



# Sage 300 Intelligence Reporting Creating a Template for your Report that Uses Dynamic Account Ranges

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## Table of Contents

About Dynamic Account Ranges.....	1
Creating a Template for your Report that Uses Dynamic Account Ranges.....	3
Setting Up Dynamic Account Ranges .....	10
Setting Up Dynamic Account Ranges using the Task Pane function .....	10
Setting Up Dynamic Account Ranges Using the Excel Functions Option.....	15
Setting Up Dynamic Account Ranges by Typing the Formula In.....	17
Refreshing Dynamic Account Ranges.....	18
Refresh.....	18
Dynamic Range Formula .....	19
Troubleshooting Dynamic Account Ranges.....	21
xxxx-xxxx-xxxx .....	21
Your data did not Refresh.....	22

# 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 [create a template](#) and [set up the dynamic ranges](#), and then [refresh](#) to automatically populate all of the latest general ledger accounts.

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	Account is required	-4.43833E-10	1.13697E-12	8.87667E-10	3.0559E-10
19	Cost of Sales	2963098.72	670.73	718343.83	688306.04	4370419.32
	Account is required	Account is required	-4.43833E-10	1.13697E-12	8.87667E-10	3.0559E-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	Account is required	-4.43833E-10	1.13697E-12	8.87667E-10	3.0559E-10



Dynamic Range (B11:K29)		SAMINC Income Statement				
Dynamic Range (B32:K49)						
Dynamic Range (B54:K179)						
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
4000	Sales	ACC	7863548.14	0	1914625.54	796745.62
4000-100	Sales	ACCDIV	612036.33	0	375422.6	394193.73
4000-200	Sales	ACCDIV	373208.42	0	1348804.72	194044.95
4010	Sales, accessories	AOC	56020.56	1809.68	26953.94	28363.32
4010-100	Sales, accessories	ACCDIV	25351.27	1809.68	12056.46	12659.78
4010-100-1	Sales, accessories	REGION	7434.04	195.78	3566.33	3767.25
4010-100-2	Sales, accessories	REGION	10505.25	0	5241.75	5482.75
4010-100-3	Sales, accessories	REGION	2956.04	0	1455.96	1544.2
4010-100-4	Sales, accessories	REGION	4055.94	1613.9	1792.42	1865.58
4010-200	Sales, accessories	ACCDIV	30669.29	0	14897.48	15703.54
4010-200-1	Sales, accessories	REGION	9457.44	0	4573.68	4806.24

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.

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

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

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

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

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

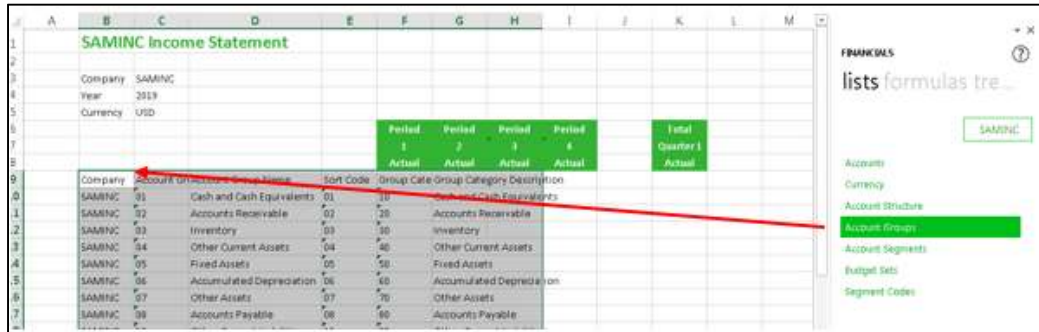
	A	B	C	D	E	F
1		<b>SAMINC Income Statement</b>				
2						
3		Company	SAMINC			
4		Year	2019			
5		Currency	USD			

2. Starting in cell **F6:F8**, create column headings for the data you'd like to report on.

	A	B	C	D	E	F	G	H	I	J	K
1		<b>SAMINC Income Statement</b>									
2											
3		Company	SAMINC								
4		Year	2019								
5		Currency	USD								
6						Period	Period	Period	Period	Total	
7						1	2	3	4	Quarter 1	
8						Actual	Actual	Actual	Actual	Actual	

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

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



4. Clear the headings and the balance sheet rows not required for this report.
5. Format the account type rows as headings, leaving an extra row where the list of accounts will later be populated.

	A	B	C	D	E	F	G	H	I	J	K
1		<b>SAMINC Income Statement</b>									
2											
3		Company	SAMINC								
4		Year	2019								
5		Currency	USD								
6						Period	Period	Period	Period		Total
7						1	2	3	4		Quarter 1
8						Actual	Actual	Actual	Actual		Actual
9											
10		15	<b>Revenue</b>								
11											
12											
13		19	<b>Cost of Sales</b>								
14											

6. Create Subtotal rows if required.

Creating a Template for your Report that Uses Dynamic Account Ranges

	A	B	C	D	E	F	G	H	I	J	K
1		<b>SAMINC Income Statement</b>									
2											
3		Company	SAMINC								
4		Year	2019								
5		Currency	USD								
6						Period	Period	Period	Period		Total
7						1	2	3	4		Quarter 1
8						Actual	Actual	Actual	Actual		Actual
9											
10		15	Revenue								
11											
12											
13		19	Cost of Sales								
14											
15											
16			Gross Profit								
17											
18		20	Other Revenue								
19											
20											
21		22	Other Expenses								
22											
23											
24			Net Profit								
25											

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

	A	B	C	D	E	F	G	H	
1		<b>SAMINC Income Statement</b>							
2									
3		Company	SAMINC						
4		Year	2019						
5		Currency	USD						
6						Period	Period	Period	
7						1	2	3	
8						Actual	Actual	Actual	
9									
10		15	Revenue						
11									
12									
13		19	Cost of Sales						
14									
15									
16			Gross Profit			=SUM(F10-F13)			

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

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

	A	B	C	D	E	F	G	H	I	J	K
1		<b>SAMINC Income Statement</b>									
2											
3		Company	SAMINC								
4		Year	2019								
5		Currency	USD								
6						Period	Period	Period	Period		Total
7						1	2	3	4		Quarter1
8						Actual	Actual	Actual	Actual		Actual
9											
10		15	Revenue								=SUM(F10:I10)
11											

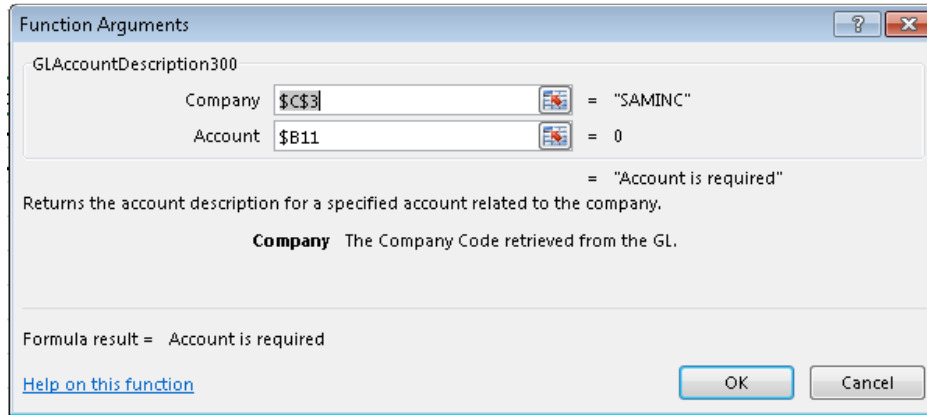
- When adding subtotals to, what will be, all of the account rows beneath it, ensure that you use ranges so that when the rows are populated, the subtotals include all of the rows.

	A	B	C	D	E	F	G	H	I	
1		<b>SAMINC Income Statement</b>								
2										
3		Company	SAMINC							
4		Year	2019							
5		Currency	USD							
6						Period	Period	Period	Period	
7						1	2	3	4	
8						Actual	Actual	Actual	Actual	
9										
10		15	Revenue			0	0	0	0	

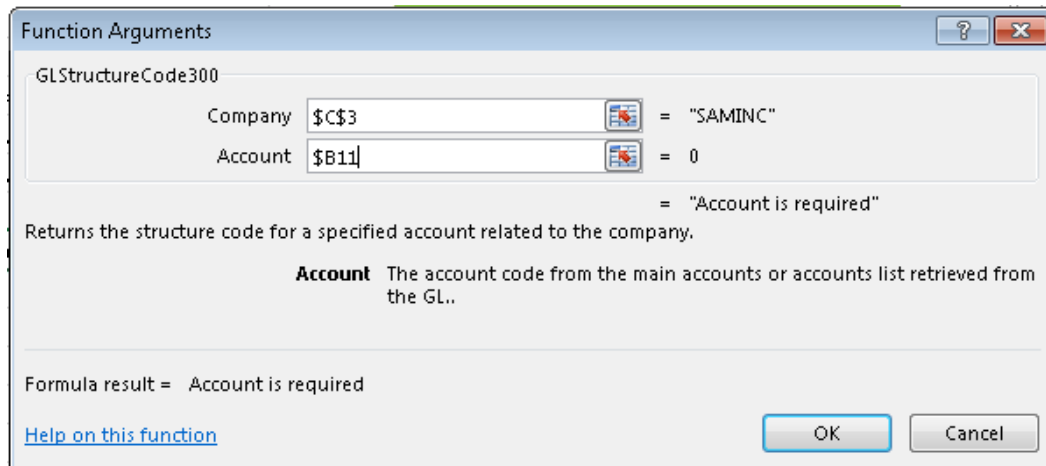
- Now we are going to add the template row where our accounts are going to be listed. We need to add this row so Sage Intelligence Reporting knows what details we want to see for each account. Click cell C11 and add the **Account Description** formula and then cell D11 and add the **Structure Code** formula.
- The **Account Description** formula is a new formula found under Formulas in the Task Pane.
- Edit the formula to connect to the correct formula arguments. Cell B11 is where our account number will be listed.



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



13. The **Structure Code** formula is a new formula found under Formulas in the Task Pane.
14. Edit the formula to connect to the correct formula arguments. Cell **B11** is where our account number will be listed.



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

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

Creating a Template for your Report that Uses Dynamic Account Ranges

SAMINC Income Statement				
Company	SAMINC			
Year	2019			
Currency	USD			
15	Revenue			
	Account is required	Account is required		
19	Cost of Sales			
	Account is required	Account is required		
	Gross Profit			
20	Other Revenue			
	Account is required	Account is required		
22	Other Expenses			
	Account is required	Account is required		

16. Drag and Drop the **Actual** formula onto your spreadsheet in the first row under the first period.



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

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

The screenshot shows an Excel spreadsheet titled "SAMINC Income Statement" with a "Function Arguments" dialog box open. The spreadsheet has columns for Company, Year, Currency, Period, and Actual. The dialog box shows the formula =GLActual300(\$B11,\$C\$3,\$C\$4,\$F\$7) and its arguments: Account (\$B11), Company (\$C\$3), Year (\$C\$4), Period (\$F\$7), AccountGroupCode (\$B\$10), AccountStructureCode (\$D\$10), BalanceType, CurrencyCode (\$C\$5), and ReportFreeLimit. Arrows point from the dialog box arguments to the corresponding cells in the spreadsheet.

**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.

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

# Setting Up Dynamic Account Ranges

## Setting Up Dynamic Account Ranges using the Take 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.

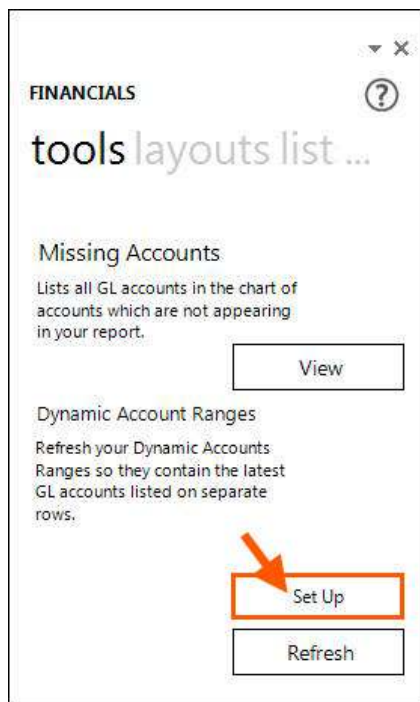
**Note:** You can only add Dynamic Ranges to the active sheet.

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	P	A
		1	2	3		
		Actual	Actual	Actual		
15	Revenue	-9457661.65	-1809.68	-2684366.18	-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

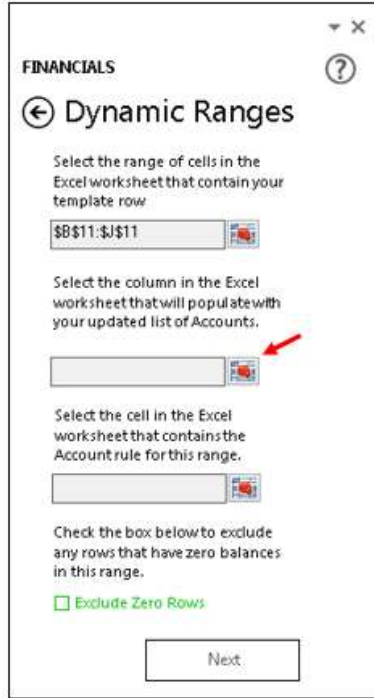
Select Range

Please select a range

=\$B\$11:\$K\$11

OK Cancel

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

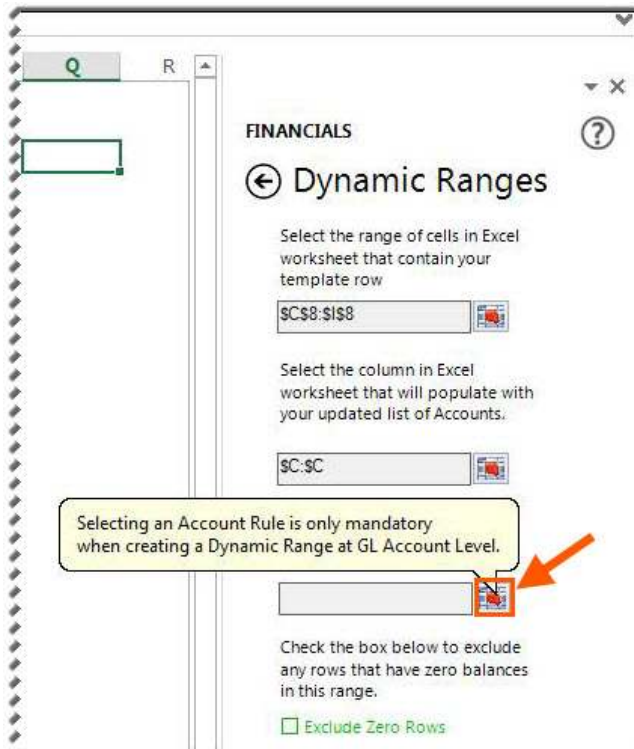
Select Range

Please select a range

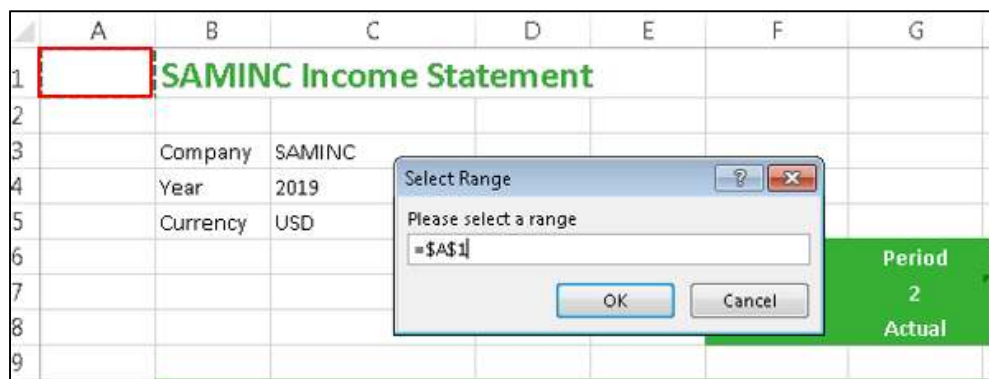
= \$B:\$B

OK Cancel

- 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.



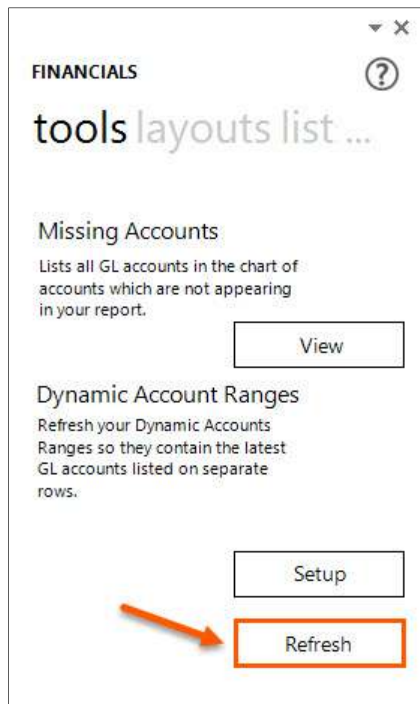
- Enable the **Exclude Zero Rows** option if you do not want to see account rows which have zero balances in all of the columns..
- Click **Next**. The **Select Range** window will appear. Select a cell in the active worksheet to save the dynamic ranges formula to. This can be any cell but top left is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

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



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



SAMINC Income Statement					Period	Period	Period	Period	Total
					1	2	3	4	Quarter
					Actual	Actual	Actual	Actual	Actual
15	Revenue				-9457661.65	-1809.68	-2684366.18	-1606330.27	-137501
4000	Sales	ACC			7863548.14	0	1914625.54	796745.62	10574
4000-100	Sales	ACCDIV			612036.33	0	375422.6	394193.73	13816
4000-200	Sales	ACCDIV			373208.42	0	1348804.72	194044.95	19160
4010	Sales, accessories	ACC			56020.56	1809.68	26953.94	28363.32	113
4010-100	Sales, accessories	ACCDIV			25251.27	1809.68	12056.46	12659.78	518
4010-100-1	Sales, accessories	REGION			7434.04	195.78	3566.33	3767.25	14
4010-100-2	Sales, accessories	REGION			10505.25	0	5241.75	5482.75	216
4010-100-3	Sales, accessories	REGION			2956.04	0	1455.96	1544.2	5
4010-100-4	Sales, accessories	REGION			4095.94	1613.9	1792.42	1865.98	93
4010-200	Sales, accessories	ACCDIV			30689.29	0	14897.48	15703.54	612
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.

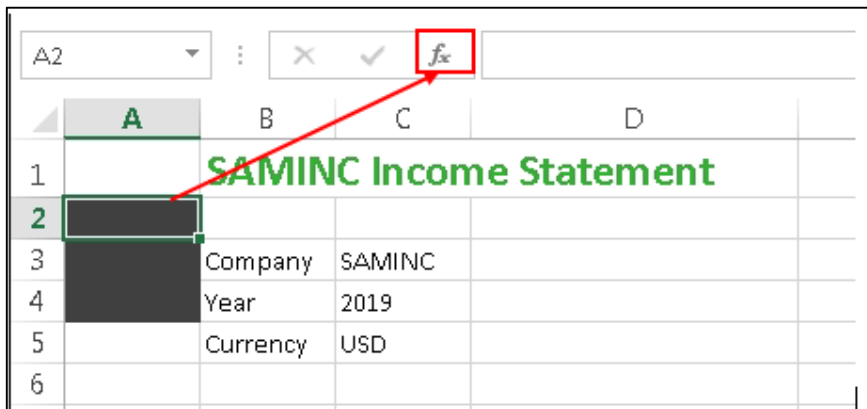
**Note:** You can only add Dynamic Ranges to the active sheet.

Before setting up dynamic account ranges you must [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, you may find typing the formula in and editing its function arguments quicker.

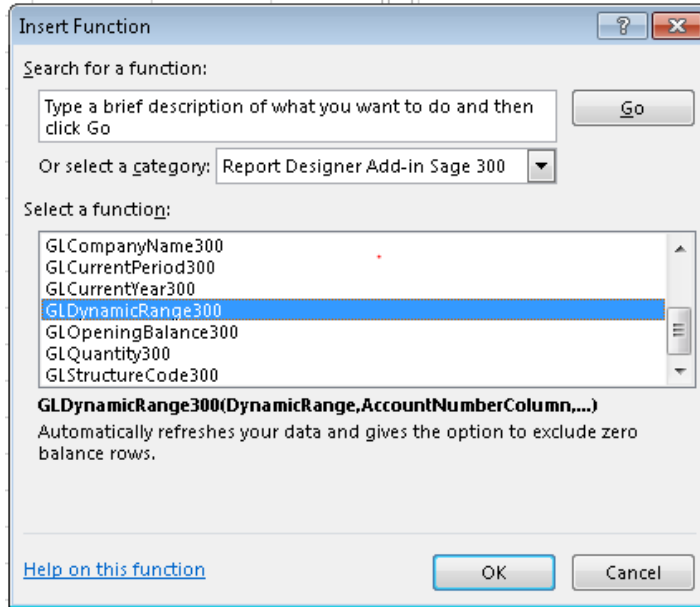
### Using the Excel Functions (Fx) option

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

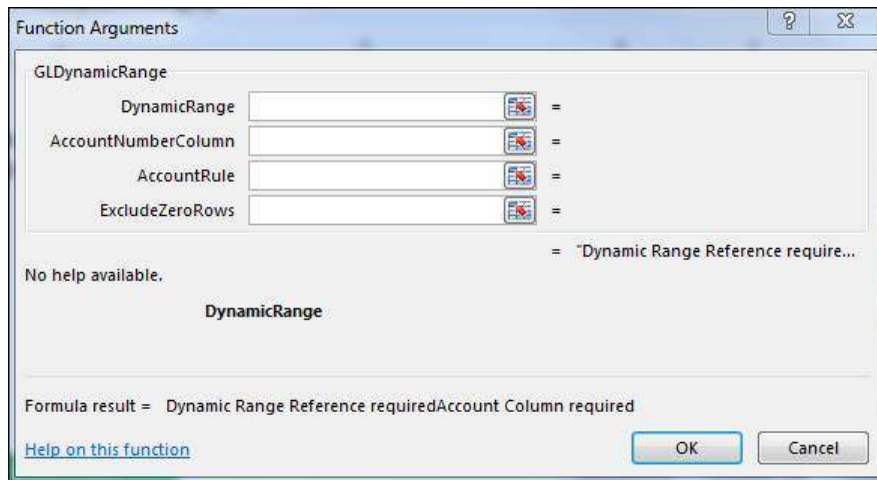


1. Select an empty cell in the active sheet. Top left is recommended.

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.

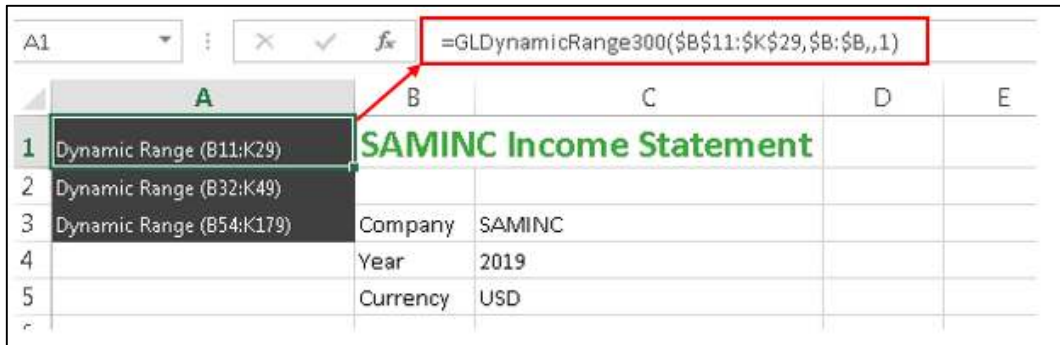
**Note:** You can only add Dynamic Ranges to the active sheet.

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.

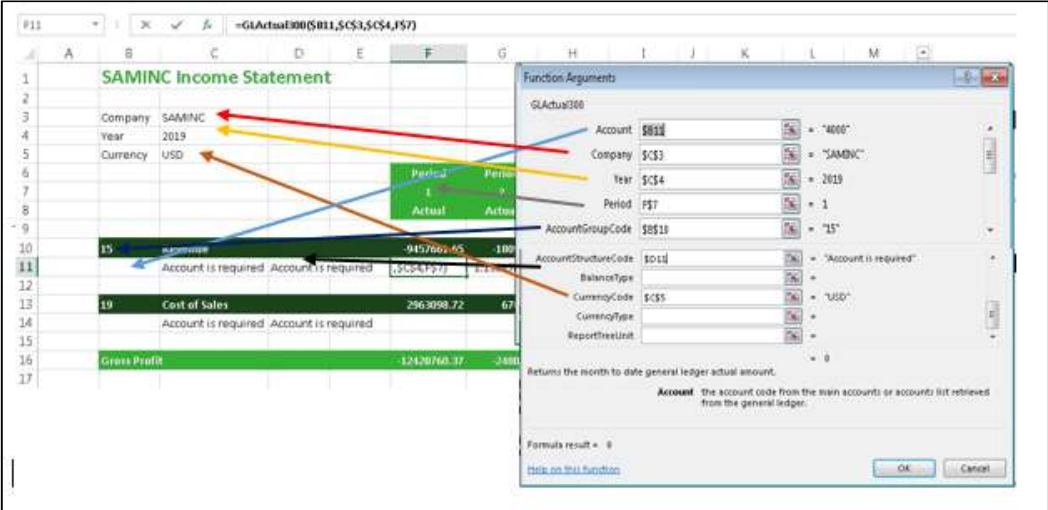
### Remarks

- 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)
```



# 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.

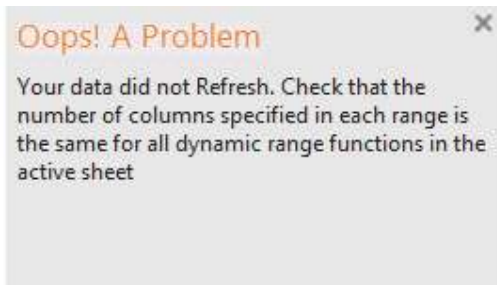
The screenshot shows an Excel spreadsheet with the following data:

	Company	Year	Currency	Period	Actual
1	SAMINC	2019	USD	1	
10	Revenue				-945.766,65
11	Account is required	Account is required			0,00
12	Cost of Sales				296.3098,72
13	Account is required	Account is required			
16	Gross Profit				-1.240.760,37

The 'Function Arguments' dialog box for the GLActual300 function is open, showing the following values:

- Account: \$B11
- Company: \$C3
- Year: \$C4
- Period: F\$7
- AccountGroupCode: \$B518
- AccountStructureCode: \$D11
- BalanceType:
- CurrencyCode: \$C55
- CurrencyType:
- ReportTreeLink:

**Your data did not Refresh.**

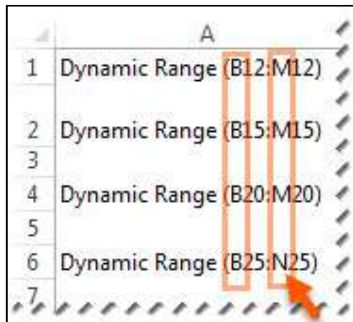


**Why does this happen?**

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

**Solution**

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



In this example, column 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.