Report Designer User Guide

Sage X3 Intelligence Reporting

DH
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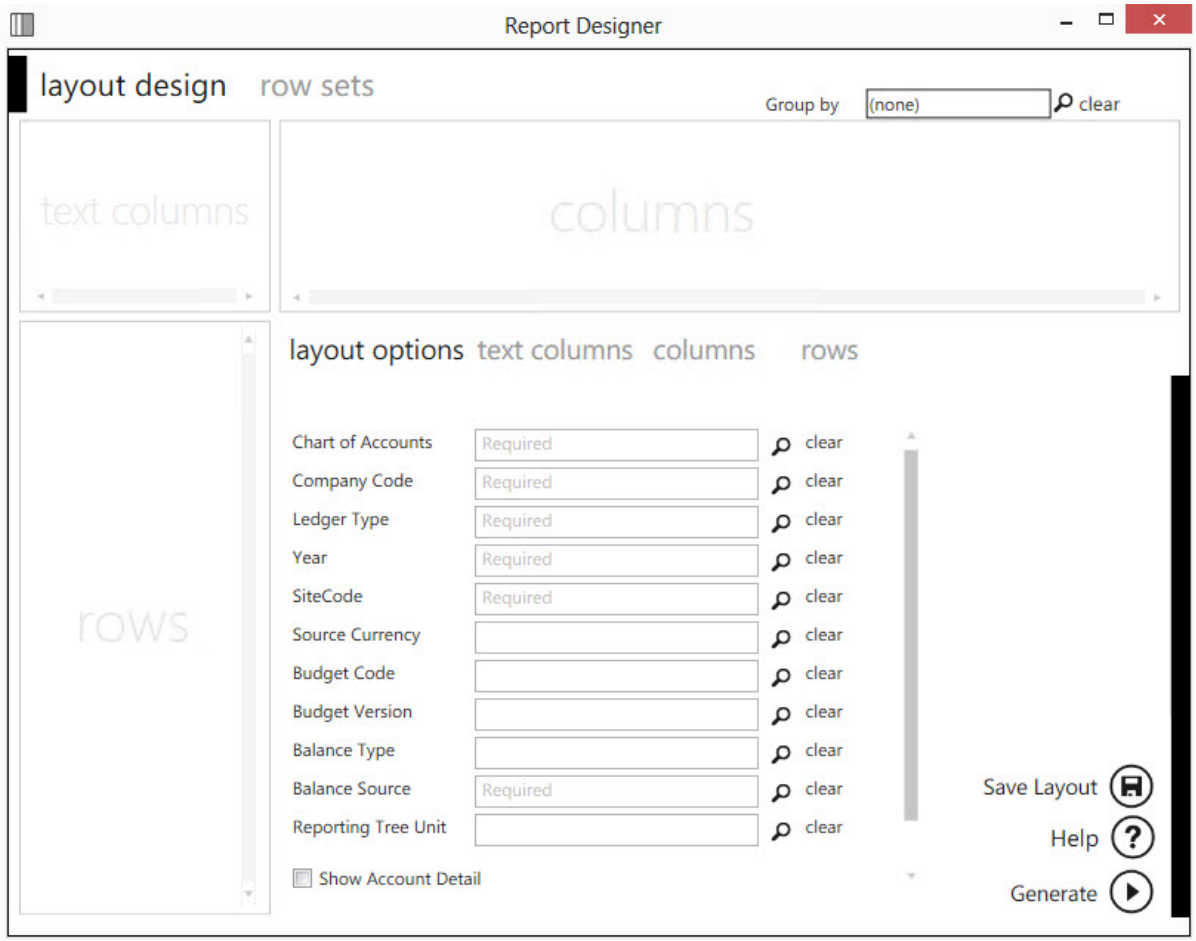
Report Designer Overview

About the Report Designer

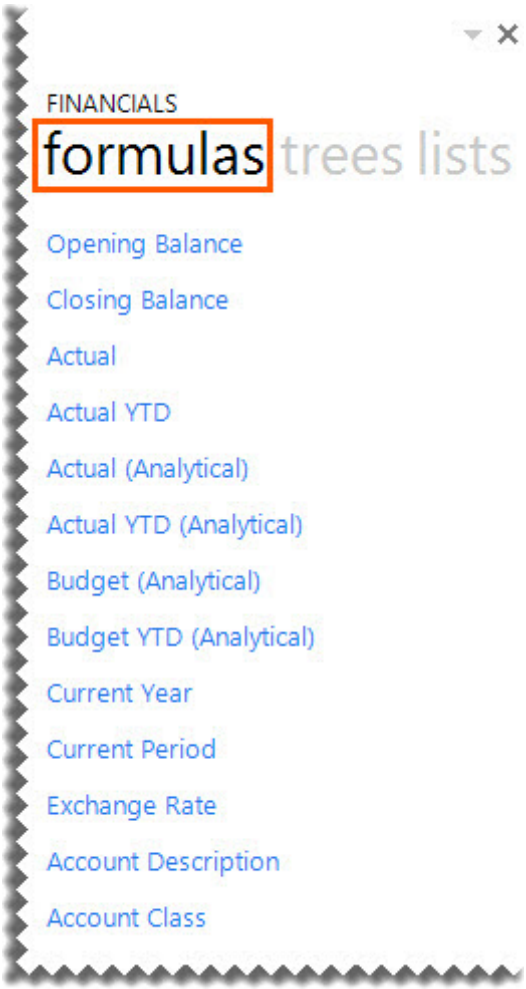
The Report Designer makes reporting simple, flexible and fast by giving you the ability to customize your financial report layouts instantly. It is recommended for finance professionals and executives who need to create financial reports on a regular basis. In the Report Designer, the design of your 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

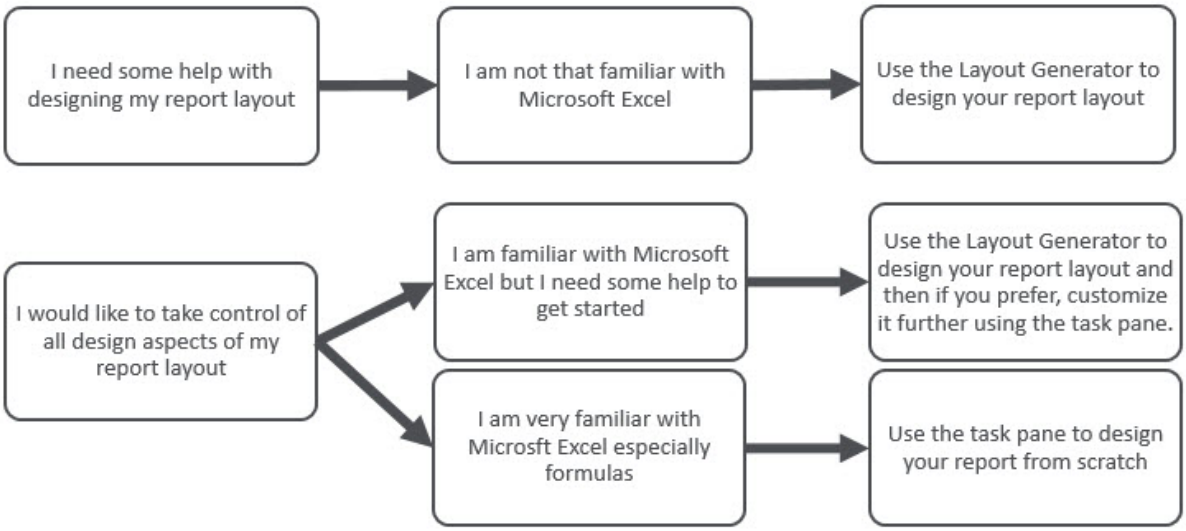
The process to design report templates is as follows:

The Report Designer extracts information from your Sage X3 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 Layout Generator or the Task Pane 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 folder.
2. Run the **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.

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
	BI Reports	New Layout	**New Layout** will open the Layout Generator to allow you to design a new report layout.
	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.
	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.
	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.
	BI Reports	Show Task Pane	**Show Task Pane** will open the Report Designer Task Pane.

Creating a Draft Layout

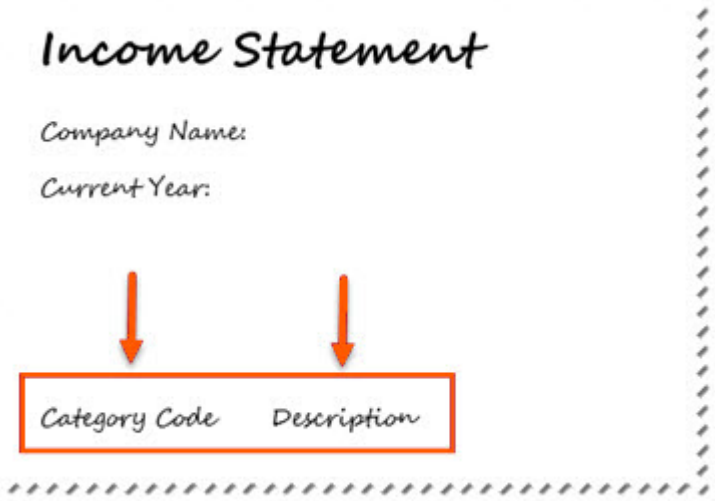
Before you begin, you need to decide what you want your report to look like when it's complete. If you don't already have a good mental image of the report, then write down what you would like the end result to look like.

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.

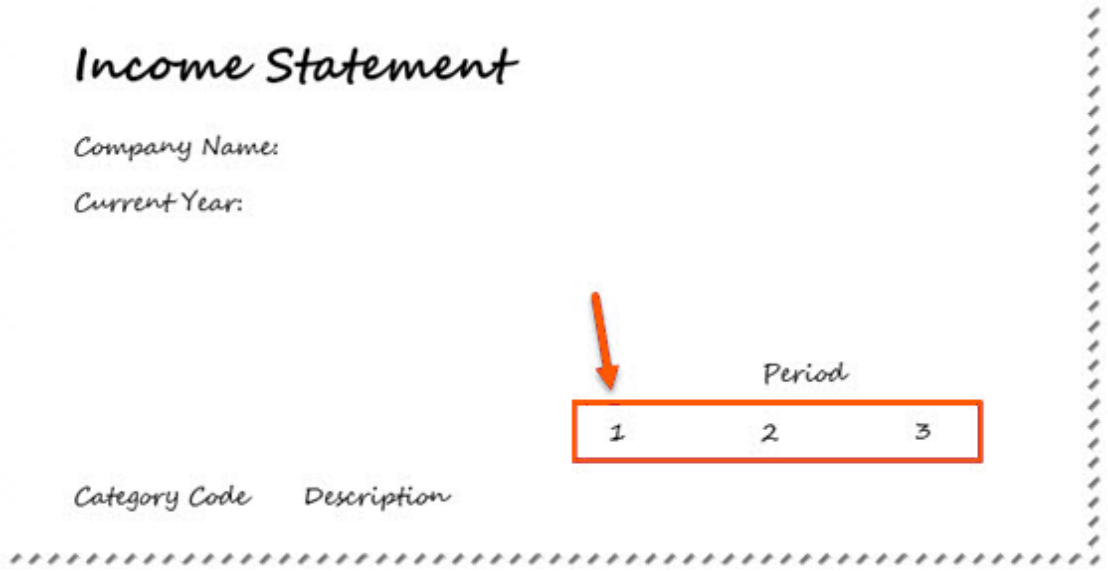
To help you, let's go through some of the steps and decisions you will need to make:

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.

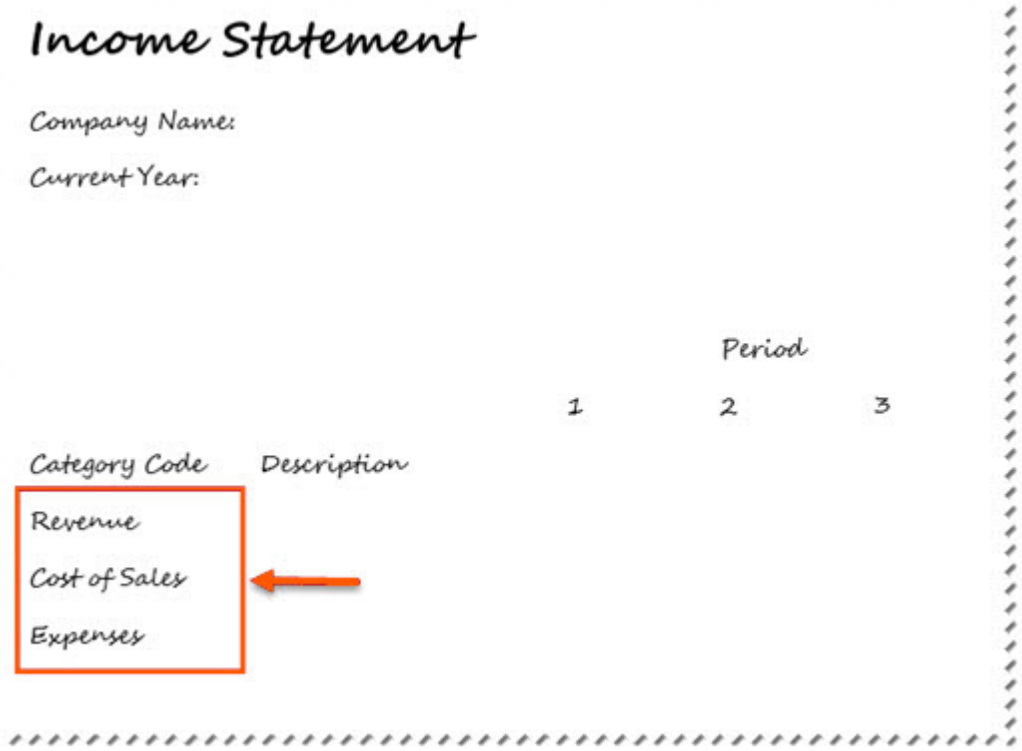
3. What details do you want to see down the left of your report? Perhaps a list of account numbers or category codes and their descriptions.



4. 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.



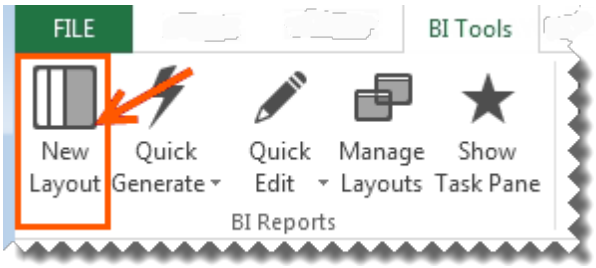
Now you have the basic layout, you are ready to begin designing your report.

Designing Reports using the Layout Generator

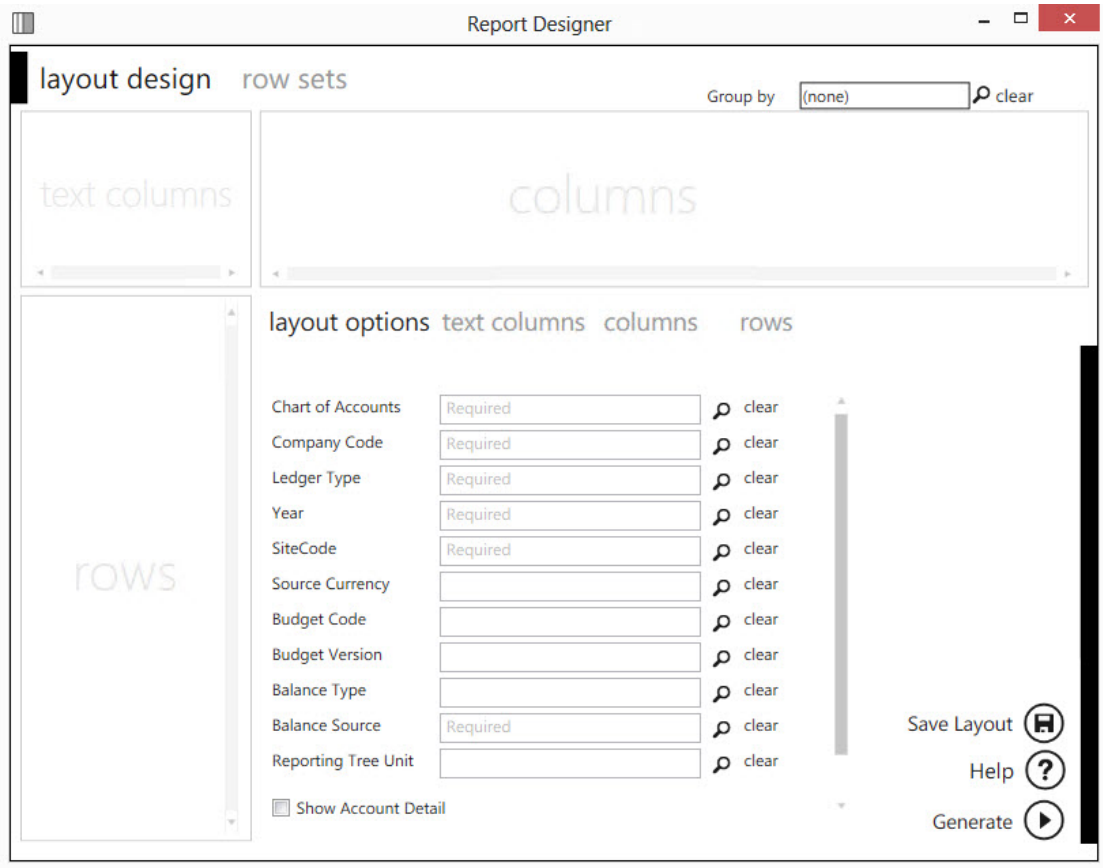
Accessing the Layout Generator to Design a New Layout

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

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

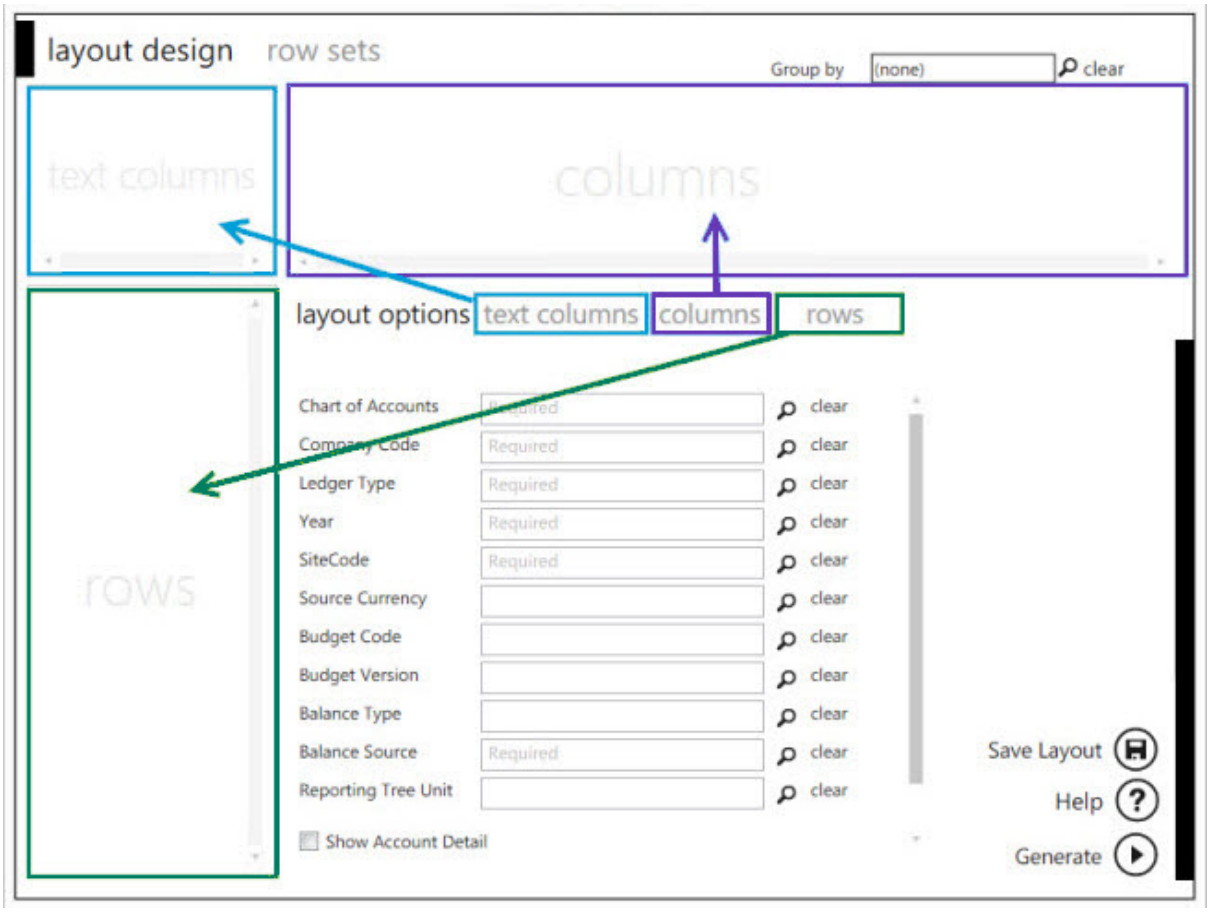


2. A prompt will appear for the layout name. Type a descriptive name so that you can easily identify your layout in future.
3. Click **OK**. The Layout Generator will appear.



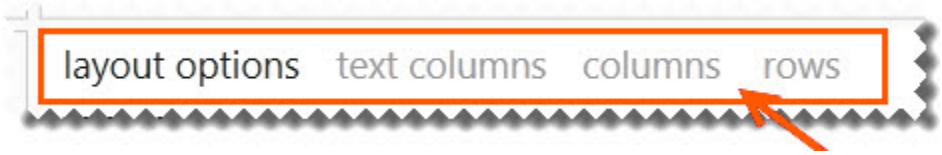
Navigating within the Layout Generator

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.



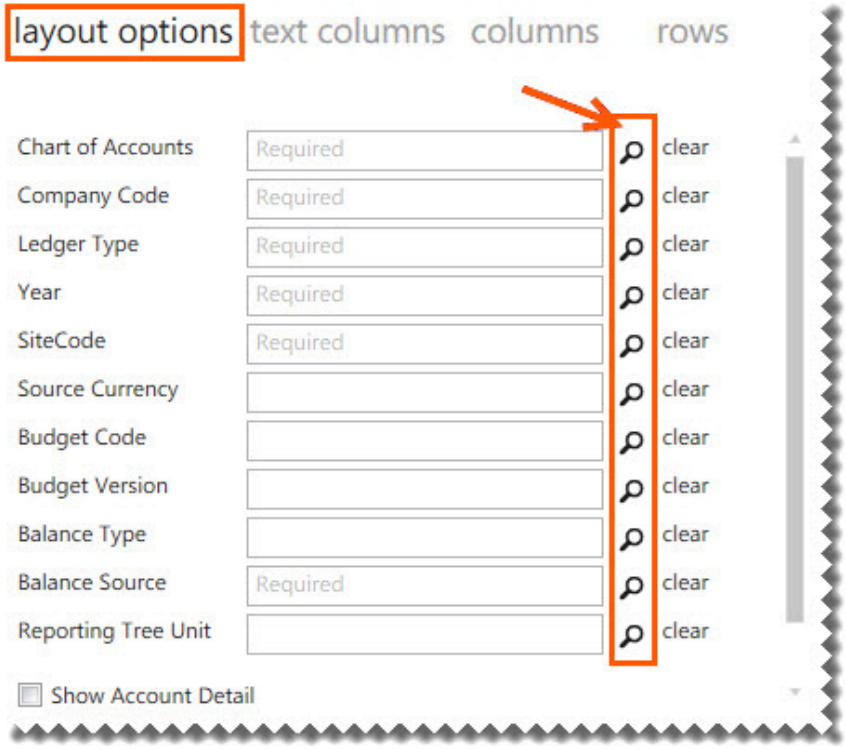
Tab Headings

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



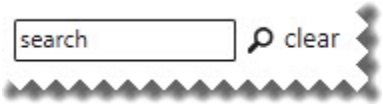
Lookup Values

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.

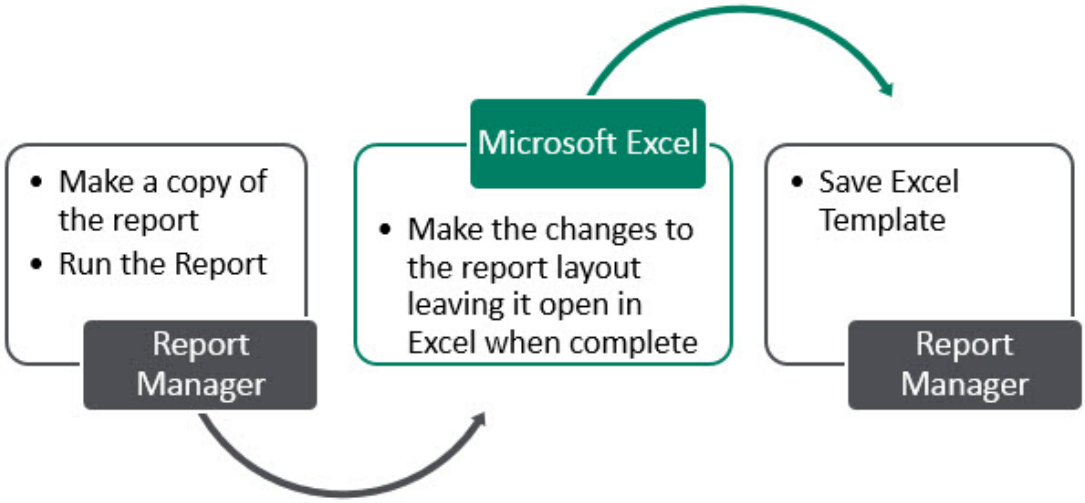
- The **Save Layout** option within the Layout Generator will save any changes to the current layout.

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.

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:



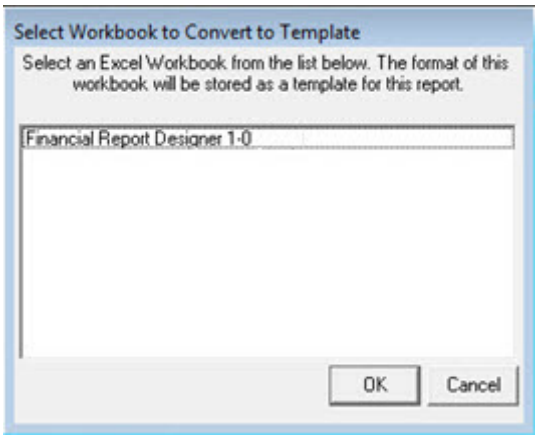
1. Open the Report Manager.

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.

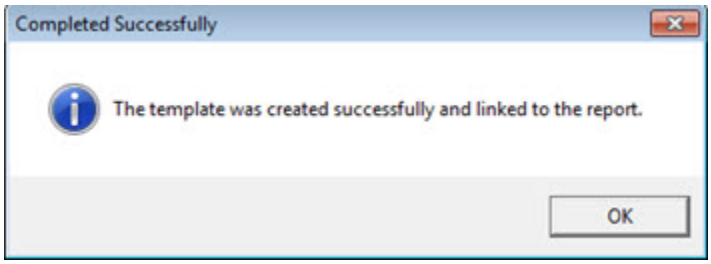
3. In Microsoft Excel, make the changes to the report.
4. After completing the changes, leave the workbook open and go back to the Report Manager.
5. Click on the report for which the changes were made, and select **Save Excel Template**.
6. In the window that appears, select the Microsoft Excel workbook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



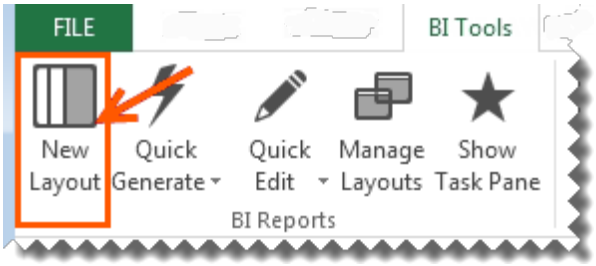
10. Click **OK**.

Designing a New Report Layout

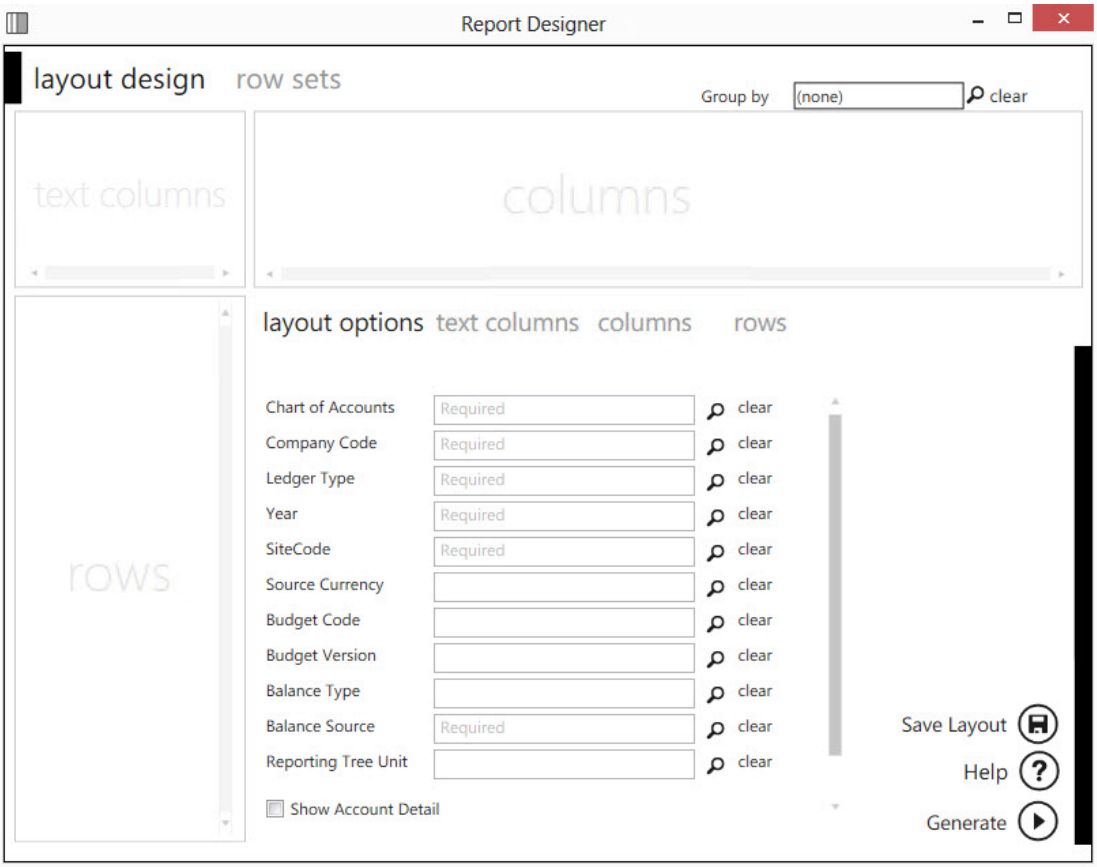
Accessing the Layout Generator to Design a New Layout

When you've run your Financial Report Designer 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.



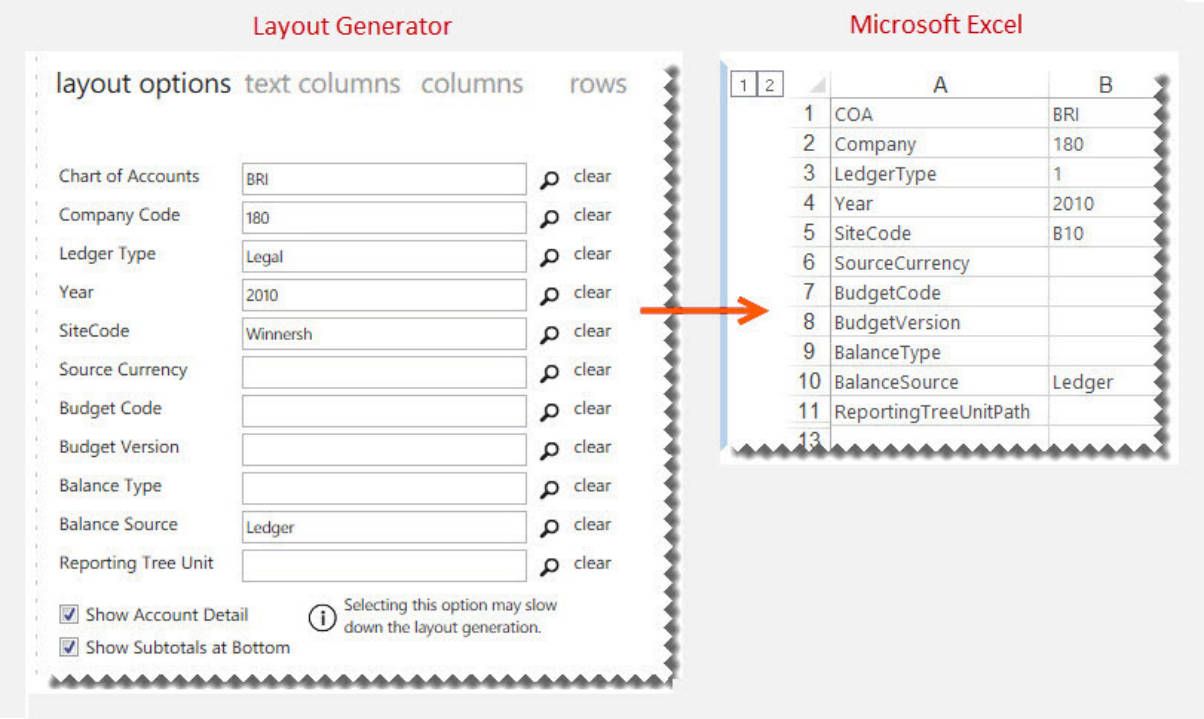
Process to Design a New Report Layout

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.

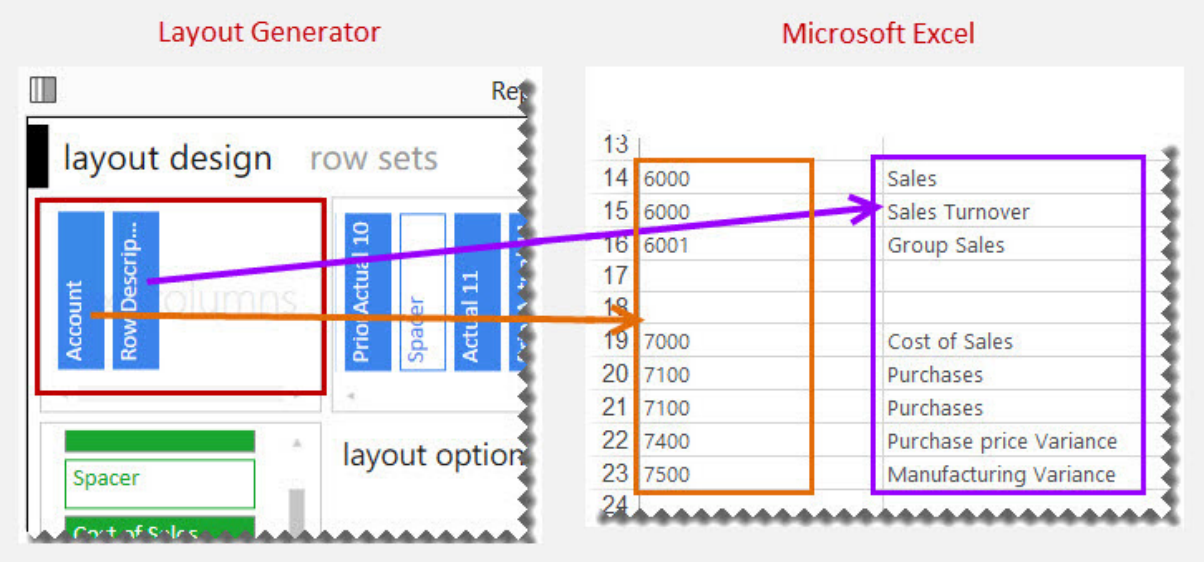
Show Subtotals at Bottom allows you to change the default option of having subtotals show at the top of grouped rows to having them show at the bottom of grouped rows.

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.

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

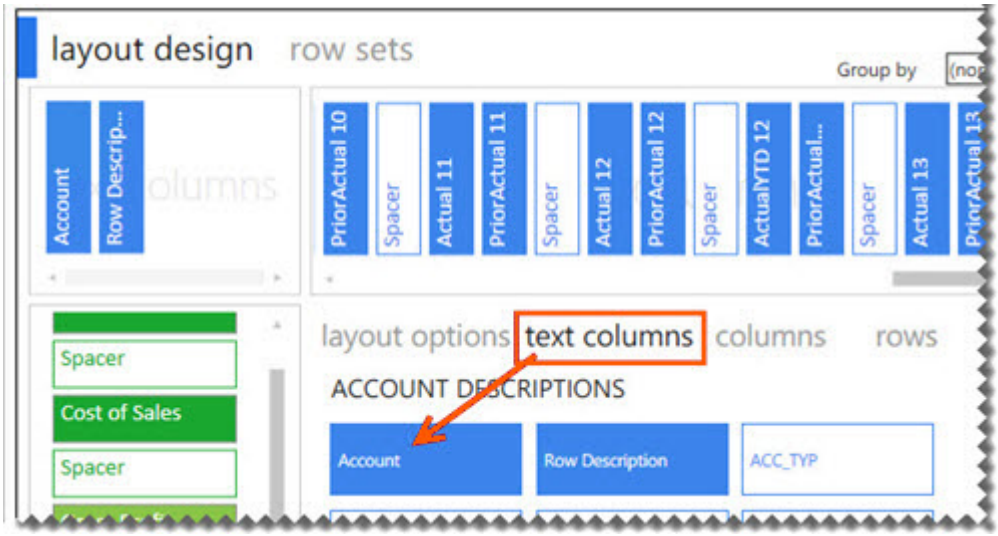
Adding Descriptive Text Columns for Rows

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**.

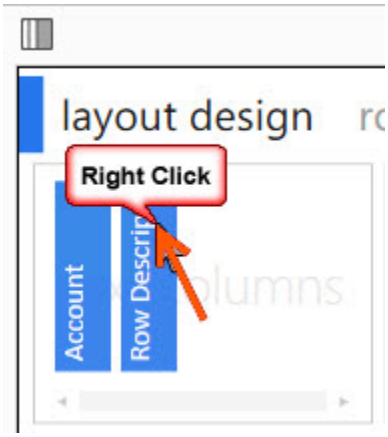


Note: Any new fields will be added to the right of the text column field selected, or the last field, in the Text Columns area of the layout designer. It will also appear in the same order in the Microsoft Excel report layout.

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

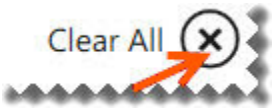
Removing a field from the Text Columns area

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



Clearing all of the fields from the Text Columns area

1. Click **Clear All**.

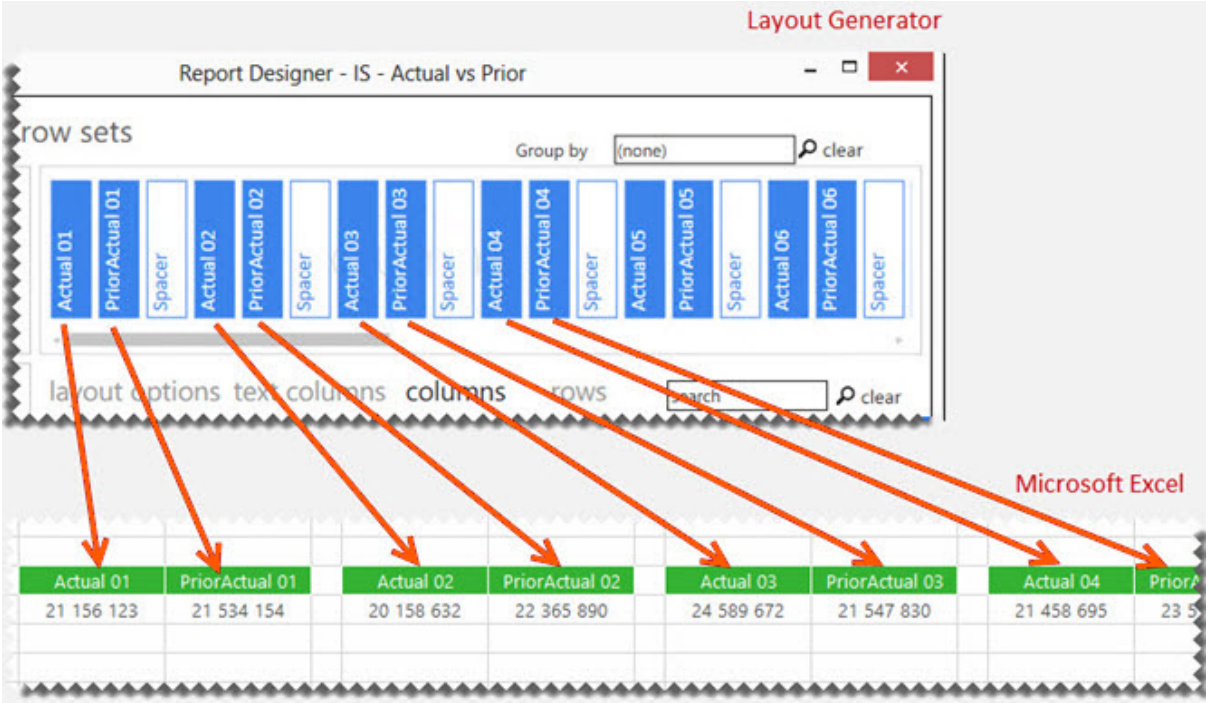


Columns

Formula Columns

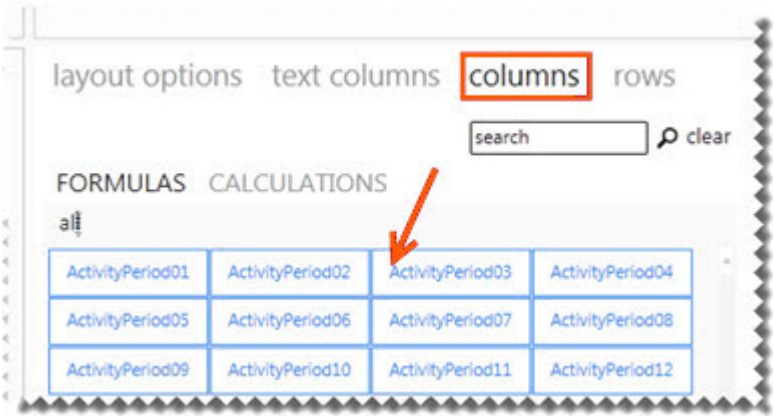
Adding and Removing Formula Columns

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.

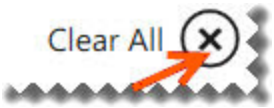
Removing Columns

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

To remove all columns, select **Clear All**.

Clearing all of the fields from the Columns area

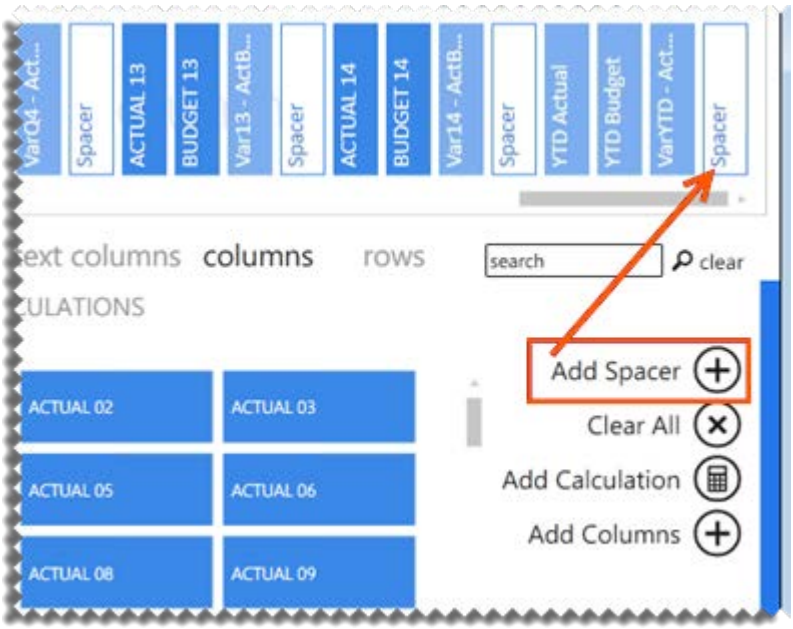
1. Click **Clear All**.



Adding a spacer to the Columns area

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

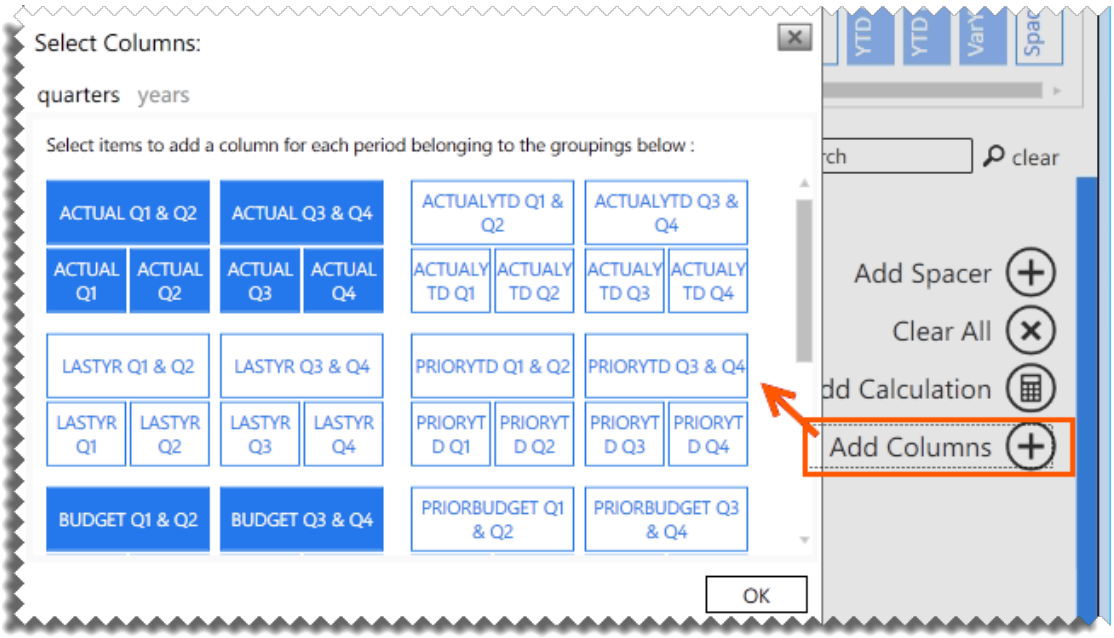
1. Click **Add Spacer**.



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**.



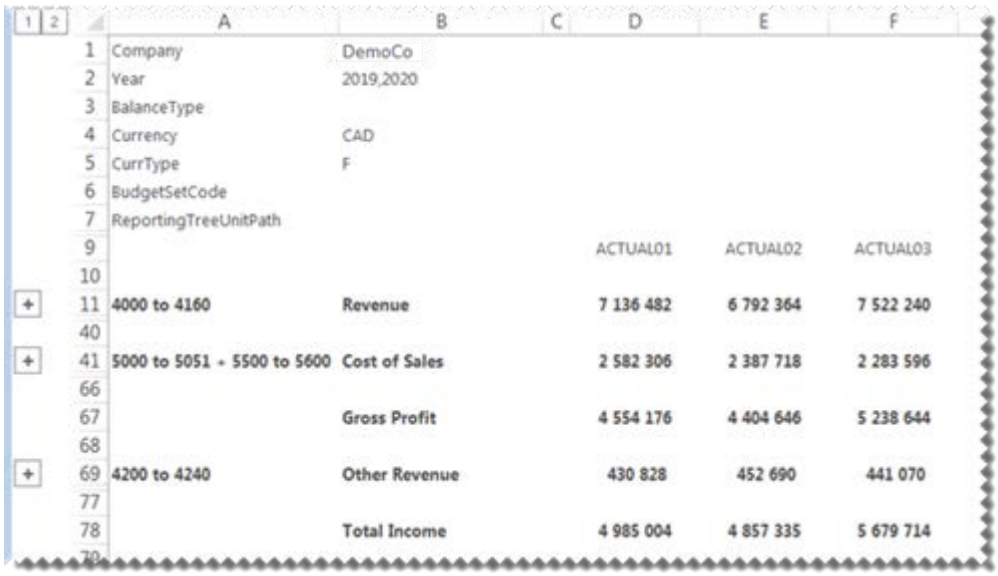
Note: Spacers need to be added manually when columns are added using the **Add Multiple** selection.

2. Select the required formula column.

Using Column Grouping

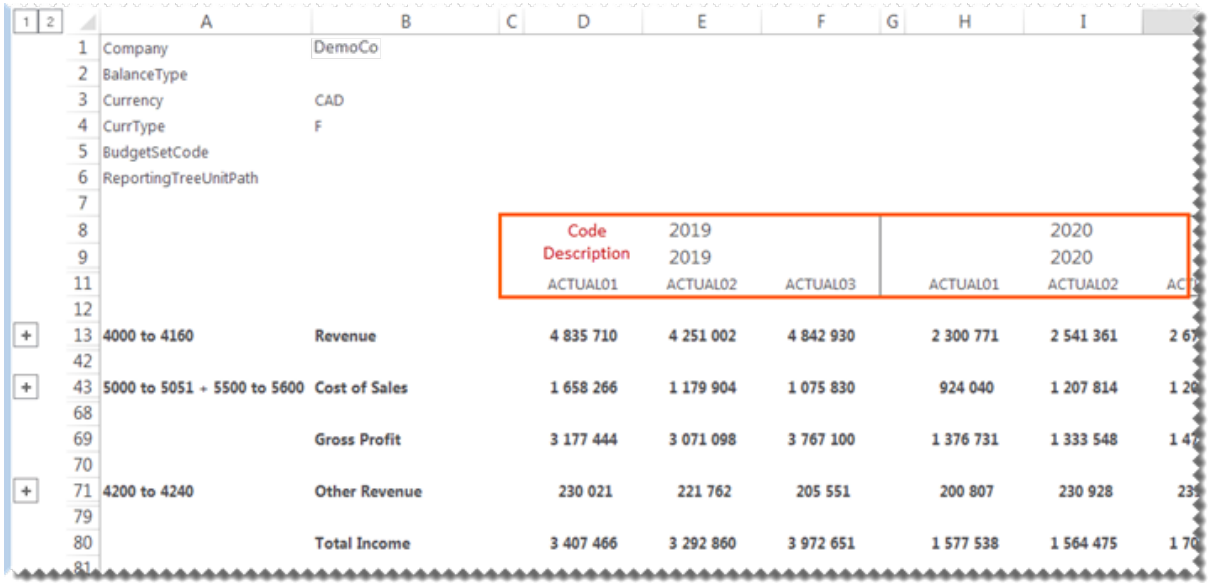
Adding a column group allows you to group multiple columns together under a single common header. This allows you to see quickly which columns fall under similar categories, for example by company, site or fiscal year.

Before adding a column group:



	A	B	C	D	E	F
1	Company	DemoCo				
2	Year	2019,2020				
3	BalanceType					
4	Currency	CAD				
5	CurrType	F				
6	BudgetSetCode					
7	ReportingTreeUnitPath					
9				ACTUAL01	ACTUAL02	ACTUAL03
10						
11	4000 to 4160	Revenue		7 136 482	6 792 364	7 522 240
40						
41	5000 to 5051 + 5500 to 5600	Cost of Sales		2 582 306	2 387 718	2 283 596
66						
67		Gross Profit		4 554 176	4 404 646	5 238 644
68						
69	4200 to 4240	Other Revenue		430 828	452 690	441 070
77						
78		Total Income		4 985 004	4 857 335	5 679 714

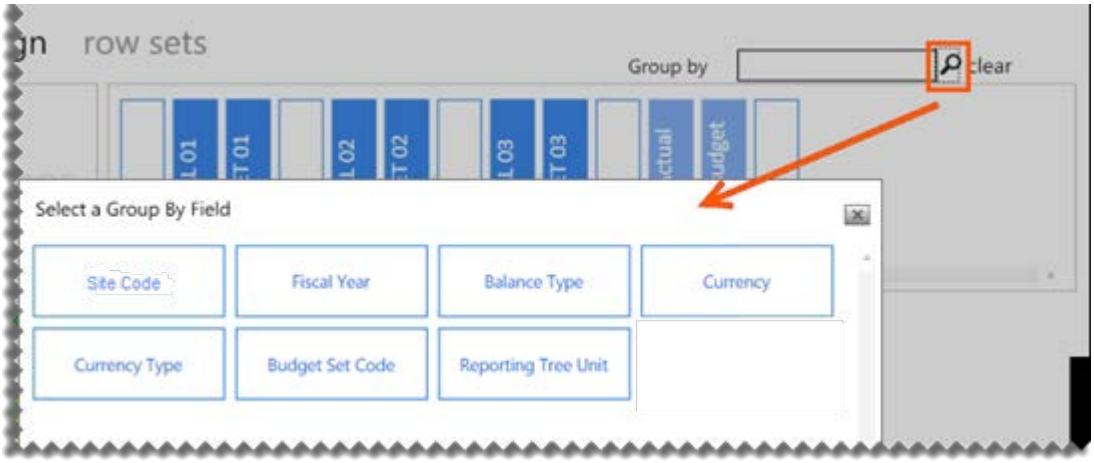
After adding the fiscal year as a column group:



	A	B	C	D	E	F	G	H	I
1	Company	DemoCo							
2	BalanceType								
3	Currency	CAD							
4	CurrType	F							
5	BudgetSetCode								
6	ReportingTreeUnitPath								
7									
8			Code	2019				2020	
9			Description	2019				2020	
11				ACTUAL01	ACTUAL02	ACTUAL03	ACTUAL01	ACTUAL02	AC
12									
13	4000 to 4160	Revenue		4 835 710	4 251 002	4 842 930	2 300 771	2 541 361	2 67
42									
43	5000 to 5051 + 5500 to 5600	Cost of Sales		1 658 266	1 179 904	1 075 830	924 040	1 207 814	1 20
68									
69		Gross Profit		3 177 444	3 071 098	3 767 100	1 376 731	1 333 548	1 47
70									
71	4200 to 4240	Other Revenue		230 021	221 762	205 551	200 807	230 928	23
79									
80		Total Income		3 407 466	3 292 860	3 972 651	1 577 538	1 564 475	1 70

Adding a column grouping

1. Click the magnifying glass.



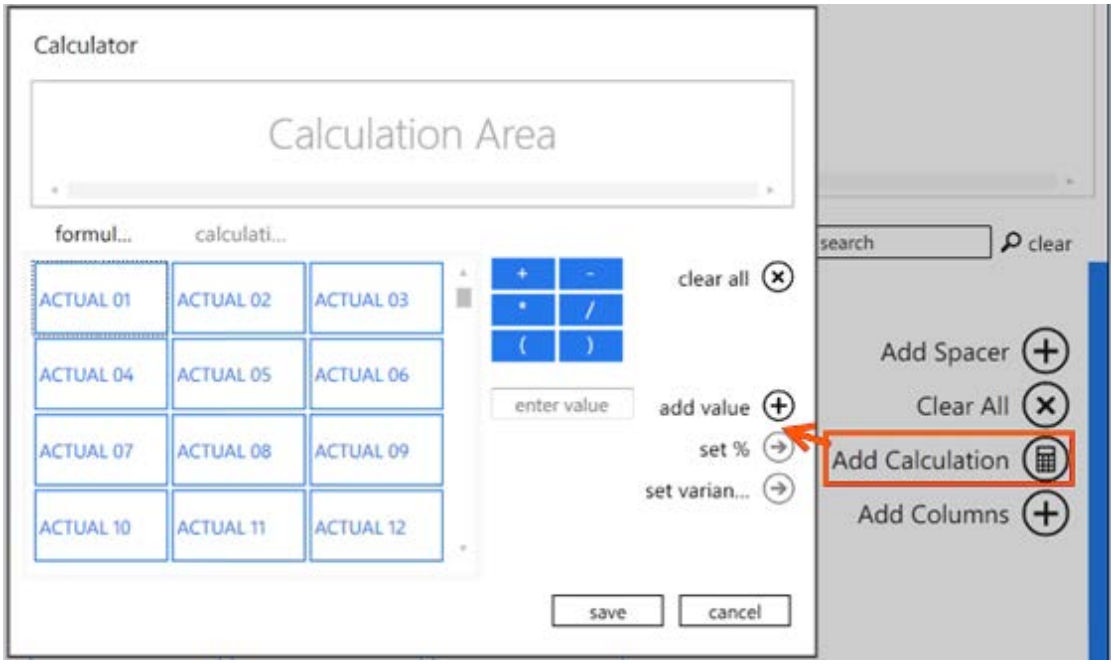
Note: There is only one level of grouping available across the top of the report.

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.

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.

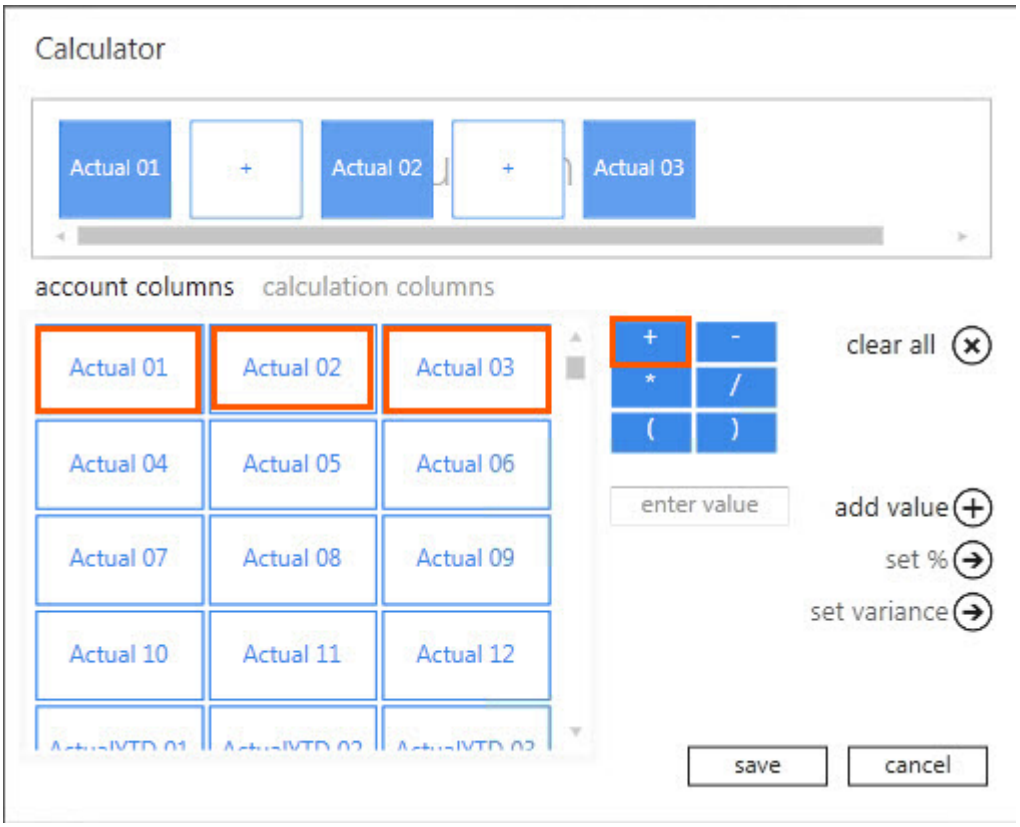
The following list explains the use of each button/feature.

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 **Actual 01** and **Actual 02**.
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 is 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.

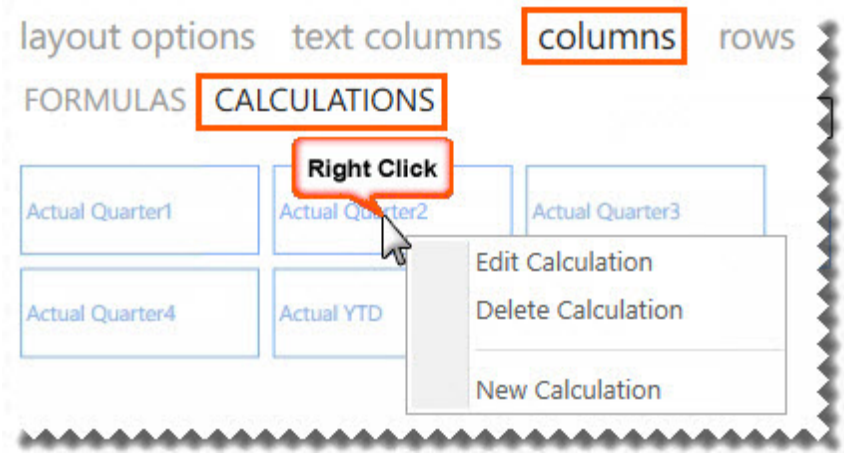
	Actual	Budget	Variance
Sales	100	50	50
Cost of Sales	100	50	**-50**

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 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

1. Select **Edit Calculation**.
2. The Calculator will open allowing you to edit the currently selected formula.

Rows

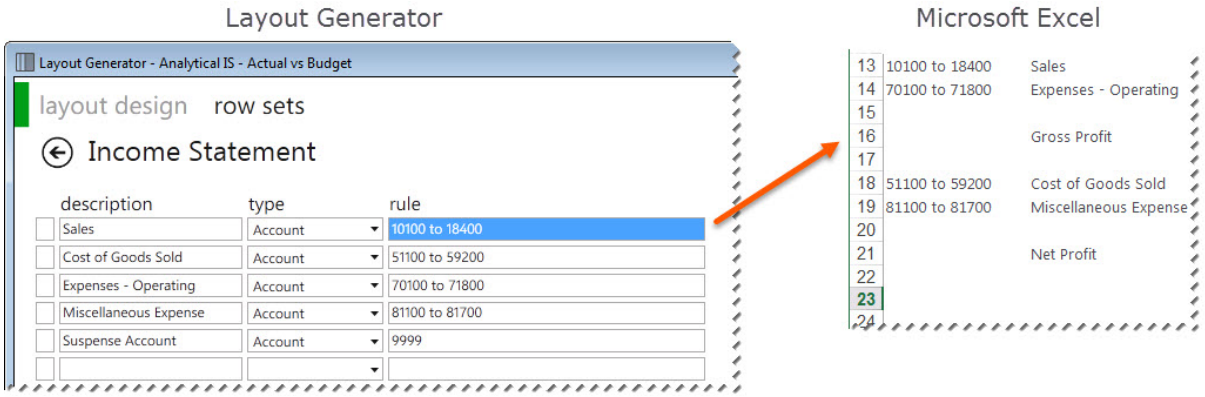
Row Sets

About Row Sets

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

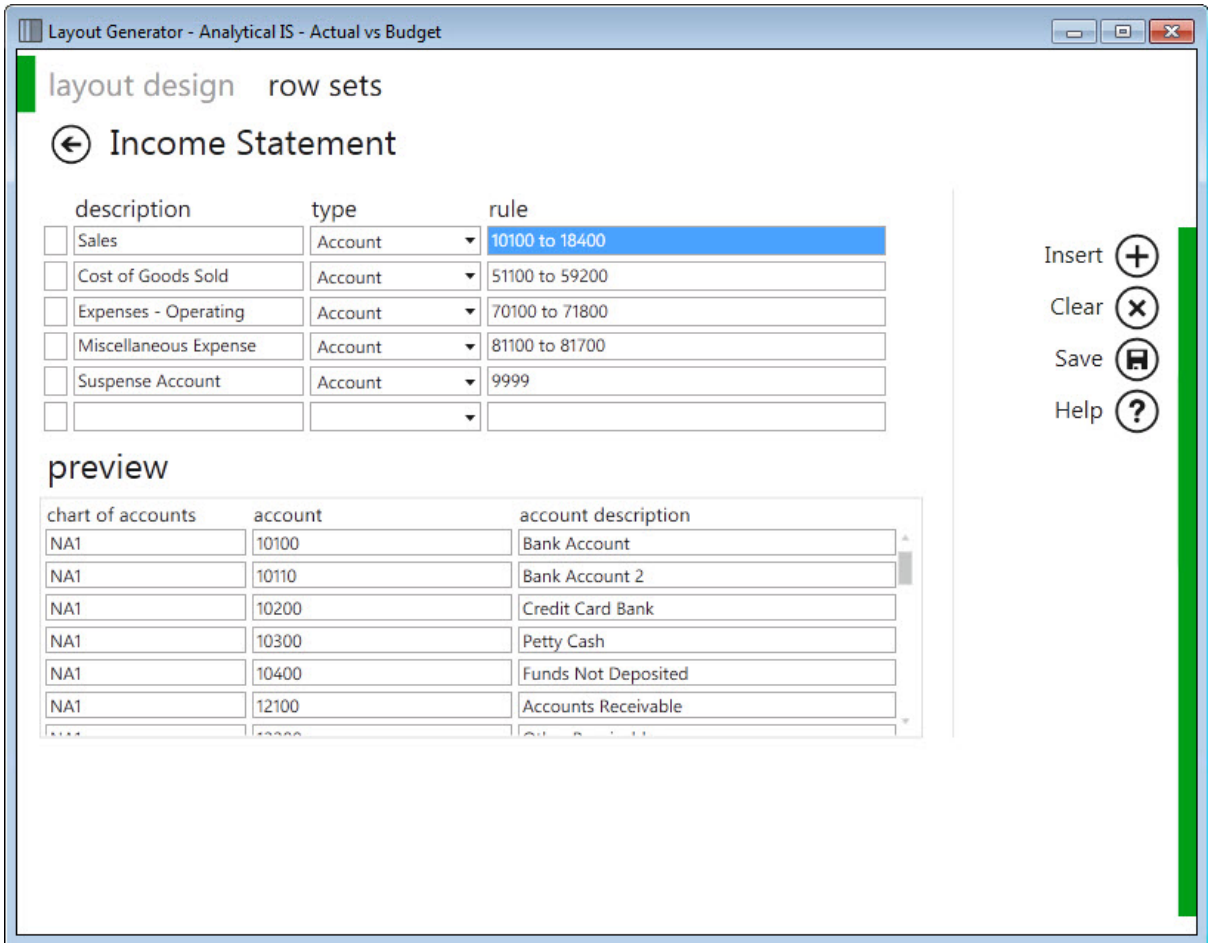
The purpose of using Row Sets

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. Row Sets can be based on Accounts or Account Class Codes. 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.

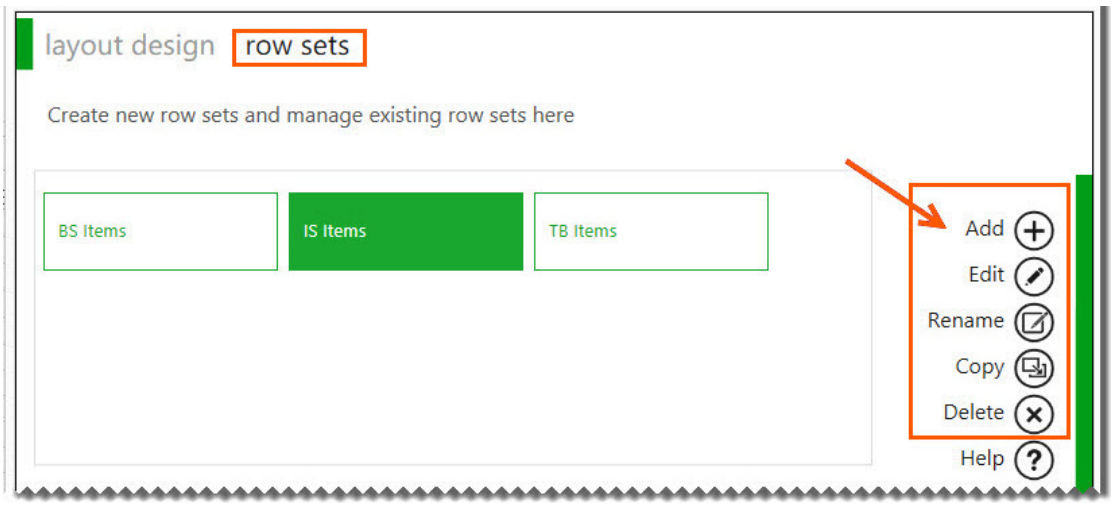


Note: The Preview is limited to 1000 records to optimize performance.

Accessing Row Sets

From the Layout Generator, select **Row Sets**. You may now:

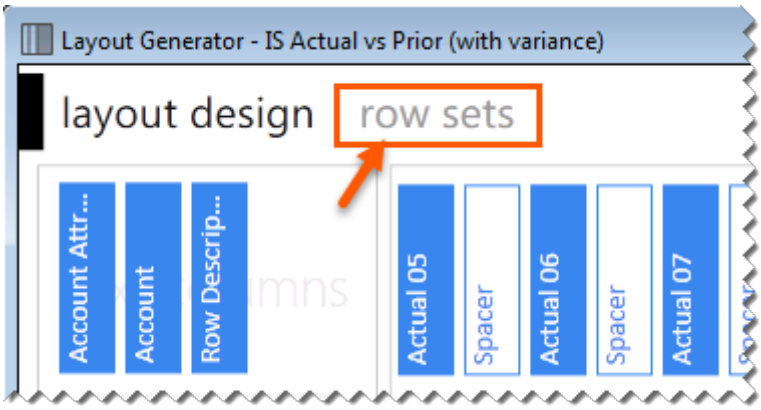
- Add new Row Sets
- Edit existing Row Sets
- Rename Row Sets
- Copy Row Sets
- Delete Row Sets



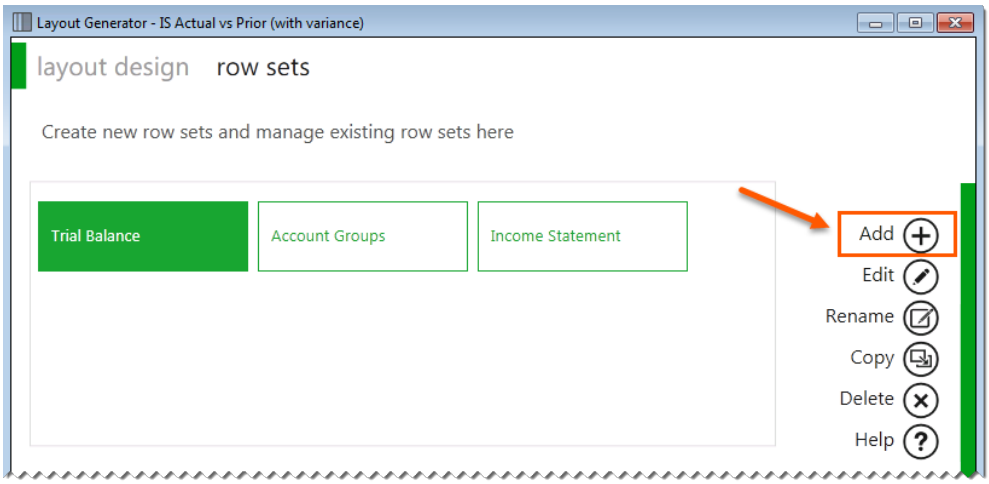
Managing Row Sets

Adding a New Row Set

1. From the Layout Generator, select **Row Sets**.



2. 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. Add the account rule. There are a variety of options available when setting up rules. You can use full account numbers, a range of account numbers for example from **1500 to 1730**, the plus sign to include account numbers, or the minus sign to exclude account numbers from the range. You can also use wildcards 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.
6. Repeat from step 4 for all additional account rules you're going to need for your report layout based on this Row Set.
7. Click **Save**.
8. 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

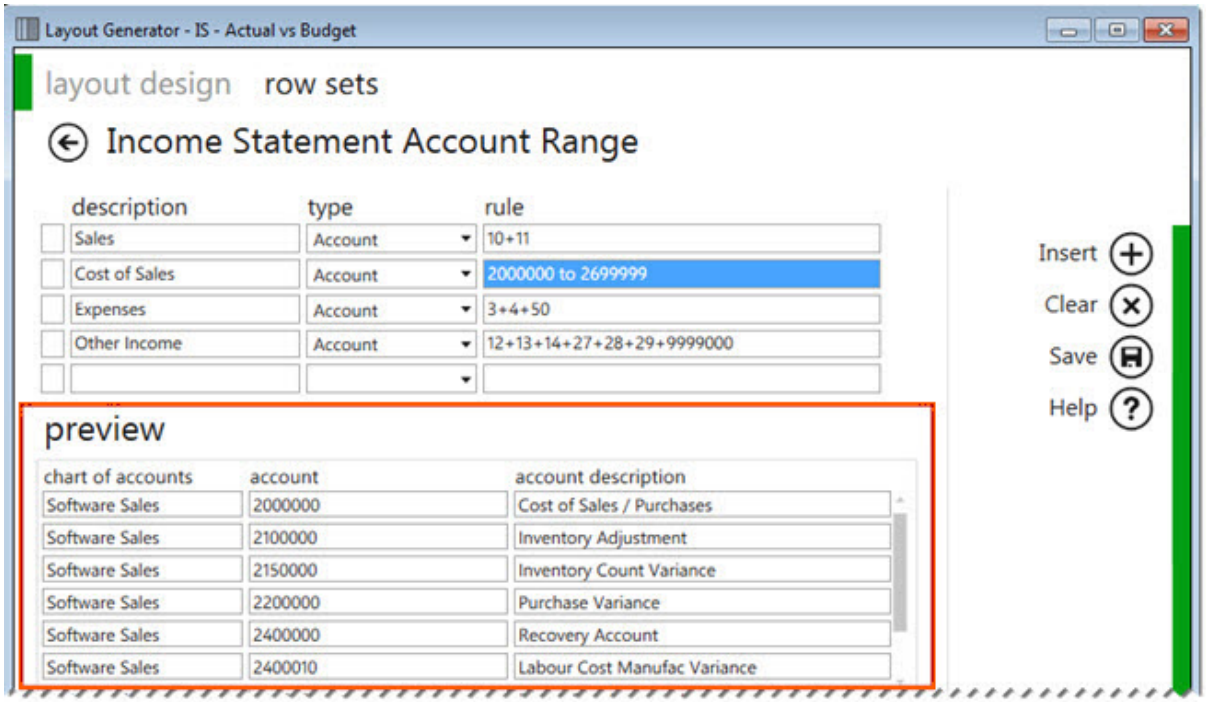
Ranges can be used to define the list of accounts to return in your Row Sets, without specifically naming each account.

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**.

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



Filter	Description	Result
4000 to 4400	Filter all accounts from 4000 up to and including 4400.	4000, 4001, 4002, 4003 up to 4399, 4400
6000 to 6999	Filter all accounts from 6000 up to and including 6999.	6000, 6001, 6002, 6003 up to 6998, 6999

Tip: Use 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 account ranges and mathematical calculations.

Filter	Description	Results may include:
740?	Filter all account numbers beginning with 740 (assuming a 4 digit controlling account)	7400, 7401, 7402, 7403, 7404, 7405 up to 7409
74?	Filter all account numbers beginning with 74. (assuming a 4 digit controlling account)	7400, 7401, 7402, 7403 up to 7497, 7498,7499.
74??	Filter all account numbers beginning with 74. (this forces only 4 digit controlling accounts to be returned)	7400, 7401, 7402, 7403 up to 7497, 7498,7499.

Using Mathematical Calculations in Row Sets

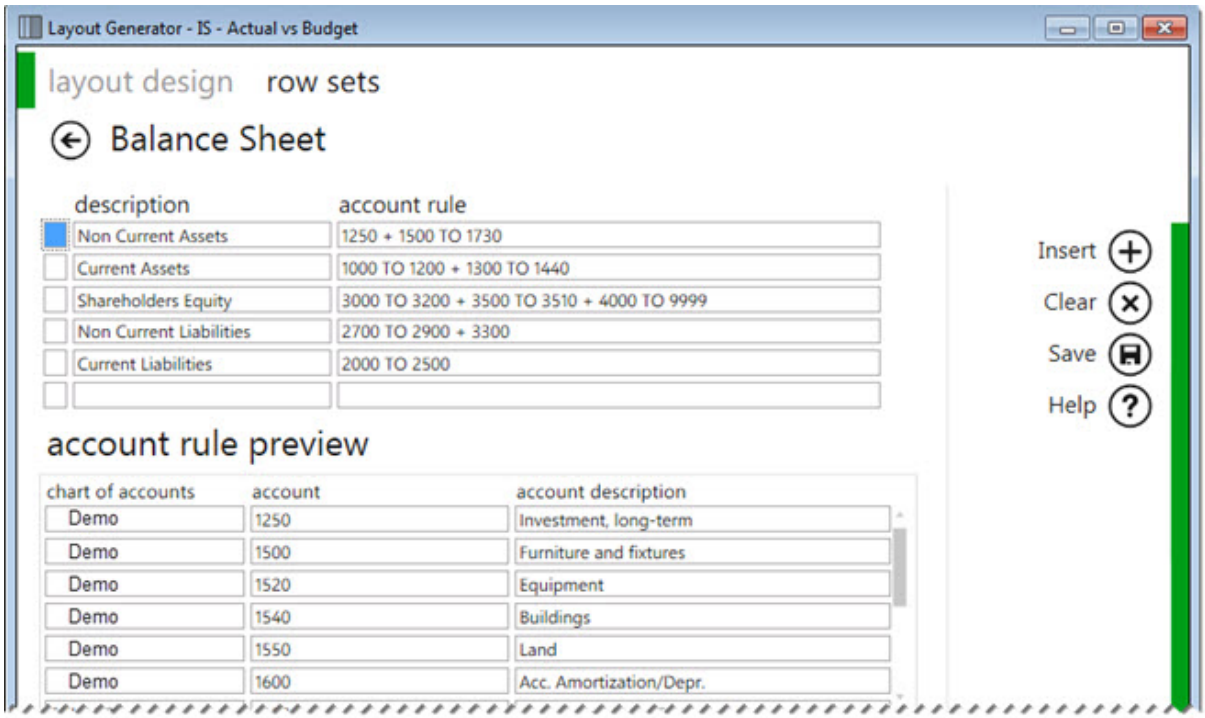
Mathematical calculations can be used to define the list of accounts to return in your Row Sets. This includes addition (+) and subtraction (-).

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.

Some examples of using mathematical calculations:

Filter	Description	Results may include:
4500 + 4600 + 4900	Accounts 4500, 4600 and 4900 (Any accounts in-between are omitted).	4500, 4600, 4900
4500 + 4600 to 4700	Account 4500 as well as accounts in the range from 4600 to 4700.	4500, 4600, 4601, 4602, 4603 up to 4699, 4700

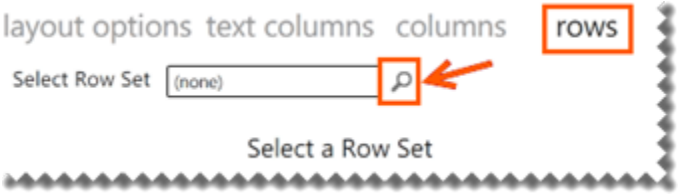


Adding and Removing Account Rows

Before you can add rows into the Row area you will need to select a Row Set. If you do not have a Row Set available, you can add one by using the Row Sets 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.

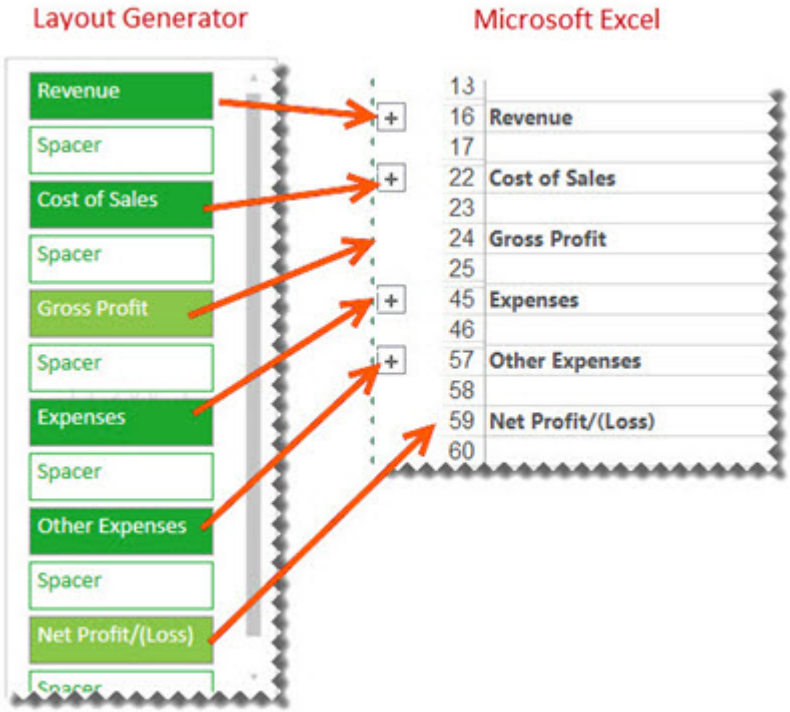
Selecting a Row Set

1. In the rows tab, click the magnifying glass to view the available Row Sets.



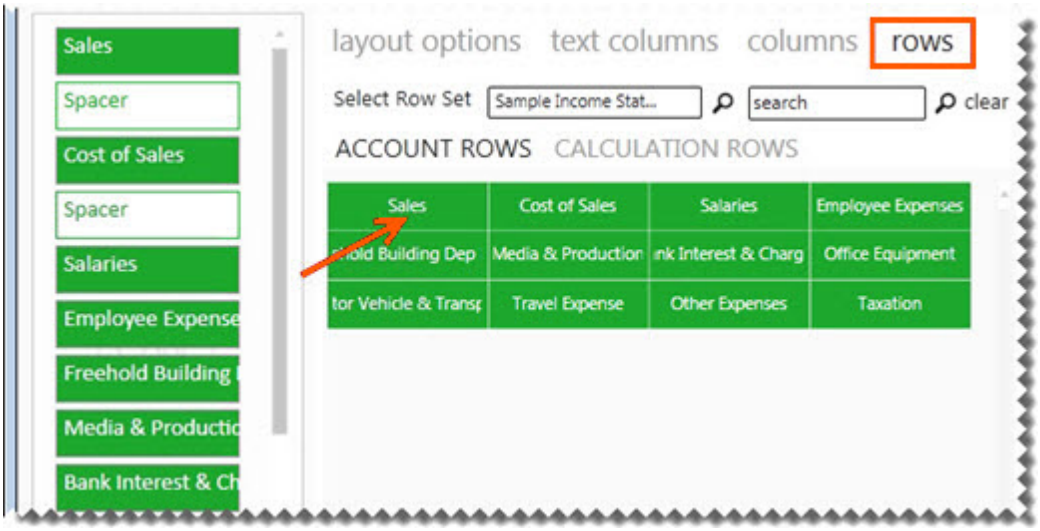
2. Select a Row Set.

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.



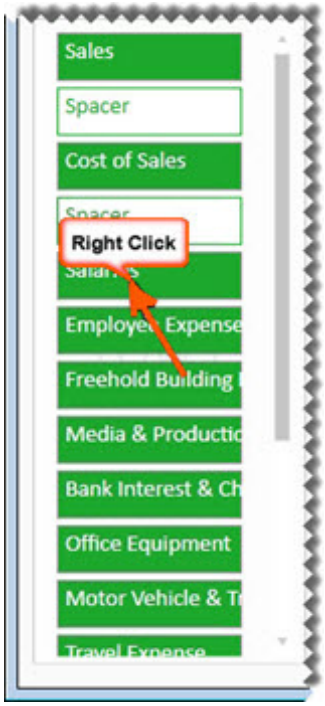
Note: Any new fields will be added to the bottom of the Rows area or above the last field selected. It will also appear in the same order in the Microsoft Excel report layout.

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.

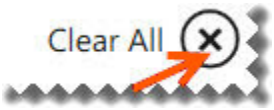
Removing a Single Row

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

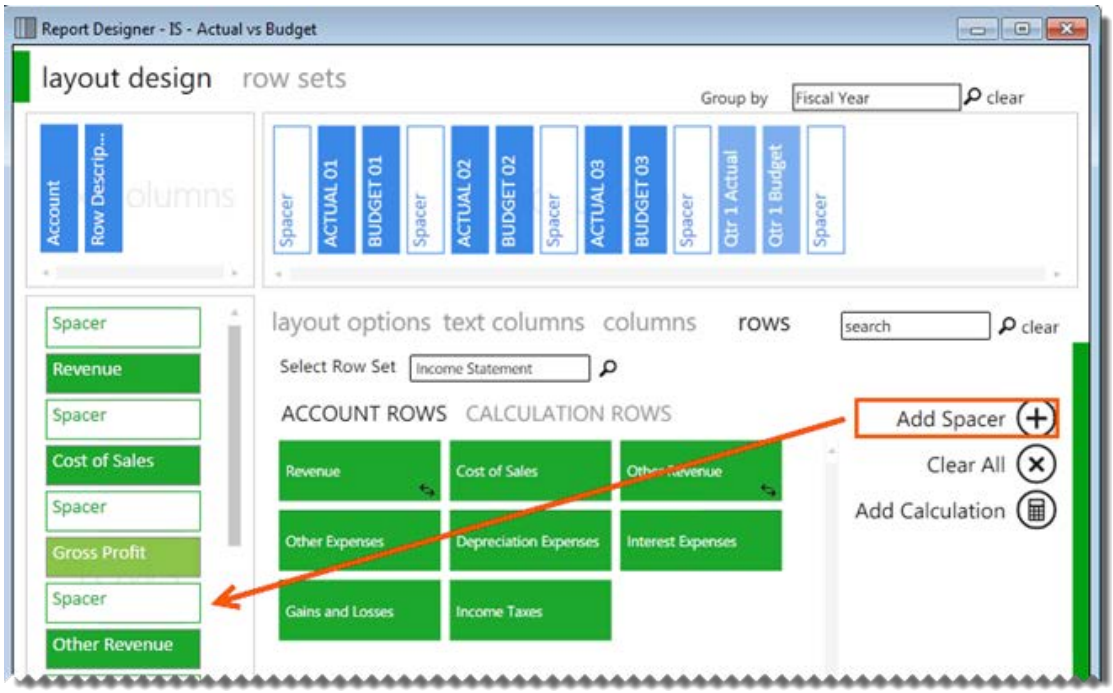
Click **Clear All**.



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**.

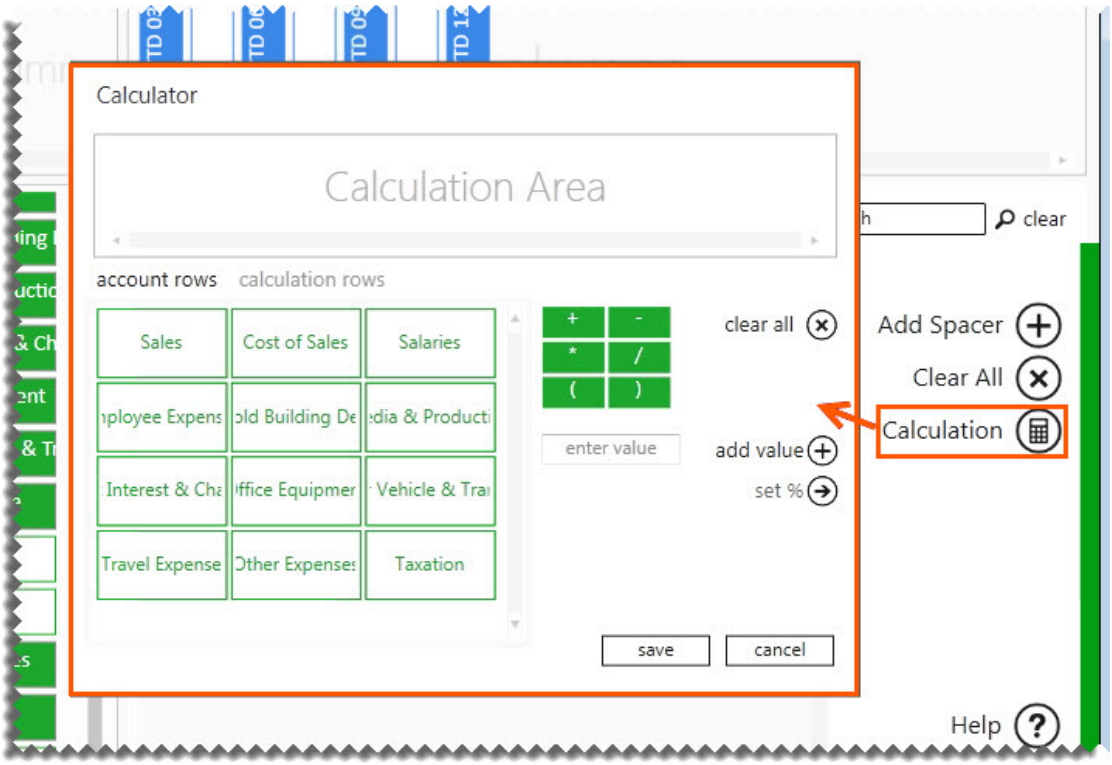


Calculation Rows

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.

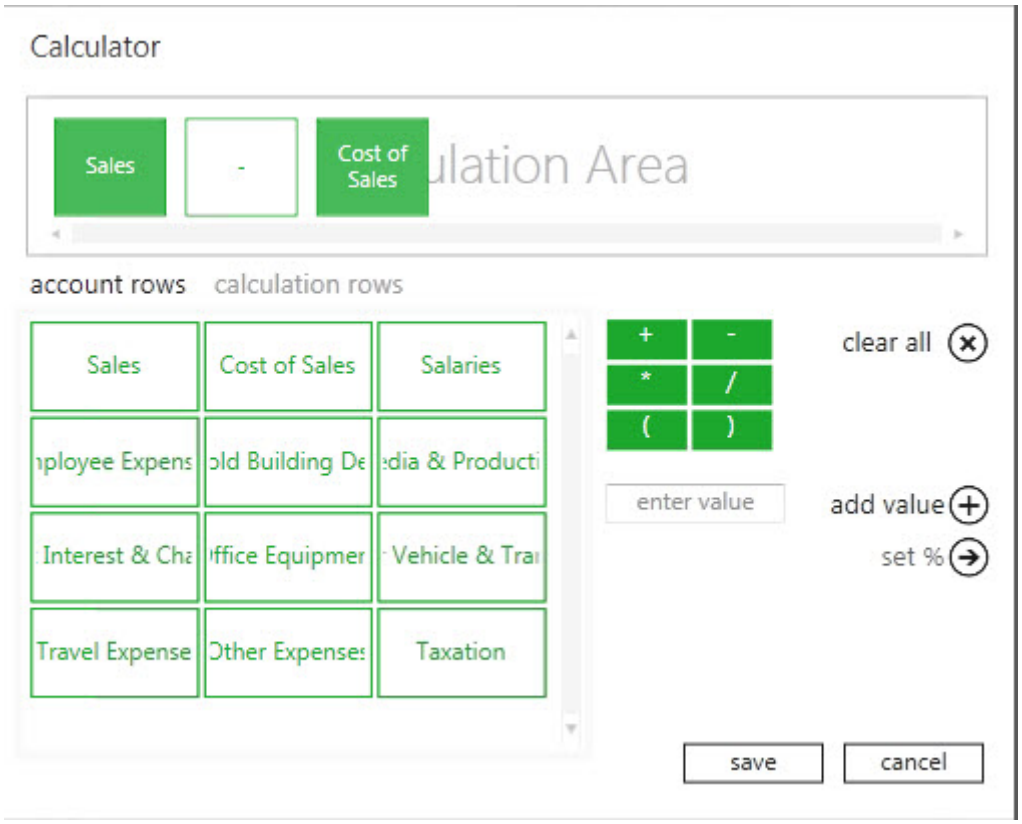
The following list explains the use of each button/feature.

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

Feature	Description
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.
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

1. Select **Edit Calculation**.
2. The Calculator will open allowing you to edit the currently selected formula.

Converting a Negative Number to Positive

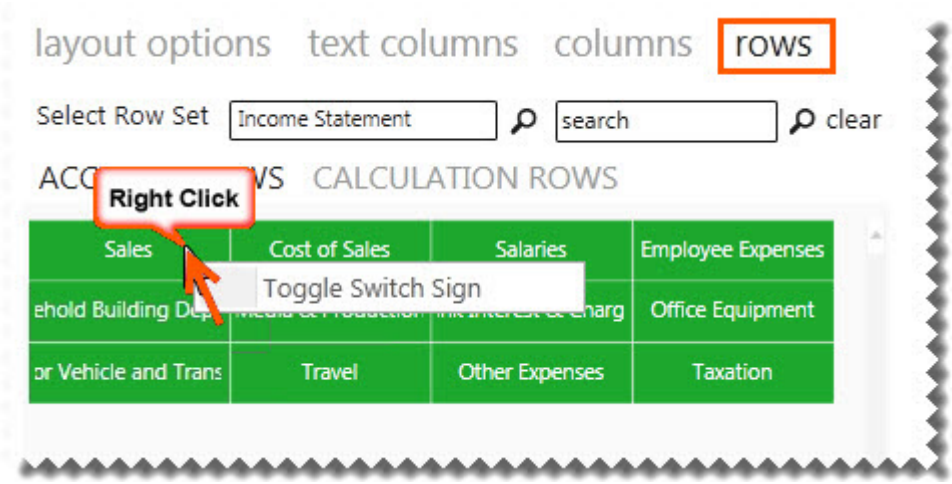
In the Layout Generator, when you generate a pre-defined layout, you will notice that certain fields in the Row Set show as a negative value, in particular, sales accounts which are stored as negative values in Sage X3.

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.

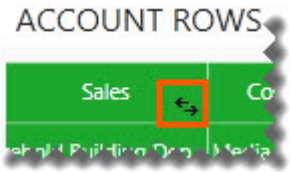
This is important for accounts with credit values such as income accounts. Without this option, these accounts would appear as negative amounts; whereas, most financial statements show sales, for example, as positive amounts.

Switching the sign of fields

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



2. 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**:

	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	**(9 718 788)**	**(9 180 082)**	**(9 805 836)**

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.

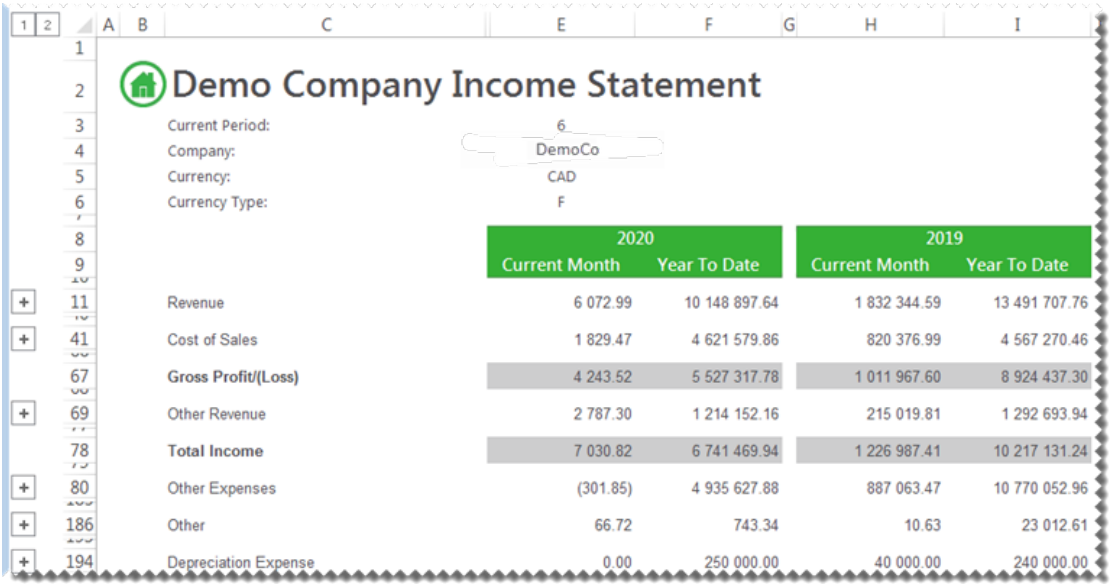
Generating your Layout

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.



Demo Company Income Statement

Current Period:	6
Company:	DemoCo
Currency:	CAD
Currency Type:	F

	2020		2019	
	Current Month	Year To Date	Current Month	Year To Date
Revenue	6 072.99	10 148 897.64	1 832 344.59	13 491 707.76
Cost of Sales	1 829.47	4 621 579.86	820 376.99	4 567 270.46
Gross Profit/(Loss)	4 243.52	5 527 317.78	1 011 967.60	8 924 437.30
Other Revenue	2 787.30	1 214 152.16	215 019.81	1 292 693.94
Total Income	7 030.82	6 741 469.94	1 226 987.41	10 217 131.24
Other Expenses	(301.85)	4 935 627.88	887 063.47	10 770 052.96
Other	66.72	743.34	10.63	23 012.61
Depreciation Expense	0.00	250 000.00	40 000.00	240 000.00

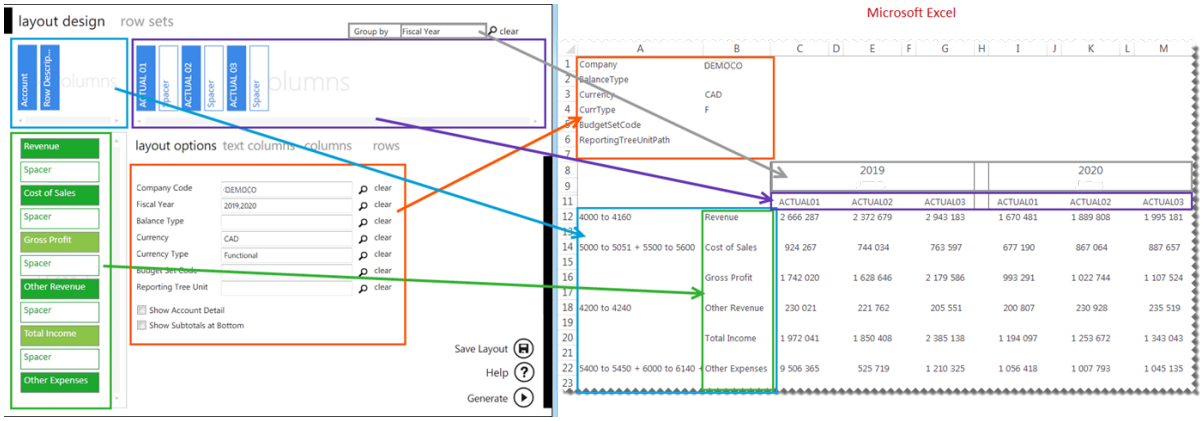
3. Save your changes for future reuse as a template or as a report with static data.

Learn More:

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

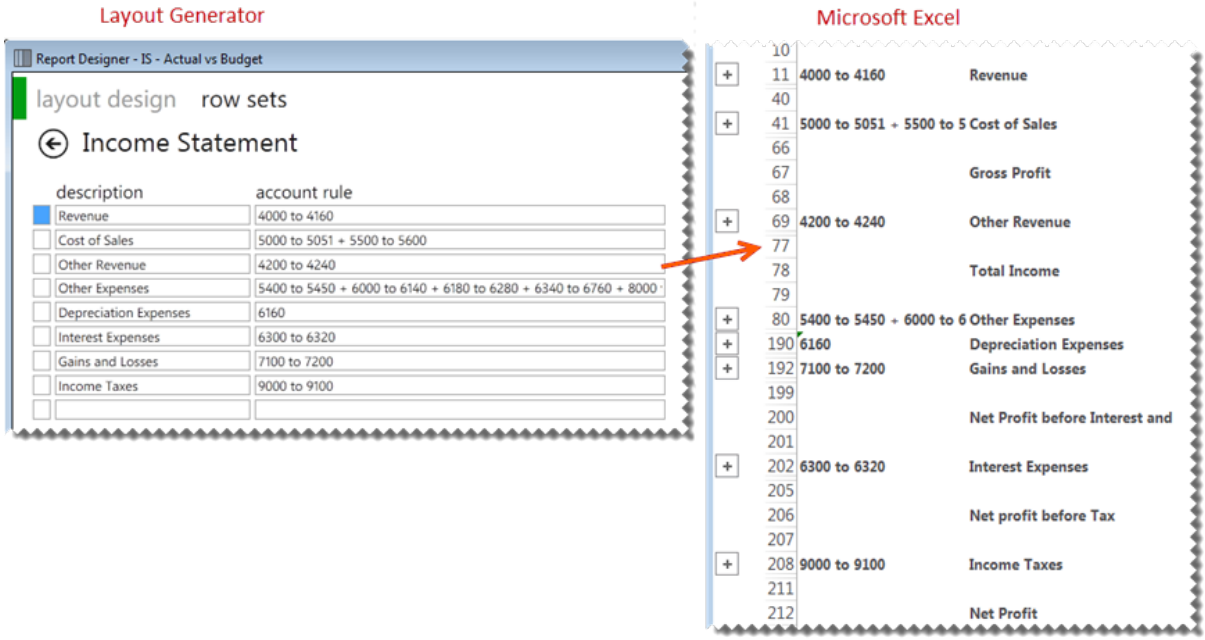
Understanding The Microsoft Excel Workbook

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.



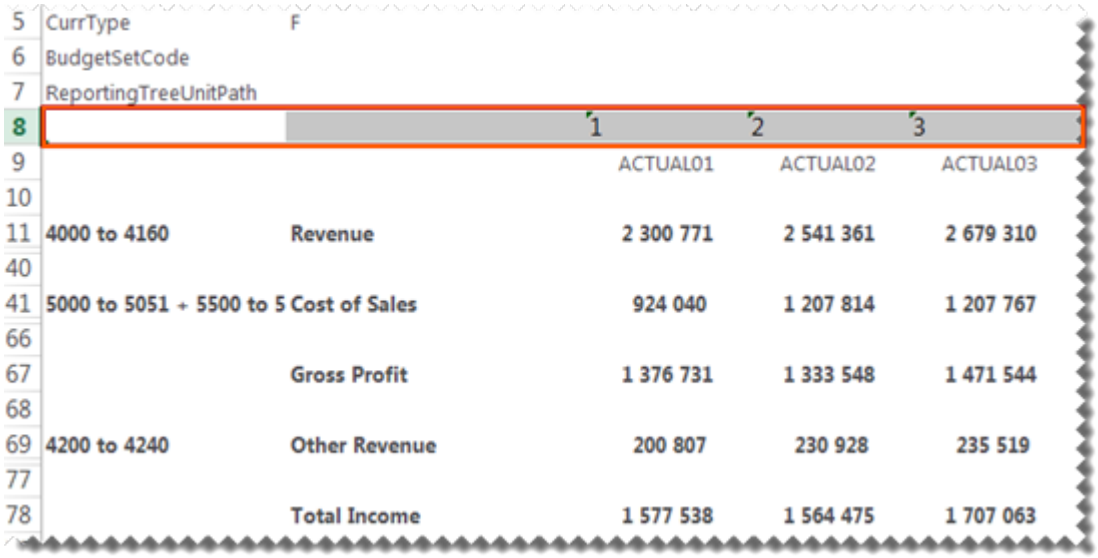
The layout options are always listed on the top left of the report. These can be changed in Microsoft Excel at any time resulting in your report being immediately updated to reflect the new data.

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.

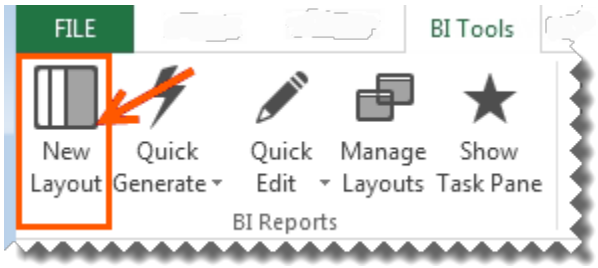


5	CurrType	F			
6	BudgetSetCode				
7	ReportingTreeUnitPath				
8			1	2	3
9			ACTUAL01	ACTUAL02	ACTUAL03
10					
11	4000 to 4160	Revenue	2 300 771	2 541 361	2 679 310
40					
41	5000 to 5051 + 5500 to 5	Cost of Sales	924 040	1 207 814	1 207 767
66					
67		Gross Profit	1 376 731	1 333 548	1 471 544
68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

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.

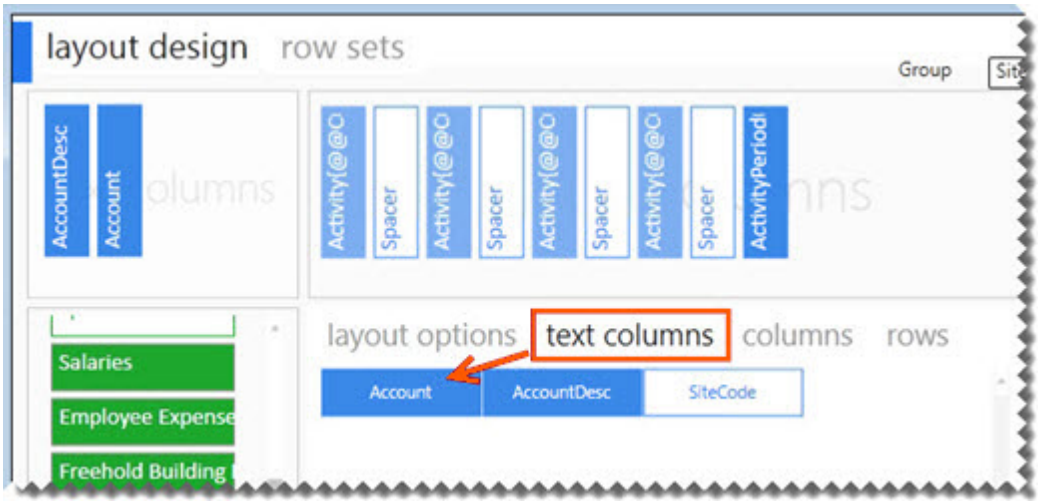
Adding Layout Options

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.

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

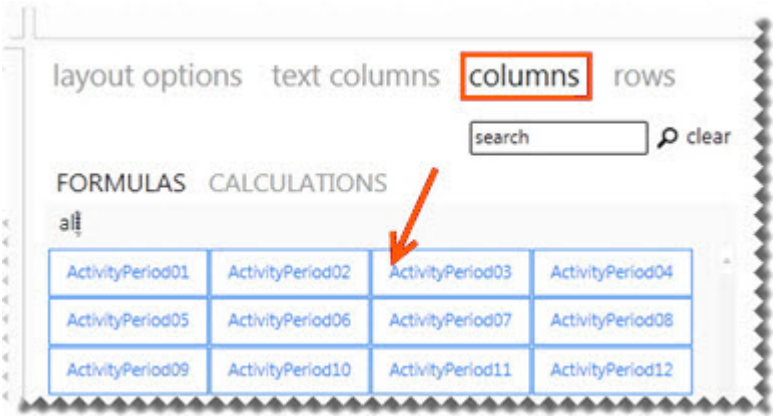
Adding Text Columns

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.

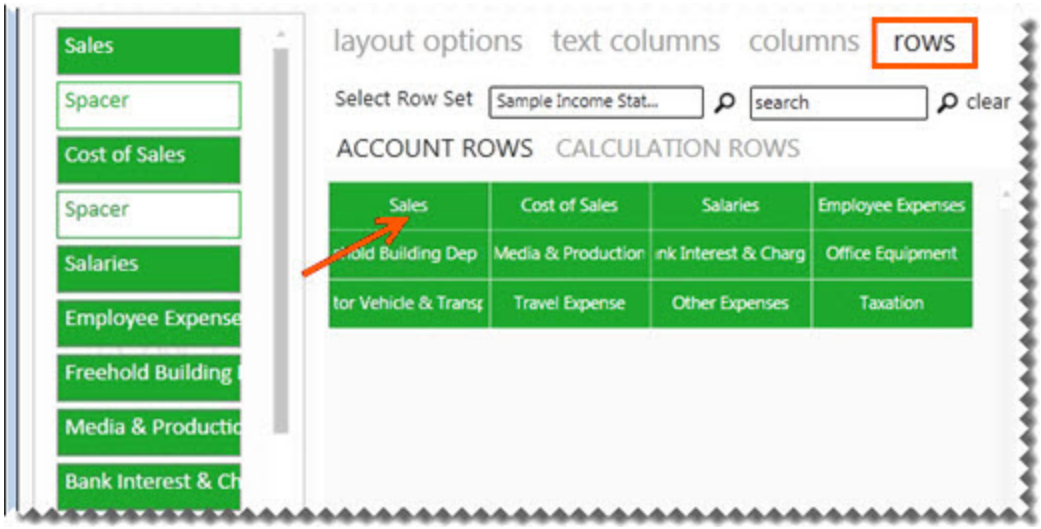
Selecting a Row Set

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	B	C	D	E	F	G	H
1	Company	DEMOCO						
2	Year	2019						
3	BalanceType							
4	Currency	CAD						
5	CurrType	F						
6	BudgetSetCode							
7	ReportingTreeUnitPath							
9			ACTUAL01	ACTUAL02	ACTUAL03	ACTUAL04	ACTUAL05	ACTUAL0
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 + 6180	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

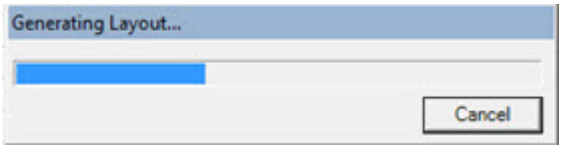
When you've run your Financial Report Designer report, the workbook will open in Microsoft Excel and the Report Designer functions will load.

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.

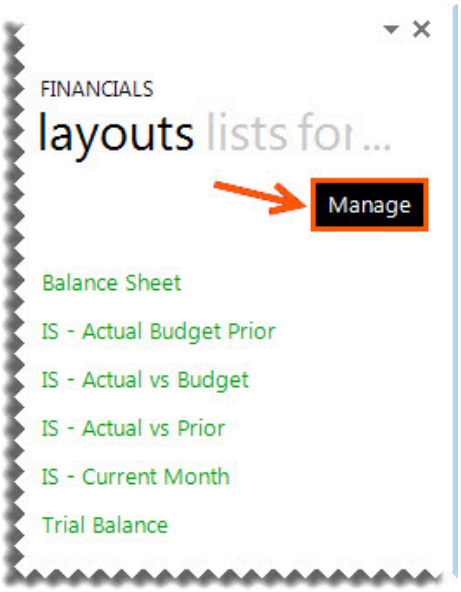


The layout will then open in Microsoft Excel in a new worksheet.

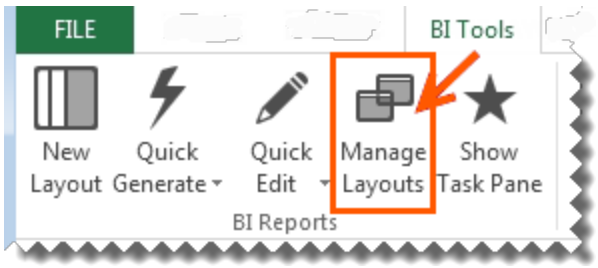
Managing Existing Layouts

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.

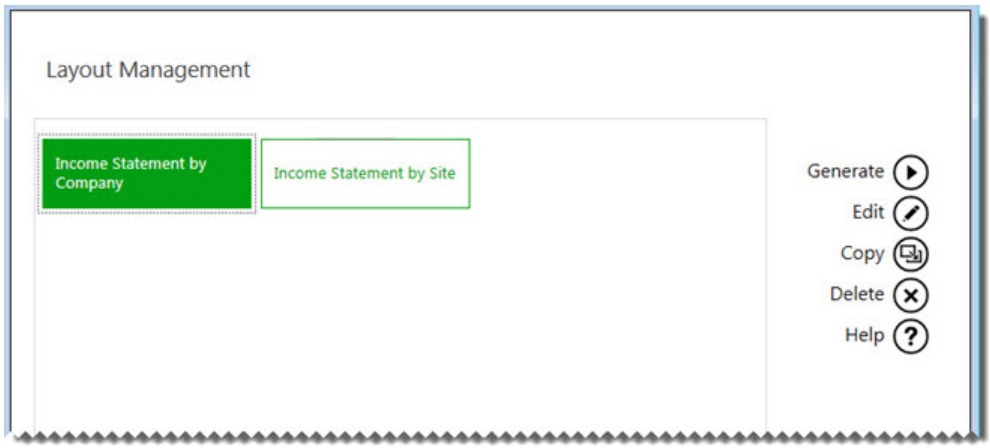
1. On the Task Pane, from the **layouts** tab, select **Manage** or alternatively from the **BI Tools** tab, select **Manage Layouts**.



OR



2. The Layout Management window will appear.

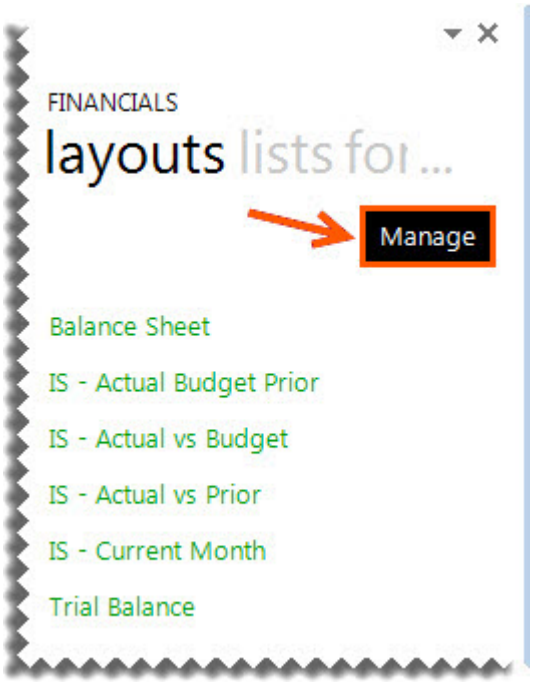


From this window you can choose to edit, copy, delete or generate a layout.

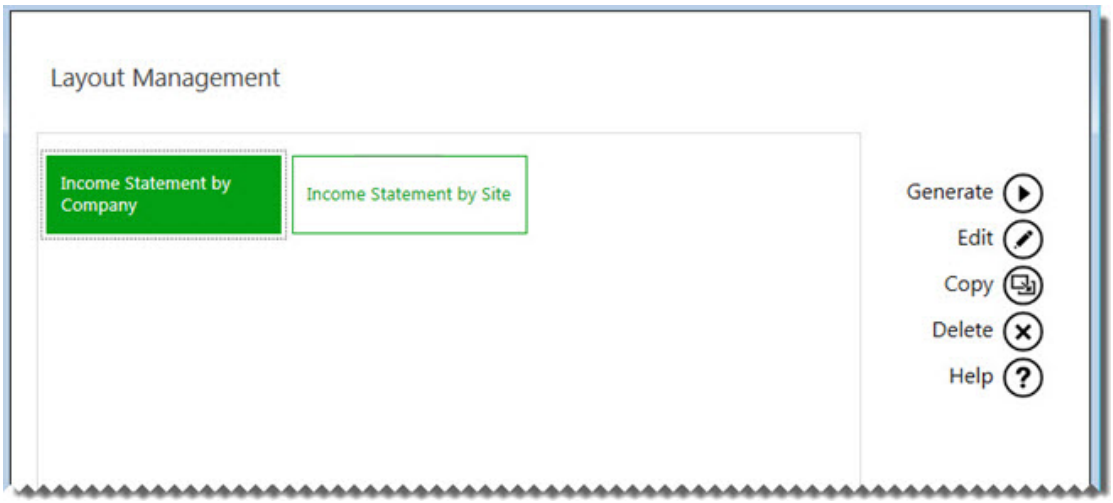
Editing Layouts

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

1. From the **layouts** tab, select **Manage.**



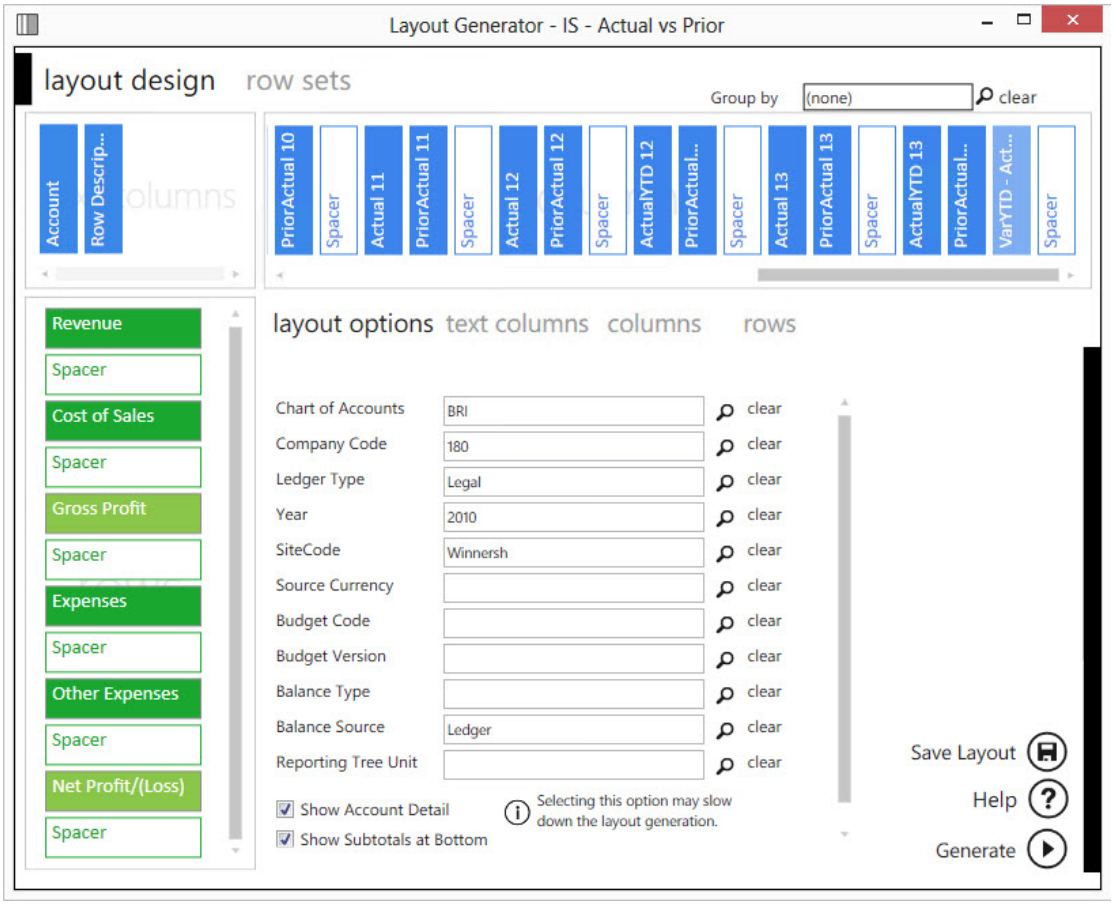
2. The Layout Management window will appear.



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.

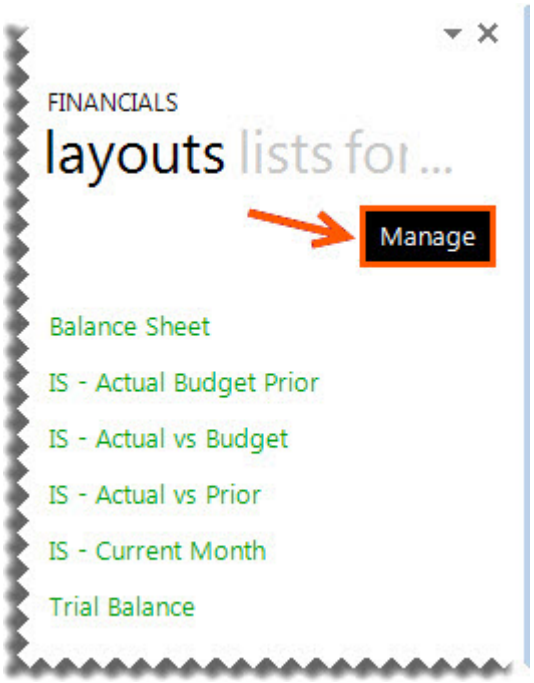


5. Make the necessary changes.
6. Click **Generate** to view your report in Microsoft Excel.

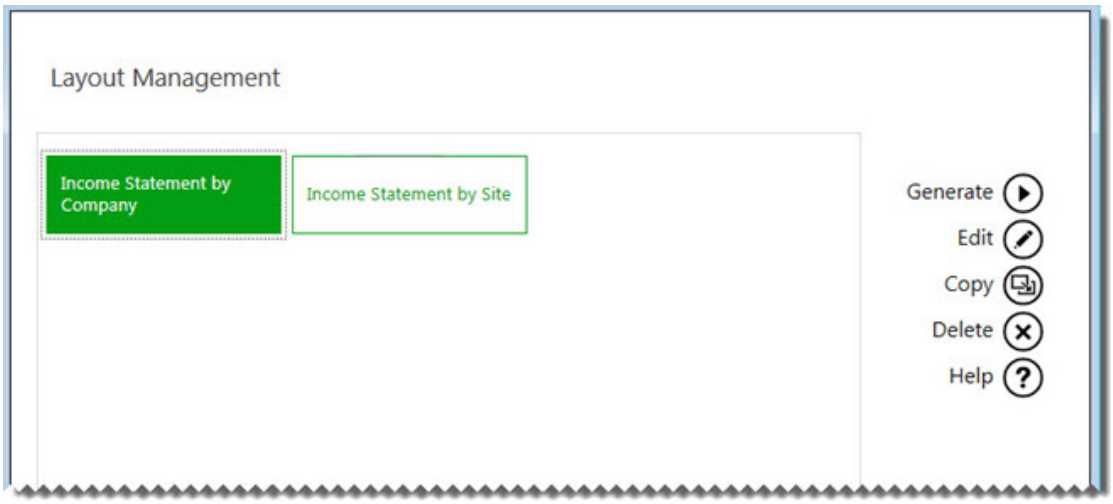
Copying Layouts

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.**



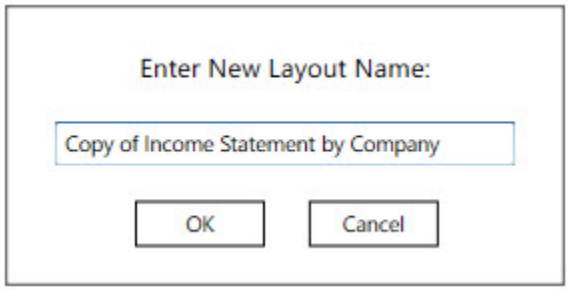
2. The Layout Management window will appear.



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

3. Select the layout you would like to copy.
4. Click **Copy**.

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

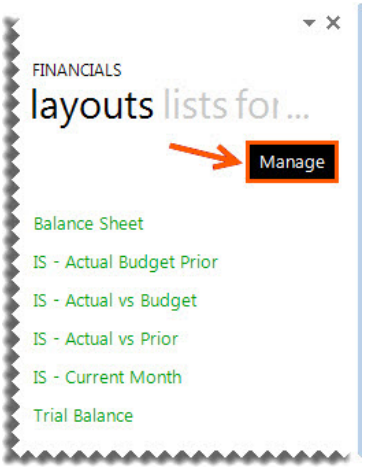


6. Select **Next**.
7. The Layout Generator will appear allowing you to make any changes to the copy of the layout.
8. Select **Generate** to open the layout in Microsoft Excel.

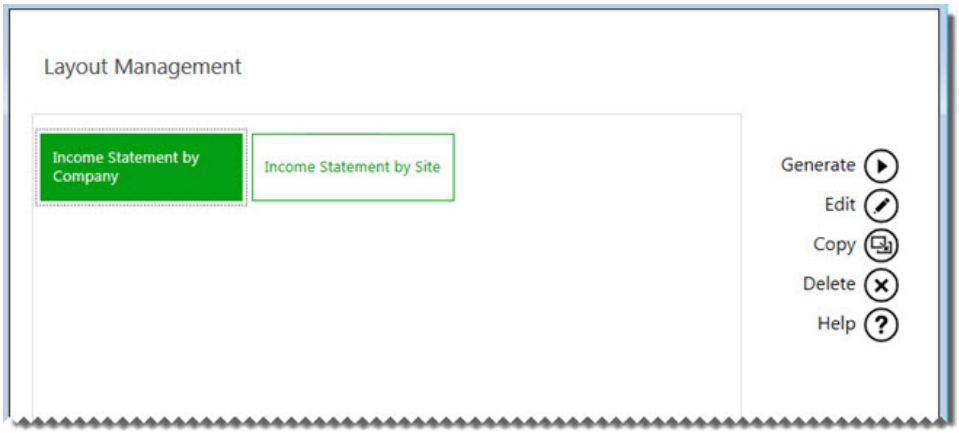
Deleting Layouts

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.

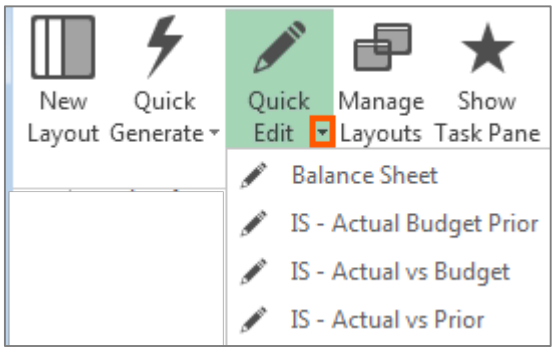


From this window you can choose to edit, copy, delete or generate a layout.

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.

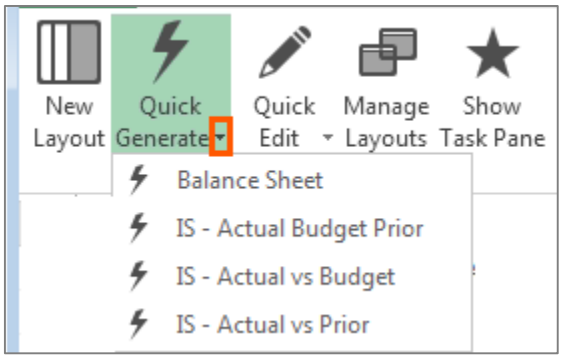


1. From the **BI Tools** tab, select **Quick Edit**. A drop down menu will appear.
2. Select the layout you wish to edit.
3. The layout will open in the Layout Generator.

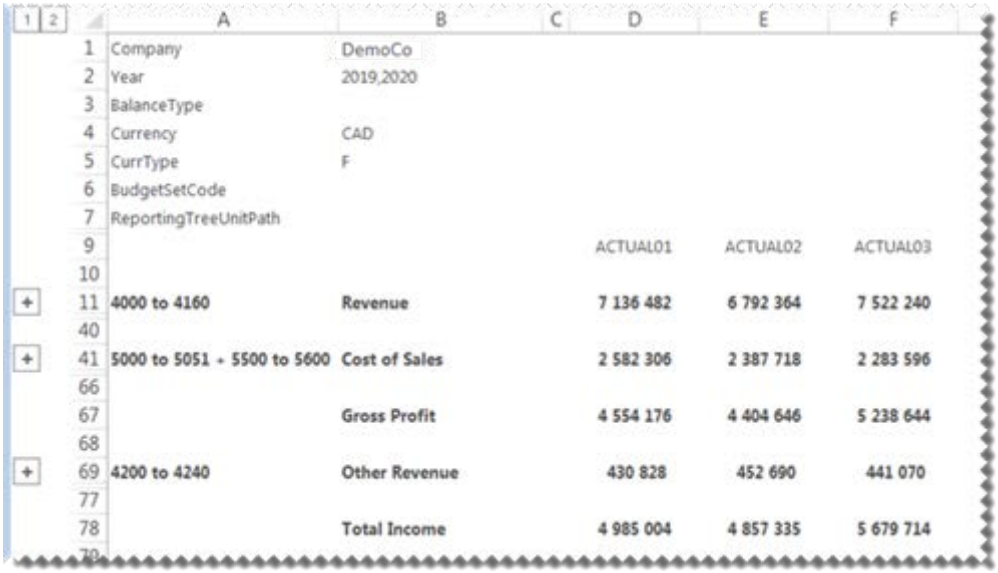
Quickly Generating Layouts

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.



	A	B	C	D	E	F
1	Company	DemoCo				
2	Year	2019,2020				
3	BalanceType					
4	Currency	CAD				
5	CurrType	F				
6	BudgetSetCode					
7	ReportingTreeUnitPath					
9				ACTUAL01	ACTUAL02	ACTUAL03
10						
11	4000 to 4160	Revenue		7 136 482	6 792 364	7 522 240
40						
41	5000 to 5051 + 5500 to 5600	Cost of Sales		2 582 306	2 387 718	2 283 596
66						
67		Gross Profit		4 554 176	4 404 646	5 238 644
68						
69	4200 to 4240	Other Revenue		430 828	452 690	441 070
77						
78		Total Income		4 985 004	4 857 335	5 679 714

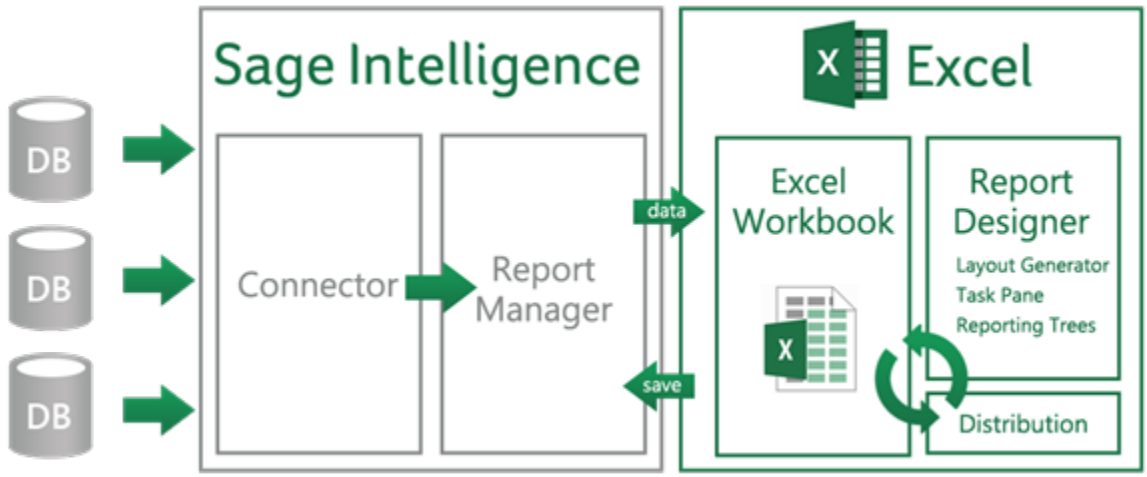
Designing Reports using the Task Pane

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.

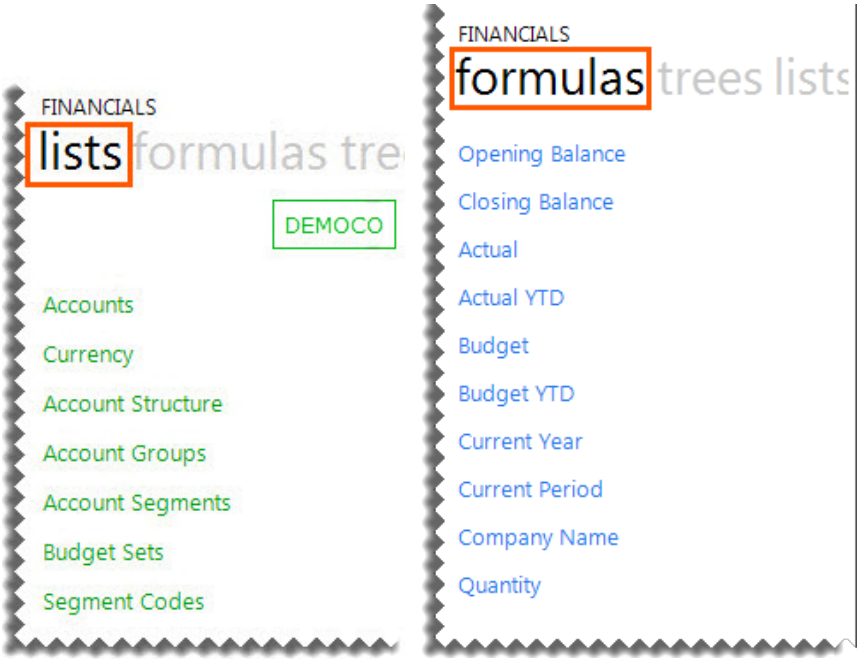
The model behind the new feature is to break down a report into reusable pieces that allows you to control where and how these pieces fit together to create a report. These pieces are Excel functions which communicate with a new In-Memory processing engine which will guarantee performance by being able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

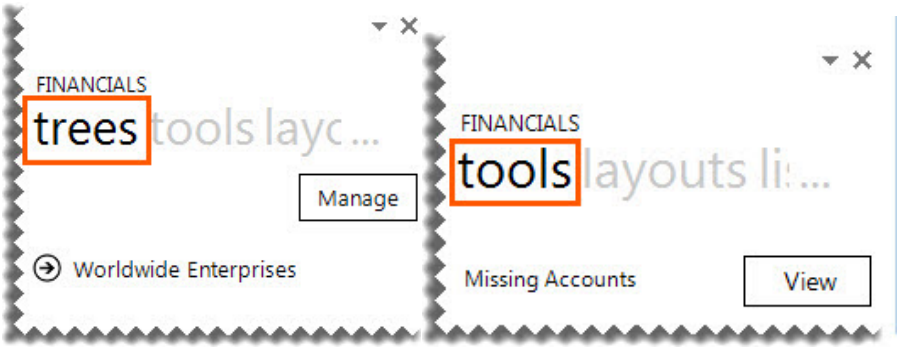
The positioning of the Task Pane within the overall Sage Intelligence Reporting product is as follows:

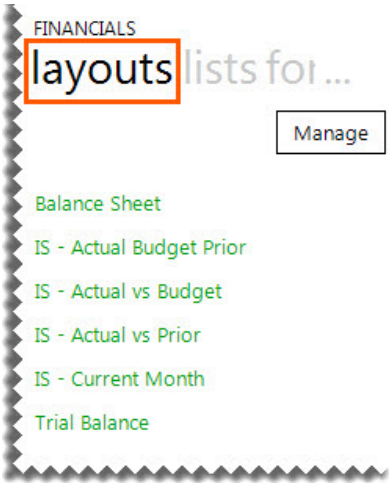


Navigating within the Task Pane

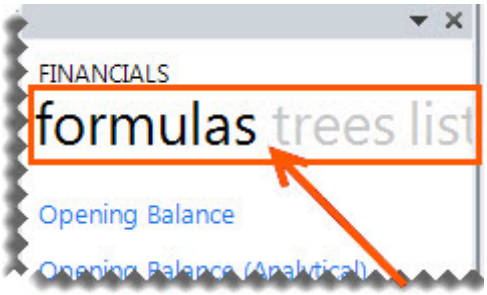
The Task Pane consists of lists, formulas, trees, tools and layouts, which can be used to give you complete control of all design aspects of your report. An intermediate knowledge of Microsoft Excel is beneficial to get the full benefit of your report capabilities.



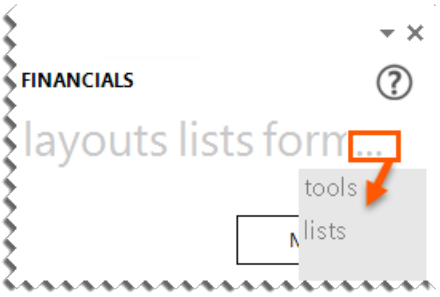




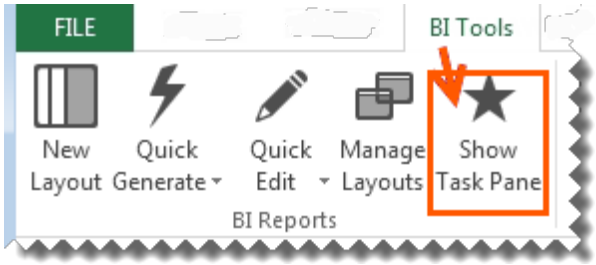
To switch between the tabs, click on the tab headings.



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 Financial Report Designer 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

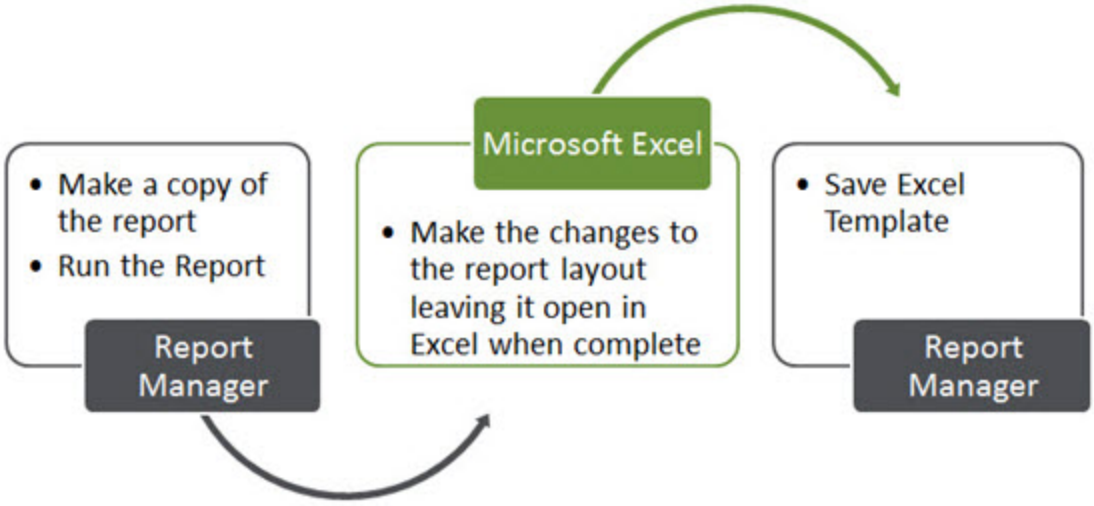
Existing layouts can be edited using Microsoft Excel functionality. Filters can also be changed. If you're unsure, copy an existing worksheet and make changes to the copied worksheet.

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:



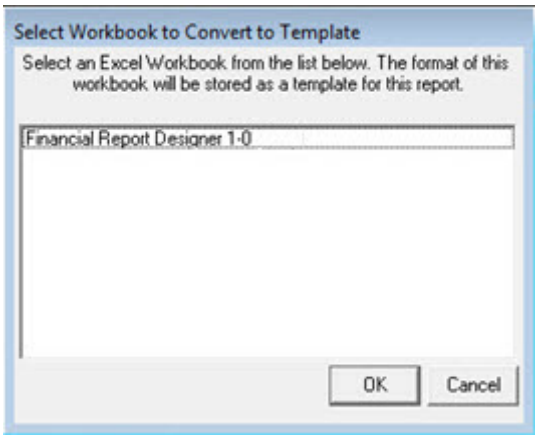
1. Open the Report Manager.

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**.

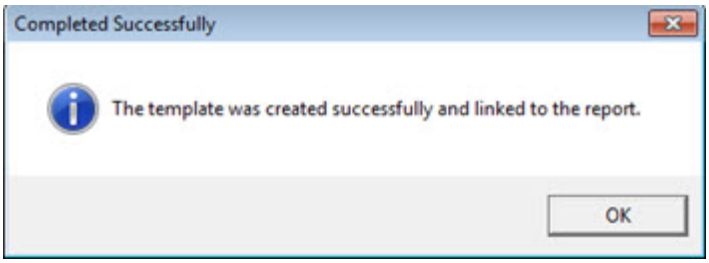
6. In the window that appears, select the Microsoft Excel workbook which contains the changes you made.

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.



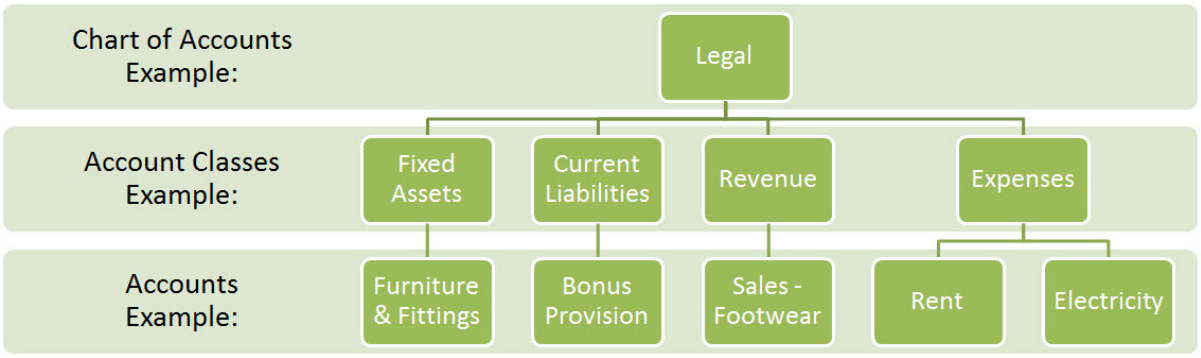
10. Click **OK**.

Lists

Understanding the 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.



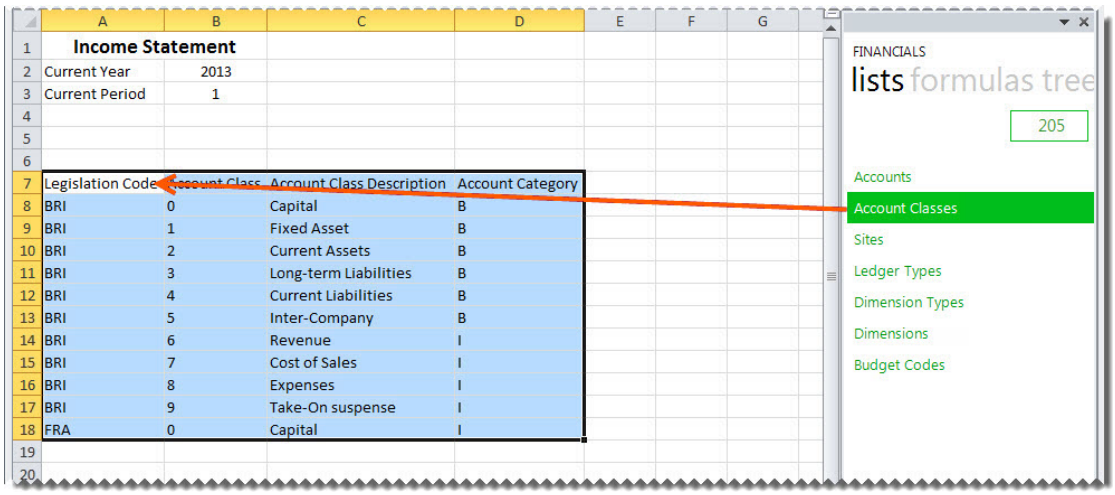
List Name	Description	Example
Accounts	This is a list of the accounts used to define each class of items for financial transactions of a business.	810100 Salaries 810410 Electricity 810415 Water 812005 Telephone
Account Classes	Account classes are assigned to accounts and account groups and determine if the account is a Balance Sheet or Profit & Loss account, the default sign, and the analytic sense. Account classes represent the different sections of financial statements such as Assets and Liabilities.	1 Fixed Assets 4 Current Liabilities 6 Revenue 8 Expenses
Sites	A single company can have multiple sites, and the sites can represent different locations, warehouses, etc.	1002 Paris 1006 Belfort 1012 Cuzac
Ledger Types	A ledger is the principal book for recording transactions. You can have the same or separate ledgers for tracking transactions and balances associated with the General Ledger or analytical ledger.	1 Legal 2 Analytical 4 Reporting
Dimensions	Analytical Accounting enables transactions to be tagged and reported by user-defined dimensions representing financial, date, or statistical information. Sage X3 supports user-defined analytic dimensions for budgeting, allocations, and analysis.	SC Service Centre DC Distribution Centre CC Cost Centre

List Name	Description	Example
Budget Codes	Budget codes identify the budget, define the controls, and determine for which chart of accounts and dimension types budgets are defined. Budgets can be defined based on dimension views, at various grouping levels, in the company currency or multiple currencies, in financial and quantity form, and with an unlimited number of revisions.	BU Original Budget BU1 Revised Budget BCB Best Case Budget
Exchange Rates	The exchange rate list returns the exchange rate information managed within Sage X3 when creating multi-currency layouts.	EUR to GBP 1,25
Reporting Codes	The reporting codes list filters data on reporting codes set up in the General Ledger.	PL COS

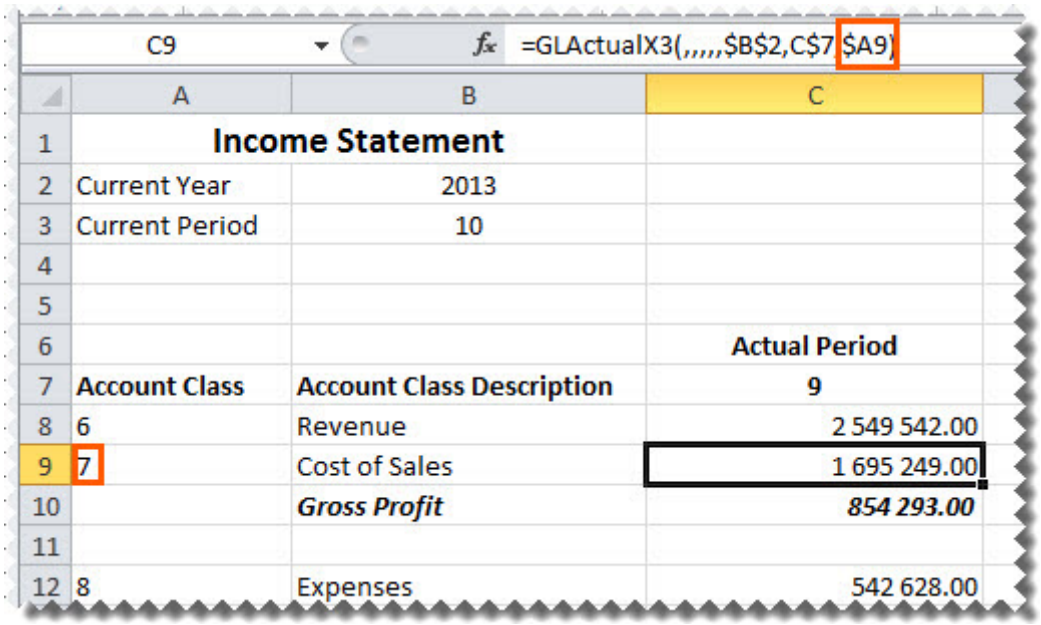
Adding Lists

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.

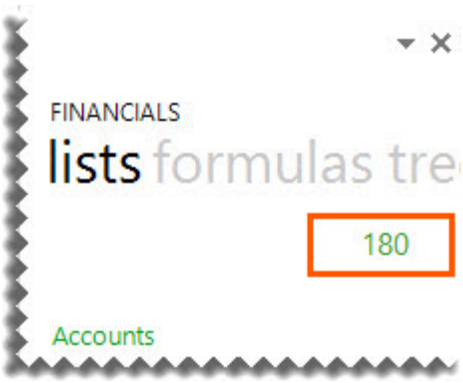


You can use the information from your lists, in your formulas to return specific data.



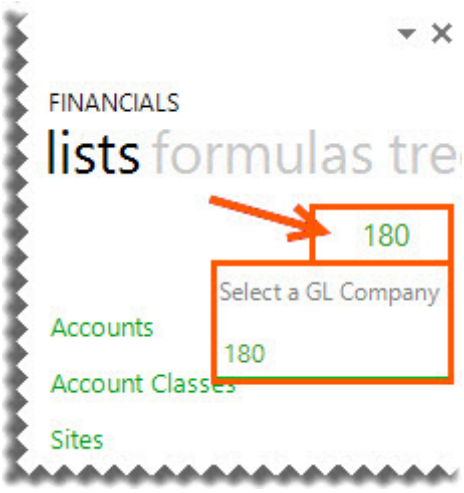
Changing Companies

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



If you have consolidated multiple companies 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 X3 General Ledger.

Formulas

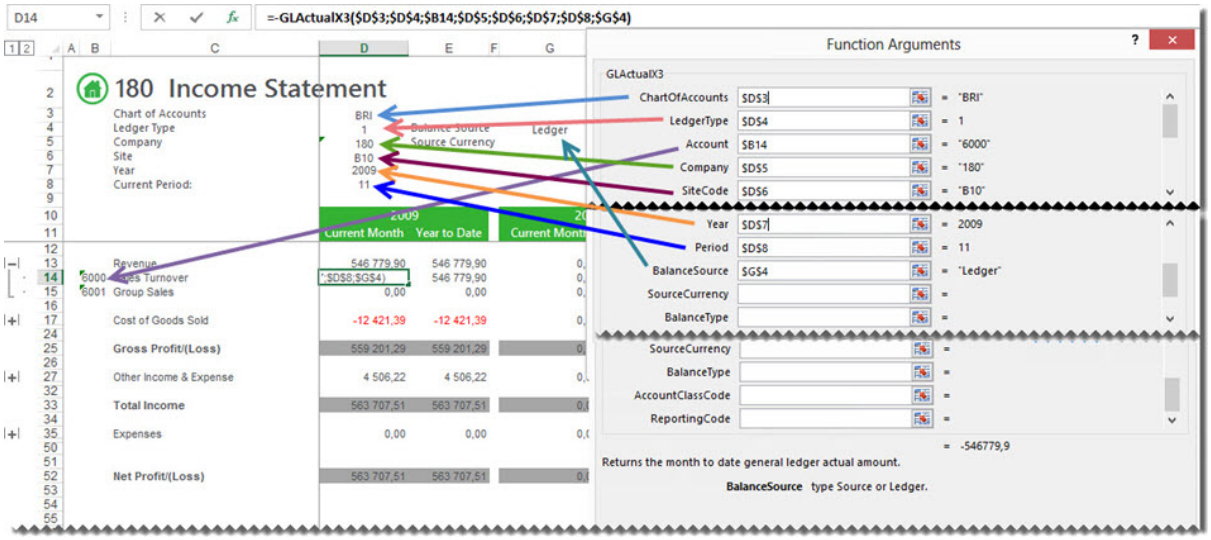
Using Cell References

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.

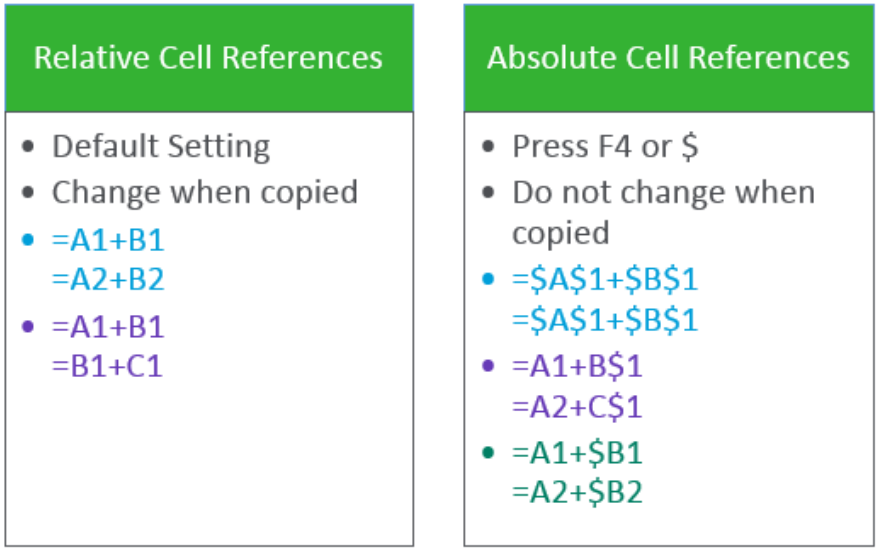
By default, a spreadsheet cell reference is relative. This means that as a formula is copied and pasted to other cells, the cell references in the formula change to reflect the formula's new location. For example, if you copy the formula **=A1+B1** from row **1** to row **2**, the formula will become **=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 **A1** or **B2**.

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.



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.

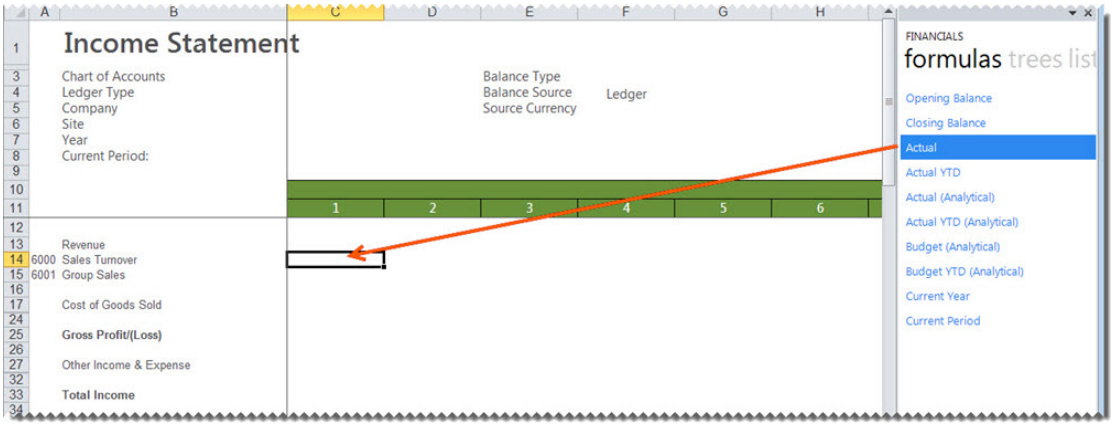
Adding Formulas

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 X3 General Ledger based on provided parameters. Each parameter acts as a filter.

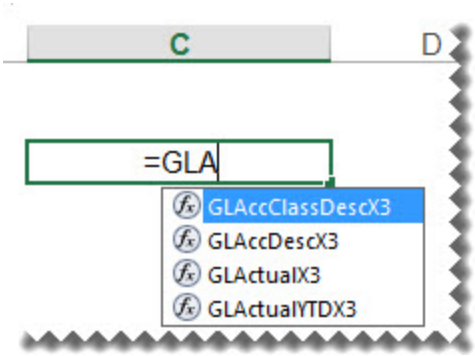
There are two ways to add formulas to your Microsoft Excel spreadsheet.

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



OR

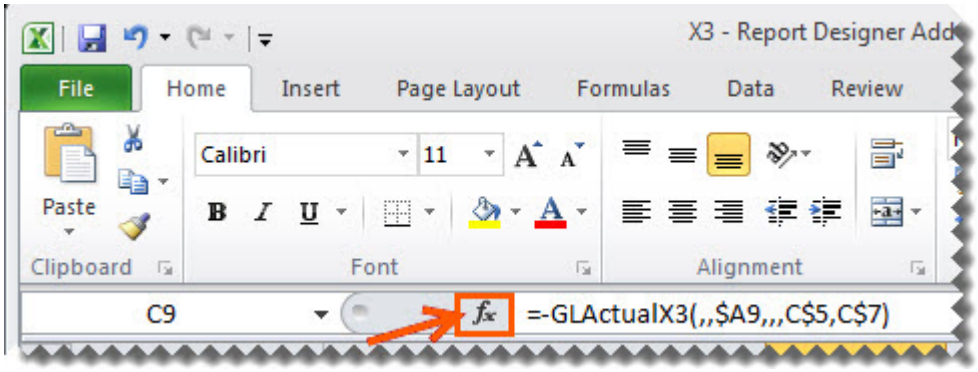
2. Type the equal sign (=), followed by the formula name, directly into the Excel sheet cell or formula bar. Please refer to **Appendix A** for a detailed explanation on each formula.



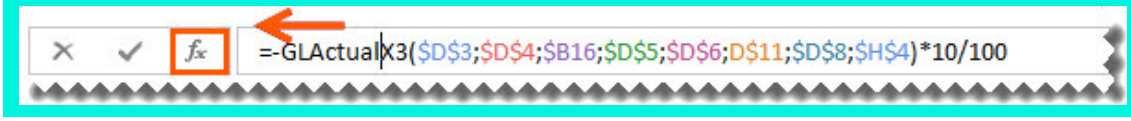
Editing Formulas

Formulas can be dragged into the Excel workbook to allow you to return balances from the Sage X3 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**.

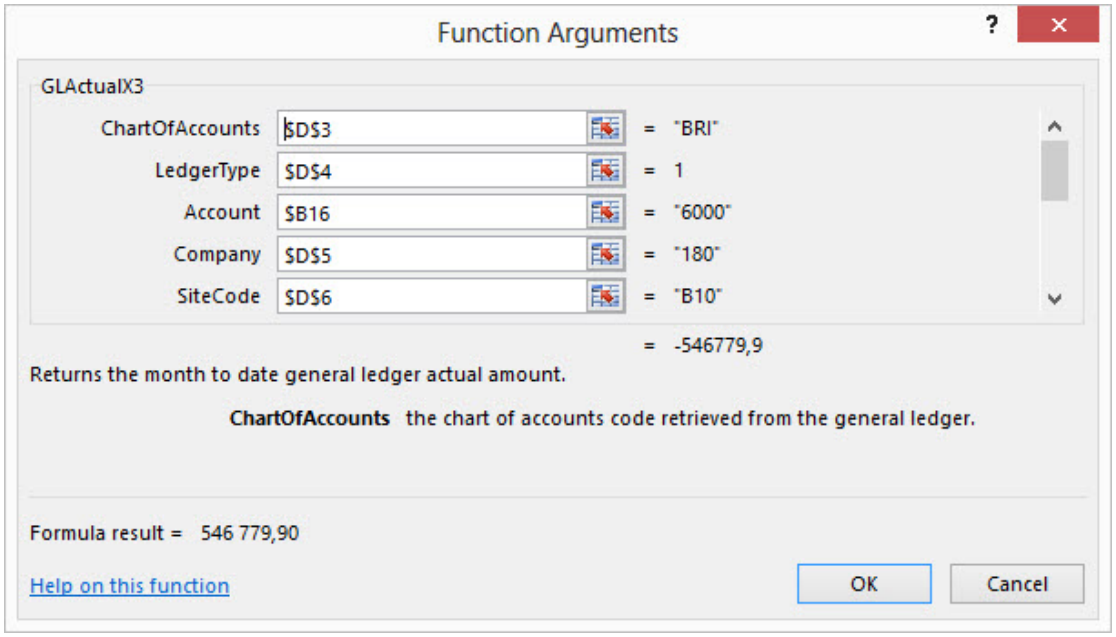


Tip: If there is more than one formula in a cell, only the formula result will be shown unless you click the specific formula you want to edit in the formula bar, before clicking **fx**.

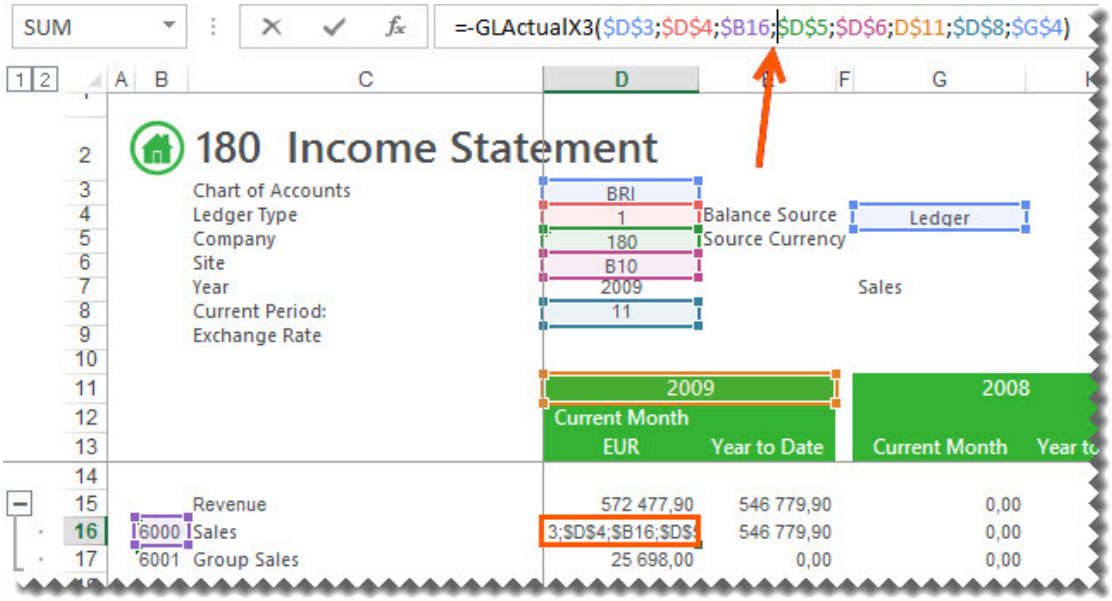


The formula parameters provided in the **Function Arguments** window will be used to specify what data is retrieved by the formula. Each setting serves as a filter to retrieve the data. The filter is applied in the order that the settings are displayed.

In the following formula example, **ChartofAccounts** is applied first, followed by **LedgerType** in that order.



Formulas can be edited manually if you are familiar with the format of the formula. Please refer to **Appendix A** for a detailed explanation on each formula and its parameters. Select the cell which contains the formula and then double-click the parameter within the formula bar and make your changes.



Grouping Sites in Formulas

A Sage X3 site exists within a company and can group together a geographic area (the concept of an office, factory, warehouse.) or an area of responsibility. A site can be specified in your Sage Intelligence Reporting formulas to filter the data being retrieved to a specific site or multiple sites. When listing multiple individual sites, a comma must be used to separate each site, or alternatively wildcards or ranges can be used.

Using Wildcards in Sites

Wildcards can be used to define the list of Site values to return in your Sage Intelligence Reporting formulas.

A wildcard character is a keyboard character such as an asterisk (*) or a question mark (?) that is used to represent one or more characters. For example, the wildcard character **?** may be substituted for any one of the 36 characters, A through Z and 0 through 9.

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.	**A??1** to return **A001** to **AZZ1**.
Asterisk *	This may be substituted for any number of characters or numbers.	**A*** to return **A,A1,AZZZ** etc
Exclamation Mark with Brackets ![ ]	Use the exclamation mark with brackets to indicate your exclusions. Only one exclusion list is allowed per expression and should be indicated at the end. Other wildcards can be used within your exclusion list.	**A50 TO B100 ![A6? to A70]** to return projects **A50,A80,A90** etc. and not **A60,A61** to **A70**.

Using Ranges in Sites

Ranges can be used to define the list of Site values to return in your Sage Intelligence Reporting formulas.

A range indicates a series of results to be returned. This is indicated by using **TO** between your start and end value of your range.

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

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

Learn More:
Specifying a Dimension in the Formula Parameter

Grouping Periods in Formulas

A Sage X3 period is the operating cycle of a company for which accounting information is collected and reported. When listing multiple individual periods, a comma must be used to separate each period, or alternatively ranges can be used.

Using Ranges in Periods

Ranges can be used to define the list of periods to return data on in your Sage Intelligence Reporting formulas.

A range indicates a series of results to be returned. This is indicated by using **TO** between your start and end value of your range.

An example could be: **1 TO 3 ;** to return all data for periods one to three which may represent your first quarter.

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

Grouping Accounts in Formulas

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.

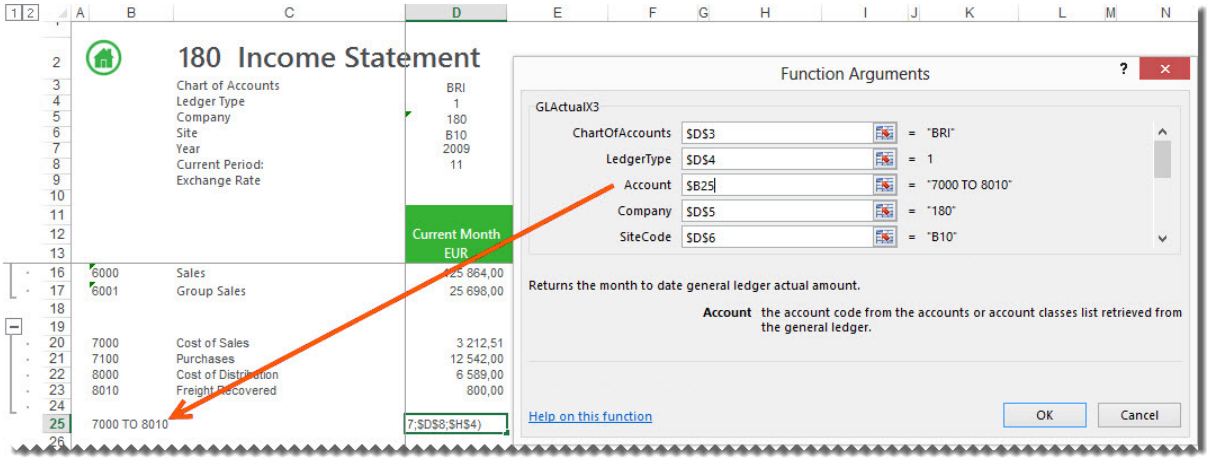
An example could be: **A to Z ;** to return all values from **A, A11, B2, C** etc. to **Z**.

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

Some examples of using account ranges:

Account Range	Description	Result
4000 to 4400	Filter all accounts from 4000 up to and including 4400.	4000, 4001, 4002, 4003 up to 4399, 4400
6000 to 6999	Filter all accounts from 6000 up to and including 6999.	6000, 6001, 6002, 6003 up to 6998, 6999
4?00 TO 5?00	In a single segment range, filter accounts ranging from 4000 to 5900. **Tip**: If you wanted to only include accounts ending with 00, you could create a reporting tree unit with a filter of ??00 to further filter the results.	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.

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



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

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 account ranges and mathematical calculations.

Some examples of using wildcards:

Filter	Description	Result
70010?	Filter all six digit account numbers beginning with 70010	700101 700102 700103 up to 700109

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.

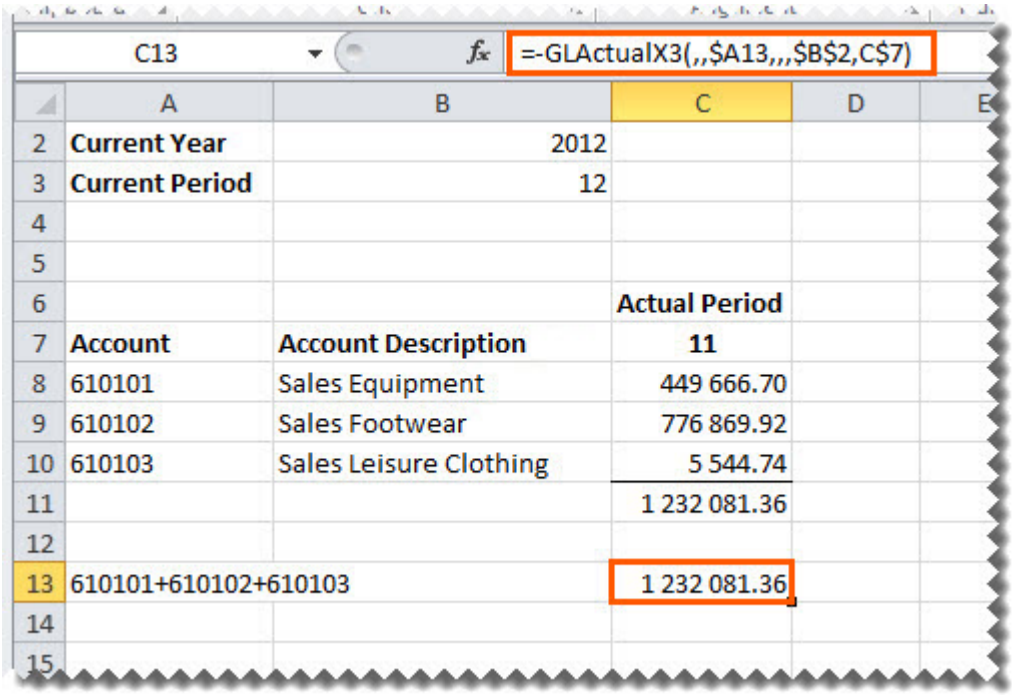
Note: The use of a space on either side of the + and/or – signs are required in order for the formula to be calculated correctly. Brackets are also supported thus calculations in brackets (parenthesis) are calculated first. For example, accounts **(700 + 705) - 840**.

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

Some examples of using mathematical calculations:

Filter	Description	Results may include:
4500 + 4600 + 4900	Accounts 4500, 4600 and 4900 (Any accounts in-between are omitted).	4500, 4600, 4900
4500 + 4600 to 4700	Account 4500 as well as accounts in the range from 4600 to 4700.	4500, 4600, 4601, 4602, 4603 up to 4699, 4700

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**.



Reversing Negative Numbers

By default, the data will show the same as that of the underlying Sage X3 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.

	Before		After
	Actual YTD		Actual YTD
Total Revenue	(12 940 469.42)	→	12 940 469.42
Other Revenue	(1 211 364.86)		1 211 364.86
Cost of Sales	4 642 535.03		4 642 535.03
Fixed Charges	676 066.48		676 066.48
Other Expenses	8 402 536.00		8 402 536.00
Amortization/Depreciation Expenses	250 000.00		250 000.00
Other Expenses	0.00		0.00
Total Cost & Expenses	13 971 137.51		13 971 137.51
Interest Expense	7 500.00		7 500.00
Income Taxes	108 000.00		108 000.00
Net Profit/(Loss)	(28 238 471.79)		65 196.77

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

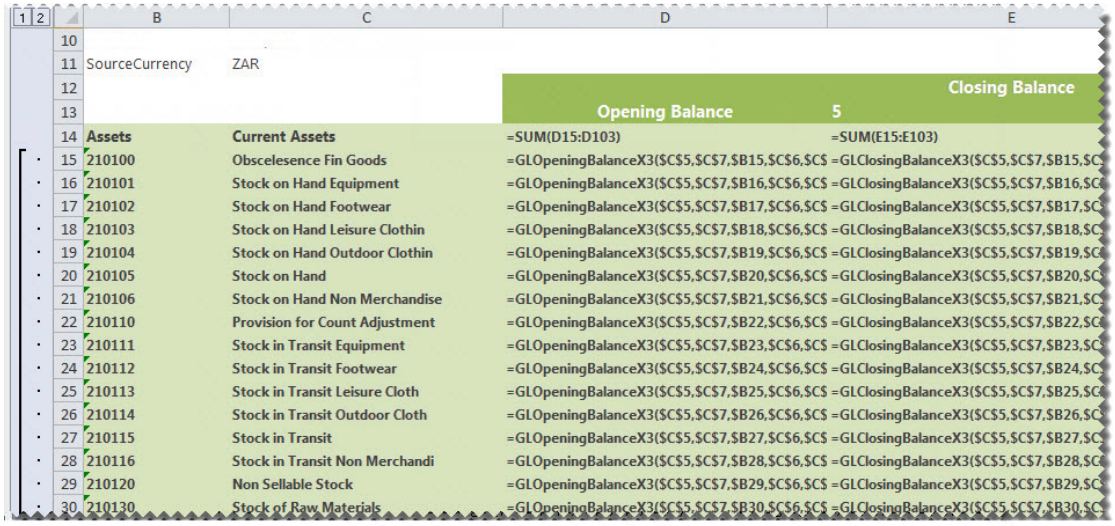
3. Drag the fill handle down to copy these to other accounts requiring the same change. You can also double-click to fill the formula down, as far as the column to the left is filled with adjacent data.

Learn More:
Converting a Negative Number to Positive using the Layout Generator

Displaying Cell Formulas instead of Values

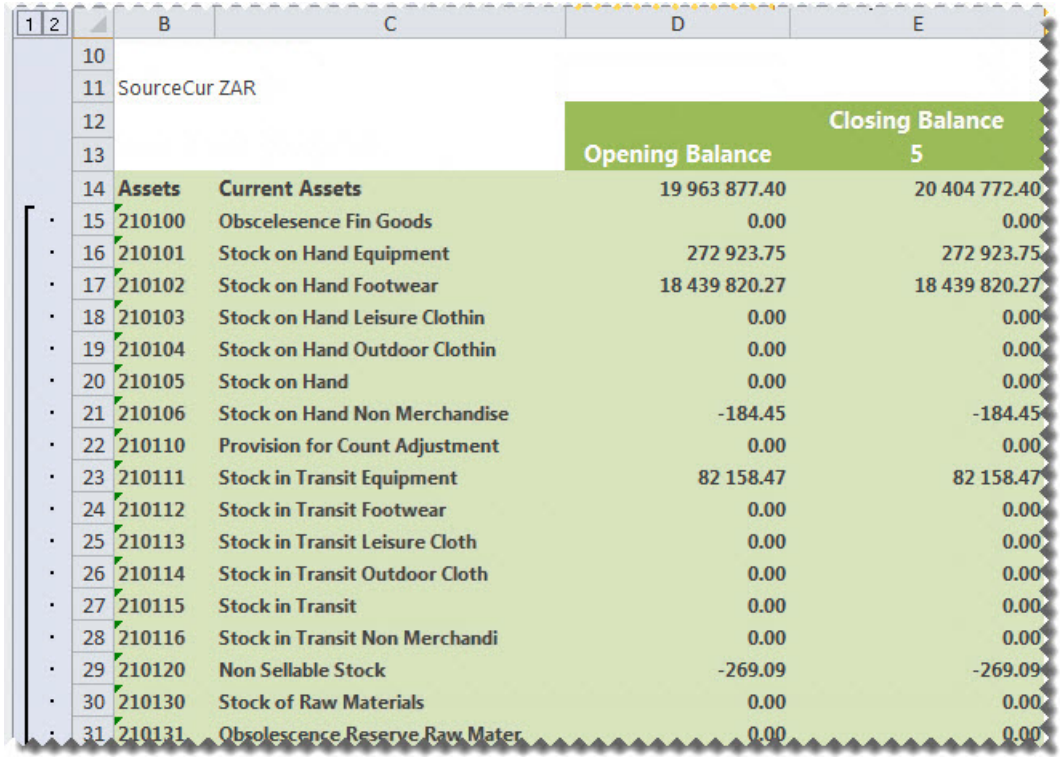
To display all of the formulas used on your spreadsheet without clicking on each cell individually:

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



	B	C	D	E
10				
11	SourceCurrency	ZAR		
12				Closing Balance
13			Opening Balance	5
14	**Assets**	**Current Assets**	=SUM(D15:D103)	=SUM(E15:E103)
15	210100	Obscelesence Fin Goods	=GLOpeningBalanceX3(C5,C7,$B15,$C$6,$C$	=GLClosingBalanceX3(C5,C7,$B15,$C
16	210101	Stock on Hand Equipment	=GLOpeningBalanceX3(C5,C7,$B16,$C$6,$C$	=GLClosingBalanceX3(C5,C7,$B16,$C
17	210102	Stock on Hand Footwear	=GLOpeningBalanceX3(C5,C7,$B17,$C$6,$C$	=GLClosingBalanceX3(C5,C7,$B17,$C
18	210103	Stock on Hand Leisure Clothin	=GLOpeningBalanceX3(C5,C7,$B18,$C$6,$C$	=GLClosingBalanceX3(C5,C7,$B18,$C
19	210104	Stock on Hand Outdoor Clothin	=GLOpeningBalanceX3(C5,C7,$B19,$C$6,$C$	=GLClosingBalanceX3(C5,C7,$B19,$C
20	210105	Stock on Hand	=GLOpeningBalanceX3(C5,C7,$B20,$C$6,$C$	=GLClosingBalanceX3(C5,C7,$B20,$C
21	210106	Stock on Hand Non Merchandise	=GLOpeningBalanceX3(C5,C7,$B21,$C$6,$C$	=GLClosingBalanceX3(C5,C7,$B21,$C
22	210110	Provision for Count Adjustment	=GLOpeningBalanceX3(C5,C7,$B22,$C$6,$C$	=GLClosingBalanceX3(C5,C7,$B22,$C
23	210111	Stock in Transit Equipment	=GLOpeningBalanceX3(C5,C7,$B23,$C$6,$C$	=GLClosingBalanceX3(C5,C7,$B23,$C
24	210112	Stock in Transit Footwear	=GLOpeningBalanceX3(C5,C7,$B24,$C$6,$C$	=GLClosingBalanceX3(C5,C7,$B24,$C
25	210113	Stock in Transit Leisure Cloth	=GLOpeningBalanceX3(C5,C7,$B25,$C$6,$C$	=GLClosingBalanceX3(C5,C7,$B25,$C
26	210114	Stock in Transit Outdoor Cloth	=GLOpeningBalanceX3(C5,C7,$B26,$C$6,$C$	=GLClosingBalanceX3(C5,C7,$B26,$C
27	210115	Stock in Transit	=GLOpeningBalanceX3(C5,C7,$B27,$C$6,$C$	=GLClosingBalanceX3(C5,C7,$B27,$C
28	210116	Stock in Transit Non Merchandi	=GLOpeningBalanceX3(C5,C7,$B28,$C$6,$C$	=GLClosingBalanceX3(C5,C7,$B28,$C
29	210120	Non Sellable Stock	=GLOpeningBalanceX3(C5,C7,$B29,$C$6,$C$	=GLClosingBalanceX3(C5,C7,$B29,$C
30	210130	Stock of Raw Materials	=GLOpeningBalanceX3(C5,C7,$B30,$C$6,$C$	=GLClosingBalanceX3(C5,C7,$B30,$C

2. Press **Ctrl ~** again to return to displaying the values.

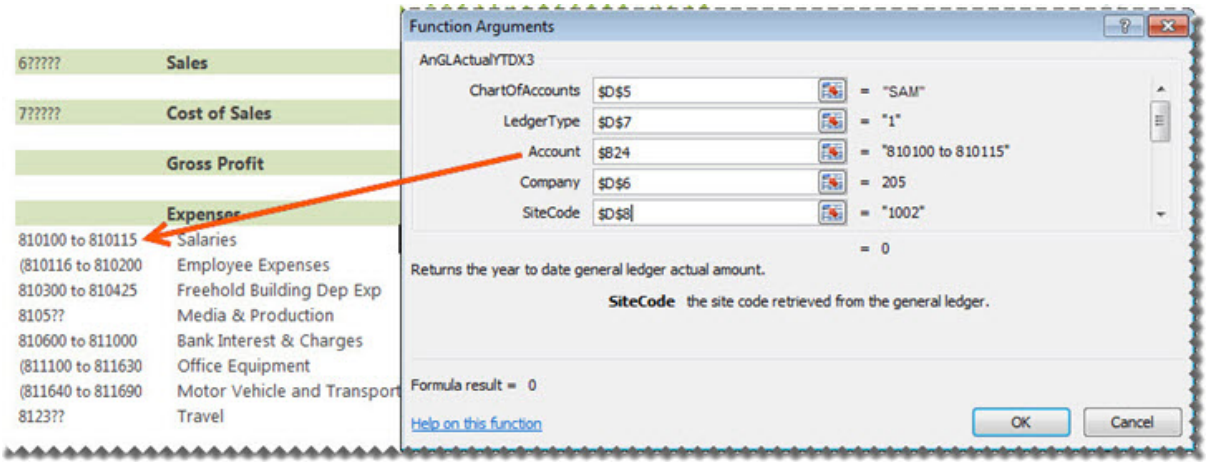


	B	C	D	E
10				
11	SourceCur ZAR			
12				Closing Balance
13			Opening Balance	5
14	**Assets**	**Current Assets**	19 963 877.40	20 404 772.40
15	210100	Obscelesence Fin Goods	0.00	0.00
16	210101	Stock on Hand Equipment	272 923.75	272 923.75
17	210102	Stock on Hand Footwear	18 439 820.27	18 439 820.27
18	210103	Stock on Hand Leisure Clothin	0.00	0.00
19	210104	Stock on Hand Outdoor Clothin	0.00	0.00
20	210105	Stock on Hand	0.00	0.00
21	210106	Stock on Hand Non Merchandise	-184.45	-184.45
22	210110	Provision for Count Adjustment	0.00	0.00
23	210111	Stock in Transit Equipment	82 158.47	82 158.47
24	210112	Stock in Transit Footwear	0.00	0.00
25	210113	Stock in Transit Leisure Cloth	0.00	0.00
26	210114	Stock in Transit Outdoor Cloth	0.00	0.00
27	210115	Stock in Transit	0.00	0.00
28	210116	Stock in Transit Non Merchandi	0.00	0.00
29	210120	Non Sellable Stock	-269.09	-269.09
30	210130	Stock of Raw Materials	0.00	0.00
31	210131	Obsolescence Reserve Raw Mater	0.00	0.00

Catering for New General Ledger Accounts

Use account ranges or wildcards 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 **810100 TO 810115** would be used in the cell which is referenced by the **Account** argument.

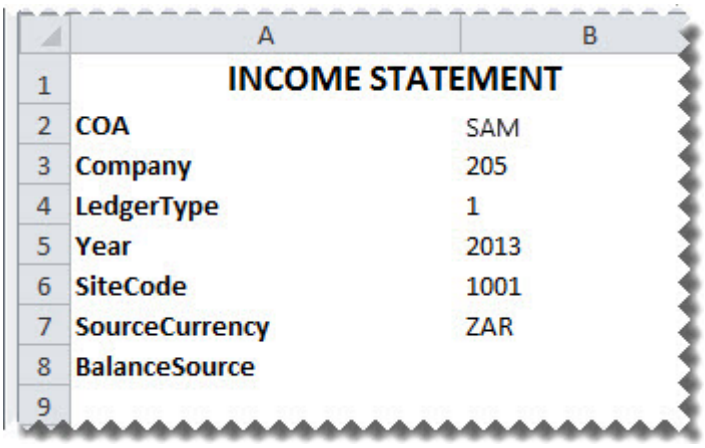
If any new accounts were added to the General Ledger, for example, Account **810112 Bonus**, it would automatically be included in the **Salaries** amount as it falls within the account range of **810100 to 810115**. Therefore, no changes would be required in your summarized report layout.

Designing Financial Reports

Designing a Basic Summarized Income Statement

This is a demonstration on how to design a summarized income statement using the Report Designer. We will be using the account classes to report from with current period figures. A basic accounting knowledge is required.

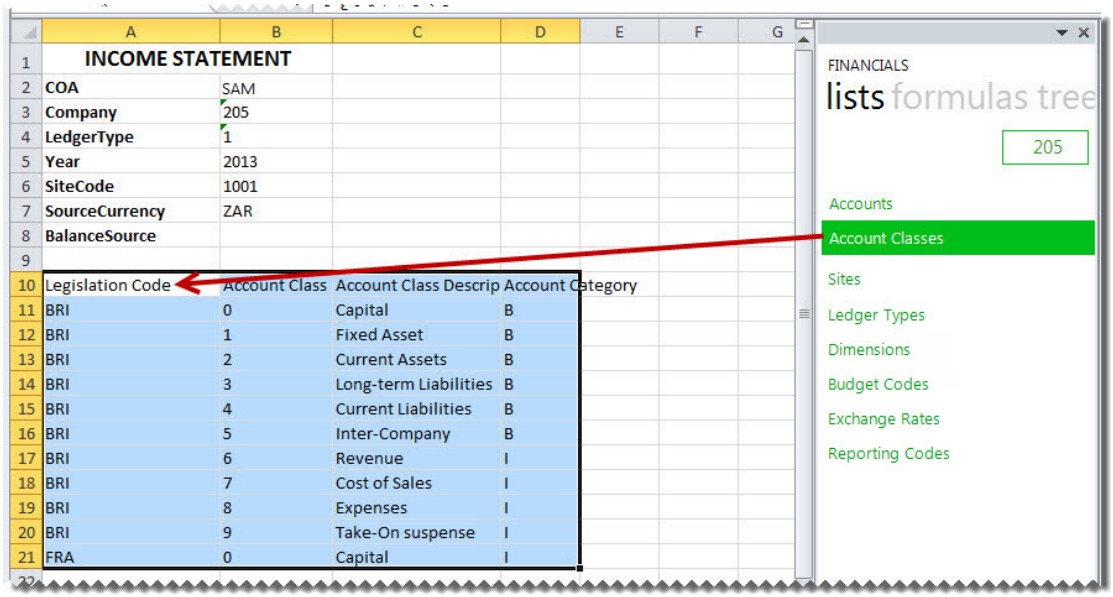
1. In Microsoft Excel, set up your spreadsheet with a heading and the filters you would like to use.



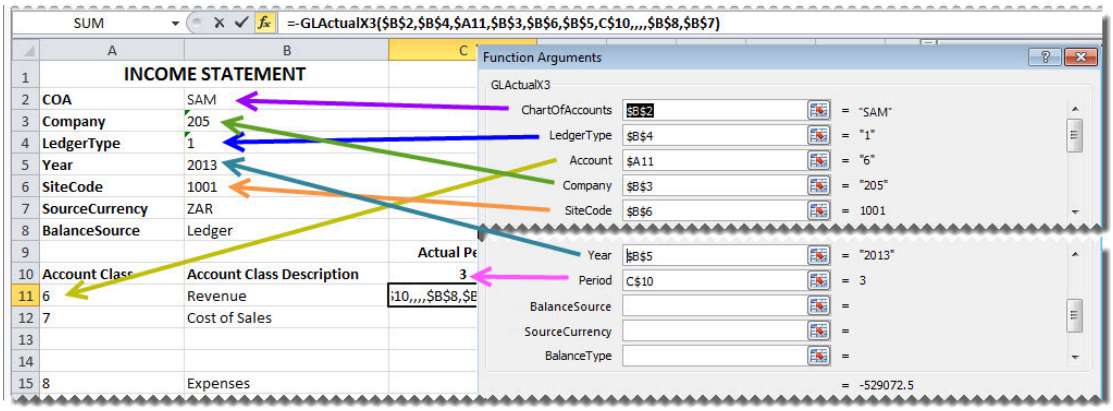
	A	B
1	**INCOME STATEMENT**	
2	**COA**	SAM
3	**Company**	205
4	**LedgerType**	1
5	**Year**	2013
6	**SiteCode**	1001
7	**SourceCurrency**	ZAR
8	**BalanceSource**	
9		

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 and drop the **Account Classes** from the **Lists**. You will use this list to help create your report.



3. Delete the columns and the accounts not required.
4. Insert a column heading for the 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 function arguments. You can do this by clicking the **fx** button and making the changes or alternatively typing directly into the formula area.



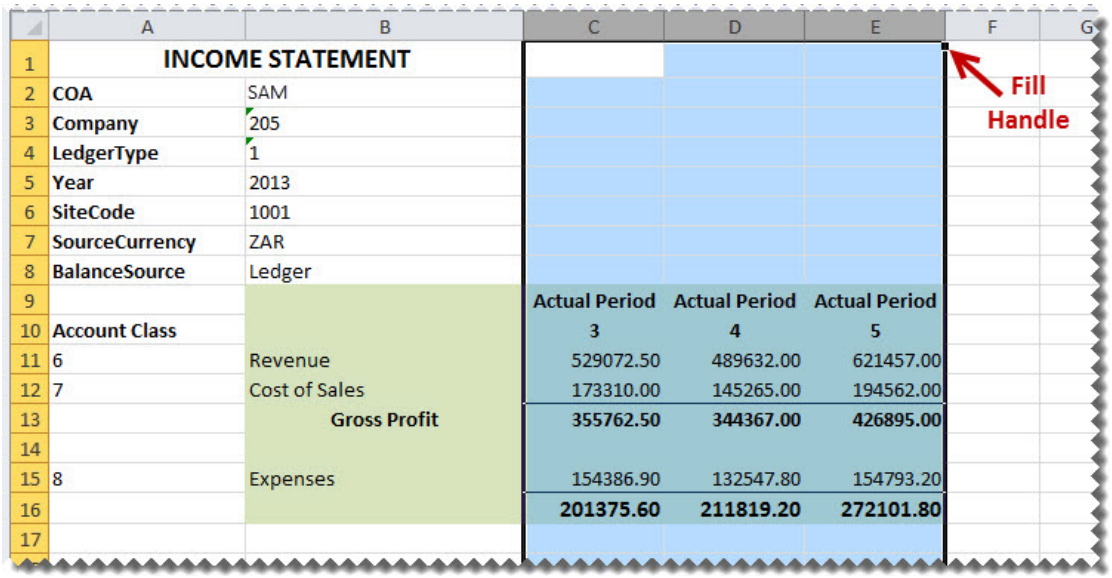
Tip: Change to absolute cell referencing where the cells remain constant. Refer to the topic Using Relative or Absolute Cell Referencing.

Tip: Some data may be stored as a negative number 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 down to copy these to other accounts requiring the same change.
8. Add headings, totals and formatting using Excel features and set your print area.

	A	B	C	D
1		**INCOME STATEMENT**		
2	**COA**	SAM		
3	**Company**	205		
4	**LedgerType**	1		
5	**Year**	2013		
6	**SiteCode**	1001		
7	**SourceCurrency**	ZAR		
8	**BalanceSource**	Ledger		
9			**Actual Period**	
10	**Account Class**		**3**	
11	6	Revenue	529072.50	
12	7	Cost of Sales	173310.00	
13		**Gross Profit**	**355762.50**	
14				
15	8	Expenses	154386.90	
16			**201375.60**	
17				
18				

9. If you used the applicable cell referencing and you wanted to compare with additional periods, you could highlight column **C** and drag the fill handle across to the right, the required amount of columns.

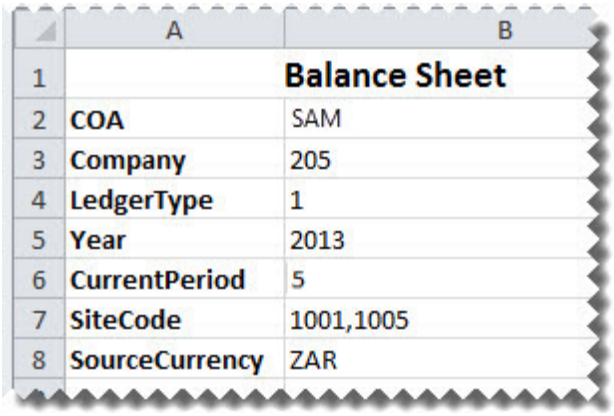


	A	B	C	D	E	F	G
1	INCOME STATEMENT						
2	COA	SAM					
3	Company	205					
4	LedgerType	1					
5	Year	2013					
6	SiteCode	1001					
7	SourceCurrency	ZAR					
8	BalanceSource	Ledger					
9			Actual Period	Actual Period	Actual Period		
10	Account Class		3	4	5		
11	6	Revenue	529072.50	489632.00	621457.00		
12	7	Cost of Sales	173310.00	145265.00	194562.00		
13		Gross Profit	355762.50	344367.00	426895.00		
14							
15	8	Expenses	154386.90	132547.80	154793.20		
16			201375.60	211819.20	272101.80		
17							

Designing a Basic Balance Sheet

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

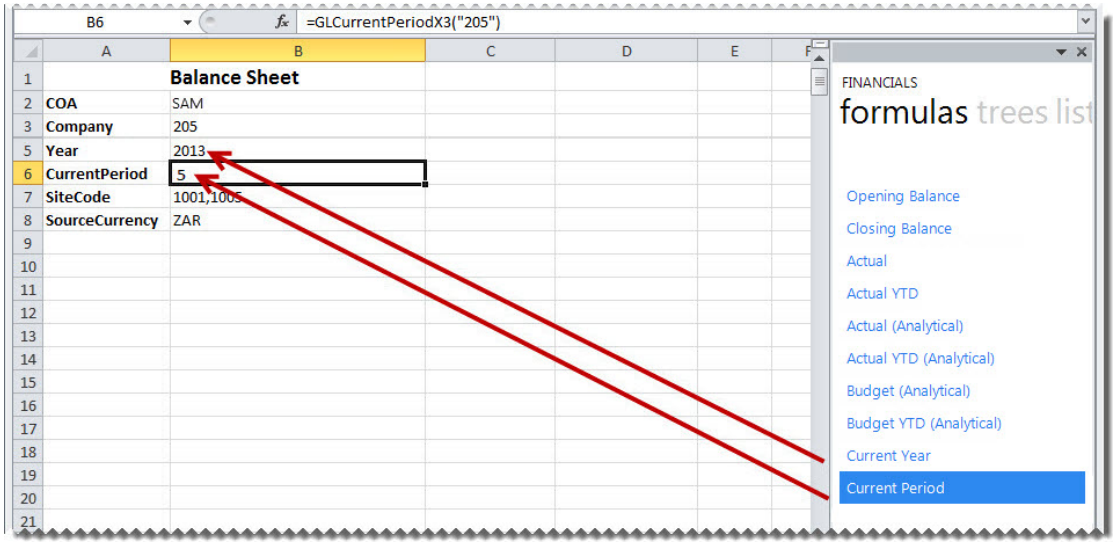
1. In Microsoft Excel, set up your spreadsheet with a heading and the filters you would like to use.



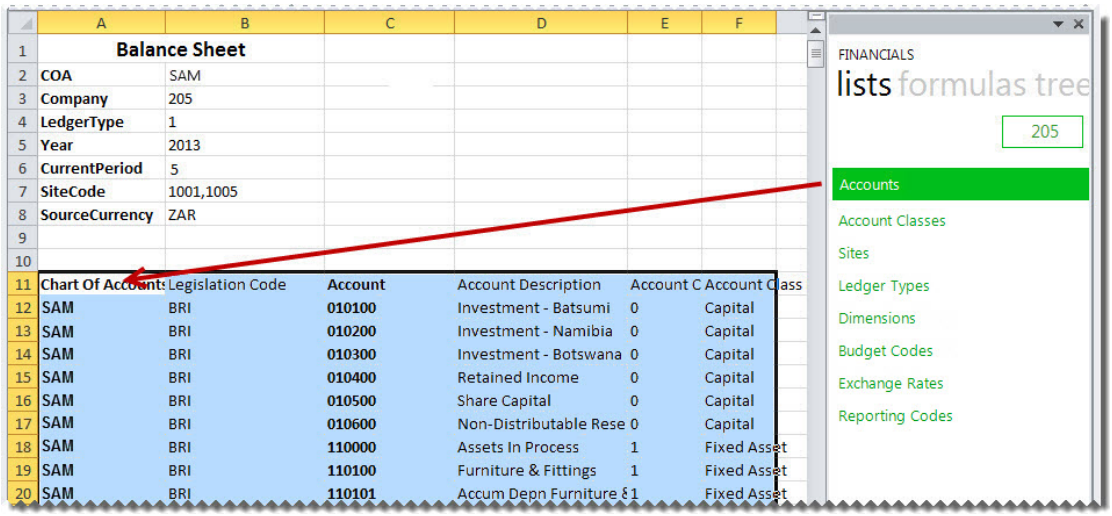
	A	B
1		**Balance Sheet**
2	**COA**	SAM
3	**Company**	205
4	**LedgerType**	1
5	**Year**	2013
6	**CurrentPeriod**	5
7	**SiteCode**	1001,1005
8	**SourceCurrency**	ZAR

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.

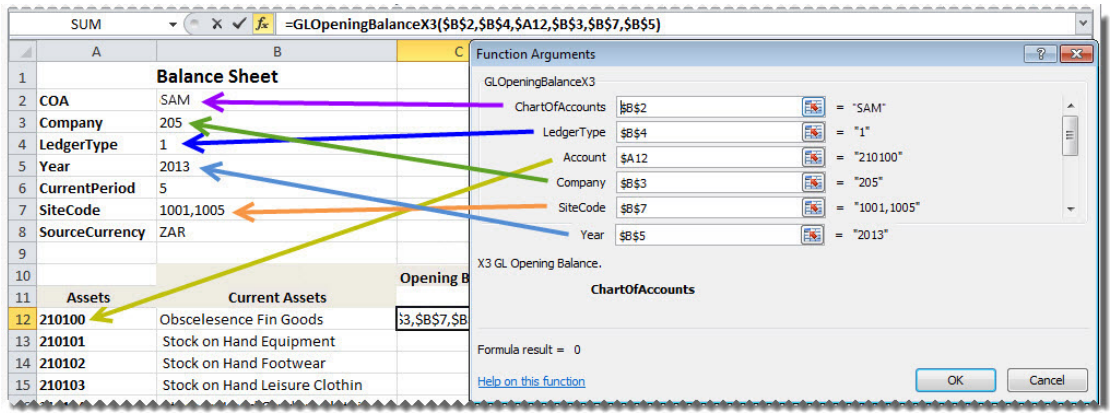
2. Drag the formulas for **Current Year** and **Current Period** into their respective cells.



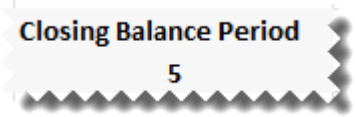
3. Drag and drop the **Accounts** list into cell A11. You will use this list to help create your report.



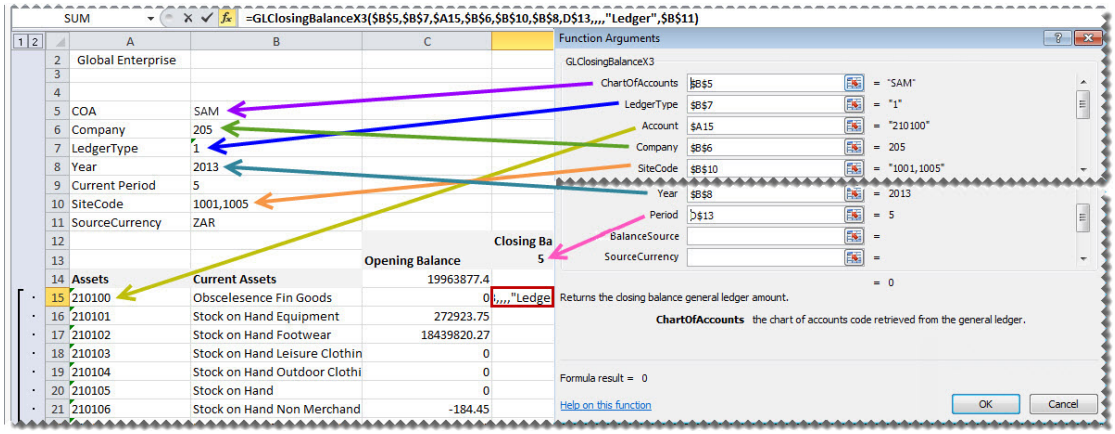
4. Delete the accounts not required, and create headings and totals where required for your rows.
5. Add column headings for **Opening Balance** and **Closing Balance Period**.
6. Drag and Drop the **Opening Balance** formula onto your spreadsheet in the same row as your first account.
7. Change the formula to link to the correct function arguments. You can do this by clicking the **fx** button and making the changes or alternatively typing directly into the formula area.



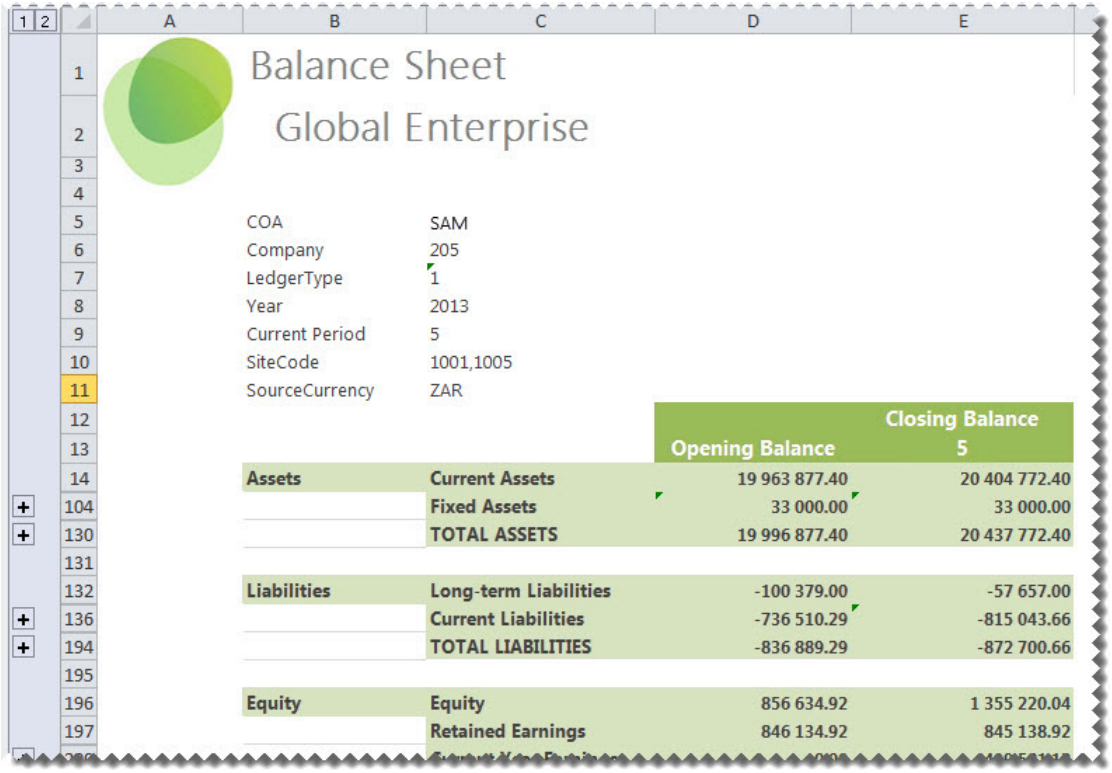
8. Drag the fill handle down to copy the formula to all the accounts required.
9. Drag and Drop the **Closing Balance** formula onto your spreadsheet in the **Closing Balance Period** column in the same row as your first account.
10. Add the period to the **Closing Balance Period** title. This allows you to change the period to see different results per period.



11. Change the **Closing Balance** formula to link to the correct function arguments. You can do this by clicking the **fx** button and making the changes or alternatively typing directly into the formula area as below.



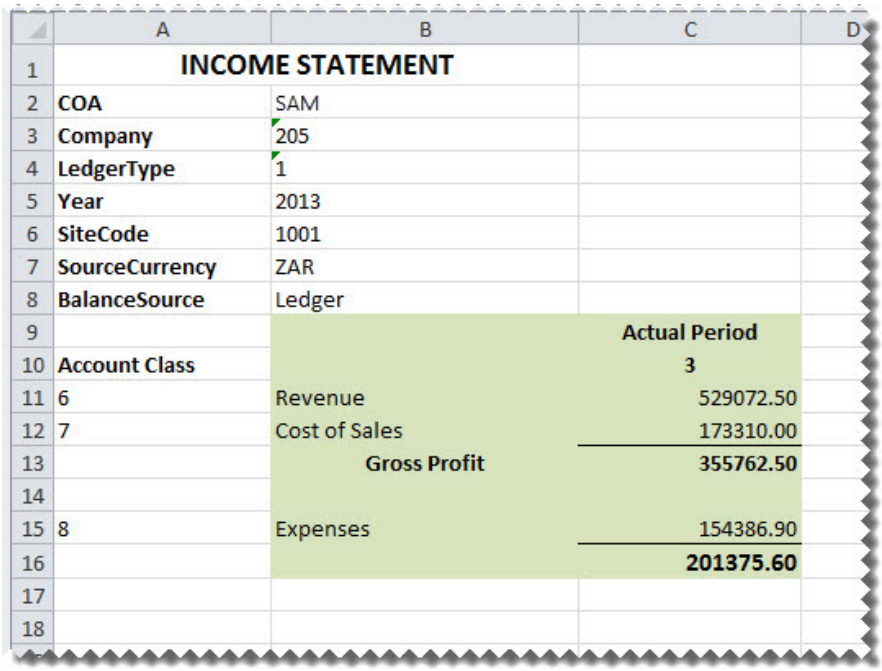
12. Drag the fill handle down to copy the formula to all the accounts required.
13. Add totals, grouping and formatting using Excel features and set your print area.



Designing a Rolling Income Statement

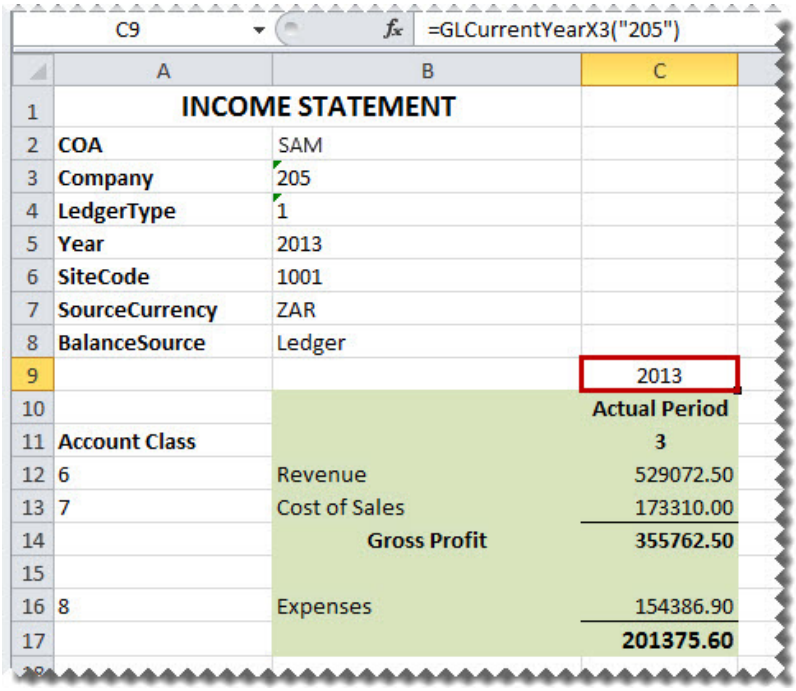
This is a demonstration on how to design an Income Statement that will always return the current month's data as well as the prior 12 months' data. The report will be designed in such a way that once set up, no manual changes will need to be made to it, allowing you to use the same report for all future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

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



	A	B	C	D
1	**INCOME STATEMENT**			
2	**COA**	SAM		
3	**Company**	205		
4	**LedgerType**	1		
5	**Year**	2013		
6	**SiteCode**	1001		
7	**SourceCurrency**	ZAR		
8	**BalanceSource**	Ledger		
9			**Actual Period**	
10	**Account Class**		**3**	
11	6	Revenue	529072.50	
12	7	Cost of Sales	173310.00	
13		**Gross Profit**	**355762.50**	
14				
15	8	Expenses	154386.90	
16			**201375.60**	
17				
18				

2. Insert a row above the **Actual Period** row.
3. Drag the current year formula to the cell above the **Actual Period**.



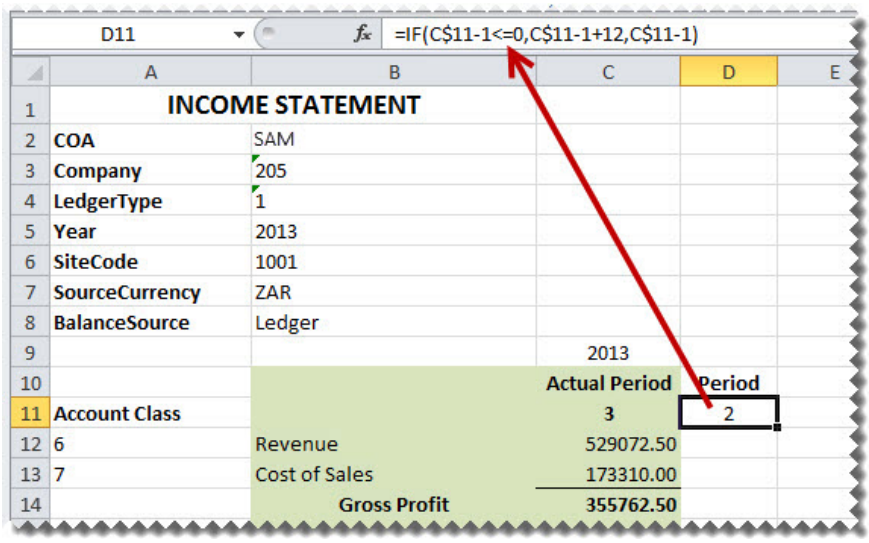
C9 =GLCurrentYearX3("205")

	A	B	C
1	**INCOME STATEMENT**		
2	**COA**	SAM	
3	**Company**	205	
4	**LedgerType**	1	
5	**Year**	2013	
6	**SiteCode**	1001	
7	**SourceCurrency**	ZAR	
8	**BalanceSource**	Ledger	
9			2013
10			**Actual Period**
11	**Account Class**		**3**
12	6	Revenue	529072.50
13	7	Cost of Sales	173310.00
14		**Gross Profit**	**355762.50**
15			
16	8	Expenses	154386.90
17			**201375.60**

4. On the right of the **Actual Period** cell, create a heading named **Period**.
5. In the cell below it 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.

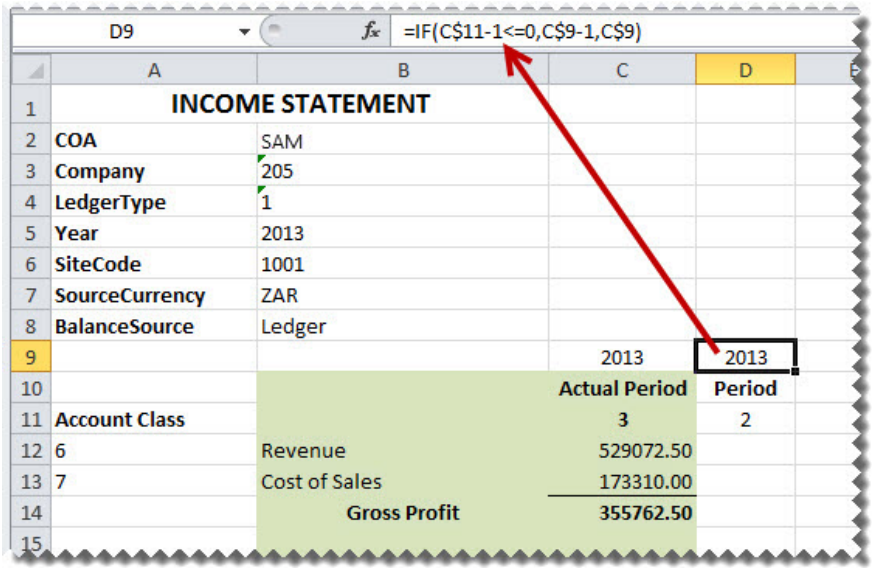


	A	B	C	D	E
1		**INCOME STATEMENT**			
2	**COA**	SAM			
3	**Company**	205			
4	**LedgerType**	1			
5	**Year**	2013			
6	**SiteCode**	1001			
7	**SourceCurrency**	ZAR			
8	**BalanceSource**	Ledger			
9			2013		
10			**Actual Period**	**Period**	
11	**Account Class**		**3**	2	
12	6	Revenue	529072.50		
13	7	Cost of Sales	173310.00		
14		**Gross Profit**	**355762.50**		

6. 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.

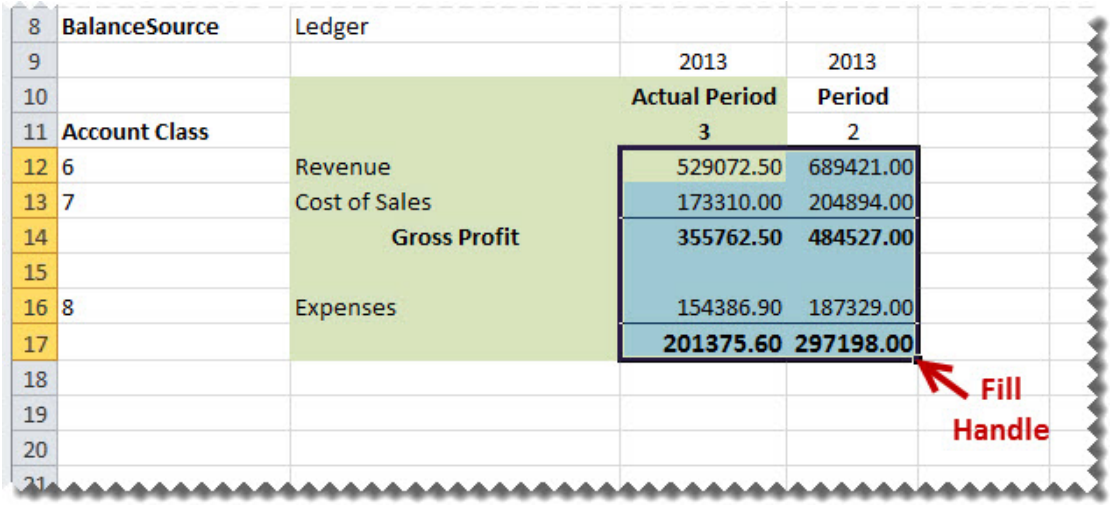
   The IF statement checks whether a condition is met, and returns one value if True, and another if False.

   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.



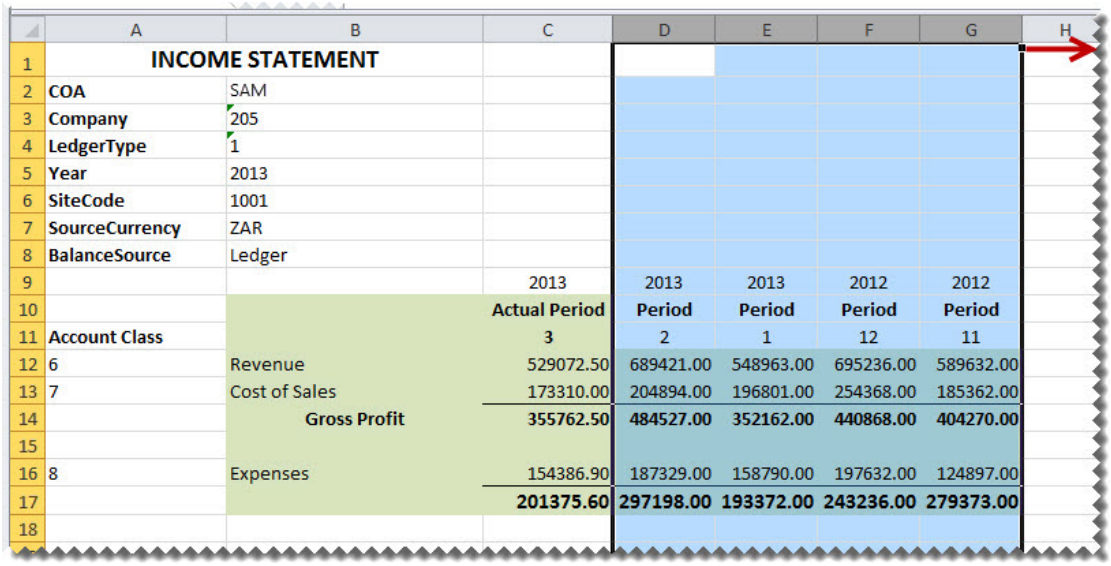
	A	B	C	D
1		**INCOME STATEMENT**		
2	**COA**	SAM		
3	**Company**	205		
4	**LedgerType**	1		
5	**Year**	2013		
6	**SiteCode**	1001		
7	**SourceCurrency**	ZAR		
8	**BalanceSource**	Ledger		
9			2013	2013
10			**Actual Period**	**Period**
11	**Account Class**		**3**	2
12	6	Revenue	529072.50	
13	7	Cost of Sales	173310.00	
14		**Gross Profit**	**355762.50**	
15				

7. Drag the data across using the fill handle to the new column you just created.



8	**BalanceSource**	Ledger		
9			2013	2013
10			**Actual Period**	**Period**
11	**Account Class**		**3**	**2**
12	6	Revenue	529072.50	689421.00
13	7	Cost of Sales	173310.00	204894.00
14		**Gross Profit**	**355762.50**	**484527.00**
15				
16	8	Expenses	154386.90	187329.00
17			**201375.60**	**297198.00**
18				
19				
20				

8. Select the new column and drag the fill handle across to copy the data for the other eleven months.
9. Drag the fill handle to copy the formulas across to the other eleven periods.



	A	B	C	D	E	F	G	H
1	**INCOME STATEMENT**							
2	**COA**	SAM						
3	**Company**	205						
4	**LedgerType**	1						
5	**Year**	2013						
6	**SiteCode**	1001						
7	**SourceCurrency**	ZAR						
8	**BalanceSource**	Ledger						
9			2013	2013	2013	2012	2012	
10			**Actual Period**	**Period**	**Period**	**Period**	**Period**	
11	**Account Class**		**3**	**2**	**1**	**12**	**11**	
12	6	Revenue	529072.50	689421.00	548963.00	695236.00	589632.00	
13	7	Cost of Sales	173310.00	204894.00	196801.00	254368.00	185362.00	
14		**Gross Profit**	**355762.50**	**484527.00**	**352162.00**	**440868.00**	**404270.00**	
15								
16	8	Expenses	154386.90	187329.00	158790.00	197632.00	124897.00	
17			**201375.60**	**297198.00**	**193372.00**	**243236.00**	**279373.00**	
18								

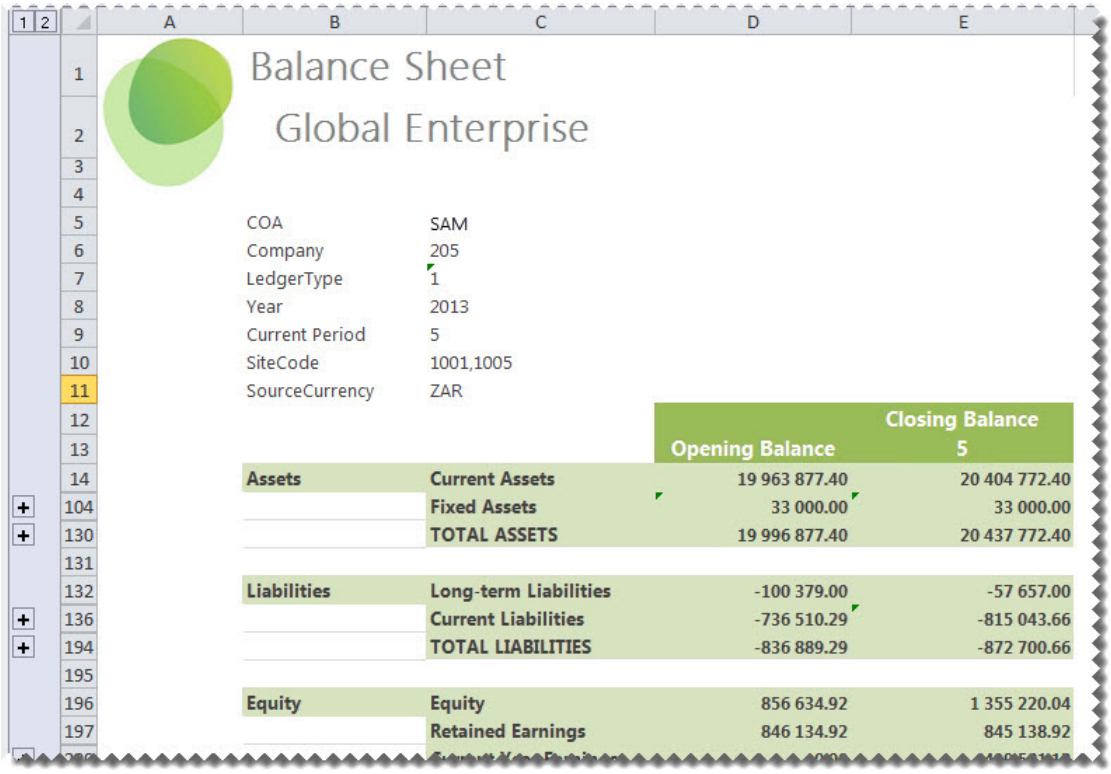
Note: The year and period numbers changed automatically to cater for one calendar year.

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

Designing a Quarterly Balance Sheet

This is a demonstration on how to design a Quarterly Balance Sheet using the Report Designer. 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.

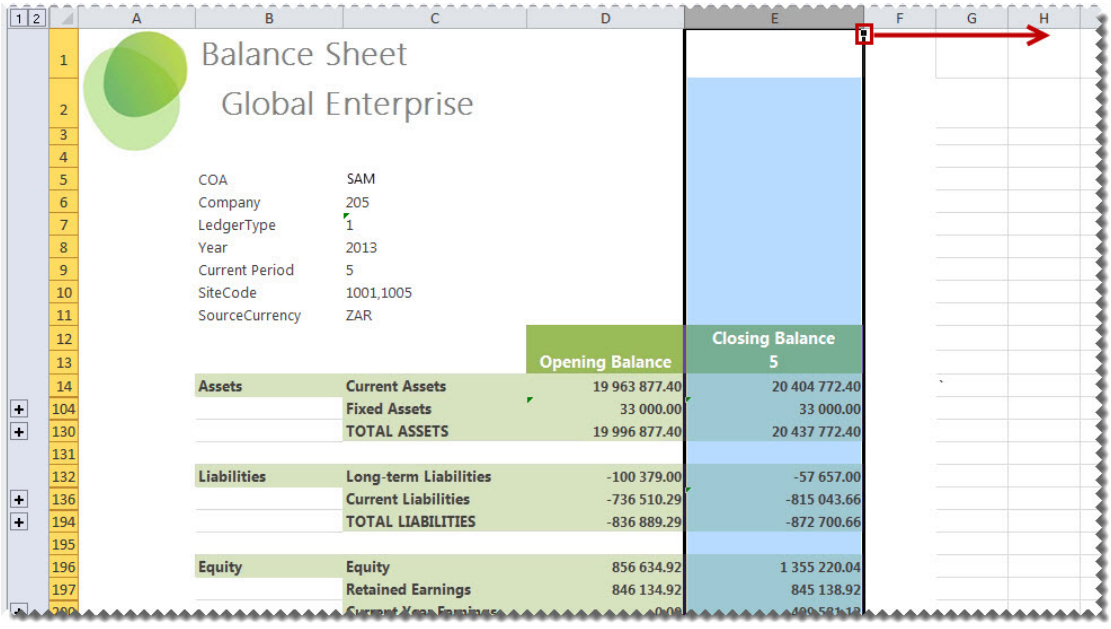


Balance Sheet
Global Enterprise

COA	SAM
Company	205
LedgerType	1
Year	2013
Current Period	5
SiteCode	1001,1005
SourceCurrency	ZAR

		Opening Balance	Closing Balance 5
Assets	Current Assets	19 963 877.40	20 404 772.40
	Fixed Assets	33 000.00	33 000.00
	TOTAL ASSETS	19 996 877.40	20 437 772.40
Liabilities	Long-term Liabilities	-100 379.00	-57 657.00
	Current Liabilities	-736 510.29	-815 043.66
	TOTAL LIABILITIES	-836 889.29	-872 700.66
Equity	Equity	856 634.92	1 355 220.04
	Retained Earnings	846 134.92	845 138.92

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

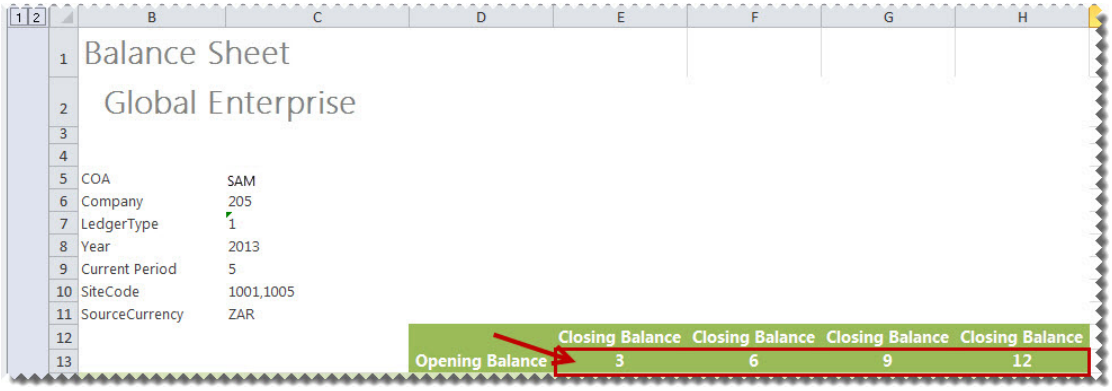


Balance Sheet
Global Enterprise

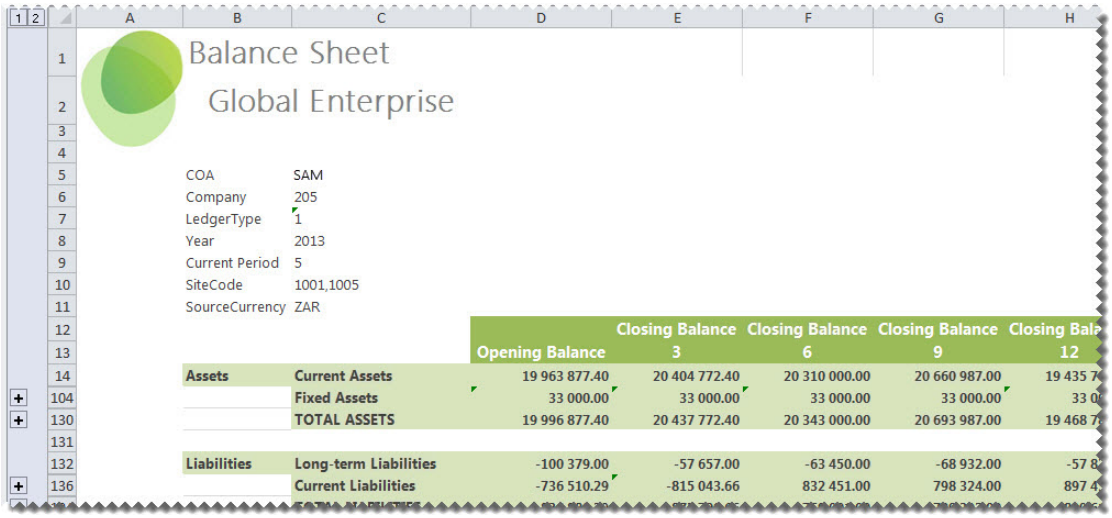
COA	SAM
Company	205
LedgerType	1
Year	2013
Current Period	5
SiteCode	1001,1005
SourceCurrency	ZAR

		Opening Balance	Closing Balance 5
Assets	Current Assets	19 963 877.40	20 404 772.40
	Fixed Assets	33 000.00	33 000.00
	TOTAL ASSETS	19 996 877.40	20 437 772.40
Liabilities	Long-term Liabilities	-100 379.00	-57 657.00
	Current Liabilities	-736 510.29	-815 043.66
	TOTAL LIABILITIES	-836 889.29	-872 700.66
Equity	Equity	856 634.92	1 355 220.04
	Retained Earnings	846 134.92	845 138.92

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



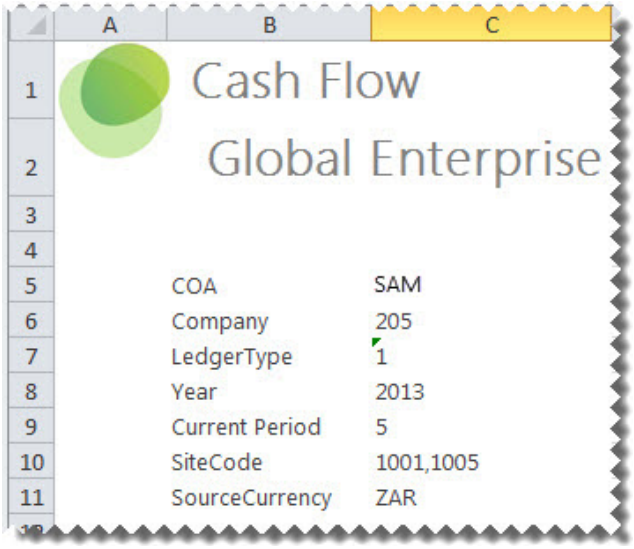
4. Notice the data automatically updated to reflect the correct closing balance amounts for each quarter.



Designing a Cash Flow Report

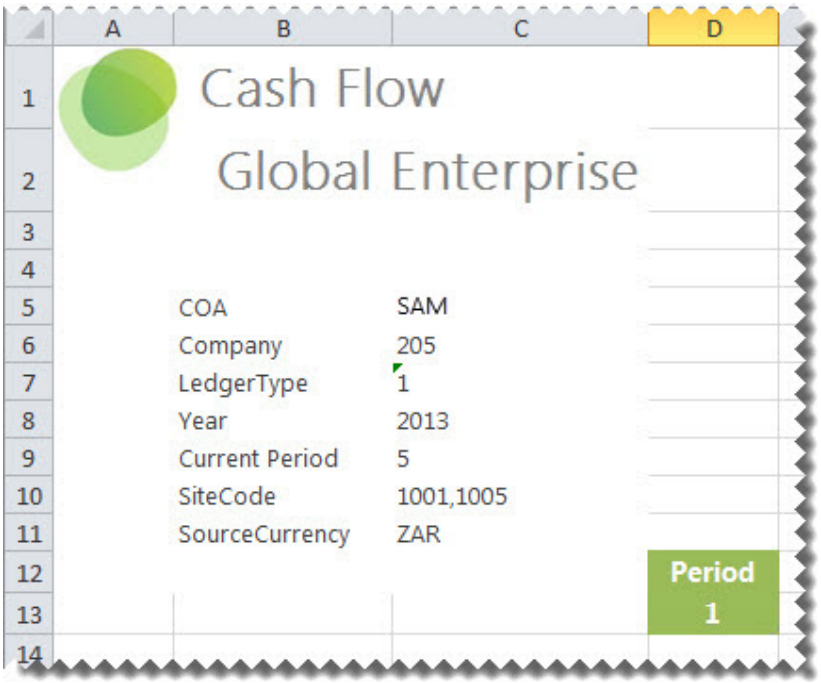
This is a demonstration on designing a Cash Flow Report using the Report Designer. The report will be created in such a way that once set up, no manual changes will need to be made to it, allowing you to use the same report for all future periods and years. Accounting knowledge is required.

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

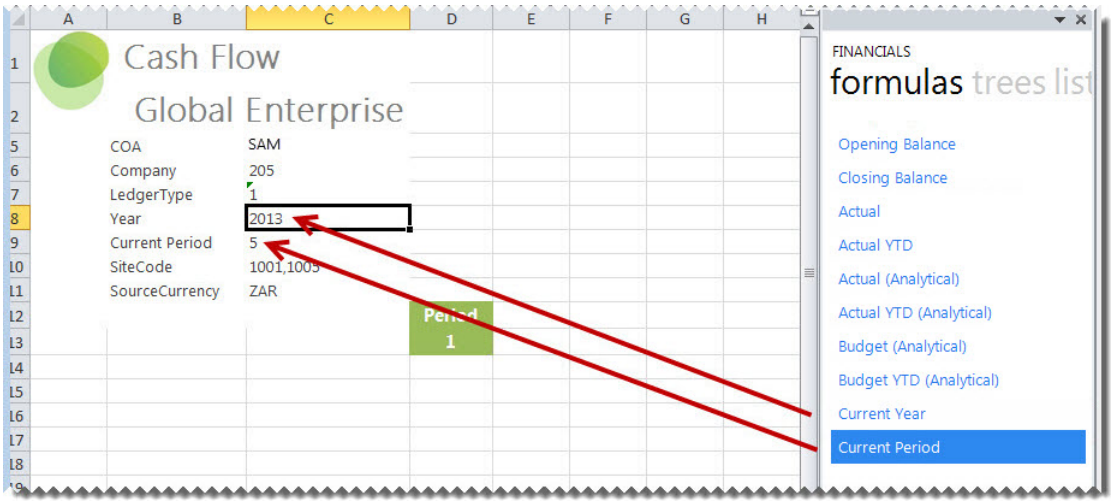


Tip: Reports that return huge data sets can be difficult to analyze and can cause performance issues. Filtering is a quick and easy way to find and work with only the data you need. Instead of your report extracting millions of records, filtering extracts only the necessary data resulting in faster more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

2. Add a heading for the period column.

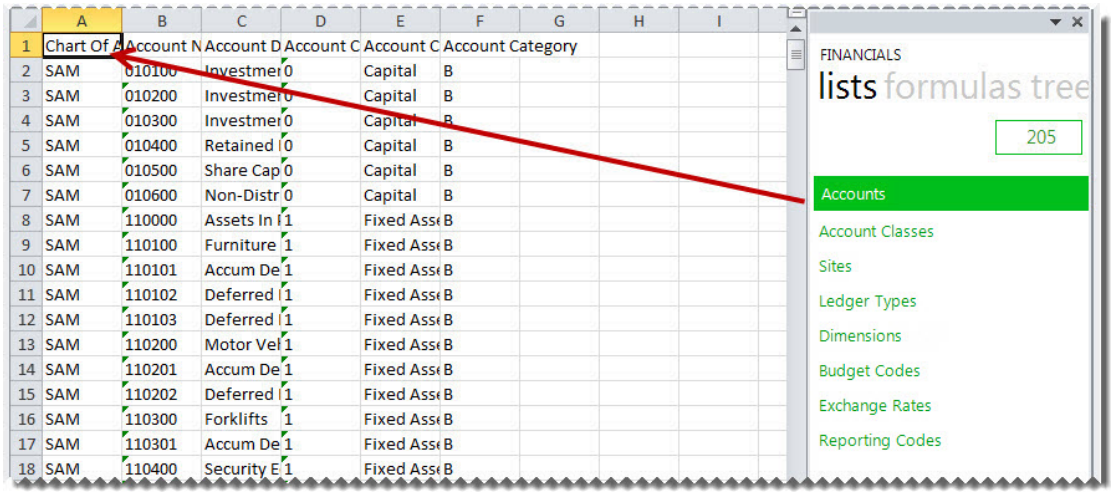


3. Drag the formulas for Current Year and Current Period into their respective cells.



4. Create headings for your cash flow report.

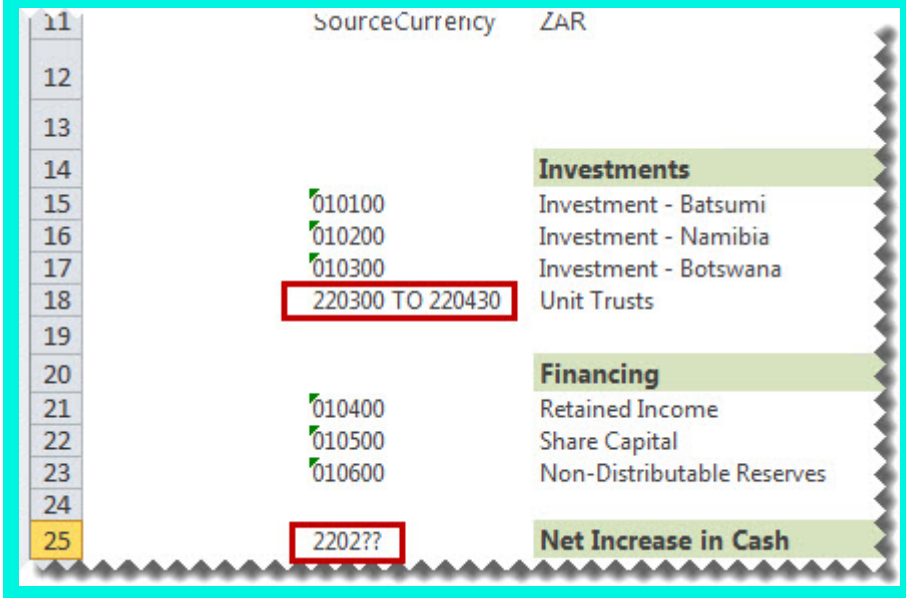
5. On a new worksheet, drag and drop the Accounts list. You will use this list to help create your report.



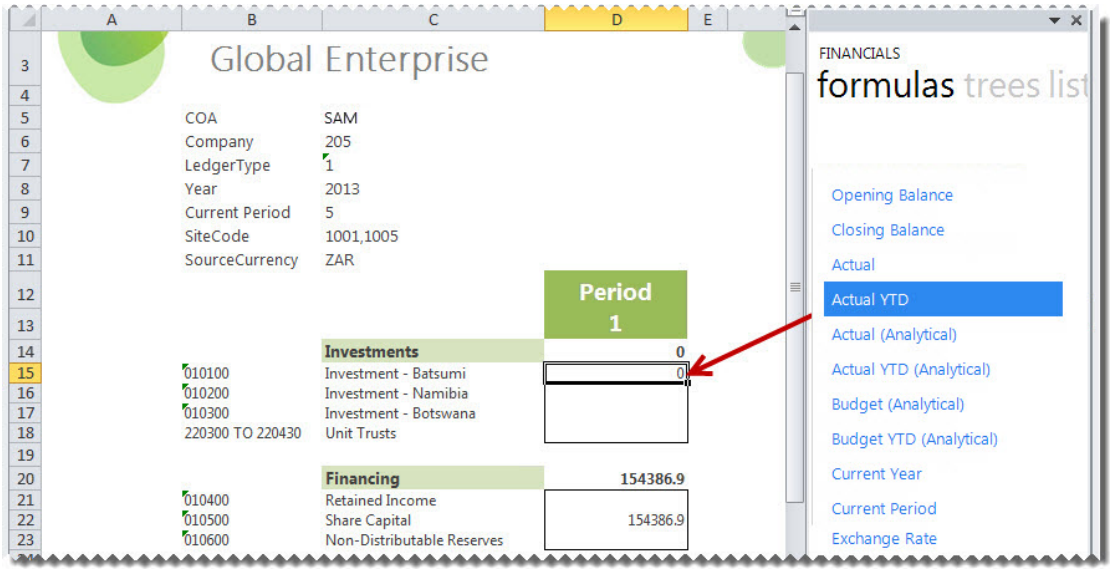
6. Copy the **Account Number** and **Account Description** columns of the required accounts.

7. Paste the copied cells under the correct headings in the Cash Flow worksheet.

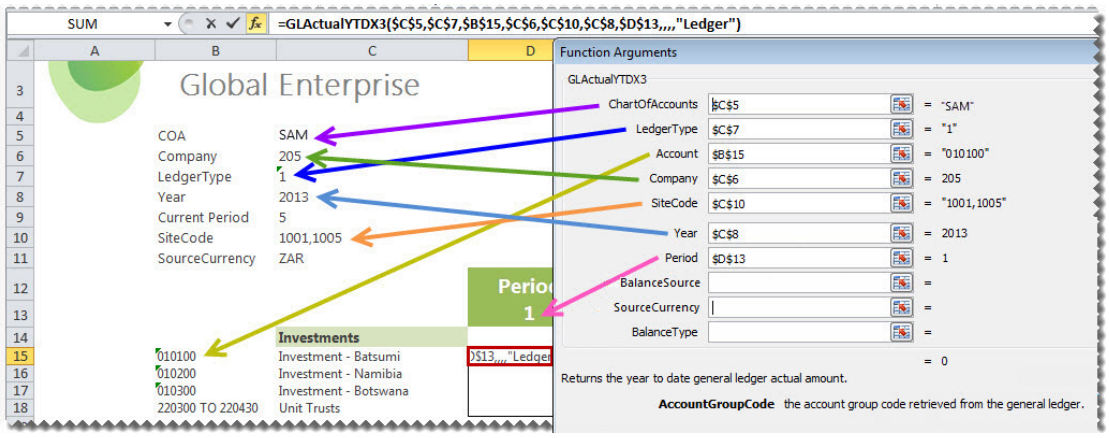
Tip: Use wildcards, account ranges or mathematical calculations to summarize data.



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



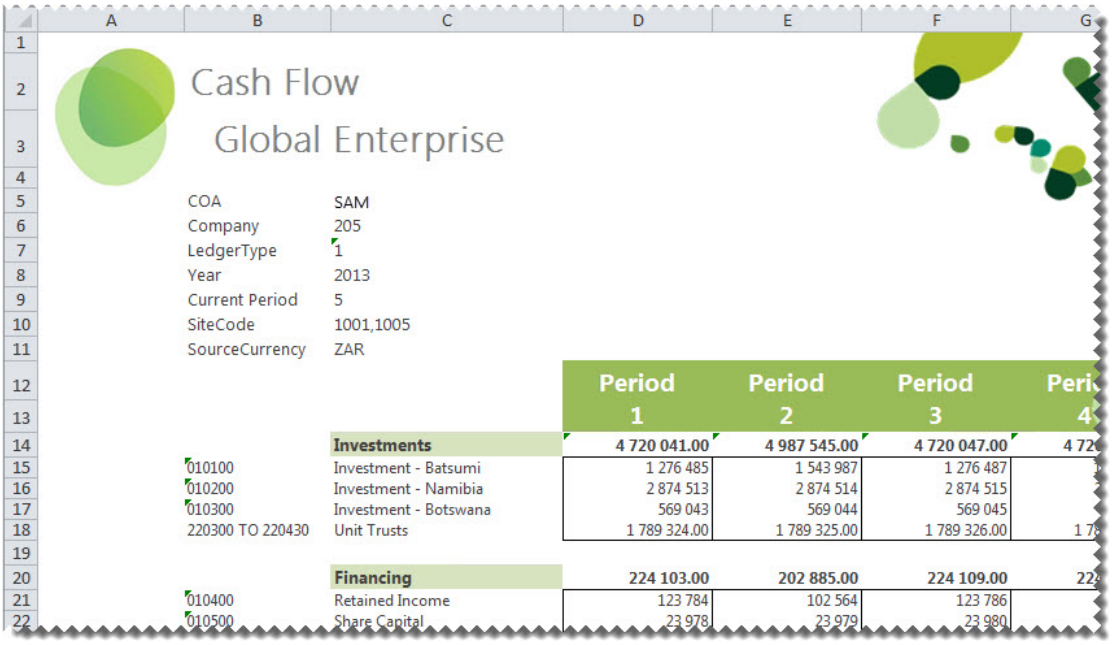
9. Change the formula to link to the correct account, year and period. You can do this by clicking the **fx** button and making the changes or alternatively typing directly into the formula area.



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 negative number 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.

10. Add any totals, grouping and formatting you require using Excel features and set your print area.
11. Select the **Period** column and drag the fill handle across to fill an additional column.
12. Repeat for as many periods as you require for the fiscal year.



Consolidating Multiple Companies Data

Preparing to Design Consolidated Report Layouts

In order to use the Task Pane for multiple company consolidations, you will need to ensure the database consolidation list is correctly set up in the reports.

1. In the Report Manager, open the folder.
2. Select the first union report. Union Reports are depicted by a blue icon. 
3. Select the **Database Consolidation List** button to browse for the available databases to consolidate.
4. Select the company databases you would like to consolidate from the list.

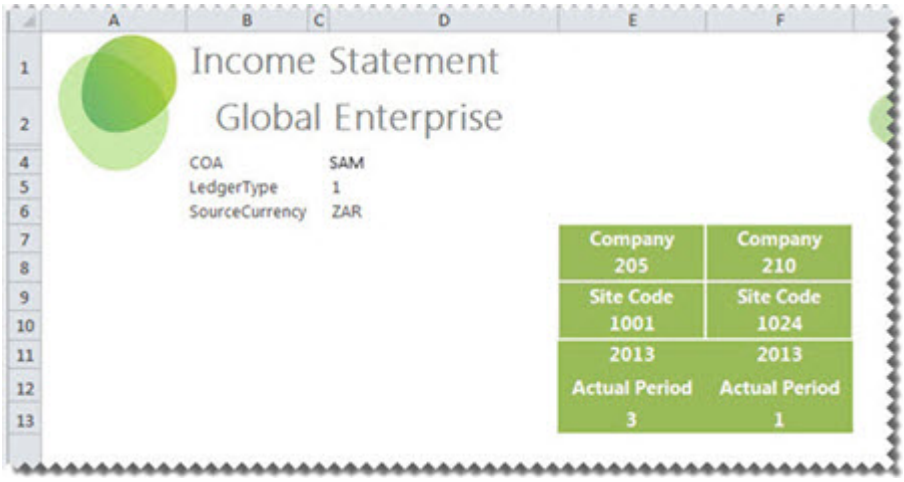
Note: The company list is populated by each company that Sage X3 has previously been logged into.

5. Select **OK**.
6. Repeat the process for all union reports in the **Consolidation** folder. After running the **Consol Financial Report Designer** report, you will now be able to combine information from multiple companies.

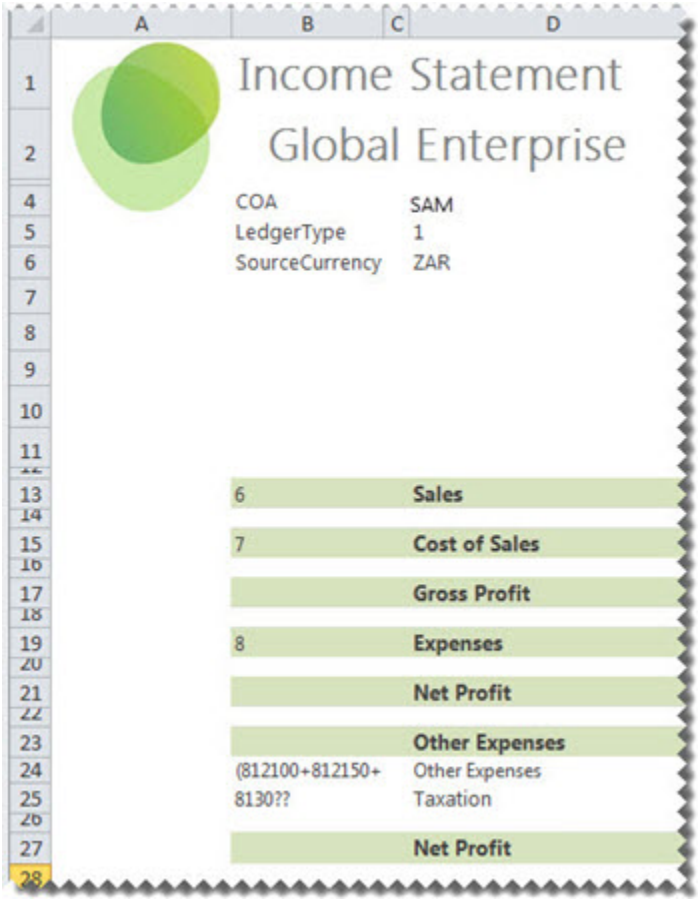
Designing Consolidated Report Layouts

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

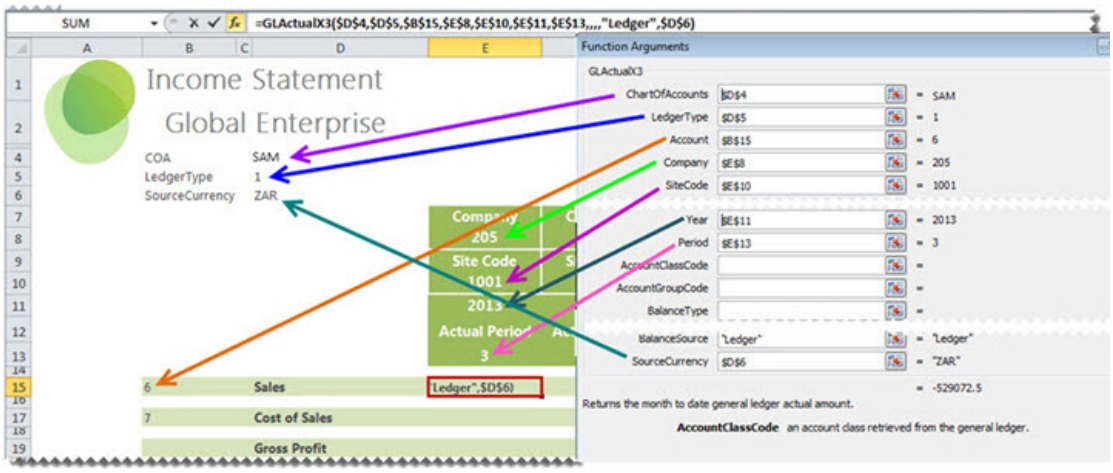
1. Design your financial report titles in the usual manner, but creating a column for each of the companies you would like to consolidate, and placing any company specific information in the column heading, for example, Company code, Site Code, Year and Period.



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



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

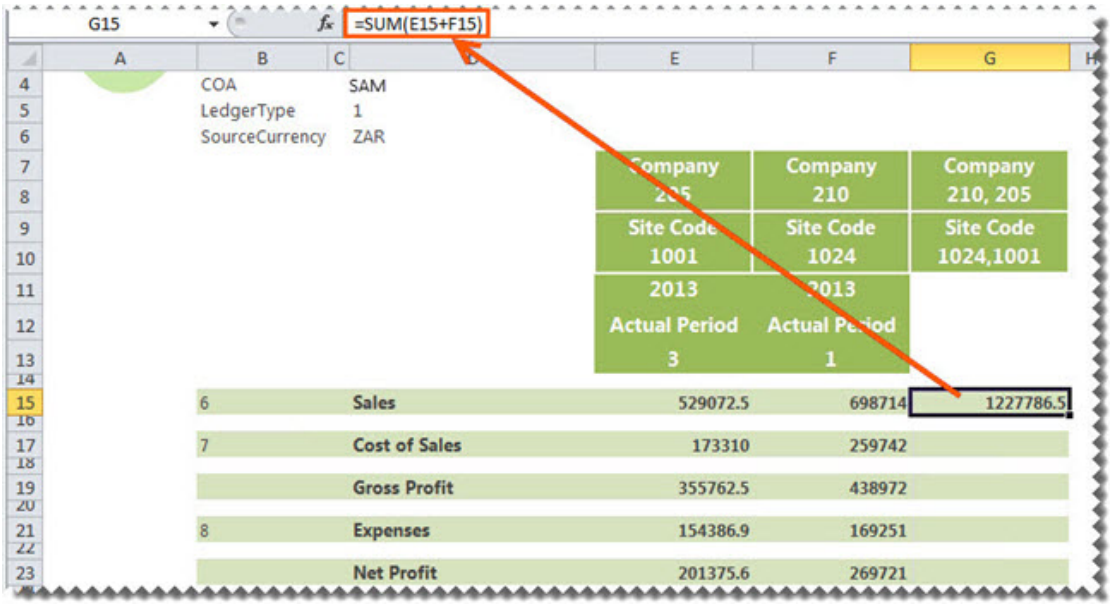


Tip: Change to absolute cell referencing where the cells remain constant. Refer to the topic Using Relative or Absolute Cell Referencing.

Tip: Some data may be stored as a negative number 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.

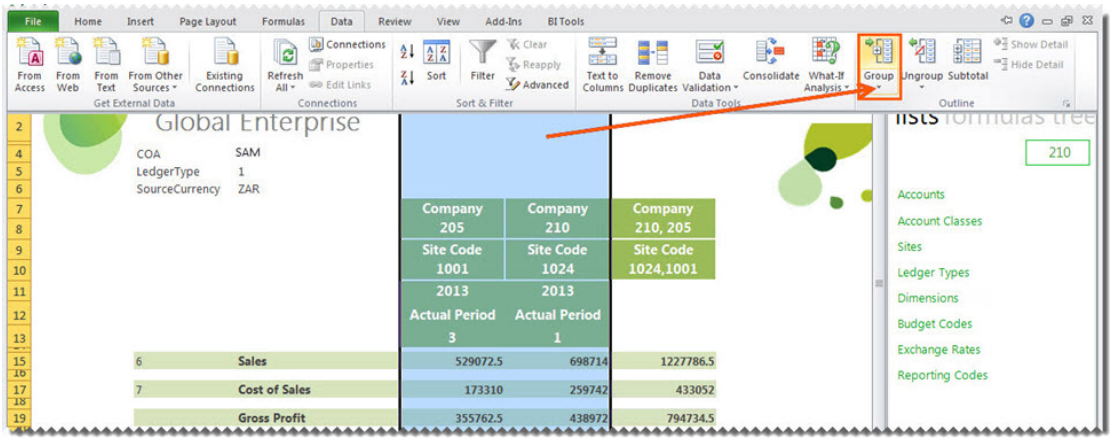
4. Add totals and formatting using Excel features.

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



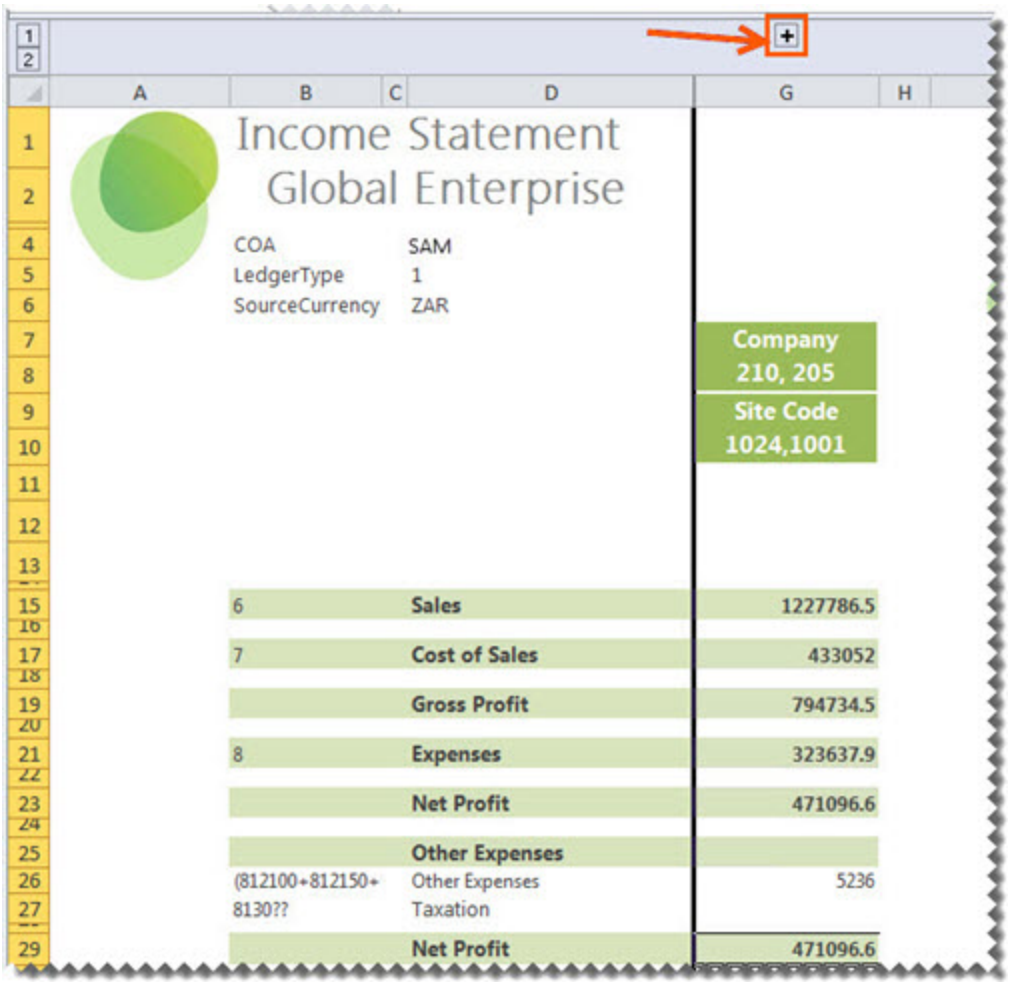
6. Copy the formula down to all relevant rows.

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



8. Click the **-** sign.

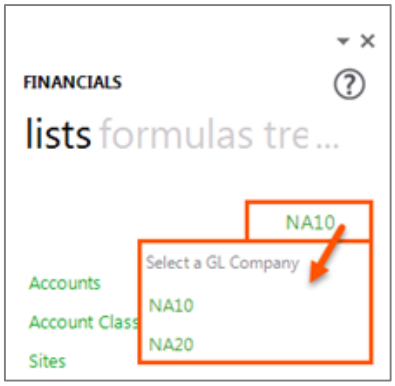
9. Click the **+** sign to expand the columns again if you need to drill down into the data.



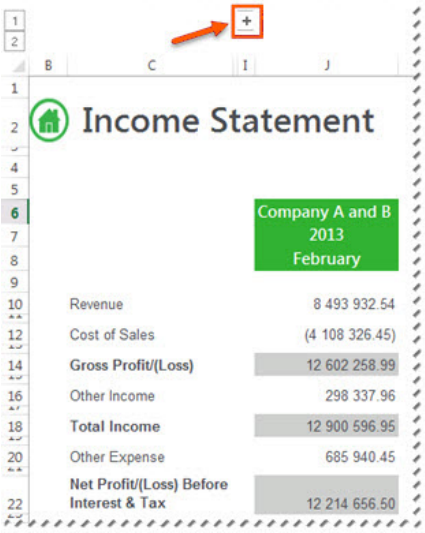
Designing a Consolidated Report Layout with a Different Chart of Accounts

In Sage X3, data for all companies, is stored in a single database, separated by schemas. This allows Sage Intelligence Reporting to connect to one database and gain access to multiple companies within that database. While installing Sage Intelligence Reporting, a SQL user creation tool will be displayed, which sets up a connection to the Sage X3 database. No further setup is required to access all companies in your Sage X3 environment.

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, Site**, **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.



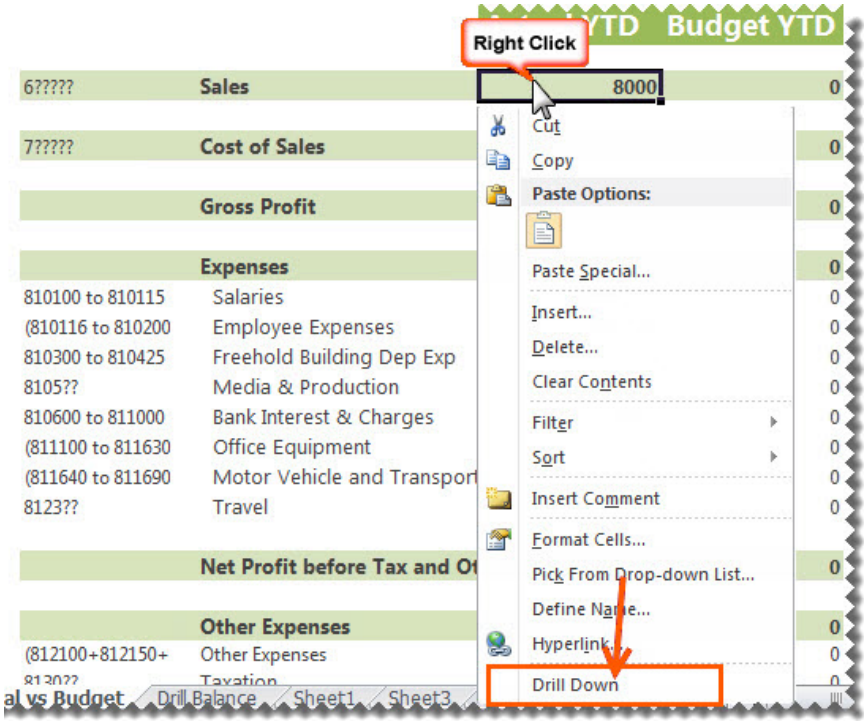
4. Ensure each formula refers to the correct Company details including **Company**, **Site, Account**, **Year** and **Period**.
5. Create a third column and using Microsoft Excel functionality, add the first two columns together.
6. Using Microsoft Excel functionality, group the first two columns so 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.



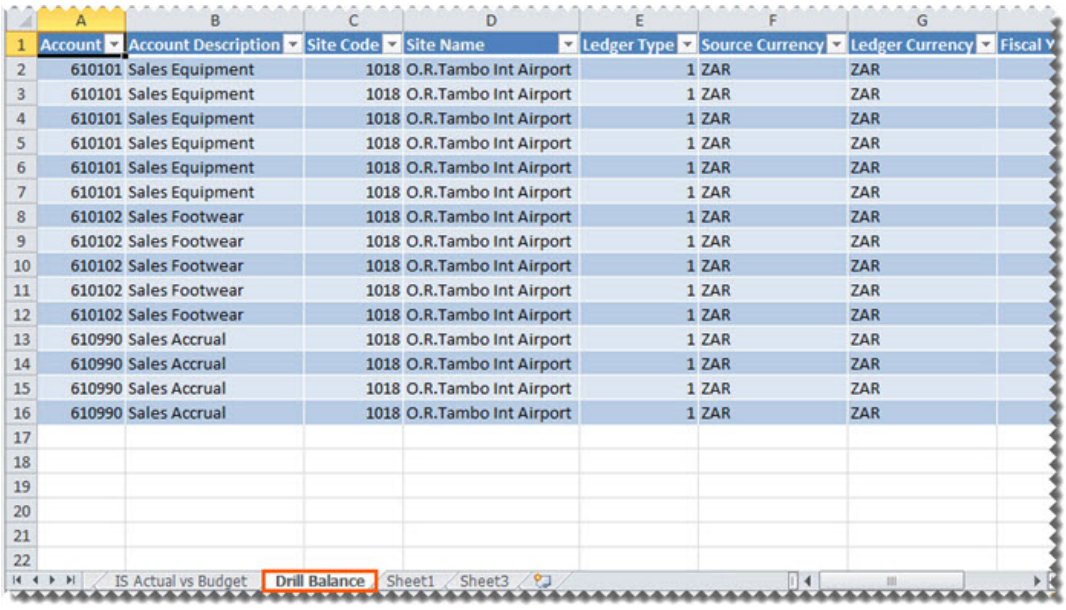
Drilling Down on Values

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

1. Select the Intelligence Reporting formula.
2. Right-click and select **Drill Down**.



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



	A	B	C	D	E	F	G
1	Account	Account Description	Site Code	Site Name	Ledger Type	Source Currency	Ledger Currency
2	610101	Sales Equipment	1018	O.R.Tambo Int Airport	1	ZAR	ZAR
3	610101	Sales Equipment	1018	O.R.Tambo Int Airport	1	ZAR	ZAR
4	610101	Sales Equipment	1018	O.R.Tambo Int Airport	1	ZAR	ZAR
5	610101	Sales Equipment	1018	O.R.Tambo Int Airport	1	ZAR	ZAR
6	610101	Sales Equipment	1018	O.R.Tambo Int Airport	1	ZAR	ZAR
7	610101	Sales Equipment	1018	O.R.Tambo Int Airport	1	ZAR	ZAR
8	610102	Sales Footwear	1018	O.R.Tambo Int Airport	1	ZAR	ZAR
9	610102	Sales Footwear	1018	O.R.Tambo Int Airport	1	ZAR	ZAR
10	610102	Sales Footwear	1018	O.R.Tambo Int Airport	1	ZAR	ZAR
11	610102	Sales Footwear	1018	O.R.Tambo Int Airport	1	ZAR	ZAR
12	610102	Sales Footwear	1018	O.R.Tambo Int Airport	1	ZAR	ZAR
13	610990	Sales Accrual	1018	O.R.Tambo Int Airport	1	ZAR	ZAR
14	610990	Sales Accrual	1018	O.R.Tambo Int Airport	1	ZAR	ZAR
15	610990	Sales Accrual	1018	O.R.Tambo Int Airport	1	ZAR	ZAR
16	610990	Sales Accrual	1018	O.R.Tambo Int Airport	1	ZAR	ZAR
17							
18							
19							
20							
21							
22							

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

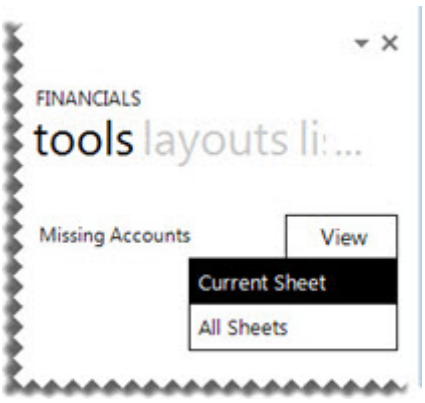
The **Missing Accounts** tool allows you to ensure that your Report Designer layouts are accurate by checking the accounts that exist in the layout and comparing them to the accounts which exist in your General Ledger. This allows you to view which accounts are missing and then to decide if you'd like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

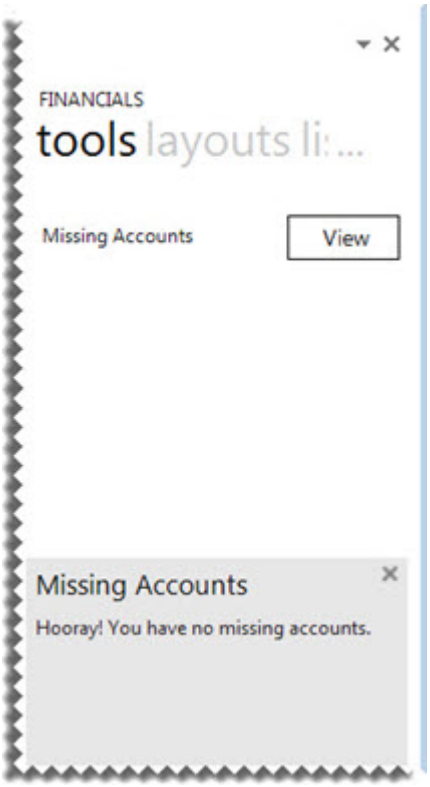
The option to view missing accounts is available from the Task Pane in Microsoft Excel under the **Tools** tab.

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.

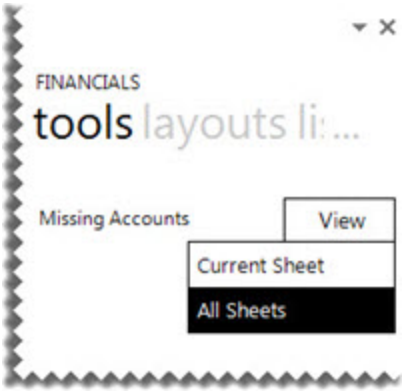
3. In the same workbook, click on the **Missing Accounts** worksheet. A list of accounts which exist in the General Ledger but are not being used in the formulas you selected, will be listed.

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.

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.

Viewing Missing Accounts for All Layouts

1. 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.

1. 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.

Protecting the Worksheet when Distributing Reports

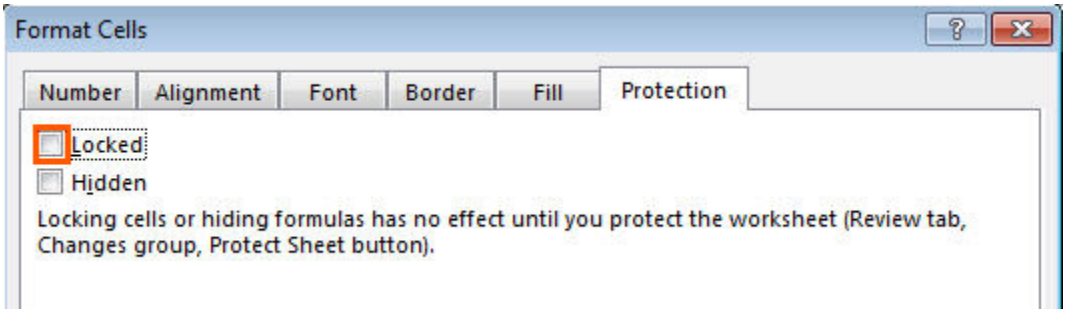
You can use worksheet protection to prevent changes to the worksheet.

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	Doing any of the following: 1. Making changes to graphic objects including maps, embedded charts, shapes, text boxes, and controls that you did not unlock before you protected the worksheet.

Uncheck This	To Prevent Users From
	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. 2. Making any changes, such as formatting, to an embedded chart. The chart continues to be updated when you change its source data. 3. Adding or editing comments.
Edit scenarios	Viewing scenarios that you have hidden, making changes to scenarios that 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.

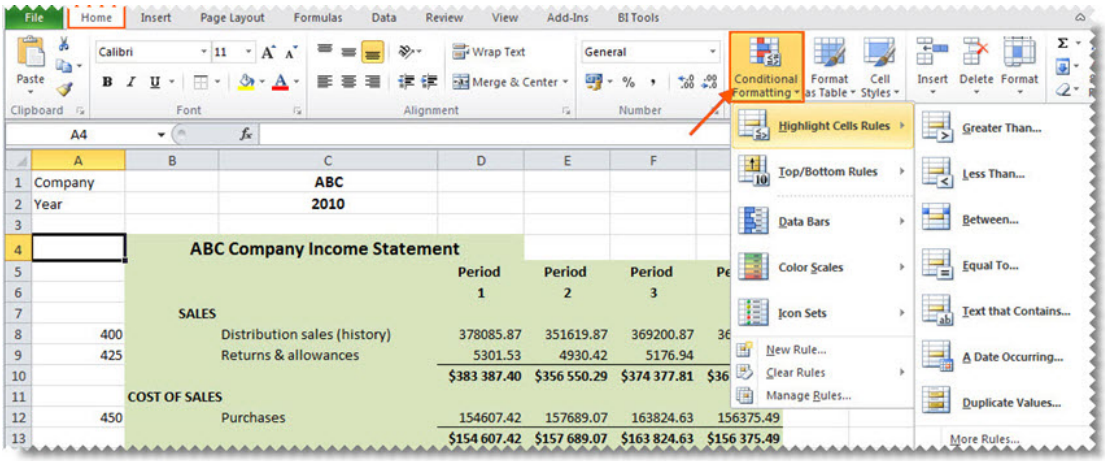
Best Practice

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.

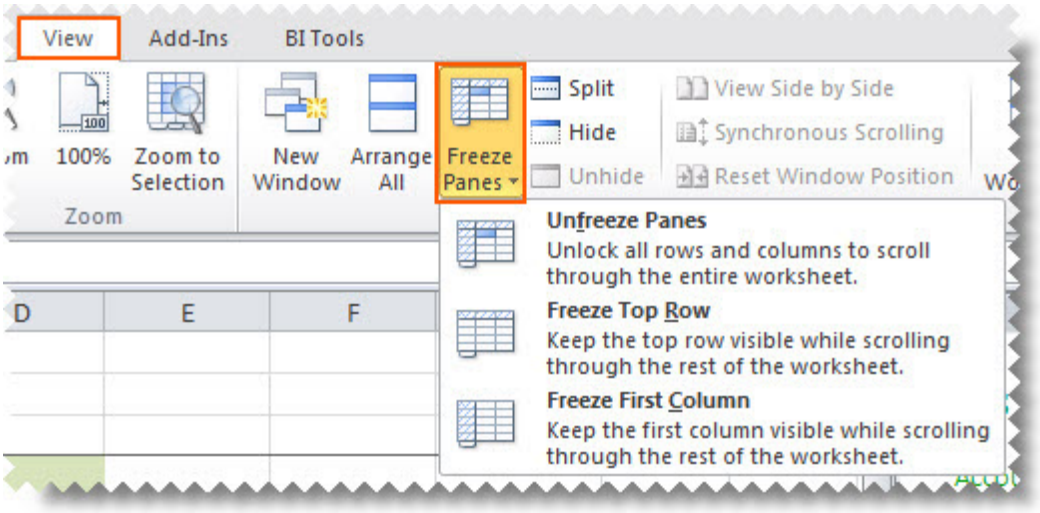
We recommend that you …

- Use cell references 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 account ranges 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

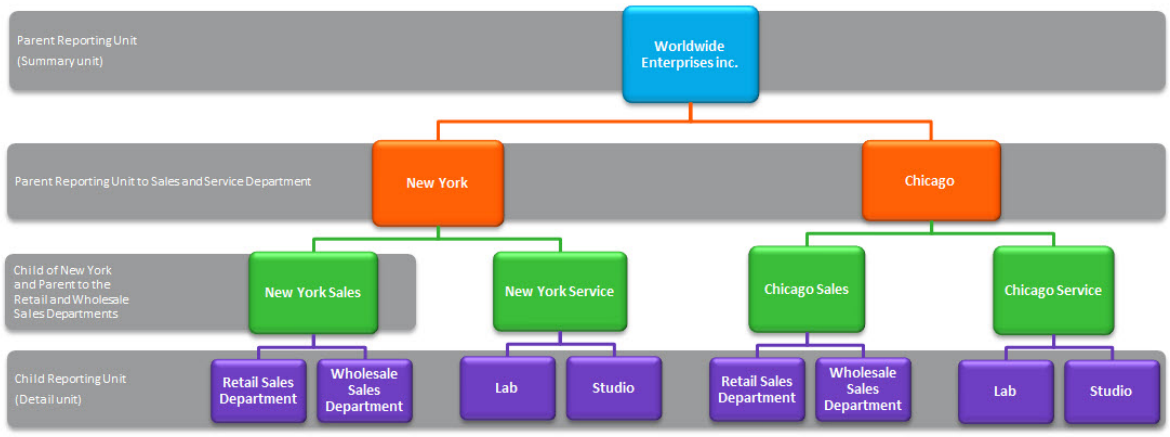
Sage Intelligence Reporting uses the following kinds of reporting units:

- 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.

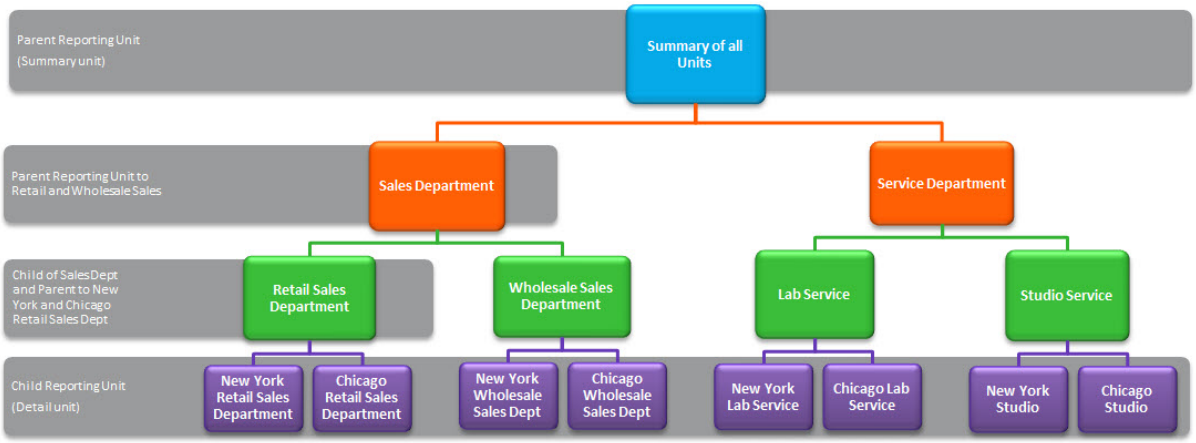
The higher-level summary units simply summarize information from the detail units.

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.

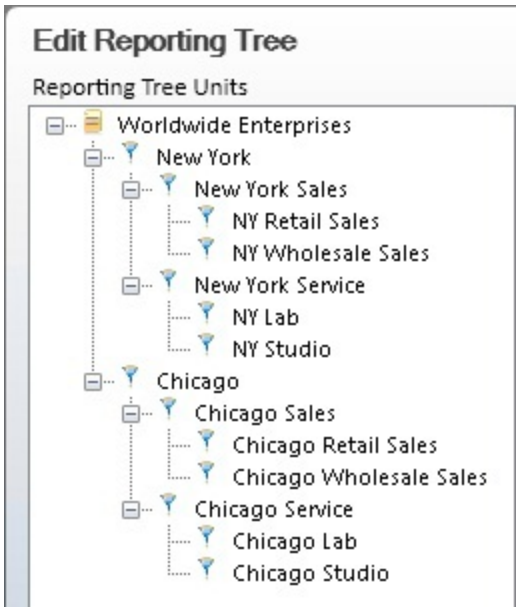
If you create several different Reporting Trees, you can print a series of financial statements each month that analyze and present your entity's operations in various ways.



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.



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

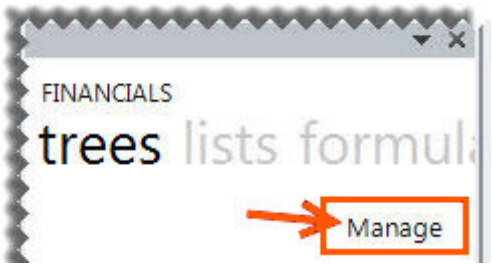
Within the same General Ledger company, you can use Reporting Trees to report on different divisions or branches using account segment filters.

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.
3. Edit formulas to include the cell reference in the 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

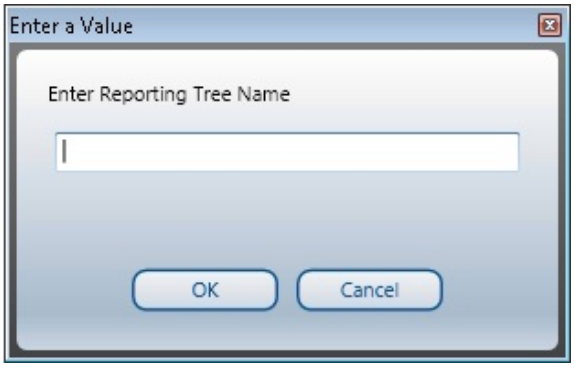
Before you build any Reporting Trees, you will first need to determine the various reporting structures your company will require. The best approach is to draw an organizational chart of your company. Refer to the topic, Reporting Unit Structures. Use your current General Ledger departments as the lowest 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**.

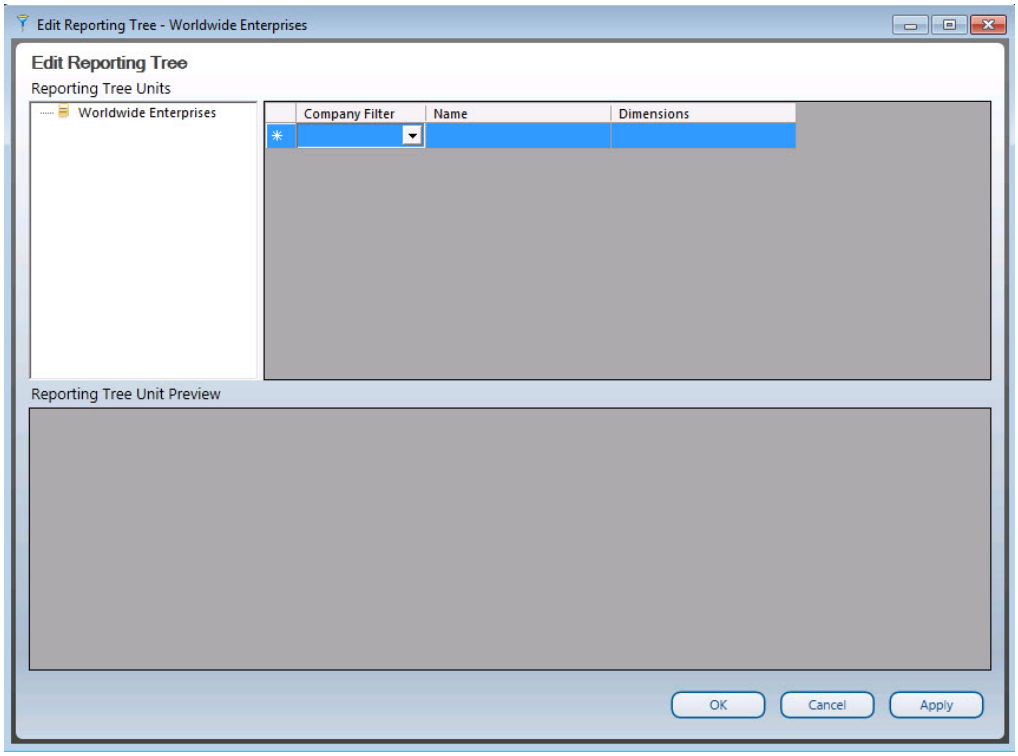


From the **Manage Reporting Trees** window, you can now **Add** a new or **Edit**, **Delete**, **Rename** or **Duplicate** your existing Reporting Trees.

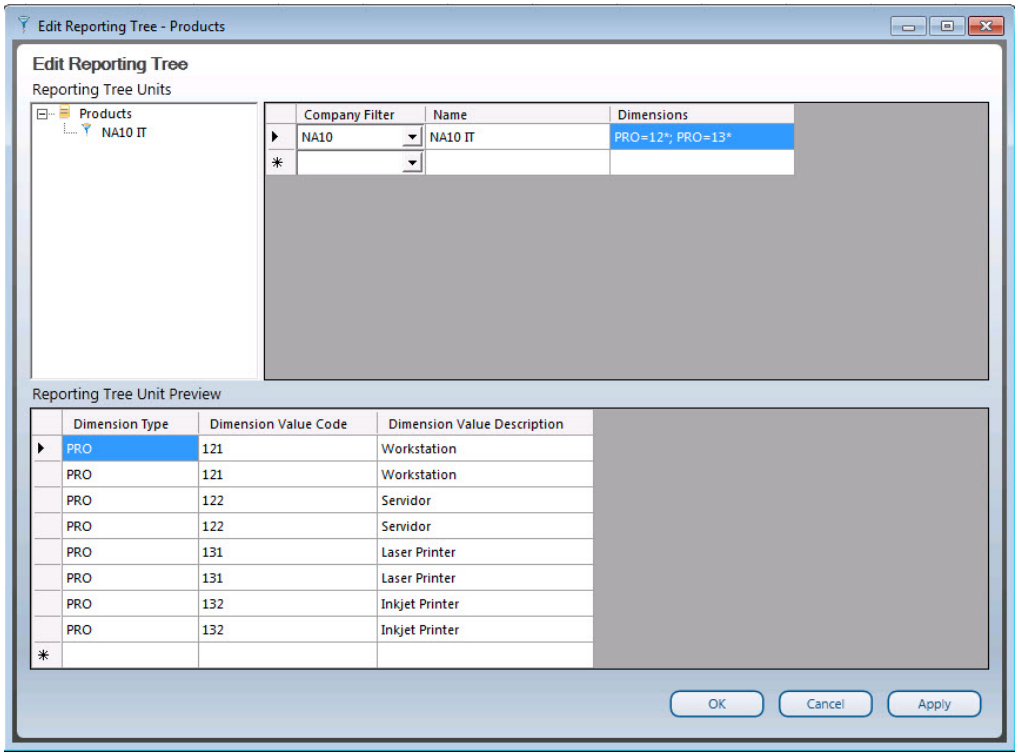
2. We're going to add a reporting tree. Select **Add**.
3. Enter a name for your Reporting Tree.



4. In the right pane each reporting unit will need to be added in a separate row with its relevant dimension 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 dimension filter. The Preview Pane will change dynamically to display the results of the dimension filter for each reporting unit. Example below:

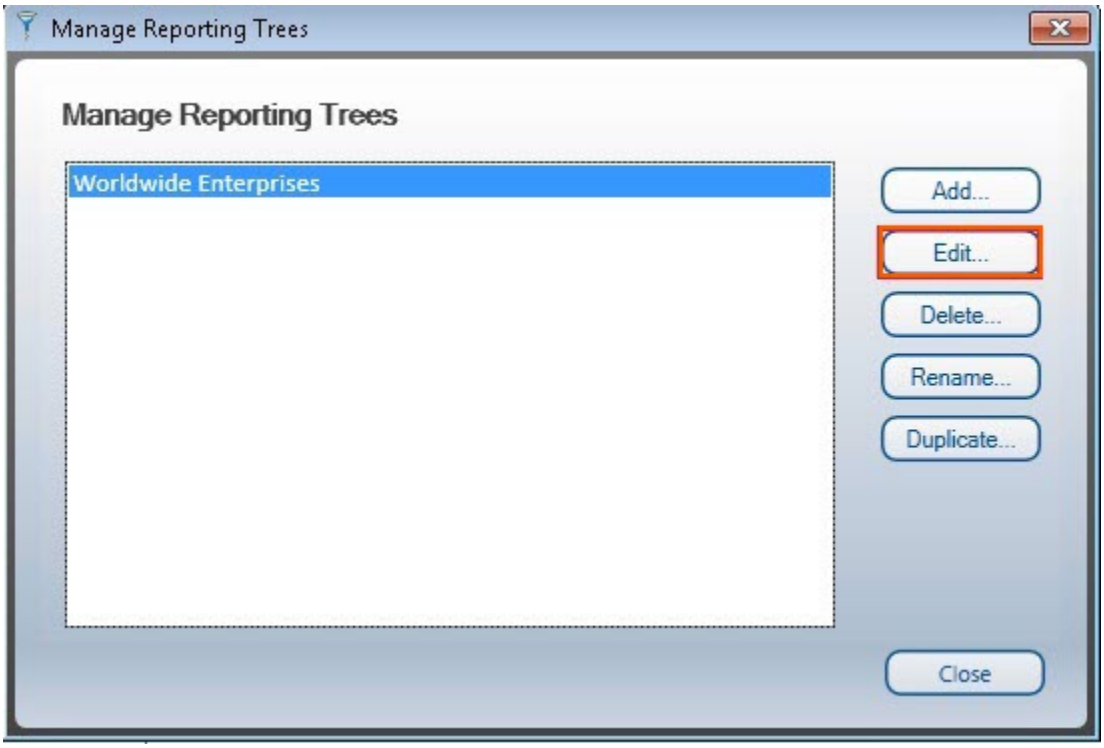


6. An optional Company filter may be applied. This will further filter the reporting unit to apply only to a specified company.
7. Using drag and drop functionality, you can arrange your reporting units into parent/child hierarchies.
8. Click **Apply** to save and continue. Click **OK** to save and exit.

Editing Reporting Trees

To edit Reporting Trees, do the following:

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



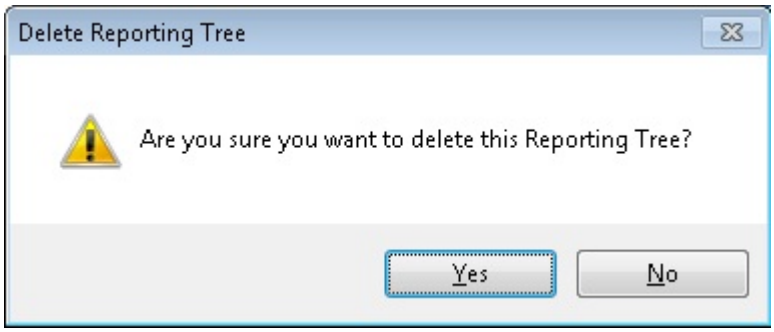
2. Make the necessary changes. Click **Apply** to save and continue. Click **OK** to save and exit.

Deleting a Reporting Tree

To delete Reporting Trees, do the following:

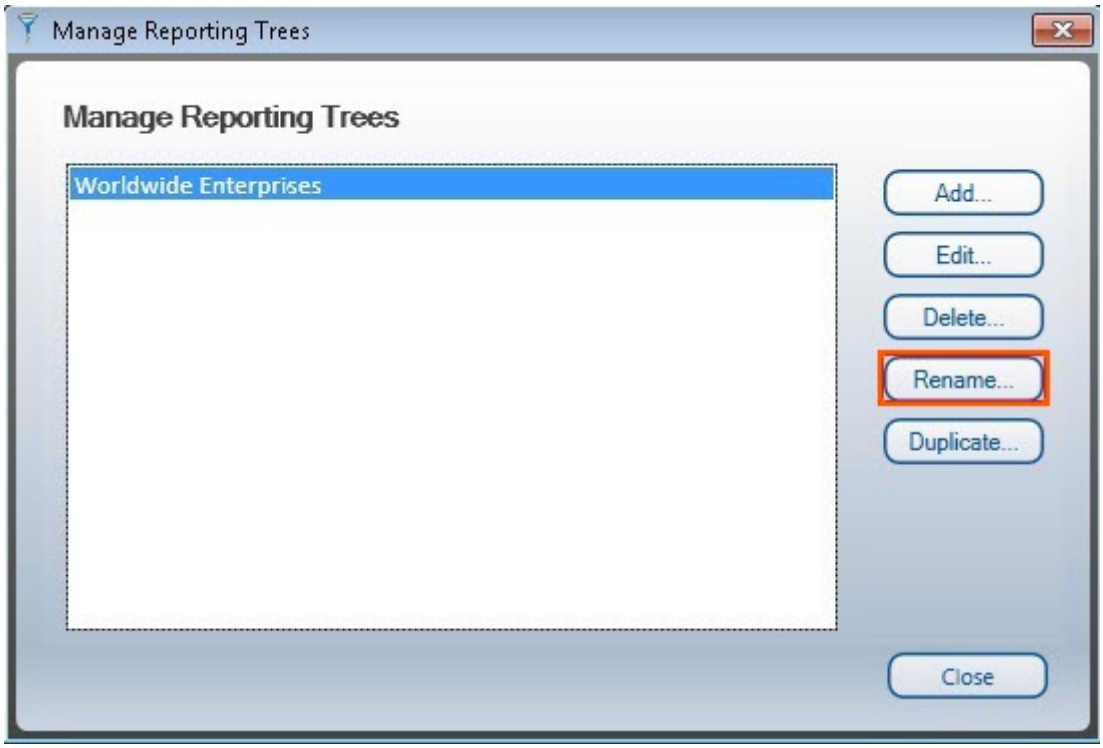
1. From the **Manage Reporting Trees** window, select the Reporting Tree you wish to delete.
2. Select **Delete**.

3. A confirmation window will open. Select **Yes** to permanently delete the reporting tree.

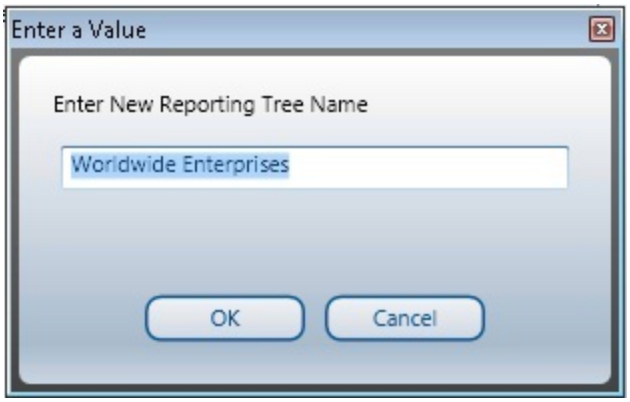


Renaming a Reporting Tree

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



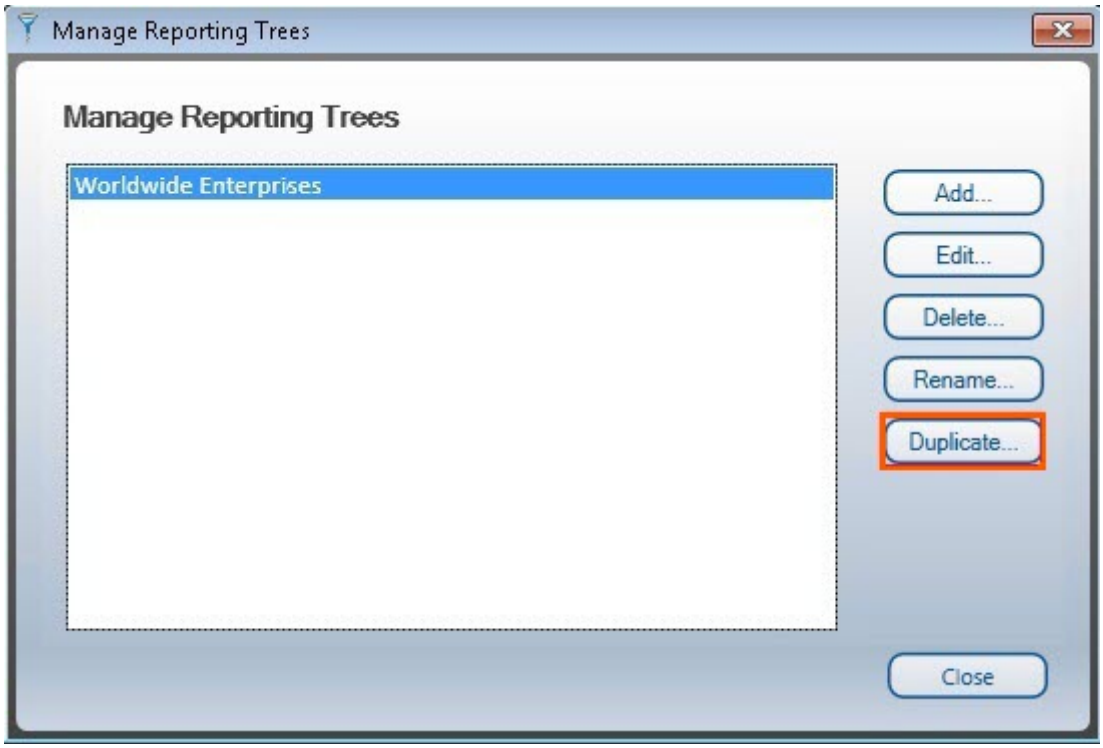
3. Enter the new name for the reporting tree.



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.

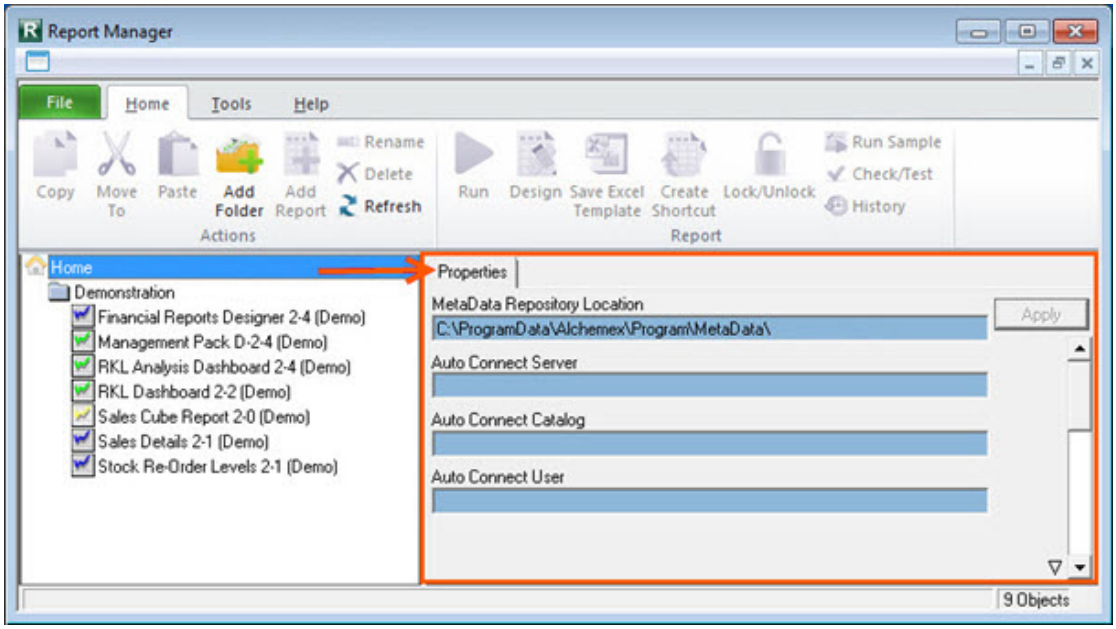
4. Select **OK** to save.

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.

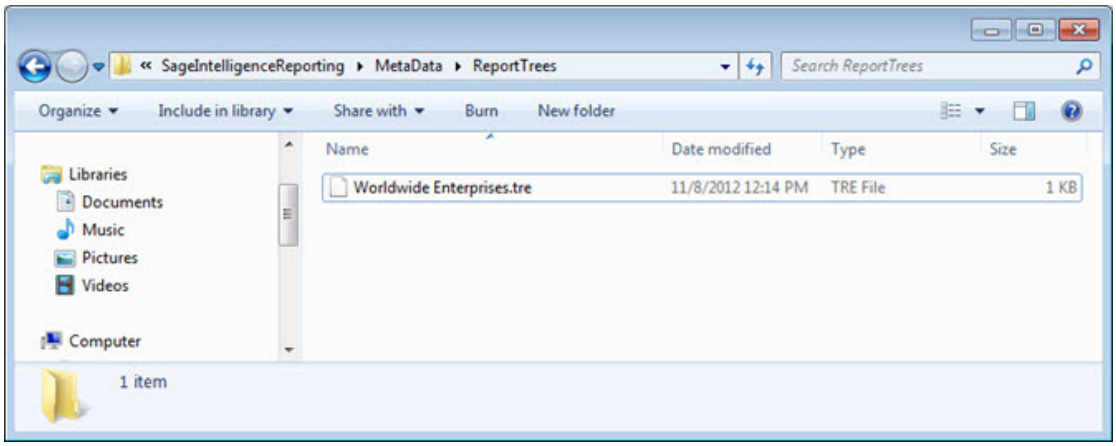
Locating the Metadata Repository

1. Open Report Manager.
2. Select **Home**.
3. 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.

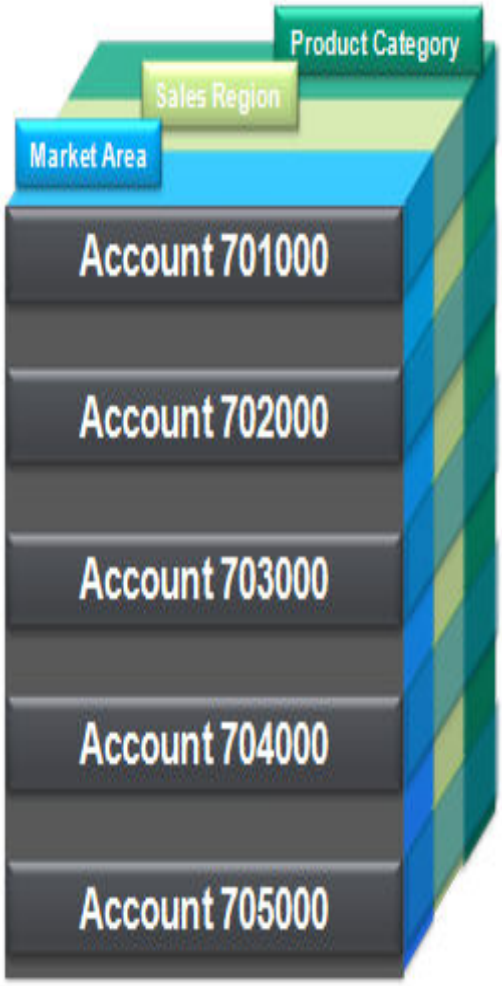
Analytical Dimensions

About Analytical Dimensions

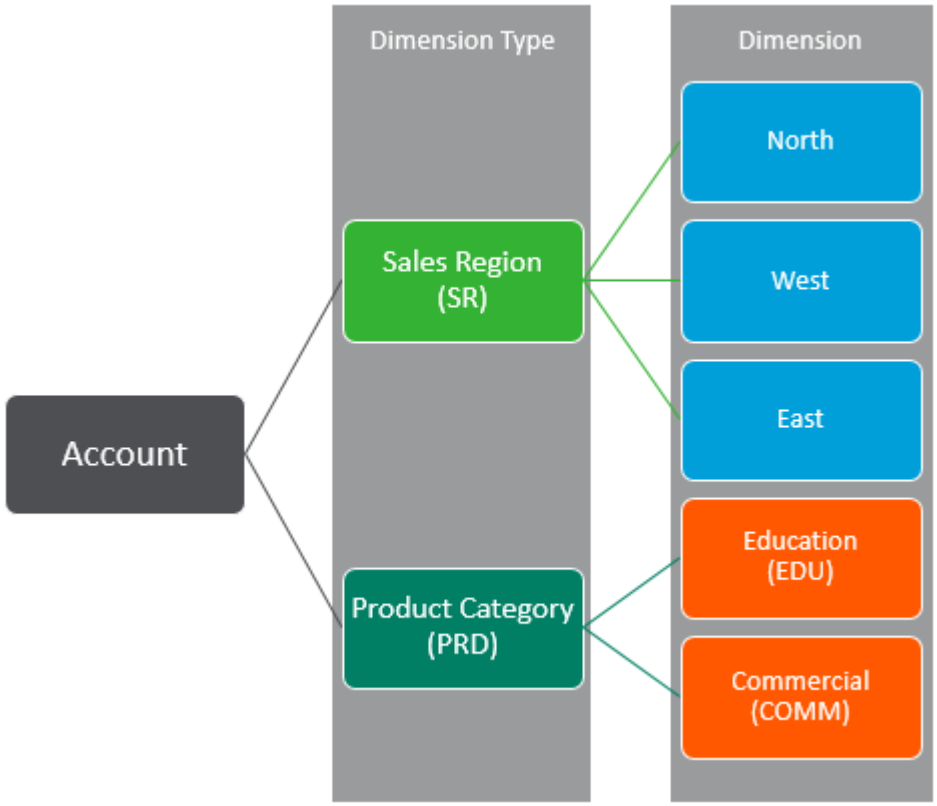
Sage X3 supports user defined analytic dimensions for budgeting allocations and analysis. Dimensions can be financial and quantity based. Most organizations use a General Ledger structure that separates business entities into different categories using dimensions.

Analytical Accounting/Dimensional ledgers enable transactions to be tagged and reported by user-defined dimension codes representing financial, date, or statistical information.

In the image below, **Market Area**, **Sales Region** and **Product Category** represent individual dimensions.



It is often useful to report on GL accounts using analytical dimensions. Dimensions are typically used to represent items such as Sales Regions, Product Categories, Departments and Locations.



When reports are generated, these values combine to pull specific analytical financial records from the source data. Once dimensions are set up in Sage X3, you can use the dimensions in your Intelligence Reporting report layout formulas.

Note: Dimensions can only be used on Analytical formulas.

Dimension Syntax

Dimensions allow you to specify a name value pair.

Note: Dimensions can only be used on Analytical formulas.

Specifying a Name Value Pair

You can use one of the following syntax methods:

- DimensionTypeCode=DimensionCode
- **PRD=EDU**
- DimensionTypeCode=DimensionCode,DimensionCode,DimensionCode
- **PRD=EDU,CHD,ASD**
- DimensionTypeCode=DimensionCode;
  DimensionTypeCode=DimensionCode,DimensionCode
- **PRD=EDU; SR=NORTH,WEST**
- DimensionTypeCode=DimensionCode,DimensionCode;
  DimensionTypeCode=DimensionCode,DimensionCode,DimensionCode
- **PRD=EDU,CHD; SR=NORTH,WEST,EAST**

For example you can request to view Sales values only for Educational products in the North and West Sales regions (as per the diagram above) by specifying the Sales/Revenue accounts range as **70????** in the **Account** parameter of the formula. You can then add the **Dimension** parameters, **PRD=EDU**; **SR=NORTH,WEST** or add the dimension parameters in Reporting Trees and specify the **ReportingTreeUnitPath** in the formulas.

Tip: You can use a space to report off blank dimensions, for example,

PRD= (space)

PRD=EDU, ,ASD

PRD= ; SR=NORTH

Using Wildcards in Dimensions

Wildcards can be used to define the list of Dimension values to return in your Sage Intelligence Reporting analytical formulas or Reporting Trees.

A wildcard character is a keyboard character such as an asterisk (*) or a question mark (?) that is used to represent one or more characters. For example, the wildcard character **?** may be substituted for any one of the 36 characters, A through Z and 0 through 9.

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.	**PJT = A??1** to return all projects **A001** to **AZZ1**.
Asterisk *	This may be substituted for any number of characters or numbers.	**PJT = A*** to return projects **A, A1, AZZZ** etc
Exclamation Mark with Brackets ![ ]	Use the exclamation mark with brackets to indicate your exclusions. Only one exclusion list is allowed per expression and should be indicated at the end. Other wildcards can be used within your exclusion list.	**PJT = A50 TO B100 ![A?6 to A7]** to return projects **A50, A80, A90 etc. and not A26**

Using Ranges in Dimensions

Ranges can be used to define the list of Dimension values to return in your Sage Intelligence Reporting analytical formulas or Reporting Trees.

A range indicates a series of results to be returned. This is indicated by using **TO** between your start and end value of your range.

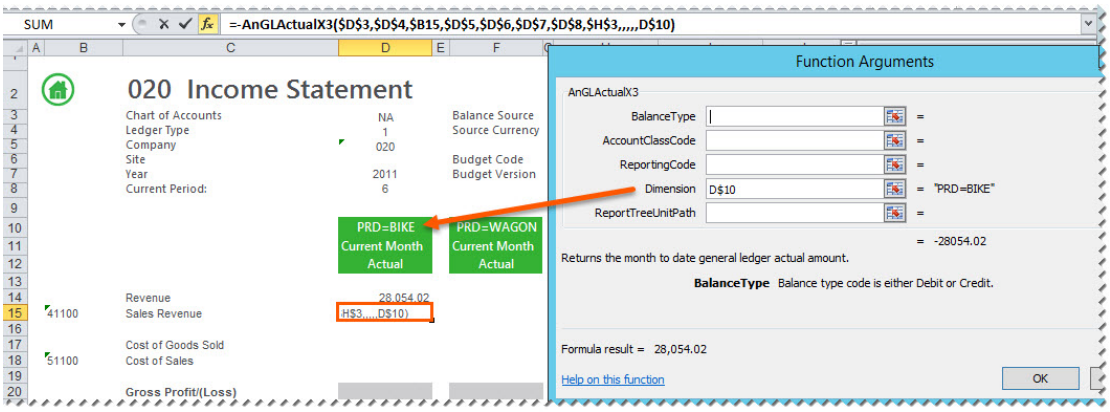
An example could be: **PJT = A to Z ; CAT = 1 to 10** to return all project values from **A, A11, B2, C** etc. to **Z** as well as all category values from **1 , 2, 3** etc. to and including **10**.

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

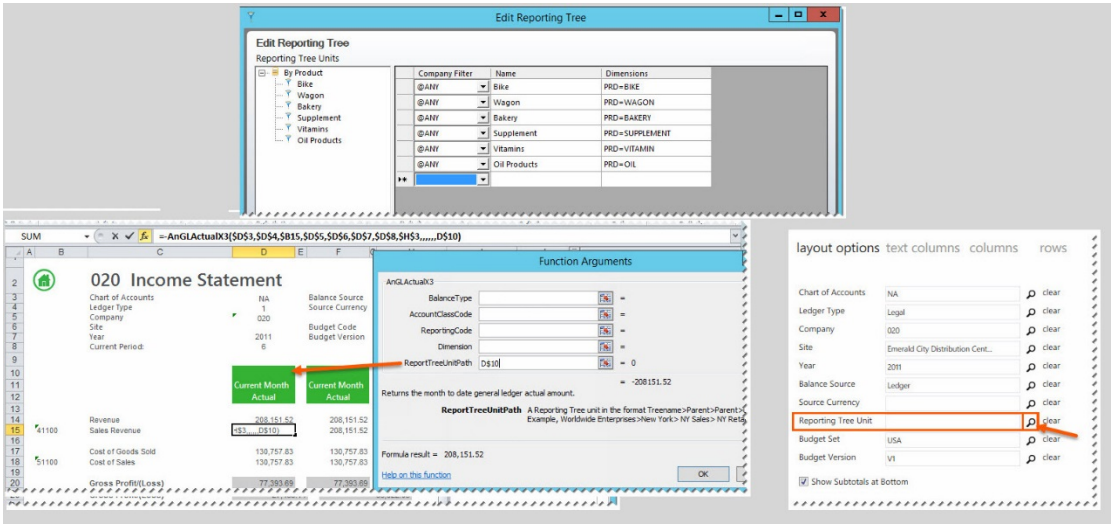
Options to use Dimensions in Report Designer Reports

There are three options available to add dimension information to a report layout.

- You can specify a dimension in the **Dimension** parameter in the **Function Arguments** window.



- You can specify the dimension information in the Reporting Tree definition and reference the dimension Reporting Trees in the **ReportingUnitPath** in the formula function arguments in the Task Pane, or in the **Reporting Tree Unit** filter in the Layout Generator layout options.

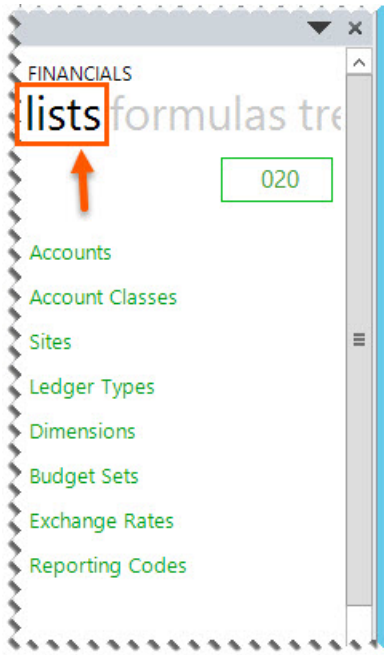


- You can also use a combination of both of the above to filter by multiple dimensions.

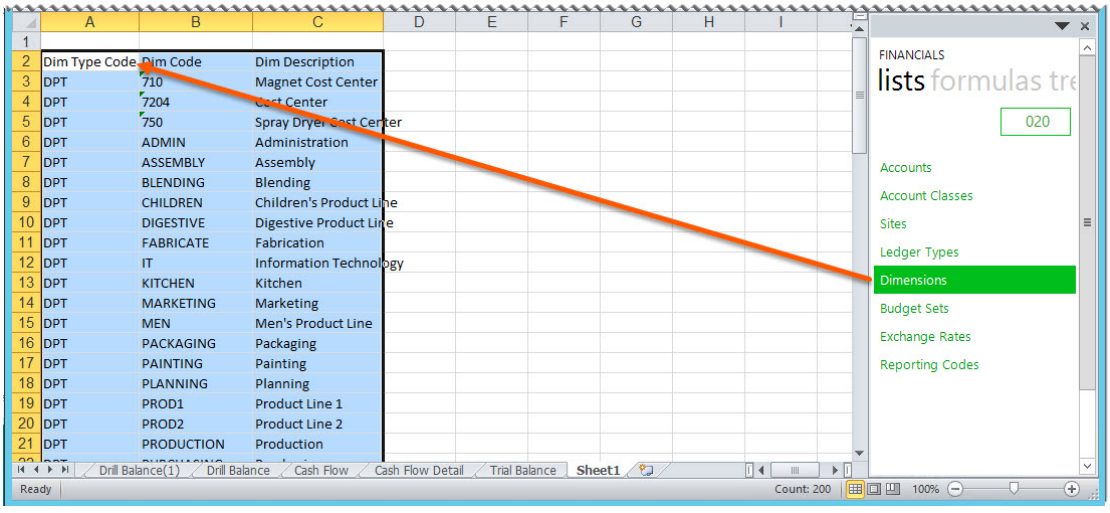
Viewing the Dimension Type Codes Available

You are able to view the Dimension Type Codes that you created in Sage X3, which will then be available to use in your report layout created with Sage Intelligence Reporting, using the Task Pane.

1. Open a blank worksheet in a Report Designer workbook.
2. In the Task Pane, select **Lists**.



3. Drag and drop the **Dimensions** list onto the blank worksheet.



This will list all of the dimension type codes which you have set up in Sage X3. The first column is the codes which can now be used to filter your report layouts in Sage Intelligence Reporting.

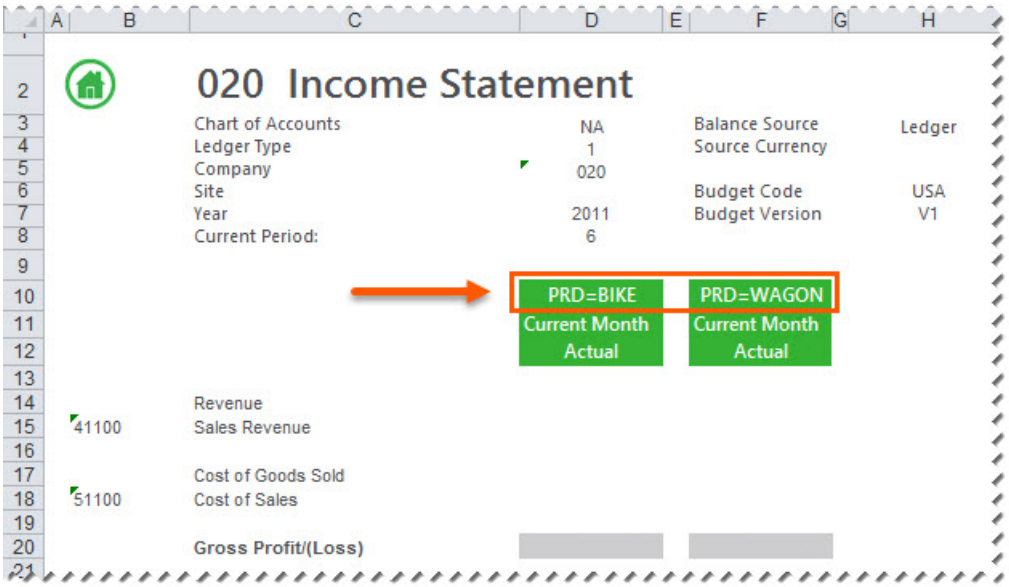
Learn More:
[Options to use Dimensions in Report Designer Reports]

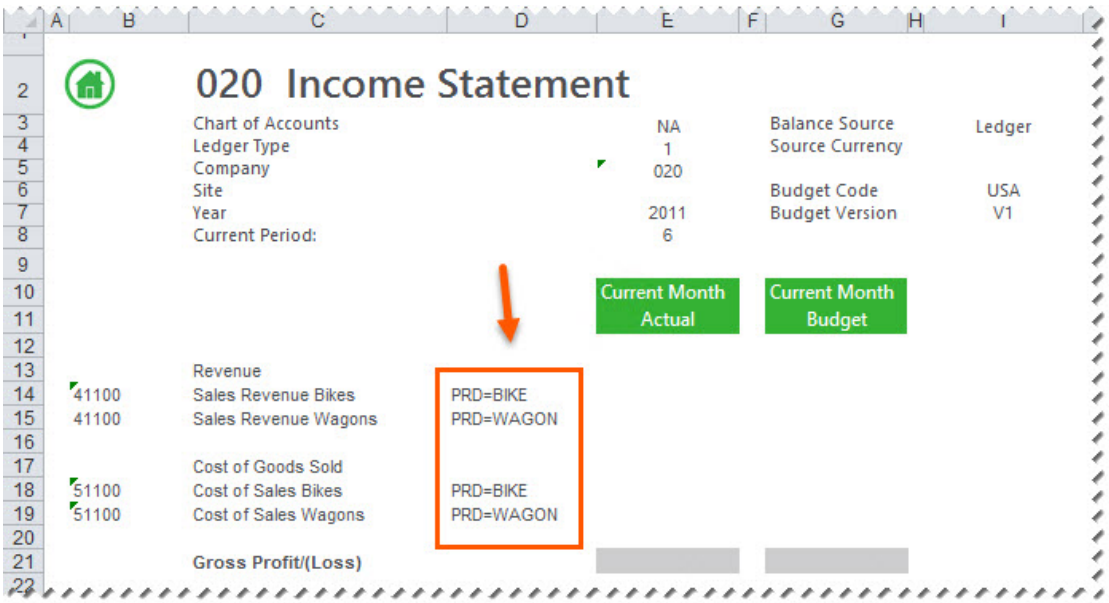
Specifying a Dimension in the Formula Parameter

Formulas are dragged into the Excel workbook to allow you to return balances from the Sage X3 General Ledger based on provided parameters. 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. You can specify a dimension in the **Dimension** parameter.

1. In your report layout, create either column headings or row headings for the dimensions you want to report on. Type in the dimension name value pair. A column and a row example is shown below:

Tip: Multiple dimensions can be inserted by using a comma, and multiple dimension types must be separated by a semi colon. Click **here** to view the correct syntax to use.

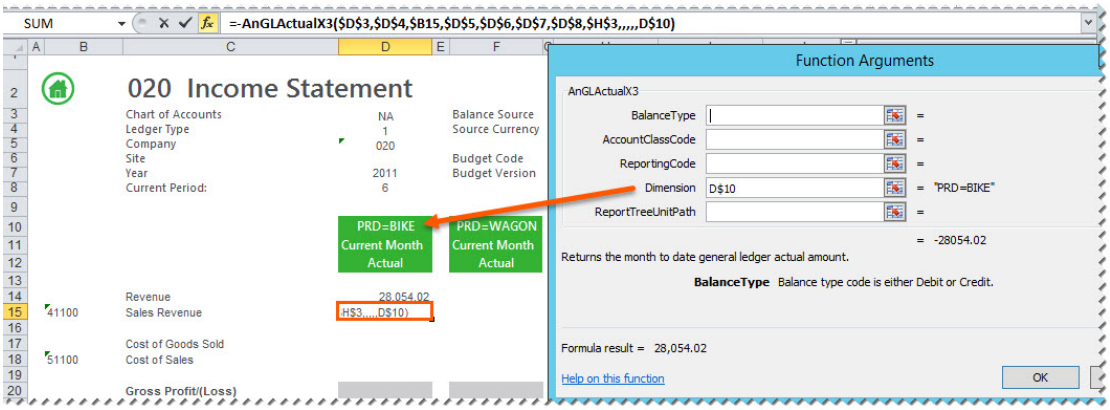




2. Drag and drop the formula you want to use onto your spreadsheet in the same row as your first account.

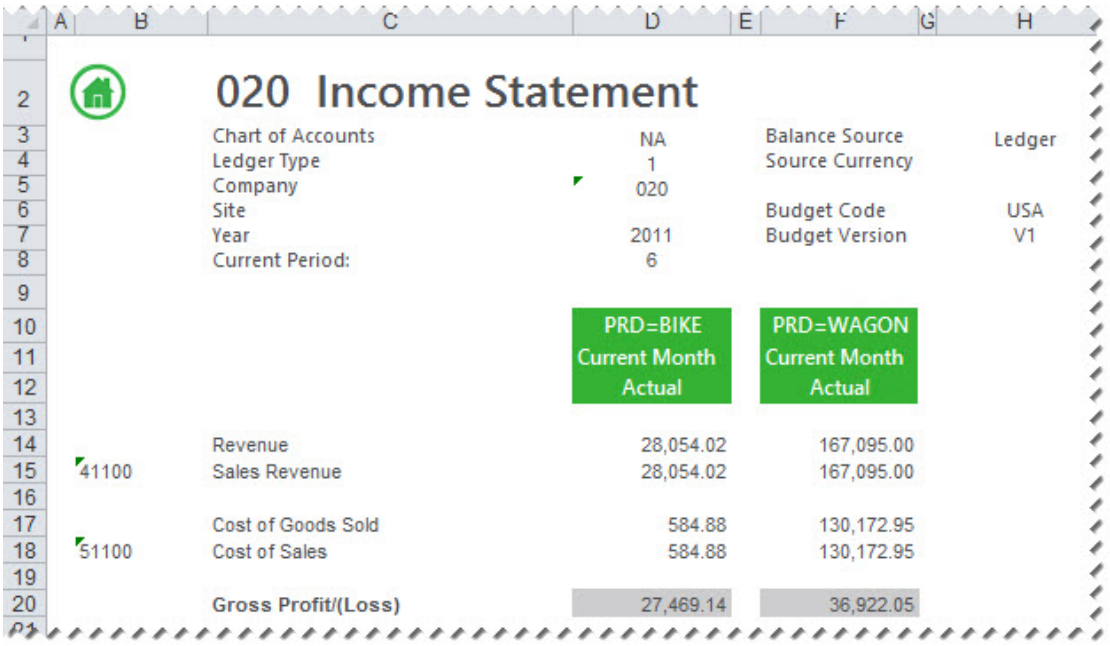
3. Edit the formula to link to the correct function arguments.

4. Ensure your formulas are referencing the cell where your dimensions are, that you specified above.



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

5. Copy the formula to other cells requiring the same change.

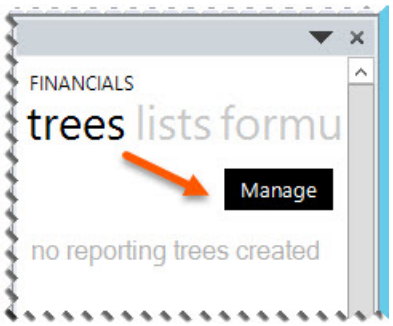


Specifying a Dimension in a Reporting Tree

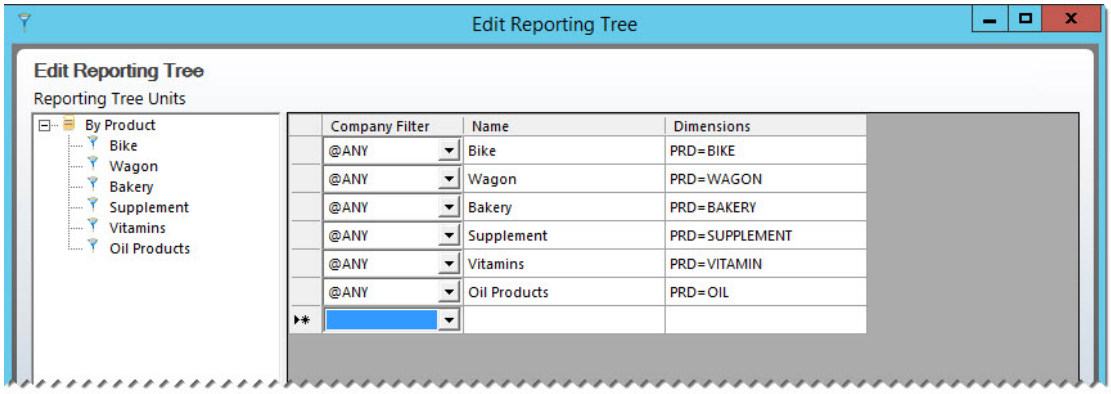
Sage Intelligence Reporting in Sage X3 supports dimensions in Reporting Trees. One of the options available to add dimension information to a report layout is to specify the dimension information in the Reporting Tree definition, and reference the dimension Reporting Trees in the **ReportingUnitPath** in the formula function arguments.

Creating a Reporting Tree using Dimensions

1. In the Task Pane, click the **trees** tab.
2. Click **Manage**.



3. Click **Add** to create a new tree or **edit** to edit an existing tree**.**
4. You can now add dimensions specifying the dimension parameters as per the example below:

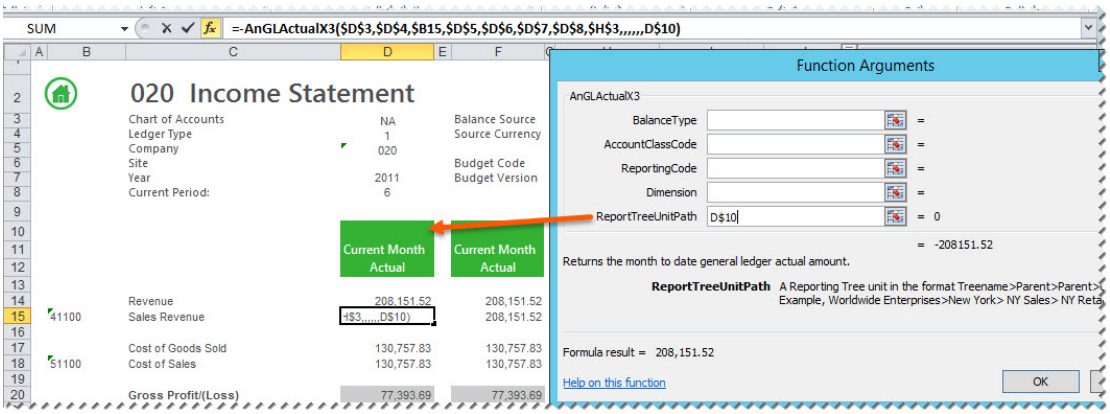


Tip: Multiple dimensions can be inserted by using a comma, and multiple dimension types must be separated by a semi colon. Click **here** to view the correct syntax to use.

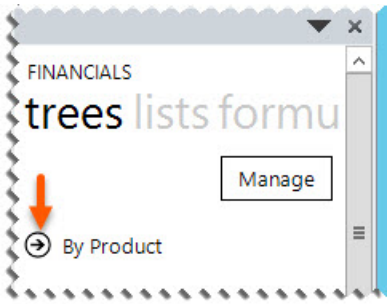
5. Click **Apply**.
6. Click **OK**.

Using a Dimension Reporting Tree in the Task Pane.

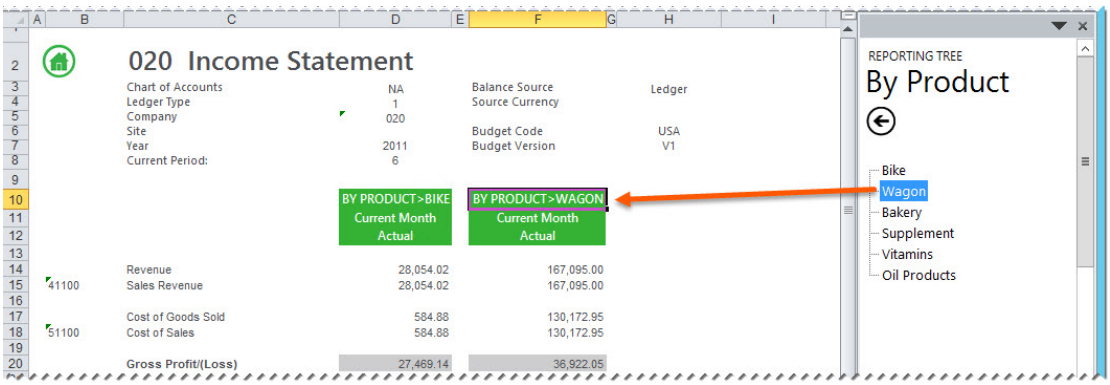
1. Ensure your formulas are referencing the **ReportTreeUnitPath** in the function arguments window.



2. On the **trees** tab, click the arrow to expand the dimension reporting tree.

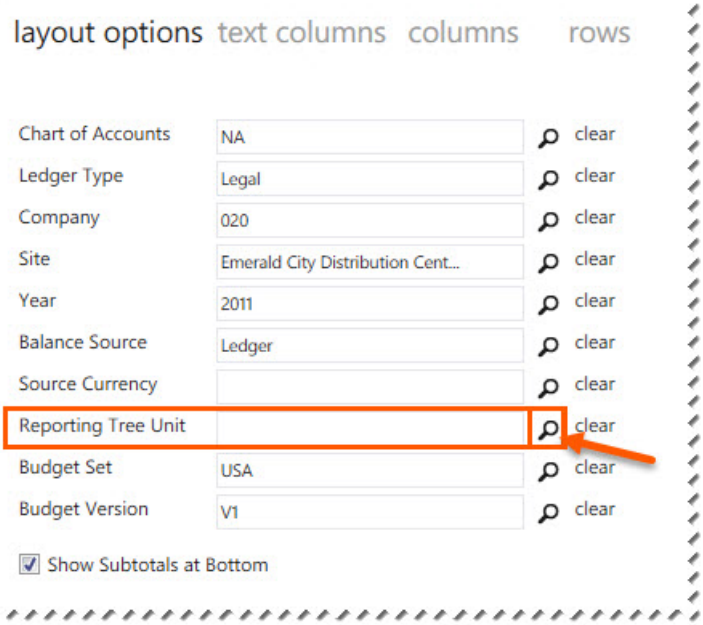


3. You can now drag the dimensions into the report layout into the **ReportTreeUnitPath** filter cell. Your data will automatically be updated to reflect the data for the dimension you have dragged in.

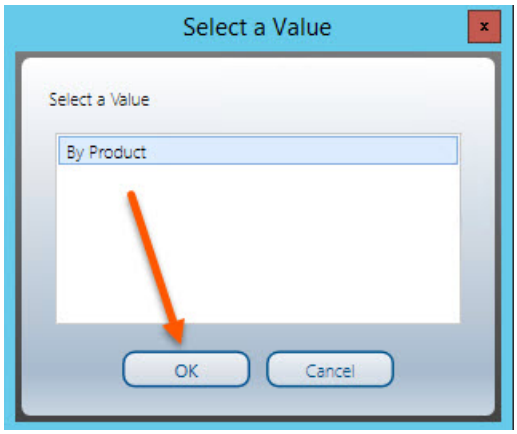


Using a Dimension Reporting Tree in the Layout Generator.

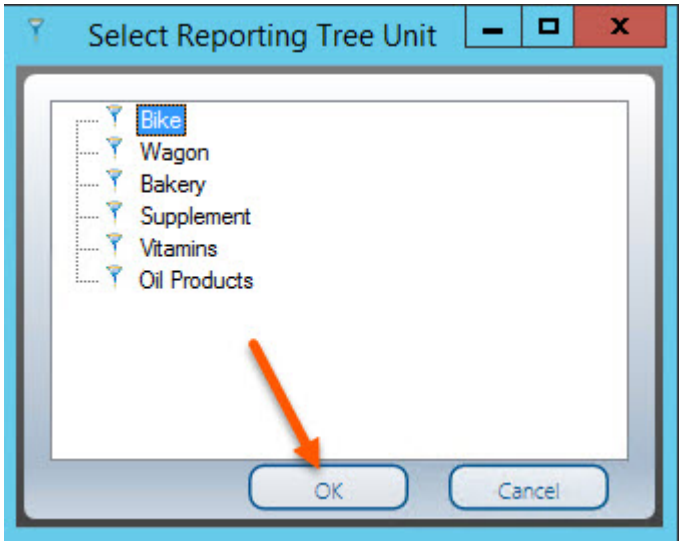
1. On the **BI Tools** tab, click **Quick Edit** to edit the layout you want to add dimension Reporting Trees to.
2. On the l**ayout options** page, click the **Reporting Tree Unit** magnifying glass.



3. Click the Reporting Tree.
4. Click **Ok**.



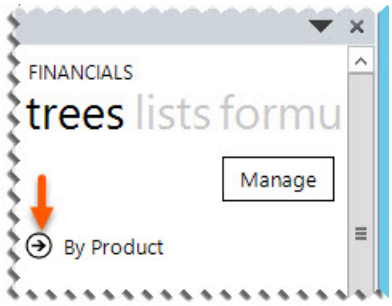
5. Select the unit you want to report on.
6. Click **Ok**.



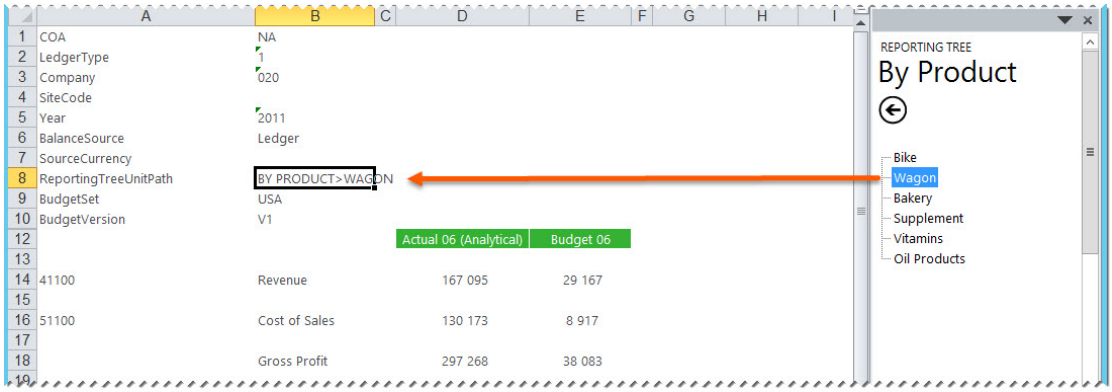
7. Click **Save Layout**.
8. Click **Generate**.
9. Notice the layout has been filtered by the Reporting Unit you added previously.

	A	B	C	D	E	F
1	COA	NA				
2	LedgerType	1				
3	Company	020				
4	SiteCode					
5	Year	2011				
6	BalanceSource	Ledger				
7	SourceCurrency					
8	ReportingTreeUnitPath	BY PRODUCT>BIKE				
9	BudgetSet	USA				
10	BudgetVersion	V1				
12				Actual 06 (Analytical)	Budget 06	
13						
14	41100	Revenue		28 054	50 000	
15						
16	51100	Cost of Sales		585	11 417	
17						
18		Gross Profit		28 639	61 417	
19						

10. To change the Reporting Tree unit, on the **trees** tab, click the arrow to expand the dimension reporting tree.



11. You can now drag the dimensions into the report layout into the **ReportingTreeUnitPath** filter cell. Your data will automatically be updated to reflect the data for the dimension you have dragged in.



Reporting Unit Rollups

Reporting trees can include the amounts from child reporting units at the parent reporting unit level. This inclusion is called rolling up the data.

Sage Intelligence Reporting uses the following rules to roll up amounts to parent units in a reporting tree:

- Within a reporting tree, all child units must have dimensions specified. Parent units usually do not use a dimension filter in a reporting tree.

Warning: Using a dimension filter for both child and parent units could cause duplication of data in the report.

- Parent reporting units that do not use a dimension filter in the reporting tree correspond to the row amount that is in the child unit report and roll up the amount to the specified parent unit. For example, if the parent unit has five child units and a dimension filter is not used in the reporting tree for that parent unit, all five child units are rolled (aggregated) up to the specified parent unit.

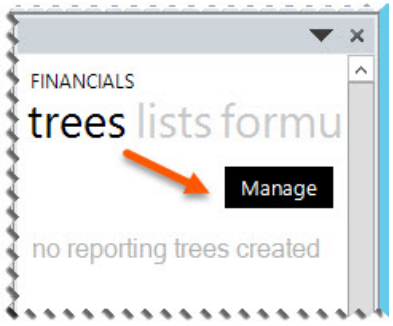
Creating a Report using Multiple Dimensions

You may want to create a report layout that uses multiple dimensions. For example, you may want to report on specific products by specific customers. You can also use a combination of Reporting Trees and formula parameters to achieve this.

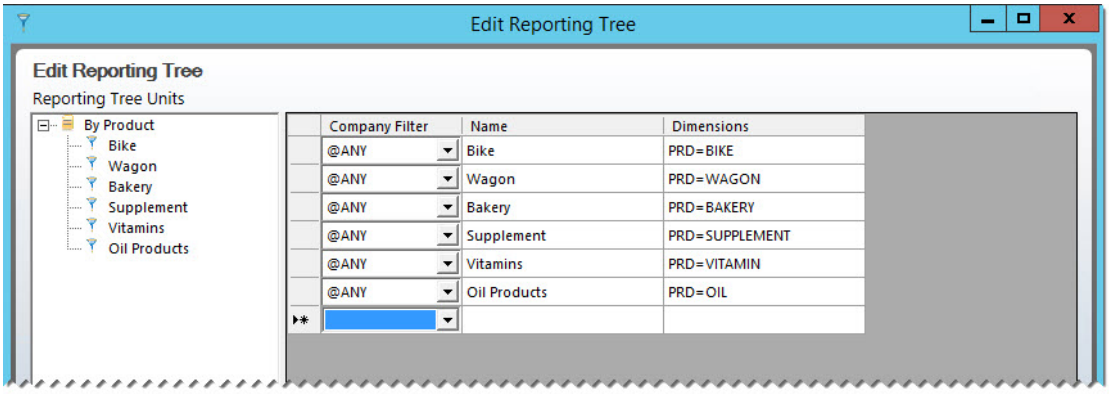
Note: Dimensions can only be used on Analytical formulas.

Creating a Reporting Tree using Dimensions

1. In the Task Pane, click the **trees** tab.
2. Click **Manage**.



3. Click **Add** to create a new tree or **edit** to edit an existing tree**.**
4. You can now add dimensions specifying the dimension parameters as per the example below:

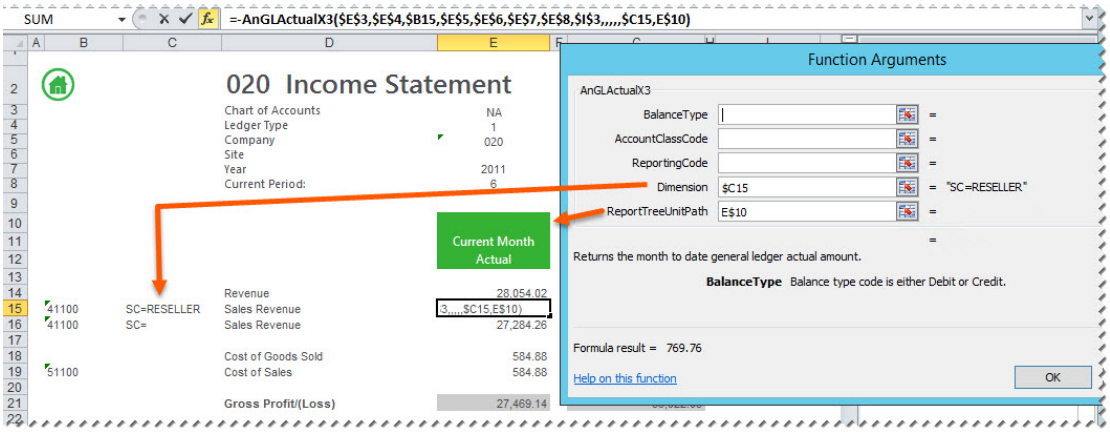


Tip: Click **here** to view the correct syntax to use.

5. Click **Apply**.
6. Click **OK**.

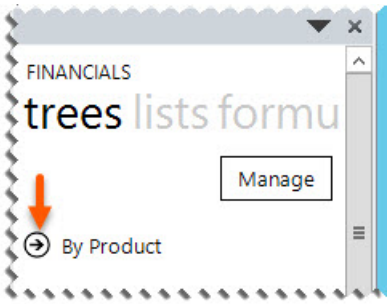
Using the Dimension Reporting Tree and a Dimension Parameter in the Task Pane.

1. Ensure your formulas are referencing the **ReportTreeUnitPath** and the **Dimension** in the function arguments window of the formulas.

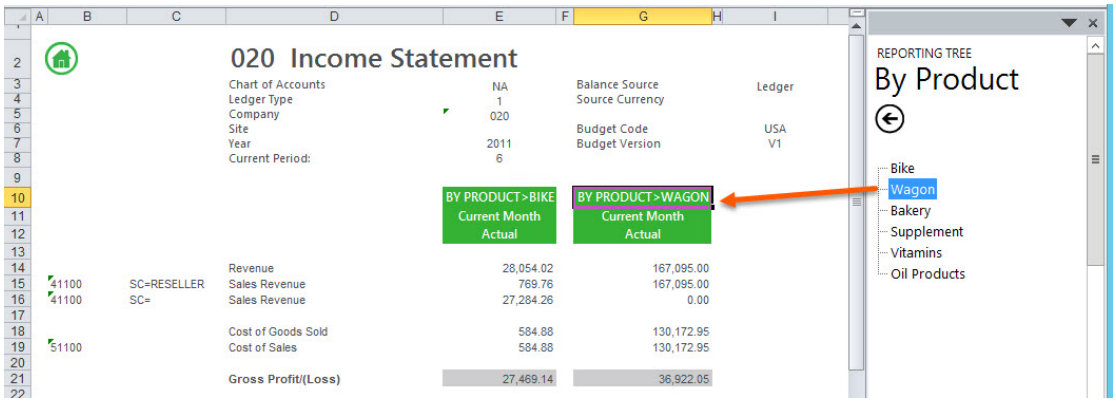


Tip: You can use a space to report off blank dimensions.

2. On the **trees** tab, click the arrow to expand the dimension reporting tree.



3. You can now drag the dimensions into the report layout into the **ReportTreeUnitPath** filter cell.



Your data will automatically be updated to reflect the data for the dimension you have dragged in, as well as the dimension in each row.

Available Formulas

Opening Balance Formula

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

Description

The **Opening Balance** 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

```
=GLOpeningBalanceX3(ChartOfAccounts,LedgerType,Account,Company,SiteCode,Year,
BalanceSource,SourceCurrency,AccountClassCode,ReportingCode)
```

The **Opening Balance** formula syntax has the following arguments:

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
ChartofAccounts	The chart of accounts code retrieved from the General Ledger.	Y	Filters the chart of accounts being referenced to a specific chart of accounts code. A chart of accounts may be shared by several ledgers.
LedgerType	The ledger type retrieved from the General Ledger.	Y	Filters the General Ledger type being referenced to a specific type. A ledger is the principal book for recording transactions. You can have the same or separate ledgers for tracking transactions and balances associated with the General Ledger or analytical ledger. A ledger combines a currency and a chart of accounts.
Account	The account code from the accounts or account classes list retrieved from the General Ledger.	N	used to reference one or more General Ledger accounts for which values must be returned. Supports accounts, account ranges, account wildcards & account addition/subtraction.
Company	A company code retrieved from the General Ledger.	Y	Filters the General Ledger accounts being referenced to one or more specific companies. A Sage X3

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
			General Ledger supports multiple companies and sites.
SiteCode	The site code retrieved from the General Ledger.	Y	Filters the General Ledger site code being referenced to a specific site code. A single company can have multiple sites. Use a comma to separate multiple site codes or use wildcards or ranges to define the list of sites.
Year	The fiscal year to return data on. The default is the current year in your General Ledger. This is a mandatory argument.	Y	Filters the General Ledger accounts being referenced to a specific fiscal period. 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.
BalanceSource	Type **Source** or **Ledger**.	Y	Filters only the balance recorded in source currency (Source) or balance recorded in ledger currency (Ledger) to be returned.
SourceCurrency	The source currency retrieved from the General Ledger.	N	Filters the General Ledger account source currency being referenced to a specific source currency.
AccountClassCode	An account class retrieved from the General Ledger.	N	Filters the General Ledger accounts according to account classes which are assigned to accounts and account groups and determine if the account is a Balance Sheet or Profit & Loss account, the default sign, and the analytic sense. Account classes represent the different sections of financial statements such as Assets and Liabilities.
ReportingCode	The reporting code retrieved from the General Ledger	N	Filters the General Ledger accounts to a specific reporting code.

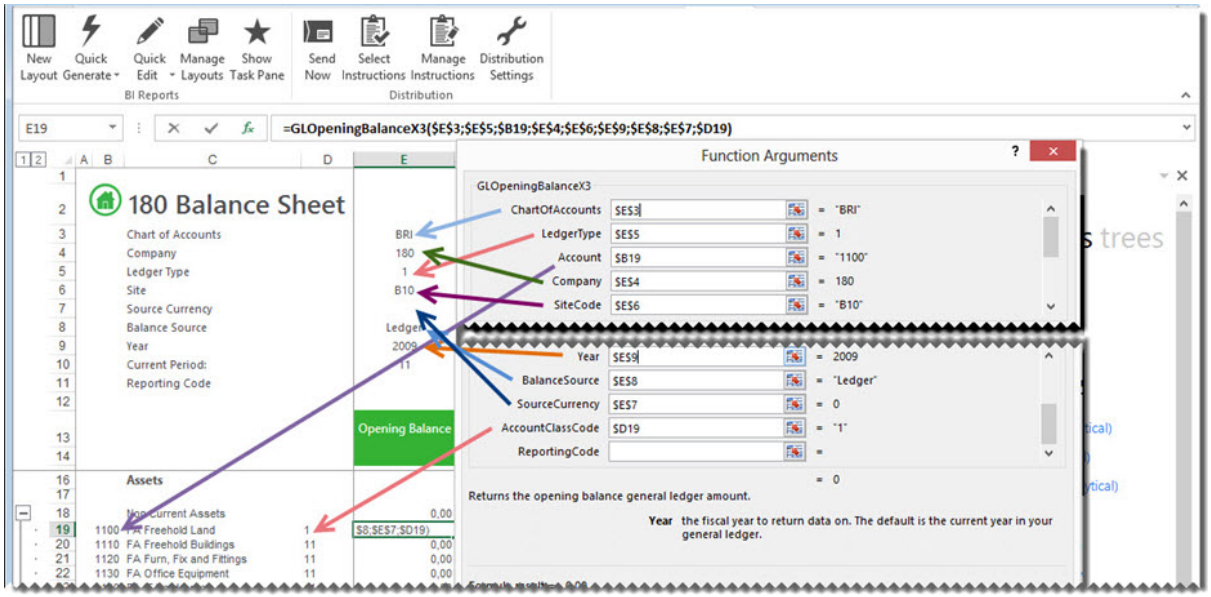
Remarks

- 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 Classes.
- 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 an **Opening Balance** formula could be:

```
=GLOpeningBalanceX3($E$3;$E$5;$B19;$E$4;$E$6;$E$9;$E$8;E7;$D19)
```



Opening Balance (Analytical) Formula

This topic describes the formula syntax and usage of the **Opening Balance (Analytical)** formula in Microsoft Excel. The **Opening Balance (Analytical)** formula is made available in Microsoft Excel by the Report Designer.

Description

The **Opening Balance (Analytical)** 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

```
=AnGLOpeningBalanceX3(ChartOfAccounts,LedgerType,Account,Company,SiteCode,Year,AccountClassCode,BalanceSource,SourceCurrency,Dimension)
```

The **Opening Balance (Analytical)** formula syntax has the following arguments:

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
ChartofAccounts	The chart of accounts code retrieved from the General Ledger.	Y	Filters the chart of accounts being referenced to a specific chart of accounts code. A chart of accounts may be shared by several ledgers.
LedgerType	The ledger type retrieved from the General Ledger.	Y	Filters the General Ledger type being referenced to a specific type. A ledger is the principal book for recording transactions. You can have the same or separate ledgers for tracking transactions and balances associated with the General Ledger or analytical ledger. A ledger combines a currency and a chart of accounts.
Account	The account code from the accounts or account classes list retrieved from the General Ledger.	N	Used to reference one or more General Ledger accounts for which values must be returned. Supports accounts, account ranges, account wildcards & account addition/subtraction.
Company	A company code retrieved from the General Ledger.	Y	Filters the General Ledger accounts being referenced to one or more specific companies. A Sage X3 General Ledger supports multiple companies and sites.

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
SiteCode	The site code retrieved from the General Ledger.	Y	Filters the General Ledger site code being referenced to a specific site code. A single company can have multiple sites. Use a comma to separate multiple site codes or use wildcards or ranges to define the list of sites..
Year	The fiscal year to return data on. The default is the current year in your General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific fiscal period. 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.
AccountClassCode	An account class retrieved from the General Ledger.	N	Filters the General Ledger accounts according to account classes which are assigned to accounts and account groups and determine if the account is a Balance Sheet or Profit & Loss account, the default sign, and the analytic sense. Account classes represent the different sections of financial statements such as Assets and Liabilities.
BalanceSource	Type **Source** or **Ledger**.	Y	Filters only the balance recorded in source currency (Source) or balance recorded in ledger currency (Ledger) to be returned.
SourceCurrency	The source currency retrieved from the General Ledger.	N	Filters the General Ledger account source currency being referenced to a specific source currency.
Dimension	The dimension code retrieved from the General Ledger.	N	Filters the analytical General Ledger dimension code being referenced to a specific dimension code. Analytical Accounting enables transactions to be tagged and reported by user-defined dimension codes representing financial, date, or statistical information. Sage X3 supports user-defined analytic dimensions for budgeting, allocations, and analysis. Supports Dimension pairs as well as multiple values, for example, "DPT=FIN,MKT,DMC" Wildcards or Ranges can be used to define the list of Dimension values.

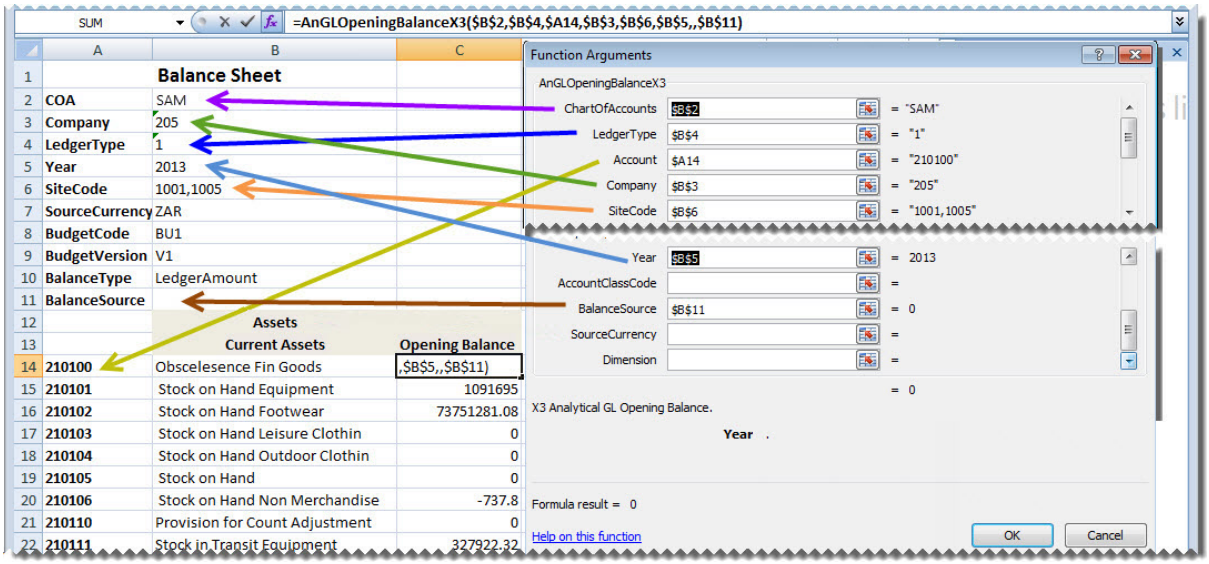
Remarks

- 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.
- 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 Classes.
- 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 an **Opening Balance (Analytical)** formula could be:

```
=AnGLOpeningBalanceX3($B$2,$B$4,$A14,$B$3,$B$6,$B$5,,$B$11)
```



Closing Balance Formula

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

Description

The **Closing Balance** 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

```
=GLClosingBalanceX3(ChartOfAccounts,LedgerType,Account,Company,SiteCode,Year,
Period,BalanceSource,SourceCurrency,BalanceType,AccountClassCode,ReportingCode)
```

The **Closing Balance** formula syntax has the following arguments:

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
ChartofAccounts	The chart of accounts code retrieved from the General Ledger.	Y	Filters the chart of accounts being referenced to a specific chart of accounts code. A chart of accounts may be shared by several ledgers.
LedgerType	The ledger type retrieved from the General Ledger.	Y	Filters the General Ledger type being referenced to a specific type. A ledger is the principal book for recording transactions. You can have the same or separate ledgers for tracking transactions and balances associated with the General Ledger or analytical ledger. A ledger combines a currency and a chart of accounts.
Account	The account code from the accounts or account classes list retrieved from the General Ledger.	N	Used to reference one or more General Ledger accounts for which values must be returned. Supports accounts, account ranges, account wildcards & account addition/subtraction.
Company	A company code retrieved from the General Ledger.	Y	Filters the General Ledger accounts being referenced to one or more specific companies. A Sage X3 General Ledger supports multiple companies and sites.

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
SiteCode	The site code retrieved from the General Ledger.	Y	Filters the General Ledger site code being referenced to a specific site code. A single company can have multiple sites. Use a comma to separate multiple site codes or use wildcards or ranges to define the list of sites.
Year	The fiscal year to return data on. The default is the current year in your General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific fiscal period. 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.
Period	The period to return data on. The default is the current period in the General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific period. A period is the operating cycle of a company for which accounting information is collected and reported. A period is the operating cycle of a company for which accounting information is collected and reported.
BalanceSource	Type **Source** or **Ledger**.	Y	Filters only the balance recorded in source currency (Source) or balance recorded in ledger currency (Ledger) to be returned.
SourceCurrency	The source currency retrieved from the General Ledger.	N	Filters the General Ledger account source currency being referenced to a specific source currency.
BalanceType	Type **Debit** or **Credit**.	N	Filters only the credit or debit balances to be returned for the accounts which are being referenced by this formula.
AccountClassCode	An account class retrieved from the General Ledger.	N	Filters the General Ledger accounts according to account classes which are assigned to accounts and account groups and determine if the account is a Balance Sheet or Profit & Loss account, the default sign, and the analytic sense. Account classes represent the different sections of financial statements such as Assets and Liabilities.

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
ReportingCode	The reporting code retrieved from the General Ledger	N	Filters the General Ledger accounts to a specific reporting code

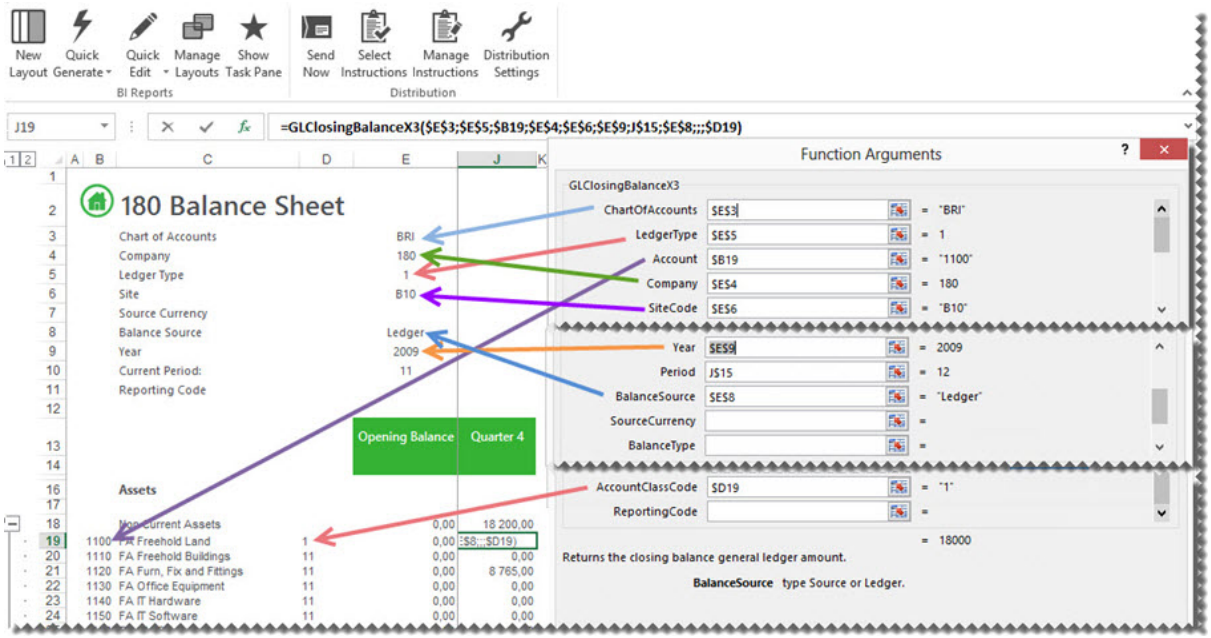
Remarks

- 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 Classes.
- 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 **ClosingBalance** formula could be:

```
=GLClosingBalanceX3($E$3;$E$5;$B19;$E$4;$E$6;$E$9;J$15;$E$8;;;$D19)
```



Closing Balance (Analytical) Formula

This topic describes the formula syntax and usage of the **Closing Balance (Analytical)** formula in Microsoft Excel. The **Closing Balance (Analytical)** formula is made available in Microsoft Excel by the Report Designer.

Description

The **Closing Balance (Analytical)** 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

```
=AnGLClosingBalanceX3(ChartOfAccounts,LedgerType,Account,Company,SiteCode,Year,Period,AccountClassCode,AccountGroupCode,BalanceType,BalanceSource,SourceCurrency,Dimension)
```

The **Closing Balance** formula syntax has the following arguments:

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
ChartofAccounts	The chart of accounts code retrieved from the General Ledger.	Y	Filters the chart of accounts being referenced to a specific chart of accounts code. A chart of accounts may be shared by several ledgers.
LedgerType	The ledger type retrieved from the General Ledger.	Y	Filters the General Ledger type being referenced to a specific type. A ledger is the principal book for recording transactions. You can have the same or separate ledgers for tracking transactions and balances associated with the General Ledger or analytical ledger. A ledger combines a currency and a chart of accounts.
Account	The account code from the accounts or account classes list retrieved from the General Ledger.	N	Used to reference one or more General Ledger accounts for which values must be returned. Supports accounts, account ranges, account wildcards & account addition/subtraction.
Company	A company code retrieved from the General Ledger.	Y	Filters the General Ledger accounts being referenced to one or more specific companies. A Sage X3 General Ledger supports multiple companies and sites.

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
SiteCode	The site code retrieved from the General Ledger.	Y	Filters the General Ledger site code being referenced to a specific site code. A single company can have multiple sites. Use a comma to separate multiple site codes or use wildcards or ranges to define the list of sites.
Year	The fiscal year to return data on. The default is the current year in your General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific fiscal period. 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.
Period	The period to return data on. The default is the current period in the General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific period. A period is the operating cycle of a company for which accounting information is collected and reported. A period is the operating cycle of a company for which accounting information is collected and reported.
AccountClassCode	An account class retrieved from the General Ledger.	N	Filters the General Ledger accounts according to account classes which are assigned to accounts and account groups and determine if the account is a Balance Sheet or Profit & Loss account, the default sign, and the analytic sense. Account classes represent the different sections of financial statements such as Assets and Liabilities.
BalanceType	Type **Debit** or **Credit**.	N	Filters only the credit or debit balances to be returned for the accounts which are being referenced by this formula.
BalanceSource	Type **Source** or **Ledger**.	Y	Filters only the balance recorded in source currency (Source) or balance recorded in ledger currency (Ledger) to be returned.
SourceCurrency	The source currency retrieved from the General Ledger.	N	Filters the General Ledger account source currency being referenced to a specific source currency.

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
Dimension	The dimension code retrieved from the General Ledger.	N	Filters the analytical General Ledger dimension code being referenced to a specific dimension code. Analytical Accounting enables transactions to be tagged and reported by user-defined dimension codes representing financial, date, or statistical information. Sage X3 supports user-defined analytic dimensions for budgeting, allocations, and analysis. Supports Dimension pairs as well as multiple values, for example, "DPT=FIN,MKT,DMC" Wildcards or Ranges can be used to define the list of Dimension values.

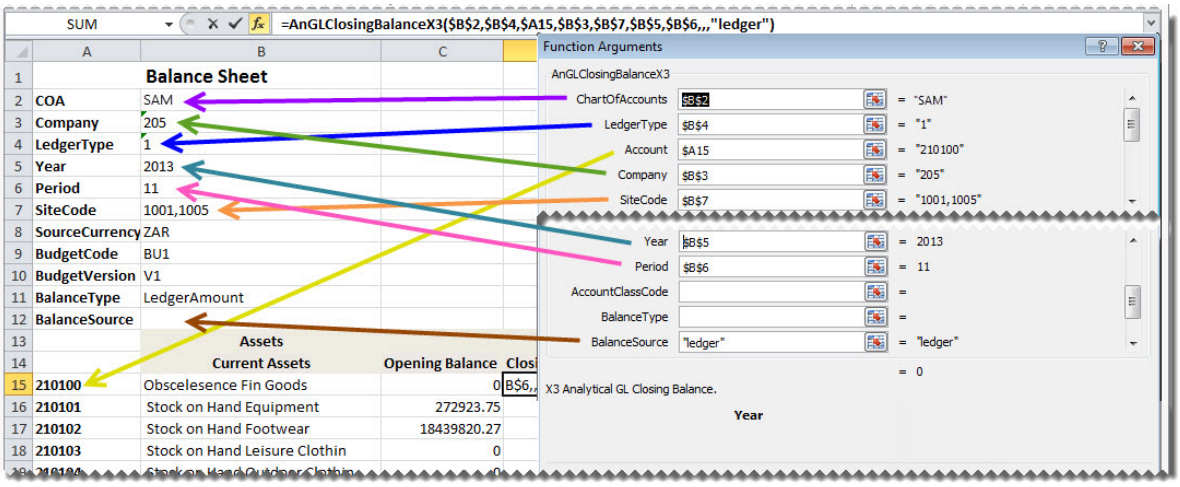
Remarks

- 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.
- 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 Classes.
- 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 **Closing Balance (Analytical)** formula could be:

```
=AnGLClosingBalanceX3($B$2,$B$4,$A15,$B$3,$B$7,$B$5,$B$6,,,"ledger")
```



Actual Formula

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

Description

The **Actual** 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

```
=GLActualX3(ChartOfAccounts,LedgerType,Account,Company,SiteCode,Year,Period,BalanceSource,SourceCurrency,BalanceType,AccountClassCode,AccountGroupCode)
```

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

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
ChartofAccounts	The chart of accounts code retrieved from the General Ledger.	Y	Filters the chart of accounts being referenced to a specific chart of accounts code. A chart of accounts may be shared by several ledgers.
LedgerType	The ledger type retrieved from the General Ledger.	Y	Filters the General Ledger type being referenced to a specific type. A ledger is the principal book for recording transactions. You can have the same or separate ledgers for tracking transactions and balances associated with the General Ledger or analytical ledger. A ledger combines a currency and a chart of accounts.
Account	The account code from the accounts or account classes list retrieved from the General Ledger.	N	Used to reference one or more General Ledger accounts for which values must be returned. Supports accounts, account ranges, account wildcards & account addition/subtraction.
Company	A company code retrieved from the General Ledger.	Y	Filters the General Ledger accounts being referenced to one or more specific companies. A Sage X3 General Ledger supports multiple companies and sites.

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
SiteCode	The site code retrieved from the General Ledger.	Y	Filters the General Ledger site code being referenced to a specific site code. A single company can have multiple sites. Use a comma to separate multiple site codes or use wildcards or ranges to define the list of sites.
Year	The fiscal year to return data on. The default is the current year in your General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific fiscal period. 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.
Period	The period to return data on. The default is the current period in the General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific period. A period is the operating cycle of a company for which accounting information is collected and reported. A period is the operating cycle of a company for which accounting information is collected and reported.
BalanceSource	Type **Source** or **Ledger**.	Y	Filters only the balance recorded in source currency (Source) or balance recorded in ledger currency (Ledger) to be returned.
SourceCurrency	The source currency retrieved from the General Ledger.	N	Filters the General Ledger account source currency being referenced to a specific source currency.
BalanceType	Type **Debit** or **Credit**.	N	Filters only the credit or debit balances to be returned for the accounts which are being referenced by this formula.
AccountClassCode	An account class retrieved from the General Ledger.	N	Filters the General Ledger accounts according to account classes which are assigned to accounts and account groups and determine if the account is a Balance Sheet or Profit & Loss account, the default sign, and the analytic sense. Account classes represent the different sections of financial statements such as Assets and Liabilities.

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
ReportingCode	The reporting code retrieved from the General Ledger	N	Filters the General Ledger accounts to a specific reporting code

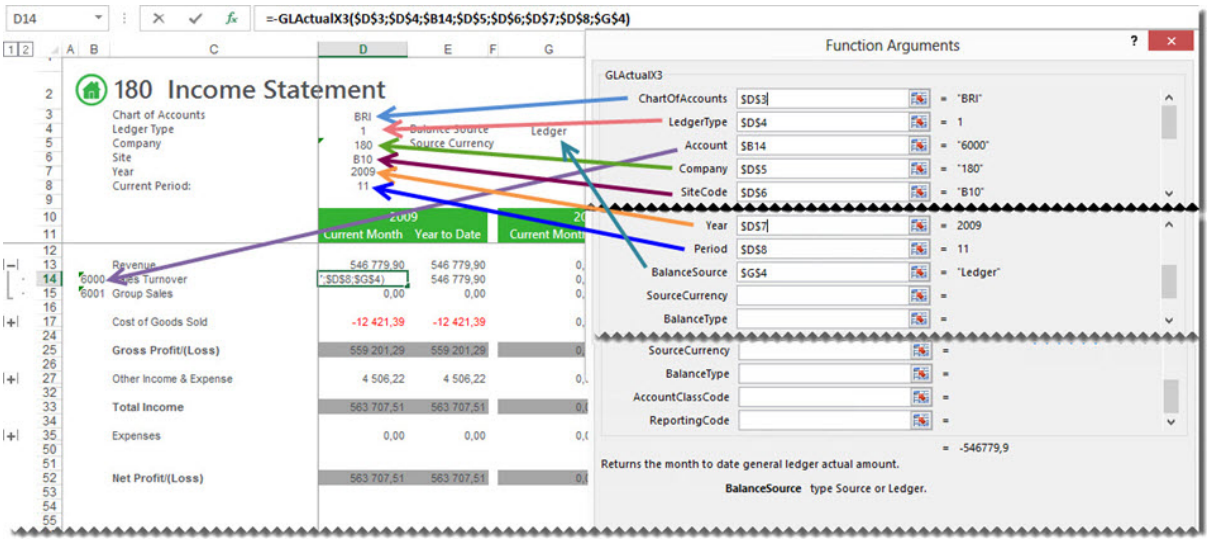
Remarks

- 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 Classes.
- 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 an **Actual** formula could be:

```
=-GLActualX3($D$3;$D$4;$B14;$D$5;$D$6;$D$7;$D$8;$G$4)
```



Actual YTD Formula

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

Description

The **Actual YTD** 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

```
=GLActualYTDX3(ChartOfAccounts,LedgerType,Account,Company,SiteCode,Year,Period,BalanceSource,SourceCurrency,BalanceType,AccountClassCode,ReportingCode)
```

The **Actual YTD** formula syntax has the following arguments:

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
ChartofAccounts	The chart of accounts code retrieved from the General Ledger.	Y	Filters the chart of accounts being referenced to a specific chart of accounts code. A chart of accounts may be shared by several ledgers.
LedgerType	The ledger type retrieved from the General Ledger.	Y	Filters the General Ledger type being referenced to a specific type. A ledger is the principal book for recording transactions. You can have the same or separate ledgers for tracking transactions and balances associated with the General Ledger or analytical ledger. A ledger combines a currency and a chart of accounts.
Account	The account code from the accounts or account classes list retrieved from the General Ledger.	N	Used to reference one or more General Ledger accounts for which values must be returned. Supports accounts, account ranges, account wildcards & account addition/subtraction.
Company	A company code retrieved from the General Ledger.	Y	Filters the General Ledger accounts being referenced to one or more specific companies. A Sage X3 General Ledger supports multiple companies and sites.

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
SiteCode	The site code retrieved from the General Ledger.	Y	Filters the General Ledger site code being referenced to a specific site code. A single company can have multiple sites. Use a comma to separate multiple site codes or use wildcards or ranges to define the list of sites.
Year	The fiscal year to return data on. The default is the current year in your General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific fiscal period. 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.
Period	The period to return data on. The default is the current period in the General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific period. A period is the operating cycle of a company for which accounting information is collected and reported. A period is the operating cycle of a company for which accounting information is collected and reported.
BalanceSource	Type **Source** or **Ledger**.	Y	Filters only the balance recorded in source currency (Source) or balance recorded in ledger currency (Ledger) to be returned.
SourceCurrency	The source currency retrieved from the General Ledger.	N	Filters the General Ledger account source currency being referenced to a specific source currency.
BalanceType	Type **Debit** or **Credit**.	N	Filters only the credit or debit balances to be returned for the accounts which are being referenced by this formula.
AccountClassCode	An account class retrieved from the General Ledger.	N	Filters the General Ledger accounts according to account classes which are assigned to accounts and account groups and determine if the account is a Balance Sheet or Profit & Loss account, the default sign, and the analytic sense. Account classes represent the different sections of financial statements such as Assets and Liabilities.

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
ReportingCode	The reporting code retrieved from the General Ledger	N	Filters the General Ledger accounts to a specific reporting code

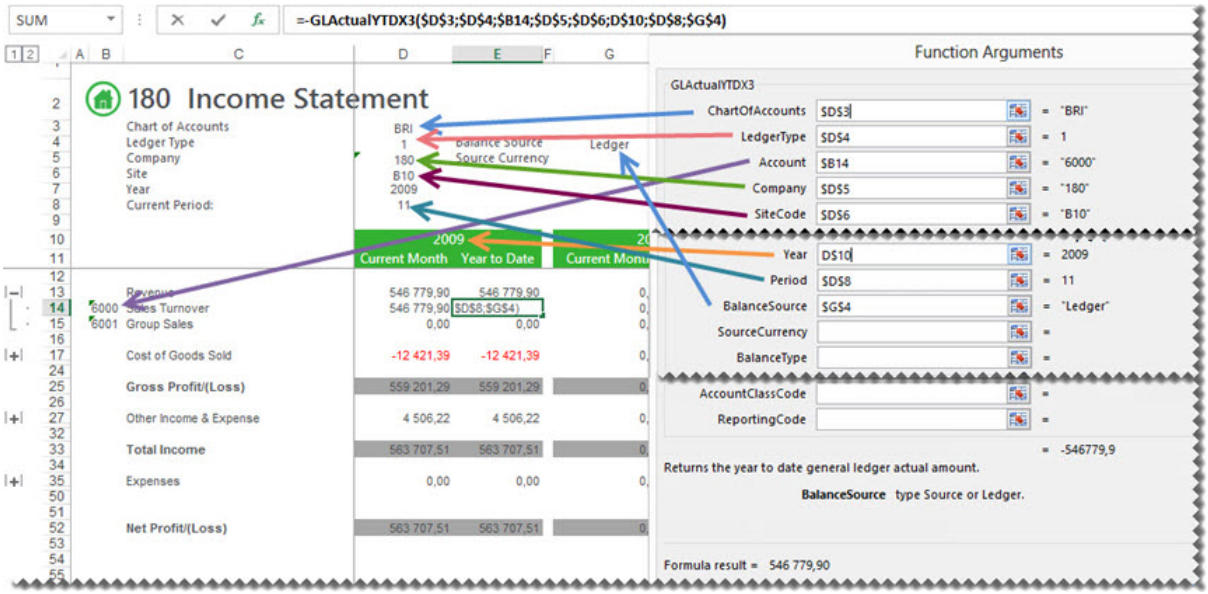
Remarks

- 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 Classes.
- 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 an **Actual YTD** formula could be:

```
=-GLActualYTDX3($D$3;$D$4;$B14;$D$5;$D$6;D$10;$D$8;$G$4)
```



Actual (Analytical) Formula

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

Description

The **Actual (Analytical)** 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

```
=AnGLActualX3(ChartOfAccounts,LedgerType,Account,Company,SiteCode,Year,Period,BalanceSource,SourceCurrency,BalanceType,AccountClassCode,ReportingCode,Dimension,ReportTreeUnitPath)
```

The **Actual (Analytical)** formula syntax has the following arguments:

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
ChartofAccounts	The chart of accounts code retrieved from the General Ledger.	Y	Filters the chart of accounts being referenced to a specific chart of accounts code. A chart of accounts may be shared by several ledgers.
LedgerType	The ledger type retrieved from the General Ledger.	Y	Filters the General Ledger type being referenced to a specific type. A ledger is the principal book for recording transactions. You can have the same or separate ledgers for tracking transactions and balances associated with the General Ledger or analytical ledger. A ledger combines a currency and a chart of accounts.
Account	The account code from the accounts or account classes list retrieved from the General Ledger.	N	Used to reference one or more General Ledger accounts for which values must be returned. Supports accounts, account ranges, account wildcards & account addition/subtraction.
Company	A company code retrieved from the General Ledger.	Y	Filters the General Ledger accounts being referenced to one or more specific companies. A Sage X3

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
			General Ledger supports multiple companies and sites.
SiteCode	The site code retrieved from the General Ledger.	Y	Filters the General Ledger site code being referenced to a specific site code. A single company can have multiple sites. Use a comma to separate multiple site codes or use wildcards or ranges to define the list of sites.
Year	The fiscal year to return data on. The default is the current year in your General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific fiscal period. 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.
Period	The period to return data on. The default is the current period in the General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific period. A period is the operating cycle of a company for which accounting information is collected and reported. A period is the operating cycle of a company for which accounting information is collected and reported.
BalanceSource	Type **Source** or **Ledger**.	Y	Filters only the balance recorded in source currency (Source) or balance recorded in ledger currency (Ledger) to be returned.
SourceCurrency	The source currency retrieved from the General Ledger.	N	Filters the General Ledger account source currency being referenced to a specific source currency.
BalanceType	Type **Debit** or **Credit**.	N	Filters only the credit or debit balances to be returned for the accounts which are being referenced by this formula.
AccountClassCode	An account class retrieved from the General Ledger.	N	Filters the General Ledger accounts according to account classes which are assigned to accounts and account groups and determine if the account is a Balance Sheet or Profit & Loss account, the default sign, and the analytic sense. Account classes represent the different

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
			sections of financial statements such as Assets and Liabilities.
ReportingCode	The reporting code retrieved from the General Ledger	N	Filters the General Ledger accounts to a specific reporting code
Dimension	Dimension Type=Dimension Code, Dimnsion Code… ; DimType=DimCode, DimCode… For example: DPT=SALES, FIN; LOCATION=NORTH, WEST	N	Filters the General Ledger data based on dimension types with their associated dimension codes that are set up in Sage X3. Wildcards or Ranges can be used to define the list of Dimension values.
ReportTreeUnitPath	A reporting tree unit in the format: Treename>Parent>Parent>unit. For example, Worldwide Enterprises>New York>NY Sales>NY Retail Sales	N	Used to achieve organizational reporting. Allows the account filter rule within one of a reporting tree's units to be applied to the formula.

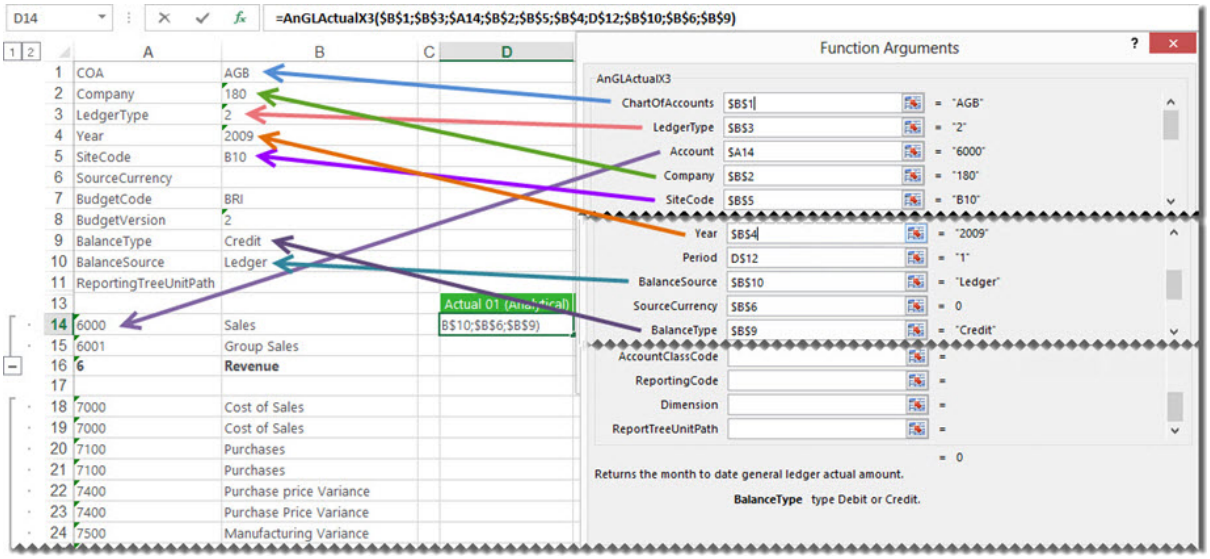
Remarks

- 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 Classes.
- 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 an **Actual (Analytical)** formula could be:

```
=AnGLActualX3($B$1;$B$3;$A14;$B$2;$B$5;$B$4;D$12;$B$10;$B$6;$B$9)
```



Actual YTD (Analytical) Formula

This topic describes the formula syntax and usage of the **Actual YTD (Analytical)** formula in Microsoft Excel. The **Actual YTD (Analytical)** formula is made available in Microsoft Excel by the Report Designer.

Description

The **Actual YTD (Analytical)** 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

```
=AnGLActualYTDX3(ChartOfAccounts,LedgerType,Account,Company,SiteCode,Year,Period,BalanceSource,SourceCurrency,BalanceType,AccountClassCode,ReportingCode,Dimension,ReportTreeUnitPath)
```

The **Actual YTD (Analytical)** formula syntax has the following arguments:

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
ChartofAccounts	The chart of accounts code retrieved from the General Ledger.	Y	Filters the chart of accounts being referenced to a specific chart of accounts code. A chart of accounts may be shared by several ledgers.
LedgerType	The ledger type retrieved from the General Ledger.	Y	Filters the General Ledger type being referenced to a specific type. A ledger is the principal book for recording transactions. You can have the same or separate ledgers for tracking transactions and balances associated with the General Ledger or analytical ledger. A ledger combines a currency and a chart of accounts.
Account	The account code from the accounts or account classes list retrieved from the General Ledger.	N	Used to reference one or more General Ledger accounts for which values must be returned. Supports accounts, account ranges, account wildcards & account addition/subtraction.
Company	A company code retrieved from the General Ledger.	Y	Filters the General Ledger accounts being referenced to one or more specific companies. A Sage X3

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
			General Ledger supports multiple companies and sites.
SiteCode	The site code retrieved from the General Ledger.	Y	Filters the General Ledger site code being referenced to a specific site code. A single company can have multiple sites. Use a comma to separate multiple site codes or use wildcards or ranges to define the list of sites.
Year	The fiscal year to return data on. The default is the current year in your General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific fiscal period. 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.
Period	The period to return data on. The default is the current period in the General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific period. A period is the operating cycle of a company for which accounting information is collected and reported. A period is the operating cycle of a company for which accounting information is collected and reported.
BalanceSource	Type **Source** or **Ledger**.	Y	Filters only the balance recorded in source currency (Source) or balance recorded in ledger currency (Ledger) to be returned.
SourceCurrency	The source currency retrieved from the General Ledger.	N	Filters the General Ledger account source currency being referenced to a specific source currency.
BalanceType	Type **Debit** or **Credit**.	N	Filters only the credit or debit balances to be returned for the accounts which are being referenced by this formula.
AccountClassCode	An account class retrieved from the General Ledger.	N	Filters the General Ledger accounts according to account classes which are assigned to accounts and account groups and determine if the account is a Balance Sheet or Profit & Loss account, the default sign, and the analytic sense. Account classes represent the different

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
			sections of financial statements such as Assets and Liabilities.
ReportingCode	The reporting code retrieved from the General Ledger	N	Filters the General Ledger accounts to a specific reporting code
Dimension	Dimension Type=Dimension Code, Dimnsion Code… ; DimType=DimCode, DimCode… For example: DPT=SALES, FIN; LOCATION=NORTH, WEST	N	Filters the General Ledger data based on dimension types with their associated dimension codes that are set up in Sage X3. Wildcards or Ranges can be used to define the list of Dimension values.
ReportTreeUnitPath	A reporting tree unit in the format: Treename>Parent>Parent>unit. For example, Worldwide Enterprises>New York>NY Sales>NY Retail Sales	N	Used to achieve organizational reporting. Allows the account filter rule within one of a reporting tree's units to be applied to the formula.

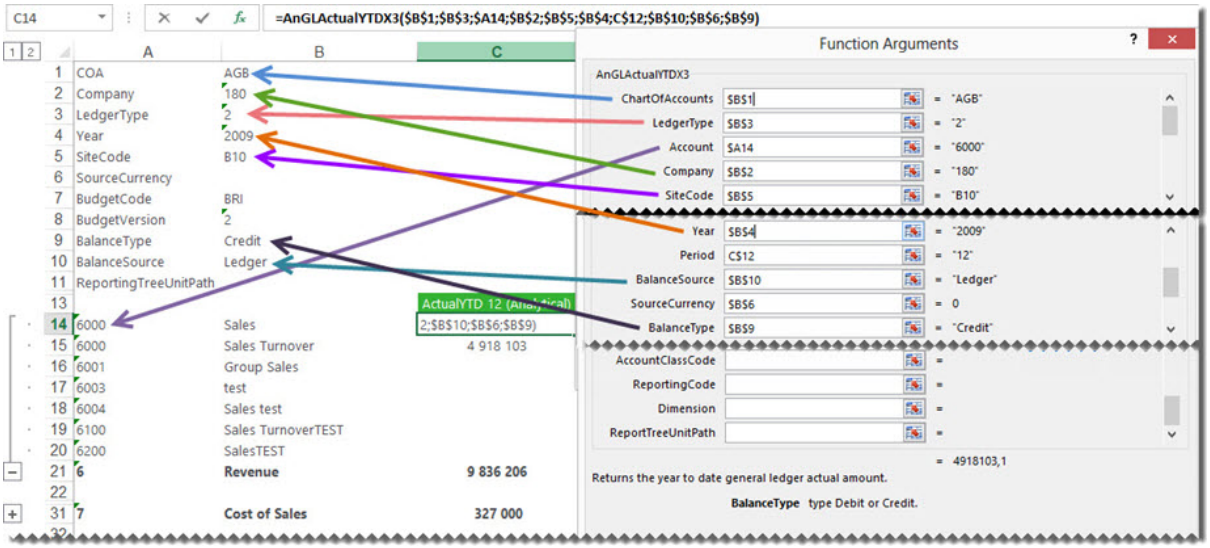
Remarks

- 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 Classes.
- 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 an **Actual YTD (Analytical)** formula could be:

```
=AnGLActualYTDX3($B$1;$B$3;$A14;$B$2;$B$5;$B$4;C$12;$B$10;$B$6;$B$9)
```



Budget (Analytical) Formula

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

Description

The **Budget (Analytical)** 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

```
=AnGLBudgetX3(ChartOfAccounts,LedgerType,Account,Company,SiteCode,Year,Period,
AccountClassCode,ReportingCode,BudgetCode,BudgetVersion,Dimension,ReportTreeUn
itPath)
```

The **Budget (Analytical)** formula syntax has the following arguments:

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
ChartofAccounts	The chart of accounts code retrieved from the General Ledger.	Y	Filters the chart of accounts being referenced to a specific chart of accounts code. A chart of accounts may be shared by several ledgers.
LedgerType	The ledger type retrieved from the General Ledger.	Y	Filters the General Ledger type being referenced to a specific type. A ledger is the principal book for recording transactions. You can have the same or separate ledgers for tracking transactions and balances associated with the General Ledger or analytical ledger. A ledger combines a currency and a chart of accounts.
Account	The account code from the accounts or account classes list retrieved from the General Ledger.	N	Used to reference one or more General Ledger accounts for which values must be returned. Supports accounts, account ranges, account wildcards & account addition/subtraction.
Company	A company code retrieved from the General Ledger.	Y	Filters the General Ledger accounts being referenced to one or more specific companies. A Sage X3 General Ledger supports multiple companies and sites.

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
SiteCode	The site code retrieved from the General Ledger.	Y	Filters the General Ledger site code being referenced to a specific site code. A single company can have multiple sites. Use a comma to separate multiple site codes or use wildcards or ranges to define the list of sites.
Year	The fiscal year to return data on. The default is the current year in your General Ledger. This is a mandatory argument.	Y	Filters the General Ledger accounts being referenced to a specific fiscal period. 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.
Period	The period to return data on.	Y	Filters the General Ledger accounts being referenced to a specific period. A period is the operating cycle of a company for which accounting information is collected and reported. A period is the operating cycle of a company for which accounting information is collected and reported.
AccountClassCode	An account class retrieved from the General Ledger.	N	Filters the General Ledger accounts according to account classes which are assigned to accounts and account groups and determine if the account is a Balance Sheet or Profit & Loss account, the default sign, and the analytic sense. Account classes represent the different sections of financial statements such as Assets and Liabilities.
ReportingCode	The reporting code retrieved from the General Ledger	N	Filters the General Ledger accounts to a specific reporting code
BudgetCode	A budget code retrieved from the General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific budget code. Budget codes identify the budget, define the controls, and determine for which chart of accounts and dimension types budgets are defined. Budgets can be defined based on dimension views, at various grouping levels, in the company currency or multiple currencies, in financial and quantity form, and with an unlimited number of revisions.

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
BudgetVersion	A budget version retrieved from the General Ledger	Y	Filters the General Ledger accounts being referenced to a specific budget version. Multiple versions of the same budget can be entered and maintained.
Dimension	Dimension Type=Dimension Code, Dimnsion Code… ; DimType=DimCode , DimCode… For example: DPT=SALES, FIN; LOCATION=NORTH, WEST	N	Filters the General Ledger data based on dimension types with their associated dimension codes that are set up in Sage X3. Wildcards or Ranges can be used to define the list of Dimension values.
ReportTreeUnitPath	A reporting tree unit in the format: Treename>Parent>Parent>unit. For example, Worldwide Enterprises>New York>NY Sales>NY Retail Sales	N	Used to achieve organizational reporting. Allows the account filter rule within one of a reporting tree's units to be applied to the formula.

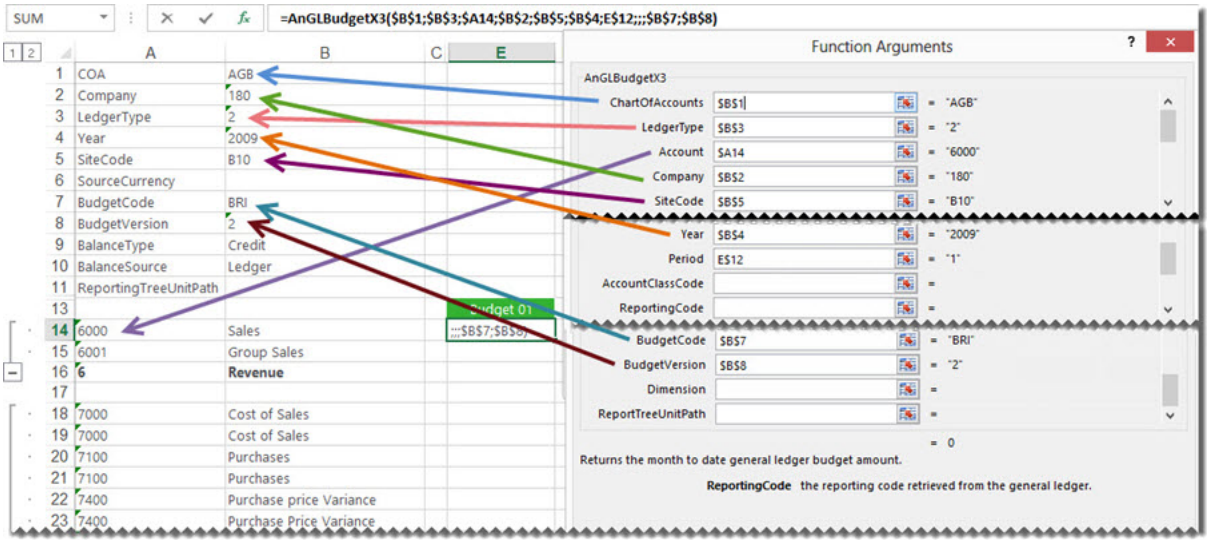
Remarks

- 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 Classes.
- 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 **Budget (Analytical)** formula could be:

```
=AnGLBudgetX3($B$1,$B$3,$A16,$B$2,$B$5,$B$4,E$14,$B$7,$B$8)
```



Budget YTD (Analytical) Formula

This topic describes the formula syntax and usage of the **Budget YTD (Analytical)** formula in Microsoft Excel. The **Budget YTD (Analytical)** formula is made available in Microsoft Excel by the Report Designer.

Description

The **Budget YTD (Analytical)** 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

```
=AnGLBudgetYTDX3(ChartOfAccounts,LedgerType,Account,Company,SiteCode,Year,Period,BudgetCode,BudgetVersion,AccountClassCode,ReportingCode,Dimension,ReportTreeUnitPath)
```

The **Budget YTD (Analytical)** formula syntax has the following arguments:

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
ChartofAccounts	The chart of accounts code retrieved from the General Ledger.	Y	Filters the chart of accounts being referenced to a specific chart of accounts code. A chart of accounts may be shared by several ledgers.
LedgerType	The ledger type retrieved from the General Ledger.	Y	Filters the General Ledger type being referenced to a specific type. A ledger is the principal book for recording transactions. You can have the same or separate ledgers for tracking transactions and balances associated with the General Ledger or analytical ledger. A ledger combines a currency and a chart of accounts.
Account	The account code from the accounts or account classes list retrieved from the General Ledger.	N	Used to reference one or more General Ledger accounts for which values must be returned. Supports accounts, account ranges, account wildcards & account addition/subtraction.
Company	A company code retrieved from the	Y	Filters the General Ledger accounts being referenced to one or more specific companies. A Sage X3

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
	General Ledger.		General Ledger supports multiple companies and sites.
SiteCode	The site code retrieved from the General Ledger.	Y	Filters the General Ledger site code being referenced to a specific site code. A single company can have multiple sites. Use a comma to separate multiple site codes or use wildcards or ranges to define the list of sites.
Year	The fiscal year to return data on. The default is the current year in your General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific fiscal period. 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.
Period	The period to return data on. The default is the current period in the General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific period. A period is the operating cycle of a company for which accounting information is collected and reported. A period is the operating cycle of a company for which accounting information is collected and reported.
BudgetCode	A budget code retrieved from the General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific budget code. Budget codes identify the budget, define the controls, and determine for which chart of accounts and dimension types budgets are defined. Budgets can be defined based on dimension views, at various grouping levels, in the company currency or multiple currencies, in financial and quantity form, and with an unlimited number of revisions.
BudgetVersion	A budget version retrieved from the General Ledger	Y	Filters the General Ledger accounts being referenced to a specific budget version. Multiple versions of the same budget can be entered and maintained.
AccountClassCode	An account class retrieved from the General Ledger.	N	Filters the General Ledger accounts according to account classes which are assigned to accounts and account groups and determine if the account is a Balance Sheet or Profit & Loss account, the default sign, and

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
			The analytic sense. Account classes represent the different sections of financial statements such as Assets and Liabilities.
ReportingCode	The reporting code retrieved from the General Ledger	N	Filters the General Ledger accounts to a specific reporting code
Dimension	Dimension Type=Dimension Code, Dimnsion Code… ; DimType=DimCode, DimCode… For example: DPT=SALES, FIN; LOCATION=NORTH, WEST	N	Filters the General Ledger data based on dimension types with their associated dimension codes that are set up in Sage X3. Wildcards or Ranges can be used to define the list of Dimension values.
ReportTreeUnitPath	A reporting tree unit in the format : Treename>Parent>Parent>unit. For example, Worldwide Enterprises>New York>NY Sales>NY Retail Sales	N	Used to achieve organizational reporting. Allows the account filter rule within one of a reporting tree's units to be applied to the formula.

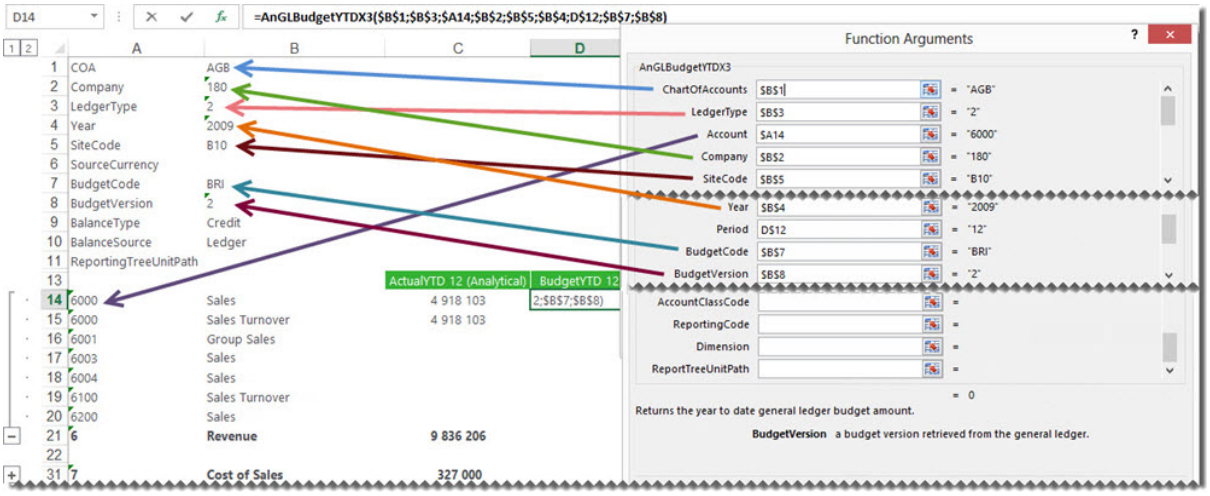
Remarks

- 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 Classes.
- 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 **Budget YTD (Analytical)** formula could be:

```
=AnGLBudgetYTDX3($B$1;$B$3;$A14;$B$2;$B$5;$B$4;D$12;$B$7;$B$8)
```



Current Year Formula

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

Description

The **Current Year** 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

```
=GLCurrentYearX3(Company)
```

The **Current Year** formula syntax has the following argument:

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

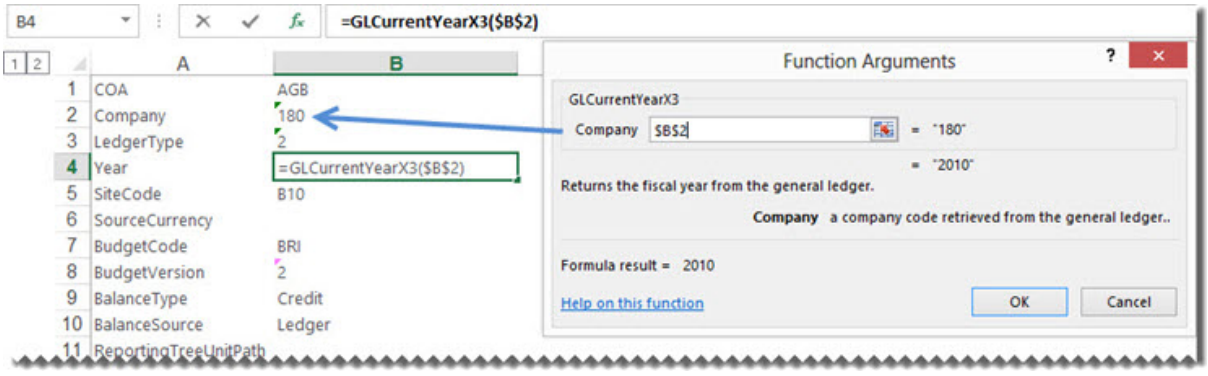
Remarks

- 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.

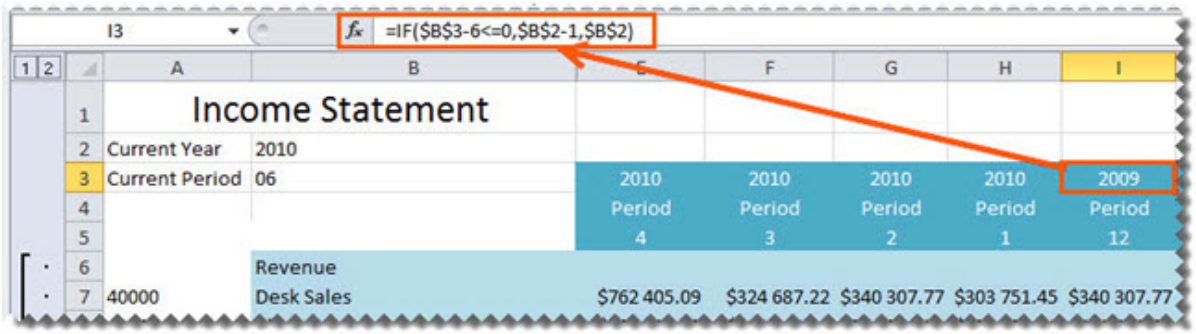
Example

An example of a **Current Year** formula could be:

```
=GLCurrentYearX3($B$2)
```



The **Current Year** can also 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 **Current Period** formula in Microsoft Excel. The **Current Period** formula is made available in Microsoft Excel by the Report Designer.

Description

The **Current Period** 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

```
=GLCurrentPeriodX3(Company)
```

The **Current Period** formula syntax has the following arguments:

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

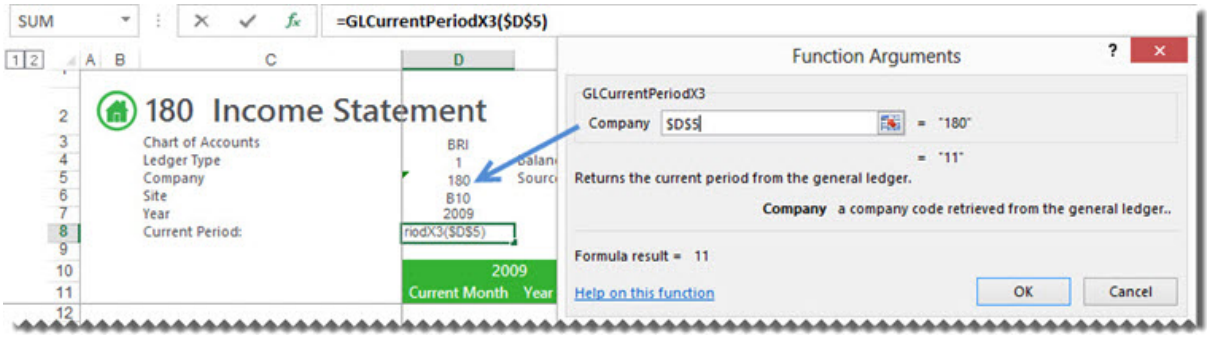
Remarks

- 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.

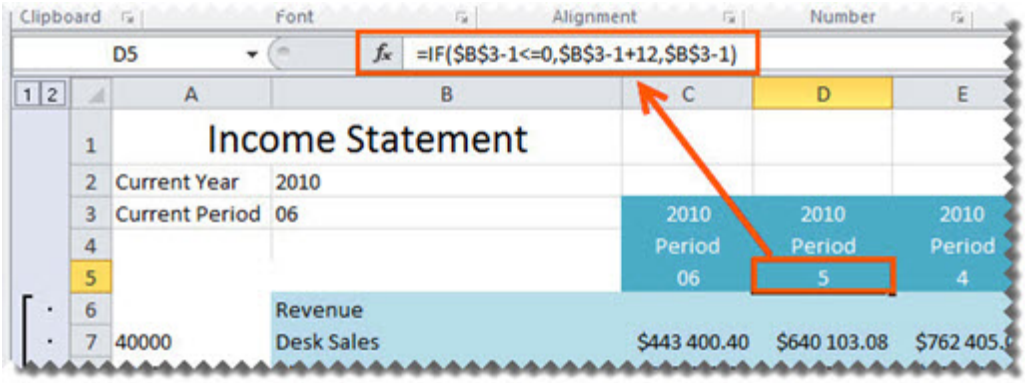
Example

An example of a **Current Period** formula could be:

```
=GLCurrentPeriodX3($D$5)
```



The **Current Period** 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 has been used to work out which periods to report on prior to it.



Exchange Rate Formula

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

Description

The **Exchange Rate** formula returns the exchange rate that is managed within Sage X3 after applying all the filters specified as arguments. Each argument can be a cell reference, a constant, or a named range.

Syntax

```
=GLExchangeRateX3(FromCurrencyCode,ToCurrencyCode,ExchangeRateType,Year,Period)
```

The **Exchange Rate** formula syntax has the following arguments:

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
FromCurrencyCode	The currency code retrieved from the General Ledger that you wish to convert from	Y	Filters the currency code retrieved from the General Ledger that you wish to convert from.
ToCurrencyCode	The currency code retrieved from the General Ledger that you wish to convert to	Y	Filters the currency code retrieved from the General Ledger that you wish to convert to.
ExchangeRateType	The exchange rate type, for example Daily or Monthly	Y	Used to return the daily or monthly exchange rate managed in Sage X3.
Year	The fiscal year to return data on. The default is the current year in your General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific fiscal period. 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.
Period	The period to return data on. The default is the current period in the General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific period. A period is the operating cycle of a company for which accounting information is collected and reported. A period

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
			is the operating cycle of a company for which accounting information is collected and reported.

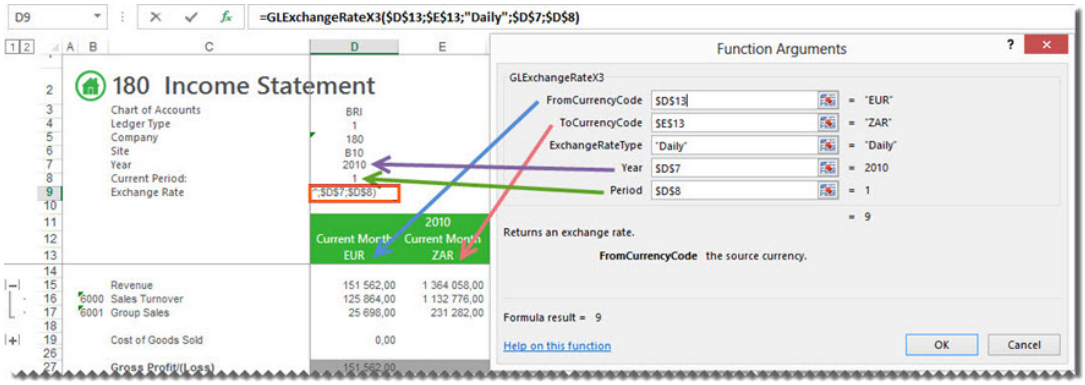
Remarks

- 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.
- To change the sign of an account to a negative number, add a minus sign (**-**) to the beginning of the formula.

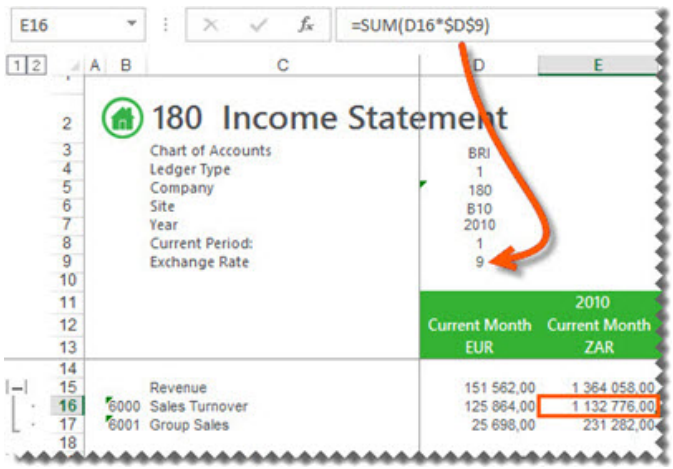
Example

An example of an **Exchange Rate** formula could be:

```
=GLExchangeRateX3($D$13;$E$13;"Daily";$D$7;$D$8)
```



The **Exchange Rate** formula can then be used to create multi-currency layouts.



Account Description Formula

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

Description

The **Account Description** formula returns the account description 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

```
=GLAccDescX3(AccountNumber)
```

The **Account Description** formula syntax has the following argument:

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
AccountNumber	An account number retrieved from the General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific account number

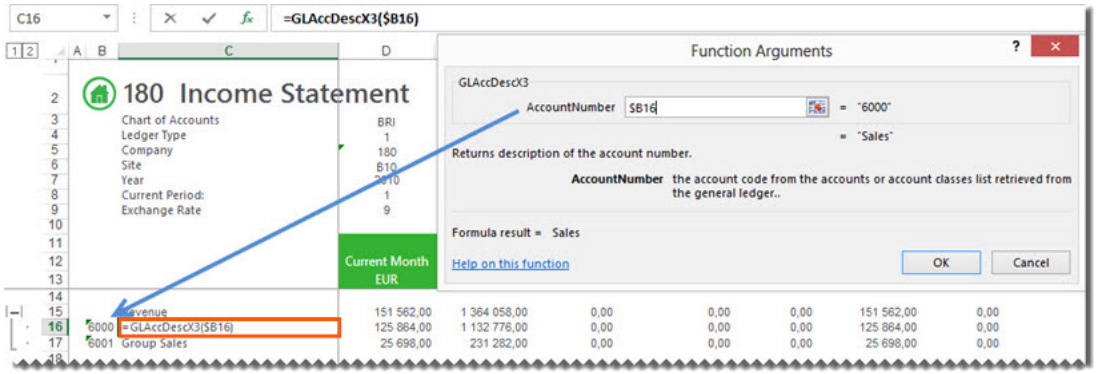
Remarks

- 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 an **Account Description** formula could be:

```
=GLAccDescX3($B16)
```



Account Class Formula

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

Description

The **Account Class** formula returns the Account Class Description 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

```
=GLAccClassDescX3(AccountClass)
```

The **Account Class** formula syntax has the following argument:

Filter	What needs to be filled in?	Mandatory	What is the purpose of the filter?
AccountClass	An account class retrieved from the General Ledger.	Y	Filters the General Ledger accounts being referenced to a specific account class.

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 an **Account Class** formula could be:

```
=GLAccClassDescX3($A17)
```