



Sage 300 Intelligence Reporting Editing an Existing Report Template to include Dynamic Ranges

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About Dynamic Account Ranges

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

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

To set up dynamic account ranges, you will need to first [edit existing report template](#) and [set up the dynamic ranges](#), and then [refresh](#) to automatically populate all of the latest general ledger accounts.

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

- [Using the **Set Up** Button on the **Tools** tab in the task pane.](#)
- [Typing the Dynamic Range into the active sheet.](#)
- [Using the Excel Functions option.](#)

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

Editing an Existing Report Template to use Dynamic Ranges

If you've previously created a layout using the Report Designer Add-in, there are some changes you'll need to make to these layouts before you can set up dynamic ranges.

You'll need to ensure:

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

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

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



	2018		2019		Current Month
	Current Month	Year To Date	Current Month	Year To Date	
Revenue	571,12	4,622,948.79	228,415.88	8,285,259.73	224,027.55
Cost of Sales	4,487.20	485,913.66	91,281.38	2,183,231.72	(76,862.1)
Goods Purchased	0.00	2,210,536.16	164,823.72	4,130,166.08	167,062.6
Other Revenue	117.80	980,452.07	833,016.74	588,837.24	162,008.7
Total Income	0.00	4,787,497.20	257,150.24	6,681,775.25	207,174.0
Other Expenses	0.00	0.00	0.00	0.00	0.0
Other	0.00	0.00	0.00	0.00	0.0
Depreciation Expenses	0.00	280,800.00	48,000.00	240,800.00	180,008.0

3. Expand the **Revenue** heading and delete all the rows except the first one. This will become the **template row/range** that you are required to reference when setting up the Dynamic Range.
4. Repeat for the **Cost of Sales, Other Revenue, Other Expenses, Other, Depreciation Expenses, Fixed Charges, Interest Expense and Income Taxes** headings.

		2020		2019		Var
		Current Month	Year To Date	Current Month	Year To Date	Current Month
Revenue		577.12	4 622 048.79	235 415.08	8 298 369.73	(234 837.9)
4000 Sales		577.12	4 622 048.79	235 415.08	8 298 369.73	(234 837.9)
Cost of Sales		4 489.20	405 013.65	81 351.36	2 163 221.72	(76 862.1)
5000 Cost of goods sold		4 489.20	405 013.65	81 351.36	2 163 221.72	(76 862.1)
Gross Profit/(Loss)		(3 912.08)	4 217 035.14	154 063.72	6 135 148.01	(157 975.8)
Other Revenue		107.00	580 452.07	103 016.74	606 637.31	(102 909.7)
4200 Delivery revenue		107.00	580 452.07	103 016.74	606 637.31	(102 909.7)
Total Income		(3 805.08)	4 797 497.21	257 080.46	6 741 775.32	(650 885.5)
Other Expenses		0.00	0.00	0.00	0.00	0.0
5400 Internal Usage		0.00	0.00	0.00	0.00	0.0

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

The screenshot shows the 'formulas trees' pane on the right side of the spreadsheet. The 'Account Description' formula is highlighted in red in the pane. A red arrow points from this formula to cell B12 in the spreadsheet, which currently contains the text 'Account is required'.

6. Edit the formula to reference the correct account.

The screenshot shows the 'Function Arguments' dialog box for the 'GLAccountDescription300' formula. The 'Company' field is set to '\$E\$4' (containing 'SAMINC') and the 'Account' field is set to '\$B12' (containing '4000'). The dialog box also displays the formula result as '= Sales'.

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

8. Repeat this process for Structure Code

		2020		2019	
		Current Month	Year To Date	Current Month	Year To Date
Revenue		0.00	0.00	0.00	0.00
4000 Account is required	Account is required	0.00	0.00	0.00	0.00
Cost of Sales		4 499.20	405 813.65	81 351.36	2 163 221.72
5000 Cost of goods sold	ACC	4 499.20	405 813.65	81 351.36	2 163 221.72
Gross Profit/(Loss)		(4 499.20)	(405 813.65)	(81 351.36)	(2 163 221.72)
Other Revenue		107.00	580 402.07	103 016.74	606 637.31
4200 Delivery revenue	ACC	107.00	580 402.07	103 016.74	606 637.31
Total Income		(4 392.20)	(175 411.58)	(21 666.38)	(1 556 584.41)
Other Expenses		0.00	0.00	0.00	0.00

9. Create a new worksheet.

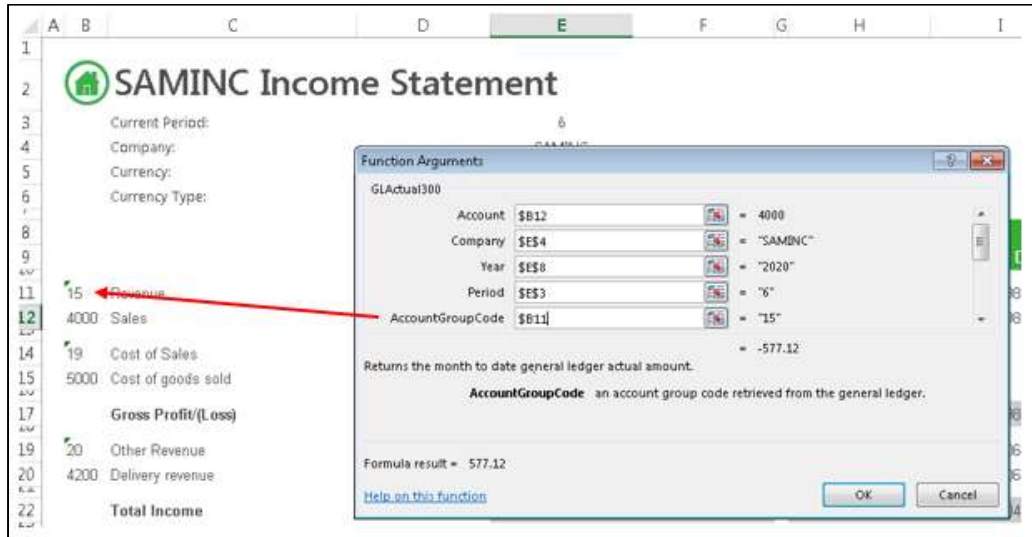
10. Drag the **Account Groups** list onto your sheet. You'll use these account groups in your layout.

Company	Account Gr	Account Group Name	Sort Code	Group Code	Group Category Description
SAMINC	01	Cash and Cash Equivalents	01	10	Cash and Cash Equivalents
SAMINC	02	Accounts Receivable	02	20	Accounts Receivable
SAMINC	03	Inventory	03	30	Inventory
SAMINC	04	Other Current Assets	04	40	Other Current Assets
SAMINC	05	Fixed Assets	05	50	Fixed Assets
SAMINC	06	Accumulated Depreciation	06	60	Accumulated Depreciation
SAMINC	07	Other Assets	07	70	Other Assets
SAMINC	08	Accounts Payable	08	80	Accounts Payable
SAMINC	09	Other Current Liabilities	09	90	Other Current Liabilities
SAMINC	10	Long Term Liabilities	10	100	Long Term Liabilities
SAMINC	11	Dividends	11	110	Other Liabilities
SAMINC	12	Share Capital	12	120	Share Capital
SAMINC	13	Shareholders' Equity	13	130	Shareholders Equity
SAMINC	14	Revenue	14	140	Revenue
SAMINC	15	Cost of Sales	15	150	Cost of Sales

11. Add the relevant account types to the headings. Best practice is to add it above the Account Number Cell. Type the Relevant Heading into the cell next to it. (Revenue, Cost of Goods Sold etc.)

15	Revenue	
4000	Sales	ACC
19	Cost of Sales	
5000	Cost of goods sold	ACC
	Gross Profit/(Loss)	
20	Other Revenue	
4200	Delivery revenue	ACC
	Total Income	
22	Other Expenses	
5400	Internal Usage	ACC

- Edit the formulas (in your template row) to also refer to the correct account group code.



- Ensure all of the formulas in the sheet have been edited to include the account group code.

			2020		2019	
			Current Month	Year To Date	Current Month	Year To Date
15	Revenue		577.12	4 622 048.79	235 415.08	8 298 359.73
12	4000 Sales	ACC	577.12	4 622 048.79	235 415.08	8 298 359.73
14	19 Cost of Sales		4 489.20	405 013.65	81 351.36	2 163 221.72
15	5000 Cost of goods sold	ACC	4 489.20	405 013.65	81 351.36	2 163 221.72
17	Gross Profit/(Loss)		(3 912.08)	4 217 035.14	154 063.72	6 135 138.01
19	20 Other Revenue		107.00	590 462.07	103 016.74	606 637.31
20	4200 Delivery revenue	ACC	107.00	590 462.07	103 016.74	606 637.31
22	Total Income		(3 805.08)	4 797 497.21	257 080.46	6 741 775.32

- Save your worksheet.
- Now you're ready to [set up](#) dynamic account ranges in the usual manner.

		2020		2019
		Current Month	Year To Date	Current Month
15	Revenue	577.12	4,622,048.79	236,415.08
4000	Sales	577.12	4,622,048.79	236,415.08

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

Setting Up Dynamic Account Ranges

Setting Up Dynamic Account Ranges using the Task Pane functions

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

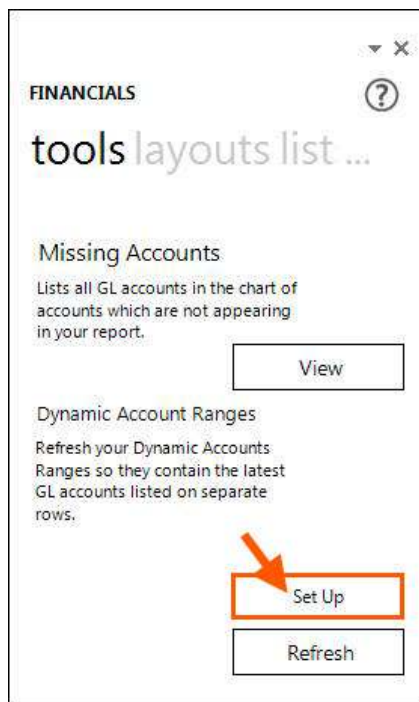
Note: You can only add Dynamic Ranges to the active sheet.

Before setting up dynamic account ranges you must [create the template in Microsoft Excel for dynamic ranges](#).

Using the Set Up Button on the tools tab in the task pane

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

1. On the **tools** tab on the task pane, select the **Set Up** option under **Dynamic Ranges**.





2. The **Dynamic Ranges** window will appear. Click the first ellipses to select the range of cells in Excel that contain your template row. This will be the row that the dynamic ranges will use to copy the formulas and parameters to the other rows that are added to the layout. All cells not selected in this range will not be form part of the dynamic expansion when Dynamic Ranges are refreshed and will thus remain static on the report.


FINANCIALS ?

← Dynamic Ranges


Select the range of cells in Excel worksheet that contain your template row

Select the column in Excel worksheet that will populate with your updated list of Accounts.



Select the cell in the Excel worksheet that contains the Account rule for this range.



Check the box below to exclude any rows that have zero balances in this range.

Exclude Zero Rows

Example below:

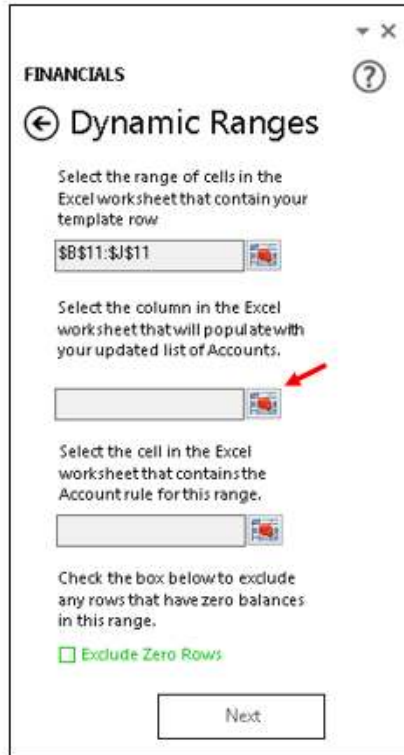
SAMINC Income Statement						
Company	SAMINC					
Year	2019					
Currency	USD					
		Period	Period	Period	Period	Period
		1	2	3	4	5
		Actual	Actual	Actual	Actual	Actual
15	Revenue	-9457661.65	-1009.60	-2604366.10	-1606330.27	-13750167.78
	Account is required	Account is required	-4.43833E-10	1.13687E-12	8.87667E-10	3.0559E-10
						7.50561E-10

Select Range

Please select a range:

=SB\$11:\$K\$11

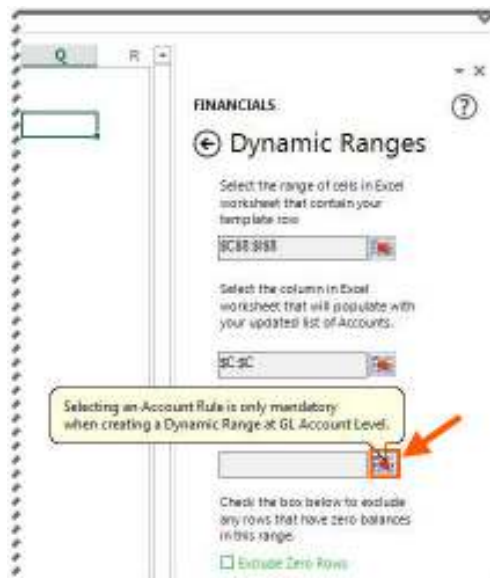
3. Absolute cell references will automatically be added for you. Click **OK**.
4. Now click the second ellipses to select the column in the Excel worksheet that will populate with your updated list of accounts.



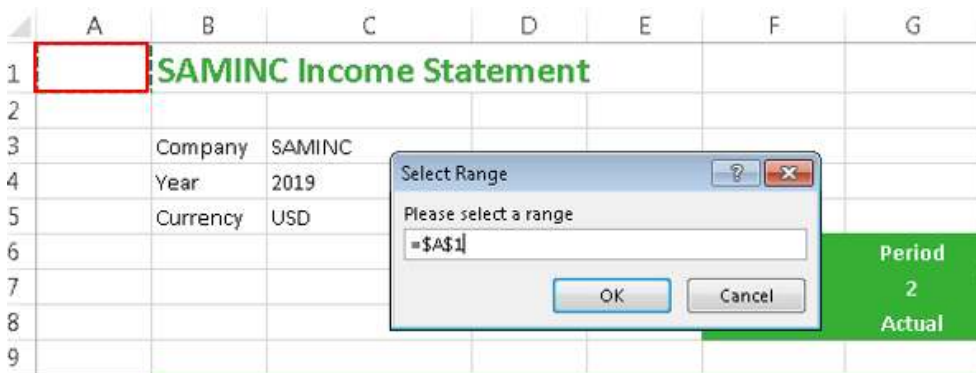
5. Example below:

SAMINC Income Statement			
Company	SAMINC		
Year	2019		
Currency	USD		
15	Revenue		-9457661.6
	Account is required	Account is required	-4.43833E-1
19	Cost of Sales		2963098.7
	Account is required	Account is required	
	Gross Profit		-12420760.3
20	Other Revenue		-425539.3

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



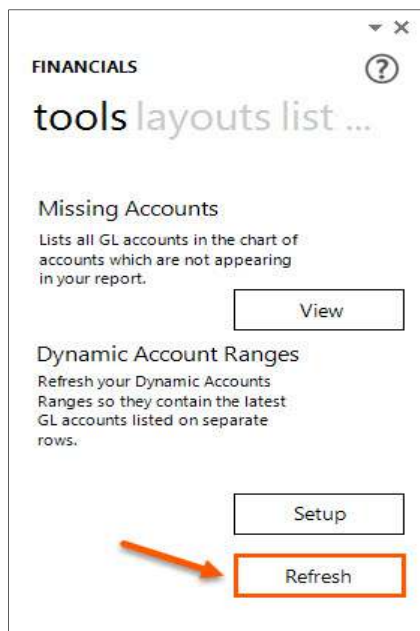
- Enable the **Exclude Zero Rows** option if you do not want to see account rows which have zero balances in all of the columns.
- Click **Next**. The **Select Range** window will appear. Select a cell in the active worksheet to save the dynamic ranges formula to. This can be any cell but top left is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



- Click **Finish**.
- Repeat the set up process for all Dynamic Ranges required in the active sheet. Example below:

Dynamic Range (B11:K11)		SAMINC Income Statement				
Dynamic Range (B14:K14)						
Dynamic Range (B19:K19)						
Company	SAMINC					
Year	2019					
Currency	USD					
		Period	Period	Period	Period	Total
		1	2	3	4	Quarter 1
		Actual	Actual	Actual	Actual	Actual
15	Revenue	-9457661.65	-1809.68	-2684366.18	-1606330.27	-13750167.78
	Account is required	-4.43833E-10	1.13687E-12	8.87667E-10	3.0559E-10	7.50561E-10
19	Cost of Sales	2963098.72	670.73	718343.83	688306.04	4370419.32
	Account is required	-4.43833E-10	1.13687E-12	8.87667E-10	3.0559E-10	7.50561E-10
	Gross Profit	-12420760.37	-2480.41	-3402710.01	-2294636.31	-18120587.1
20	Other Revenue	-425539.37	0	-205293.98	-215558.69	-846392.04
	Account is required	-4.43833E-10	1.13687E-12	8.87667E-10	3.0559E-10	7.50561E-10

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



- All of the general ledger accounts will be refreshed and available in your report.

	A	B	C	D	E	F	G	H	I	J	K
1	Dynamic Range (B11:K29)	SAMINC Income Statement									
2	Dynamic Range (B32:K49)										
3	Dynamic Range (B54:K179)	Company	SAMINC								
4		Year	2019								
5		Currency	USD								
6						Period	Period	Period	Period		Total
7						1	2	3	4		Quarter
8						Actual	Actual	Actual	Actual		Actual
9											
10		15	Revenue			-9457661.65	-1809.68	-2684366.18	-1606130.27		-137501
11		4000	Sales	ACC		7863548.14	0	1914625.54	796745.62		10574
12		4000-100	Sales	ACCDIV		612036.33	0	375422.6	394193.73		13816
13		4000-200	Sales	ACCDIV		373208.42	0	1348804.72	194044.95		19160
14		4010	Sales, accessories	ACC		56020.56	1809.68	26953.94	28363.32		113
15		4010-100	Sales, accessories	ACCDIV		25351.27	1809.68	12056.46	12659.78		518
16		4010-100-1	Sales, accessories	REGION		7434.04	195.78	3566.33	3767.25		14
17		4010-100-2	Sales, accessories	REGION		10905.25	0	5241.75	5482.75		216
18		4010-100-3	Sales, accessories	REGION		2956.04	0	1455.96	1544.2		5
19		4010-100-4	Sales, accessories	REGION		4095.94	1613.9	1792.42	1865.58		93
20		4010-200	Sales, accessories	ACCDIV		30669.29	0	14897.48	15703.54		612
21		4010-200-1	Sales, accessories	REGION		9457.44	0	4573.68	4806.24		188

Setting Up Dynamic Account Ranges Using the Excel Functions Option

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

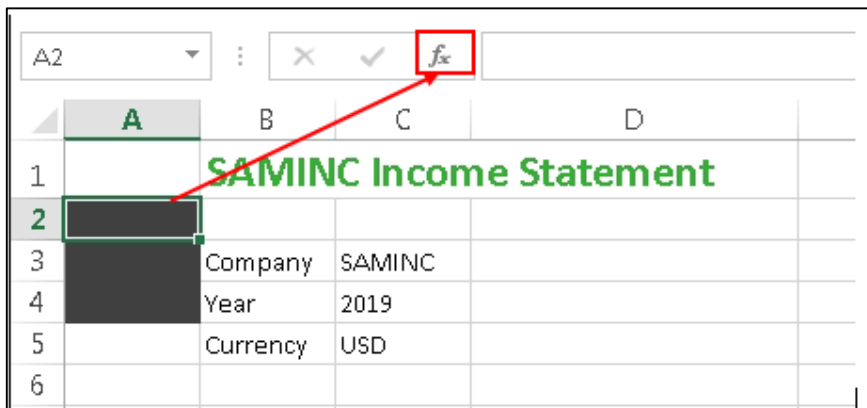
Note: You can only add Dynamic Ranges to the active sheet.

Before setting up dynamic account ranges you must [edit the existing template in Microsoft Excel for dynamic ranges](#).

Although using the [Set Up](#) option in the tools tab of the task pane is the easiest method to set up dynamic ranges, if you are familiar with Excel and understand how dynamic ranges work, you may find typing the formula in and editing its function arguments quicker.

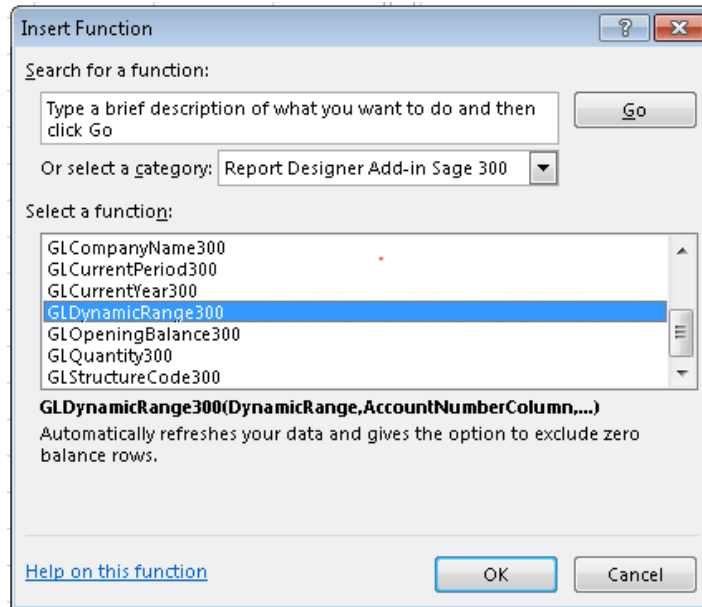
Using the Excel Functions (Fx) option

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

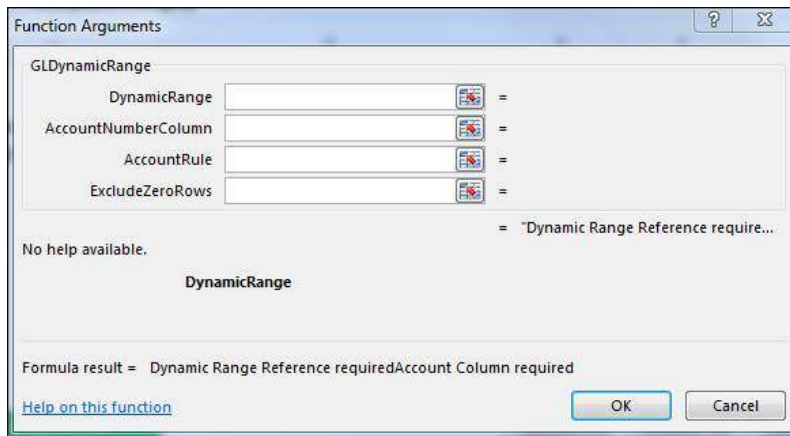


1. Select an empty cell in the active sheet. Top left is recommended.

2. Select **Insert Function**.
3. Select a category namely, Report Designer Add-In Sage 300.
4. Select a function from the list. **GLDynamicRange**



5. This will open the function arguments window for the **GLDynamicRange** function. You can now use this to set up your **GLDynamicRange** formula.



Setting Up Dynamic Account Ranges by Typing the Formula In

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

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

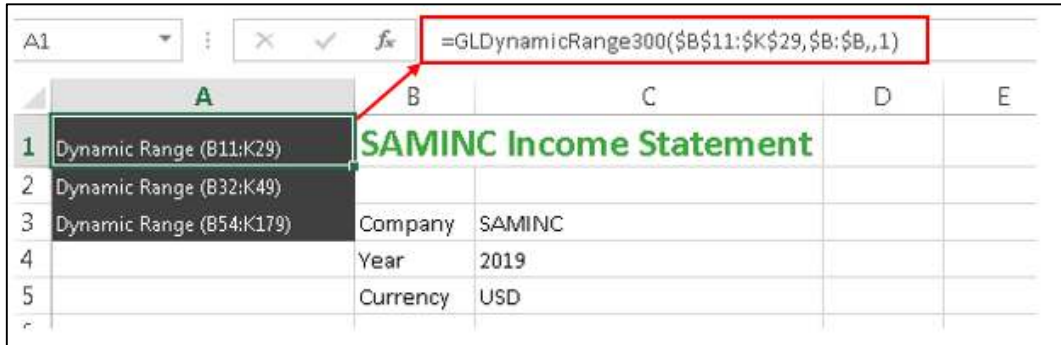
Before setting up dynamic account ranges you must [create the template in Microsoft Excel for dynamic ranges](#).

Although using the [Set Up](#) option in the **tools** tab of the task pane is the easiest method to set up dynamic ranges, if you are familiar with Excel and understand how dynamic ranges

work and the [syntax](#) of the dynamic ranges formula, you may find typing the formula directly in quicker.

Typing the Dynamic Range Function into the active sheet

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



Refreshing Dynamic Account Ranges

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



Refresh

If there are Dynamic Account Ranges in the active sheet and you click **Refresh**, Sage Intelligence Reporting will automatically update the financial layout with new accounts that may have been added to your Sage 300 general ledger.

Refreshing will also exclude any rows with a zero balance, if you have enabled this option in the [Set Up](#), or in the function arguments.

Dynamic Range Formula

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

Description

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

Syntax

```
=GLDynamicRange(DynamicRange,AccountNumberColumn,AccountRule, ExcludeZeroRows)
```

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

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

Remarks

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

Example

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

```
=GLDynamicRange300($B$11:$K$29,$B:$B,,1)
```

The screenshot shows an Excel spreadsheet with the following data:

	A	B	C	D	E	F	G
1		SAMINC Income Statement					
2		Company	SAMINC				
3		Year	2019				
4		Currency	USD				
5							
6							
7							
8							
9							
10		15	expense			-945,766.65	-189
11			Account is required	Account is required			
12		19	Cost of Sales			296,309.72	67
13			Account is required	Account is required			
14							
15							
16			Gross Profit			-1,249,766.37	-248
17							

The 'Function Arguments' dialog box for the **GLDynamicRange300** function is open, showing the following arguments:

- Account: \$B\$11
- Company: \$C\$3
- Year: \$C\$4
- Period: \$F\$7
- AccountGroupCode: \$B\$19
- AccountStructureCode: \$D\$11
- BalanceType: +
- CurrencyCode: \$C\$5
- CurrencyType: +
- ReportTreeLink: +

Below the arguments, it states: "Returns the month to date general ledger actual amount." and "Account: the account code from the main accounts or accounts list retrieved from the general ledger." The formula result is 0.

Troubleshooting Dynamic Account Ranges

XXXX-XXXX-XXXX

		Period 1	Period 2	Period 3	Period 4	Quarter 1
		Actual	Actual	Actual	Actual	Actual
5:	Revenue	0,00	0,00	0,00	0,00	0,00
	XXXX-XXXX-XXXX	0,00	0,00	0,00	0,00	0,00
12:	Cost of Sales:	444.579,89	492.067,39	1.089.024,90	803.132,21	2.828.804,39
50000-01-000-010-000	COS Desks:Irvine-Main-Steelcase	43.740,21	49.004,32	73.054,63	83.486,67	249.285,83
50000-02-001-010-000	COS Desks:Atlanta-Peach Ave.-Steelc	36.905,80	41.347,39	51.639,84	70.441,88	200.334,91

Why does this happen?

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

Solution

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

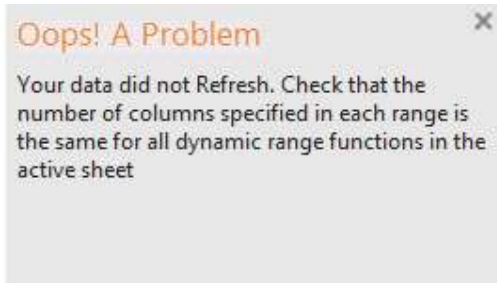
The screenshot shows an Excel spreadsheet titled "SAMINC Income Statement" with columns for Company, Year, Currency, and various account types. A "Function Arguments" dialog box is open for the "GLActual300" function. The dialog box contains the following arguments:

- Account: \$B11
- Company: \$C3
- Year: \$C4
- Period: P1
- AccountGroupCode: \$B19
- AccountStructureCode: \$D11
- BalanceType:
- CurrencyCode: \$C5
- CurrencyType:
- ReportTreeLink:

Red arrows point from the dialog box arguments to the corresponding cells in the spreadsheet. The spreadsheet shows the following data:

	Period 1	Period 2	Period 3	Period 4	Quarter 1
	Actual	Actual	Actual	Actual	Actual
15 Revenue	945769,45	109			
19 Cost of Sales	2963098,72	67			
Gross Profit	1247670,37	3488			

Your data did not Refresh.

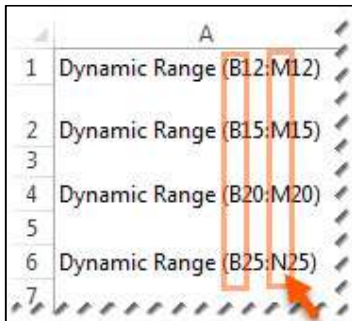


Why does this happen?

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

Solution

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



	A
1	Dynamic Range (B12:M12)
2	Dynamic Range (B15:M15)
3	
4	Dynamic Range (B20:M20)
5	
6	Dynamic Range (B25:N25)
7	

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