

# Sage 500 ERP 2016 Intelligence Reporting Report Designer User Guide

**DH** 22 05 2015

# **Table of Contents**

Report Designer	3
Report Designer Overview	3
The Report Designer Process	4
Designing Reports using the Layout Generator	9
Designing Reports using the Task Pane	57
Drilling Down on Values	134
Missing Accounts	136
Copying Reports	139
Protecting the Worksheet when Distributing Reports	141
Best Practice	143
Reporting Trees	145

# Report Designer

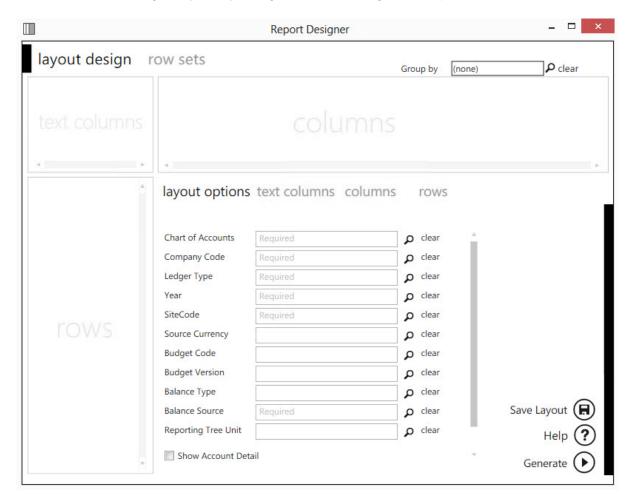
#### **Report Designer Overview**

## **About the Report Designer**

The Report Designer makes reporting simple, flexible and fast by giving you the ability to customize your financial report layouts instantly. It is recommended for finance professionals and executives who need to create financial reports on a regular basis. In the Report Designer, the design of your financial reports are completely separate from your General Ledger. As a result, you can easily change reports without modifying your accounting system's General Ledger.

There are two options to design your financial report layouts: the layout generator and the Task Pane.

The Layout Generator gives you the power to transform Microsoft Excel data in a raw spreadsheet format into a meaningful layout by using an intuitive drag-and-drop interface.



For those professionals who want to have complete control of their report layout and who are familiar with Microsoft Excel, the Task Pane allows a completely customized layout to be designed using Microsoft Excels' powerful functionality.

## Learn More:



Watch the video online:

#### **The Report Designer Process**

The process to design report templates is as follows:

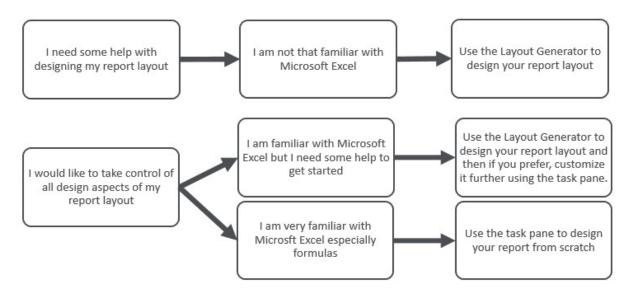


The Report Designer extracts information from your Sage 500 ERP General Ledger. It then uses your customized report columns and rows to produce professional reports that are customized to suit your organization's requirements. You can use the <u>Layout Generator or the Task Pane</u> to design your reports.

# **Choosing the Most Suitable Way to Design Reports**

Depending on the level of control you would like in the design of your report and your knowledge of Microsoft Excel, the Layout Generator may be used to simplify generating reports, otherwise the Task Pane may be used.

Follow the process below to determine the best option for you to design reports.



If you do not have an advanced knowledge of Microsoft Excel then the Layout Generator provides an intuitive drag-and-drop interface to design reports. If however, you do have an advanced knowledge of Microsoft Excel and am familiar with Microsoft Excel formulas then the Task Pane provides a complete solution to design your reports using powerful Microsoft Excel functionality giving you complete control.

Note: In order to do multiple company consolidated reports, the Task Pane will need to be used.

#### **Accessing and Saving Reports and Templates**

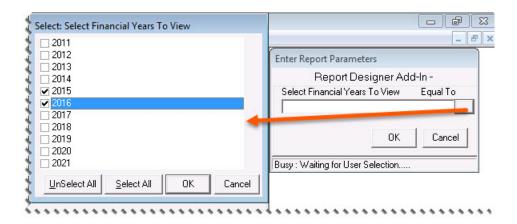
Opening Financial Reports and/or Templates

- 1. In the Report Manager, open the **Designer** folder.
- 2. Run the Financial Report Designer or the Demonstration Financial Report Designer report.

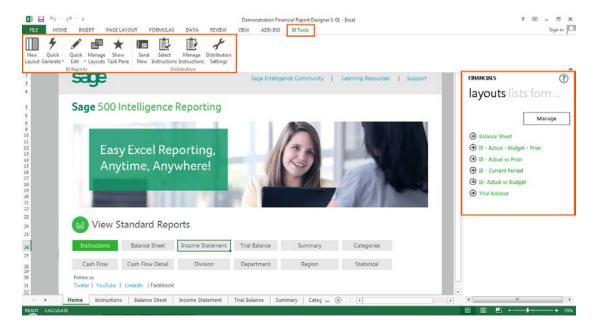
**Tip:** The **Demonstration Report Designer** report will include a few demonstration layouts which have been designed to work with the demonstration company financial data only. It is intended to illustrate how popular financial layouts can be created.

3. You will be prompted to select optional parameters should you wish to filter the data that will be loaded into Microsoft Excel.

**Tip:** Reports that return huge data sets can be difficult to analyze and can cause performance issues. Filtering is a quick and easy way to find and work with only the data you need. Instead of your report extracting millions of records, filtering extracts only the necessary data resulting in faster more efficient reports.



 The Microsoft Excel report or template will open automatically and the Report Designer functions will load.



# Saving Reports and/or Templates

The Save Layout option within the Layout Generator will save any changes to the current layout.



The Save Excel Template option in the Report Manager must be used to save the entire workbook.

# The Report Designer Ribbon

Once a Report Designer report or template is loaded into Microsoft Excel, the full **BI Tools** ribbon will become available.

The options are as follows:

Icon	Group	Label	Description
New Layout	BI Reports	New Layout	<b>New Layout</b> will open the Layout Generator to allow you to design a new report layout.
Quick Generate +	BI Reports	Quick Generate	Quick Generate is a drop down menu of all the report layouts previously saved. Instead of selecting the Manage Layouts option and then generating your layouts, you can generate them from the Quick Generate menu.
Quick Edit 🕶	BI Reports	Quick Edit	Quick Edit is a drop down menu of all the report layouts previously saved and allows you to select a report to edit without having to open the Manage Layouts option first.
Manage Layouts	BI Reports	Manage Layouts	Manage Layouts will open the Layout Management window which will display the existing report layouts that ship with the Report Designer and any new layouts that you have created.
Show Task Pane	BI Reports	Show Task Pane	Show Task Pane will open the Report Designer Task Pane.

#### **Creating a Draft Layout**

Before you begin, you need to decide what you want your report to look like when it's complete. If you don't already have a good mental image of the report, then write down what you would like the end result to look like.

**Tip:** Don't worry, it can just be a first draft. We can always edit layouts later if you've left anything out, or you want to make changes.

To help you, let's go through some of the steps and decisions you will need to make:

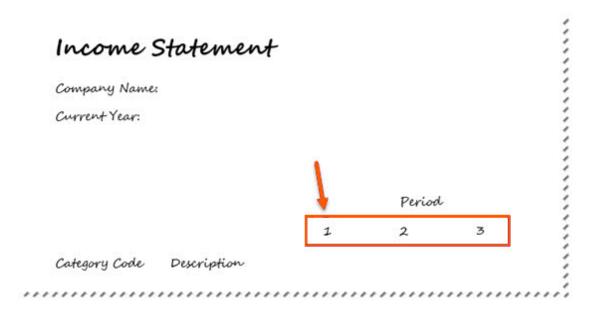
- 1. You will need to give your report a suitable heading. Something meaningful so you will always know exactly which layout you are generating in future.
- 2. What filters do you want to use? Filters allow you to retrieve specific data based on your selections. Filters are displayed on the top of your report and can be changed in Microsoft Excel resulting in your report being immediately updated to reflect the new data.



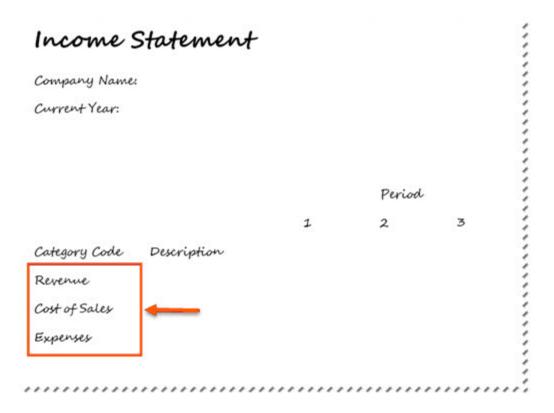
3. What details do you want to see down the left of your report? Perhaps a list of account numbers or category codes and their descriptions.



What do you want to see in each column of data? This could be different periods, current vs prior years, current vs budget or YTD.



5. How do you want to categorize the details on the left side? Do you want to see Revenue, Cost of Sales, Expenses or maybe Assets and Liabilities? List your main headings. You can go into as much or as little detail as you need.



Now you have the basic layout, you are ready to begin designing your report.

# **Designing Reports using the Layout Generator**

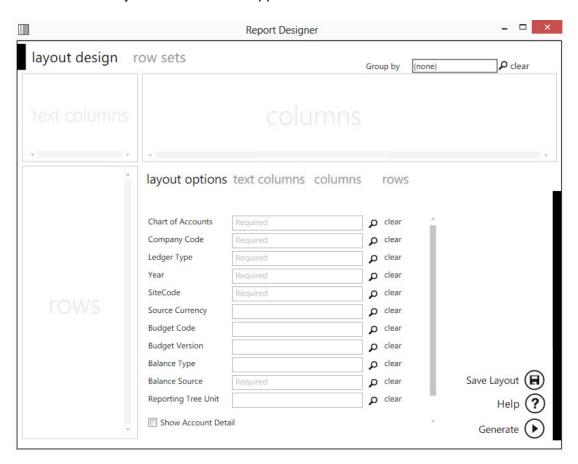
# Accessing the Layout Generator to Design a New Layout

When you've run your <u>Financial Report Designer</u> report, the workbook will open in Microsoft Excel and the Report Designer functions will load.

1. On the **BI Tools** tab, select **New Layout**.

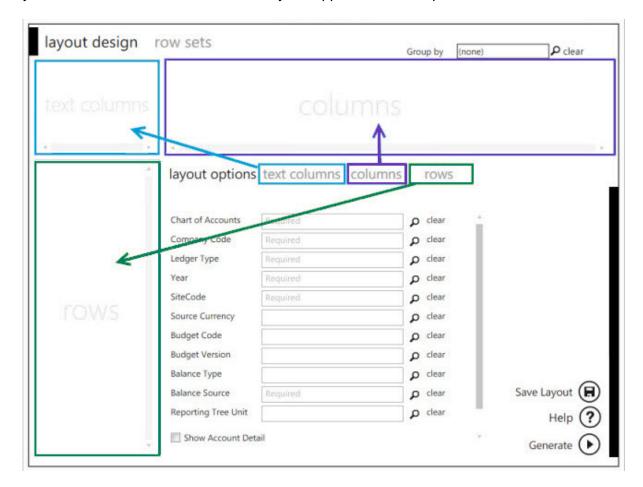


- A prompt will appear for the layout name. Type a descriptive name so that you can easily identify your layout in future.
- 3. Click **OK**. The Layout Generator will appear.



# **Navigating within the Layout Generator**

Within the Layout Generator, there is a text columns area, a columns area and a rows area. When you have added columns and rows, they will appear in their respective areas.



#### Tab Headings

Click on the respective headings to view the columns, rows or options which can be added.



#### Lookup Values

The magnifying glass allows you to perform a lookup on layout options to view the available items which can then be selected.

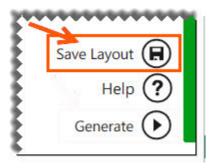
#### Search

The **Search** function allows you to search the rows and columns area for specific fields. For example if you search for **actual** only the fields containing the actual amounts appear.



#### Save Layout

The Save Layout option within the Layout Generator will save any changes to the current layout.



The Save Excel Template option in the Report Manager must be used to save the entire workbook.

# **Saving Report Layouts**

Whenever changes are made to the Financial Report Designer report, they need to be saved so that they're available for all subsequent runs.

• The **Save Layout** option within the Layout Generator will save any changes to the current layout.

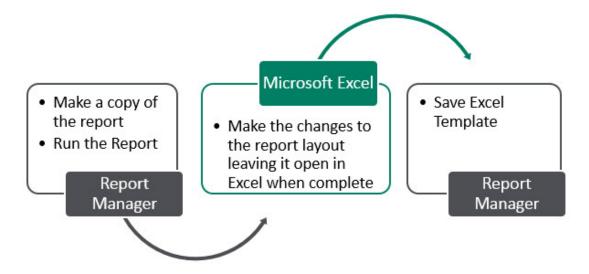
**Warning:** If you close the workbook, without saving the Excel template in the Report Manager, all of your changes will be lost.



• The **Save Excel Template** option in the Report Manager must be used to save the entire workbook. This is the same process to save any Sage Intelligence report.

1. Creating Microsoft Excel templates enables you to create a template from an open Microsoft Excel workbook and link it to an existing report so as to standardize the output format of the chosen report for every run instance in future.

The process to save the Microsoft Excel report template is as follows:

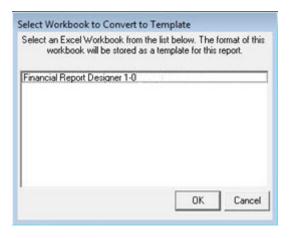


Open the Report Manager.

**Tip:** If you're unsure of making changes to any of the existing reports, you should create a copy of the report before you make any changes.

- 2. Select and run the report you want to customize.
- 3. In Microsoft Excel, make the changes to the report.
- 4. After completing the changes, leave the workbook open and go back to the Report Manager.
- 5. Click on the report for which the changes were made, and select **Save Excel Template**.
- 6. In the window that appears, select the Microsoft Excel workbook which contains the changes you made.

**Warning:** All Microsoft Excel workbooks that you have open will be listed in the window, so ensure you select the correct Microsoft Excel workbook to use as a template for your report.

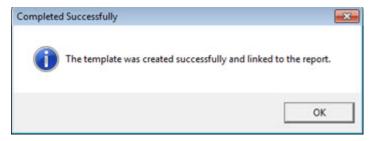


7. Click OK.

8. When prompted to specify the template name, change the name of the template. Doing so ensures that the original template is not overwritten with the copy.



9. Click **OK**. Once the template has been successfully linked, the Microsoft Excel workbook is automatically closed and a confirmation window appears.



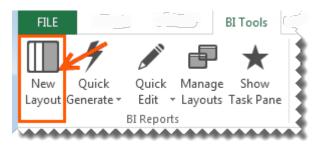
10. Click **OK**.

#### **Designing a New Report Layout**

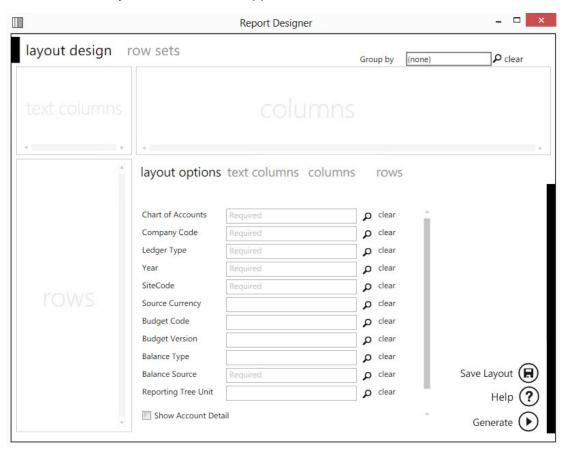
Accessing the Layout Generator to Design a New Layout

When you've run your <u>Financial Report Designer</u> report, the workbook will open in Microsoft Excel and the Report Designer functions will load.

1. On the **BI Tools** tab, select **New Layout**.



- 2. A prompt will appear for the layout name. Type a descriptive name so that you can easily identify your layout in future.
- 3. Click **OK**. The Layout Generator will appear.



#### Process to Design a New Report Layout

The process to design a new report layout in the Layout Generator is as follows:



If you designed a layout using the criteria in the following layout design, it would yield the layout in Microsoft Excel. The data and fields will differ depending on the General Ledger you are using.

#### Setting the Layout Options

The Layout options act as filters for your entire layout allowing you to retrieve specific data based on your selections. The layout options you select are displayed at the top of your report and can be changed in Microsoft Excel to manipulate the data being retrieved from the General Ledger.

Show Account Detail uses Microsoft Excel grouping to allow you to include individual accounts belonging to the row account rules selected. The account rules and ranges are those defined in the selected row set.

Note: Selecting this option may slow down the generation of the layout.

**Note**: The **Show Account Detail** option will be disabled if the number of GL accounts exceeds the allowable limit which prevents Microsoft Excel performance issues, as a result of inserting too many accounts into a single Excel worksheet. If you would like this function to be enabled, consider further filtering the data being provided in your report within the Report Manager.

**Show Subtotals at Bottom** allows you to change the default option of having subtotals show at the top of grouped rows to having them show at the bottom of grouped rows.

**Note:** The layout options do not support multiple company codes. In order to do multiple company consolidations, the Task Pane will need to be used.

**Enable Zero Detail Rows** allows you to exclude rows with zero balances from the layout in the Excel worksheet.

Remember to save any changes you've made to your layouts, you'll need to <u>save the Excel</u> <u>template</u> in the Report Manager.

#### Adding Descriptive Text Columns for Rows

The Text Columns determine the descriptive text of the rows you want to view in your layout. The account number and description are typical text columns on a financial report.

To add fields to the Text Columns area:

1. Click on the required text column from the columns listed under **Text Columns**.

**Note:** Any new fields will be added to the right of the text column field selected, or the last field, in the Text Columns area of the layout designer. It will also appear in the same order in the Microsoft Excel report layout.

**Tip:** The order can be changed by dragging and dropping the fields in the Layout Generator Text Columns area into the correct order.

Removing a field from the Text Columns area

2. Right-click on the field in the **Text Columns** area.

Clearing all of the fields from the Text Columns area

3. Click Clear All.



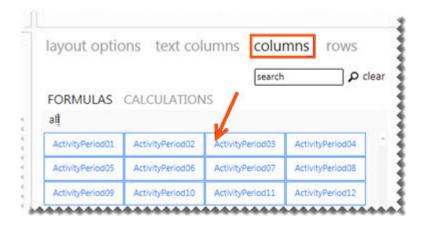
#### **Columns**

Adding and Removing Formula Columns

The Columns area determines what you see across the top of the report layout. In an income statement, this would typically be Actual, Prior and/or Budget amounts.

Adding Columns to the Columns Area

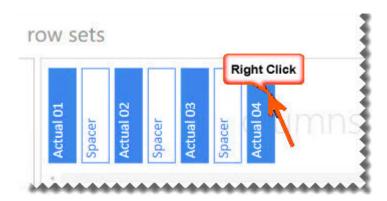
1. Click on the required formula columns listed in the **columns** tab.



2. You can neaten your report layout by adding spacers. Clicking **Add Spacer** inserts a blank column. Spacers can be dragged and dropped into position.

#### Removing Columns

1. To remove a single column, right-click on the column field in the Column area.



2. To remove all columns, select Clear All.

Clearing all of the fields from the Columns area

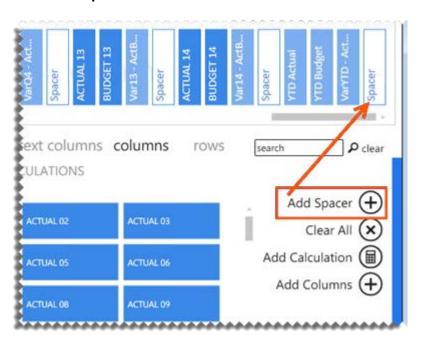
# 1. Click Clear All.



Adding a spacer to the Columns area

A spacer will insert a blank column allowing for easier analysis and/or neater report layouts.

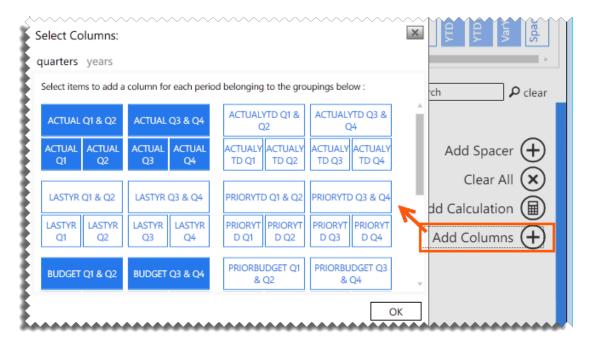
# 1. Click Add Spacer.



# Adding Multiple Formula Columns for Quarters or Years

Adding multiple formula columns allows you to add formula columns for quarters, half years or full years at once, instead of adding each period formula separately.

1. Under the columns tab, select Add Columns.



**Note:** Spacers need to be added manually when columns are added using the Add Multiple selection.

2. Select the required formula column.

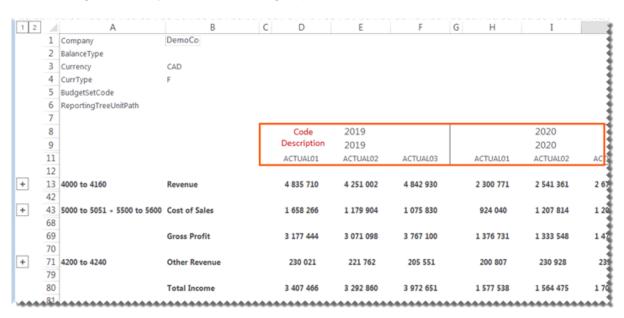
# Using Column Grouping

Adding a column group allows you to group multiple columns together under a single common header. This allows you to see quickly which columns fall under similar categories, for example by company, site or fiscal year.

# Before adding a column group:

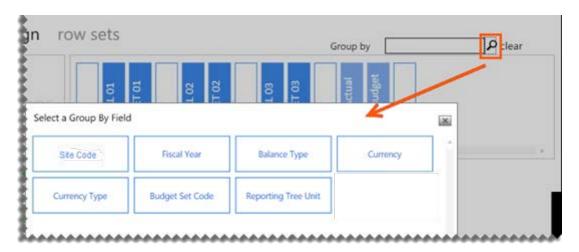


# After adding the fiscal year as a column group:



# Adding a column grouping

1. Click the magnifying glass.



Note: There is only one level of grouping available across the top of the report.

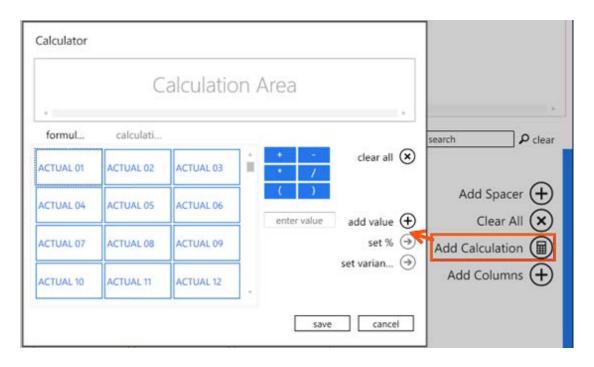
2. Select a field to group by. When the layout is generated, a heading row for the code and description will be added to the columns.

#### Calculation Columns

# **Creating New Calculations**

New calculations can be added by right-clicking in the calculated items area and selecting **New Calculation** or by doing the following:

- 1. Select the Columns tab.
- 2. Click Add Calculation.



The calculator will open.

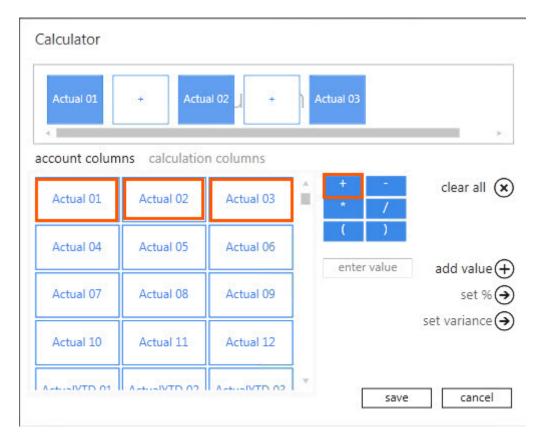
The following list explains the use of each button/feature.

Feature	Description
Clear all	Clears all fields from the Calculation Area.
Formulas	These are standard columns that can be used in formulas. When creating a formula for a column, the columns appear here, such as <b>Actual 01</b> and <b>Actual 02</b> .
Calculations	These are the calculated fields which are already created which can be used in formulas.
Functions	Include your addition, subtraction, multiply, divide and parenthesis.
Scroll bar	Scrolls between all the account items or calculation items.
Add value	Allows you to add a value in the formula you create. For example calculating GP%. You would need to include a value of 100 to build this formula (GP/Sales)*100
Save	Will save the formula you create. A window appears where you can name the formula. The formula will be saved and will appear as a button in the calculated field's area of your Layout Generator.

Feature	Description
Set %	Displays the results of the formula as a percentage, rather than an amount.
Set Variance	Changes the sign of variances amounts as per standard accounting practices, based on the type of account (See below for more details).
Cancel	Closes the calculator.

As an example, to create a formula for First Quarter.

- 1. Select Actual 01.
- 2. Select the plus sign (+).
- 3. Select Actual 02.
- 4. Select the plus sign (+).
- 5. Select Actual 03.



- 6. Click Save.
- 7. Enter the formula name as 1st Quarter.

# Set Variance Option

- The **set variance** option caters for standard accounting calculations.
- The Variance calculation is based on the Account Type.

# Set Variance Example

	Actual	Budget	Variance
Sales	100	50	50
Cost of Sales	100	50	50

In the above scenario, the variance for Sales is a good variance – actual sales are higher than budgeted sales; however, the variance for Cost of Sales is a bad variance – actual cost of sales are higher than budgeted cost of sales.

When selecting, the **set variance** option, in this scenario, the Sales variance would display as a positive amount, and the Cost of Sales variance as a negative amount, as shown below.

	Actual	Budget	Variance
Sales	100	50	50
Cost of Sales	100	50	-50

# **Managing Calculation Columns**

Calculated fields are available as standard with the Report Designer report layouts, however calculated fields can be added, edited or deleted.

# Accessing Calculated Fields

- 1. In the Columns Area, click Calculations.
- 2. Right-click in the calculated field's area.



3. You can now Edit, Delete or create a New Calculation.

#### Deleting a Calculated Field

- 1. Select Delete Calculation.
- 2. A confirmation message will appear. Select Yes.

#### Editing a Calculated Field

- 1. Select Edit Calculation.
- 2. The <u>Calculator</u> will open allowing you to edit the currently selected formula.

#### Rows

About Row Sets

A row set is a collection of row groupings, based on rules which you define according to your reporting needs.

#### The purpose of using Row Sets

Row Sets allow you to create rules to include accounts that would commonly be used on several layouts of similar types, for example income statements. The rows you are able to select in the rows tab is dependent on the row set you have selected.

Row sets are set before creating layouts but they can be added/edited during the layout design process.

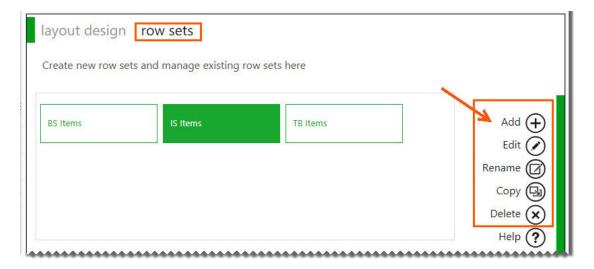
The **Preview** allows you to view all of the accounts which will be filtered by the selected account rule. Always check the preview to ensure all of the accounts you are wanting are included.

**Note:** The Preview is limited to 1000 records to optimize performance.

#### **Accessing Row Sets**

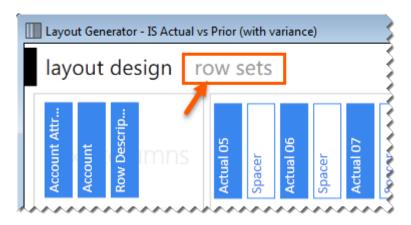
From the Layout Generator, select row sets. You may now:

- Add new Row Sets
- Edit existing Row Sets
- Rename Row Sets
- Copy Row Sets
- Delete Row Sets

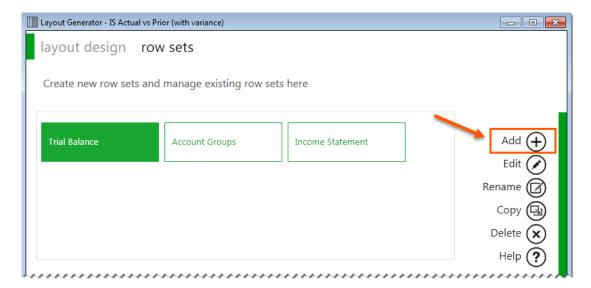


#### Adding a New Row Set

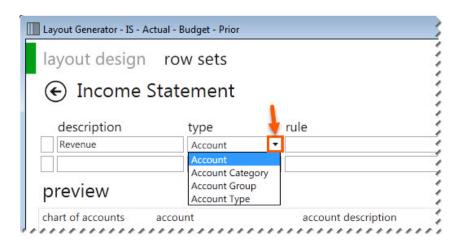
From the Layout Generator, select row sets.



#### Select Add.



- 3. Type a descriptive row set name. For example, **Income Statements** or **Balance Sheets**.
- 4. Under description, add an account rule description. For example, **Revenue**.
- 5. Select a rule type from the drop down menu.



- 6. Add the account rule. There are a variety of options available when setting up rules. You can use full account numbers, a <u>range</u> of account numbers for example from **1500 to 1730**, the <u>plus</u> sign to include account numbers, or the <u>minus</u> sign to exclude account numbers from the range. You can also use <u>wildcards</u> and account delimiters in your rules. Notice how the Preview window updates with all of the accounts that are going to be included in this rule.
- 7. Repeat from step 4 for all additional account rules you're going to need for your report layout based on this row set.
- 8. Click Save.
- 9. Click OK.

# **Editing an Existing Row Set**

- 1. From the Layout Generator, select row sets
- 2. Select Edit.
- 3. Make the necessary changes.
- 4. Click Save.
- 5. A confirmation message will appear. Click **OK**.

#### Renaming an Existing Row Set

- 1. From the Layout Generator, select row sets
- 2. Select Rename.
- 3. Type in the new name for the row set.
- 4. Select OK.

## **Deleting a Row Set**

- 1. From the Layout Generator, select row sets
- 2. Select **Delete**.
- 3. A confirmation message will appear.
- 4. Select Yes.

#### Using Account Ranges in Row Sets

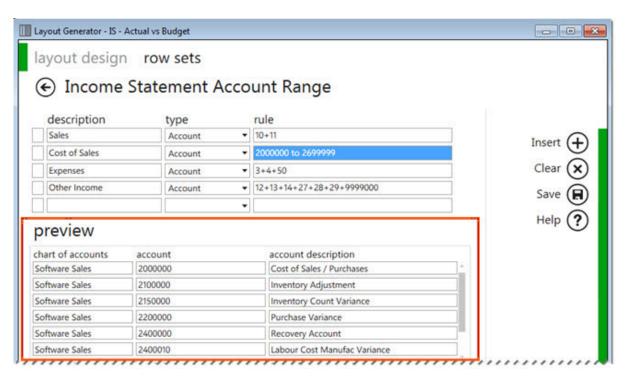
Ranges can be used to define the list of accounts to return in your row sets, without specifically naming each account.

A range consists of two accounts where you want to retrieve data for those two accounts and every value between those two. This is indicated by using **TO** between your start and end value of your range. Alpha characters are also supported in an account range.

**Note:** You must use a space before and after **TO** in order to ensure clear distinction of your start and end range values.

An example could be: A to Z; to return all values from A, A11, B2, C etc. to Z.

<u>Wildcards</u> can be used in combination with account ranges and <u>mathematical calculations</u>. When a single-segment or <u>multi-segment</u> range includes <u>wildcard characters</u> (?), Sage Intelligence Reporting determines the low and high ends of the range, and then includes all values between those ends, inclusive.



Filter	Description	Result
200-00-00 to 220-00-50	Filter all accounts from 200-00-00 up to and including 220-00-50	200-00-00, 200-00-01 200-00-02 up to 220-00-50
4?5-00-00 to 4?5-03-03	Filter accounts with first segment ranging from 405 up to and including 495 and second and third segments ranging from 00-00 up to and including 03-03.	Sage Intelligence Reporting will determine the low end of the range which is 405-00-00 and the high end of the range which is
	<b>Tip</b> : If you wanted to only include accounts with the first segment starting with a 4 and ending with a 5, you could use a Reporting Tree unit with a filter of 4?5-??-?? to further filter the results.	495-03-03 and return all accounts between the ends inclusive. 405-00-00 to and including 495-03-03 which would include for example, account 406-01-02

**Tip:** Use account ranges or dynamic account ranges to ensure new accounts being added to the General Ledger are included in your reports.

# Using Wildcards in Row Sets

Wildcards can be used to define the list of accounts to return in your row sets, without specifically naming each account.

A wildcard character is a keyboard character such as an asterisk (\*) or a question mark (?) that is used to represent one or more characters.

The following wildcards are available:

Wildcard character	Use	Example
Question Mark ?	Use the question mark as a substitute for any one of the 36 characters, A through Z and 0 through 9. Multiple question marks (??) can be used to indicate the number of characters to be substituted. Sage Intelligence Reporting replaces each question mark (?) with the entire range of possible values, including letters. For example, in the range from 12?0 TO 12?4, Sage Intelligence Reporting replaces the question mark in 12?0 with the lowest value in the character set, and replaces the question mark in 12?4 with the highest value in the character set. The question mark (?) can be placed in any position of an account segment. For example, if the rule contains only natural segment values (assuming a four-character natural segment), entering 4??? in a row, all accounts whose natural segment value begins with a 4 will be included.	A??1 to return A001 to AZZ1.
Asterisk *	Use the asterisk to substitute any number of characters or numbers. The asterisk can only be placed alone to return all accounts	* to return every account

Wildcards can be used in combination with <u>account ranges</u> and <u>mathematical calculations</u>. When a single-segment or <u>multi-segment</u> range includes <u>wildcard characters</u> (?), Sage Intelligence Reporting determines the low and high ends of the range, and then includes all values between those ends, inclusive.

4? Filter all Account Numbers beginning with 4 4000-100 4000-100-10  4???? Filter Account Numbers beginning with 4 and has a minimum of 4 characters thereafter 4000-100-10  4000-???-1? Filter Account Numbers with first segment of 4000-100-10 4000, second segment of 3 characters and last segment beginning with 1.  20-2001-? Filter all accounts beginning with segments 20-2001-000-00-A-AAA up to 20-2001-999-99-Z-ZZZ 20-2001-???-00- Filter all accounts beginning with segments	Filter	Description	Results may include:
has a minimum of 4 characters thereafter  4000-100-10  Filter Account Numbers with first segment of 4000-100-10 4000, second segment of 3 characters and last segment beginning with 1.  Filter all accounts beginning with segments 20-2001-?  Filter all accounts beginning with segments 20-2001-999-99-Z-ZZZ  20-2001-900-00-A-COM up to	4?	Filter all Account Numbers beginning with 4	4000-100
4000-???-1? 4000, second segment of 3 characters and last segment beginning with 1.  20-2001-? Filter all accounts beginning with segments 20-2001-999-99-Z-ZZZ 20-2001-???-00- Filter all accounts beginning with segments	4????		
20-2001-? Filter all accounts beginning with segments 20-2001-999-99-Z-ZZZ  20-2001-???-00- Filter all accounts beginning with segments	4000-???-1?	4000, second segment of 3 characters and	
20-2001- 20-2001-999-99-Z-ZZZ 20-2001-???-00- Filter all accounts beginning with segments	20-2001-2	Filter all accounts beginning with segments	20-2001-000-00-A-AAA up to
20-2001-???-00- Filter all accounts beginning with segments	20-2001-:	20-2001-	20-2001-999-99-Z-ZZZ
	20-2001-???-00-	Filter all accounts beginning with segments	20-2001-000-00-A-COM up to
A-COM <b>20-2001-</b> and ending with <b>-00-A-COM</b> 20-2001-999-00-A-COM	A-COM	20-2001- and ending with -00-A-COM	20-2001-999-00-A-COM
Filter all accounts beginning with segment 40000-AA up to 40000-ZZ	40000-??		40000-AA up to 40000-ZZ
40000-S? Filter all accounts beginning with 40000-S 40000-SA to 40000-SZ or	40000-S?	Filter all accounts beginning with 40000-S	40000-SA to 40000-SZ or

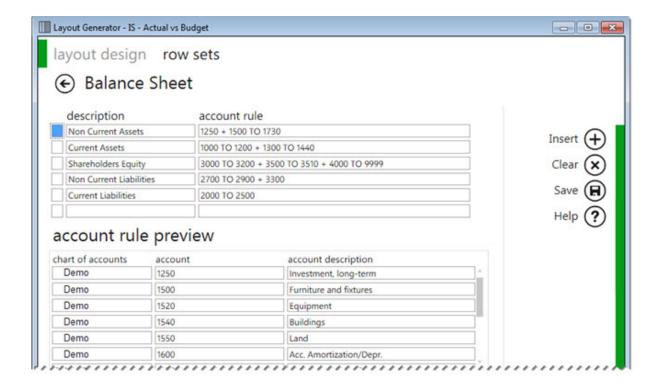
Filter	Description	Results may include:	
		40000-S1 to 40000-S9	
40?00-AA	Filter all accounts beginning with <b>40</b> and ending with <b>00-AA</b>	40000-AA to 40900-AA	
24400?	Filter all accounts beginning with 24400	All accounts starting with 244000 up to 244009 with any characters thereafter.	
4?00 TO 5?00	In a single segment range, filter accounts ranging from 4000 to 5900.	Sage Intelligence Reporting will determine the low end of the range which is 4000 and the high end of the range which is 5900 and return all accounts between the ends inclusive. 4000 up to and including 5900, which would include for example, account 4655.	
	<b>Tip</b> : If you wanted to only include accounts ending with 00, you could <u>create a Reporting Tree</u> unit with a filter of ??00 to further filter the results.		
4?5-00-00 to 4?5-03-03	Filter accounts with first segment ranging from 405 up to and including 495 and second and third segments ranging from 00-00 up to and including 03-03.	Sage Intelligence Reporting will determine the low end of the range which is 405-00-00 and the high end of the range which is 495-03-03 and return all accounts between the ends inclusive. 405-00-00 up to and including 495-03-03 which would include for example, account 406-01-02.	
	<b>Tip</b> : If you wanted to only include accounts with the first segment starting with a 4 and ending with a 5, you could <u>create a Reporting Tree unit</u> with a filter of 4?5-??-?? to further filter the results.		

# Using Mathematical Calculations in Row Sets

Mathematical calculations can be used to define the list of accounts to return in your row sets. This includes addition (+) and subtraction (-).

**Note:** The use of a space on either side of the + and/or – signs are required in order for the formula to be calculated correctly. Brackets are also supported thus calculations in brackets (parenthesis) are calculated first. For example, accounts **(700 + 705) - 840**.

Wildcards can be used in combination with account ranges and mathematical calculations.

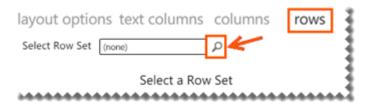


# Adding and Removing Account Rows

Before you can add rows into the Row area you will need to select a <u>Row Set</u>. If you do not have a row set available, you can add one by using the <u>Row Sets</u> tab at the top of the window. The row set determines the rows that will be available for you to select in the rows tab.

#### Selecting a Row Set

1. In the rows tab, click the magnifying glass to view the available row sets.

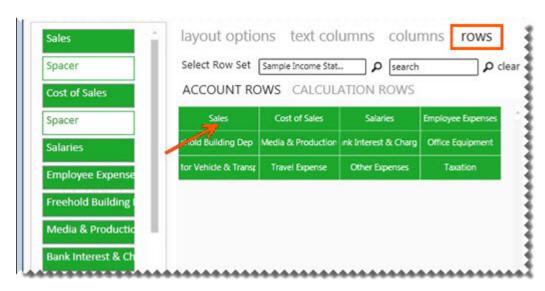


2. Select a row set.

The Rows area determines what you see down the left side of the report layout.

#### **Adding Rows**

1. Click on the fields from the Rows tab to add them into the rows area. You can also click on fields from the standard calculated row fields. These standard calculated fields ship with the Report Designer layouts but you are able to edit, add new, or delete calculated fields.



**Note:** Any new fields will be added to the bottom of the Rows area or above the last field selected. It will also appear in the same order in the Microsoft Excel report layout.

**Tip:** The order can be changed by dragging and dropping the fields in the Layout Generator Rows area into the correct order.

2. You can add spacers by clicking **Add Spacer** which adds a blank row in your report layout. Spacers can be dragged and dropped into position to neaten your report layout.

# Removing a Single Row

1. To remove a single row, you can right-click on the row in the Rows area.



Clearing all of the fields from the Rows area

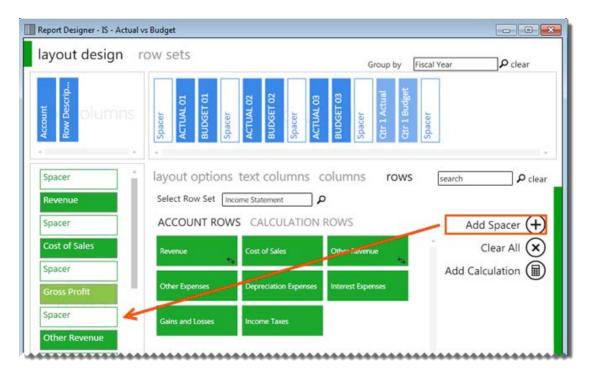
1. Click Clear All.



# Adding a spacer to the Rows area

A spacer will insert a blank row allowing for easier analysis and/or neater report layouts.

Click Add Spacer.

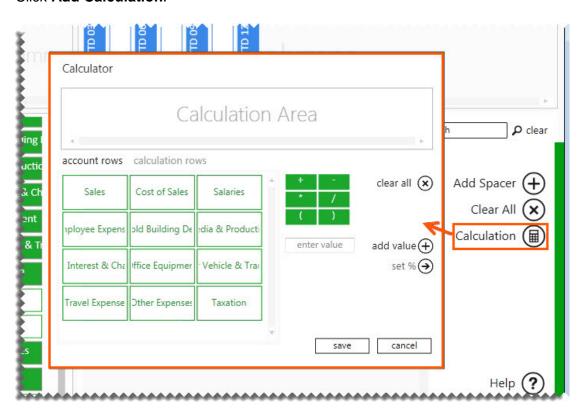


#### Calculation Rows

## **Creating New Calculation Rows**

New calculations can be added by right-clicking in the calculated items area and selecting **New Calculation** or by doing the following:

- 1. Select the **Rows** tab.
- 2. Click Add Calculation.



The calculator will open.

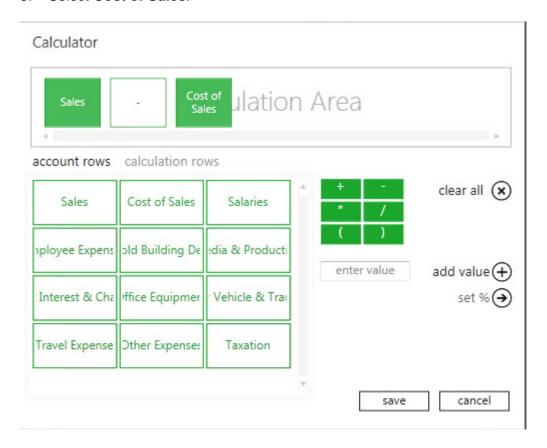
The following list explains the use of each button/feature.

Feature	Description		
Clear all Clears all fields from the Calculation Area.			
Account columns	These are standard rows that can be used in formulas. When creating a formula for a row, the rows appear here, such as Sales and Cost of Sales.		
Calculation columns	These are the calculated fields which are already created which can be used in formulas.		
Functions	Include your addition, subtraction, multiply, divide and parenthesis.		
Scroll bar	Scrolls between all the all the saved standard items.		
Add value	Allows you to add a value in the formula you create. For example calculating GP%. You would need to include a value of 100 to build this formula ( GP/Sales)*100		
Save	Will save the formula you create. A window appears where you can name		

Feature	Description		
	the formula. The formula will be saved and will appear as a button in the calculated field's area of your Layout Generator.		
Set %	Displays the results of the formula as a percentage, rather than an amount.		
Cancel	Will close the calculator.		

As an example, to create a formula for Gross Profit.

- 1. Select Sales.
- 2. Select the minus sign (-)
- 3. Select Cost of Sales.



- 4. Select Save.
- 5. Enter the formula name as Gross Profit.

# **Managing Calculation Rows**

Calculated fields are available as standard with the supplied row sets, however you will need to add your own calculated fields to any new row sets you add.

## Accessing calculated fields

- 1. In the Rows Area, click Calculation Rows.
- 2. Right-click in the calculated fields area.
- 3. You can now Edit, Delete or create a New Calculation.

## Deleting a calculated field

- 1. Select **Delete Calculation.**
- 2. A confirmation message will appear. Select **Yes**.

## Editing a calculated field

- Select Edit Calculation.
- 2. The <u>Calculator</u> will open allowing you to edit the currently selected formula.

## Converting a Negative Number to Positive

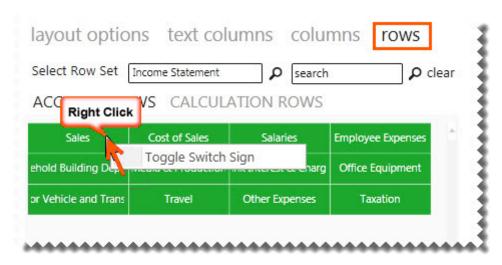
In the Layout Generator, when you generate a pre-defined layout, you will notice that certain fields in the row set show as a negative value, in particular, sales accounts which are stored as negative values in Sage 500 ERP.

By default the field's sign status will be the same as that of the underlying data – for sales accounts this will be negative values. You have the option to change the sign of any of these fields to a positive.

This is important for accounts with credit values such as income accounts. Without this option, these accounts would appear as negative amounts; whereas, most financial statements show sales, for example, as positive amounts.

Switching the sign of fields

1. Right-click on the field that you want to change the sign of.



 Click on Toggle Switch Sign. This will then switch the sign of this field from its default value in the underlying data. If it is negative, it will become positive, and vice versa. An icon will appear indicating that the sign has been switched.



Example: Before switching the sign on **Revenue**:



# After switching the sign on Revenue:

	ACTUAL01	ACTUAL02	ACTUAL03
Revenue	7 136 482	6 792 364	7 522 240
Cost of Sales	2 582 306	2 387 718	2 283 596
Gross Profit	4 554 176	4 404 646	5 238 644
~~~~~	*****		*****

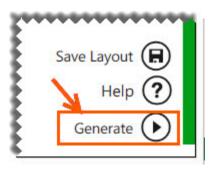
# **Learn More:**

Reversing Negative Numbers using formulas added by the Report Designer in Excel.

#### Generating your Layout

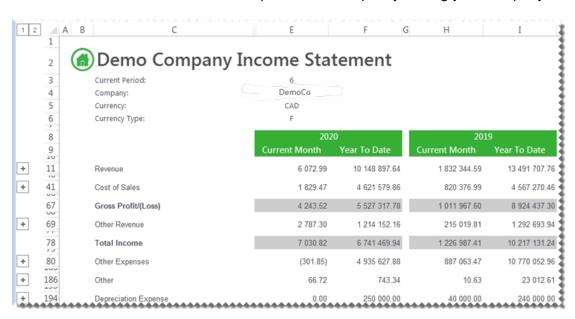
Once you have designed your new layout as per your specific requirements, you can generate your layout.

1. Select Generate Layout.



Once you have generated your layout, your report layout is opened as per your design in Microsoft Excel.

2. You can then customize it further if required, for example by adding your company branding.



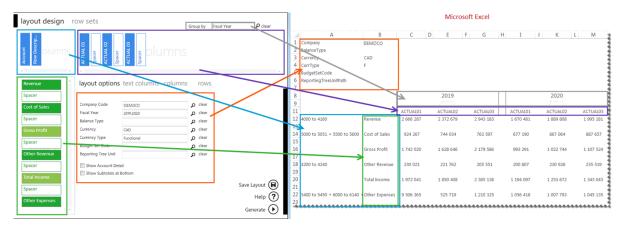
Save your changes for future reuse as a template or as a report with static data.

#### Learn More:

For a better understanding on the generated layout, click here.

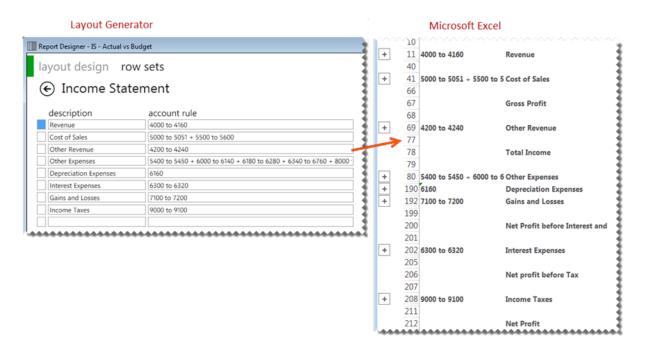
#### Understanding the Microsoft Excel Workbook

If you designed a layout using the criteria below, it would yield the layout on the right in Microsoft Excel. The data and fields will differ depending on the accounting application you are using.



The <u>layout options</u> are always listed on the top left of the report. These can be changed in Microsoft Excel at any time resulting in your report being immediately updated to reflect the new data.

The groups of account rows are set by the row set selected in the Layout Generator.



If you have an intermediate knowledge of Microsoft Excel and you would like to customize your layout further, you can use the Task Pane. Designing layouts using the Layout Generator or the Task Pane results in the same formulas being inserted into Microsoft Excel.

When your layout is generated, the period row is automatically hidden by Sage Intelligence Reporting.

5	CurrType	F			~~~~~~
6	BudgetSetCode				- 1
7	ReportingTreeUnitPath				
8			Ί	2	3
9			ACTUAL01	ACTUAL02	ACTUAL03
10					3
11	4000 to 4160	Revenue	2 300 771	2 541 361	2 679 310
40					- 1
41	5000 to 5051 + 5500 to 5	Cost of Sales	924 040	1 207 814	1 207 767
66					- 1
67		Gross Profit	1 376 731	1 333 548	1 471 544
68					
69	4200 to 4240	Other Revenue	200 807	230 928	235 519
77					- 1
78		Total Income	1 577 538	1 564 475	1 707 063
/ long	*****	****	****	*****	********

### **Designing a Basic Income Statement**

This is a demonstration on how to design a basic income statement using the Layout Generator. A basic accounting knowledge is required.

1. On the **BI Tools** tab, select **New Layout**.



- 2. A prompt will appear for the layout name. Type a descriptive name so that you can easily identify your layout in future.
- 3. Click **OK**. The Layout Generator will appear.

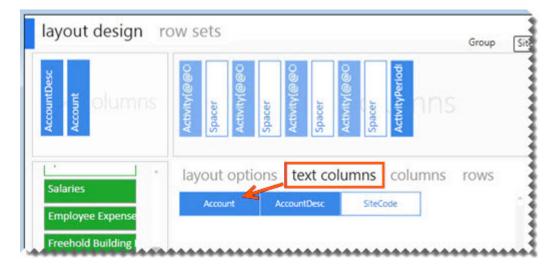
#### **Adding Layout Options**

**Tip:** The Layout options act as initial filters for your entire layout. Reports that return huge data sets can be difficult to analyze and can cause performance issues. Filtering is a quick and easy way to find and work with only the data you need. Instead of your report extracting millions of records, filtering extracts only the necessary data resulting in faster more efficient reports.

4. Using the magnifying glass, select all the required filters for your layout.

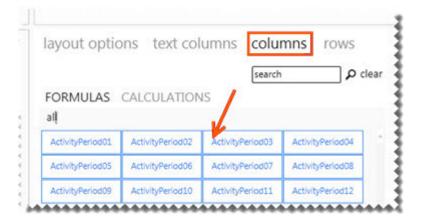
#### **Adding Text Columns**

 Click on the required text column from the columns listed under Text Columns. The account number and account description are typical text columns on a financial report.



### **Adding Columns**

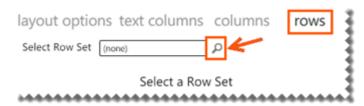
1. Click on the required formula columns listed in the **Column** tab. Periods are typical formula columns on a financial statement.



2. You can neaten your report layout by adding spacers. Clicking **Add Spacer** inserts a blank column. Spacers can be dragged and dropped into position.

## Selecting a Row Set

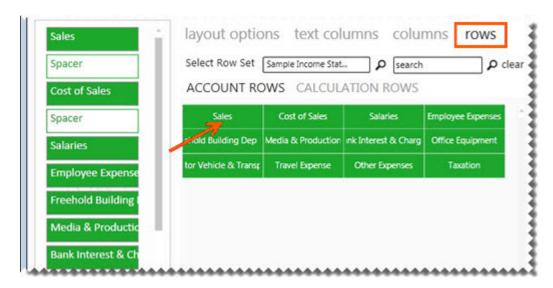
1. In the rows tab, click the magnifying glass to view the available row sets.



2. Select a row set.

#### **Adding Rows**

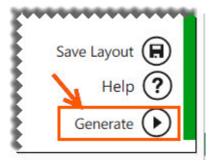
1. Click on the fields from the Rows tab to add them into the rows area. You can also click on fields from the standard calculated row fields. These standard calculated fields ship with the Report Designer layouts but you are able to edit, add new or delete calculated fields.



2. You can add spacers by clicking **Add Spacer** which adds a blank row in your report layout. Spacers can be dragged and dropped into position to neaten your report layout.

#### Generating the Layout

- 1. Once you have designed your new layout as per your specific requirements, you can generate your layout.
- 2. Select Generate.



Once you have generated your layout, your report layout is opened as per your design in Microsoft Excel.

A	A	В	C	D	E	F	G	Н
1	Company	DEMOCO						
2	Year	2019						
3	BalanceType							
4	Currency	CAD						
5	CurrType	F						
6	BudgetSetCode							
7	ReportingTreeUnitPath							
9			ACTUAL01	ACTUAL02	ACTUAL03	ACTUAL04	ACTUAL05	ACTUALO
10	4000 to 4160	Revenue	2 666 287	2 372 679	2 943 183	1 748 855	1 928 359	1 832 34
11								
12	5000 to 5051 + 5500 to 5600	Cost of Sales	924 267	744 034	763 597	685 689	629 307	820 377
13								
14		Gross Profit	1 742 020	1 628 646	2 179 586	1 063 166	1 299 052	1 011 96
15								
16	4200 to 4240	Other Revenue	230 021	221 762	205 551	215 559	204 781	215 020
17								
18		Total Income	1 972 041	1 850 408	2 385 138	1 278 724	1 503 833	1 226 98
19								
20	5400 to 5450 + 6000 to 6140 + 6	5180 Other Expenses	9 506 365	525 719	1 210 325	973 064	974 717	1 014 73
21		*****	****	****		****		****

You can then customize your report layout further if required, for example by adding your company branding. Save your changes for future reuse as a template or as a report with static data.

# **Working with Existing Layouts**

## Accessing and Generating Existing Report Layouts

When you've run your <u>Financial Report Designer</u> report, the workbook will open in Microsoft Excel and the Report Designer functions will load.

The workbook is shipped with a few demonstration layouts which have been designed for you to view your company financial data. You can use these layouts to work from, or you can create a new layout from scratch.

#### Generating an Existing Report Layout

The **layouts** tab will list the existing report layouts that ship with the Report Designer and any new layouts that you have created in the Layout Generator. These can also be accessed from the **BI Tools** tab, **Quick Generate** menu.

- 1. From the **Layouts** tab, click the layout you'd like to generate.
- 2. The **Generating Layout** window will appear showing you the progress.

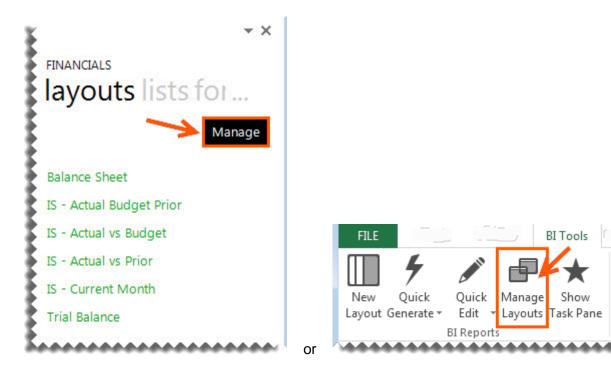


The layout will then open in Microsoft Excel in a new worksheet.

#### Managing Existing Layouts

The **layouts** tab will list the existing report layouts that ship with the Report Designer Layout Generator and allow you to manage or generate them.

1. On the Task Pane, from the **layouts** tab, select **Manage** or alternatively from the **BI Tools** tab, select **Manage Layouts**.



2. The Layout Management window will appear.

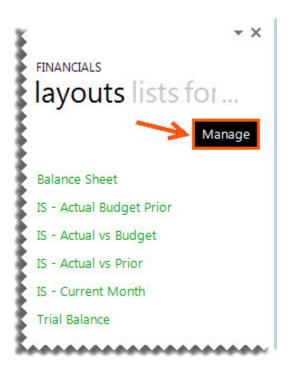


From this window you can choose to <u>edit</u>, <u>copy</u>, <u>delete</u> or generate a layout.

#### **Editing Layouts**

Editing an existing layout opens the Layout Generator which allows you to modify the layout.

1. From the layouts tab, select Manage.



2. The Layout Management window will appear.



From this window you can choose to edit, copy, delete or generate a layout.

- 3. Select the layout you wish to edit and select Edit.
- 4. The Layout generator will appear.

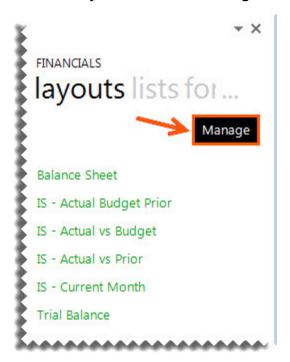
Make the necessary changes.

5. Click **Generate** to view your report in Microsoft Excel.

## **Copying Layouts**

Selecting **Copy** will create an exact copy of an existing layout. The **Enter New Layout Name** window will appear allowing you to give the copied report a new name.

1. From the layouts tab, select Manage.

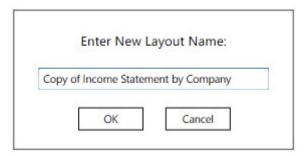


2. The Layout Management window will appear.



- 3. From this window you can choose to edit, copy, delete or generate a layout
- 4. Select the layout you would like to copy.
- 5. Click Copy.

6. The **Enter New Layout Name** window will appear allowing you to give the copied layout a new name.

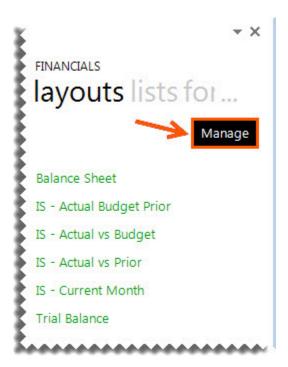


- 7. Select **Next**.
- 8. The Layout Generator will appear allowing you to make any changes to the copy of the layout.
- 9. Select **Generate** to open the layout in Microsoft Excel.

# **Deleting Layouts**

Deleting layouts allows you to remove any unneeded layouts from your workbook.

1. From the layouts tab, select Manage.



2. The Layout Management window will appear.



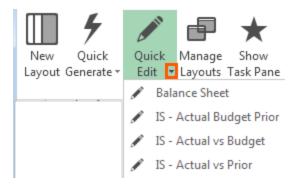
From this window you can choose to edit, copy, delete or generate a layout.

- 3. Select the layout you wish to delete.
- 4. Select **Delete**.
- 5. A confirmation window will appear. Selecting **Yes** will permanently delete the report layout. Selecting **No** will return you to the previous window.



#### **Quickly Editing Layouts**

The **Quick Edit** option allows to easily edit a layout without having to launch the Layout Generator from the **Manage Layouts** option.

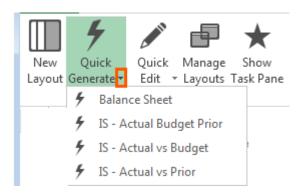


- 1. From the **BI Tools** tab, select **Quick Edit**. A drop down menu will appear.
- 2. Select the layout you wish to edit. The layout will open in the <u>Layout Generator</u>.

## **Quickly Generating Layouts**

The **Quick Generate** option is a drop down menu of all the layouts you have previously saved.

1. From the **BI Tools** tab, select **Quick Generate**. A drop down menu will appear.



2. Select the layout you wish to generate. The report will open in Microsoft Excel.



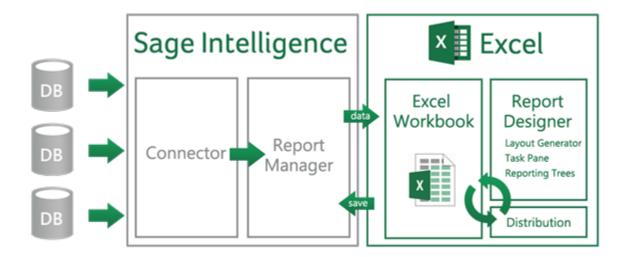
## **Designing Reports using the Task Pane**

### **About The Report Designer Task Pane**

The Task Pane is the latest addition to the Report Designer module which presents an alternative to the Layout Generator to empower you to take control of all design aspects of your reporting layouts.

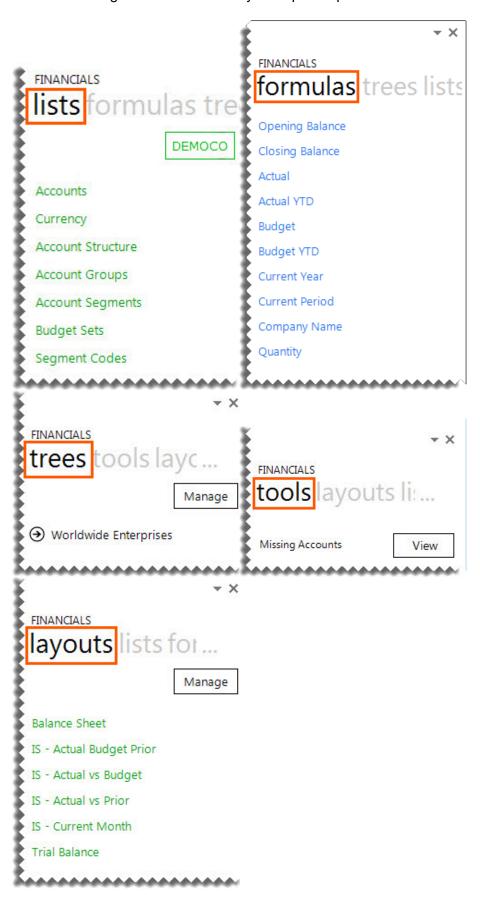
The model behind the new feature is to break down a report into reusable pieces that allows you to control where and how these pieces fit together to create a report. These pieces are Excel functions which communicate with a new In-Memory processing engine which will guarantee performance by being able to crunch financial numbers very quickly.

The positioning of the Task Pane within the overall Sage Intelligence Reporting product is as follows:



### **Navigating within the Task Pane**

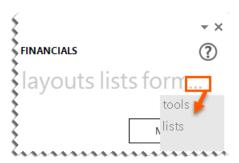
The Task Pane consists of <u>lists</u>, <u>formulas</u>, trees, tools and layouts, which can be used to give you complete control of all design aspects of your report. An intermediate knowledge of Microsoft Excel is beneficial to get the full benefit of your report capabilities.



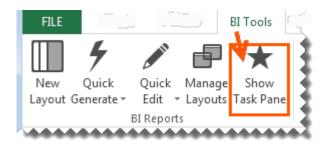
To switch between the tabs, click on the tab headings.



To see additional tabs, click on the ellipses.



If the Task Pane is closed in error, in the **BI Tools** tab in the Excel ribbon, click **Show Task Pane** to open the Task Pane again.



# **Accessing and Managing Existing Report Layouts**

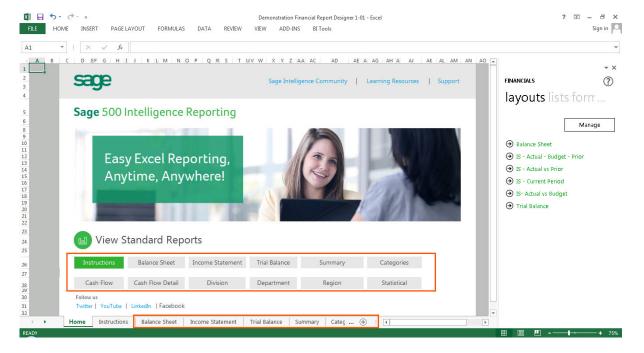
When you've run your Demonstration <u>Financial Report Designer</u> report, the workbook will open in Microsoft Excel and the Task Pane functions will load.



You can use these layouts to work from, or you can create a new layout from scratch.

#### Viewing Existing Layouts

There are several reports which have been designed for you. The shortcuts are provided for you or you can click the worksheets directly.

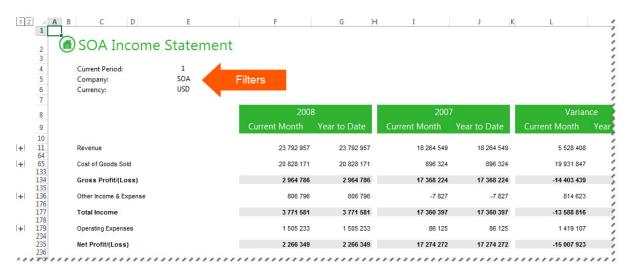


Clicking on the **Home** icon from any sheet, will return you to the **Home** sheet above.



### **Editing Existing Layouts**

Existing layouts can be edited using Microsoft Excel functionality. Filters can also be changed. If you're unsure, copy an existing worksheet and make changes to the copied worksheet.

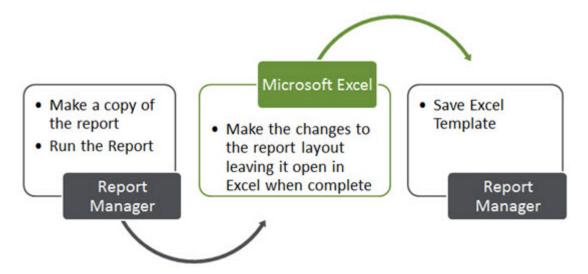


Remember to always save the workbook as an Excel template to keep the changes permanently.

### **Saving Reports**

The **Save Excel Template** option allows you to create a template from an open Microsoft Excel workbook and link it to an existing report. This allows you to standardize the format of the report every time you run it. The process is the same for any Sage Intelligence report.

The process to save the Microsoft Excel report template is as follows:

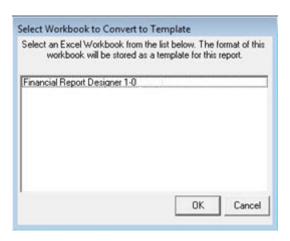


Open the Report Manager.

**Tip:** If you're unsure of making changes to any of the standard reports, you should create a copy of the report first and make the changes to the copied report.

- 2. Select and run the report you want to customize.
- 3. In Microsoft Excel, make the changes to the report.
- 4. After completing the changes, leave the workbook open and go back to the Report Manager.
- 5. Click on the report for which the changes were made, and select **Save Excel Template**.
- 6. In the window that appears, select the Microsoft Excel workbook which contains the changes you made.

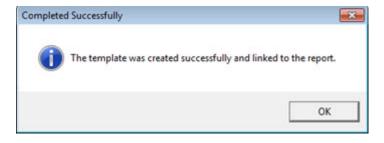
**Warning:** All Microsoft Excel workbooks that you have open will be listed in the window, so ensure you select the correct Microsoft Excel workbook to use as a template for your report.



- 7. Click OK.
- 8. When prompted to specify the template name, change the name of the template. Doing so ensures that the original template is not overwritten with the copy.

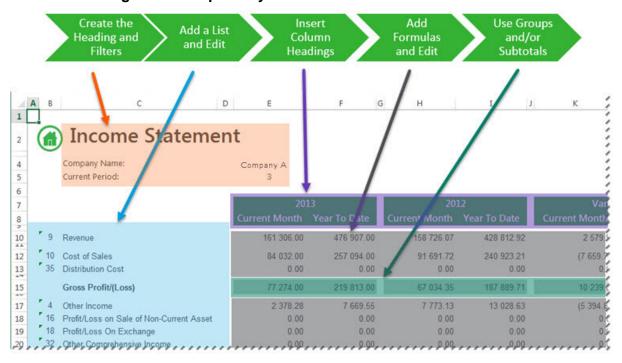


9. Click **OK**. Once the template has been successfully linked, the Microsoft Excel workbook is automatically closed and a confirmation window appears.



10. Click **OK**.

# **Process to Design a New Report Layout**

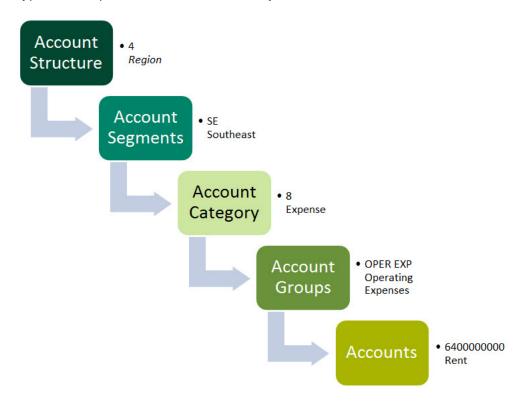


#### Lists

## Understanding the Sage 500 ERP Intelligence List Structure

Lists are retrieved from the General Ledger and can be used to view some of the key information, for example, accounts and budget codes. Information from the lists are used in formula arguments to extract specific data.

To understand the list structure, the General Ledger hierarchy must be understood. Below is a typical example of an account hierarchy.



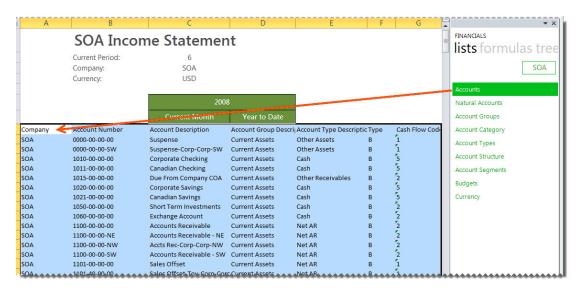
List Name	Example	
Accounts	6020-00-10-00 6400-00-10-00 7200-00-00-00 7510-00-00-00	Salaries - Sales Rent - Sales Office Supplies Telephone Expense
Natural Accounts	4500 4510 6020	Cost of Sales Purchases Salaries
Account Groups	CURR LIAB LT LIAB REVENUE COGS	Current Liabilities Long Term Liabilities Revenue Cost of Goods Sold
Account Category	1 2 4 5	Asset Liability Revenue Cost of Sales
Account Types	24	Other Assets

List Name	Example		
	19 23 25	Cash Prepaid Expenses Current Liabilities	
Account Structure	1 2 3	Main Division Department	
Account Segments	2 3 4	Division Department Region	
Budgets	Current Budget ApprBudget	Current Budget Approved Budget	
Currency	CAD GBP USD	Natural Currency Natural Currency Home Currency	

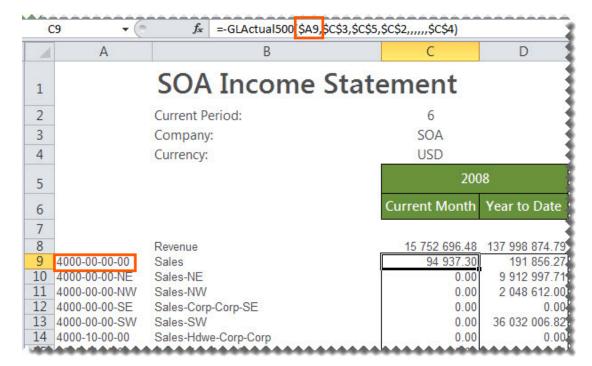
### **Adding Lists**

There are various lists that can be used to view some of the key information, for example, account numbers and budget codes.

1. Drag-and-drop lists that you require from the Task Pane to your Microsoft Excel worksheet.

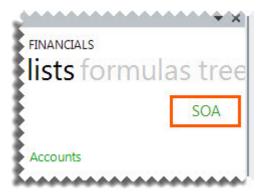


You can use the information from your lists, in your formulas to return specific data.



## **Changing Companies**

Lists are always returned from the company code which is selected in the Task Pane on the **lists** tab.



If you have consolidated multiple company's data, you can select a different company from the company drop down list.

1. Click on the company code.



2. Select a new GL Company Code from the drop down options.

Note: The company code is obtained from your Sage 500 ERP General Ledger.

#### **Formulas**

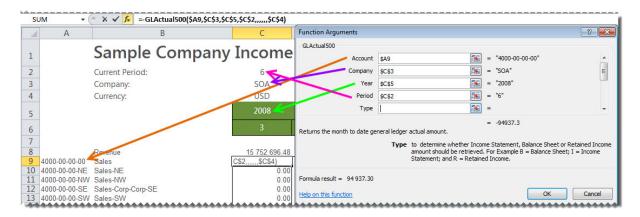
#### Using Cell References

The recommended method for entering data into the Sage Intelligence Reporting formulas is by using cell references. This method makes modifying and maintaining your worksheet easier.

A cell reference identifies the location of a cell or group of cells in a spreadsheet. A cell reference consists of the column letter and row number that intersect at the cell's location. When listing a cell reference, the column letter is always listed first.

For example, if you wanted information for the year **2013** and you used **2012** in the **Year** argument of the **Actual** formula, you would have to modify every formula that used the old value. If you store the year in a cell, you simply change that one cell and Microsoft Excel updates all the formulas that use that argument.

The following is an example of a formula using cell references as arguments.



Tip: Excel named ranges can also be substituted for a cell reference in any function argument.

### Using Relative or Absolute Cell References

There are two types of cell references in Microsoft Excel: relative and absolute. Relative and absolute references behave differently when copied and filled to other cells.

By default, a spreadsheet cell reference is relative. This means that as a formula is copied and pasted to other cells, the cell references in the formula change to reflect the formula's new location. For example, if you copy the formula **=A1+B1** from row **1** to row **2**, the formula will become **=A2+B2**. Relative references are especially convenient whenever you need to repeat the same calculation across multiple rows or columns.

In contrast, an absolute cell reference does not change when its formula is copied and pasted to other cells.

An example of a relative cell reference would be **A1** or **B2**. An example of an absolute cell reference would be **\$A\$1** or **\$B\$2**.

You can also mix absolute and relative cell references. An example would be copying a cell reference of **\$B1**, the column reference will remain **B** but the row reference will change to reflect the formulas new location.

#### **Relative Cell References**

- Default Setting
- · Change when copied
- =A1+B1
  - =A2+B2
- =A1+B1
  - =B1+C1

# Absolute Cell References

- Press F4 or \$
- Do not change when copied
- =\$A\$1+\$B\$1
  - =\$A\$1+\$B\$1
- =A1+B\$1
- =A2+C\$1
- =A1+\$B1
  - =A2+\$B2

If you are entering a value in your formula, be sure to include any alpha-numeric data in double-quotes (" "). This will ensure that Microsoft Excel interprets the value as a text value and not a cell reference.

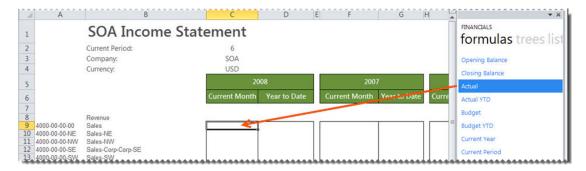
### **Adding Formulas**

Formulas are used to define columns for the report, where the type of formula used determines what data will be retrieved.

Formulas are dragged into the Excel workbook to allow you to return balances from the Sage 500 ERP General Ledger based on provided parameters. Each parameter acts as a filter.

There are two ways to add formulas to your Microsoft Excel spreadsheet.

1. In the Task Pane **formulas** tab, click on the formula. Drag-and-drop the formula onto your Microsoft Excel spreadsheet.



2. Type the equal sign (=), followed by the formula name, directly into the Excel sheet cell or formula bar.

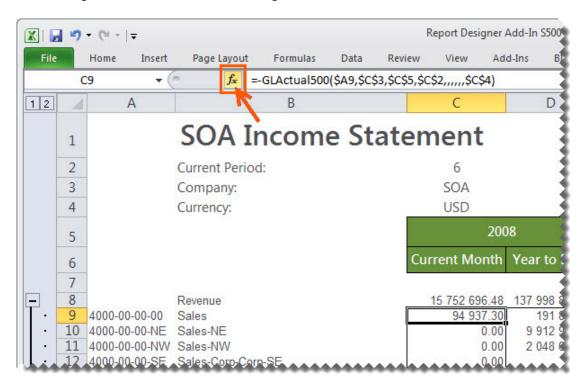


### **Editing Formulas**

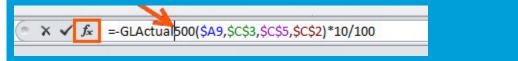
#### Editing Formulas

Formulas can be dragged into the Excel workbook to allow you to return balances from the Sage 500 ERP General Ledger based on provided parameters. Each parameter acts as a filter. Formulas are used to define columns for the report where the type of formula used determines what data will be retrieved. There are two ways to edit the formulas.

• The formula settings (function arguments window) can be accessed by clicking on the cell containing the formula and then clicking fx.

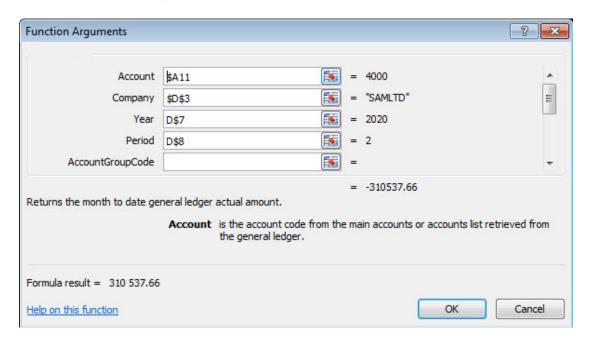


**Tip**: If there is more than one formula in a cell, only the formula result will be shown unless you click the specific formula you want to edit in the formula bar, before clicking **f**x.

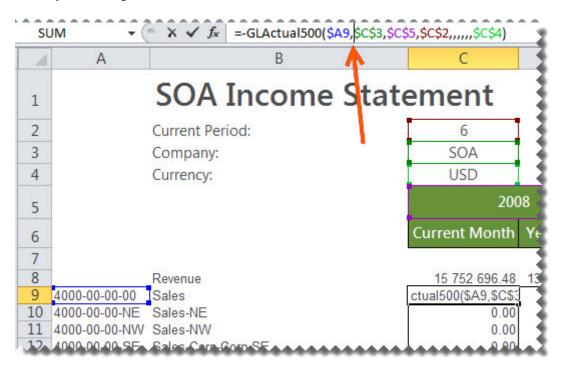


The formula parameters provided in the Function Arguments window will be used to specify
what data is retrieved by the formula. Each setting serves as a filter to retrieve the data. The
filter is applied in the order that the settings are displayed.

In the following formula example, **Account** is applied first, followed by **Company**, **Year**, **Period**, **AccountGroupCode**in that order.



Formulas can be edited manually if you are familiar with the format of the formula. Select the
cell which contains the formula and then double-click the parameter within the formula bar and
make your changes.



#### **Using Account Ranges**

Ranges can be used to define the list of accounts to return in your Sage Intelligence Reporting formulas, without specifically naming each account.

A range consists of two accounts where you want to retrieve data for those two accounts and every value between those two. This is indicated by using **TO** between your start and end value of your range. Alpha characters are also supported in an account range.

**Note:** You must use a space before and after **TO** in order to ensure clear distinction of your start and end range values.

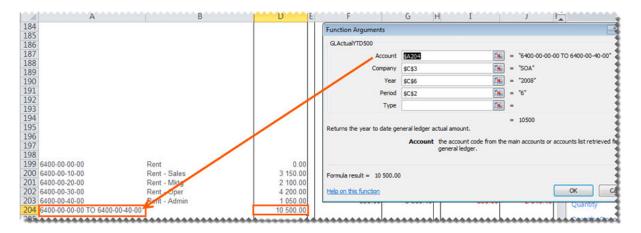
An example could be: A to Z; to return all values from A, A11, B2, C etc. to Z.

Wildcards can be used in combination with <u>account ranges</u> and <u>mathematical calculations</u>. When a single-segment or <u>multi-segment</u> range includes <u>wildcard characters</u> (?), Sage Intelligence Reporting determines the low and high ends of the range, and then includes all values between those ends, inclusive.

Some examples of using account ranges:

Account Range	Description	Result	
200-00-00 TO 220-00-50	Filter all accounts from 200-00-00 up to and including 220-00-50	200-00-00, 200-00-01 200-00-02 up to 220-00-50	
4?00 TO 5?00	In a single segment range, filter accounts ranging from 4000 to 5900.	Sage Intelligence Reporting will determine the low end of the range which is 4000 and the high end of the range which is 5900 and return all accounts between the ends inclusive. 4000 up to and including 5900, which would include for example, account 4655.	
	<b>Tip</b> : If you wanted to only include accounts ending with 00, you could <u>create a Reporting Tree</u> unit with a filter of ??00 to further filter the results.		
4?5-00-00 TO 4?5-03-03	In a multi-segment range, filter accounts with first segment ranging from 405 up to and including 495 and second and third segments ranging from 00-00 up to and including 03-03.	Sage Intelligence Reporting will determine the low end of the range which is 405-00-00 and the high end of the range which is 495-03-03 and return all accounts between the ends inclusive. 405-00-00 up to and including 495-03-03 which would include for example, account 406-01-02.	
	<b>Tip</b> : If you wanted to only include accounts with the first segment starting with a 4 and ending with a 5, you could <u>create a Reporting Tree</u> unit with a filter of 4?5-??-?? to further filter the results.		

The account range would be used in the cell which is referenced by the **Account** argument.



**Tip:** Use account ranges or <u>dynamic account ranges</u> to ensure new accounts being added to the General Ledger are included in your reports.

#### **Learn More:**



Watch the video online:
About Dynamic Account Ranges

# **Using Account Wildcards**

Wildcards can be used to define the list of accounts to return in your Sage Intelligence Reporting formulas, without specifically naming each account.

A wildcard character is a keyboard character such as an asterisk (\*) or a question mark (?) that is used to represent one or more characters.

The following wildcards are available:

Wildcard character	Use	Example
Question Mark?	Use the question mark as a substitute for any one of the 36 characters, A through Z and 0 through 9. Multiple question marks (??) can be used to indicate the number of characters to be substituted. Sage Intelligence Reporting replaces each question mark (?) with the entire range of possible values, including letters. For example, in the range from 12?0 TO 12?4, Sage Intelligence Reporting replaces the question mark in 12?0 with the lowest value in the character set, and replaces the question mark in 12?4 with the highest value in the character set. The question mark (?) can be placed in any position of an account segment. For example, if the rule contains only natural segment values (assuming a four-character natural segment), entering 4??? in a row, all accounts whose natural segment value begins with a 4 will be included.	A??1 to return A001 to AZZ1.
Asterisk *	Use the asterisk to substitute any number of characters or numbers. The asterisk can only be placed alone to return all accounts	* to return every account

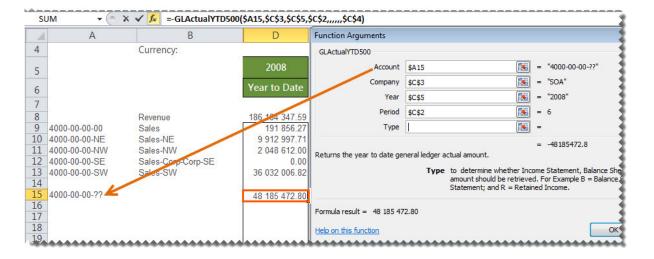
Wildcards can be used in combination with <u>account ranges</u> and <u>mathematical calculations</u>. When a single-segment or <u>multi-segment</u> range includes <u>wildcard characters</u> (?), Sage Intelligence Reporting determines the low and high ends of the range, and then includes all values between those ends, inclusive.

Some examples of using wildcards:

Filter	Description	Result	
10?	Filter all accounts beginning with 10	All accounts starting with 100 up to 109 with any digits thereafter	
101-0?-00	Filter accounts with first segment of 101 and last segment of 00 with second segment of two digits beginning with 0		
201-??-10	Filter accounts with first segment of 201 and last segment of 10 with no filter on second segment of three digits	201-00-10 201-01-10 201-02-10 201-03-10 up to 201-99-10	
4?00 TO 5?00	In a single segment range, filter accounts ranging from 4000 to 5900.	Sage Intelligence Reporting will determine the low end of the range which is 4000 and the high end of the range which is 5900 and return all accounts between the ends inclusive. 4000 up to and including 5900, which would include for example, account 4655.	
	<b>Tip</b> : If you wanted to only include accounts ending with 00, you could <u>create a</u> <u>Reporting Tree</u> unit with a filter of ??00 to further filter the results.		

Filter	Description	Result
4?5-00-00 TO	In a multi-segment range, filter accounts with first segment ranging from 405 up to and including 495 and second and third segments ranging from 00-00 up to and including 03-03.	Sage Intelligence Reporting will determine the low end of the range which is 405-00-00 and the high end of the range which is 495-03-03 and return all accounts between the ends inclusive. 405-00-00 up to and including 495-03-03 which would include for example, account 406-01-02.
4?5-03-03	<b>Tip</b> : If you wanted to only include accounts with the first segment starting with a 4 and ending with a 5, you could <u>create a</u> <u>Reporting Tree</u> unit with a filter of 4?5-??-?? to further filter the results.	

An example of using wildcards in Microsoft Excel using the **GLActual500** formula could be as follows:



# **Using Mathematical Calculations**

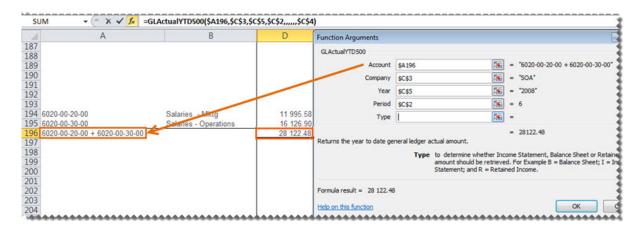
Mathematical calculations can be used to define the list of accounts to return in your Sage Intelligence Reporting formulas. This includes addition (+) and subtraction (-).

The mathematical calculation would be used in the cell which is referenced by the **Account** argument.

**Note:** The use of a space on either side of the + and/or - signs are required in order for the formula to be calculated correctly. Brackets are also supported thus calculations in brackets (parenthesis) are calculated first. For example, accounts (700 + 705) - 840.

Wildcards can be used in combination with account ranges and mathematical calculations.

For example, typing **6020002000 + 6020003000** in the cell will give a total figure for Account **6020002000** and Account **6020003000**.



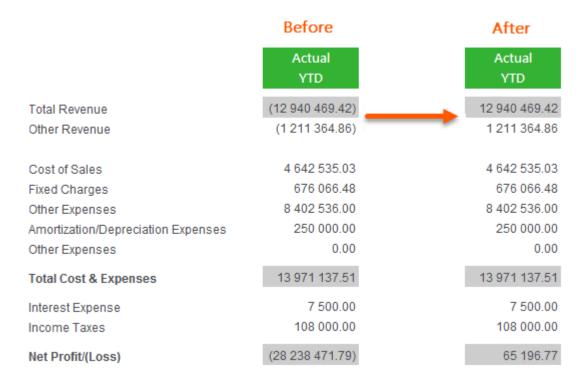
For example, typing 610101 + 610102 + 610103 in the cell which is linked to the Account setting will give a total figure for Account 61010, Account 610102 and Account 610103.

The mathematical calculation could be used in the cell which is referenced by the MasterSubAccount argument.

For example, typing 20-2001-038-00-D-GDS + 20-2001-077-00-D-GDS in the cell will give a total figure for Account 20-2001-038-00-D-GDS and Account 20-2001-077-00-D-GDS.

# Reversing Negative Numbers

By default the data will show the same as that of the underlying Sage 500 ERP data. For revenue accounts this may be negative values. You have the option to change these values to a positive number by editing the formula.



- 1. Click in the formula bar.
- 2. Add (minus) to the beginning of the formula name.



3. Drag the fill handle down to copy these to other accounts requiring the same change. You can also double-click to fill the formula down, as far as the column to the left is filled with adjacent data.

## **Learn More:**

Converting a Negative Number to Positive using the Layout Generator

#### Displaying Cell Formulas instead of Values

To display all of the formulas used on your spreadsheet without clicking on each cell individually:

- 1. Press **Ctrl** ~. All of the displayed values will be replaced by the formulas used to calculate them.
- 2. Press Ctrl ~ again to return to displaying the values.

# **Catering for New General Ledger Accounts**

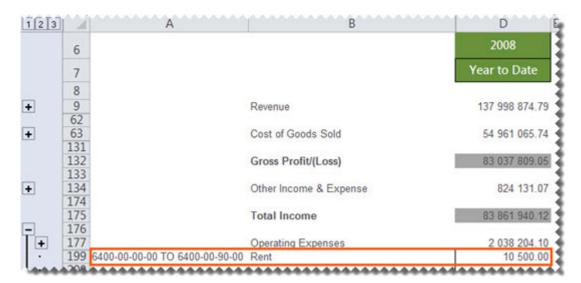
Use <u>account ranges</u>, <u>dynamic account ranges</u> or <u>wildcards</u> when designing your report to cater for new accounts that may be added to the General Ledger in the future.

An example would be if you wanted to summarize specific accounts instead of listing each one as per below.

The account range would be used in the cell which is referenced in the formula by the **Account** argument.



If any new accounts were added to the General Ledger, for example, **Account 6400-00-50-00 Rent - Showroom**, it would automatically be included in the **Rent** amount as it falls within the account range of **6400-00-00 TO 6400-00-90-00**. Therefore no changes would be required in your report layout.



# **Designing Financial Reports**

# Designing a Basic Income Statement

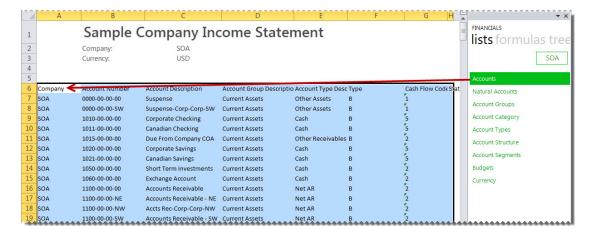
This is a demonstration on how to design a basic income statement. We will be using the **Accounts** list to report from with current period figures. A basic accounting knowledge is required.

1. In Microsoft Excel, set up your spreadsheet with a heading and the filters you would like to use.

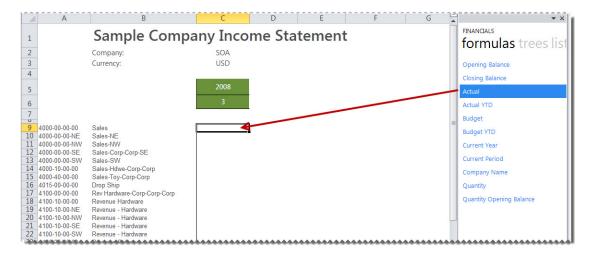


**Tip:** Reports that return huge data sets can be difficult to analyze and can cause performance issues. Filtering is a quick and easy way to find and work with only the data you need. Instead of your report extracting millions of records, filtering extracts only the necessary data resulting in faster more efficient reports.

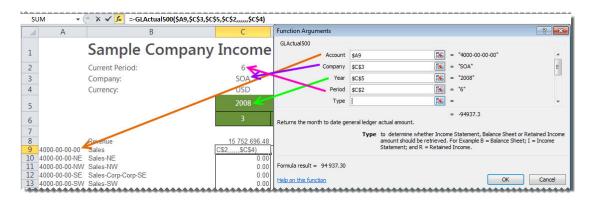
Drag-and-drop the Accounts from the Lists group. You will use this list to help create your report.



- 3. Delete the columns and the balance sheet accounts not required.
- 4. Insert a column heading for the year and period.
- 5. Drag-and-drop the **Actual** formula onto your spreadsheet in the same row as your first account.



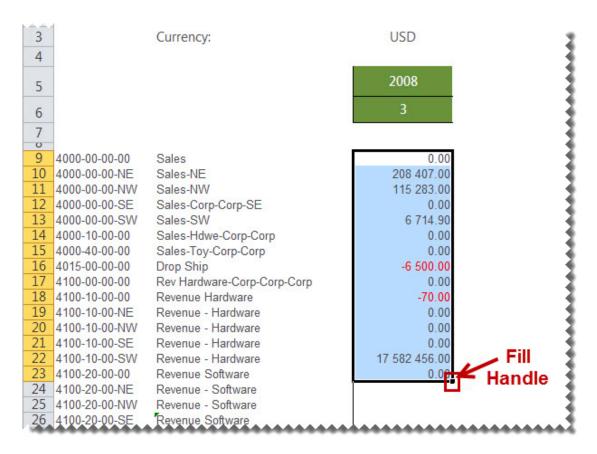
6. Change the **Actual** formula to link to the correct company, year and period. You can do this by clicking the **f**x button and making the changes or alternatively typing directly into the formula area.



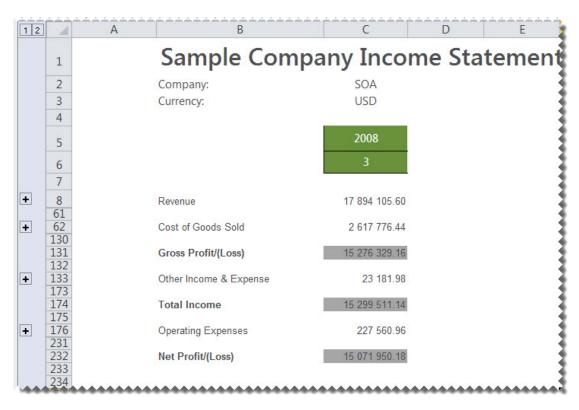
**Tip**: Change to absolute cell referencing where the cells remain constant. Refer to the topic **Using Relative or Absolute Cell Referencing**.

**Tip:** Some data may be stored as a <u>negative number</u> which causes your reports to reflect data incorrectly. Add a - (minus) to the beginning of the formula name to correct this. Drag the fill handle down to copy the formula to other rows requiring the same change.

7. Drag the fill handle to copy the formula down to all of the accounts.



- 8. Add headings, totals and formatting using Excel features and set your print area. Hide any rows or columns you do not wish to view in the final layout.
- 9. Use Microsoft Excel's **Group** feature to group rows under headings.



10. Run Save Excel Template in your Report Manager to save your report for future use.

#### Designing a Basic Balance Sheet

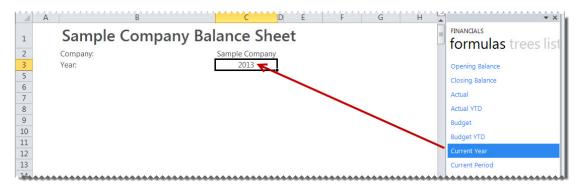
This is a demonstration on how to design a basic balance sheet. A basic accounting knowledge is required. We will be using the **Accounts** list to report the opening and closing balances.

1. In Microsoft Excel, set up your spreadsheet with a heading and the filters you would like to use.

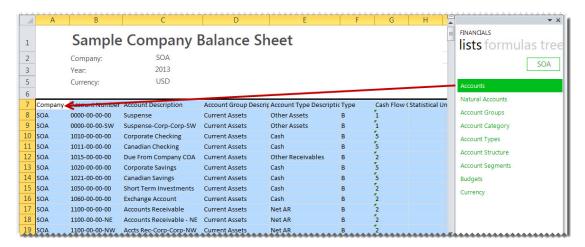


**Tip:** Reports that return huge data sets can be difficult to analyze and can cause performance issues. Filtering is a quick and easy way to find and work with only the data you need. Instead of your report extracting millions of records, filtering extracts only the necessary data resulting in faster more efficient reports.

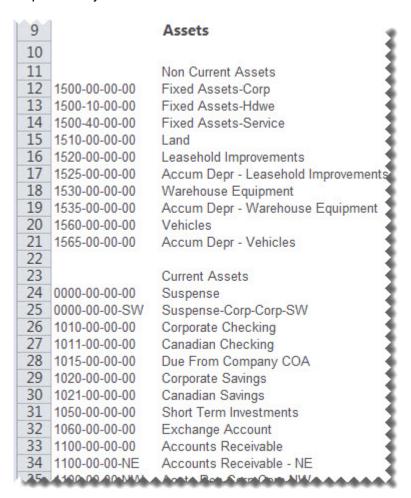
2. Drag the formula for Current Year into the correct cell.



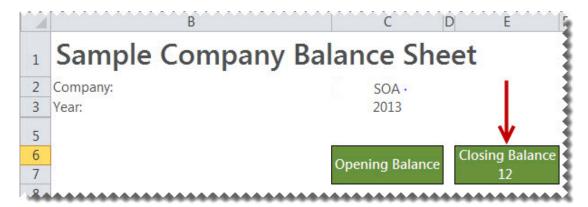
3. Drag-and-drop the **Accounts** list onto the spreadsheet. You will use this list to help create your report.



4. Delete the income statement accounts not required, and create headings and totals where required for your rows.

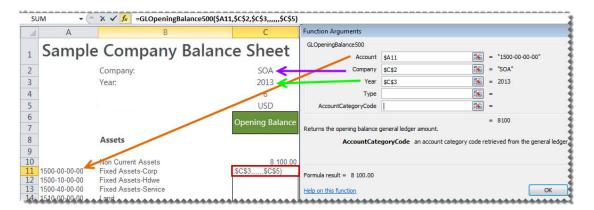


- 5. Add column headings for the **Opening Balance**.
- 6. Add a column heading for the **Closing Balance** and the period to report on.

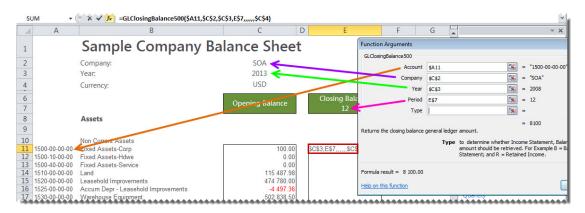


7. Drag-and-drop the **Opening Balance** formula onto your spreadsheet in the same row as your first account.

8. Change the formula to link to the correct account as well as the correct year. You can do this by clicking the **f**× button and making the changes or alternatively typing directly into the formula area.

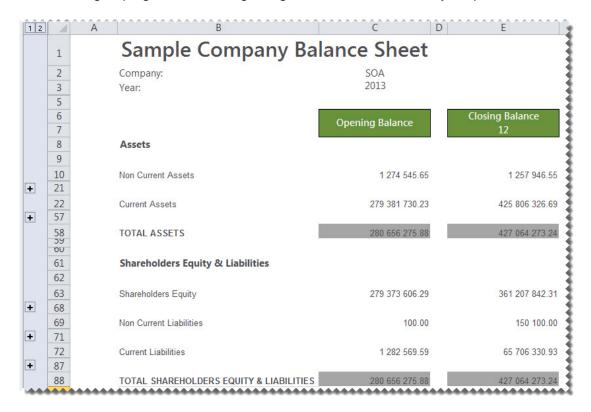


- 9. Drag the fill handle down to copy the formula to all the accounts required.
- 10. Drag-and-drop the **Closing Balance** formula onto your spreadsheet in the **Closing Balance** column in the same row as your first account.
- 11. Change the formula to link to the correct account as well as the correct year and month. You can do this by clicking the **f**x button and making the changes or alternatively typing directly into the formula area.



12. Drag the fill handle down to copy the formula to all the accounts required.

13. Add totals, grouping and formatting using Excel features and set your print area.

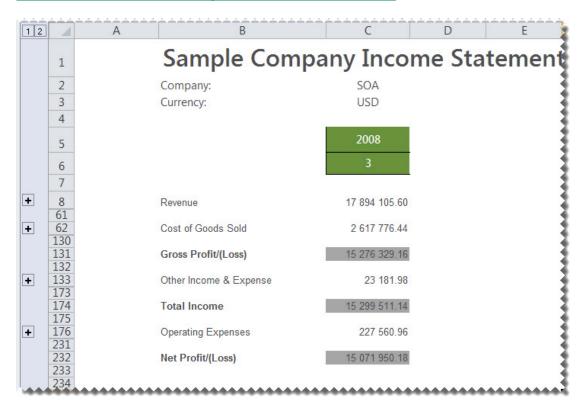


14. Run Save Excel Template in your Report Manager to save your report for future use.

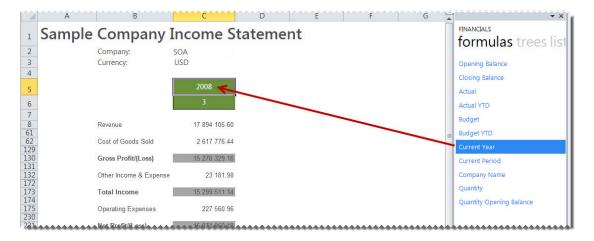
## Designing a Rolling Income Statement

This is a demonstration on how to design an Income Statement that will always return the current month's data as well as the prior 12 months data. The report will be designed in such a way that once set up, no manual changes will need to be made to it, allowing you to use the same report for all future periods and years without any input. An intermediate knowledge of Microsoft Excel formulas and basic accounting is required.

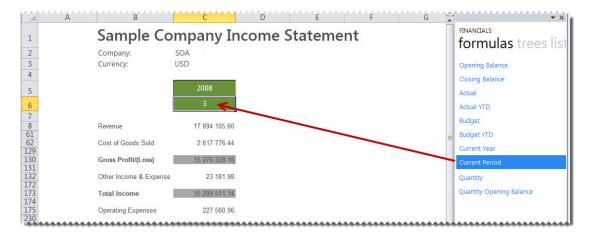
1. Follow the instructions to design a basic income statement.



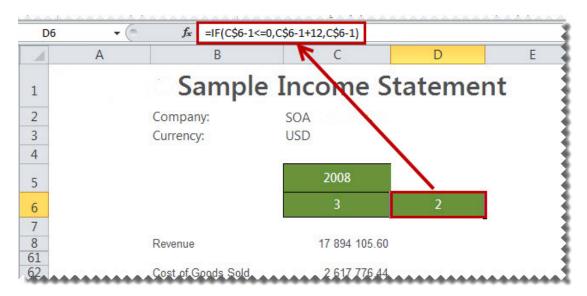
2. Drag the Current Year formula to the column heading in the cell containing the year.



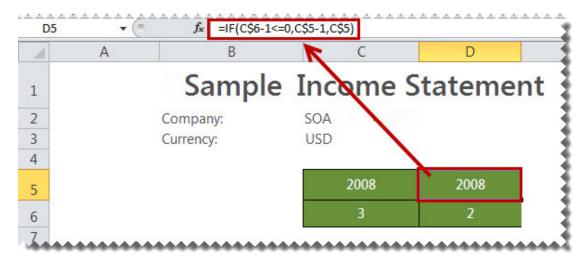
3. Drag the Current Period formula to the column heading in the cell containing Current Month.



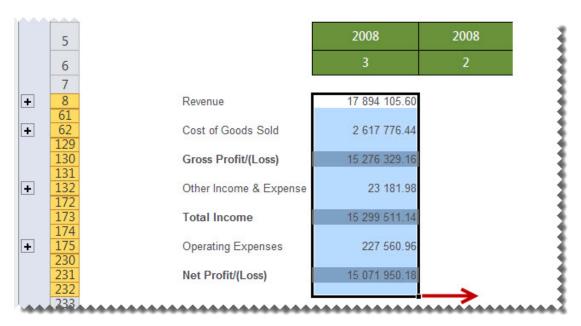
4. In the cell to the right of the current period cell, add an Excel formula to determine the correct period to report on. One way in which you can create this formula is to use the **IF** function. The **IF** statement checks whether a condition is met, and returns one value if True, and another if False. In this example, the period is calculated by subtracting one from the current period. If the result is less than or equal to zero, then the period is within the previous year and provided the periods are representative of a year, will start at prior year period 12. In this example the formula will be **=IF(C\$6-1<=0,C\$6-1+12,C\$6-1)**.



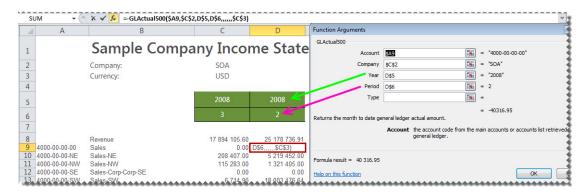
In the cell to the right of the current year, add an Excel formula to determine the correct year to report on. One way in which you can create this formula is to use the **IF** function. The **IF** statement checks whether a condition is met, and returns one value if True, and another if False. In this example, the year is calculated by subtracting one from the current period. If the result is less than or equal to zero, then the period is within the previous year. In this example, the formula will be **=IF(C\$6-1<=0,C\$5-1,C\$5)**.



6. Copy the formulas you created previously across to the new column. You can do this by highlighting the cells and dragging the fill handle across one column.



7. Expand any Excel groupings you created and using <u>cell referencing</u>, change the copied formulas to reference the correct year and period.

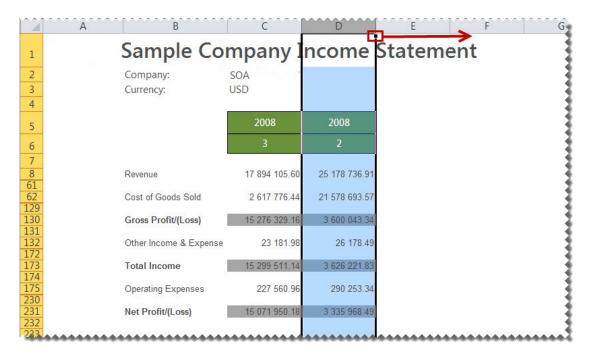


8. Drag the fill handle down or copy the amended formula to all the accounts required.

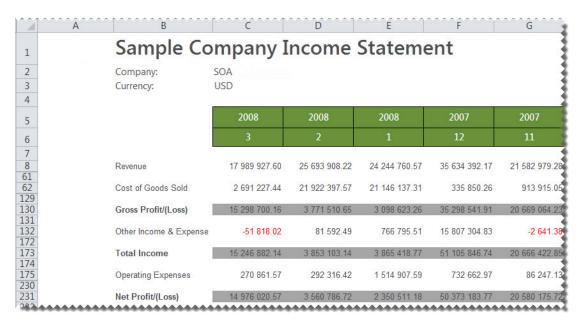
000	3		Currency:	JSD	1
	4				
	5			2008	2008
	6			3	2
	7				
	8		Revenue	17 894 105.60	25 171 331.98
	9	4000-00-00-00	Sales	0.00	40 316.95
334	10	4000-00-00-NE	Sales-NE	208 407.00	5 219 452.00
192	11	4000-00-00-NW	Sales-NW	115 283.00	1 321 405.00
82	12	4000-00-00-SE	Sales-Corp-Corp-SE	0.00	0.00
	13	4000-00-00-SW	Sales-SW	6 714.90	18 003 476.64
	14	4000-10-00-00	Sales-Hdwe-Corp-Corp	0.00	0.00
100	15	4000-40-00-00	Sales-Toy-Corp-Corp	0.00	0.00
10*	16	4015-00-00-00	Drop Ship	-6 500.00	0.00
13	17	4100-00-00-00	Rev Hardware-Corp-Corp-C	0.00	0.00
374	18	4100-10-00-00	Revenue Hardware	-70.00	49 880.00
12	19	4100-10-00-NE	Revenue - Hardware	0.00	228 236.49
0.	20	4100-10-00-NW	Revenue - Hardware	0.00	34 480.20
93	21	4100-10-00-SE	Revenue - Hardware	0.00	58 400.00
	22	4100-10-00-SW	Revenue - Hardware	17 582 456.00	227 870.00
A Company	23	41002000000	Revenue Software	0.00	

**Tip:** Double-clicking the fill-handle fills the formula down as far as the column to the left is filled with adjacent data.

Select the new column and drag the fill handle across to copy the data for the other eleven months.



10. Provided the correct <u>cell referencing</u> had been used, the amounts, year and periods would have changed automatically to cater for prior periods and years.

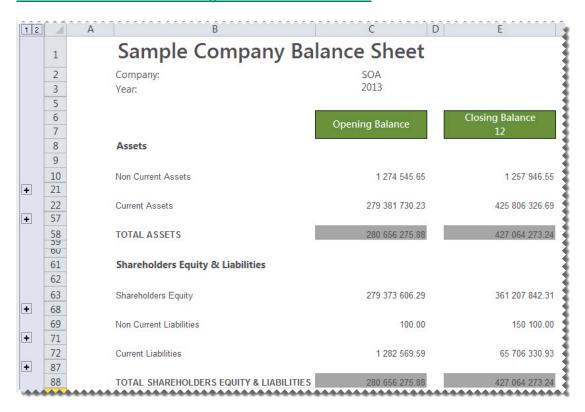


11. Run Save Excel Template in your Report Manager to save your report for future use.

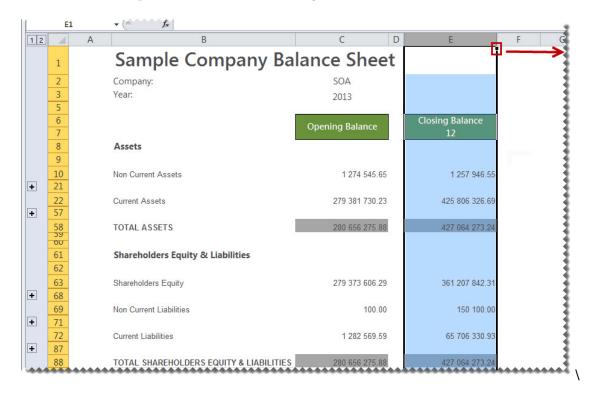
## Designing a Quarterly Balance Sheet

This is a demonstration on how to design a Quarterly Balance Sheet using the Report Designer Task Pane. The report will be created in such a way that once set up, no manual changes will need to be made to it, allowing you to use the same report for all future periods and years. A basic accounting knowledge is required.

1. Follow the instructions to design a basic balance sheet.



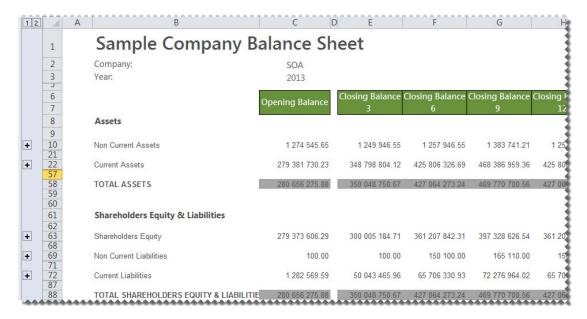
2. Select the Closing Balance column and drag the fill handle across to three more columns.



3. Change the period numbers to reflect the quarterly periods.



4. Notice the data automatically updated to reflect the correct closing balance amounts for each quarter.



5. Run Save Excel Template in your Report Manager to save your report for future use.

#### Designing a Cash Flow Report

This is a demonstration on designing a Cash Flow Report using the Report Designer Task Pane. The report will be created in such a way that once set up, no manual changes will need to be made to it, allowing you to use the same report for all future periods and years. Accounting knowledge is required.

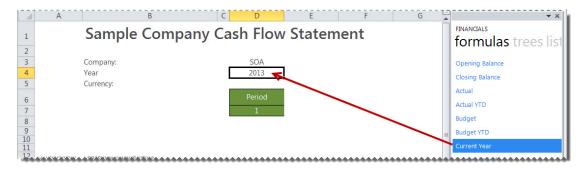
1. In Microsoft Excel, set up your spreadsheet with a heading and the filters you would like to use.

**Tip:** Reports that return huge data sets can be difficult to analyze and can cause performance issues. Filtering is a quick and easy way to find and work with only the data you need. Instead of your report extracting millions of records, filtering extracts only the necessary data resulting in faster more efficient reports.

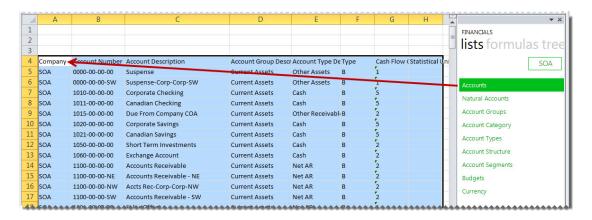
2. Add a heading for the period column.



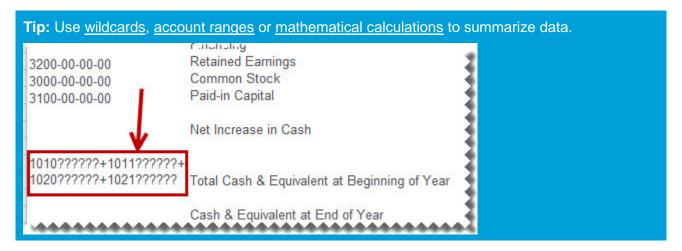
Drag the formula for Current Year into the correct cell.



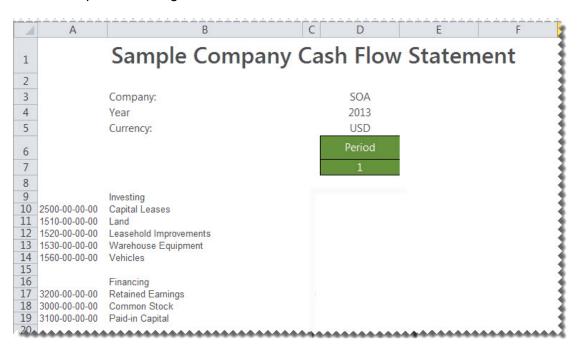
4. On a new worksheet, drag-and-drop the **Accounts** list. You will use this list to help create your report.



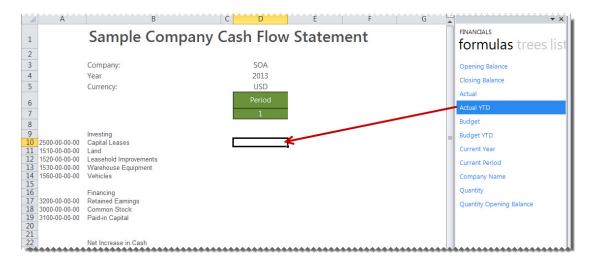
Copy the required accounts with the required details and paste them into the Cash Flow worksheet.



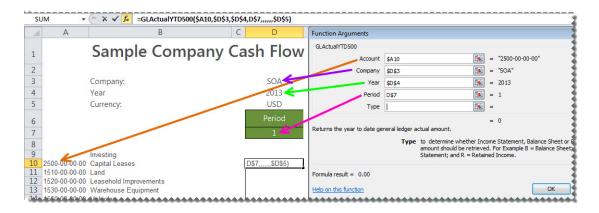
Add the required headings.



Drag-and-drop the Actual YTD formula onto your spreadsheet in the same row as your first account.



8. Change the formula to link to the correct account, company, year and period. You can do this by clicking the **f**x button and making the changes or alternatively typing directly into the formula area.



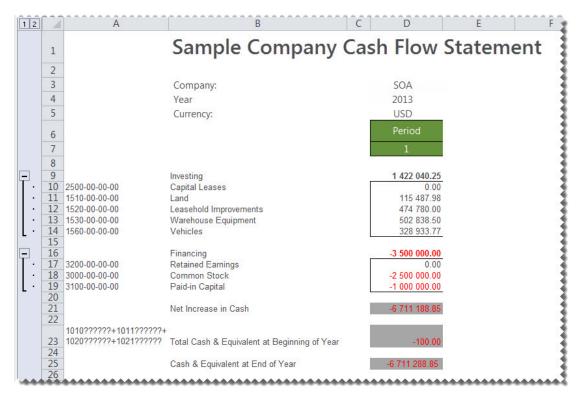
**Tip:** Change to absolute cell referencing where the cells remain constant. Refer to the topic **Using Relative or Absolute Cell Referencing**.

**Tip:** Some data may be stored as a <u>negative number</u> which causes your reports to reflect data incorrectly. Add a - (minus) to the beginning of the formula name to correct this. Drag the fill handle down to copy the formula to other rows requiring the same change.

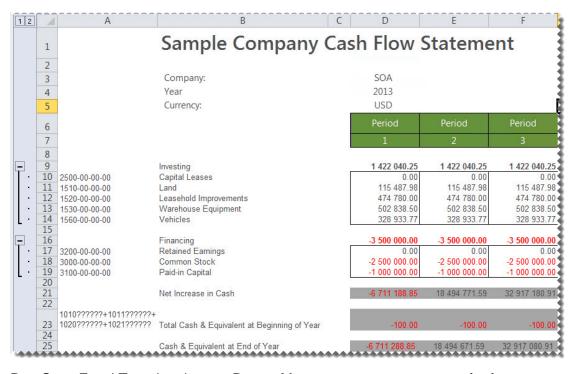
9. Drag the fill handle down or copy the amended formula to all the accounts required.

**Tip:** Double-clicking the fill-handle fills the formula down as far as the column to the left is filled with adjacent data.

10. Add any totals, grouping and formatting you require using Excel features and set your print area.



- 11. If you would like to add more periods, select the period column and drag the fill handle across to fill as many additional columns as required.
- 12. Delete or amend any necessary data, for example the period numbers you would like to report on.



13. Run Save Excel Template in your Report Manager to save your report for future use.

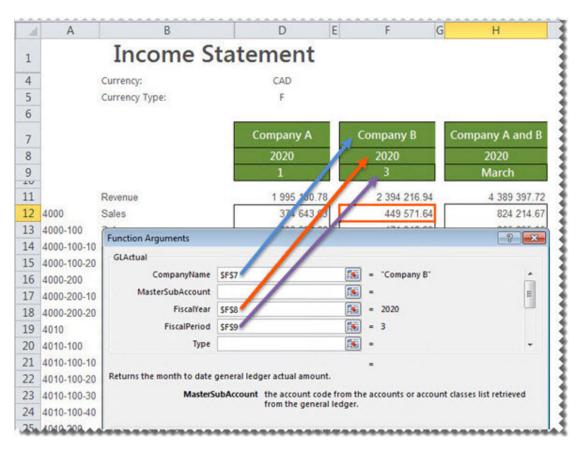
# **Consolidating Multiple Companies Data**

# **Designing Consolidated Report Layouts**

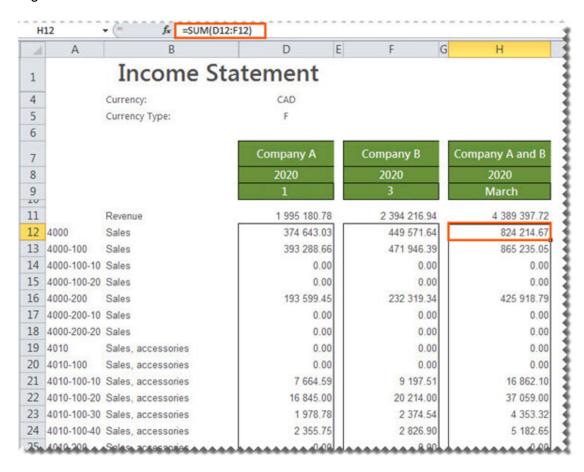
Consolidating company data, even running on different fiscal periods and/or years, can be done using the method below:

To design consolidated report layouts, you will need to run a report that is in the Report Manager (Consolidated) in Sage 500 ERP.

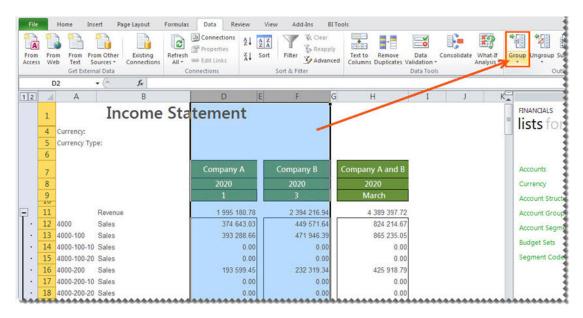
- 1. Design your financial report layout in the usual manner, creating a column for each of the companies you would like to consolidate, and placing any company specific information in the column heading, for example, **Company Name**, **Fiscal Year** and **Period**.
- 2. Add formulas, in the usual manner for each company, ensuring the correct company is selected in the lists tab of the Task Pane.
- 3. Ensure each formula refers to the correct column **Company Name**, **Fiscal Year** and **Period**.



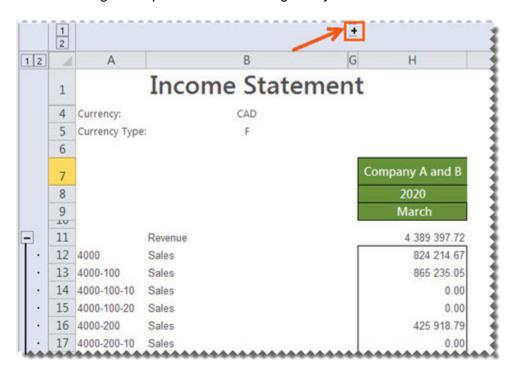
Create a third column and using Microsoft Excel functionality, add the first two columns together.



5. Using Microsoft Excel functionality, group the first two columns so that they are only visible when required.



6. Click the + sign to expand the columns again if you need to drill down into the data.



Another way to design consolidated report layouts when the same chart of accounts is used, is to use the Reporting Trees in the Task Pane.

## Designing Consolidated Report Layouts using Reporting Trees

In order to use the Task Pane for multiple company consolidations, you will need to run the **Consol Financial Report Designer** report

**Note:** In order to consolidate multiple companies' data using <u>Reporting Trees</u>, one of the <u>lists</u> must be in common with both companies GL data structure.

After running the report, do the following:

- In Microsoft Excel, set up your financial report layout in the usual way, except for the following differences:
  - In addition to the filters you already set up, add an additional filter for the Reporting Tree Unit for each company you would like to consolidate in it's own column.

You can drag-and-drop the Reporting Tree which has been set up to retrieve data from both companies. If you still need to set this up, refer to the topic on <a href="Creating a New Reporting Tree">Creating a New Reporting Tree</a>.



 When editing your <u>formulas</u> link it to the applicable Reporting Tree you would like to extract the data from.



**Tip**: Change to absolute cell referencing where the cells remain constant. Refer to the topic **Using Relative or Absolute Cell Referencing**.

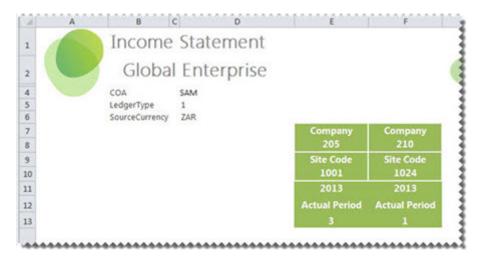
**Tip:** Some data may be stored as a <u>negative number</u> which causes your reports to reflect data incorrectly. Add a - (minus) to the beginning of the formula name to correct this. Drag the fill handle down to copy the formula to other rows requiring the same change.

- To drill-down into the data, right-click on the amount and select **Drill-Down**. A new spreadsheet will be created and you will be able to see from which company and which accounts the amount was made up of.
- 3. Save your report for future use.

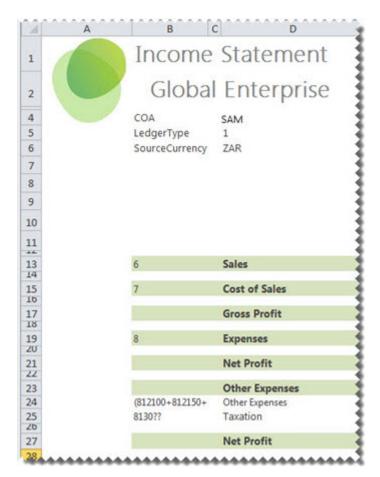
#### **Designing Consolidated Report Layouts**

After running a report that uses the Report Designer, do the following:

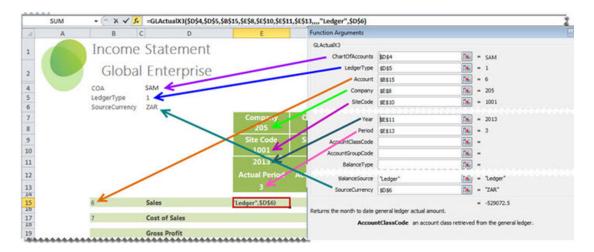
 Design your financial report titles in the usual manner, but creating a column for each of the companies you would like to consolidate, and placing any company specific information in the column heading, for example, Company code, Site Code, Year and Period.



Drag-and-drop the relevant list from the lists tab. You can then use this list to help create your report rows.



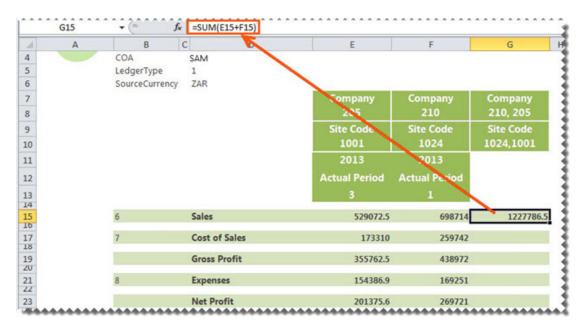
3. <u>Create formulas</u> in the usual manner for each company column changing the function arguments to point to the relevant company code, year and period.



**Tip**: Change to absolute cell referencing where the cells remain constant. Refer to the topic **Using Relative or Absolute Cell Referencing**.

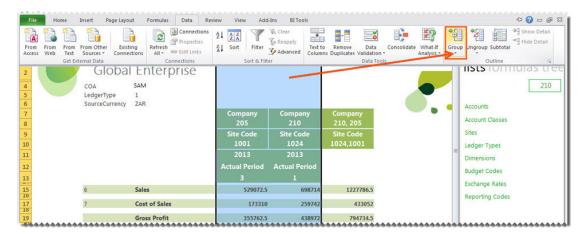
**Tip:** Some data may be stored as a <u>negative number</u> which causes your reports to reflect data incorrectly. Add a - (minus) to the beginning of the formula name to correct this. Drag the fill handle down to copy the formula to other rows requiring the same change.

- 4. Add totals and formatting using Excel features.
- 5. Create a third column and using Microsoft Excel functionality add the first two columns together.

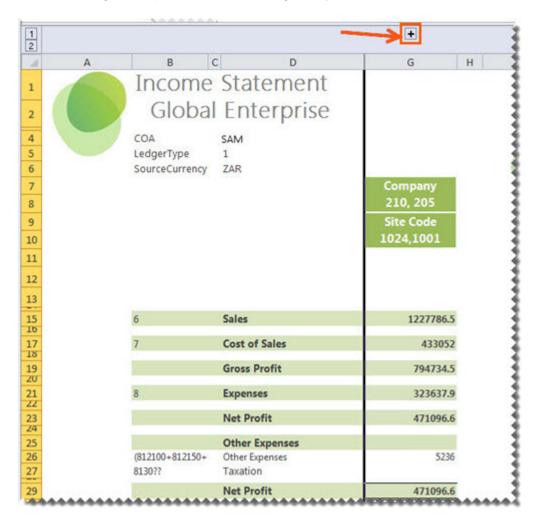


6. Copy the formula down to all relevant rows.

7. Using Microsoft Excel functionality, group the first two columns so that they are only visible when required.



- 8. Click the sign.
- 9. Click the + sign to expand the columns again if you need to drill down into the data.

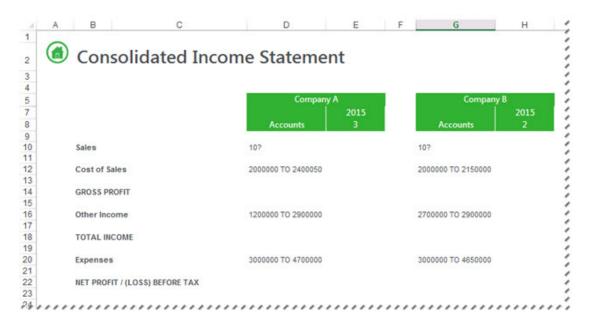


## Designing a Consolidated Report Layout with a Different Chart of Accounts

Consolidating company data, using different chart of accounts and/or fiscal periods and/or years, can be done using the method below:

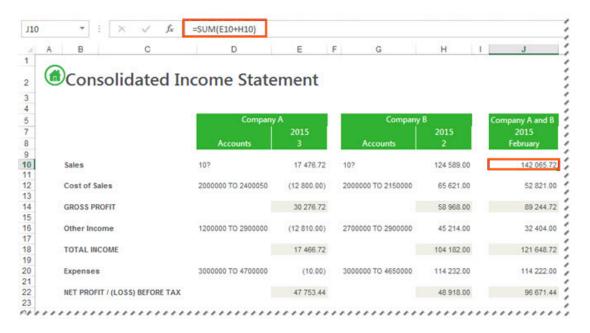
To design consolidated report layouts, you will need to run a report that is in the Report Manager (Consolidated) in Sage 500 ERP.

- Design your financial report layout in the usual manner, creating a column for each of the companies you would like to consolidate, and placing any company specific information in the column heading, for example, Company Name, Fiscal Year and Period.
- 2. Add a column for each companies account details.

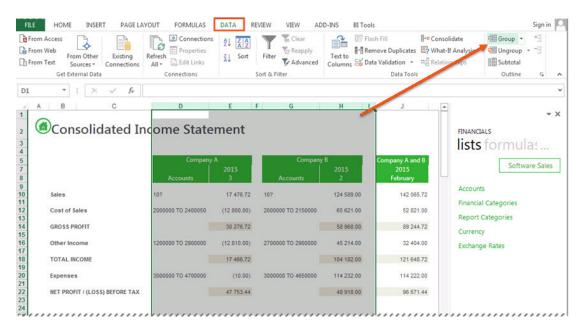


- 3. Add formulas, in the usual manner for each company, ensuring the correct company is selected in the lists tab of the Task Pane.
- 4. Ensure each formula refers to the correct Company details including **Company Name**, **Account**, **Year** and **Period**.

Create a third column and using Microsoft Excel functionality, add the first two columns together.



6. Using Microsoft Excel functionality, group the first two columns so that they are only visible when required.



7. Click the + sign to expand the columns again if you need to drill down into the data.



## **Dynamic Account Ranges**

## About Dynamic Account Ranges

Dynamic Account Ranges allow you to add a dynamic range to your financial layouts in the Report Designer. Sage Intelligence Reporting will automatically refresh the range to ensure it contains the latest General Ledger accounts listed on separate rows in your layout. Dynamic Account Ranges can be found on the **tools** tab of the Task Pane.

An advanced knowledge of Microsoft Excel formulas as well as accounting knowledge is recommended to use dynamic account ranges.

To set up dynamic account ranges, you will need to first <u>create a template</u> and <u>set up the dynamic ranges</u>, and then <u>refresh</u> to automatically populate all of the latest General Ledger accounts.



There are 3 ways you could set up the Dynamic Ranges in the active sheet:

- Using the **Set Up** Button on the **Tools** tab in the Task Pane.
- Typing the Dynamic Range into the active sheet.
- Using the Excel Functions option.

Note: You can only add or refresh Dynamic Ranges in the active sheet.

## **Learn More:**

<u>Dynamic Range</u> formula syntax <u>Refreshing Dynamic Account Ranges</u> <u>Troubleshooting Dynamic Ranges</u>

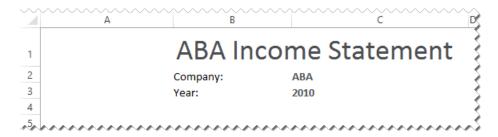
## Creating a Template for your Report that Uses Dynamic Account Ranges

Dynamic Account Ranges allow you to add a dynamic range to your financial layouts in the Report Designer. Sage Intelligence Reporting will automatically refresh the range to ensure it contains the latest GL accounts listed on separate rows in your layout.

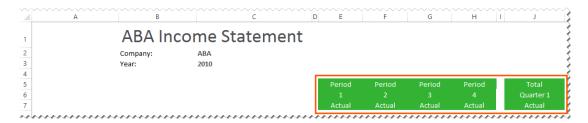
## Note: You can only add or refresh Dynamic Ranges in the active sheet.

Before setting up dynamic account ranges you must create the report layout (template) in Microsoft Excel of what you'd like your report to look like. The following is an example of an income statement for the first quarter of the financial year.

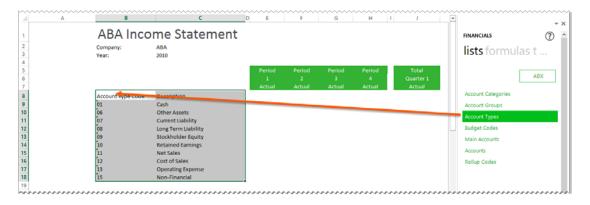
1. Starting in cell B1, set-up your spreadsheet with a heading and the filters you'd like to use.



2. Starting in cell E5:E7, create column headings for the data you'd like to report on.

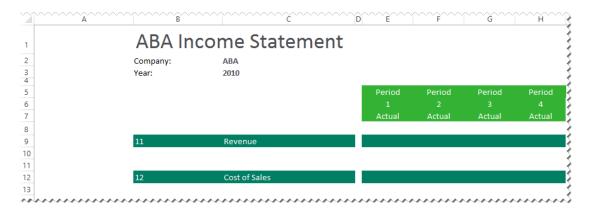


3. Drag-and-drop the **Account Types** from the **Lists** group into cell **B9**. You will use this list to help create your report.

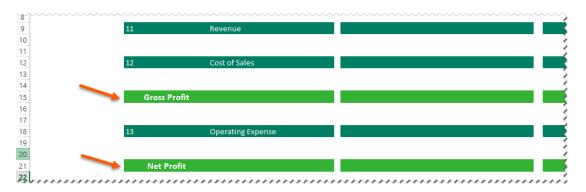


4. Clear the headings and the balance sheet rows not required for this report.

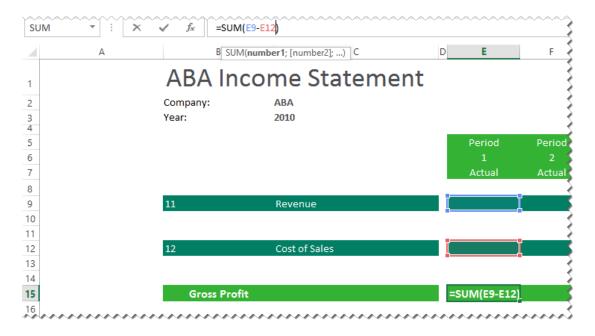
Format the account type rows as headings, leaving an extra row where the list of accounts will later be populated.



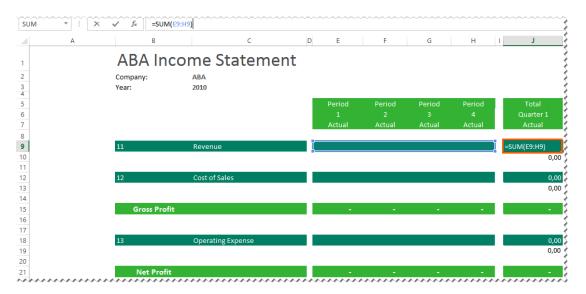
6. Create Subtotal rows if required.



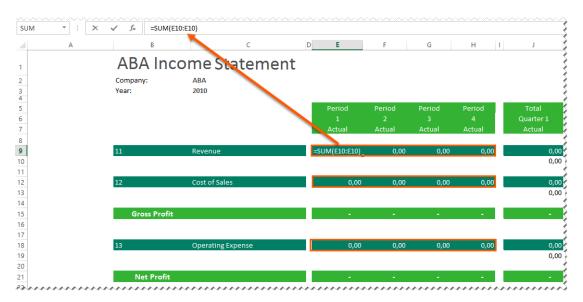
7. Use the Microsoft Excel **=Sum** function in the subtotal rows.



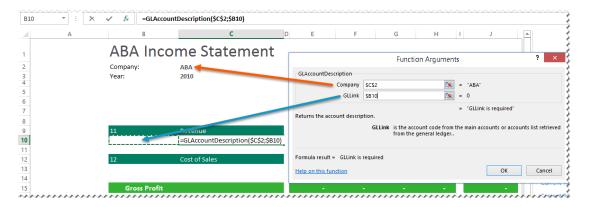
8. Copy the formulas to all of the rows and columns which need subtotalling.



9. When adding subtotals to, what will be, all of the account rows beneath it, ensure that you use ranges so that when the rows are populated, the subtotals include all of the rows.

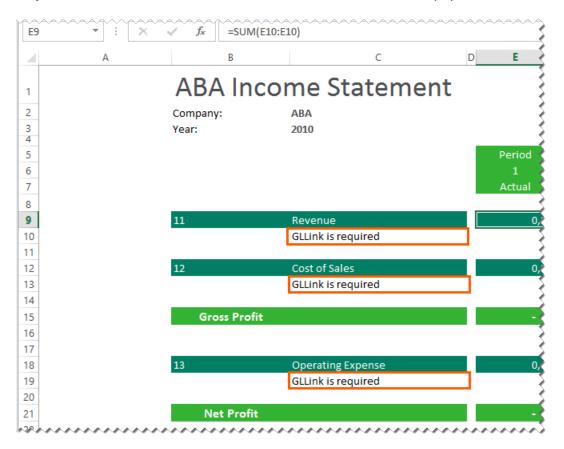


- 10. Now we're going to add the template row where our accounts are going to be listed. We need to add this row so Sage Intelligence Reporting knows what details we want to see for each account. Click cell **C10** and add the **Account Description** formula.
- 11. Edit the formula to connect to the correct formula arguments. Cell **B10** is where our account number will be listed.

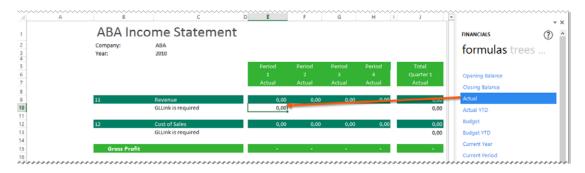


**Tip:** Change to absolute cell referencing where the cells remain constant. Refer to the topic **Using Relative or Absolute Cell Referencing**.

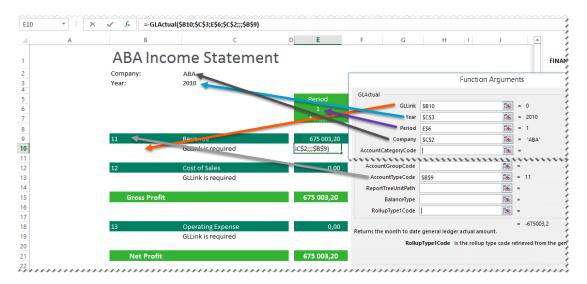
12. Copy the formula to the other rows requiring the same change. Don't worry about the **GLLink is required** error. This will be resolved when the account rows are populated.



13. Drag-and-drop the **Actual** formula onto your spreadsheet in the first row under the first period.



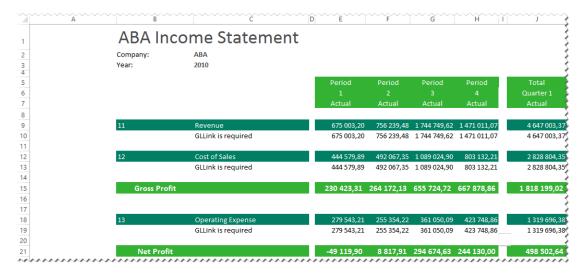
14. Change the **Actual** formula to link to the correct Account, Year, Period, Company and Account Type. You can do this by clicking the **fx** button and making the changes.



**Tip:** Change to absolute cell referencing where the cells remain constant. Refer to the topic **Using Relative or Absolute Cell Referencing**.

**Tip:** Some data may be stored as a <u>negative number</u> which causes your reports to reflect data incorrectly. Add a - (minus) to the beginning of the formula name to correct this. Drag the fill handle down to copy the formula to other rows requiring the same change.

- 15. Copy the formula to other cells requiring the same formula.
- 16. Now that you have set up your template row, your report template is ready for you to set up your dynamic account ranges. Before you continue, save your workbook in case you have made a mistake and have to revert back to the template to make a change.



#### Learn More:

Setting Up Dynamic Account Ranges using the Set Up Option
Dynamic Range formula syntax
Refreshing Dynamic Account Ranges
Troubleshooting Dynamic Ranges

## Editing an Existing Report Template to use Dynamic Ranges

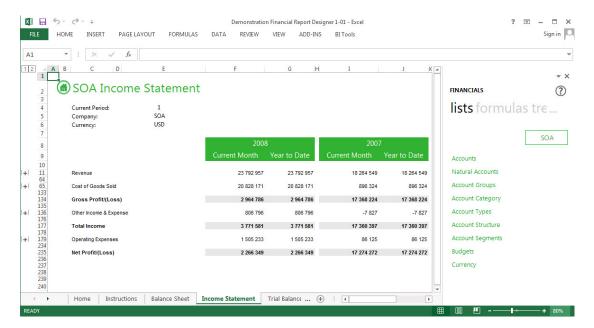
If you've previously created a layout, there are some changes you'll need to make before you can set up dynamic ranges.

#### You'll need to ensure:

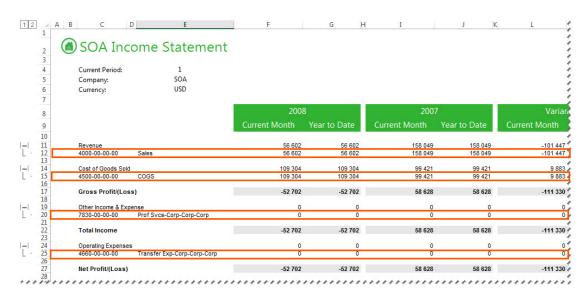
- The Account Description formula is used.
- Formulas are edited to include an account type, group or category.

As an example, let's work with the **Income Statement** layout in the **Demonstration Financial Report Designer** report which is provided for you.

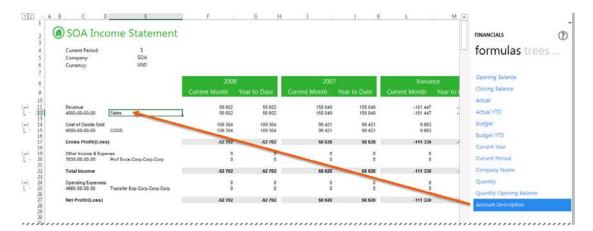
- Run the **Demonstration Financial Report Designer** report.
- 2. Select the Income Statement report.



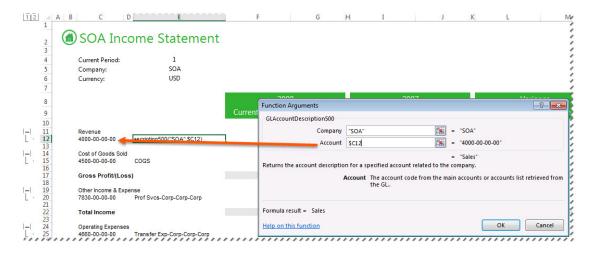
- 3. Expand the Revenue heading and delete all the rows except the first one.
- 4. Repeat for the Cost of Goods Sold, Other Income and Expense and Operating Expenses headings.



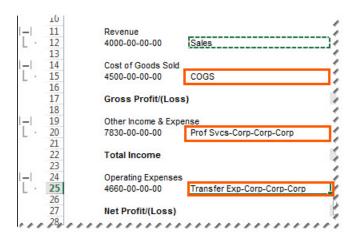
5. In the description column, drag the Account Description formula into the cell.



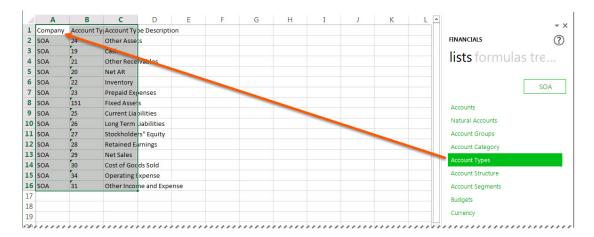
6. Edit the formula to reference the correct account.



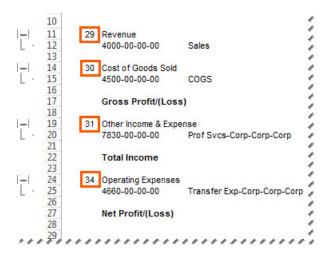
7. Copy the formula to the other account description cells.



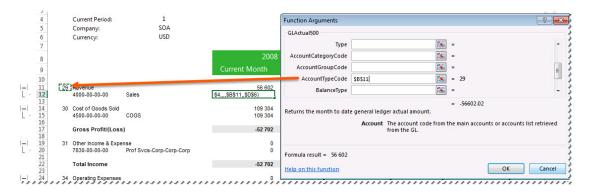
- 8. Create a new worksheet.
- 9. Drag the **Account Types** list onto your sheet. You'll use these account types in your layout.



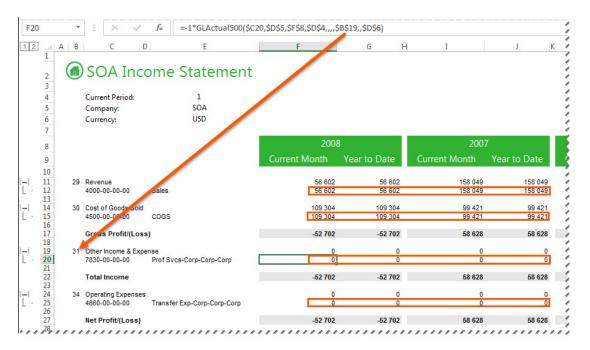
10. Add the relevant account types to the headings.



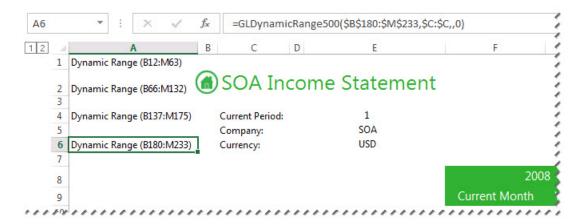
11. Edit the formulas to also refer to the correct account type code.



12. Ensure all of the formulas in the sheet have been edited to include the account type code.



- 13. Save your worksheet.
- 14. Now you're ready to set up dynamic account ranges in the usual manner.



- 15. Remember to save the template before refreshing the dynamic account ranges in case you need to make a change.
- 16. You can use Excel grouping to hide the account details again until you need to analyze it.

#### **Learn More:**

Setting Up Dynamic Account Ranges using the Set Up Option
Setting Up Dynamic Account Ranges using the Excel Functions Option
Setting Up Dynamic Account Ranges by Typing the Formula In

#### Setting Up Dynamic Account Ranges

Setting Up Dynamic Account Ranges

Dynamic Account Ranges allow you to add a dynamic range to your financial layouts in the Report Designer. Sage Intelligence Reporting will automatically refresh the range to ensure it contains the latest GL accounts listed on separate rows in your layout. Dynamic Account Ranges can be found on the **tools** tab of the Task Pane.

Note: You can only add Dynamic Ranges to the active sheet.

Before setting up dynamic account ranges you must <u>create the template in Microsoft Excel for dynamic ranges</u>.

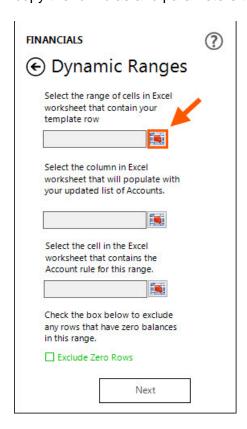
## Using the Set Up Button on the tools tab in the Task Pane

**Set Up** allows you to set up the Dynamic Ranges in the active sheet. The **Set Up** option gives you a step-by-step process to guide you through setting up the Dynamic Ranges, and provides a checkbox option to exclude rows with a zero balance. This is the easiest method to set up dynamic ranges as it provides you with the step-by-step process.

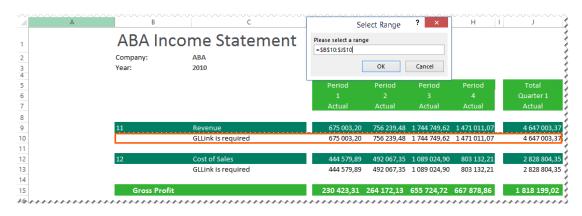
1. On the tools tab on the Task Pane, select the Set Up option under Dynamic Ranges.



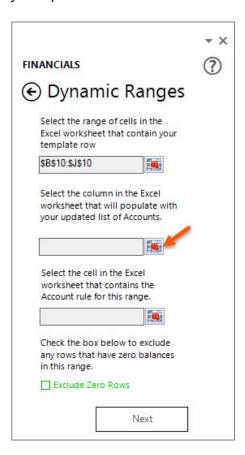
2. The **Dynamic Ranges** window will appear. Click the first ellipses to select the range of cells in Excel that contain your template row. This will be the row that the dynamic ranges will use to copy the formulas and parameters to the other rows that are added to the layout.



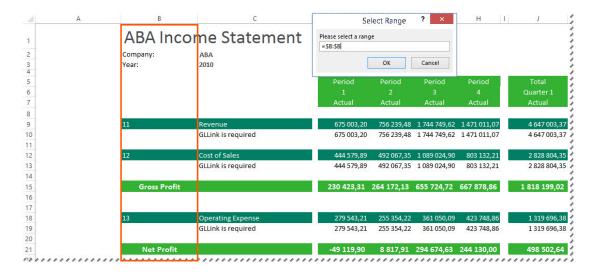
## Example below:



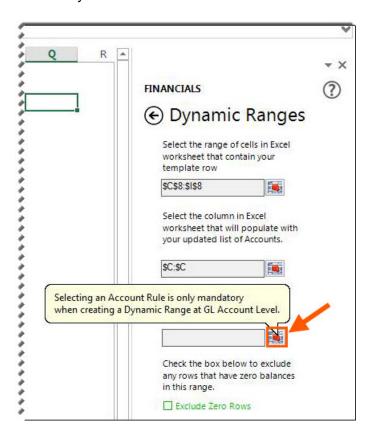
- 3. Absolute cell references will automatically be added for you. Click OK.
- Now click the second ellipses to select the column in the Excel worksheet that will populate with your updated list of accounts.



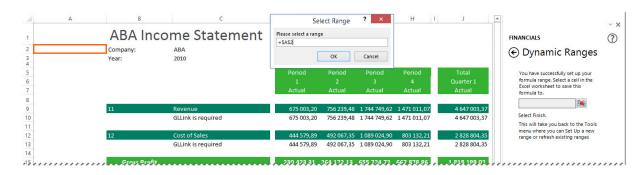
5. Example below:



6. Click the third ellipses to select the cell in the Excel worksheet that contains the Account rule. If you have created the layout at a higher level than account level, the Account rule is not mandatory.

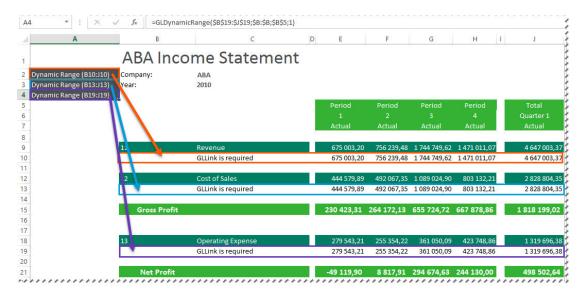


- 7. Enable the **Exclude Zero Rows** option if you do not want to see account rows which have zero balances in all of the columns..
- 8. Click **Next**. The **Select Range** window will appear. Select a cell in the active worksheet to save the dynamic ranges formula to. This can be any cell but top left is best. You can hide this row or column later.

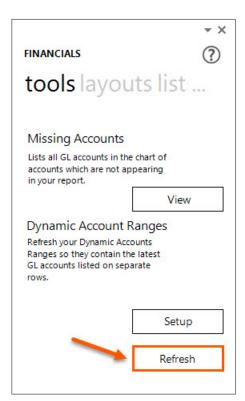


9. Click Finish.

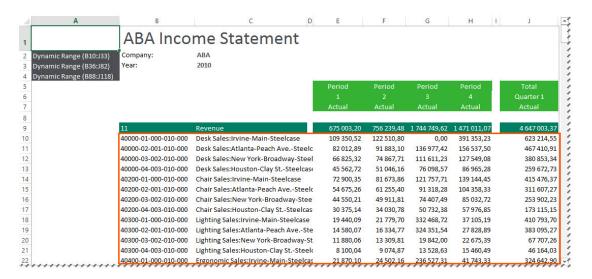
10. Repeat the set up process for all Dynamic Ranges required in the active sheet. Example below:



- 11. Before you continue, save your workbook in case you have made a mistake and have to revert back to the template to make a change.
- 12. Once all dynamic ranges have been set up in the active sheet, on the Task Pane, in the **tools** tab, under **Dynamic Ranges**, click **Refresh**.



13. All of the General Ledger accounts will be refreshed and available in your report.



#### **Learn More:**

<u>Dynamic Range</u> formula syntax <u>Refreshing Dynamic Account Ranges</u> <u>Troubleshooting Dynamic Ranges</u> Setting Up Dynamic Account Ranges Using the Excel Functions Option

Dynamic Account Ranges allow you to add a dynamic range to your financial layouts in the Report Designer. Sage Intelligence Reporting will automatically refresh the range to ensure it contains the latest GL accounts listed on separate rows in your layout.

Note: You can only add Dynamic Ranges to the active sheet.

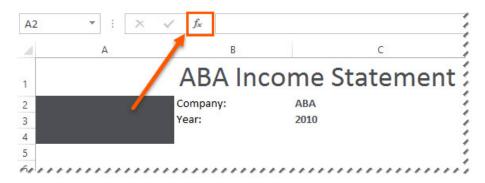
Before setting up dynamic account ranges you must <u>create the template in Microsoft Excel for</u> dynamic ranges.

Although using the <u>Set Up</u> option in the **tools** tab of the Task Pane is the easiest method to set up dynamic ranges, if you are familiar with Excel and understand how dynamic ranges work, you may find typing the formula in and editing its function arguments guicker.

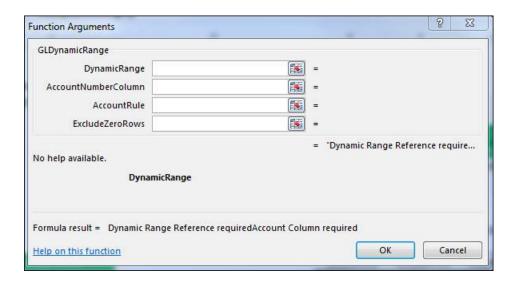
#### Using the Excel Functions (Fx) option

One of the options to set up dynamic ranges on the active sheet is to use the **Insert Function** option.





- 1. Select an empty cell in the active sheet. Top left is recommended.
- 2. Select Insert Function.
- 3. Select a category. For example **Sage 500 functions** depending on your Sage Intelligence integration.
- 4. Select a function from the list. **GLDynamicRange**.
- 5. This will open the function arguments window for the **GLDynamicRange** function. You can now use this to set up your **GLDynamicRange** formula.



## **Learn More:**

**Dynamic Range** formula syntax

Setting Up Dynamic Account Ranges by Typing the Formula In

Dynamic Account Ranges allow you to add a dynamic range to your financial layouts in the Report Designer. Sage Intelligence Reporting will automatically refresh the range to ensure it contains the latest GL accounts listed on separate rows in your layout.

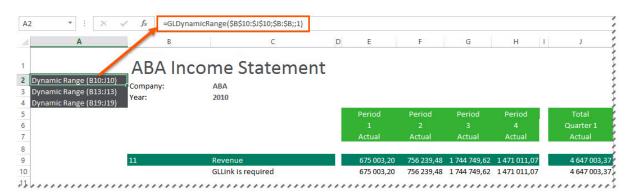
## Note: You can only add Dynamic Ranges to the active sheet.

Before setting up dynamic account ranges you must <u>create the template in Microsoft Excel for dynamic ranges</u>.

Although using the <u>Set Up</u> option in the **tools** tab of the Task Pane is the easiest method to set up dynamic ranges, if you are familiar with Excel and understand how dynamic ranges work and the <u>syntax</u> of the dynamic ranges formula, you may find typing the formula directly in quicker.

## Typing the Dynamic Range Function into the active sheet

You can add dynamic account ranges into the active sheet, by typing the formula directly into a cell. Top left of the page is recommended. You can always hide this column later. Example below:

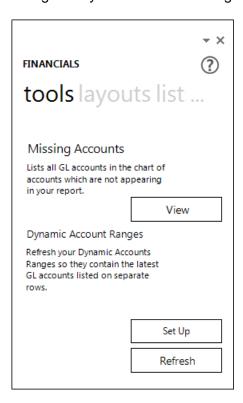


#### Learn More:

**Dynamic Range** formula syntax

## Refreshing Dynamic Account Ranges

Dynamic Account Ranges allow you to add a dynamic range to your financial layouts in the Report Designer. Dynamic Account Ranges can be found on the **tools** tab of the Task Pane.



## Refresh

If there are Dynamic Account Ranges in the active sheet and you click **Refresh**, Sage Intelligence Reporting will automatically update the financial layout with new accounts that may have been added to your Sage 500 ERP General Ledger.

Refreshing will also exclude any rows with a zero balance, if you have enabled this option in the <u>Set</u> Up, or in the function arguments.

## Dynamic Range Formula

This topic describes the formula syntax and usage of the **GLDynamicRange** formula in Microsoft Excel. The **GLDynamicRange** formula is made available in Microsoft Excel by the Report Designer. Description

The **GLDynamicRange** formula refreshes General Ledger accounts and can exclude rows with zero values, applying all the filters specified as arguments. Each argument can be a cell reference, a constant, or a named range.

## **Syntax**

=GLDynamicRange(DynamicRange,AccountNumberColumn,AccountRule, ExcludeZeroRows)

The **GLDynamicRange** formula syntax has the following arguments:

Filter	Need	What needs to be filled in?	What is the purpose of the filter?
DynamicRange	Required	the template range	Used to reference one or more General Ledger accounts for which values must be returned. Supports main accounts, accounts, account ranges, account wildcards & account addition/subtraction.
AccountNumberColumn	Required	The account code from the main accounts or accounts list retrieved from the General Ledger.	Filters the General Ledger accounts being referenced to a specific account number column.
AccountRule	Optional	Depending on what level you have set your layout at. (Level – Account Group, Account Type, Account Category). If your layout is set up at an account level then the Account Rule is required.	Filters the General Ledger accounts being referenced to a specific account rule.
ExcludeZeroRows	Optional	1 = Exclude Zero Rows, 0 = Include Zero Rows	Filters the General Ledger accounts being referenced to either display or not display rows with zero values.

#### Remarks

- Arguments are applied in the order that they are displayed.
- The recommended method for entering data into the Sage Intelligence Reporting formulas is by using cell references. This method makes modifying and maintaining your worksheet easier.

# Example An example of a **GLDynamicRange** formula could be:

#### =GLDynamicRange(\$B10;\$C\$3;E\$6;\$C\$2;;;\$B\$9) E10 √ f<sub>sc</sub> =-GLActual(\$B10;\$C\$3;E\$6;\$C\$2;;;\$B\$9) **ABA Income Statement** Company: Function Arguments Year: GLLink \$B10 = 2010 Year \$C\$3 9 Period ES6 = "ABA" Company \$C\$2 .l: ic required AccountCategoryCode = 11 12 13 14 15 16 AccountGroupCode = 11 AccountTypeCode ReportTreeUnitPath K 1 BalanceType 1 RollupType1Code 18 Returns the month to date general ledger actual amount. GLLink is required 20 21 Net Profit

## Troubleshooting Dynamic Account Ranges

Troubleshooting Dynamic Ranges

#### XXXX-XXXX-XXXX

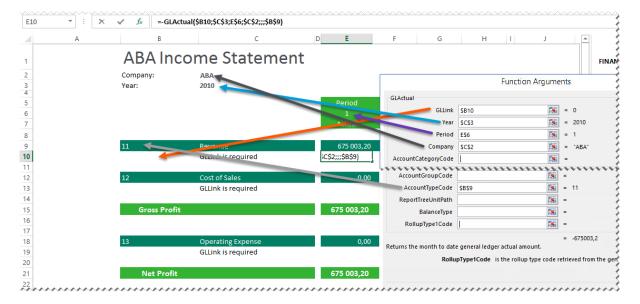


#### Why does this happen?

If you have typed in an incorrect or invalid Account number, Account Group, Account Type or Account Category & you refresh the dynamic range, the account column will return a cell with xxxx-xxxx.

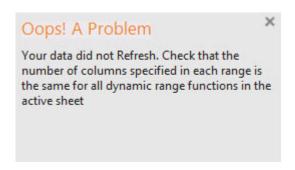
#### Solution

Check the formulas to ensure the Account number, Account Group, Account Type or Account Category reference is correct.



## Troubleshooting Dynamic Ranges

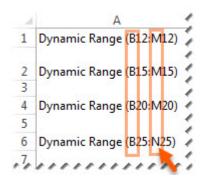
#### Your data did not Refresh.



Why does this happen?

The range of cells that contain your template row must have the same number of columns for all dynamic range functions in the active sheet. Solution

Check the dynamic range formulas to ensure the column range is identical.

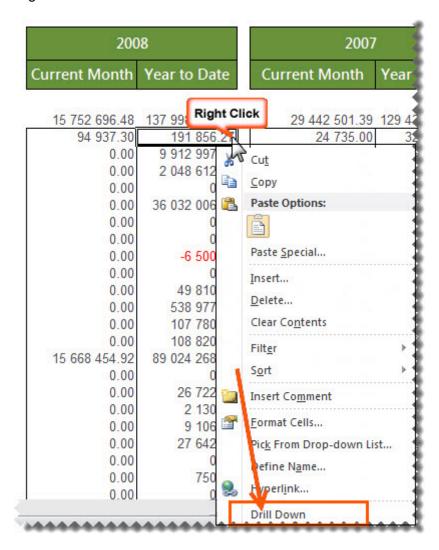


In this example, column  ${\bf B}$  to column  ${\bf M}$  is being used. You would need to change the  ${\bf N}$  in the last dynamic range formula to an  ${\bf M}$ , and then refresh your dynamic account ranges again.

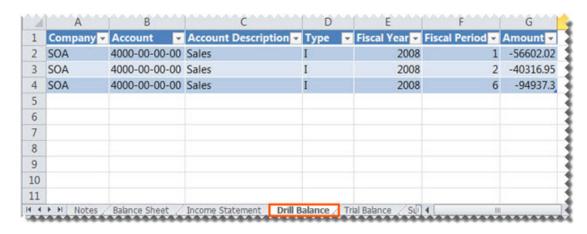
## **Drilling Down on Values**

To view the detail of the value being returned by a formula, you can use the **Drill Down** option.

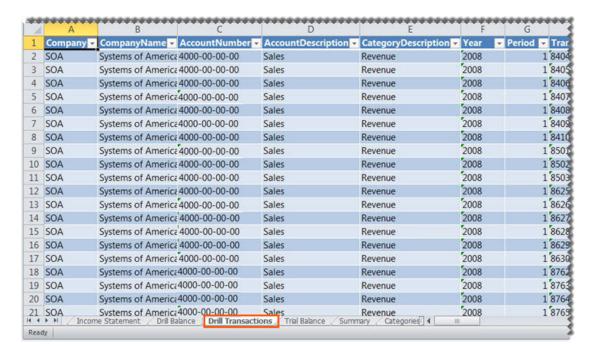
- 1. Select the value.
- Right-click and select **Drill Down**.



A new worksheet named **Drill Balance** will be created in the Microsoft Excel workbook with the account balance details of the data.



4. To drill down further to GL transaction level, right-click on the cell which contains the value you want to view more detail on, and select **Drill Down** again. Another new worksheet named **Drill Transactions** will be created with the GL transaction details.



**Note:** Drill Down will show you balances of the accounts which were being referenced in the formula you drilled down on. It does not take account rule mathematical context into account, and therefore does not apply different signs (+ or -) based on the mathematical context. For example if you drill down on the following rule **1000 - 3000**, the drill down will show you the account balances of all accounts which match this rule. It will not put a negative sign in front of accounts which match **3000**.

## **Missing Accounts**

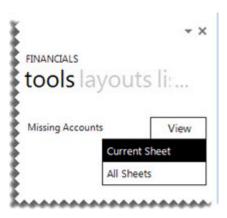
The **Missing Accounts** tool allows you to ensure that your Report Designer layouts are accurate by checking the accounts that exist in the layout and comparing them to the accounts which exist in your General Ledger. This allows you to view which accounts are missing and then to decide if you'd like to add them to any of your report layouts.

**Tip:** We recommend that you regularly run the **Missing Accounts** option on each of your financial statements to view any new General Ledger accounts which have not been included in your reports.

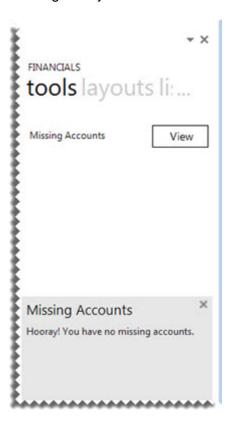
The option to view missing accounts is available from the Task Pane in Microsoft Excel under the **Tools** tab.

## **Viewing Missing Accounts for the Current Layout**

- 1. To view missing accounts from your current layout, from the current worksheet that is displayed in Microsoft Excel, select the **Tools** tab from the Task Pane in Microsoft Excel.
- 2. Select View, Current Sheet.



If there are no missing accounts a notification message will indicate that there are no accounts missing from your current worksheet that exist in your General Ledger.



If there are accounts missing from your current worksheet, a Missing Accounts worksheet will be generated in the Microsoft Excel workbook to display the accounts that are missing from your current worksheet. Don't panic! Odds are you will always have missing accounts because if you're checking the Income Statement, all of your Balance Sheet accounts will be missing, and vice versa.

3. In the same workbook, click on the **Missing Accounts** worksheet. A list of accounts which exist in the General Ledger but are not being used in the formulas you selected, will be listed.

**Note**: This worksheet is updated each time the **Missing Accounts** option is run. Always select your formulas and click the Missing Accounts View option before viewing the Missing Accounts worksheet.

Copy any missing accounts which you'd like to be included in your report, and insert them under the correct heading in your financial statement.

## **Viewing Missing Accounts for All Layouts**

- To view missing accounts for all the layouts in your workbook, select the **Tools** tab from the Task Pane in Microsoft Excel.
- 2. Select View, All Sheets.



If there are no Missing accounts a Task Pane notification message will indicate that there are no accounts missing from your current sheet that exist in your General Ledger.

If there are accounts missing from your current sheet a **Missing Accounts** worksheet will be generated in the Microsoft Excel workbook to display the accounts that are missing from each layout. Don't panic! Odds are you will always have missing accounts because for the Income Statements, all of your Balance Sheets accounts will be missing, and vice versa.

3. In the same workbook, click on the **Missing Accounts** worksheet. A list of accounts which exist in the General Ledger but are not being used in the formulas you selected, will be listed.

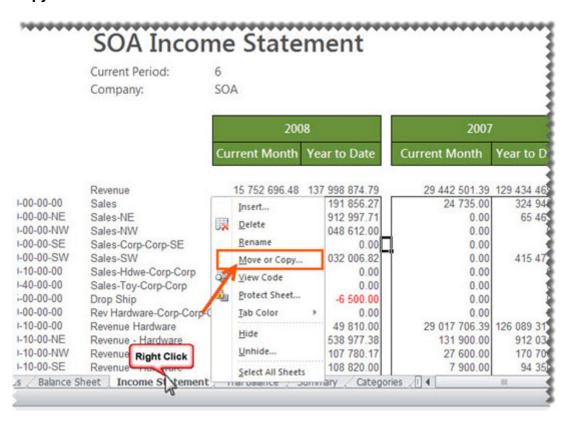
**Note:** This worksheet is updated each time the **Missing Accounts** option is run. Always select your formulas and click the Missing Accounts **View** option before viewing the Missing Accounts worksheet.

4. Copy any missing accounts which you'd like to be included in your report, and insert them under the correct heading in your financial statement.

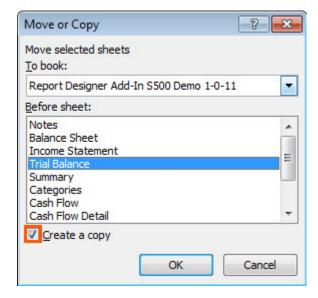
## **Copying Reports**

To save time or to promote standardization, you can copy a worksheet as a template that you can use to create other worksheets from.

 Copy the entire worksheet by right-clicking on the bottom worksheet tab and select Move or Copy.



2. Select **Create a copy** and the location within the current workbook where you would like the worksheet copied to.



- 3. Select **OK**. Make any changes you require in the copied worksheet.
- 4. Save your report for future use.

Note: In the copied report below, all formatting, formulas and lists are retained.

1		SOA Incom	ne State	ment		
2		Current Period:	6			
3		Company:	SOA			
4						
5			200	8	2007	
6			Current Month	Year to Date	Current Month	Year to Date
7		2.				
8		Revenue	15 752 696.48	137 998 874.79	29 442 501.39	129 434 469.3
9 400	00-00-00-00	Sales	94 937.30	191 856.27	24 735.00	324 945.1
10 400	00-00-00-NE	Sales-NE	0.00	9 912 997.71	0.00	65 463.3
-	WM-00-00-00	Sales-NW	0.00	2 048 612.00	0.00	0.0
-	00-00-00-SE	Sales-Corp-Corp-SE	0.00	0.00	0.00	0.0
-	00-00-00-SW	Sales-SW	0.00	36 032 006.82	0.00	415 472.3
	00-10-00-00	Sales-Hdwe-Corp-Corp	0.00	0.00	0.00	0.0
	00-40-00-00	Sales-Toy-Corp-Corp	0.00	0.00	0.00	0.0
	15-00-00-00	Drop Ship	0.00	-6 500.00	0.00	0.0
	00-00-00	Rev Hardware-Corp-Corp-C	0.00	0.00	0.00	0.0
	00-10-00-00	Revenue Hardware	0.00	49 810.00	29 017 706.39	
20	00-10-00-NE	Revenue - Hardware	0.00	538 977.38	131 900.00	
	00-10-00-NW	Revenue - Hardware	0.00	107 780.17	27 600.00	170 700.0
21 410	00-10-00-SE	Revenue - Hardware	0.00	108 820.00	7 900.00	94 350.0

## **Protecting the Worksheet when Distributing Reports**

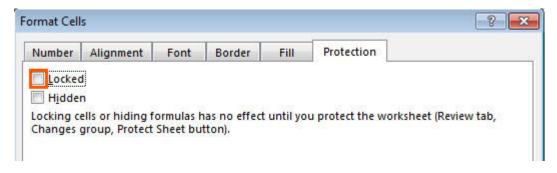
You can use worksheet protection to prevent changes to the worksheet.

By default, when you protect a worksheet, all the cells on the worksheet are locked and users cannot make any changes to a locked cell. However, you can unlock specific cells for all users or specific users.

Unlocking cells or ranges

To unlock any cells or ranges that you want other users to be able to change, do the following:

- 1. Select each cell or range that you want to unlock.
- 2. On the Home tab, in the Cells group, click Format, and then click Format Cells.
- 3. On the **Protection** tab, uncheck the **Locked** box.



#### 4. Click OK.

#### Hiding formulas

To hide any formulas that you do not want to be visible, do the following:

- 1. In the worksheet, select the cells that contain the formulas that you want to hide.
- 2. On the **Home** tab, in the **Cells** group, click **Format**, and then click **Format Cells**.
- 3. On the **Protection** tab, check the **Hidden** box.
- 4. Click OK.

#### Password Protecting the worksheet

- 1. On the **Review** tab, in the **Changes** group, click **Protect Sheet**.
- 2. In the **Allow all users of this worksheet to list**, select the elements you want users to be able to change.

UNCHECK THIS	TO PREVENT USERS FROM	
Select locked cells	Moving the pointer to cells for which the Locked box is checked on the Protection tab of the Format Cells dialog box. By default, users are allowed to select locked cells.	
Select unlocked cells	Moving the pointer to cells for which the Locked box is unchecked on the Protection tab of the Format Cells dialog box. By default, users can select unlocked cells, and they can press the TAB key to move between the	

	unlocked cells on a protected worksheet.	
Format cells	Changing any of the options in the Format Cells or Conditional Formatting dialog boxes. If you applied conditional formats before you protected the worksheet, the formatting continues to change when a user enters a value that satisfies a different condition.	
Format columns	Using any of the column formatting commands, including changing column width or hiding columns (Home tab, in the Cells group, Format button).	
Format rows	Using any of the row formatting commands, including changing row height or hiding rows (Home tab, Cells group, Format button).	
Insert columns	Inserting columns.	
Insert rows	Inserting rows.	
Insert hyperlinks	Inserting new hyperlinks, even in unlocked cells.	
Delete columns	Deleting columns. Note: If Delete columns is protected and Insert columns is not also protected, you can insert columns but you cannot delete the inserted columns.	
Delete rows	Deleting rows. Note: If Delete rows is protected and Insert rows is not also protected, you can insert rows but you cannot delete the inserted rows.	
Sort	Using any commands to sort data (Data tab, Sort & Filter group). Note: You can't sort ranges that contain locked cells on a protected worksheet, regardless of this setting.	
Use AutoFilter	Using the drop-down arrows to change the filter on ranges when AutoFilters are applied. Note: You can't apply or remove AutoFilters on a protected worksheet, regardless of this setting.	
Use PivotTable reports	Formatting, changing the layout, refreshing, or otherwise modifying PivotTable reports, or creating new reports.	
Edit objects	<ol> <li>Doing any of the following:</li> <li>Making changes to graphic objects including maps, embedded charts, shapes, text boxes, and controls that you did not unlock before you protected the worksheet. For example, if a worksheet has a button that runs a macro, you can click the button to run the macro, but you cannot delete the button.</li> <li>Making any changes, such as formatting, to an embedded chart. The chart continues to be updated when you change its source data.</li> <li>Adding or editing comments.</li> </ol> Viewing scenarios that you have hidden, making changes to scenarios that	
Edit scenarios	you have prevented changes to, and deleting these scenarios. Users can change the values in the changing cells, if the cells are not protected, and add new scenarios.	

- 3. In the **Password to unprotect sheet** box, type a password for the sheet.
- 4. Click **OK**, and then retype the password to confirm it.

**Warning:** It is critical that you remember your password. If you forget your password, it cannot be retrieved.

**Tip:** For an additional layer of security, you can protect your whole workbook file by using a password. This allows only users who have the password the ability to view or modify data in the workbook.

Removing protection from a worksheet

1. On the **Review** tab, in the **Changes** group, click **Unprotect Sheet**.

Note: The Protect Sheet option changes to Unprotect Sheet when a worksheet is protected.

2. If prompted, type the password to unprotect the worksheet.

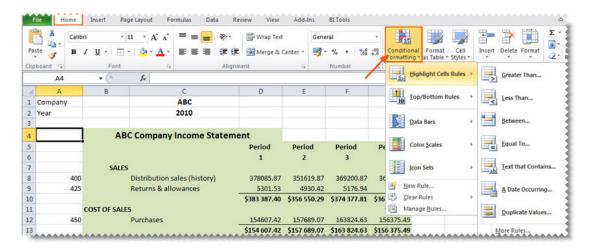
#### **Best Practice**

The benefits of applying a best practice standard are:

- Consistency spreadsheets have a consistent structure and look, making sharing easier.
- Clarity spreadsheets are clear and structured, reading like a book, navigating like a website. This makes them easier to share and audit.
- Efficiency spreadsheets use efficient formula structures. They will be easier to use and share, saving time at key points in critical processes.
- Flexibility models are easily changed and extended without the need for a complete re-work.

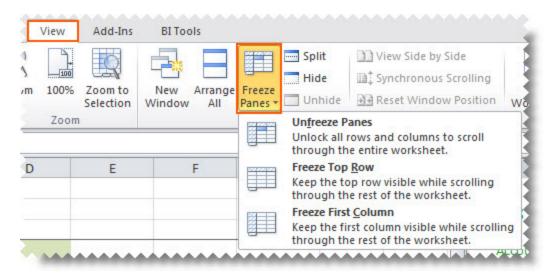
We recommend that you ...

- Use <u>cell references</u> to enter data into formulas. Using cell references in formulas allows the
  formula to update when the data is changed at a later date, without having to manually edit
  each formula. This method makes modifying and maintaining your worksheet easier.
- Use <u>account ranges</u> in your reports to ensure new accounts being added to the General Ledger are included in your reports.
- Use Conditional formatting with proper visual design, you will be able to discern 'good' or 'bad' values in seconds.



Avoid the extraneous - remove any 'noise'. If it doesn't serve a purpose in the spreadsheet, take
it out. That includes prior old data, prior layout attempts etc.

- Use a consistent naming strategy with versions, and save often. If you are working on updating the 4th version of your income statement spreadsheet, name and save the workbook as **Income Statement 5.0** before your start making your changes. If something goes terribly wrong, you can always revert to the old version.
- Set **Freeze Panes** in Microsoft Excel so you can easily scroll around the worksheet without losing view of report headings etc.



# **Reporting Trees**

## What are Reporting Trees?

Although you can create financial reports without the aid of a Reporting Tree, the Reporting Tree allows you to model a very sophisticated reporting structure and view your organization in many different ways with the click of a button. Some companies may have very complex corporate hierarchies that require hundreds of tree units, as well as other hierarchies that require much fewer tree units.

Most organizations have a hierarchical structure in which departments (or other business units) report to one or more higher-level units. In a traditional organizational chart, the lower units on the chart typically report to increasingly higher units.

Sage Intelligence Reporting uses the term **reporting unit** for each box in an organizational chart. A reporting unit can be an individual department from the General Ledger, or it can be a higher-level, summary unit that combines information from other reporting units. For a Report Designer layout that includes a Reporting Tree, one report is generated for each reporting unit and at the summary level. All of these reports use the text columns, row and column layouts that are specified in the Report Designer.

Each Reporting Tree contains a group of reporting units. Sage Intelligence Reporting allows you to easily add or change reporting units without requiring a change to your financial data.

# **Reporting Unit Structures**

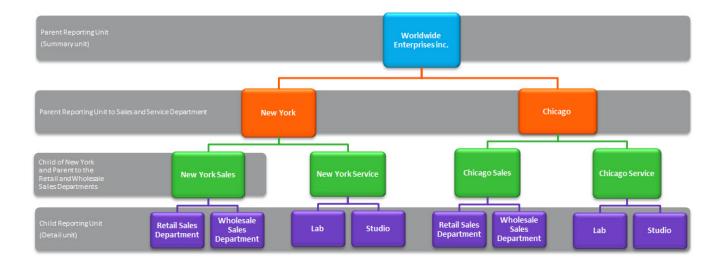
Sage Intelligence Reporting uses the following kinds of reporting units:

- A detail unit draws information directly from the financial data or from a Microsoft Excel spreadsheet file.
- A summary unit summarizes data from lower-level units.

A Reporting Tree consists of parent reporting units and child reporting units:

- A parent reporting unit is a summary unit that pulls summarized information from a detail unit. A
  summary unit can be both a detail unit and a summary unit; that is, a summary unit can draw
  information from a lower unit, the financial data, or an Excel spreadsheet. Thus, a parent unit
  can, in turn, be the child unit of a higher parent unit.
- A child reporting unit can be either a detail unit that pulls information directly from the financial data or a spreadsheet, or it can be an intermediate summary unit (that is, the parent unit to a lower unit, but also the child unit to a higher-level summary unit).

The following diagram shows the parent and child reporting units, and their hierarchical relationship, for the organization **Worldwide Enterprises inc**.



The lowest-level detail reporting units (Retail Sales, Wholesale Sales, Lab and Studio) represent departments in the financial data.

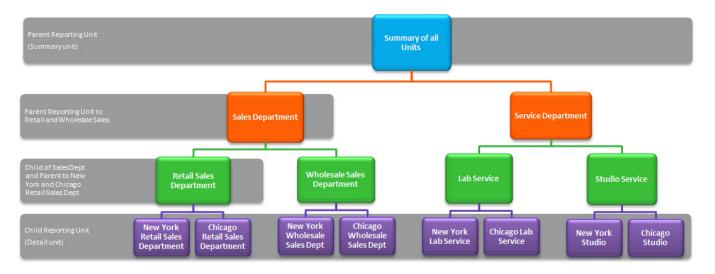
The higher-level summary units simply summarize information from the detail units.

In Sage Intelligence Reporting, you can create an unlimited number of Reporting Trees to view your organization in different ways. Each Reporting Tree can contain any combination of departments and summary units.

By rearranging the structure among the reporting units, you can create different Reporting Trees. You can then use the same Report Designer Layout with each Reporting Tree, enabling you to create different financial report layouts very quickly.

For example, the diagram below shows a Reporting Tree that is essentially the same as the Reporting Tree that is shown above. The difference is that the reporting structure displays an organizational structure that is divided by business function instead of by location. These two Reporting Trees demonstrate different perspectives on entity operations.

If you create several different Reporting Trees, you can print a series of financial statements each month that analyze and present your entity's operations in various ways.



## **Parent Child Relationships**

The most common type of Reporting Tree is composed of parent units that pull summarized information from the detail units and child units that contain detail units of account information. However, many detail/summary hierarchy combinations can be created. A child unit can be both a child to the higher unit as well as a parent to a lower unit. See topic Reporting Unit Structures.

You can create this parent/child hierarchy structure by moving individual reporting units or an entire branch (parent unit and all child units) to higher or lower levels on the graphical tree. This is called promoting and demoting units. Promoting a unit moves it to a higher level in the tree. Demoting a unit moves a unit to a lower level. When you build a Reporting Tree, you can promote and demote reporting units using a drag-and-drop operation.

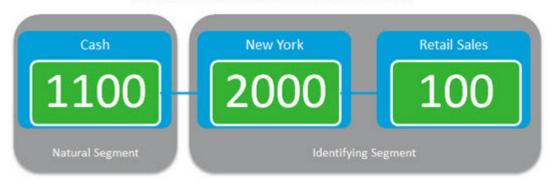


#### **Account Filters**

#### **Account Filters**

Most organizations use an account structure that separates business entities into different categories. A fully qualified account contains a value for the natural segment, for example, Cash or Sales, as well as values for additional segments, for example, Location, Division and Department. The following figure demonstrates how the natural segment and the Identifying segments combine to form a fully qualified account number.

## Account Structure in Financial Data



The distinction between the natural and identifying segment is critical to the successful use of the Report Designer. Typically you would specify the natural segment in a row definition and the identifying segment in a Reporting Tree definition. When reports are generated, these values combine to pull specific financial records from the source.

Reporting Trees support the use of special characters as a way to identify multiple segment values without specifically naming each one.

Character	Function
? Question Mark	A placeholder for a single character in a segment. In the above example, the value "1100-2???-100" will return all data with a segment range between "1100-2000-100" to "1100-2999-100" which will be all retail sales cash transactions from all branches with codes between 2000 and 2999.
* Asterisk	A placeholder for one or more characters at the end. In the above example, the value "1100-2000-*" will return all data with a segment range between "1100-2000-0" to "1100-2000-999" which will be all cash transactions from all departments in New York.
OR	Used to describe multiple segments. In the above example, the value "1100-2000-100 OR 1100-2000-200" will return all data with a segment of either 1100-2000-100 or a segment range of 1100-2000-200 which will be all retail sales cash transactions from New York branch or wholesale sales cash transactions from New York (if 200 represented wholesale sales)
то	Used to describe a range of segments. In the above example, the value "1100-1???-100? TO 1100-8???-100" will return all data with a segment range from 1100-1000-100 to 1100-8999-100 which will be all cash retail sales from all branches whose branch segments range from 1000 to 8999.

# The following account delimiters are supported:

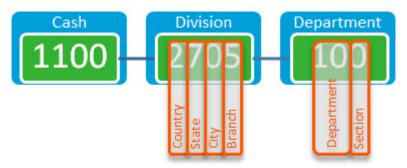
- (Dash)
- / (Slash)
- \ (Backslash)
- . (Full stop)
- # (Number sign)
- % (Percentage)
- ^ (Caret)
- & (Ampersand)
- : (Colon)
- < (Greater than)
- > (Less than)
- \* (Asterisk)

# Account Filter Examples

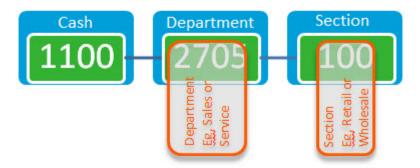
Depending on the size of the organization, fully qualified account number segments can have different representations for different companies.

## Example below:

# Large International Corporation



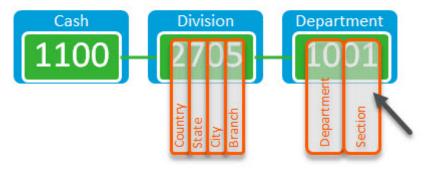
# **Small Local Business**



In the above example to include all cash transactions, an account filter rule of **1100-????-???** would be used.

An extra digit may even be added to further identify a segment:

# Large International Corporation



In this example to include all cash transactions, an account filter rule of 1100-???? would be used.

# The following account delimiters are supported:

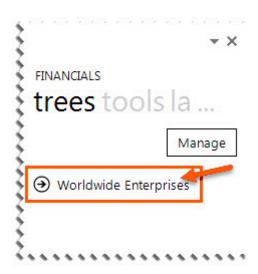
- (Dash)
- / (Slash)
- \ (Backslash)
- . (Full stop)
- # (Number sign)
- % (Percentage)
- ^ (Caret)
- & (Ampersand)
- : (Colon)
- < (Greater than)
- > (Less than)
- \* (Asterisk)

# **Working with Reporting Trees**

**Viewing Reporting Trees** 

Reporting Trees which have already been created will be listed in the Task Pane.

1. To view the reporting unit structure, click on the Reporting Tree name.



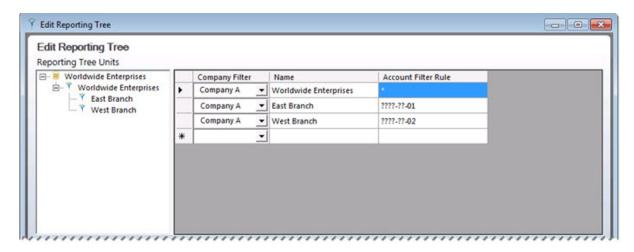
2. To view the units further down the hierarchy, click on the child units.



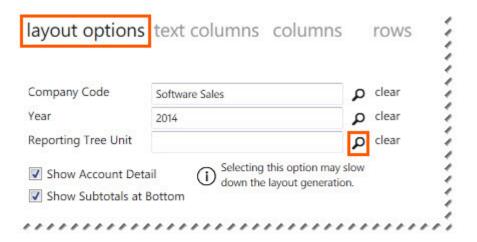
## Using Reporting Trees in a Layout Generator Report Layout

**Note:** You can't use Reporting Trees to consolidate companies in the Layout Generator. You'll need to use the Task Pane to create consolidated report layouts.

Within the same General Ledger company, you can use Reporting Trees to report on different divisions or branches using account segment filters.



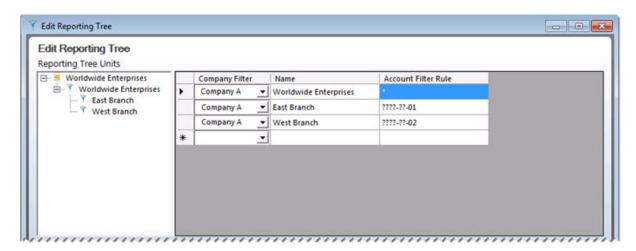
1. To filter a financial statement to a specific reporting unit, in the **Layout Options**, select the **Reporting Tree Unit** magnifying glass.



- 2. Select the Reporting Tree name and click **OK**.
- 3. Select the Reporting Tree unit and click **OK**. Depending on your tree, there may be several child unit levels you can choose from.
- 4. When you generate the layout, the Reporting Tree unit will be automatically added to all of the formulas resulting in data for that specific unit displaying.

## Using Reporting Trees in a Task Pane Report Layout

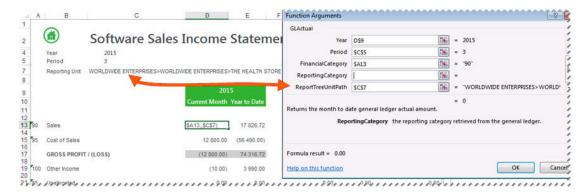
Within the same General Ledger company, you can use Reporting Trees to report on different divisions or branches using account segment filters.



- 1. To filter a financial statement to a specific reporting unit, add **Reporting Unit** to the filters list.
- 2. Drag-and-drop a reporting unit onto the report layout.



Edit formulas to include the cell reference in the ReportTreeUnit argument.

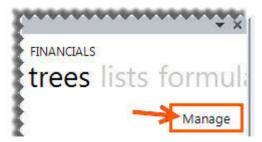


4. By dragging in another Reporting Tree unit into the same cell, the report data is immediately updated for the new Reporting Tree unit.

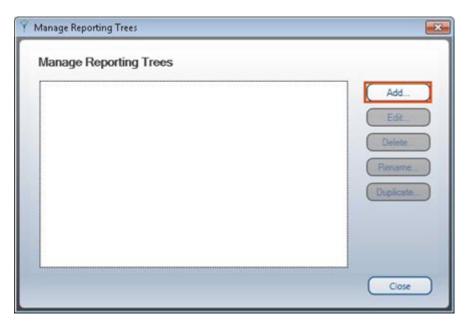
## Adding a New Reporting Tree

Before you build any Reporting Trees, you will first need to determine the various reporting structures your company will require. The best approach is to draw an organizational chart of your company. Refer to the topic, Reporting Unit Structures. Use your current General Ledger departments as the lowest detail level. Add to these as many boxes as you need to show higher-level divisions or regions. Remember that each box represents a potential reporting unit in any of your Reporting Trees.

1. To manage reporting units, in the **trees** tab, click **Manage**.



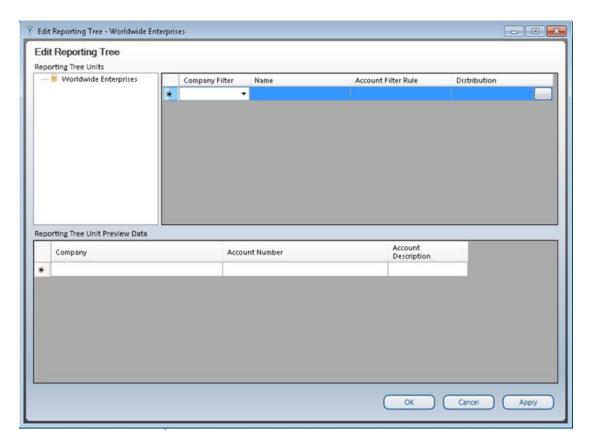
From the **Manage Reporting Trees** window, you can now **Add** a new or **Edit**, **Delete**, **Rename** or **Duplicate** your existing Reporting Trees.



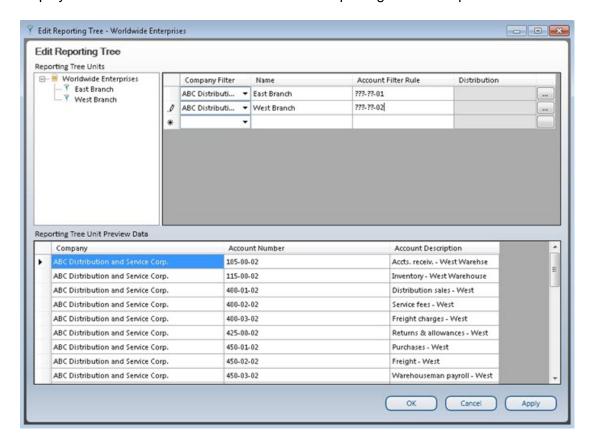
- 2. We're going to add a Reporting Tree. Select Add.
- 3. Enter a name for your Reporting Tree.



4. In the right pane each reporting unit will need to be added in a separate row with its relevant account filter rule.



5. The graphical tree on the left side of the Reporting Tree Manager allows you to visualize the relationship of parent/child unit hierarchy while the right side displays each reporting unit in a separate row with its relevant account filter. The Preview Pane will change dynamically to display the results of the account filter for each reporting unit. Example below:



- 6. An optional Company filter may be applied. This will further filter the reporting unit to apply only to a specified company.
- 7. An optional distribution instruction may be added to each reporting unit. The distribution instruction entered here will automatically be linked to the generated worksheet. This prevents instructions from having to be selected and linked to each individual report.
- 8. Using drag-and-drop functionality, you can arrange your reporting units into <u>parent/child</u> hierarchies.
- 9. Click **Apply** to save and continue. Click **OK** to save and exit.

# **Editing Reporting Trees**

To edit Reporting Trees, do the following:

 From the Manage Reporting Trees window, select the Reporting Tree you wish to edit and select the Edit button.



2. Make the necessary changes. Click **Apply** to save and continue. Click **OK** to save and exit.

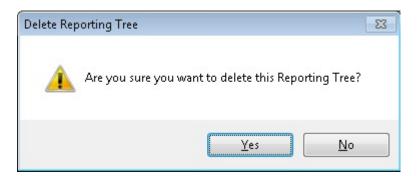
# Deleting a Reporting Tree

To delete Reporting Trees, do the following:

- 1. From the Manage Reporting Trees window, select the Reporting Tree you wish to delete.
- 2. Select **Delete**.



3. A confirmation window will open. Select **Yes** to permanently delete the Reporting Tree.



# Renaming a Reporting Tree

- 1. From the **Manage Reporting Trees** window, select the Reporting Tree you wish to rename.
- 2. Select Rename.



3. Enter the new name for the Reporting Tree.



4. Select **OK** to save your change. Selecting **Cancel** will exit without saving.

# **Duplicating a Reporting Tree**

- 1. From the Manage Reporting Trees window, select the Reporting Tree you wish to duplicate.
- 2. Select the **Duplicate** button.



3. Enter a name for the copy of the Reporting Tree.



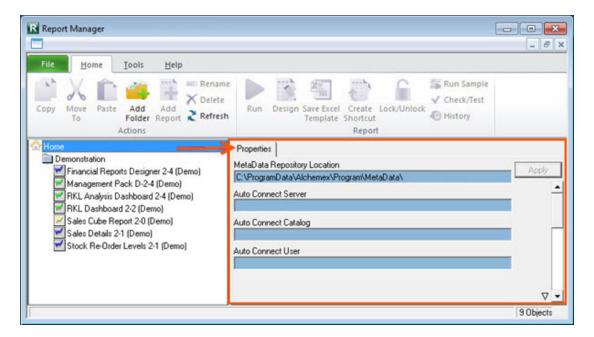
4. Select **OK** to save.

# Copying Reporting Trees to other Sage Intelligence Reporting systems

To copy Reporting Trees to other Sage Intelligence Reporting systems, you will need to locate your metadata repository and copy the required Reporting Tree files.

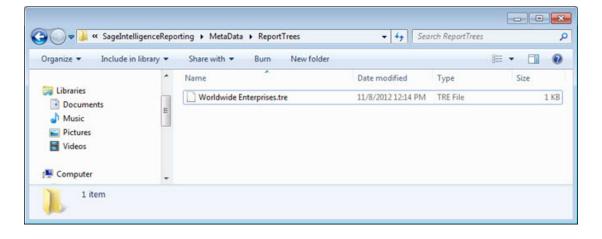
Locating the Metadata Repository

- 1. Open Report Manager.
- 2. Select Home.
- In the properties window, under MetaData Repository Location, note the path to your metadata repository.



## Copying Reporting Trees

- 1. Using windows explorer, browse to the location of your metadata repository.
- 2. Double-click the **ReportTrees** folder.
- 3. A list of all your Reporting Trees will be displayed. Copy the required Reporting Tree/s.



# Pasting Reporting Trees

- 1. Using windows explorer on the destination Sage Intelligence Reporting system, browse to the location of that systems metadata repository.
- 2. Paste the Reporting Tree you copied previously into the **ReportTrees** folder.

# **APPENDIX A**

#### **Available Formulas**

# **Opening Balance Formula**

This topic describes the formula syntax and usage of the **GLOpeningBalance500** formula in Microsoft Excel. The **GLOpeningBalance500** formula is made available in Microsoft Excel by the Report Designer Task Pane.

# Description

The **GLOpeningBalance500** formula returns the opening balance General Ledger amount after applying all the filters specified as arguments. Each argument can be a cell reference, a constant, or a named range.

Syntax

=GLOpeningBalance500(Account,Company,Year,Type,AccountCategoryCode,AccountGroupCode,AccountTypeCode,BalanceType,CurrencyCode,ReportTreeUnit)

# The GLOpeningBalance500 formula syntax has the following arguments:

Filter	Need	What needs to be filled in?	What is the purpose of the filter?
Account	Required	The account code from the Accounts or Natural Accounts list retrieved from the General Ledger.	Used to reference one or more General Ledger accounts for which values must be returned. Supports Accounts, Natural Accounts, account ranges, account wildcards & account addition/subtraction.
Company	Optional	A company code retrieved from the General Ledger.	Filters the General Ledger accounts being referenced to one or more specific companies. Supports a single company code and comma separated values
Year	Required	The fiscal year to return data on. A fiscal year is a length of time that a company uses for accounting purposes. The fiscal year may or may not be the same as a calendar year.	Filters the General Ledger accounts being referenced to a specific fiscal year.
Туре	Optional	To determine where the amount should be retrieved from. For example, B = Balance Sheet, I = Income Statement, R = Retained Income.	Identifies where the amount should be retrieved from - income statement, balance sheet or retained income.
AccountCategoryCode	Optional	An account category code retrieved from the General Ledger.	Summarizes all of the General Ledger accounts which are linked to the specified category and returns the summary value.
AccountGroupCode	Optional	An account group code retrieved from the General Ledger.	Summarizes all of the General Ledger accounts which are linked to the specified account group

Filter	Need	What needs to be filled in?	What is the purpose of the filter?
			and returns the summary value.
AccountTypeCode	Optional	An account type code retrieved from the General Ledger.	Identifies the format of the account numbers that are assigned to the account type code.
BalanceType	Optional	To determine whether only debit amounts or only credit amounts must be retrieved. For example, type <b>Debit</b> or <b>Credit</b> .	Allows only the credit or debit balances to be returned for the accounts which are being referenced by this formula.
CurrencyCode	Required	A currency code retrieved from the General Ledger.	Filters the currency code for which accounts must be retrieved.
ReportTreeUnit	Optional	A Reporting Tree unit in the format: Treename>Parent>Parent>unit. For example, Worldwide Enterprises>New York>NY Sales>NY Retail Sales	Used to achieve organizational reporting. Allows the account filter rule within one of a Reporting Tree's units to be applied to the formula.

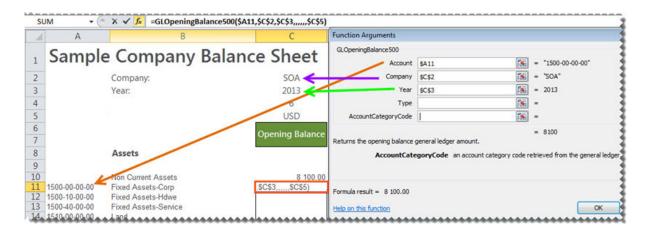
## Remarks

- Arguments are applied in the order that they are displayed.
- The recommended method for entering data into the Sage Intelligence Reporting formulas is by using cell references. This method makes modifying and maintaining your worksheet easier.
- Ranges, Mathematical Calculations and Wildcards can be used in the referenced cell of the Account argument allowing you to filter on Account Numbers or Account Groups.
- To change the sign of an account to a negative number, add a minus sign (-) to the beginning of the formula.

# Example

An example of a **GLOpeningBalance500** formula could be:

# =GLOpeningBalance500(\$A11,\$C\$2,\$C\$3)



## **Closing Balance Formula**

This topic describes the formula syntax and usage of the **GLClosingBalance500** formula in Microsoft Excel. The **GLClosingBalance500** formula is made available in Microsoft Excel by the Report Designer Task Pane.

## Description

The **GLClosingBalance500** formula returns the closing balance General Ledger amount after applying all the filters specified as arguments. Each argument can be a cell reference, a constant, or a named range.

# Syntax

=GLClosingBalance500(Account,Company,Year,Period,Type,AccountGroupCode,AccountTypeCode,BalanceType,CurrencyCode,ReportTreeUnit)

# The **GLClosingBalance500** formula syntax has the following arguments:

Filter	Need	What needs to be filled in?	What is the purpose of the filter?
Account	Required	The account code from the <b>Accounts</b> or <b>Natural Accounts</b> list retrieved from the General Ledger.	Used to reference one or more General Ledger accounts for which values must be returned. Supports Accounts, Natural Accounts, account ranges, account wildcards & account addition/subtraction.
Company	Optional	A company code retrieved from the General Ledger.	Filters the General Ledger accounts being referenced to one or more specific companies. Supports a single company code and comma separated values.
Year	Required	The fiscal year to return data on. A fiscal year is a length of time that a company uses for accounting purposes. The fiscal year may or may not be the same as a calendar year.	Filters the General Ledger accounts being referenced to a specific fiscal year.
Period	Required	The period to return data up to. A period is the operating cycle of a company for which accounting information is collected and reported.	Filters the General Ledger accounts being referenced to the accumulated total up to a specific period.
Туре	Optional	To determine where the amount should be retrieved from. For example, B = Balance Sheet, I = Income Statement, R = Retained Income.	Identifies where the amount should be retrieved from - income statement, balance sheet or retained income.
AccountGroupCode	Optional	An account group code retrieved from the General Ledger.	Summarizes all of the General Ledger accounts which are linked to the specified account group and returns the summary value.
AccountTypeCode	Optional	An account type code retrieved from the General Ledger.	Identifies the format of the account numbers that are assigned to the account type code.
BalanceType	Optional	To determine whether only debit amounts or only credit amounts must	Allows only the credit or debit balances to be returned for the

Filter	Need	What needs to be filled in?	What is the purpose of the filter?
		be retrieved. For example, type <b>Debit</b> or <b>Credit</b> .	accounts which are being referenced by this formula.
CurrencyCode	Required	A currency code retrieved from the General Ledger.	Filters the currency code for which accounts must be retrieved.
ReportTreeUnit	Optional	A Reporting Tree unit in the format: Treename>Parent>Parent>unit. For example, Worldwide Enterprises>New York>NY Sales>NY Retail Sales	Used to achieve organizational reporting. Allows the account filter rule within one of a Reporting Tree's units to be applied to the formula.

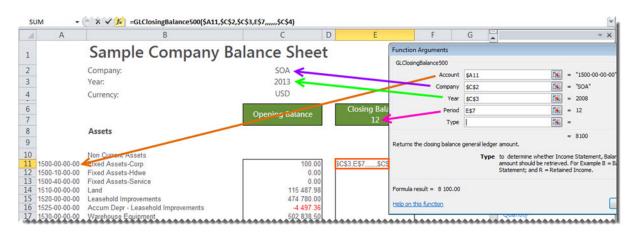
#### Remarks

- Arguments are applied in the order that they are displayed.
- The recommended method for entering data into the Sage Intelligence Reporting formulas is by using cell references. This method makes modifying and maintaining your worksheet easier.
- Ranges, Mathematical Calculations and Wildcards can be used in the referenced cell of the Account argument allowing you to filter on Account Numbers or Account Groups.
- To change the sign of an account to a negative number, add a minus sign (-) to the beginning of the formula.

## Example

An example of a GLClosingBalance500 formula could be:

# =GLClosingBalance500(\$A11,\$C\$2,\$C\$3,E\$7)



## **Actual Formula**

This topic describes the formula syntax and usage of the **GLActual500** formula in Microsoft Excel. The **GLActual500** formula is made available in Microsoft Excel by the Report Designer Task Pane.

# Description

The **GLActual500** formula returns the month to date General Ledger actual amount after applying all the filters specified as arguments. Each argument can be a cell reference, a constant, or a named range.

# Syntax

=GLActual500(Account,Company,Year,Period,Type,AccountGroupCode,AccountCategoryCode,AccountTypeCode,BalanceType,CurrencyCode,ReportTreeUnit)

# The **GLActual500** formula syntax has the following arguments:

Filter	Need	What needs to be filled in?	What is the purpose of the filter?
Account	Required	The account code from the <b>Accounts</b> or <b>Natural Accounts</b> list retrieved from the General Ledger.	Used to reference one or more General Ledger accounts for which values must be returned. Supports Accounts, Natural Accounts, account ranges, account wildcards & account addition/subtraction.
Company	Optional	A company code retrieved from the General Ledger.	Filters the General Ledger accounts being referenced to one or more specific companies. Supports a single company code and comma separated values.
Year	Required	The fiscal year to return data on. A fiscal year is a length of time that a company uses for accounting purposes. The fiscal year may or may not be the same as a calendar year.	Filters the General Ledger accounts being referenced to a specific fiscal year.
Period	Required	The period to return data on. A period is the operating cycle of a company for which accounting information is collected and reported.	Filters the General Ledger accounts being referenced to a specific period.
Туре	Optional	To determine where the amount should be retrieved from. For example, B = Balance Sheet, I = Income Statement, R = Retained Income.	Identifies where the amount should be retrieved from - income statement, balance sheet or retained income.
AccountCategoryCode	Optional	An account category code retrieved from the General Ledger.	Summarizes all of the General Ledger accounts which are linked to the specified category and returns the summary value.
AccountGroupCode	Optional	An account group code retrieved from the General Ledger.	Summarizes all of the General Ledger accounts which are linked to the specified account group and returns the summary value.

Filter	Need	What needs to be filled in?	What is the purpose of the filter?
AccountTypeCode	Optional	An account type code retrieved from the General Ledger.	Identifies the format of the account numbers that are assigned to the account type code.
BalanceType	Optional	To determine whether only debit amounts or only credit amounts must be retrieved. For example, type <b>Debit</b> or <b>Credit</b> .	Allows only the credit or debit balances to be returned for the accounts which are being referenced by this formula.
CurrencyCode	Required	A currency code retrieved from the General Ledger.	Filters the currency code for which accounts must be retrieved.
ReportTreeUnit	Optional	A Reporting Tree unit in the format: Treename>Parent>Parent>unit. For example, Worldwide Enterprises>New York>NY Sales>NY Retail Sales	Used to achieve organizational reporting. Allows the account filter rule within one of a Reporting Tree's units to be applied to the formula.

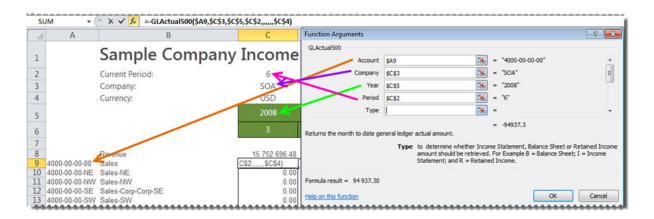
#### Remarks

- Arguments are applied in the order that they are displayed.
- The recommended method for entering data into the Sage Intelligence Reporting formulas is by using cell references. This method makes modifying and maintaining your worksheet easier.
- Ranges, Mathematical Calculations and Wildcards can be used in the referenced cell of the Account argument allowing you to filter on Account Numbers or Account Groups.
- To change the sign of an account to a negative number, add a minus sign (-) to the beginning of the formula.

## Example

An example of a GLActual500 formula could be:

# =-GLActual500(\$A9,\$C\$2,C\$5,C\$6,,,,,\$C\$3)



## **Actual YTD Formula**

This topic describes the formula syntax and usage of the **GLActualYTD500** formula in Microsoft Excel. The **GLActualYTD500** formula is made available in Microsoft Excel by the Report Designer Task Pane.

# Description

The **GLActualYTD500** formula returns the year to date General Ledger actual amount after applying all the filters specified as arguments. Each argument can be a cell reference, a constant, or a named range.

# **Syntax**

=GLActualYTD500(Account,Company,Year,Period,Type,AccountGroupCode,AccountCategoryCode,AccountTypeCode,BalanceType,CurrencyCode,ReportTreeUnit)

# The **GLActualYTD500** formula syntax has the following arguments:

Filter	Need	What needs to be filled in?	What is the purpose of the filter?
Account	Required	The account code from the <b>Accounts</b> or <b>Natural Accounts</b> list retrieved from the General Ledger.	Used to reference one or more General Ledger accounts for which values must be returned. Supports Accounts, Natural Accounts, account ranges, account wildcards & account addition/subtraction.
Company	Optional	A company code retrieved from the General Ledger.	Filters the General Ledger accounts being referenced to one or more specific companies. Supports a single company code and comma separated values.
Year	Required	The fiscal year to return data on. A fiscal year is a length of time that a company uses for accounting purposes. The fiscal year may or may not be the same as a calendar year.	Filters the General Ledger accounts being referenced to a specific fiscal year.
Period	Required	The period to return data on. A period is the operating cycle of a company for which accounting information is collected and reported.	Filters the General Ledger accounts being referenced to a specific period.
Туре	Optional	To determine where the amount should be retrieved from. For example, B = Balance Sheet, I = Income Statement, R = Retained Income.	Identifies where the amount should be retrieved from - income statement, balance sheet or retained income.
AccountGroupCode	Optional	An account group code retrieved from the General Ledger.	
AccountCategoryCode	Optional	An account category code retrieved from the General Ledger.	Summarizes all of the General Ledger accounts which are linked to the specified category and returns the summary value.
AccountTypeCode	Optional	An account type code retrieved from	Identifies the format of the account

Filter	Need	What needs to be filled in?	What is the purpose of the filter?
		the General Ledger.	numbers that are assigned to the account type code.
BalanceType	Optional	To determine whether only debit amounts or only credit amounts must be retrieved. For example, type <b>Debit</b> or <b>Credit</b> .	Allows only the credit or debit balances to be returned for the accounts which are being referenced by this formula.
CurrencyCode	Required	A currency code retrieved from the General Ledger.	Filters the currency code for which accounts must be retrieved.
ReportTreeUnit	Optional	A Reporting Tree unit in the format: Treename>Parent>Parent>unit. For example, Worldwide Enterprises>New York>NY Sales>NY Retail Sales	Used to achieve organizational reporting. Allows the account filter rule within one of a Reporting Tree's units to be applied to the formula.

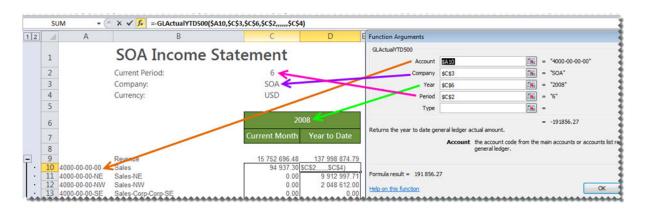
#### Remarks

- Arguments are applied in the order that they are displayed.
- The recommended method for entering data into the Sage Intelligence Reporting formulas is by using cell references. This method makes modifying and maintaining your worksheet easier.
- Ranges, Mathematical Calculations and Wildcards can be used in the referenced cell of the Account argument allowing you to filter on Account Numbers or Account Groups.
- To change the sign of an account to a negative number, add a minus sign (-) to the beginning of the formula.

#### Example

An example of a GLActualYTD500 formula could be:

# =-GLActualYTD500(\$A9,\$C\$3,\$C\$5,\$C\$2)



# **Budget Formula**

This topic describes the formula syntax and usage of the **GLBudget500** formula in Microsoft Excel. The **GLBudget500** formula is made available in Microsoft Excel by the Report Designer Task Pane.

## Description

The **GLBudget500** formula returns the month to date General Ledger budget amount after applying all the filters specified as arguments. Each argument can be a cell reference, a constant, or a named range.

# **Syntax**

=GLBudget500(Account,Company,Year,Period,Type,AccountCategoryCode,AccountGroupCode, AccountTypeCode,BalanceType,CurrencyCode,ReportTreeUnit)

# The **GLBudget500** formula syntax has the following arguments:

Filter	Need	What needs to be filled in?	What is the purpose of the filter?
Account	Required	The account code from the <b>Accounts</b> or <b>Natural Accounts</b> list retrieved from the General Ledger.	Used to reference one or more General Ledger accounts for which values must be returned. Supports Accounts, Natural Accounts, account ranges, account wildcards & account addition/subtraction.
Company	Optional	A company code retrieved from the General Ledger.	Filters the General Ledger accounts being referenced to one or more specific companies. Supports a single company code and comma separated values.
Year	Required	The fiscal year to return data on. A fiscal year is a length of time that a company uses for accounting purposes. The fiscal year may or may not be the same as a calendar year.	Filters the General Ledger accounts being referenced to a specific fiscal year.
Period	Required	The period to return data on. A period is the operating cycle of a company for which accounting information is collected and reported.	Filters the General Ledger accounts being referenced to a specific period.
Туре	Optional	To determine where the amount should be retrieved from. For example, B = Balance Sheet, I = Income Statement, R = Retained Income.	Identifies where the amount should be retrieved from - income statement, balance sheet or retained income.
AccountCategoryCode	Optional	An account category code retrieved from the General Ledger.	Summarizes all of the General Ledger accounts which are linked to the specified account category and returns the summary value.
AccountGroupCode	Optional	An account group code retrieved from the General Ledger.	Summarizes all of the General Ledger accounts which are linked to the specified account group and returns the summary value.

Filter	Need	What needs to be filled in?	What is the purpose of the filter?
AccountTypeCode	Optional	An account type code retrieved from the General Ledger.	Identifies the format of the account numbers that are assigned to the account type code.
BudgetTypeCode	Required	The budget type code retrieved from the General Ledger	Filters the General Ledger budget amounts being referenced to a specific budget type code. The format of the budget type code must be identical to the format in your General Ledger.
CurrencyCode	Required	A currency code retrieved from the General Ledger.	Filters the currency code for which accounts must be retrieved.
ReportTreeUnit	Optional	A Reporting Tree unit in the format: Treename>Parent>Parent>unit. For example, Worldwide Enterprises>New York>NY Sales>NY Retail Sales	Used to achieve organizational reporting. Allows the account filter rule within one of a Reporting Tree's units to be applied to the formula.

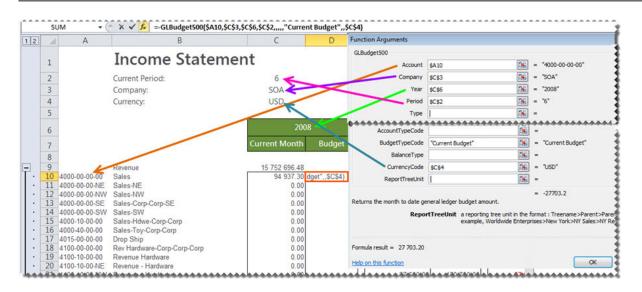
#### Remarks

- Arguments are applied in the order that they are displayed.
- The recommended method for entering data into the Sage Intelligence Reporting formulas is by using cell references. This method makes modifying and maintaining your worksheet easier.
- Ranges, Mathematical Calculations and Wildcards can be used in the referenced cell of the Account argument allowing you to filter on Account Numbers or Account Groups.
- To change the sign of an account to a negative number, add a minus sign (-) to the beginning of the formula.

## Example

An example of a GLBudget500 formula could be:

# =-GLBudget500(\$A9,\$C\$3,C\$5,\$C\$2,,,,,"Current Budget")



# **Budget YTD Formula**

This topic describes the formula syntax and usage of the **GLBudgetYTD500** formula in Microsoft Excel. The **GLBudgetYTD500** formula is made available in Microsoft Excel by the Report Designer Task Pane.

# Description

The **GLBudgetYTD500** formula returns the year to date General Ledger budget amount after applying all the filters specified as arguments. Each argument can be a cell reference, a constant, or a named range.

# **Syntax**

=GLBudgetYTD500(Account,Company,Year,Period,Type,AccountCategoryCode,AccountGroup Code,AccountTypeCode,BudgetTypeCode,CurrencyCode,ReportTreeUnit)

## The **GLBudgetYTD500** formula syntax has the following arguments:

Filter	Need	What needs to be filled in?	What is the purpose of the filter?
Account	Required	The account code from the <b>Accounts</b> or <b>Natural Accounts</b> list retrieved from the General Ledger.	Used to reference one or more General Ledger accounts for which values must be returned. Supports Accounts, Natural Accounts, account ranges, account wildcards & account addition/subtraction.
Company	Optional	A company code retrieved from the General Ledger.	Filters the General Ledger accounts being referenced to one or more specific companies. Supports a single company code and comma separated values.
Year	Required	The fiscal year to return data on. A fiscal year is a length of time that a company uses for accounting purposes. The fiscal year may or may not be the same as a calendar year.	Filters the General Ledger accounts being referenced to a specific fiscal year.
Period	Required	The period to return data on. A period is the operating cycle of a company for which accounting information is collected and reported.	Filters the General Ledger accounts being referenced to a specific period.
Туре	Optional	To determine where the amount should be retrieved from. For example, B = Balance Sheet, I = Income Statement, R = Retained Income.	Identifies where the amount should be retrieved from - income statement, balance sheet or retained income.
AccountCategoryCode	Optional	An account category code retrieved from the General Ledger.	Summarizes all of the General Ledger accounts which are linked to the specified account category and returns the summary value.
AccountGroupCode	Optional	An account group code retrieved from the General Ledger.	Summarizes all of the General Ledger accounts which are linked to the specified account group and returns the summary value.

Filter	Need	What needs to be filled in?	What is the purpose of the filter?
AccountTypeCode	Optional	An account type code retrieved from the General Ledger.	Identifies the format of the account numbers that are assigned to the account type code.
BudgetTypeCode	Required	the budget type code retrieved from the General Ledger	Filters the General Ledger budget amounts being referenced to a specific budget type code. The format of the budget type code must be identical to the format in your General Ledger.
CurrencyCode	Required	A currency code retrieved from the General Ledger.	Filters the currency code for which accounts must be retrieved.
ReportTreeUnit	Optional	A Reporting Tree unit in the format: Treename>Parent>Parent>unit. For example, Worldwide Enterprises>New York>NY Sales>NY Retail Sales	Used to achieve organizational reporting. Allows the account filter rule within one of a Reporting Tree's units to be applied to the formula.

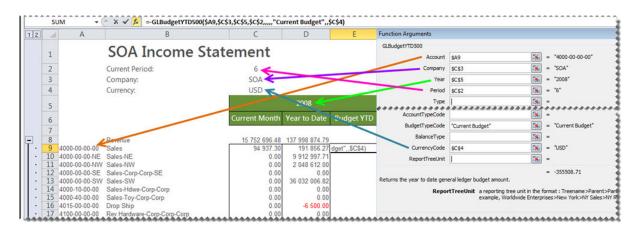
#### Remarks

- Arguments are applied in the order that they are displayed.
- The recommended method for entering data into the Sage Intelligence Reporting formulas is by using cell references. This method makes modifying and maintaining your worksheet easier.
- Ranges, Mathematical Calculations and Wildcards can be used in the referenced cell of the Account argument allowing you to filter on Account Numbers or Account Groups.
- To change the sign of an account to a negative number, add a minus sign (-) to the beginning of the formula.

## Example

An example of a GLBudgetYTD500 formula could be:

# =-GLBudgetYTD500(\$A9,\$C\$3,\$C\$5,\$C\$2,,,,,"Current Budget")



#### **Current Year Formula**

This topic describes the formula syntax and usage of the **GLCurrentYear500** formula in Microsoft Excel. The **GLCurrentYear500** formula is made available in Microsoft Excel by the Report Designer Task Pane.

## Description

The **GLCurrentYear500** formula returns the current fiscal year from your General Ledger after applying the filters specified as arguments. Each argument can be a cell reference, a constant, or a named range.

# Syntax

=GLCurrentYear500(Company)

The **GLCurrentYear500** formula syntax has the following argument:

Filter	Need	What needs to be filled in?	What is the purpose of the filter?
Company	Optional	A company code retrieved from the General Ledger.	Filters the General Ledger accounts being referenced to one or more specific companies.

## Remarks

- Arguments are applied in the order that they are displayed.
- The recommended method for entering data into the Sage Intelligence Reporting formulas is by using cell references. This method makes modifying and maintaining your worksheet easier.

#### Example

An example of a GLCurrentYear500 formula could be:

# =GLCurrentYear500("SOA")



The **GLCurrentYear500** can be used in formulas to return data based on the current year, for example the report below will use the current year formula to determine the prior year to report on.



#### **Current Period Formula**

This topic describes the formula syntax and usage of the **GLCurrentPeriod500** formula in Microsoft Excel. The **GLCurrentPeriod500** formula is made available in Microsoft Excel by the Report Designer Task Pane.

## Description

The **GLCurrentPeriod500** formula returns the current period from your General Ledger after applying the filters specified as arguments. Each argument can be a cell reference, a constant, or a named range.

# **Syntax**

# =GLCurrentPeriod500(Company)

The GLCurrentPeriod500 formula syntax has the following arguments:

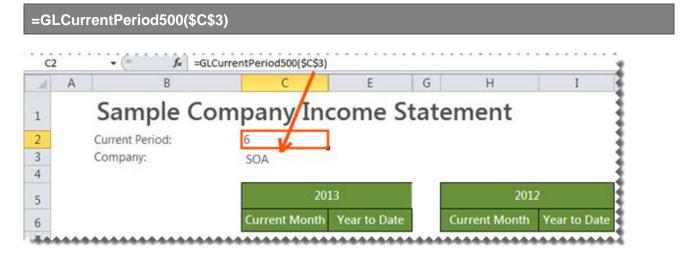
Filter	Need	What needs to be filled in?	What is the purpose of the filter?
Company	Optional	A company code retrieved from the General Ledger.	Filters the General Ledger accounts being referenced to one or more specific companies.

## Remarks

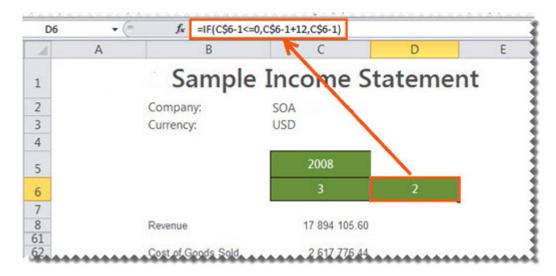
- Arguments are applied in the order that they are displayed.
- The recommended method for entering data into the Sage Intelligence Reporting formulas is by using cell references. This method makes modifying and maintaining your worksheet easier.

## Example

An example of a GLCurrentPeriod500 formula could be:



This is especially useful when reporting on the current period as well as prior periods. The **GLCurrentPeriod500** can be used in formulas to return periods based on the current period, for example in the report below the result of the current period formula in cell **C6** has been used to work out which periods to report on prior to it.



## **Company Name Formula**

This topic describes the formula syntax and usage of the **GLCompanyName500** formula in Microsoft Excel. The **GLCompanyName500** formula is made available in Microsoft Excel by the Report Designer Task Pane.

# Description

The **GLCompanyName500** formula returns the full company name from your General Ledger after applying the company code filter specified as arguments. Each argument can be a cell reference, a constant, or a named range.

# Syntax

=GLCompanyName500(Company)

The **GLCompanyName500** formula syntax has the following arguments:

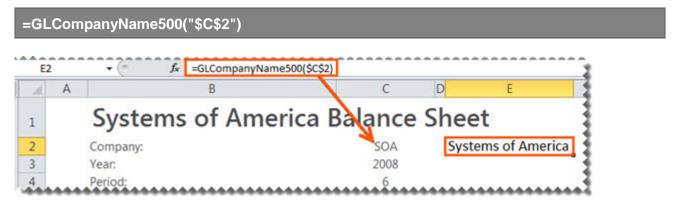
Filter	Need	What needs to be filled in?	What is the purpose of the filter?
CompanyCode	Required	A company code retrieved from the General Ledger.	Filters the companies to return a specific company name.

#### Remarks

- Arguments are applied in the order that they are displayed.
- The recommended method for entering data into the Sage Intelligence Reporting formulas is by using cell references. This method makes modifying and maintaining your worksheet easier.

#### Example

An example of a GLCompanyName500 formula could be:



# **Quantity Opening Balance Formula**

This topic describes the formula syntax and usage of the **GLQtyOpeningBal500** formula in Microsoft Excel. The **GLQtyOpeningBal500** formula is made available in Microsoft Excel by the Report Designer Task Pane.

# Description

The **GLQtyOpeningBal500** formula is used for statistical reporting and returns the opening balance General Ledger quantity information in a financial report, such as number of units, from your General Ledger, after applying the filters specified as arguments. Each argument can be a cell reference, a constant, or a named range.

# **Syntax**

=GLQtyOpeningBal500(Account,Company,Year,Period,Type,AccountGroupCode,AccountCateg oryCode,AccountTypeCode,ReportTreeUnit)

# The **GLQtyOpeningBal500** formula syntax has the following arguments:

Filter	Need	What needs to be filled in?	What is the purpose of the filter?
Account	Required	The account code from the <b>Accounts</b> or <b>Natural Accounts</b> list retrieved from the General Ledger.	Used to reference one or more General Ledger accounts for which values must be returned. Supports Accounts, Natural Accounts, account ranges, account wildcards & account addition/subtraction.
Company	Optional	A company code retrieved from the General Ledger.	Filters the General Ledger accounts being referenced to one or more specific companies. Supports a single company code and comma separated values.
Year	Required	The fiscal year to return data on. A fiscal year is a length of time that a company uses for accounting purposes. The fiscal year may or may not be the same as a calendar year.	Filters the General Ledger accounts being referenced to a specific fiscal year.
Period	Required	The period to return data on. A period is the operating cycle of a company for which accounting information is collected and reported.	Filters the General Ledger accounts being referenced to a specific period.
Туре	Optional	To determine where the amount should be retrieved from. For example, B = Balance Sheet, I = Income Statement, R = Retained Income.	Identifies where the amount should be retrieved from - income statement, balance sheet or retained income.
AccountGroupCode	Optional	An account group code retrieved from the General Ledger.	Summarizes all of the General Ledger accounts which are linked to the specified account group and returns the summary value.
AccountCategoryCode	Optional	An account category code retrieved from the General Ledger.	Summarizes all of the General Ledger accounts which are linked

			to the specified account category and returns the summary value.
AccountTypeCode	Optional	An account type code retrieved from the General Ledger.	Identifies the format of the account numbers that are assigned to the account type code.
ReportTreeUnit	Optional	A Reporting Tree unit in the format: Treename>Parent>Parent>unit. For example, Worldwide Enterprises>New York>NY Sales>NY Retail Sales	Used to achieve organizational reporting. Allows the account filter rule within one of a Reporting Tree's units to be applied to the formula.

## Remarks

- Arguments are applied in the order that they are displayed.
- The recommended method for entering data into the Sage Intelligence Reporting formulas is by using cell references. This method makes modifying and maintaining your worksheet easier.

# Example

An example of statistical reporting that returns the quantity information in a financial report is as follows:

2	HOTEL	LEMEIN I	NCC	OME S	STATEM	1ENT		
3	For the Five Months Ending May 29, 2012							
4	, , , , , , , , , , , , , , , , , , , ,							
5								
6		THIS			LAST			
7		YEAR		CPOR	YEAR	CPOR	BUDGET	CPOR
8								
9	Rooms Available	1680			1680		1680	
10	Total Control of the	1295			1521		1512	
11								
12	147 X 3 1/2	117.44			100.27		112	
13		77.08			90.54		90	
14								
26		154743.34	100	119.493	155261.63	102.079	172151.04	113.857
27								
41		6646.93	4.29545	5.13276	6673.92	4.38785	7386.12	4.885
42				47 5474		10 770 1		
62		22789.34	14.7272	17.5979	25507.8	16.7704	26215.61	17.3384
72		4174.45	2 00700	3.22351	2040.0	2.59684	4057.53	2.68355
73		41/4.45	2.69766	3.22351	3949.8	2.53684	4057.53	2.00355
74		33610.72	24 7202	25 0542	36131.52	22 7551	37659.26	24 0060

## **Quantity Formula**

This topic describes the formula syntax and usage of the **GLQuantity500** formula in Microsoft Excel. The **GLQuantity500** formula is made available in Microsoft Excel by the Report Designer Task Pane.

## Description

The **GLQuantity500** formula is used for statistical reporting and returns the quantity information in a financial report, such as number of units, from your General Ledger, after applying the filters specified as arguments. Each argument can be a cell reference, a constant, or a named range.

# Syntax

=GLQuantity500(Account,Company,Year,Period,Type,AccountCategoryCode,AccountGroupCode,,AccountTypeCode,ReportTreeUnit)

# The **GLQuantity500** formula syntax has the following arguments:

Filter	Need	What needs to be filled in?	What is the purpose of the filter?
Account	Required	The account code from the Accounts or Natural Accounts list retrieved from the General Ledger.	Used to reference one or more General Ledger accounts for which values must be returned. Supports Accounts, Natural Accounts, account ranges, account wildcards & account addition/subtraction.
Company	Optional	A company code retrieved from the General Ledger.	Filters the General Ledger accounts being referenced to one or more specific companies. Supports a single company code and comma separated values.
Year	Required	The fiscal year to return data on. A fiscal year is a length of time that a company uses for accounting purposes. The fiscal year may or may not be the same as a calendar year.	Filters the General Ledger accounts being referenced to a specific fiscal year.
Period	Required	The period to return data on. A period is the operating cycle of a company for which accounting information is collected and reported.	Filters the General Ledger accounts being referenced to a specific period.
Туре	Optional	To determine where the amount should be retrieved from. For example, B = Balance Sheet, I = Income Statement, R = Retained Income.	Identifies where the amount should be retrieved from - income statement, balance sheet or retained income.
AccountCategoryCode	Optional	An account category code retrieved from the General Ledger.	Summarizes all of the General Ledger accounts which are linked to the specified account category and returns the summary value.
AccountGroupCode	Optional	An account group code retrieved from the General Ledger.	Summarizes all of the General Ledger accounts which are linked to the specified account group

Filter	Need	What needs to be filled in?	What is the purpose of the filter?
			and returns the summary value.
AccountTypeCode	Optional	An account type code retrieved from the General Ledger.	Filters the General Ledger accounts being referenced to a specific account.
ReportTreeUnit	Optional	A Reporting Tree unit in the format : Treename>Parent>Parent>unit. For example, Worldwide Enterprises>New York>NY Sales>NY Retail Sales	Used to achieve organizational reporting. Allows the account filter rule within one of a Reporting Tree's units to be applied to the formula.

## Remarks

- Arguments are applied in the order that they are displayed.
- The recommended method for entering data into the Sage Intelligence Reporting formulas is by using cell references. This method makes modifying and maintaining your worksheet easier.

# Example

An example of statistical reporting that returns the quantity information in a financial report is as follows:

	1								
	2	HOTEL L	EMEIN I	NCC	OME S	STATEN	1ENT		
	3	For the Five Months Ending May 29, 2012							
	4								
	5								
(	6		THIS			LAST			
	7		YEAR		CPOR	YEAR	CPOR	BUDGET	CPOR
1	В								
	9	Rooms Available	1680			1680		1680	
	0	Rooms Sold	1295			1521		1512	
1	1								
1	2	A.D.R.	117.44			100.27		112	
	3	Occupancy %	77.08			90.54		90	
- Indiana	4								
	26	Total Sales	154743.34	100	119.493	155261.63	102.079	172151.04	113.857
- Interest	27								
1	11	Total Purchases	6646.93	4.29545	5.13276	6673.92	4.38785	7386.12	4.885
and the last	2								
and the same of	2	TOTAL WAGES & SALARIES	22789.34	14.7272	17.5979	25507.8	16.7704	26215.61	17.3384
	3								
	2	TOTAL PAYROLL BURDEN	4174.45	2.69766	3.22351	3949.8	2.59684	4057.53	2.68355
-	3								
7	4	TOTAL COST OF SALES	33610.72	21.7203	25.9542	36131.52	23.7551	37659.26	24.9069

## **Account Description Formula**

This topic describes the formula syntax and usage of the **GLAccountDescription** formula in Microsoft Excel. The **GLAccountDescription** formula is made available in Microsoft Excel by the Report Designer.

## Description

The **GLAccountDescription** formula returns the account name from your General Ledger based on the account number given, after applying the filters specified as arguments. Each argument can be a cell reference, a constant, or a named range.

## **Syntax**

# =GLAccountDescription(Company)

# The **GLAccountDescription** formula syntax has the following arguments:

Filter	Need	What needs to be filled in?	What is the purpose of the filter?
Company	Required	A company code retrieved from the General Ledger.	Filters the companies to return a specific company name.
GLLink	Required	The account code from the main accounts or accounts list retrieved from the General Ledger.	Used to reference one or more General Ledger accounts for which values must be returned. Supports main accounts, account ranges, account wildcards & account addition/subtraction.

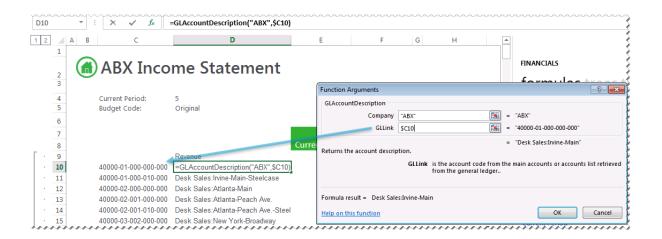
#### Remarks

- Arguments are applied in the order that they are displayed.
- The recommended method for entering data into the Sage Intelligence Reporting formulas is by using cell references. This method makes modifying and maintaining your worksheet easier.

#### Example

An example of a **GLAccountDescription** formula could be:

## =GLAccountDescription("ABX",\$C10)



## **Dynamic Range Formula**

This topic describes the formula syntax and usage of the **GLDynamicRange** formula in Microsoft Excel. The **GLDynamicRange** formula is made available in Microsoft Excel by the Report Designer.

## Description

The **GLDynamicRange** formula refreshes General Ledger accounts and can exclude rows with zero values, applying all the filters specified as arguments. Each argument can be a cell reference, a constant, or a named range.

## **Syntax**

=GLDynamicRange(DynamicRange,AccountNumberColumn,AccountRule, ExcludeZeroRows)

## The **GLDynamicRange** formula syntax has the following arguments:

Filter	Need	What needs to be filled in ?	What is the purpose of the filter?
DynamicRange	Required	The template range.	Used to reference one or more General Ledger accounts for which values must be returned. Supports main accounts, accounts, account ranges, account wildcards & account addition/subtraction.
AccountNumberColumn	Required	The account code from the main accounts or accounts list retrieved from the General Ledger.	Filters the General Ledger accounts being referenced to a specific account number column.
AccountRule	Optional	Depending on what level you have set your layout at. (Level – Account Group, Account Type, Account Category). If your layout is set up at an account level then the Account Rule is required.	Filters the General Ledger accounts being referenced to a specific account rule.
ExcludeZeroRows	Optional	1 = Exclude Zero Rows, 0 = Include Zero Rows	Filters the General Ledger accounts being referenced to either display or not display rows with zero values.

#### Remarks

- Arguments are applied in the order that they are displayed.
- The recommended method for entering data into the Sage Intelligence Reporting formulas is by using cell references. This method makes modifying and maintaining your worksheet easier.

# Example An example of a **GLDynamicRange** formula could be:

#### =GLDynamicRange(\$B10;\$C\$3;E\$6;\$C\$2;;;\$B\$9) E10 √ f<sub>sc</sub> =-GLActual(\$B10;\$C\$3;E\$6;\$C\$2;;;\$B\$9) **ABA Income Statement** Company: Function Arguments Year: GLLink \$B10 = 2010 Year \$C\$3 9 Period ES6 = "ABA" Company \$C\$2 .l: ic required AccountCategoryCode = 11 12 13 14 15 16 AccountGroupCode = 11 AccountTypeCode ReportTreeUnitPath K 1 BalanceType 1 RollupType1Code 18 Returns the month to date general ledger actual amount. GLLink is required 20 21 Net Profit