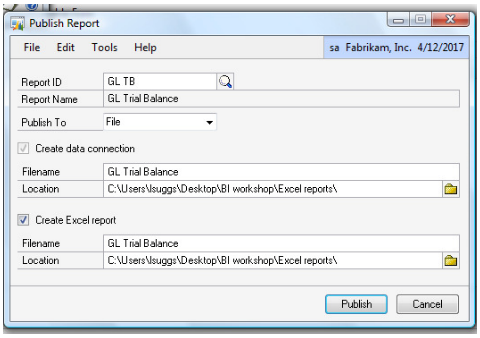
In Dynamics GP, go to Microsoft Dynamics GP > Tools > Smartlist Builder. Choose Smartlist Builder or Excel Report Builder.



In this tool, the user defines which table(s) and fields will be included in the reports.

Add restrictions, define any calculated fields.

Define whether the list is summarized, and if so, what operation is performed on each field.



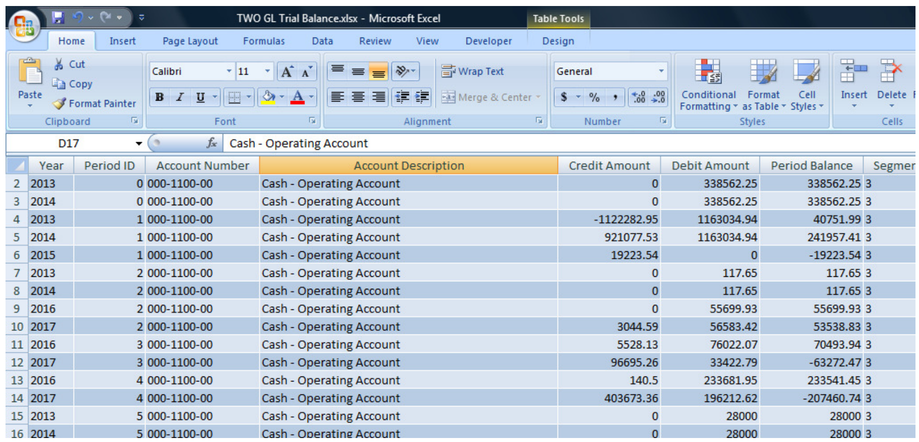
Click on PUBLISH to create the report. Choose to publish to a file or to SharePoint.

The Excel file can now be opened.

Click on Table Tools and refresh.

Security is handled using database roles on the SQL Server. If the user is not assigned a role that can access the data in the report, the report cannot be refreshed by that user.

If the user can access the data, the data sheet is refreshed. Any tables or graphs using that data can then be refreshed without any additional steps.



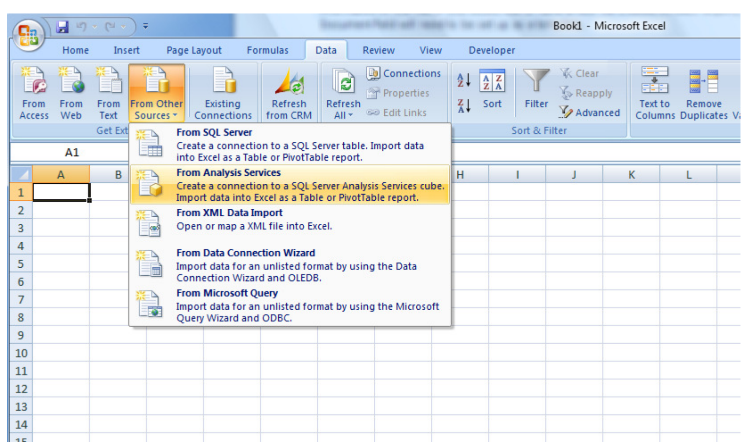
	Year	Period ID	Account Number	Account Description	Credit Amount	Debit Amount	Period Balance	Segmer
2	2013	0	000-1100-00	Cash - Operating Account	0	338562.25	338562.25	3
3	2014	0	000-1100-00	Cash - Operating Account	0	338562.25	338562.25	3
4	2013	1	000-1100-00	Cash - Operating Account	-1122282.95	1163034.94	40751.99	3
5	2014	1	000-1100-00	Cash - Operating Account	921077.53	1163034.94	241957.41	3
6	2015	1	000-1100-00	Cash - Operating Account	19223.54	0	-19223.54	3
7	2013	2	000-1100-00	Cash - Operating Account	0	117.65	117.65	3
8	2014	2	000-1100-00	Cash - Operating Account	0	117.65	117.65	3
9	2016	2	000-1100-00	Cash - Operating Account	0	55699.93	55699.93	3
10	2017	2	000-1100-00	Cash - Operating Account	3044.59	56583.42	53538.83	3
11	2016	3	000-1100-00	Cash - Operating Account	5528.13	76022.07	70493.94	3
12	2017	3	000-1100-00	Cash - Operating Account	96695.26	33422.79	-63272.47	3
13	2016	4	000-1100-00	Cash - Operating Account	140.5	233681.95	233541.45	3
14	2017	4	000-1100-00	Cash - Operating Account	403673.36	196212.62	-207460.74	3
15	2013	5	000-1100-00	Cash - Operating Account	0	28000	28000	3
16	2014	5	000-1100-00	Cash - Operating Account	0	28000	28000	3

Analysis Cubes

The Analysis cubes provide good examples for working with pivot tables. Analysis cubes are pre-programmed OLAP cubes. Cubes organize the data in logical hierarchies. The field names are descriptive. Customer Name is called Customer Name instead of RM00101.CUSTNAME, for example.

Pivot tables are a way to summarize data. A pivot table can pull data from a range or table in Excel, or from external sources. In earlier examples, the pivot table was created from an Excel sheet. For cubes, the data is in the cube and a connection must be created.

Choose the Data menu > From Analysis Services.



Select the cube based on the data needed.

Financials – accounting data (GL and Bank Reconciliation)

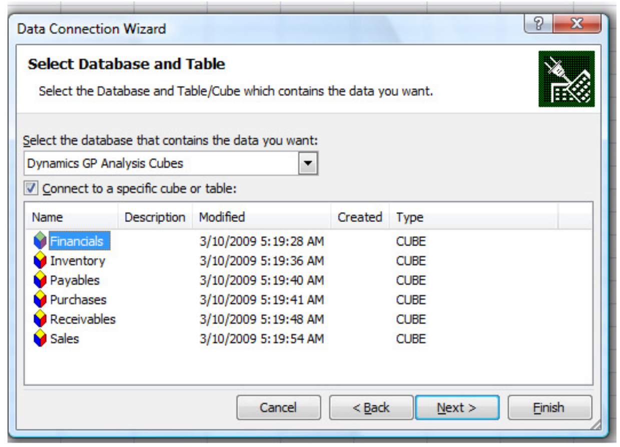
Receivables – AR

Payables – AP

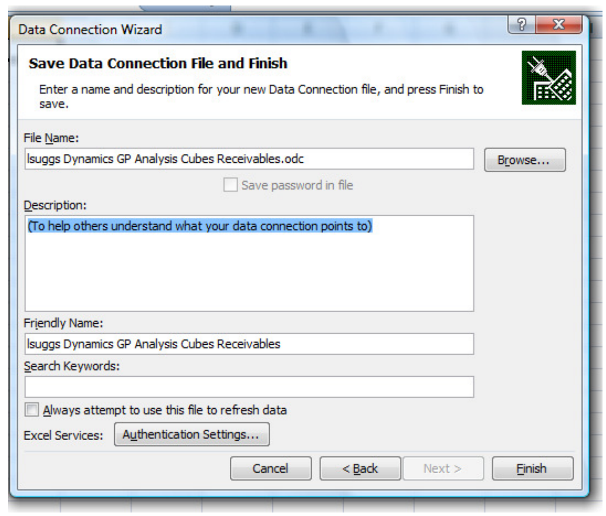
Inventory – Inventory

Sales – Sales Order Processing

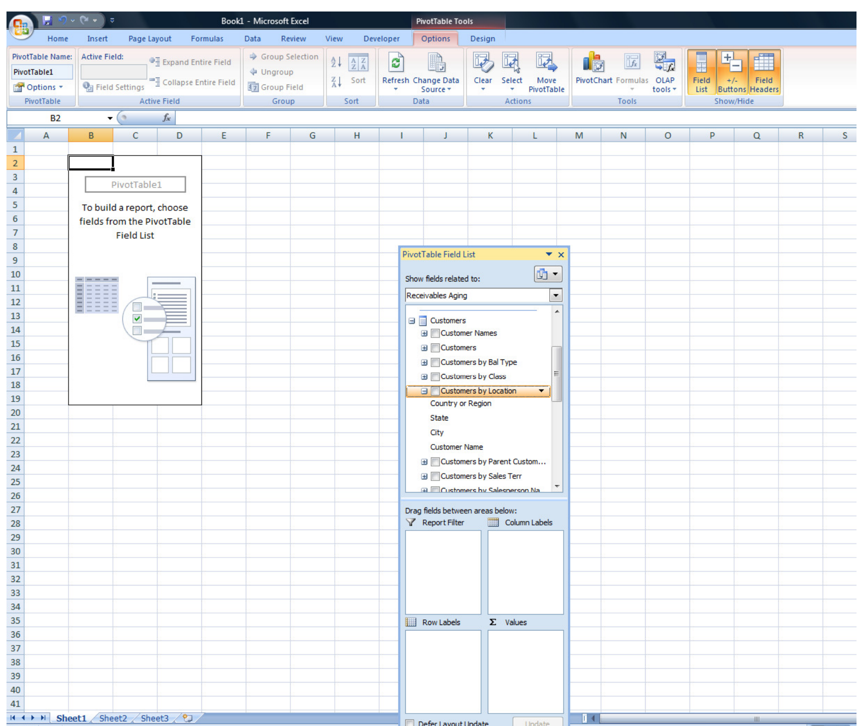
Purchases – PO Processing



Click Finish on the next screen.



A template will open in Excel. In earlier versions of Excel, the template is on the worksheet. The labels are the same as in the Pivot Table box below. Drag and drop fields to place them in the table. If the fields need to be moved, drag them to the new location or out of the table entirely.

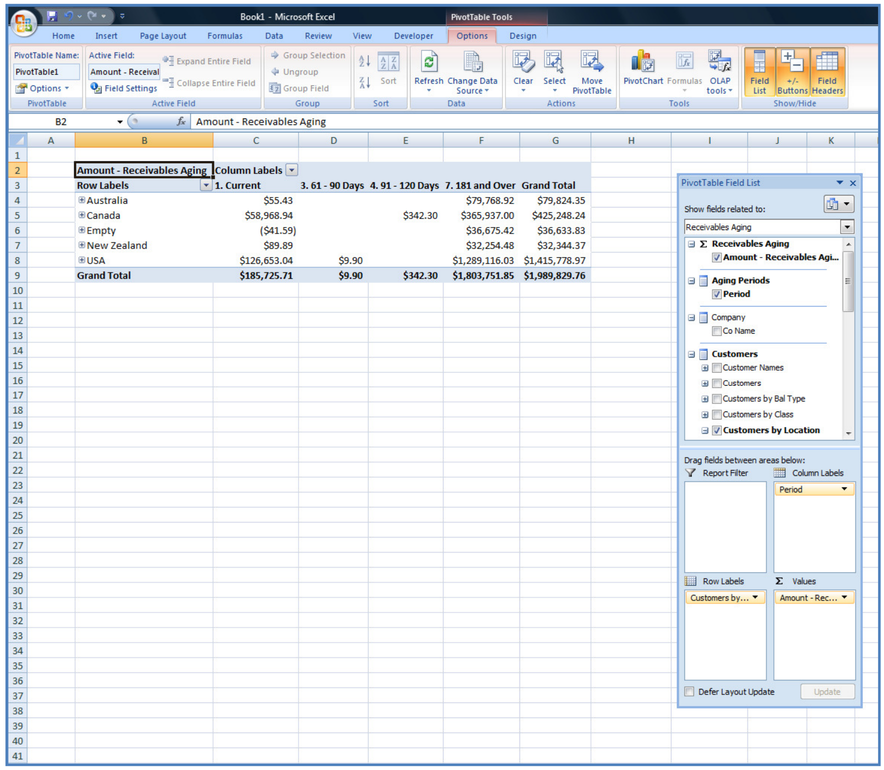


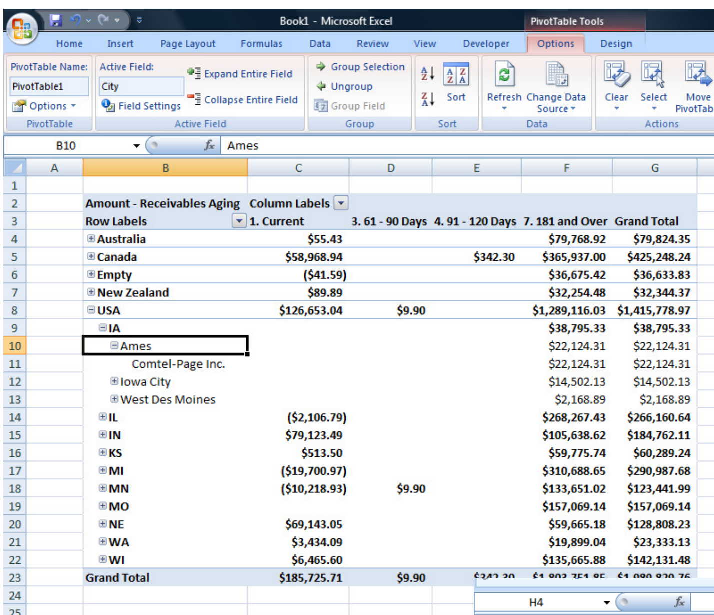
Report Filters – Restrictions. The data in the table will change based on these fields.

Row Labels – These are the rows in the table. Multiple fields result in subtotals.

Column Labels - These are the columns in the table. Multiple fields result in subtotals.

Values (data fields) – These are the summarized fields. To change the summary option, click on the down arrow on the field and choose Field value settings. In earlier versions of Excel, right-click on the field in the pivot table and choose Field value settings. Formats are also set from this menu.

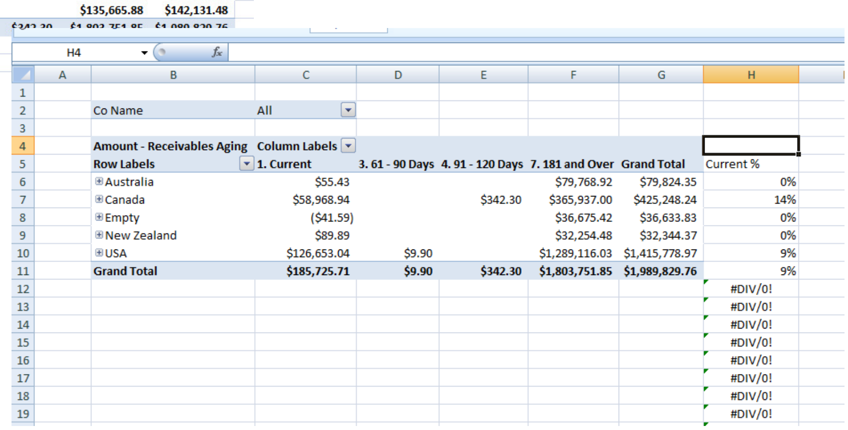




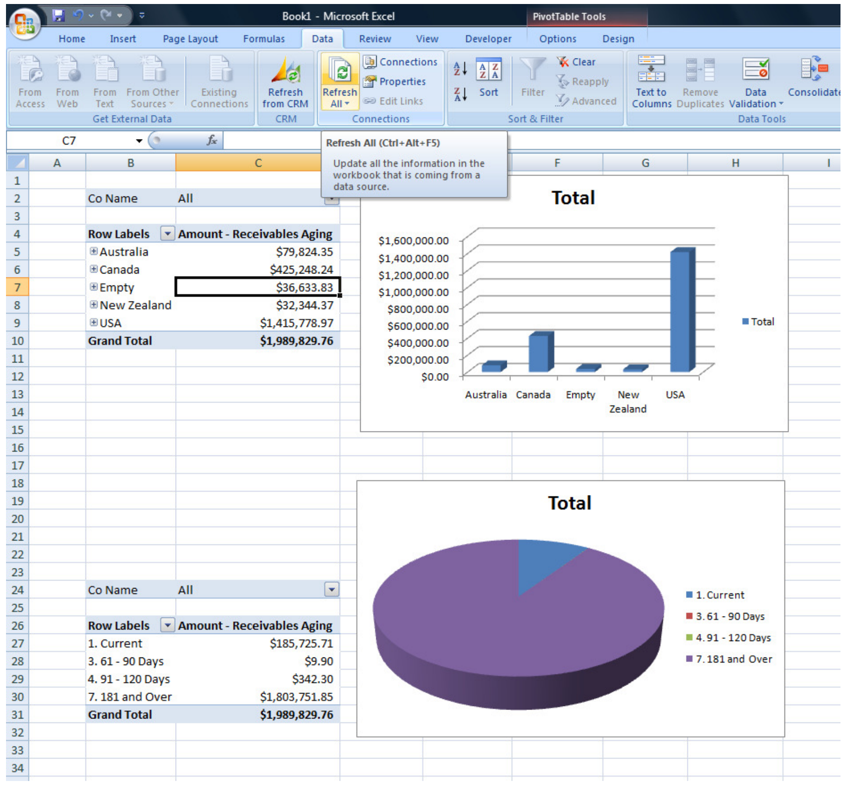
If you choose a hierarchy from the list, you will be able to drill down to a lower level of detail in the cube. The cubes organize the data and the organization is reflected in the pivot table structure.

In earlier versions of Excel, an Analysis add-in is required to use some of the cube functionality. In 2007, it is more seamless. These examples are in pivot tables, but more formatted reports are possible. Create the table, then go to Pivot Table Tools > OLAP Tools > Convert to formulas to create a formatted report.

Use formulas as normal. Type in the cell references – do not select cells from the pivot table.



Make sure to continue the formulas down the column to allow for additional data when the pivot table is refreshed. Use conditional formatting to hide the errors due to empty lines.

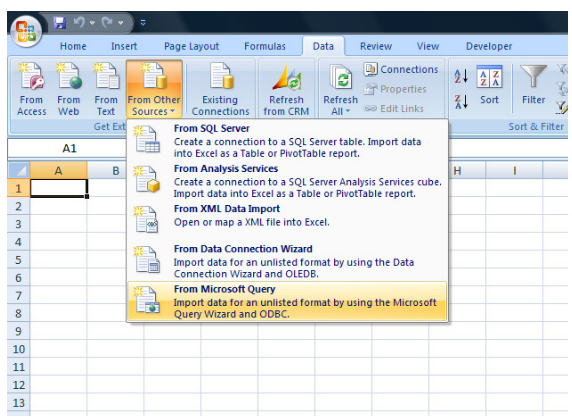


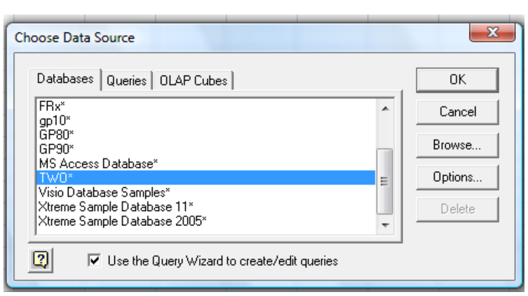
Dashboards are reports that highlight important information graphically. When the Pivot Table tools ribbon is available, choose to insert a chart. Define the type and other options as normal.

You can have multiple reports on one sheet. To refresh all tables and graphs, click on Data > Refresh All.

MS Query

If only one table is needed, use “From SQL Server”. Otherwise, use “From Microsoft Query”. This allows joining multiple tables for a more complex query.



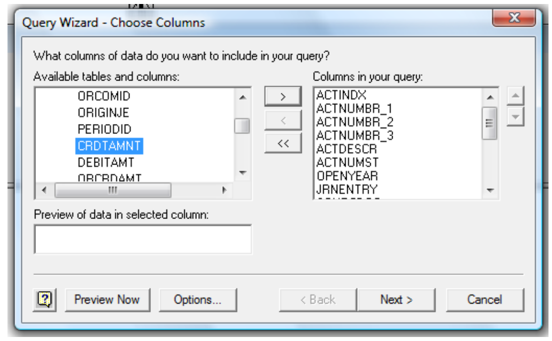


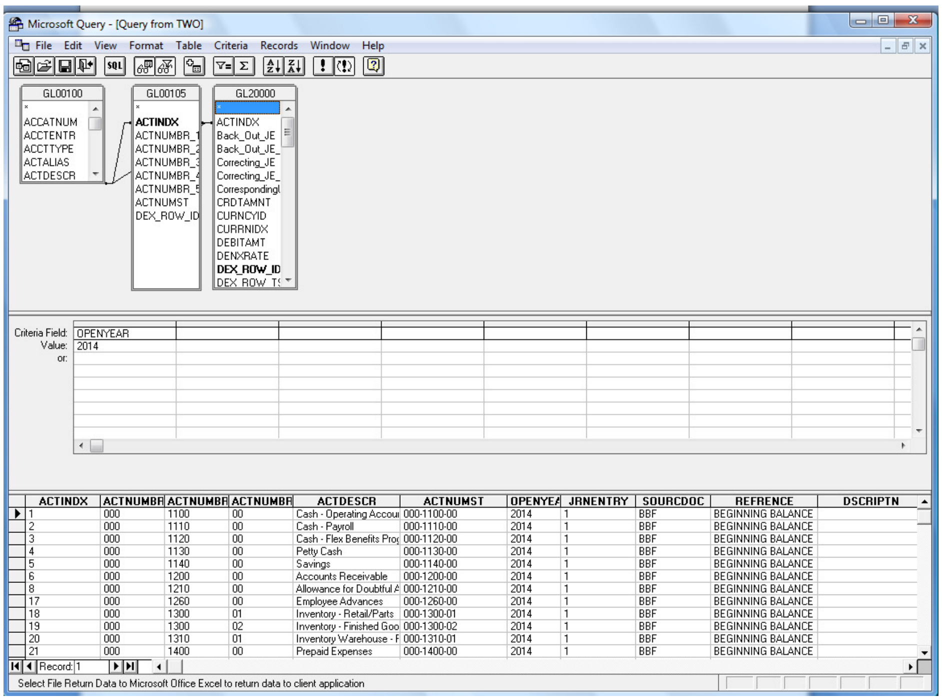
Select the ODBC data source. An ODBC connection is specific to each workstation, so be sure to use the same name on all workstations that will be using the Excel reports.

Select the tables and fields needed.

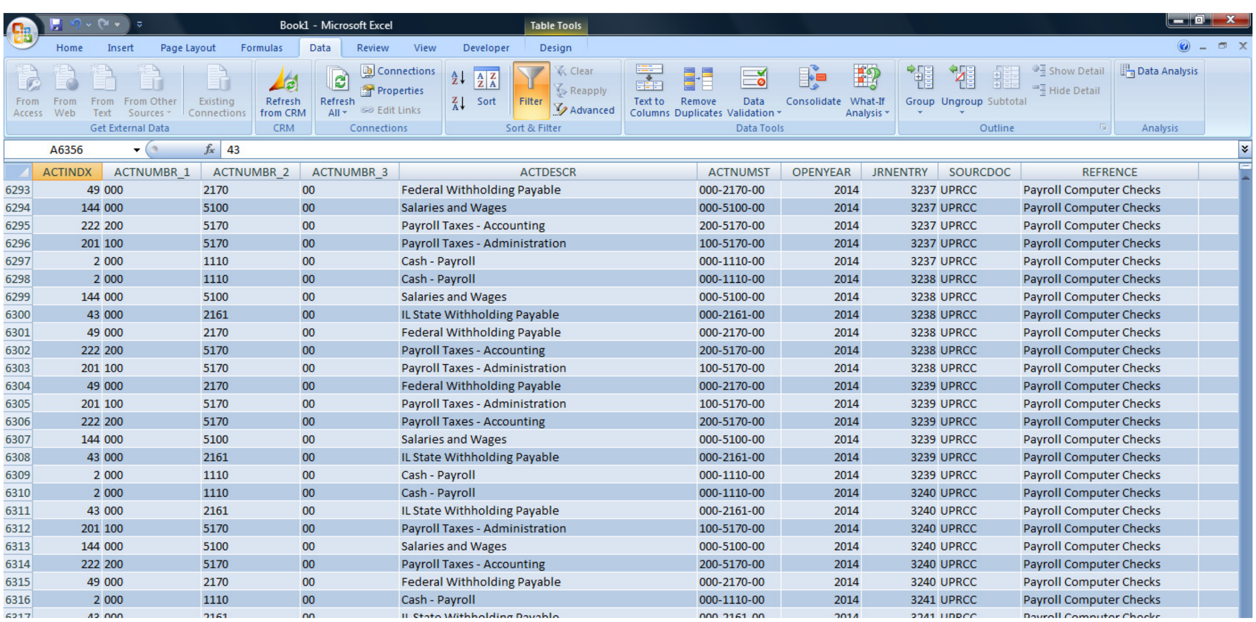
The wizard will step through entering restrictions and sorts.

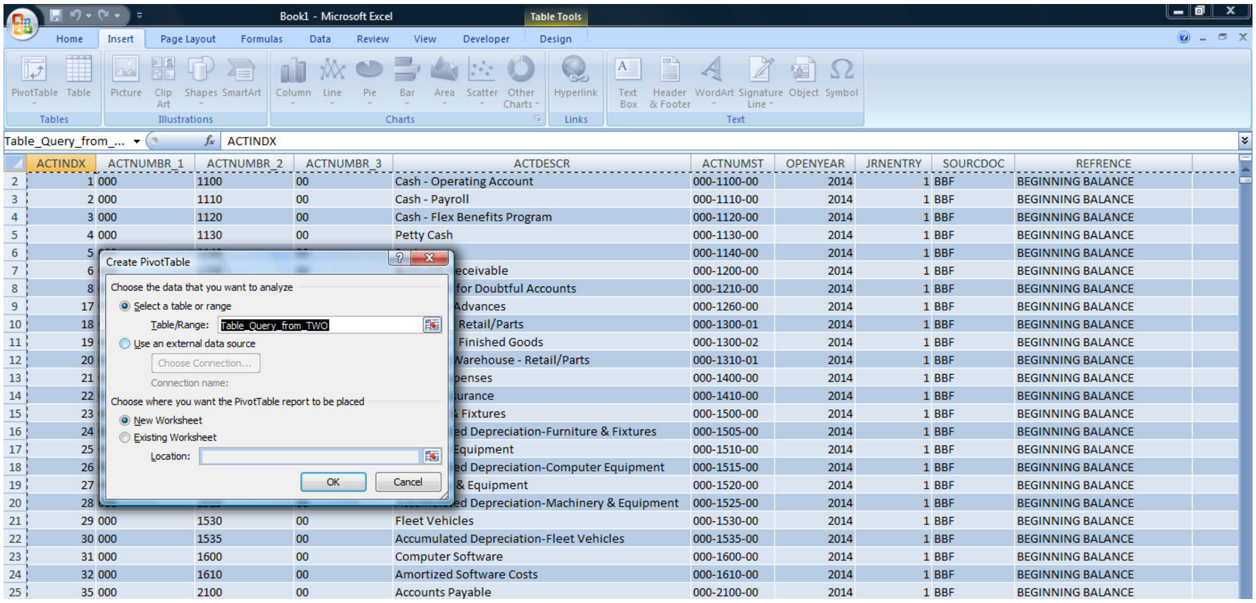
It will then ask whether to return the data to Excel or to open MS Query. If opened in MS Query, the query can be refined as needed.





The result is a data sheet that can be filtered, pivoted, or charted to provide the information needed.





Go to Insert > Pivot table. Click in the data range to select the data. Change the reference to use the entire column to allow for more data upon refresh.

Right-click on the pivot header to open the menu of additional options. The options available depend on which cell is clicked and the data type of the data element.

Right-click on the label itself for more grouping and sorting options. For example, group date fields by month or year rather than by day.

There are also menus for data and value filtering. For example, include only transactions in the current month or only those greater than $1000.

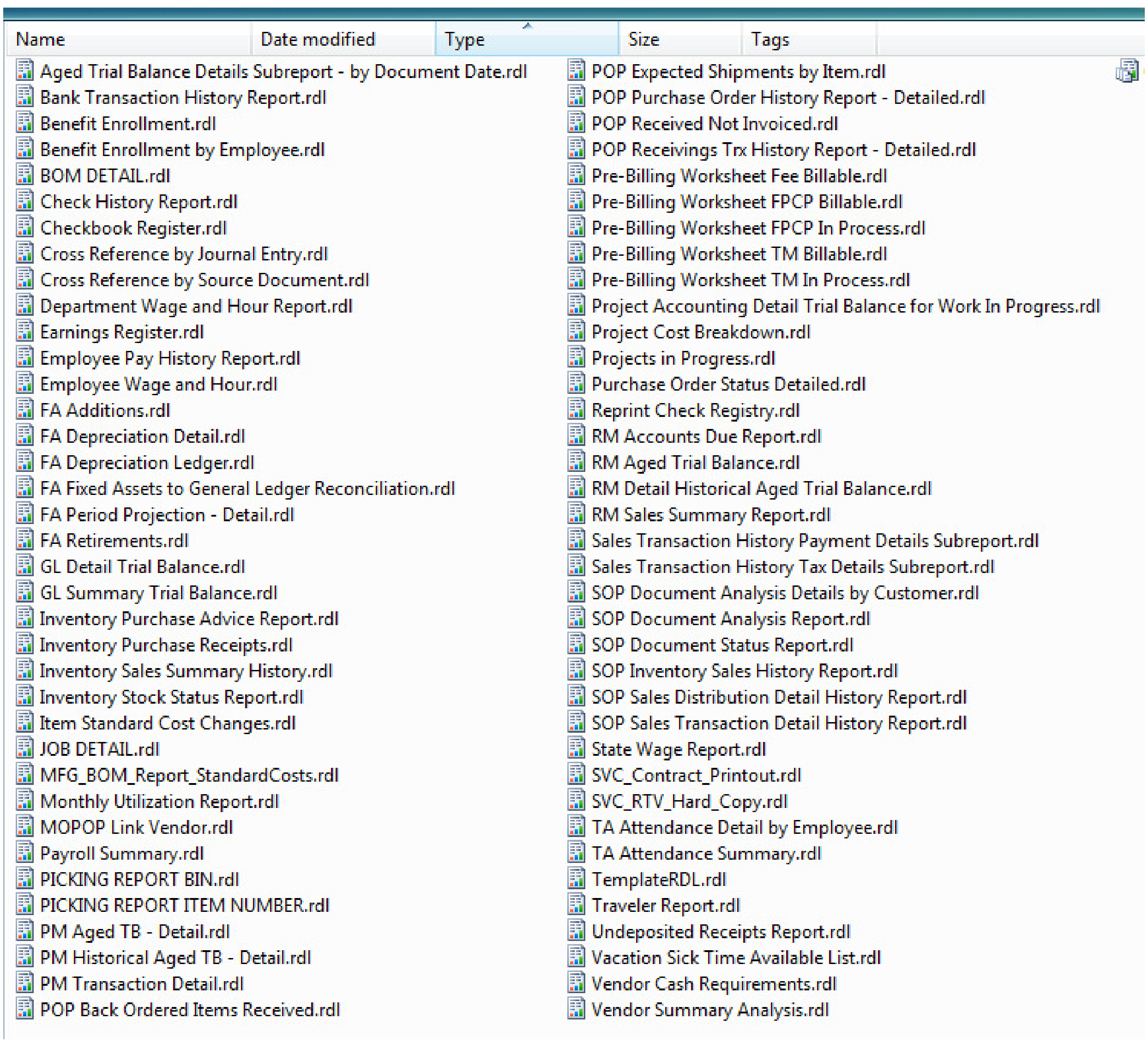
Rows and columns can be restricted on the fly to include only certain values. Changing this restriction changes the data displayed in the table.

SQL Reporting Services

MS Dynamics GP Report Templates

SQL Reporting Services (SRS) is used to deliver reports via a web browser to users throughout the organization – regardless of whether or not they are Dynamics GP users. SRS can combine data from multiple sources and multiple companies. Reports are accessed using Internet Explorer and the security is controlled via the server. Reports are designed in Visual Studio.

There are approximately 90 SRS report templates available with version 10. These can be modified in Visual Studio. The out of the box templates are shown below. Also available are report models for the most commonly used data. These are used for Report Builder but can also be used for reports built in Visual Studio.



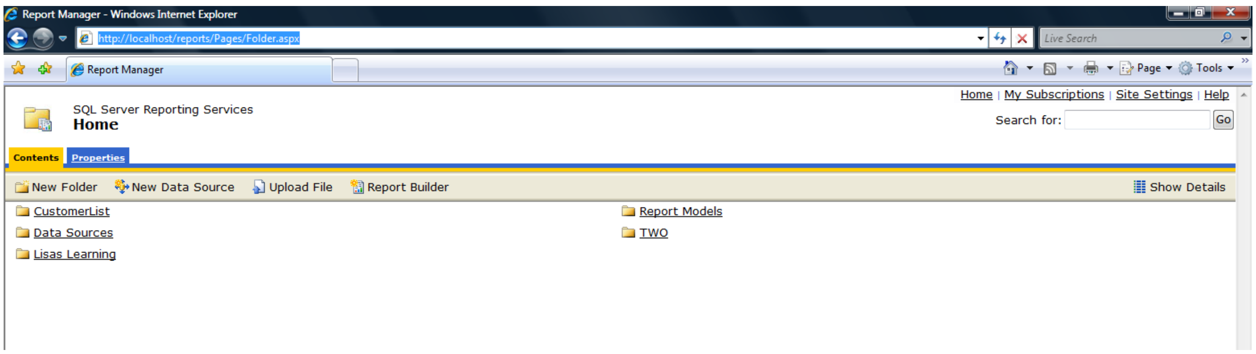
Users access reports using Internet Explorer based on the rights they have been granted.

On the SQL server, the path will be similar to this one:

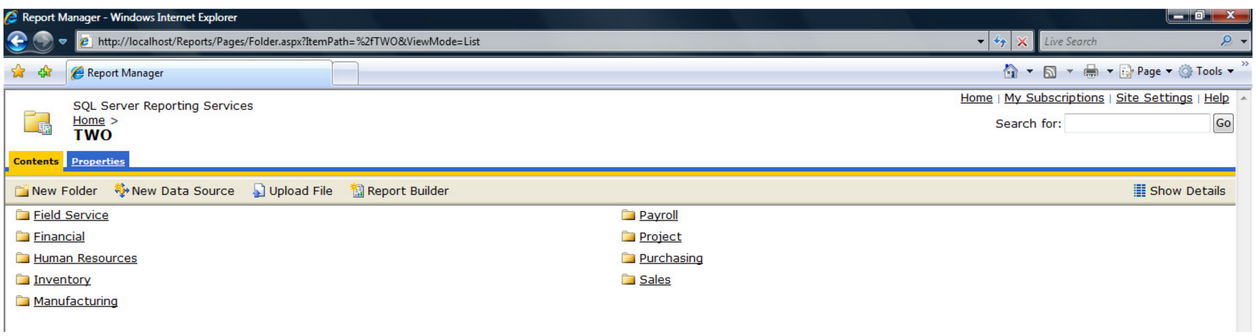
http://localhost/reports/Pages/Folder.aspx

On other machines, the server name will replace local host.

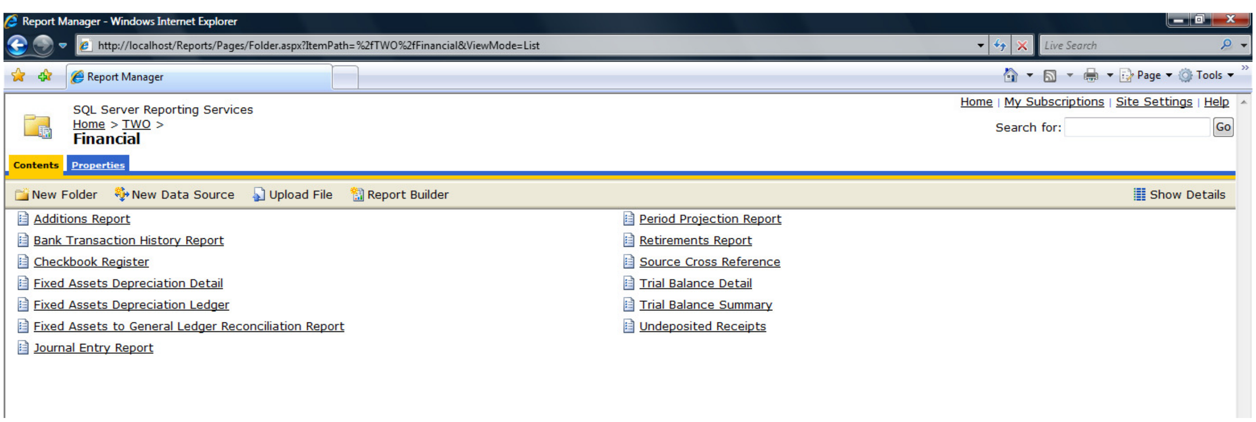
A user with administrator rights will see the report model and datasource folder as well as a folder for each Dynamics GP company.



Drilling into the TWO company shows subfolders for each report category.

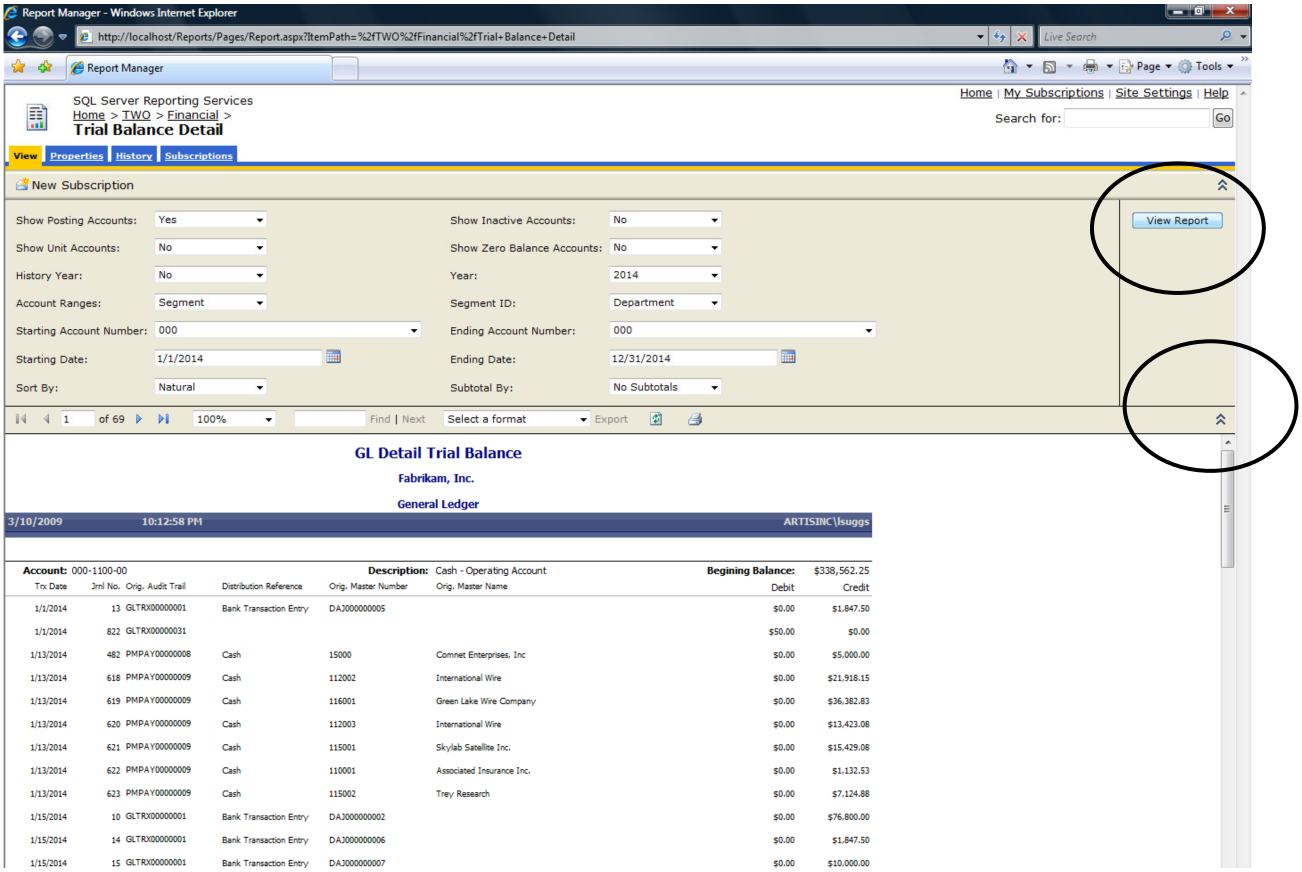


Within each folder, the reports are visible. Click on a report to launch it. The GL Trial Balance Detail is shown.

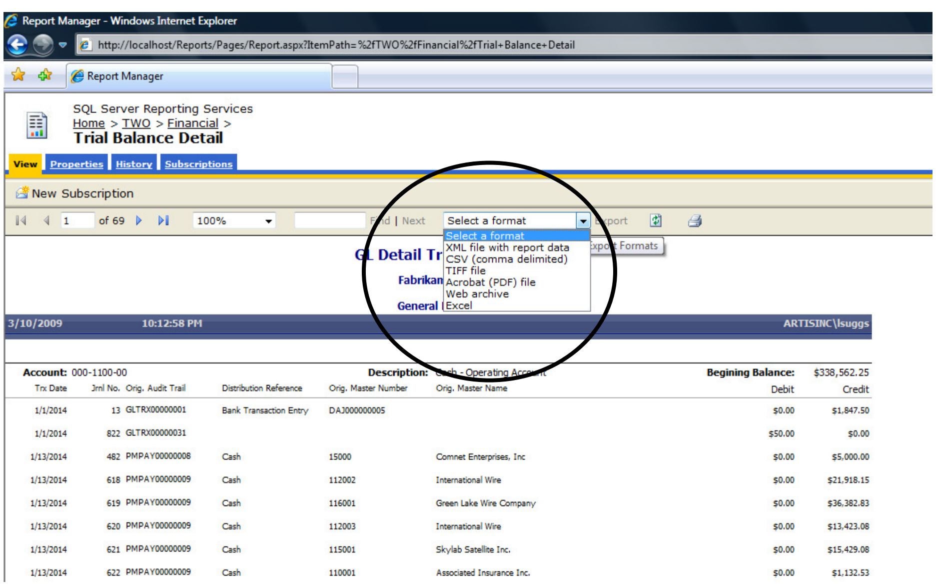


The user fills out the parameters at the top of the report then clicks the VIEW REPORT button.

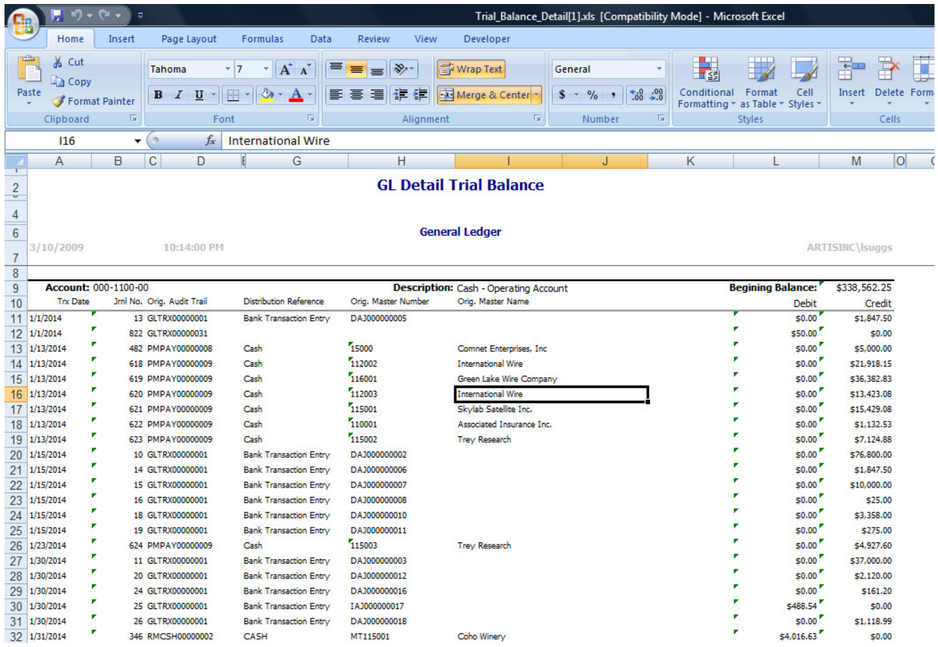
The parameters section of the screen can be collapsed for ease of report viewing.



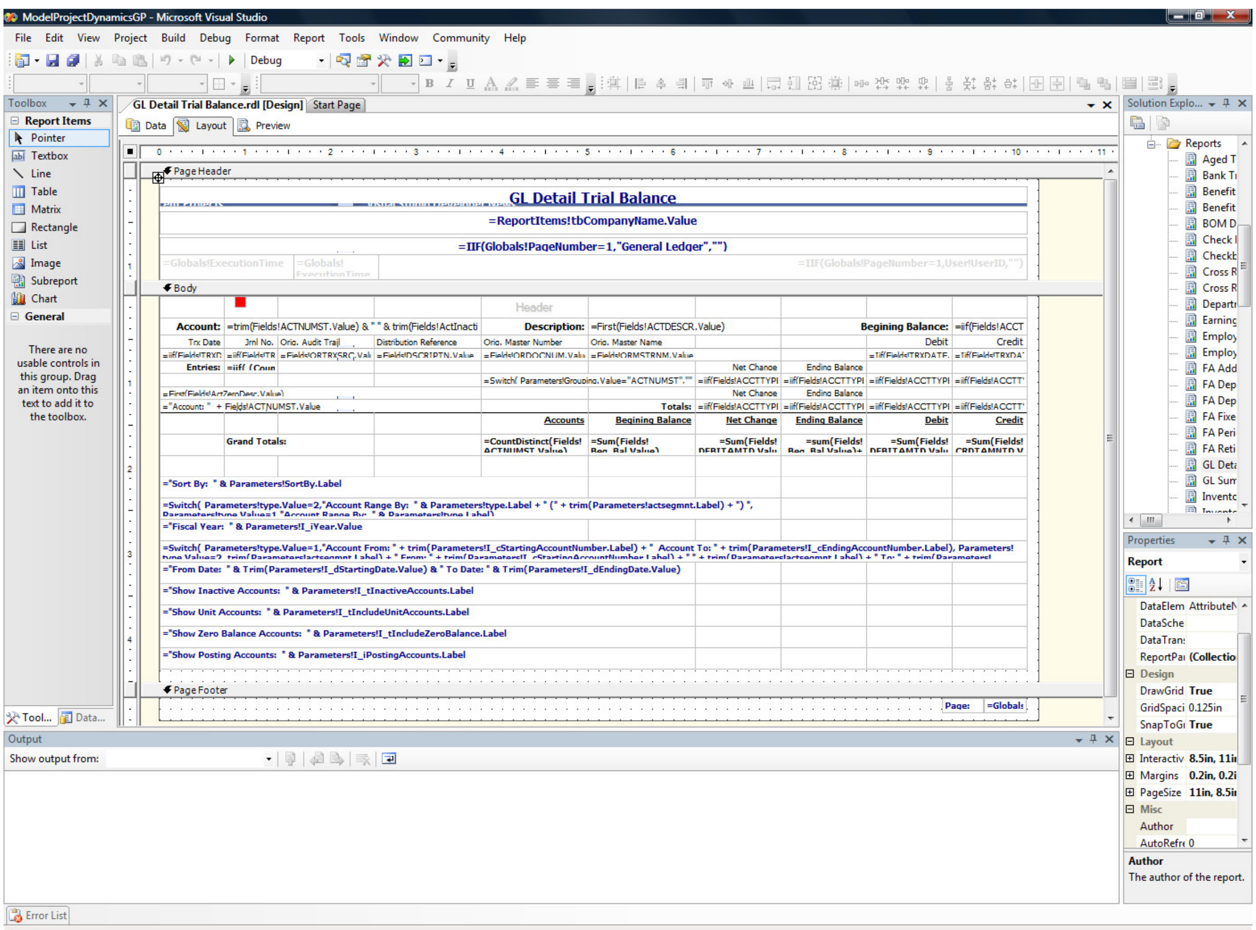
The report may be viewed on the screen, printed, or exported in a variety of formats.



The reports export to Excel much more cleanly than Report Writer reports.



The report layout in Visual Studio is complex. A technical person familiar with SRS can modify the report, save it and deploy it to the Report Manager.



SRS Report Builder

SRS Report Builder is a limited version of SRS that uses report models to define the data that is available to users. Users can create simple reports and make them available in the SRS Report Manager.

Users who are granted rights to use the Report Builder will see the Report Builder button on the home page of the Report Manager.

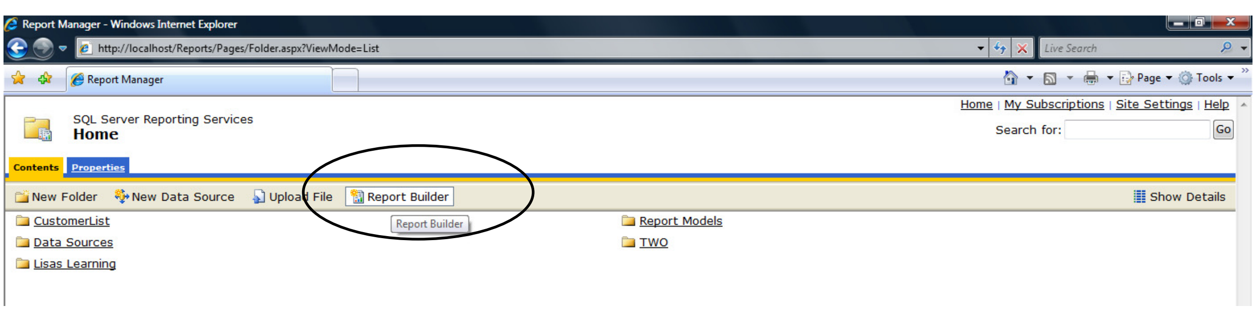
Use the Report Builder window in design mode to design, manipulate data within, and preview your reports. In Design mode, the Report Builder window is divided into several areas: the **Explorer** pane, the design area, and the **Report Layout** pane.

In Design mode, you can:

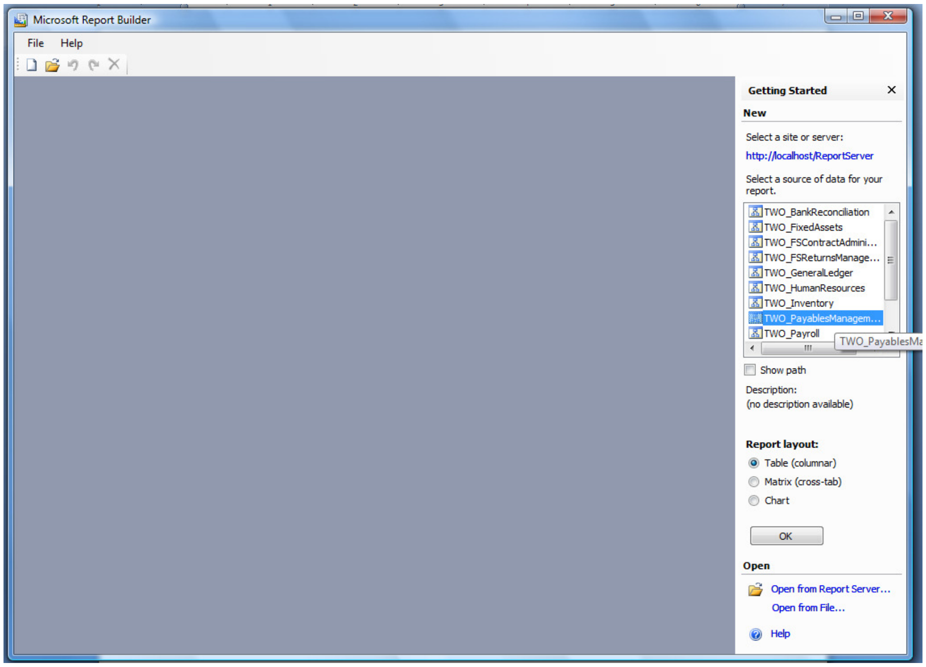
- Explore the data available to you.
- Select the fields you want to display in your report.
- Drag and drop fields into the report.
- Position selected fields within the report.
- Apply filters.
- Create formulas.
- Sort and group the data in the report.
- Preview the results.
- Adjust the size of the rows and columns within the report.
- Format all items within the report.

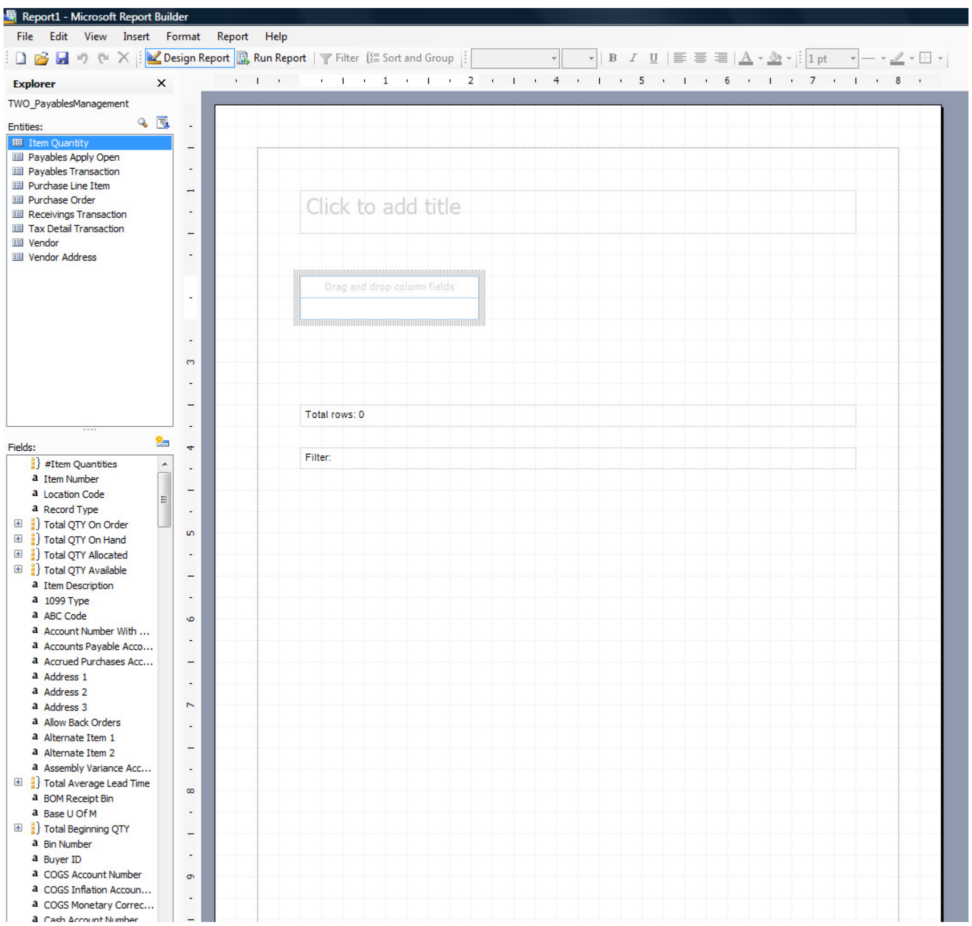
Use to create a new field that contains a formula.

In the Report Manager, click the Report Builder button.



The Report Builder opens with a blank screen. Select the Data source and type of report on the right.





The entities (groupings of data) are on the top left.

Fields available are on the bottom left.

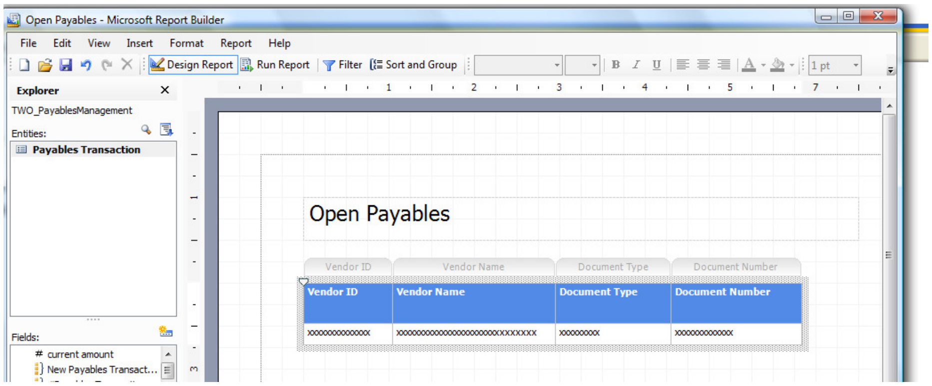
Drag fields onto the report template in the center.

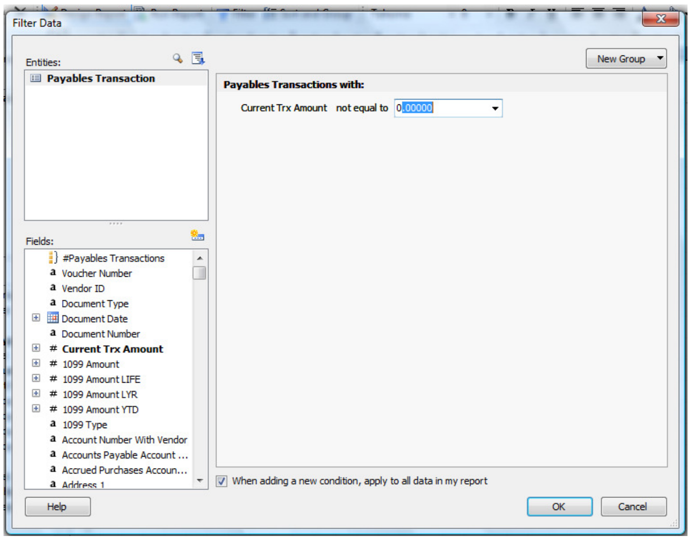
Other fields can be created under the Report menu > Add fields.

Fields are formatted once they are on the report by right-clicking the fields and selecting the format.

Type a title on the report in the indicated location.

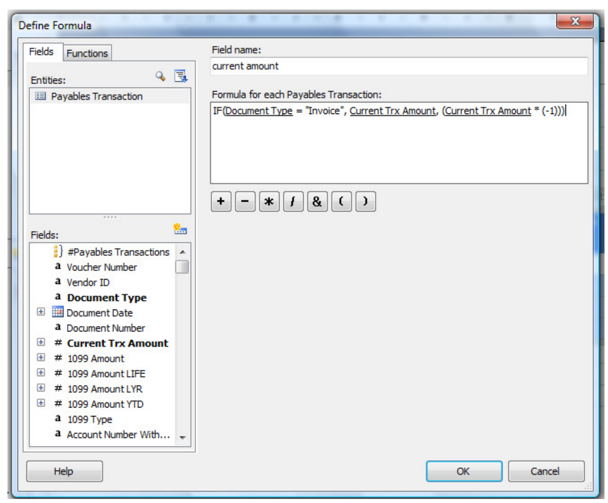
As you drag fields onto the report, they are displayed on the template (blue). To remove fields, right-click and delete.





To add a filter, click the Filter button. The filter window opens. Select the field to be filtered and create the restriction.

To create a new field, click on the Report menu > New Field. Use the Fields tab to select the field and enter the expression for the field. Formula syntax is like Excel formulas. For example, an if statement uses the following syntax:



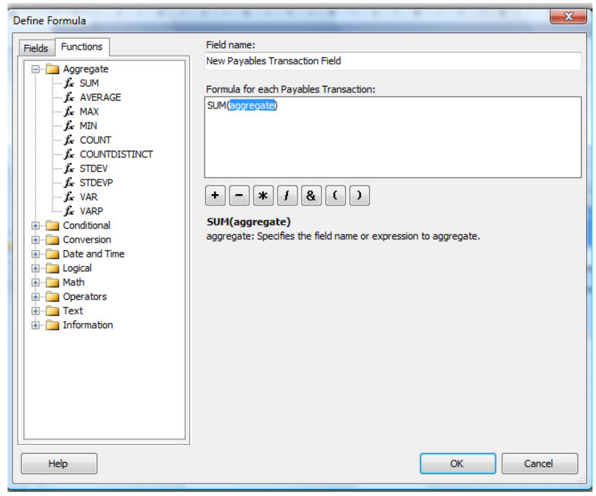
IF(logical test, true result, false result)

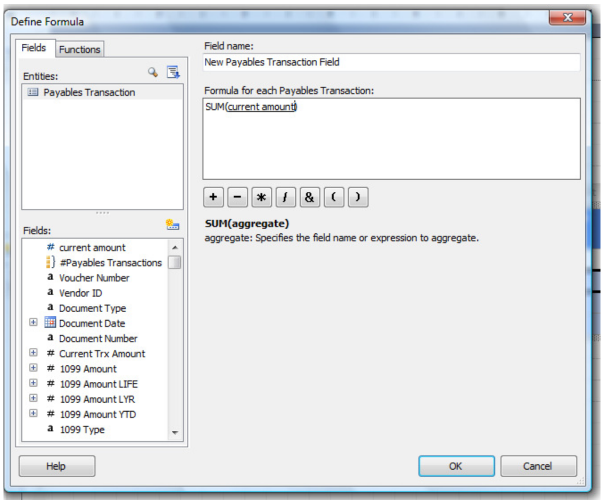
To create a field that is a positive number if the document is an invoice, but negative if it is not, the expression is:

=IF(Document type = “Invoice”, Current Trx Amount, (Current Trx Amount * (-1)))

If it is necessary to edit a formula, select the field from the field list on the left – not from the report. It is not possible to edit the field from the report template, but any changes to the field will automatically be applied to the field on the template.

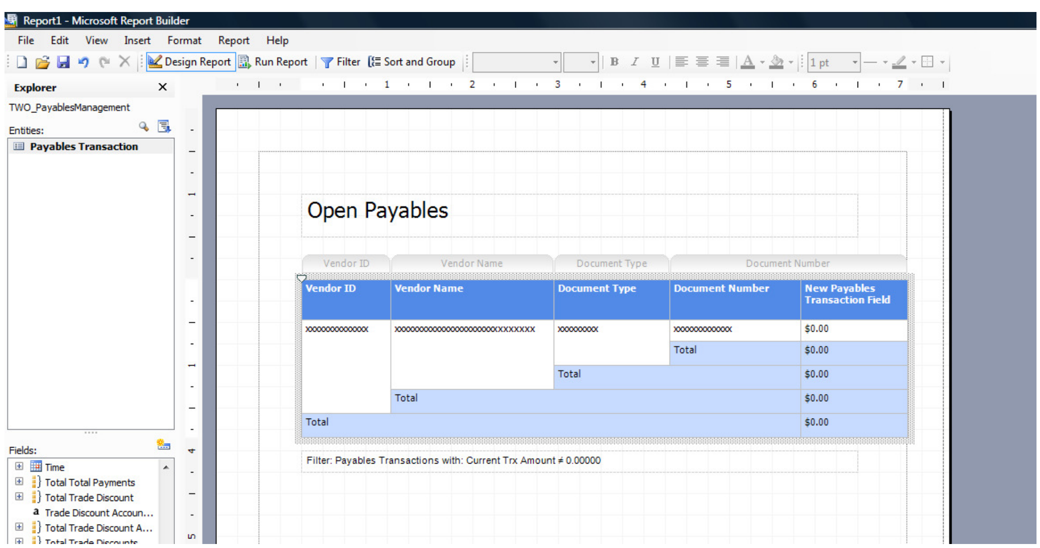
To create subtotals for this field, create a second field to sum the first one. Use the Aggregate tab.





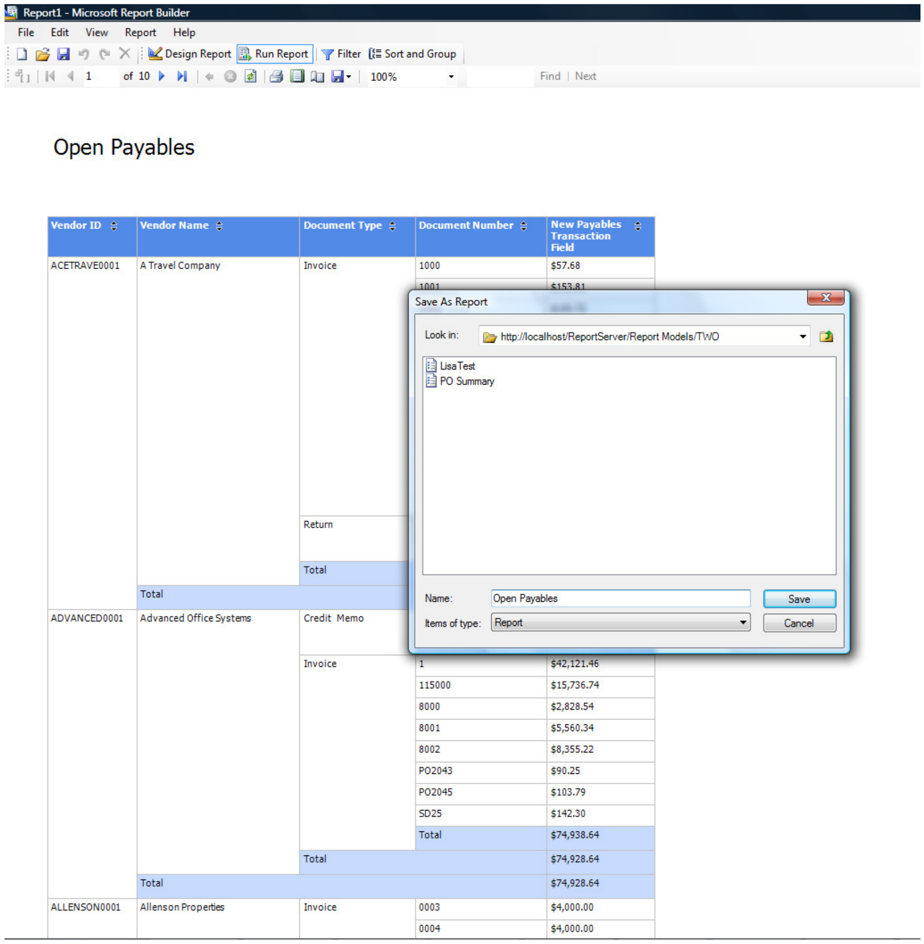
The formula is SUM(fieldname). Select the field from the left to insert into the formula.

Adding the new aggregated field to the report adds subtotals for every group (green). Format the subtotals by right-clicking on each and choosing the desired format.

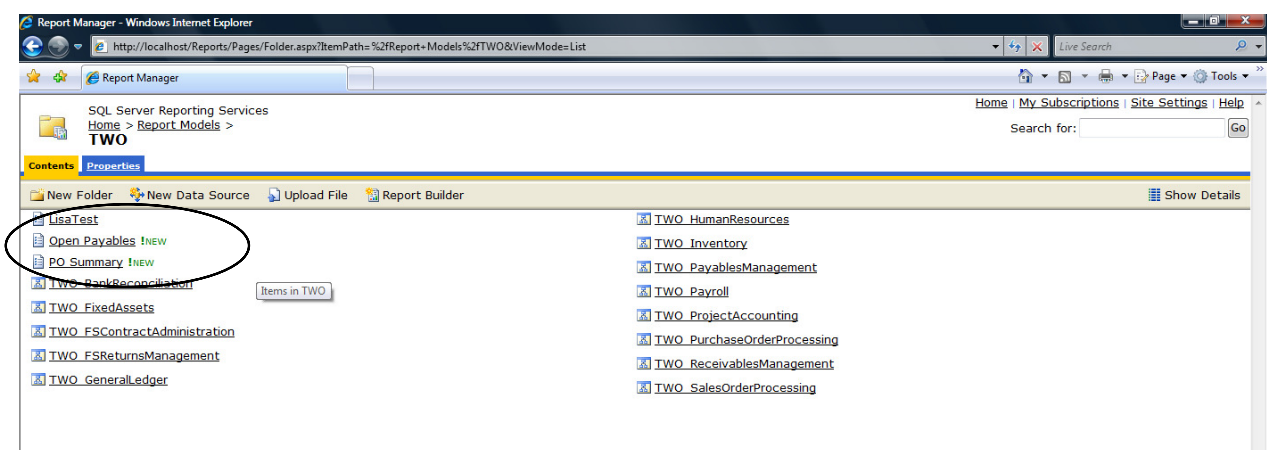


Click the Run Report button to preview the report. Click the Design Report button to make any changes.

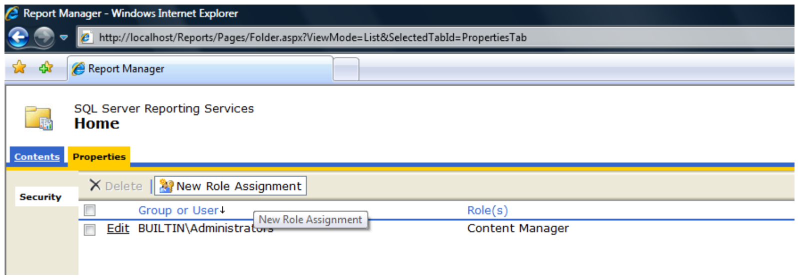
Saving the report will deploy it to the Report Manager. Select the location of the report. The report can then be run from the Report Manager.

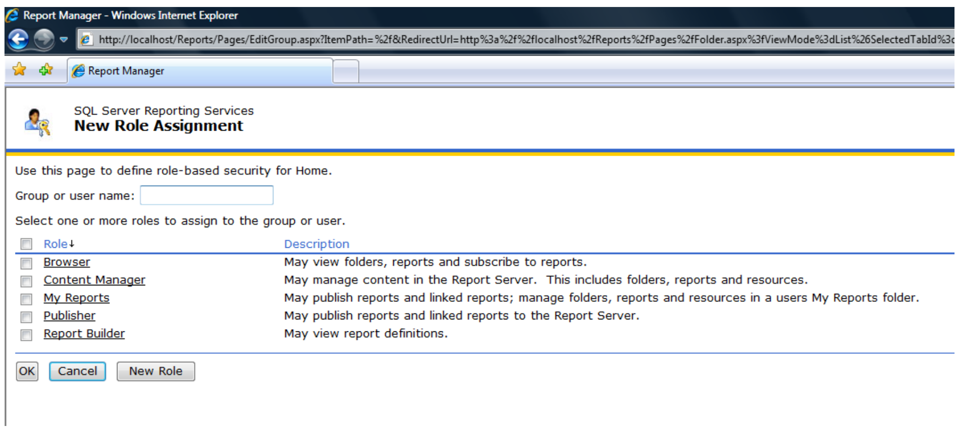


The report will be displayed as “New!”



User rights are defined in SQL Reporting Services. Users are assigned roles that determine whether they are allowed to run reports only, edit existing reports, or create reports, but only to a "My Reports" folder, and so on.





Microsoft FRx

Microsoft FRx is made up of several applications – all related to producing financial statements. FRx reports can be exported to Excel as a formatted report or as a pivot table/chart. Other export formats include XBRL and HTML.

FRx Report Designer: Create and edit reports.

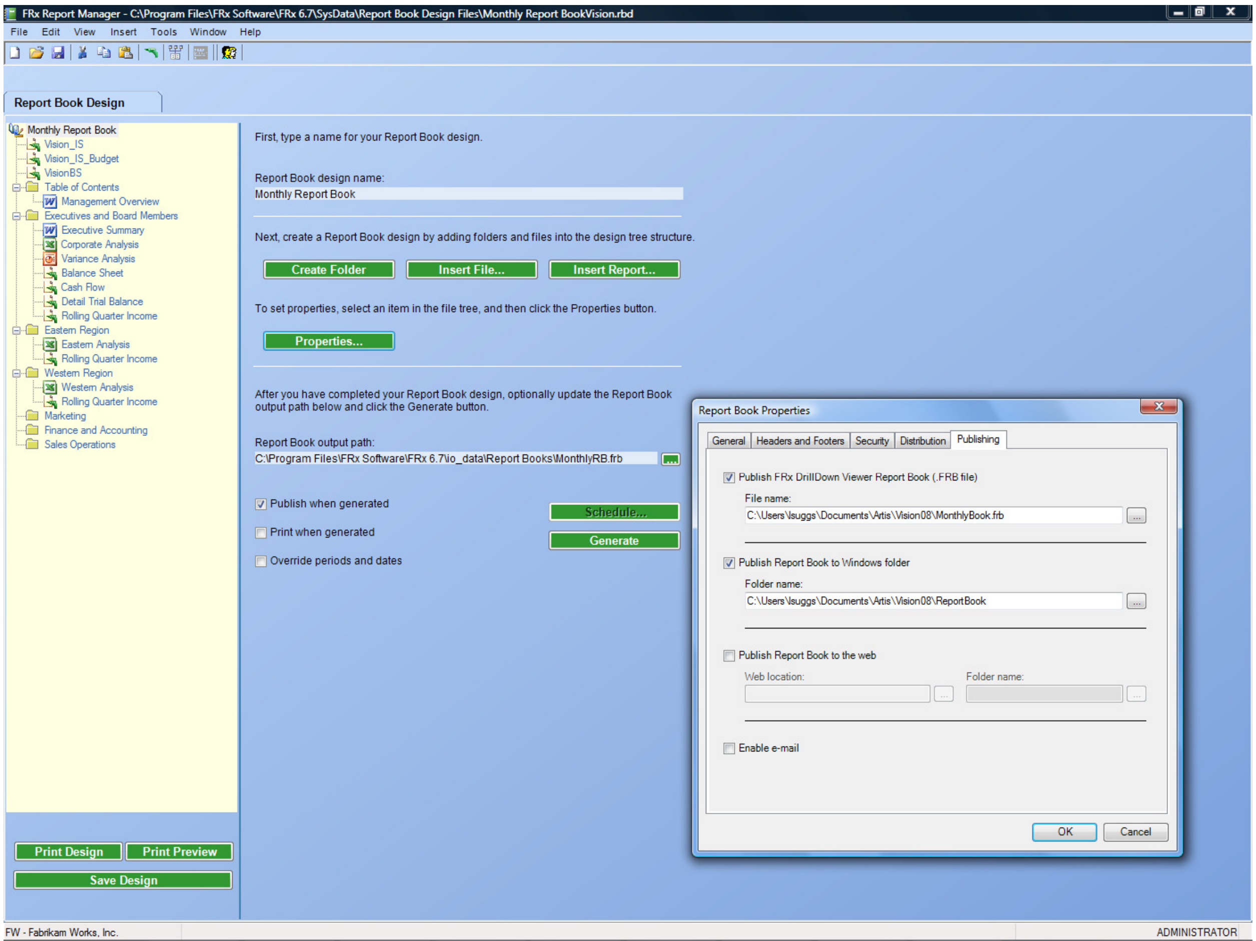
FRx Report Launcher: Run reports, setting the report date, file format for export, and other parameters. The user cannot edit report templates.

FRx Drilldown Viewer: View existing reports generated in Report Designer or Report Launcher. Export to other formats. The user cannot generate new reports.

FRx Report Server: Schedule FRx reports and offload ad hoc reports to a server for generation.

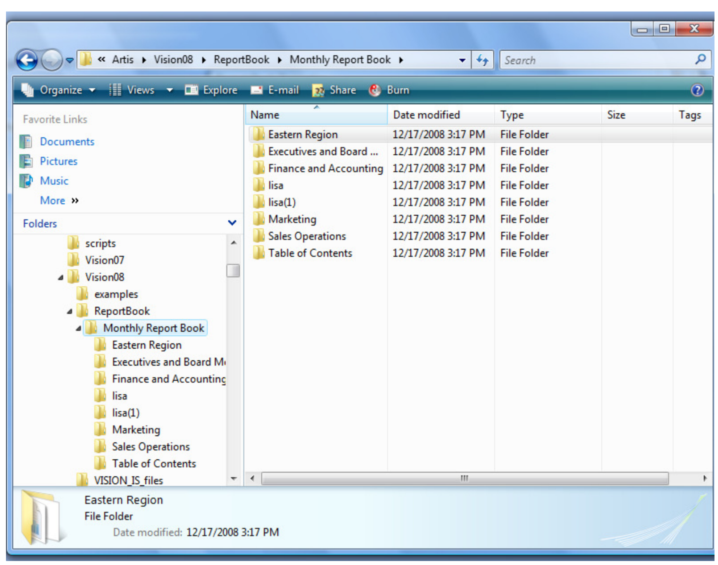
FRx Webport: Secure intranet site to access reports published from FRx Report Designer.

FRx Report Manager: Combine multiple FRx reports with other files to create a report package. Publish the files to a Drilldown viewer file for ease of access, or to a network folder to be accessed as needed. Generate the entire report package at once and print if necessary.



Files are organized in the Report Manager (left). When the report book is published, choose the destination location and type.

Publishing to a file creates subdirectories that mirror the report book.



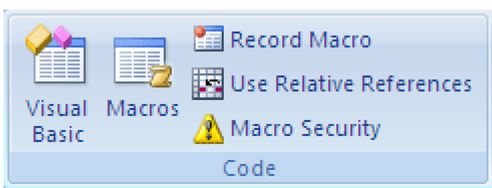
Macros in Excel 2007

Record a macro

When you record a macro, the macro recorder records all the steps required to complete the actions that you want your macro to perform. Navigation on the Ribbon is not included in the recorded steps.

NOTE The Ribbon is a component of the Microsoft Office Fluent user interface.

1. If the **Developer** tab is not available, do the following to display it:
    1. Click the **Microsoft Office Button** , and then click **Excel Options**.
    2. In the **Popular** category, under **Top options for working with Excel**, select the **Show Developer tab in the Ribbon** check box, and then click **OK**.
2. To set the security level temporarily to enable all macros, do the following:
    1. On the **Developer** tab, in the **Code** group, click **Macro Security**.

    2. Under **Macro Settings**, click **Enable all macros (not recommended, potentially dangerous code can run)**, and then click **OK**.

    NOTE To help prevent potentially dangerous code from running, we recommend that you return to any one of the settings that disable all macros after you finish working with macros. For more information about how to change the settings, see Change macro security settings in Excel.

3. On the **Developer** tab, in the **Code** group, click **Record Macro**.
4. In the **Macro name** box, enter a name for the macro.

    NOTE The first character of the macro name must be a letter. Subsequent characters can be letters, numbers, or underscore characters. Spaces cannot be used in a macro name; an underscore character works well as a word separator. If you use a macro name that is also a cell reference, you may get an error message that the macro name is not valid.

5. To assign a CTRL combination shortcut key to run the macro, in the **Shortcut key** box, type any lowercase letter or uppercase letter that you want to use.

   NOTE The shortcut key will override any equivalent default Excel shortcut key while the workbook that contains the macro is open. For a list of CTRL combination shortcut keys that are already assigned in Excel, see Excel shortcut and function keys.

6. In the **Store macro in** list, select the workbook where you want to store the macro.

   TIP If you want a macro to be available whenever you use Excel, select **Personal Macro Workbook**. When you select **Personal Macro Workbook**, Excel creates a hidden personal macro workbook (Personal.xlsb) if it does not already exist, and saves the macro in this workbook. In Windows Vista, this workbook is saved in the C:\Users*user name*\AppData\Local\Microsoft\Excel\XLStart folder. In Microsoft Windows XP, this workbook is saved in the C:\Documents and Settings*user name*\Application Data\Microsoft\Excel\XLStart folder. Workbooks in the XLStart folder are opened automatically whenever Excel starts. If you want a macro in the personal macro workbook to be run automatically in another workbook, you must also save that workbook in the XLStart folder so that both workbooks are opened when Excel starts.

7. In the **Description** box, type a description of the macro.
8. Click **OK** to start recording.
9. Perform the actions that you want to record.
10. On the **Developer** tab, in the **Code** group, click **Stop Recording** .

    TIP You can also click **Stop Recording** on the left side of the status bar.