

The logo for Infor F9, featuring the text "Infor F9" in a bold, sans-serif font. The background of the entire page is a light blue color with a pattern of white line-art icons representing various business and technology concepts such as buildings, charts, a car, and a stethoscope.

# Infor F9

# Infor F9 User Guide

For Data Pro Infinity POWER

## **Welcome to F9!**

This document outlines how to get started and learn some of the core functionality of F9 Report Writer, Version 6. For more in-depth information on additional features, you may also want to refer to product help.

## Table of contents

<b>1</b>	<b>F9 Overview .....</b>	<b>1</b>
<b>2</b>	<b>Getting Started .....</b>	<b>2</b>
<b>3</b>	<b>Navigation .....</b>	<b>5</b>
3.1	Ribbon .....	5
3.2	Task Panes .....	6
<b>4</b>	<b>Reports.....</b>	<b>11</b>
4.1	Quick Trial Balance.....	11
4.2	Dynamic Trial Balance.....	16
4.3	Sales Table Report.....	22
4.4	Pivot Analysis .....	25
4.5	Wizard Report.....	32
<b>5</b>	<b>Functions .....</b>	<b>42</b>
5.1	Fundamental GL.....	42
5.2	Insert GL .....	44
5.3	Absolute and Relative Cell Referencing .....	50
5.4	Insert GLTRAN .....	51
5.5	DESC.....	58
5.6	SDESC .....	59
5.7	BSPEC .....	60
<b>6</b>	<b>Dropdowns.....</b>	<b>62</b>
6.1	Insert.....	62
<b>7</b>	<b>Scheduling .....</b>	<b>71</b>
<b>8</b>	<b>Tools.....</b>	<b>72</b>
8.1	Publish to Viewer .....	72
<b>9</b>	<b>Resources .....</b>	<b>73</b>
9.1	Updates.....	73
9.2	Help .....	73
9.3	License .....	74
<b>10</b>	<b>Appendix .....</b>	<b>75</b>
10.1	Account Ranges.....	75
10.2	Period Specifiers.....	77
10.3	Migrating from F9 Version 5.....	79

## 1 F9 Overview

Infor F9 (F9) Report Writer is an easy-to-use reporting solution that links financial data to Microsoft Excel. Everything you know about your spreadsheet can be applied to the reports you create using F9. If you know Excel, you know F9!

F9 Report Writer offers a powerful feature package including:

- Reports and analysis
- Flexible cell-based formulas
- Consolidations
- Drill down
- Budgeting
- Multi-Currency
- Pivot and Table reports
- Drag and drop parameters
- Slicers and filtering
- And More...

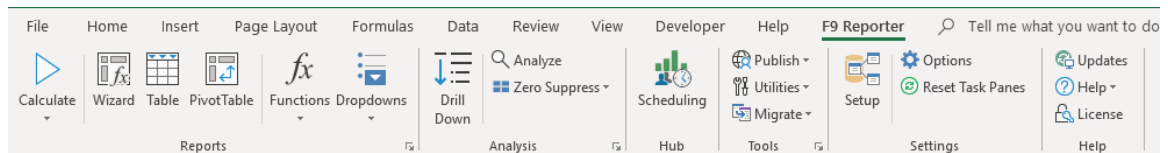
Every financial report starts as a spreadsheet and uses the features of Microsoft Excel. F9 Version 6 is designed to leverage the latest features of Excel versions 2013-2016.

This User Guide is designed for new users to learn the core features of F9 in a short period of time as well as act as a quick reference to functionality when it's needed. Exercises are based on connecting to a sample GL company database.


## 2 Getting Started

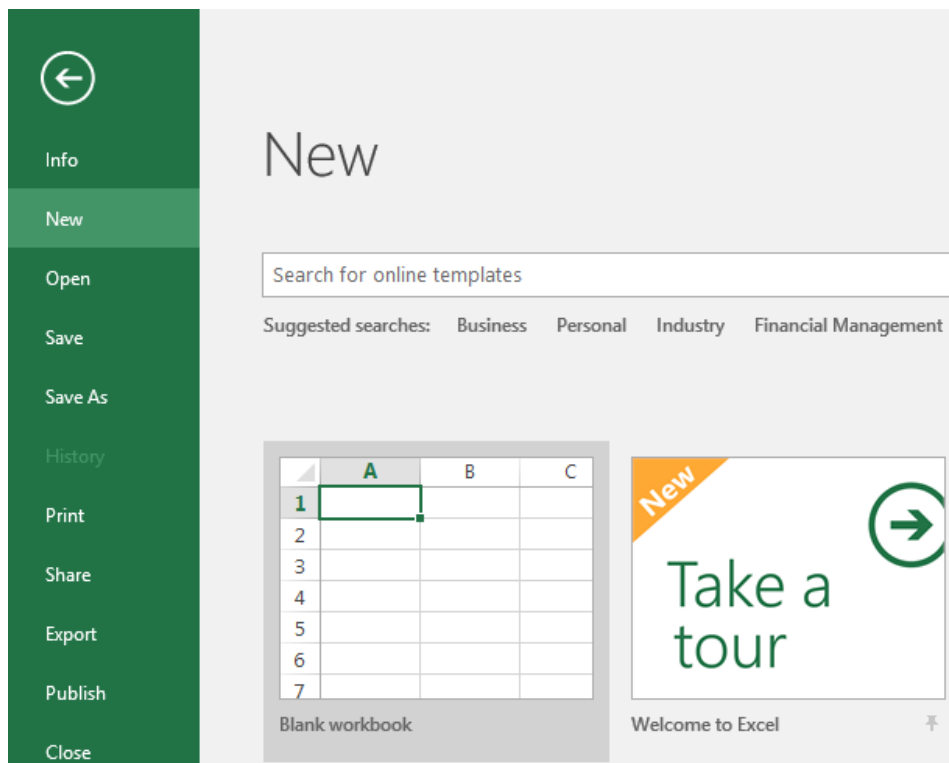
To begin, we need to check F9 Report Writer is correctly attached in your Excel and that the data connection is working.

1. Open **Excel**
2. Check for F9 in the **Ribbon**:




### Note:

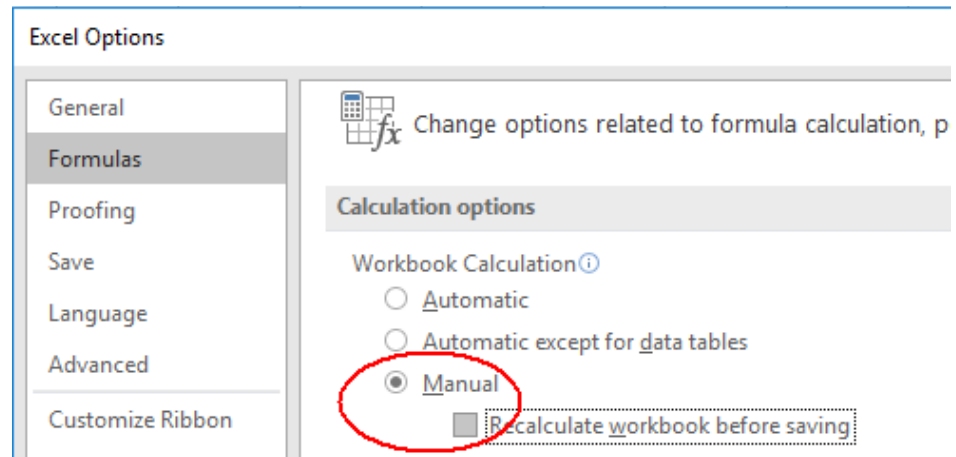
- If you do not see F9, refer to the installed file: **F9 Readme (for your product).PDF**.
  - Check that your version of **Excel is 2013 or 2016**
3. To open a blank workbook, choose **Tab**  + **New + Blank workbook**.



4. Ensure **Calculation** is set to Manual.

This allows the most control in Excel as minor changes to your spreadsheets will not cause a full recalculation.

- Select **Tab**  + **Options** + **Formulas** and click **Manual** as shown:



Notes:

- **F9** key - calculates the workbook (or all open workbooks).
- **Shift+F9** - calculates the active visible worksheet.
- **F2+Enter** - calculates just the active cell.
- To save you time, all **F9 reports** should be **saved with Manual Calculation** so that the entire workbook does not recalculate every time you edit a cell.

5. The last step is for **data connection** to access the GL database for this User Guide.

- From the **F9 Ribbon**, select **Setup**
- If you are on the **30-day trial** of F9, **click Ok** in the trial screen. The F9 Setup will window will next display:

F9 Setup [Data Pro]

System: C:\POWER\ Browse...

Company: INS Profile Year: 2019

Account Mask: \*\_\* Period: Off

Segment Separator: dash (-)

Main Segment: 1

Options:

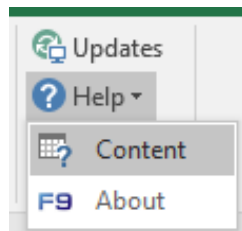
Zero Label: 0  Return Zero for Accounts Not Found

Scaling: None  Do Not Hold Files Open

Rounding: None  Data Preload Enabled

Financial Entities Setup... OK Cancel Help

- Before you can access Data Pro, you will have to browse to the Data Pro data folder and select any company file: “**CPY\*.DBF**”
- If you see one or more companies set in the dropdown, F9 has successfully connected. If you **do not see** company **INS**, select your company’s database.
- This guide can be followed with different data by simply changing any parameters and steps that are highlighted in **blue text**.
- For more details on steps to connect to your system, refer to the F9 Help and topic: **Windows/Preferences/Setup/Company Setup**

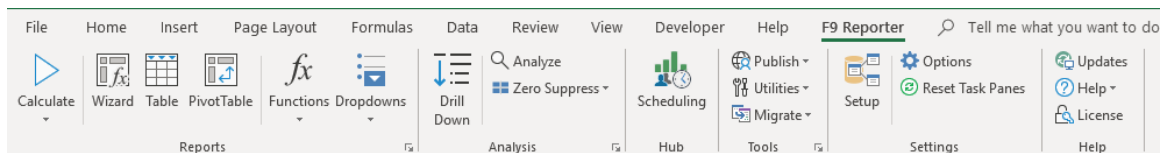


- If you are not able to setup access, please [contact F9](#) Technical Support for help.

### 3 Navigation

This section includes tips on how to navigate through F9’s product screens and menu items. Given that F9 runs within Excel as an Add-in, if you are familiar with Excel you will find using F9 to be similar in many ways.

#### 3.1 Ribbon



Each time you start Excel, the F9 Ribbon will be included in Excel’s Ribbon. When you click on the tab name, F9’s Ribbon becomes the current focus in Excel.

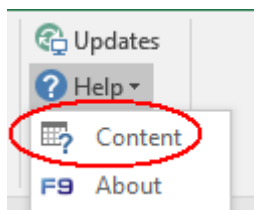
Notice that items are divided into **functional groups** for:

Reports	Analysis	Hub
Tools	Settings	Help

Items that have a **menu** display with a **down arrow** include:

Calculate	Functions	Dropdowns
Zero Suppress	Publish	Migrate
Help		

For detailed information on any of the Ribbon items, click on **Help + Content**:






## 3.2 Task Panes

From the **F9 Ribbon**, there are seven different **Task Panes** that display as an anchored window in order to build out new reports.



F9 GL

Source  

**Company Controls** 

Companies:

Years:

AccountMasks:

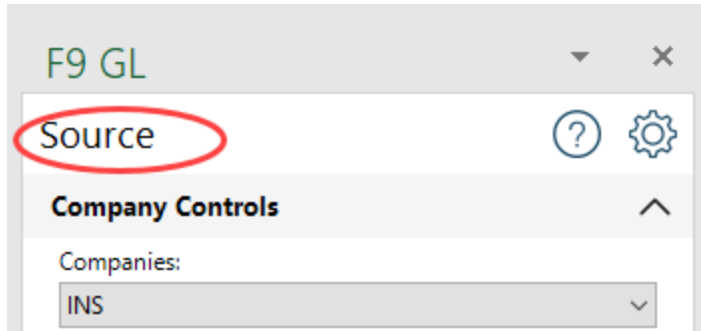
**Account Segments**

Periods:

Account:

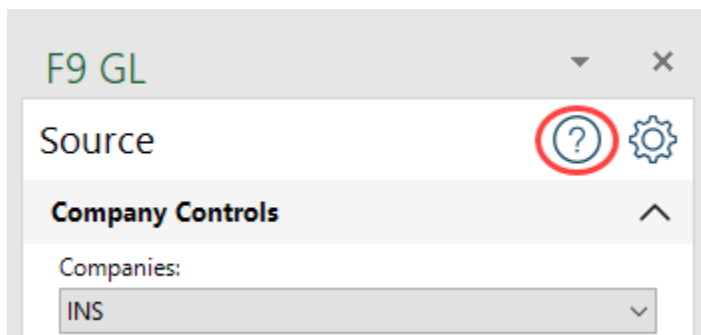
We will demonstrate navigation by going through this Task Pane in more detail.

### Source:



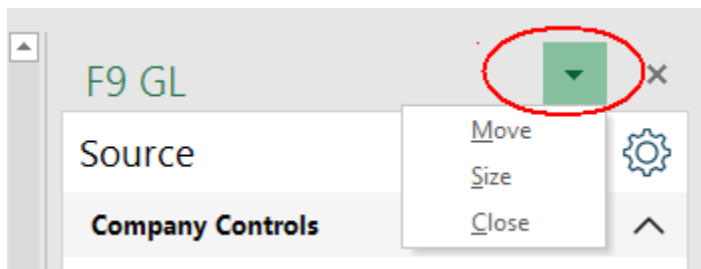
- Displays what data parameters to use in this function such as your Company and different accounts.

### Help:



- Open's the F9 help topic for this Task Pane.

### Move:



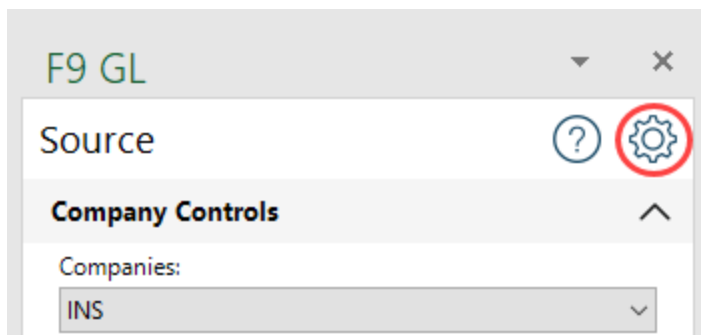
- All Excel Task Panes can be moved, floating, or re-anchored to a different location.

### Close:

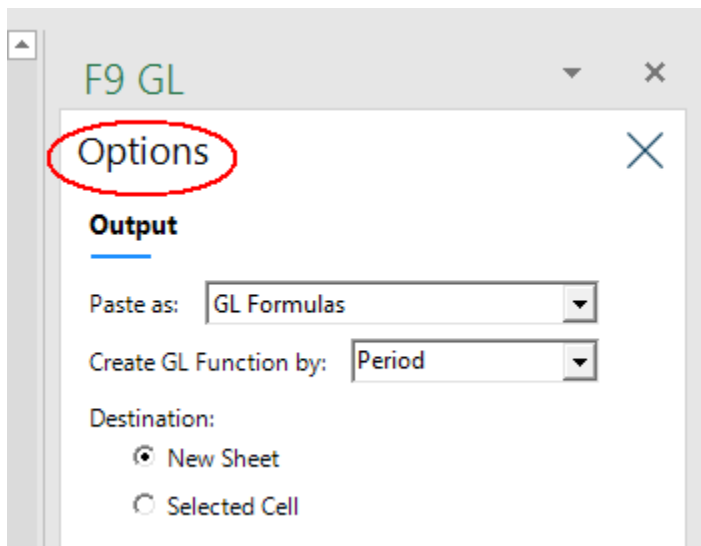


- Closes the current F9 Task Pane

### Options:

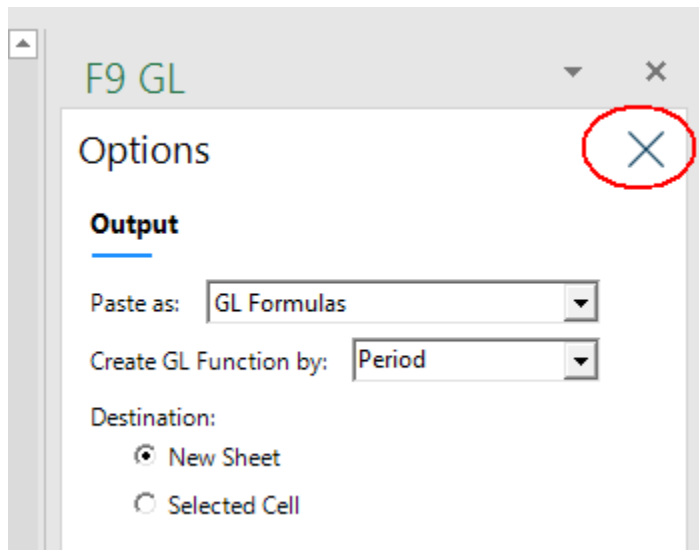


displays:



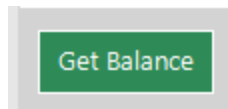
- Includes additional options for this F9 Task Pane.

### Close Options:



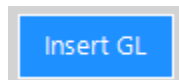
- Returns back to the **Source** display in the Task Pane.

#### Get Balance:



- This button outputs an account balance into the Task Pane.

#### Insert GL:



- This button results in an F9 function and all its parameters to be output to your Excel worksheet.

## 4 Reports

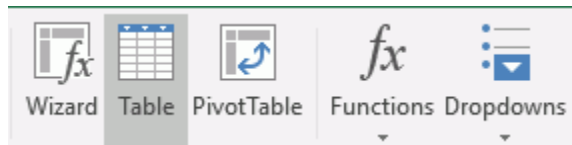
### 4.1 Quick Trial Balance

Let's begin by outputting your Chart of Accounts with period amounts to Excel.

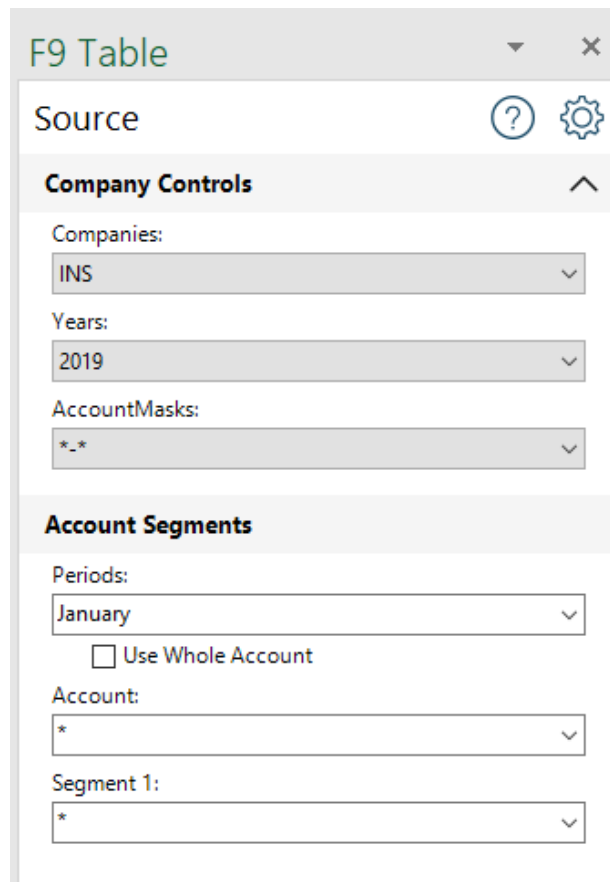
#### Table Report + Static Values

F9 provides a task pane to select criteria and build interactive Excel Tables which can have static values or dynamic F9 formulas for calculation and refresh.

1. Select an **empty worksheet**.
2. From the F9 Ribbon, click the **Table** button



The F9 task pane displays to the right of your active worksheet:

A screenshot of the 'F9 Table' task pane. The pane has a title bar with 'F9 Table' and a close button. Below the title bar is a 'Source' section with a question mark icon and a settings gear icon. The main area is divided into two sections: 'Company Controls' and 'Account Segments'. Under 'Company Controls', there are three dropdown menus: 'Companies' (selected 'INS'), 'Years' (selected '2019'), and 'AccountMasks' (selected '\*\_\*'). Under 'Account Segments', there is a 'Periods' dropdown (selected 'January') with an unchecked 'Use Whole Account' checkbox below it, an 'Account' dropdown (selected '\*'), and a 'Segment 1' dropdown (selected '\*').

3. Ensure the same defaults are set for your F9 as shown.
4. Click the **Options** button



**F9 Table**

**Options**

**Include**

- Account Code
  - Separate Segments
  - Prepend With a '
- Description
  - =DESC() Formula
- Origin

**Output**

- Skip Zeros
- Classic F9 Chart
- Paste as: **Static Values**

Destination:

- New Sheet
- Selected Cell

**Formatting**

- Gridlines
- Slicers
- Total

Table Style: **None**

- [None style]
- [Style 1]
- [Style 2]
- [Style 3]
- [Style 4]
- [Style 5]
- [Style 6]

5. Set options to the above.

6. Click **Create Table** in the lower task pane:

The screenshot shows the 'Accounts Found' task pane with a 'Create Table' button. Below it is a spreadsheet view of a trial balance for 2019. The spreadsheet has columns for Account, Description, Type, and January. The total for January is -61,420.76.

Account	Description	Type	January
40000-1	Revenue - Commercial	Income/Sales	0
40000-2	Revenue - Residential	Income/Sales	0
41100-1	Revenue Concrete - Commercial	Income/Sales	-22,600.00
41100-2	Revenue Concrete - Residential	Income/Sales	-2,400.00
41200-1	Revenue Electrical- Commercial	Income/Sales	0
41200-2	Revenue Electrical-Residential	Income/Sales	0
41300-1	Revenue Framing - Commercial	Income/Sales	-21,700.00
41300-2	Revenue Framing - Residential	Income/Sales	0
41400-1	Revenue Plumbing - Commercial	Income/Sales	0
41400-2	Revenue Plumbing - Residential	Income/Sales	0
41500-1	Revenue Roofing - Commercial	Income/Sales	0
41500-2	Revenue Roofing - Residential	Income/Sales	-31,106.54
50000-1	Cost of Sales - Commercial	Cost Of Sales	0
50000-2	Cost of Sales - Residential	Cost Of Sales	0
51100-1	Concrete COS - Commercial	Cost Of Sales	4,300.00
51100-2	Concrete COS - Residential	Cost Of Sales	1,500.00
51200-1	Electrical COS - Commercial	Cost Of Sales	0
51200-2	Electrical COS - Residential	Cost Of Sales	0
51300-1	Framing COS - Commercial	Cost Of Sales	560.54
51300-2	Framing COS - Residential	Cost Of Sales	50
51400-1	Plumbing COS - Commercial	Cost Of Sales	0
51400-2	Plumbing COS - Residential	Cost Of Sales	0
51500-1	Roofing COS - Commercial	Cost Of Sales	3,000.00
51500-2	Roofing COS - Residential	Cost Of Sales	0
60100-1	Salaries - Commercial	Operating Expenses	3,543.79
60100-2	Salaries - Residential	Operating Expenses	3,431.45
Total			-61,420.76

7. With the trial balance created, we can check the total to see that it sums to zero.

- Click on any balance in column **E**
- Click the keyboard **End** key + **down arrow** key

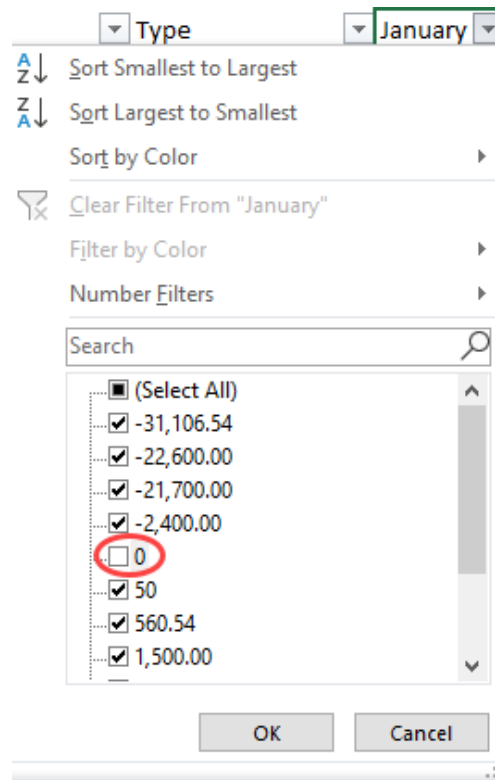
- Excel should set the active cell to the last one in the table

	A	Account	Description	Type	January	F
16		41400-1	Revenue Plumbing - Commercial	Income/Sales	0	
17		41400-2	Revenue Plumbing - Residential	Income/Sales	0	
18		41500-1	Revenue Roofing - Commercial	Income/Sales	0	
19		41500-2	Revenue Roofing - Residential	Income/Sales	-31,106.54	
20		50000-1	Cost of Sales - Commercial	Cost Of Sales	0	
21		50000-2	Cost of Sales - Residential	Cost Of Sales	0	
22		51100-1	Concrete COS - Commercial	Cost Of Sales	4,300.00	
23		51100-2	Concrete COS - Residential	Cost Of Sales	1,500.00	
24		51200-1	Electrical COS - Commercial	Cost Of Sales	0	
25		51200-2	Electrical COS - Residential	Cost Of Sales	0	
26		51300-1	Framing COS - Commercial	Cost Of Sales	560.54	
27		51300-2	Framing COS - Residential	Cost Of Sales	50	
28		51400-1	Plumbing COS - Commercail	Cost Of Sales	0	
29		51400-2	Plumbing COS - Residential	Cost Of Sales	0	
30		51500-1	Roofing COS - Commercial	Cost Of Sales	3,000.00	
31		51500-2	Roofing COS - Residential	Cost Of Sales	0	
32		60100-1	Salaries - Commercial	Operating Expenses	3,543.79	
33		60100-2	Salaries - Residential	Operating Expenses	3,431.45	
34		Total			-61,420.76	
35						
36						

8. The current table contains some accounts with a zero period balance. These can be filtered out using Excel.

- Click keys: **CTRL+Home** to return to the top of the worksheet
- Click on the cell with dropdown: **January (cell E7)**
- Unselect the amount for zero to filter the table





Notice that Excel has simply hidden the rows in the table.

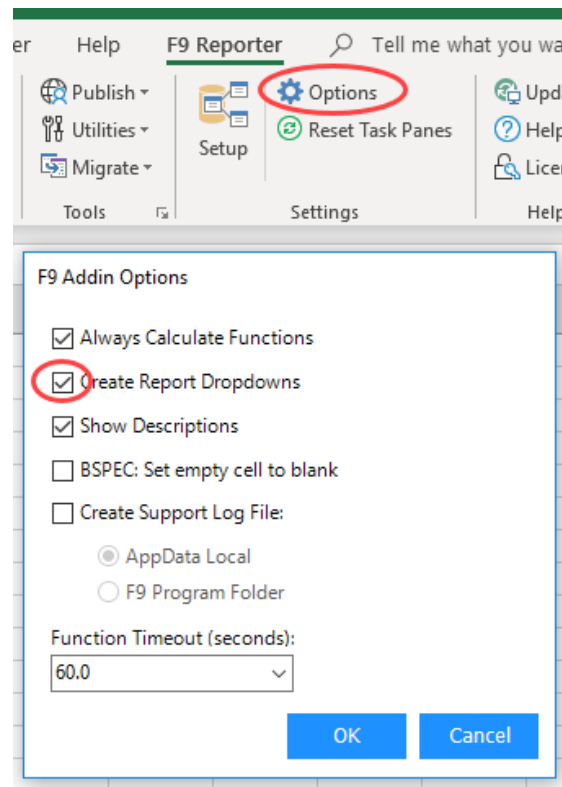
9. **Rename** this **worksheet** tab to: **TrialBal\_1**
10. **Save** a copy of your report.

## 4.2 Dynamic Trial Balance

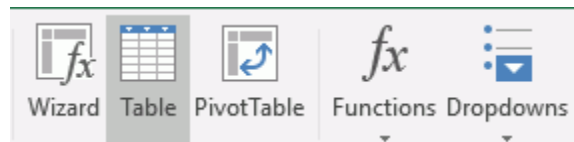
### Table Report + GL Formulas

In the first exercise, the F9 Table output with fixed values with one Excel subtotal formula. Next, we will generate a more report with dropdown parameters, F9 formulas, and additional filtering.

1. First, we will ensure F9 is setup to create dropdowns. From the **F9 Ribbon**, select **Options**:



2. Click **Create Report Dropdowns** (if necessary) and **OK**
3. Select a **new worksheet**
4. If the F9 Table task pane is closed, click on **Table** from the **F9 Ribbon**.



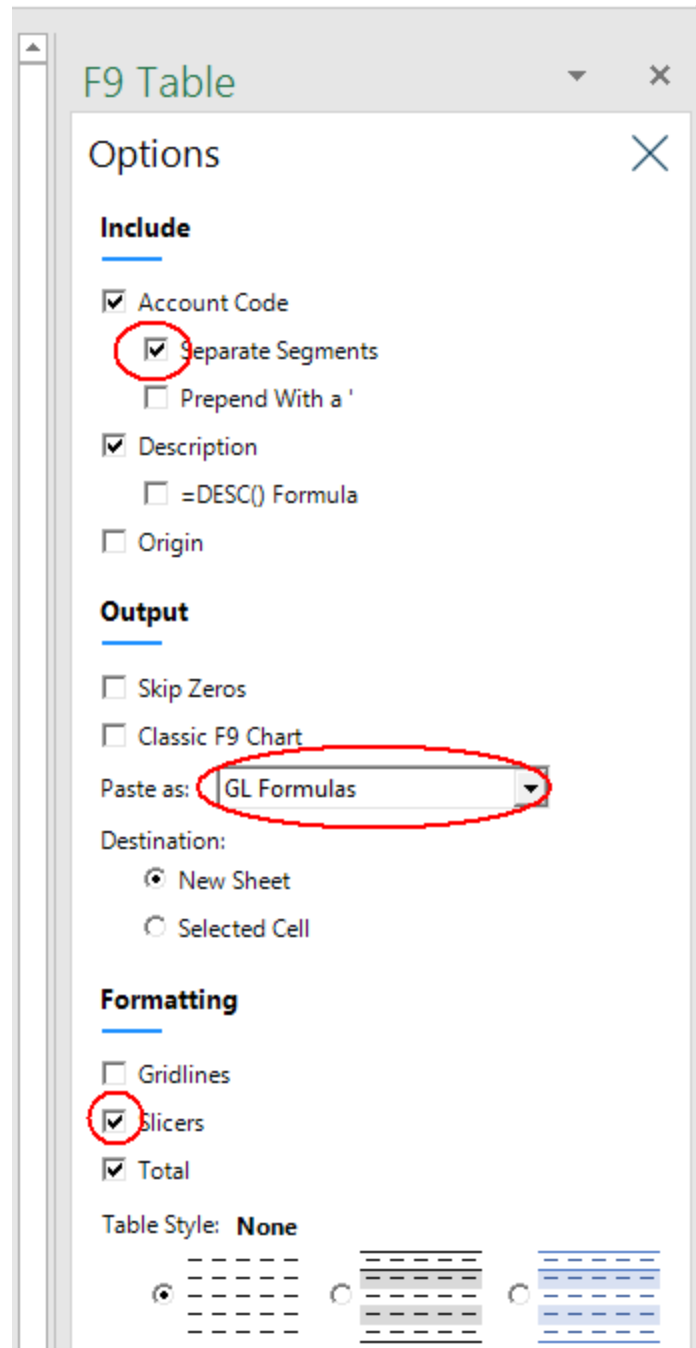
We will use the same Source settings as in the previous exercise:

- All accounts; **2015**, January

5. Click **Options**



6. Change settings to the following:



First, by splitting the account segments into separate table columns, we can add Slicer filtering to the report. The other main difference is that instead of static balances, there will be F9 formulas for recalculation.

7. Click **Create Table** to see the new report.

	A	B	C	D	E	F
1				<b>Account</b>	<b>Segment 1</b>	
2	Companie	INS		40000	1	
3	Years:	2019		41100	2	
4				41200		
5	Accounts:	(*)(*)				
6						
7		Periods:			January	
8						
9		Account	Segment 1	Description	Amount	January
10		40000	1	Revenue - Commercial	0.00	
11		40000	2	Revenue - Residential	0.00	
12		41100	1	Revenue Concrete - Commercial	-22,600.00	
13		41100	2	Revenue Concrete - Residential	-2,400.00	
14		41200	1	Revenue Electrical- Commercial	0.00	
15		41200	2	Revenue Electrical-Residential	0.00	
16		41300	1	Revenue Framing - Commercial	-21,700.00	
17		41300	2	Revenue Framing - Residential	0.00	
18		41400	1	Revenue Plumbing - Commercial	0.00	
19		41400	2	Revenue Plumbing - Residential	0.00	
20		41500	1	Revenue Roofing - Commercial	0.00	
21		41500	2	Revenue Roofing - Residential	-31,106.54	
22		50000	1	Cost of Sales - Commercial	0.00	
23		50000	2	Cost of Sales - Residential	0.00	
24		51100	1	Concrete COS - Commercial	4,300.00	
25		51100	2	Concrete COS - Residential	1,500.00	
26		51200	1	Electrical COS - Commercial	0.00	
27		51200	2	Electrical COS - Residential	0.00	
28		51300	1	Framing COS - Commercial	560.54	
29		51300	2	Framing COS - Residential	50.00	

Straight away, you will see the new Table slicers created by the account segments.

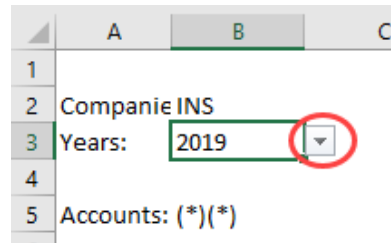
8. Click on the **Slicer** values: **“41100”** for **Account**

	A	B	C	D	E	F
1				<b>Account</b>	<b>Segment 1</b>	
2	Companie	INS		40000	1	
3	Years:	2019		41100	2	
4				41200		
5	Accounts:	(*)(*)				
6						
7		Periods:			January	
8						
9		Account	Segment 1	Description	Amount	January
12		41100	1	Revenue Concrete - Commercial	-22,600.00	
13		41100	2	Revenue Concrete - Residential	-2,400.00	
36		Total			-61,420.76	
37						

The table rows automatically filter by the Slicer selection. You can select more than one row in a given Slicer by holding the Ctrl or Shift key down at the same time.

9. One difference with this report is that F9 dropdowns have been created which allows you to change parameters and recalculate.

- Select **Cell B3** which has **2019**
- Notice when selected, a **dropdown** control displays:



- Select year **2018**
- From the **F9 Ribbon**, click **Calculate + Worksheet** to see new balances refresh

10. The second major difference in this report is that **F9 formulas** were added instead of static values and from the calculate just done, new balances were returned.

- Select **cell E12** which contains a balance
- Excel's formula bar shows the F9 formula for the cell
- If you click on the formula bar, Excel displays the cell references in a color coded format:

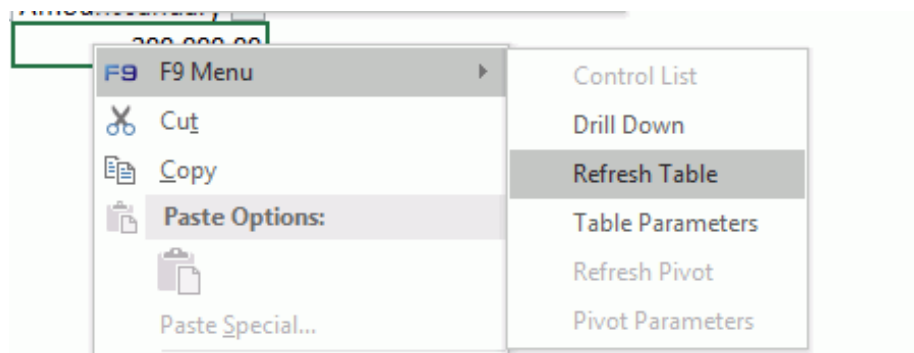
The image shows an Excel spreadsheet with a data table. The formula bar at the top displays the formula: `=GL(BSPEC($B12,$C12),E$7,$B$2,$B$3)`. The spreadsheet has columns for Account, Segment 1, Description, and Amount January. The data table is as follows:

Account	Segment 1	Description	Amount January
40000	1	Revenue - Commercial	0.00
40000	2	Revenue - Residential	0.00
41100	1	Revenue Concrete - Commercial	<b>=\$B\$3</b>
41100	2	Revenue Concrete - Residential	-1,300.00
41200	1	Revenue Electrical- Commercial	0.00
41200	2	Revenue Electrical-Residential	0.00
41300	1	Revenue Framing - Commercial	-15,100.00
41300	2	Revenue Framing - Residential	0.00

The F9 formulas and dropdowns are what really make this report dynamic. As new period balances are updated to the F9 reporting database, the latest results are simply recalculated in Excel.

11. Over time, accounts will be added or deleted from the chart of accounts. In this scenario, F9 table rows need to be refreshed and this is easy to do.

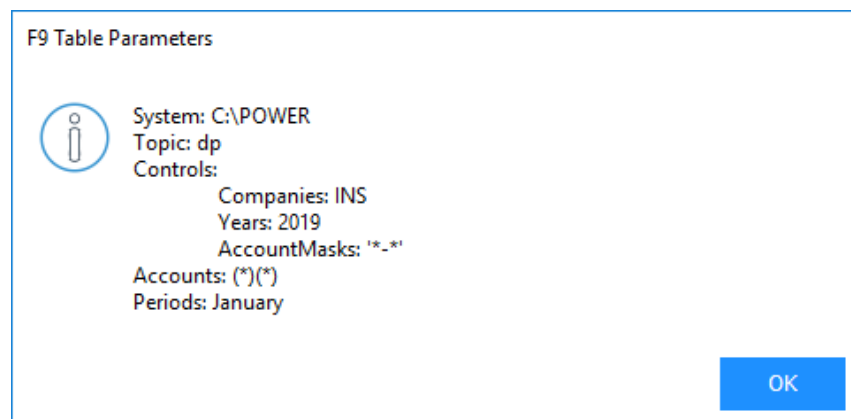
- Click on any cell within an F9 table report
- Right+Click the mouse
- From the popup menu that displays, select **F9 Menu + Refresh Table**



- The rows for the tab will next be refreshed.

Note:

- **Table Refresh** is only available from F9 table reports created with **F9 Version 6** and higher. If you have a table from F9 Version 5, you will need to recreate the table.
- If for any reason an F9 V6 table is not able to refresh, you can lookup how it was originally created by selecting **F9 Menu + Table Parameters**. For example, this might occur if portions of the worksheet were deleted or changed or you are connected to a different database. This information may help for trouble-shooting or if you want to recreate a similar table report.



- With F9 table reports, you can change the formatting at any time. Add or remove slicers, subtotals, and formatting just like you would with any table by using all the functionality available from Excel.

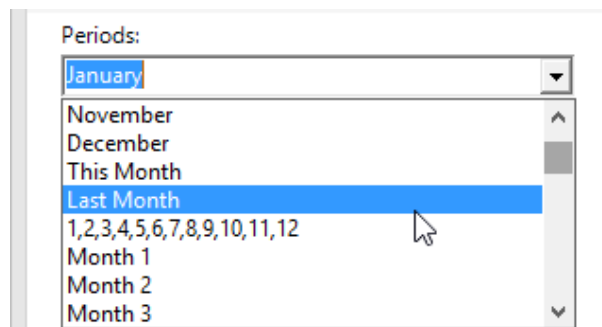
12. **Rename** this **worksheet** tab to: **TrialBal\_2**

13. **Save** your report.

## 4.3 Sales Table Report

F9 Table report can consist of a subset of accounts as well as multiple period balance columns. The steps that follow will demonstrate this in just a few clicks.

1. Select a **new worksheet**
2. If the F9 Table task pane is closed, click on **Table** from the **F9 Ribbon**.
3. You can output multiple balance columns by listing them within **Periods**. Click on the **dropdown** to some of the many values available:



4. Enter the following for Periods:



5. For the table rows, this will represent just the sales accounts. In the demo database this falls within a range in the Account segment. When you click on the **Account dropdown**, F9 displays all the available segments.
6. Within **Account**, enter the following:



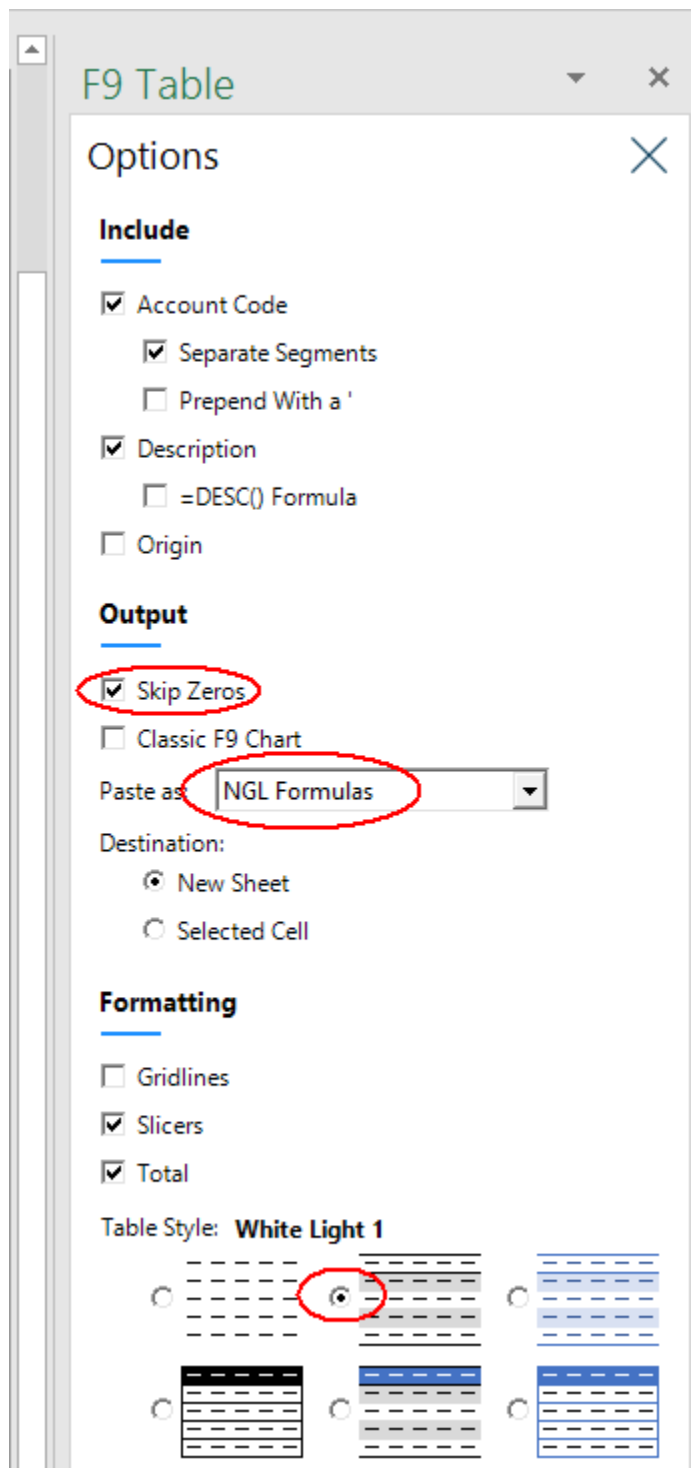
Also set **Year** to **2019** for this example.

7. Click **Options**



8. Change settings to the following:





Note:

- NGL Formulas are identical to the F9 GL formula but returns the sign negated.

9. Click **Create Table** to output the new table:

The screenshot shows the Infor F9 interface. At the top, a formula bar contains the formula `=NGL(BSPEC($B10,$C10),E$7,$B$2,$B$3)`. Below the formula bar, there are two filter panels: "Account" with a list containing 41100, 41200, and 41300; and "Segment 1" with a list containing 1 and 2. Below these filters is a "Periods:" row with columns 1 through 6. The main data table has the following structure:

Account	Segment 1	Description	Amount 1	Amount 2	Amount 3	Amount 4	Amount 5	Amount 6
41100	1	Revenue Concrete - Commercial	22,600.00	45,000.00	6,500.00	5,000.00	0.00	0.00
41100	2	Revenue Concrete - Residential	2,400.00	3,200.00	4,404.75	5,010.00	0.00	0.00
41200	2	Revenue Electrical-Residential	0.00	0.00	951.32	4,777.95	0.00	0.00
41300	1	Revenue Framing - Commercial	21,700.00	6,700.00	3,200.00	8,000.00	0.00	0.00
41300	2	Revenue Framing - Residential	0.00	0.00	8,280.00	1,469.58	0.00	0.00
41500	2	Revenue Roofing - Residential	31,106.54	7,700.00	6,500.00	8,588.62	0.00	0.00
<b>Total</b>			<b>77,806.54</b>	<b>62,600.00</b>	<b>29,836.07</b>	<b>32,846.15</b>	<b>0.00</b>	<b>0.00</b>

**Notes:**

- This table is dynamic with the use of **NGL formulas**, slicers, and report dropdowns for recalculation.
- We chose to have F9 skip zero balance rows instead of filtering in Excel as there are multiple period balances output.
- Account segments can be filtered in the Table to display a subset of rows; a specific department, for example
- The period balance columns can also be changed by clicking on their dropdowns in row 7:

This image shows a close-up of the "Periods:" row from the table above. The dropdown menu is open, showing a list of numbers from 1 to 8. The number 1 is currently selected and highlighted in blue.

10. Rename the worksheet as **SalesTable**

11. **Save** your report.

## 4.4 Pivot Analysis

There will be scenarios where you may want to analyze results using the more dynamic Excel Pivot table. Parameters can be dragged and dropped into rows, columns, and filters or set as slicers; pivot drilldown outputs the aggregated balances at any time.

F9's Pivot creates financial pivot reports easily and provides all your relevant parameters.

### Annual Revenue by Department

Years 2018 and 2019

Period (All)

Sum of Amount	Account	Years	
Segment 1		2018	2019
1	40000	0.00	0.00
	41100	108,500.00	79,100.00
	41200	0.00	0.00
	41300	36,400.00	39,600.00
	41400	0.00	0.00
	41500	0.00	0.00
<b>1 Total</b>		<b>144,900.00</b>	<b>118,700.00</b>
2	40000	0.00	0.00
	41100	43,600.50	15,014.75
	41200	2,100.30	5,729.27
	41300	50,750.50	9,749.58
	41400	0.00	0.00
	41500	106,200.00	53,895.16
<b>2 Total</b>		<b>202,651.30</b>	<b>84,388.76</b>

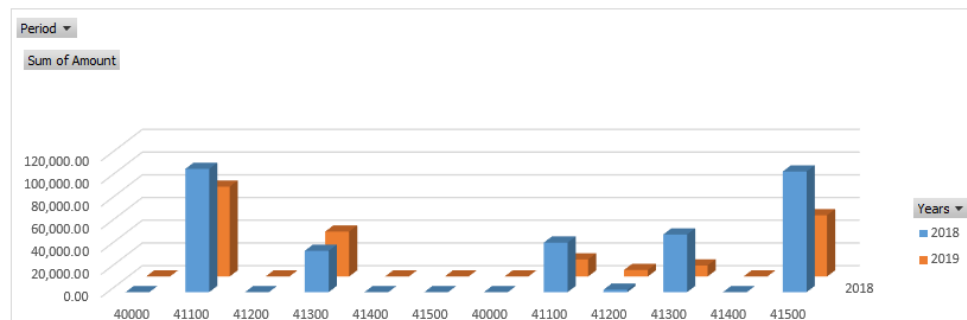


Years

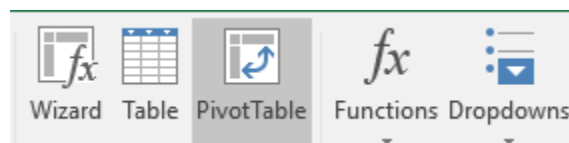
- 2018
- 2019

Segment 1

- 1
- 2



1. Click **PivotTable** from the **F9 Ribbon**



The **Source** settings display next.

2. Select multiple **years: 2018 and 2019**

3. Edit the **Account** field and enter the value: **4\***
4. Change **periods** to be: **1,2,3,4,5,6**

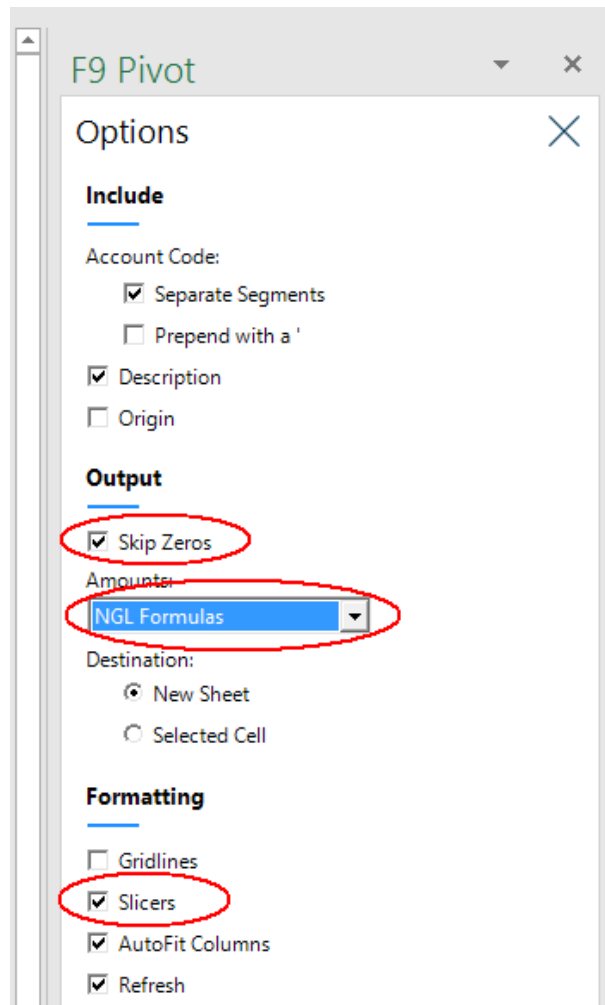
The screenshot shows the 'F9 Pivot' configuration window. It has a title bar with 'F9 Pivot' and window control buttons. Below the title bar is a 'Source' section with a help icon and a settings gear icon. The main content is divided into two sections: 'Company Controls' and 'Account Segments'.  
**Company Controls:**  
- Companies: A list box containing 'INS' with a checked checkbox.  
- Years: A list box containing '2018' (checked), '2019' (checked), '2020' (unchecked), and '2021' (unchecked).  
- AccountMasks: A list box containing '\*' (unchecked), '\*.\*' (checked), '\*.\*.\*' (unchecked), '\*.\*.\*.\*' (unchecked), and '\*.\*.\*.\*.\*' (unchecked).  
**Account Segments:**  
- Periods: A dropdown menu showing '1,2,3,4,5,6'.  
- Use Whole Account: An unchecked checkbox.  
- Account: A dropdown menu showing '4\*'.  
- Segment 1: A dropdown menu showing '\*'.

5. Click **Options**



For this report, we want the sales amounts to be driven by F9 NGL formulas as opposed to static values.

6. For **Output**, click **Skip Zeros** and select **NGL formulas** for Amounts
7. Under Formatting, click **Slicers**. Your Options should now be the same as the following:



8. Click **Create PivotTable** in the lower task pane



The new report is created to a new worksheet.

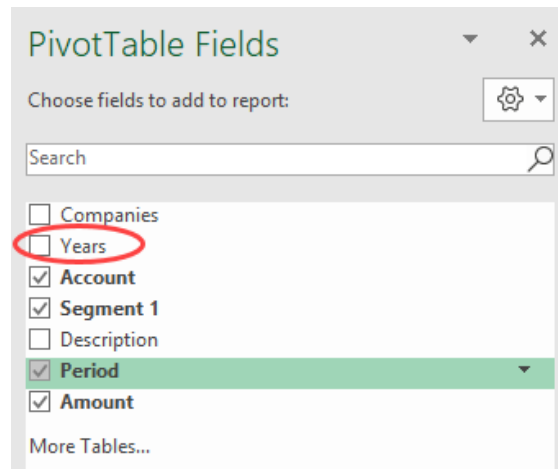
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		
1				Years				Account			Segment 1						
2				2018				41100			1						
3				2019				41200			2						
4								41300									
5								41500									
6																	
7																	
8																	
9			Segment 1	(All)													
10																	
11			Sum of Amount	Years	Period												
12				2018				2018 Total	2019						2019 Total		
13			Account	1	2	3	4	5	6	1	2	3	4	5	6		
14			41100	51,300.00	0.00	12,000.50	37,500.00	0.00	0.00	100,800.50	25,000.00	48,200.00	10,904.75	10,010.00	0.00	0.00	94,114.75
15			41200	0.00	0.00	2,100.30	0.00	0.00	0.00	2,100.30	0.00	0.00	951.32	4,777.95	0.00	0.00	5,729.27
16			41300	15,100.00	0.00	11,950.50	45,000.00	0.00	0.00	72,050.50	21,700.00	6,700.00	11,480.00	9,469.58	0.00	0.00	49,349.58
17			41500	24,000.00	0.00	8,200.00	50,000.00	0.00	0.00	82,200.00	31,106.54	7,700.00	6,500.00	8,588.62	0.00	0.00	53,895.16
18																	

9. **Close** the **F9 Pivot** task pane as it is no longer needed

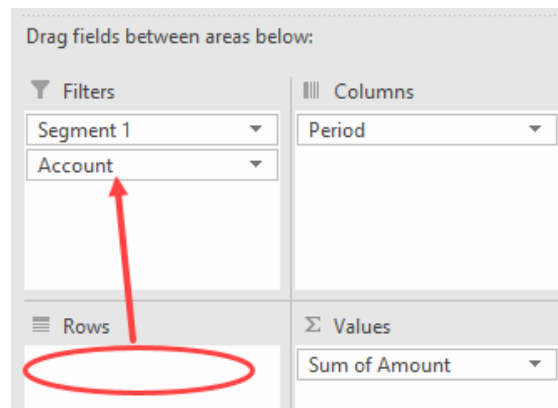


10. Within Excel's **PivotTable Fields** task pane:

- **Uncheck Years** in the upper field list



- **Drag Account** from Rows up to Filters

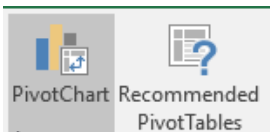


	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1				Years				Account			Segment 1			
2				2018				41100			1			
3				2019				41200			2			
4								41300						
5								41500						
6														
7														
8			Segment 1	(All)										
9			Account	(All)										
10														
11			Sum of Amount	Period										
12					1	2	3	4	5	6				
13			Total		168,206.54	62,600.00	64,087.37	165,346.15	0.00	0.00				

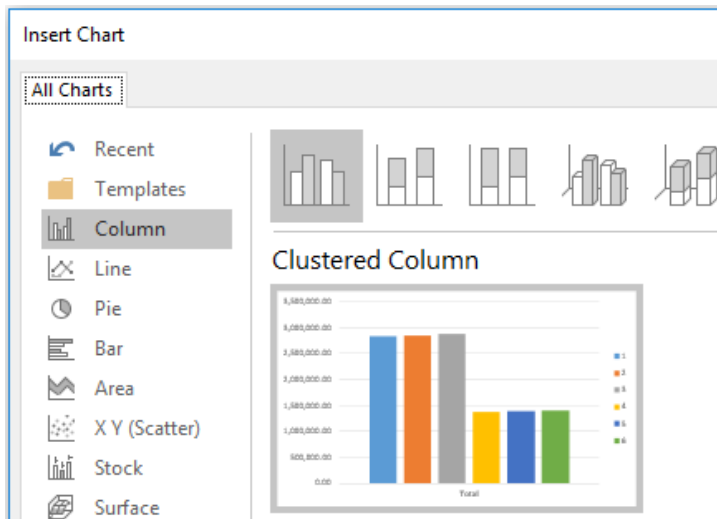
The PivotTable has been created – so far so good!

### 11. Add a PivotChart

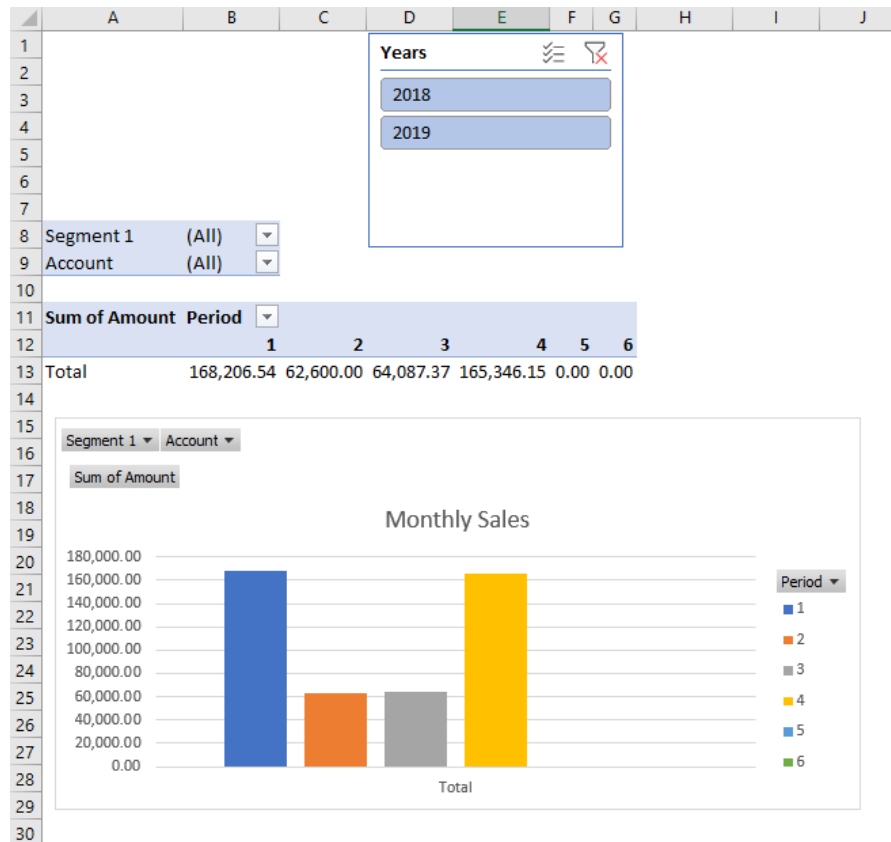
- Select any cell within the PivotTable that has a balance, such as **B13**
- **Excel Ribbon Analyze:** select **PivotChart**



- Set to the following if not already the default:



- Click **OK** and **drag/resize** the new chart below the PivotTable
- **Optional:** Select the PivotChart and to add a chart title

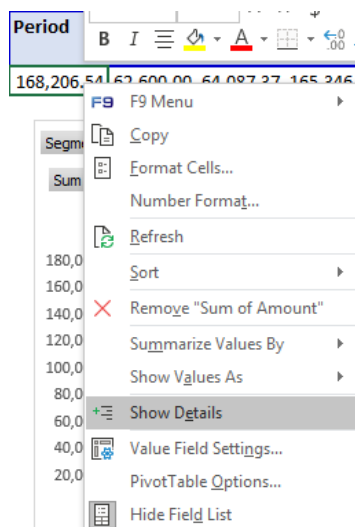


The Pivot report should look similar to the above.

12. Click on the **Years Slicer** to see how the results change for a single year versus all.

13. Drilldown steps

- Click anywhere in the PivotTable
- **Right-Click + Show Details**





- Alternatively, **double-click** on the Pivot cell having the balance

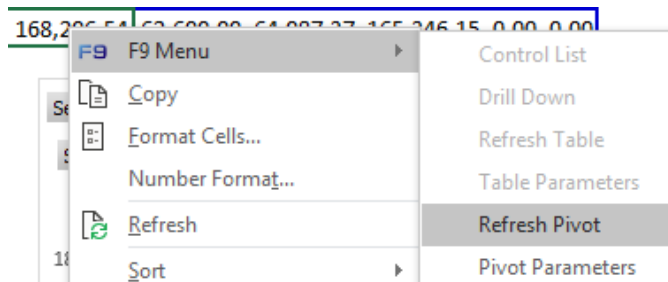
	A	B	C	D	E	F	G
1	Companies	Years	Account	Segment 1	Description	Period	Amount
2	INS	2019	41500	2	Revenue Roofi	2	7700
3	INS	2018	41100	1	Revenue Conci	2	0
4	INS	2019	41300	2	Revenue Fram	2	0
5	INS	2019	41300	1	Revenue Fram	2	6700
6	INS	2019	41200	2	Revenue Electi	2	0
7	INS	2019	41100	2	Revenue Conci	2	3200
8	INS	2019	41100	1	Revenue Conci	2	45000
9	INS	2018	41100	2	Revenue Conci	2	0
10	INS	2018	41500	2	Revenue Roofi	2	0
11	INS	2018	41300	2	Revenue Fram	2	0
12	INS	2018	41300	1	Revenue Fram	2	0
13	INS	2018	41200	2	Revenue Electi	2	0

Excel places the drill results into a new worksheet tab.

#### 14.Refresh Pivot

Updating the balances in a F9 Pivot report is a bit different given there are no F9 formulas in the PivotTable.

- Click anywhere in the PivotTable
- **Right-Click + F9 Menu**
- **Select Refresh Pivot**



- The Excel status bar will display with details on the refresh until completed.

#### Note:

- F9 NGL formulas that are linked to the PivotTable totals
- The formulas can be found in a separate worksheet created by F9
- We recommend hiding this data worksheet to ensure PivotTable refresh results stay in tact

## 4.5 Wizard Report

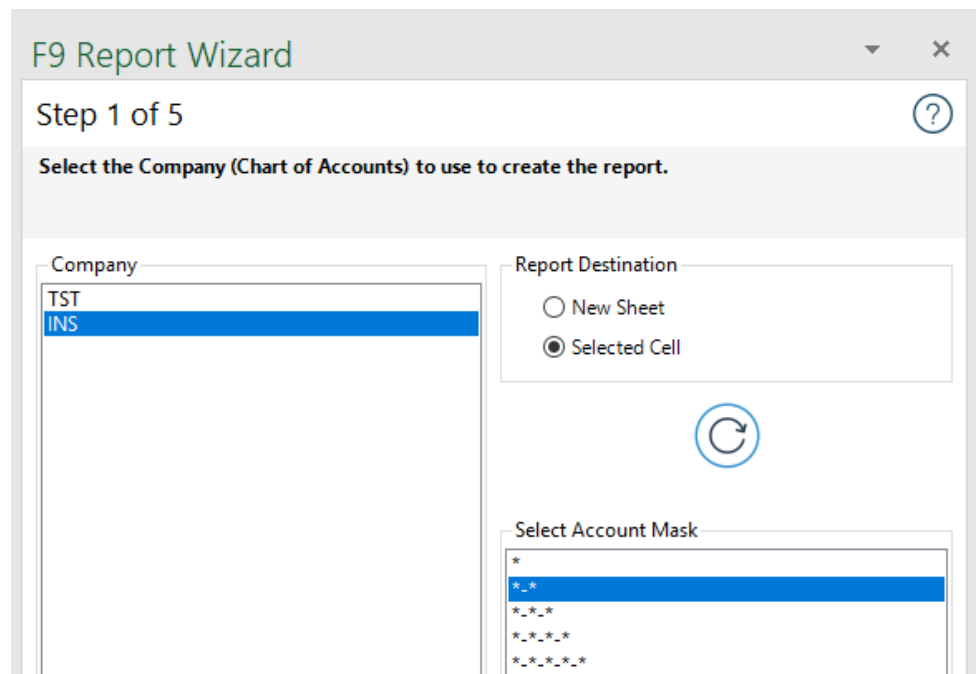
F9 Wizard is available to step you through defining different report dimensions by rows and columns and then outputting the results. F9 formulas can reside anywhere in the workbook and Wizard will help you visualize setting up new reports by multiple fiscal years or departments for example. Like the other F9 toolsets, a control area is created with dropdown parameters. Select and change any dropdown to calculate new results easily.

Any new report created by Wizard can be easily expanded and typically this is by adding new rows, subtotals, and formatting. All the F9 formulas are output with the correct absolute and relative cell referencing also.

### 1. Step 1 - Company

The very first thing to decide is what company (database) to access for building a new report. This also drives the display of parameter values such as years and account segments in steps that follow.

- From the **F9 Ribbon**, select **Wizard**
- You may want to resize the Task Pane display by dragging its border to the left
- Select a **Company and Account Mask** to start
- For **Destination**: **New Sheet**

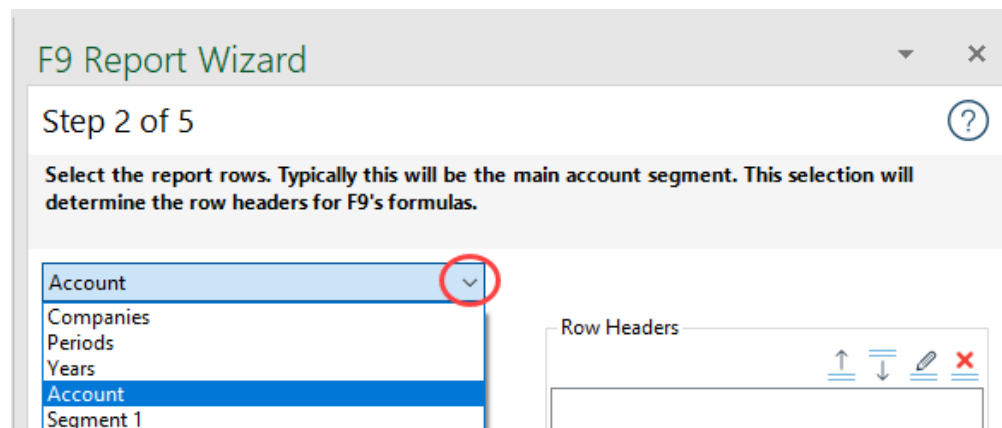


- Click 

## 2. Step 2 – Rows

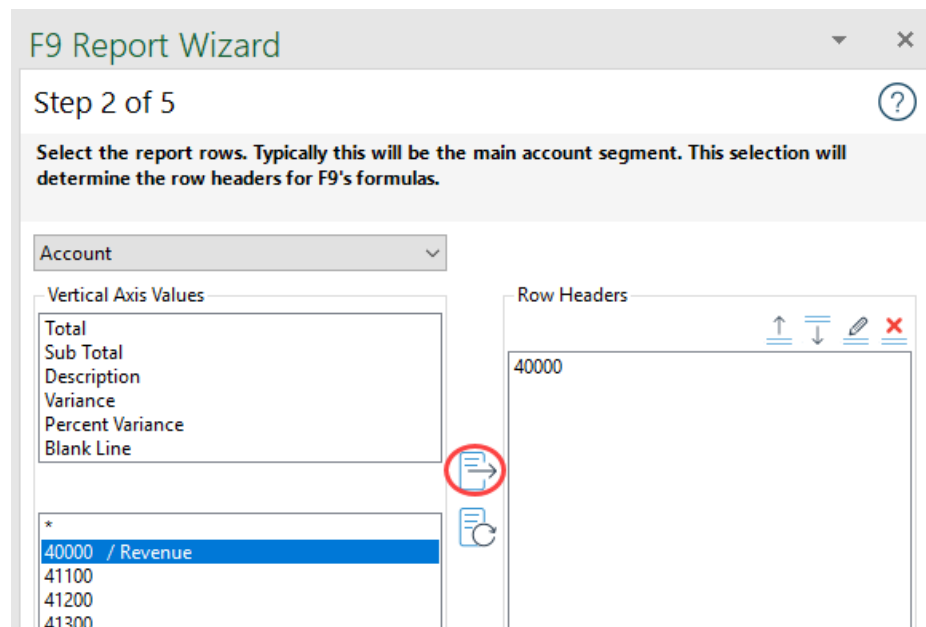
GL reports often have rows defined by accounts and descriptions. In F9's Wizard, this will be your main account segment typically. This does not mean you cannot have other types of rows; this can be by a different parameter such as by Location, Year, or Budget. In Step 2, you pick which parameter and values represent rows.

- In the **upper left dropdown**, click on the dropdown.

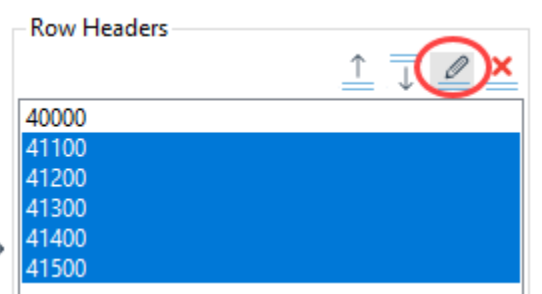


Notice the different items that can represent rows. Try clicking on different ones to see the values displayed.

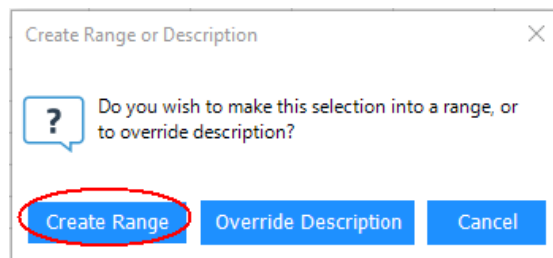
- Select **Account** which is the main account segment for this database.
- Click: **40000** and **Add** to move across to the Row Headers.



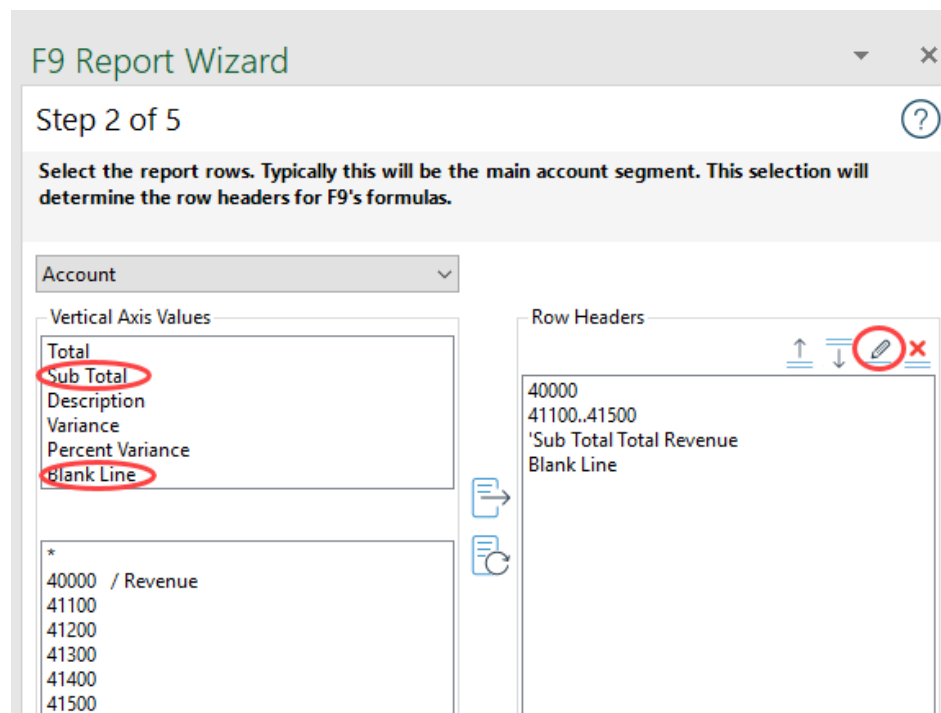
- Next, select accounts **41100 to 41500** and **Add**
- The next step will demonstrate setting up a range. In **Row Headers**, select **41100 to 41500** and then **Edit**



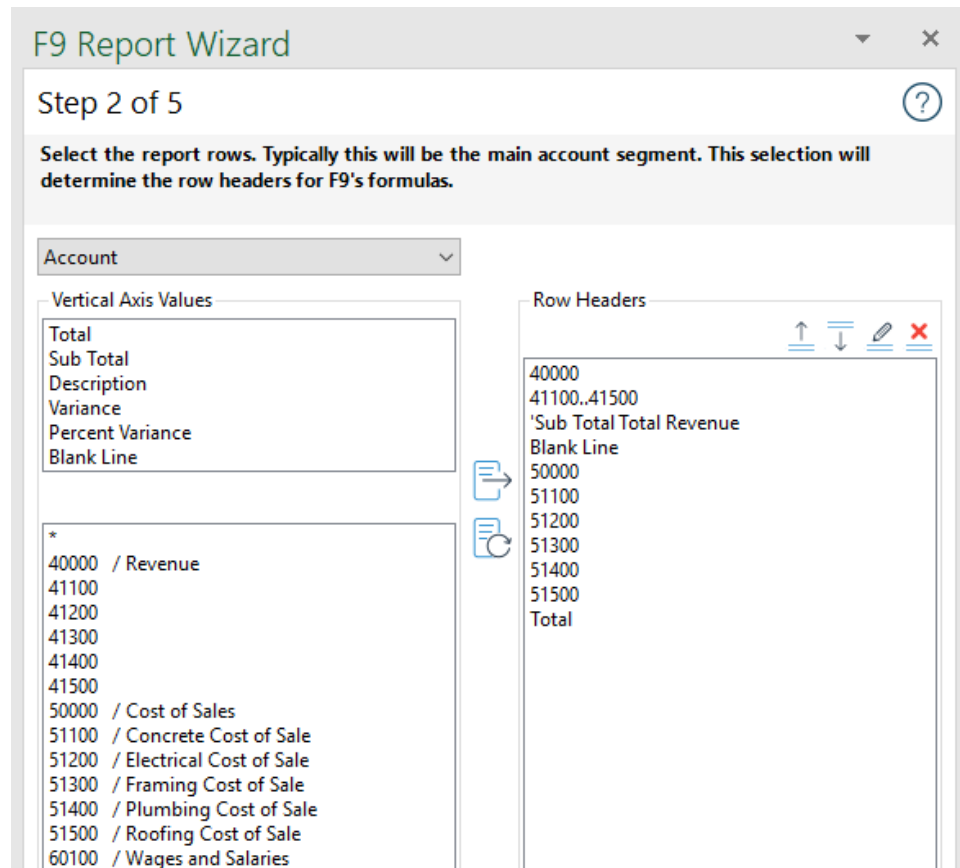
- Click **Create Range**



- Add a **Subtotal** and **Blank line**
- Select **Subtotal** and then **Edit**
- In **Description Override** type “**Total Revenue**”



- From the account list, highlight **50000 to 51500 + Add**
- Select **Total + Add**



Notes:

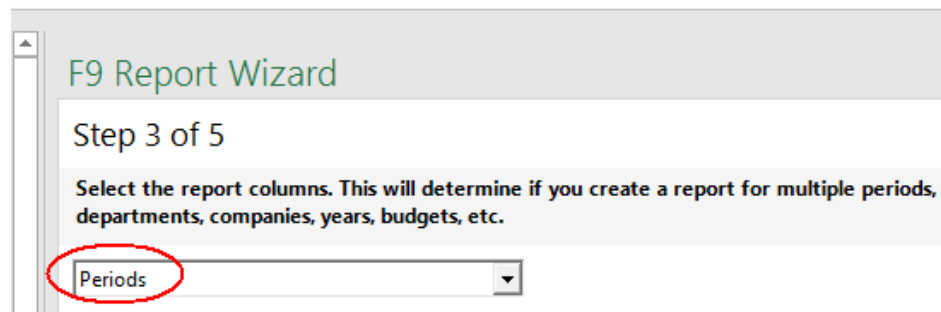
- You can move row headers using buttons:
- To delete a header row, select it and then:

- Click:

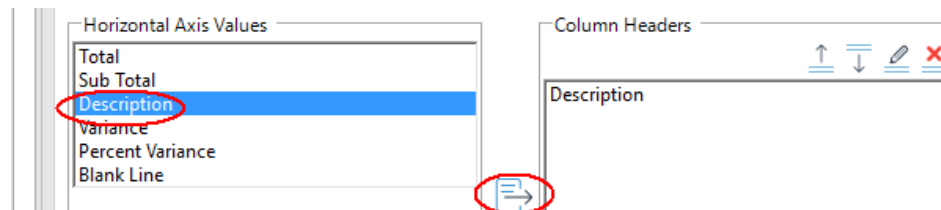
**3. Step 3 - Columns**

We could continue to add more rows and sub totals within Step 2 but for the purposes of this guide, we will go to the next step. For this report, the columns will be defined by Periods. Note that just like in Step 2, you can build columns by a different parameter such as Department or Year.

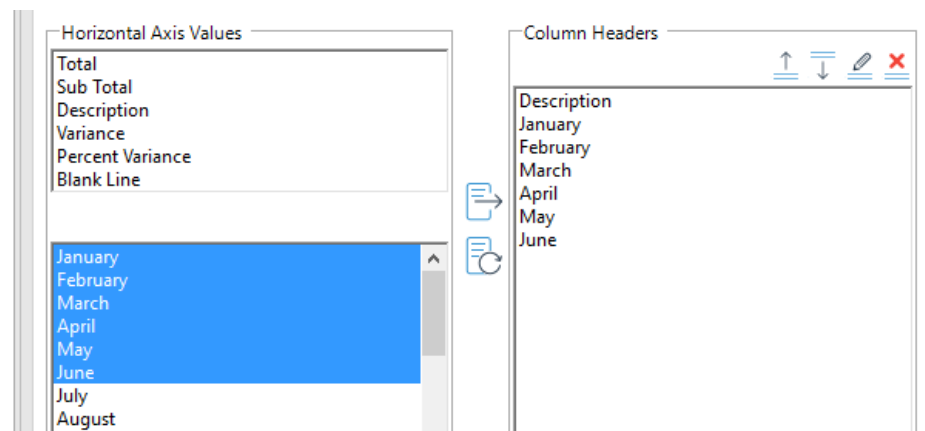
- In the **upper left dropdown**, click on **Periods**



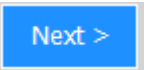
- To include descriptions for the accounts, select: **Description + Add**



- Select **Periods: January to June + Add**



- Click: 

You will notice each time  is clicked, the Wizard outputs the criteria into Excel:

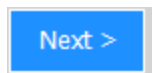
	A	B	C	D	E	F	G	H	I	J	K
1	Company	INS									
2											
3											
4											
5											
6											
7											
8				Descriptic	January	February	March	April	May	June	▼
9			40000								
10			41100..41500								
11			Total Revenue								
12											
13			50000								
14			51100								
15			51200								
16			51300								
17			51400								
18			51500								
19			Total								

#### 4. Step 4 – Control Area

The control area represents all reaming parameters for F9's formulas which are Dropdown controls to be used for later recalculation.

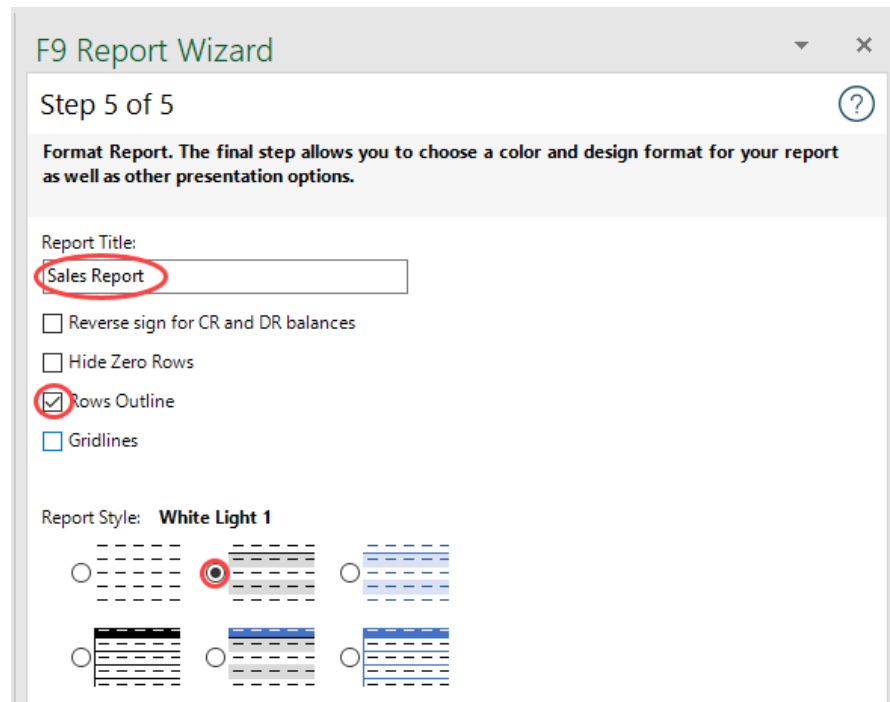
- No changes are required for defaults here

- Click:



#### 5. Step 5 - Formatting

- Change the settings to be the following:



- Click: 

	A	B	C	D	E	F	G	H	I	J
1		INS								
2	Periods	Horizontal								
3	Years	2019								
4	Account	Vertical								
5	Segment 1	*								
6										
7										
8										
9		40000								
10		41100..41500	0							
11		Total Revenue								
12										
13		50000								
14		51100								
15		51200								
16		51300								
17		51400								
18		51500								
19		Total								
20										
21										

Sales Report						
Description	January	February	March	April	May	June
Revenue	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
0	-\$77,806.54	-\$62,600.00	-\$29,836.07	-\$32,846.15	\$0.00	\$0.00
Total Revenue	-\$77,806.54	-\$62,600.00	-\$29,836.07	-\$32,846.15	\$0.00	\$0.00
Cost of Sales	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Concrete Cost of Sale	\$5,800.00	\$12,300.00	\$6,263.55	\$6,330.00	\$0.00	\$0.00
Electrical Cost of Sale	\$0.00	\$0.00	\$440.21	\$6,140.04	\$0.00	\$0.00
Framing Cost of Sale	\$610.54	\$11,100.00	\$3,300.00	\$2,106.81	\$0.00	\$0.00
Plumbing Cost of Sale	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Roofing Cost of Sale	\$3,000.00	\$5,600.00	\$4,652.33	\$3,848.89	\$0.00	\$0.00
Total	-\$68,396.00	-\$33,600.00	-\$15,179.98	-\$14,420.41	\$0.00	\$0.00

The resulting report created by Wizard contains formulas for balances as well as account descriptions.

Note:



- Now that the focus is back in Excel, you can change any of the formatting, add additional rows and subtotals to build out the report as needed.
- From Excel's Home tab, try working with different fonts, borders, color fill to enhance the style. For example:

	A	B	C	D	E	F	G	H	I	J
1		INS								
2	Periods	Horizontal								
3	Years	2019								
4	Account	Vertical								
5	Segment 1	*								
6										
7				<b>Sales Report</b>						
8				<b>Description</b>	<b>January</b>	<b>February</b>	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>
9		40000		Revenue	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
10		41100..41500	0		-\$77,806.54	-\$62,600.00	-\$29,836.07	-\$32,846.15	\$0.00	\$0.00
11				<b>Total Revenue</b>	<b>-\$77,806.54</b>	<b>-\$62,600.00</b>	<b>-\$29,836.07</b>	<b>-\$32,846.15</b>	<b>\$0.00</b>	<b>\$0.00</b>
12										
13		50000		Cost of Sales	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
14		51100		Concrete Cost of Sale	\$5,800.00	\$12,300.00	\$6,263.55	\$6,330.00	\$0.00	\$0.00
15		51200		Electrical Cost of Sale	\$0.00	\$0.00	\$440.21	\$6,140.04	\$0.00	\$0.00
16		51300		Framing Cost of Sale	\$610.54	\$11,100.00	\$3,300.00	\$2,106.81	\$0.00	\$0.00
17		51400		Plumbing Cost of Sale	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
18		51500		Roofing Cost of Sale	\$3,000.00	\$5,600.00	\$4,652.33	\$3,848.89	\$0.00	\$0.00
19				<b>Total</b>	<b>-\$68,396.00</b>	<b>-\$33,600.00</b>	<b>-\$15,179.98</b>	<b>-\$14,420.41</b>	<b>\$0.00</b>	<b>\$0.00</b>
20										

## 6. Recalculate

As a final exercise to the report creation with Wizard, we will step through some easy ways to refresh the results.

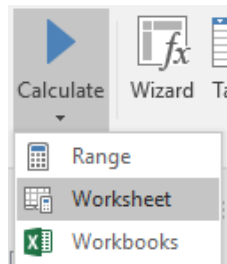
- **Select the first balance** in the report
- Click on the **formula bar** in Excel to see its references **color coded**

The screenshot shows the Excel interface with the formula bar at the top containing the formula: `=GL(BSPEC($C9,$B$5),E$8,$B$1,$B$3)`. The references are color-coded: \$C9 (green), \$B\$5 (purple), E\$8 (blue), \$B\$1 (red), and \$B\$3 (orange). Below the formula bar, the spreadsheet grid shows columns A through E and rows 1 through 9. The data in the grid matches the 'Sales Report' table from the previous image. Cell B9, containing '40000', is selected with a blue border. The 'Sales Report' table is visible in the background, with its first row (Description: Revenue, January: \$B\$3) also highlighted.

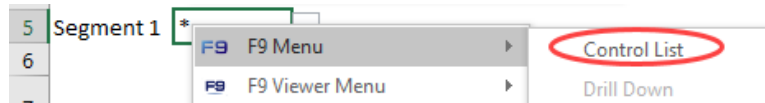
- Select cell **B3** and change the **Year to 2018**

	A	B
1		INS
2	Periods	Horizontal
3	Years	2019
4	Account	2018
5	Segment 1	2019
6		2020
		2021

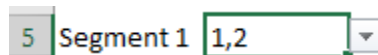
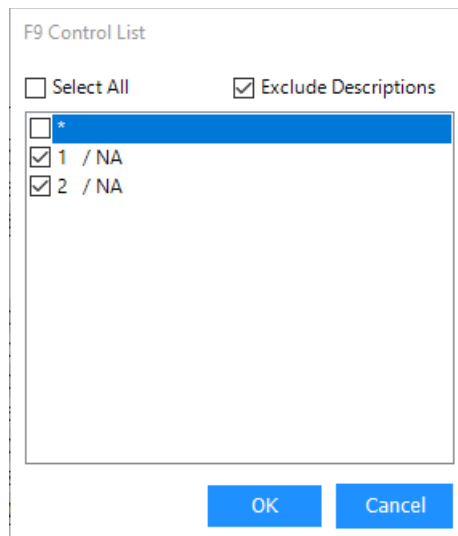
- **F9 Ribbon + Calculate + Worksheet**



- Select **Segment1, cell B5**
- **Right-Click + F9 Menu + Control List**



- Select **1 and 2** to output a list + **OK**



- **F9 Ribbon + Calculate + Worksheet**
- Rename this tab to: **Wizard**

	A	B	C	D	E	F	G	H	I	J
1		INS								
2	Periods	Horizontal								
3	Years	2018								
4	Account	Vertical								
5	Segment 1	1,2								
6										
7				<b>Sales Report</b>						
8				<b>Description</b>	<b>January</b>	<b>February</b>	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>
9		40000		Revenue	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
10		41100..41500	0		-\$90,400.00	\$0.00	-\$34,251.30	-\$132,500.00	\$0.00	\$0.00
11				<b>Total Revenue</b>	<b>-\$90,400.00</b>	<b>\$0.00</b>	<b>-\$34,251.30</b>	<b>-\$132,500.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
12										
13		50000		Cost of Sales	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
14		51100		Concrete Cost of Sale	\$775.00	\$0.00	\$8,977.85	\$15,075.00	\$0.00	\$0.00
15		51200		Electrical Cost of Sale	\$0.00	\$0.00	\$1,200.00	\$0.00	\$0.00	\$0.00
16		51300		Framing Cost of Sale	\$8,900.00	\$0.00	\$8,112.40	\$11,000.00	\$0.00	\$0.00
17		51400		Plumbing Cost of Sale	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
18		51500		Roofing Cost of Sale	\$16,000.00	\$0.00	\$3,600.00	\$16,000.00	\$0.00	\$0.00
19				<b>Total</b>	<b>-\$64,725.00</b>	<b>\$0.00</b>	<b>-\$12,361.05</b>	<b>-\$90,425.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
20										

As you can see a report created by Wizard is very flexible to calculate across a variety of parameters. You can also click on the period headings (January to June) and change to other values.

## 5 Functions

### 5.1 Fundamental GL

We have seen how F9 formulas return dynamic results when recalculated and this leads into learning more about how this works.

The GL function is the fundamental F9 formula as it links any cell in your spreadsheet to any balance in your GL. This happens with the use of parameters that tell F9 what GL total should be returned.

#### Syntax:

**=GL(Account, Period, Company, Year, Type, Currency)**

Parameter	Description	Examples
<b>Account</b>	GL account(s)	<i>100*-000-*</i> <i>1*-000..110-9000</i>
<b>Period</b>	Reporting period(s)	<i>Month 1</i> <i>March</i> <i>Year to Date 5</i>
<b>Company</b>	Company database	<i>INS</i>
<b>Year</b>	Fiscal year	<i>2019</i>

By the end of this User Guide, we hope you will be very familiar with this formula and how best to utilize its functionality.

If you already know how to write other Excel formulas, the same rules apply to F9's.

F9 provides a number of tools to help build GL formulas with the proper absolute and relative cell referencing to then copy and autofill additional rows and columns as needed.

F9 toolsets for creating GL formulas:

- Table
- Wizard
- Pivot

- Insert Function - GL

In the previous sections: [Dynamic Trial Balance](#) and [Sales Report](#), F9 created both GL and NGL (sign negated) formulas within the table reports.

The screenshot shows an Excel spreadsheet with a table of data. The formula bar at the top displays the formula `=NGL(BSPEC($B10,$C10),E$7,$B$2,$B$3)`, which is circled in red. The table below has the following data:

Account	Segment 1	Description	Amount January
41100	1	Revenue Concrete - Commercial	22,600.00
41100	2	Revenue Concrete - Residential	2,400.00
41300	1	Revenue Framing - Commercial	21,700.00
41500	2	Revenue Roofing - Residential	31,106.54
<b>Total</b>			<b>77,806.54</b>

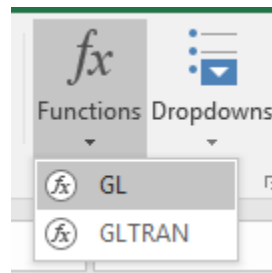
Of course you can always start typing any new formula manually in Excel but let's start learning more about the GL function by following the exercise in the next section.

## 5.2 Insert GL

So far in this guide, we have used F9's reporting tools to generate formatted results. It is possible to create F9 formulas anywhere in the worksheet and you can also place the dropdown controls anywhere you like.

### 1. F9 Ribbon

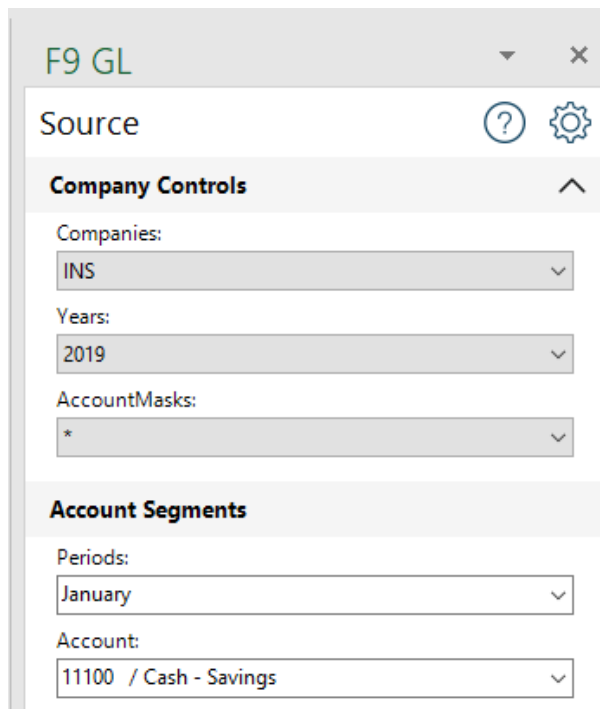
- Select a **new blank worksheet**
- From the **F9 Ribbon**, click **Functions**
- Select **GL**



A task pane will next open in Excel.

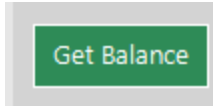
### 2. Insert GL

- From the F9 task pane, select the following:

A screenshot of the 'F9 GL' task pane in Excel. The pane has a title bar with 'F9 GL' and window control buttons. Below the title bar is a 'Source' section with a question mark icon and a settings gear icon. The main content is divided into two sections: 'Company Controls' and 'Account Segments'. Under 'Company Controls', there are three dropdown menus: 'Companies' (set to 'INS'), 'Years' (set to '2019'), and 'AccountMasks' (set to '\*'). Under 'Account Segments', there are two dropdown menus: 'Periods' (set to 'January') and 'Account' (set to '11100 / Cash - Savings').

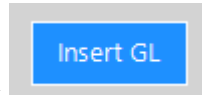
**Note:**

- All of the dropdowns represent the parameters that will be included in the GL formula.



- Click

The account balance for **January, 2019** displays beside the button.



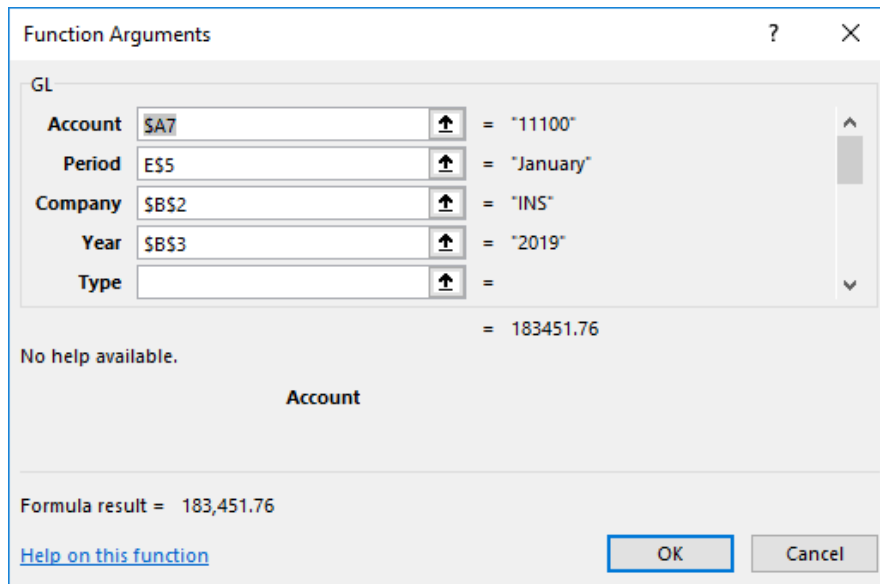
- Next, click to have F9 create a new GL formula template on the worksheet.

E7		✕ ✓ fx		=GL(\$A7,E\$5,\$B\$2,\$B\$3)		
	A	B	C	D	E	F
1						
2	Companies:	INS				
3	Years:	2019				
4						
5					January	
6						
7	11100			Cash - Savings	183,451.76	
8						

- Select the cell with the GL formula and then click on the **Excel formula bar**; parameters display as **color-coded**:

SUM		✕ ✓ fx		=GL(\$A7,E\$5,\$B\$2,\$B\$3)		
	A	B	C	D	E	F
1						
2	Companies:	INS				
3	Years:	2019				
4						
5					January	
6						
7	11100			Cash - Savings	\$B\$3)	
8						

- From the **Excel Ribbon**, select **Formulas + Insert Function**



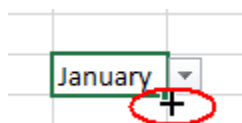
Notes:

- Excel provides its own window to help build formulas. Because **F9 is an Excel Add-In**, our **functions are registered** so that they can be calculated.
- The Account parameter includes a second F9 formula called **BSPEC** which stands for **Build SPECifier**. This will be explained later in the User Guide but for now, understand that it is used to build out combinations of account parameters.

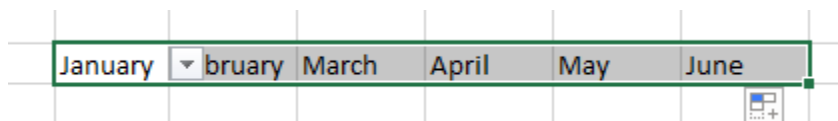
**3. Expand Report**

The next steps will show how to extend results across columns and rows using just Excel.

- Click on **cell E9** which has the dropdown: **January**
- **Hover the mouse** until the icon changes to:



- **Drag the cell** across to output months January to June



Note:

- The above step is using **Excel's** feature called **Auto Fill**
- Notice how F9 period dropdown controls are copied to each cell



- Next select **cell E10** which has the **GL balance: \$129,073.25**
- **Drag the cell** across columns E through J

	January	February	March	April	May	June
Cash - Savings	183,451.76	183,451.76	183,451.76	183,451.76	183,451.76	183,451.76

- Click **Shift-F9** to recalculate the balances for the new formulas

	A	B	C	D	E	F	G	H	I	J
1										
2	Companies:	INS								
3	Years:	2019								
4										
5					January	February	March	April	May	June
6										
7	11100			Cash - Savings	183,451.76	168,024.93	168,024.93	168,426.87	168,426.87	\$B\$3
8										

**Note:**

- **Shift-F9** calculates the active worksheet tab where-as **F9** calculates all open workbook(s)
- Click on **cell A8** (which is empty)
- Enter the account: **'11105**
- Click on **cells A9** and **A10** (which are empty)
- Enter the accounts: **'11110** and **'11120**
- Click on **cell A11**
- Enter the range: **'11200..11360**
- In **cell A12**, enter the wild card account: **'114\***
- Next, select **cells D7 to J7**
- Drag the **cells down rows** using Excel's auto fill
- Click **Shift-F9** to recalculate

	A	B	C	D	E	F	G	H	I	J
1										
2	Companies:	INS								
3	Years:	2019								
4										
5					January	February	March	April	May	June
6										
7	11100			Cash - Savings	183,451.76	168,024.93	168,024.93	168,426.87	168,426.87	168,426.87
8	11105			Cash - Savings	183,451.76	168,024.93	168,024.93	168,426.87	168,426.87	168,426.87
9	11110			Cash - Savings	183,451.76	168,024.93	168,024.93	168,426.87	168,426.87	168,426.87
10	11120			Cash - Savings	183,451.76	168,024.93	168,024.93	168,426.87	168,426.87	168,426.87
11	11200..11360			Cash - Savings	183,451.76	168,024.93	168,024.93	168,426.87	168,426.87	168,426.87
12	114*			Cash - Savings	183,451.76	168,024.93	168,024.93	168,426.87	168,426.87	168,426.87
13										

### Notes:

- The F9 GL formula uses cell referencing for parameters and this allows you to **auto fill** (or copy) to other **rows and columns**.
- **F9 formulas** can **reside anywhere** in the worksheet which offers a high level of flexibility.
- F9 **account segments** can be **single** values, **ranges**, **wildcards**, as well as **lists**.
- A **single quote** was entered in front of Account **segments** for Excel to treat **as text**. This is useful so that Excel does not format as a numeric result; for example: 100-10 (= 90)
- Notice in column D there are **account descriptions** with another F9 formula called: **=DESC( )**. This is described in more detail later in the guide.

## 4. F9 Calculate

With just one Insert GL function, you can see that the beginnings of a new report were created easily as all the cell referencing within the GL formula was setup correctly. In addition to the F9 formulas, there are also report dropdowns created for you.

- Select **cell B3** which has year **2019**.
- Change the year to **2018**
- **F9 Ribbon + Calculate + Worksheet**

	A	B	C	D	E	F	G	H	I	J
1										
2	Companies:	INS								
3	Years:	2018								
4										
5					January	February	March	April	May	June
6										
7	11100			Cash - Savings	283,354.98	283,704.98	284,104.98	210,451.76	210,451.76	210,451.76
8	11105			Petty Cash	225.00	225.00	225.00	225.00	225.00	225.00
9	11110			Cash in Bank - General	61,053.69	17,752.69	-21,247.31	20,680.19	20,680.19	20,680.19
10	11120			Cash in Bank - Payroll	6,905.79	18,198.67	27,784.43	0.00	0.00	0.00
11	11200..11360			Notes Receivable	866,093.46	970,932.41	1,080,430.97	1,305,337.12	1,305,337.12	1,305,337.12
12	114*			Inventory - Tampa Main Office	452,793.50	467,574.77	441,542.74	483,531.58	483,531.58	483,531.58
13										

Notes:

- The above highlights all the cells where F9 **created Dropdown parameters** from the first Insert GL Function step.
- When a dropdown is **not selected**, it **displays as regular text** which is helpful when printing and publishing reports.
- F9 Dropdowns **can also be moved** to different cells because of correct syntax for cell referencing. For example, you can **cut and paste** the Year dropdown to be closer to Periods.

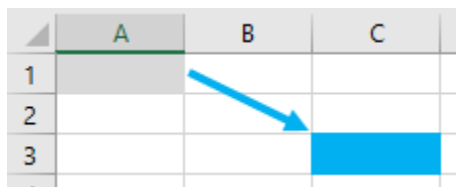
### 5.3 Absolute and Relative Cell Referencing

By default, a formula you create in Excel uses Relative cell references. This means that if you copy a formula, Excel will automatically adjust the cell references in the copied formula to refer to different cells, relative to the position of the original formula. An example would be: =A5\*.50 (both column and row are relative and can change).

If you want to maintain the original cell reference when copying formulas to different rows or columns, you make the cell address absolute by preceding both the column and row with a dollar sign (\$). For example: \$A\$2 (the address will not change).

Perhaps less often, there are situations where you will want to copy formulas relative to different column headings such as budget types or periods. In this case, only part of the cell reference is fixed and the other should change relative to where it is copied or auto filled by Excel. An example: G\$10 (row 10 is fixed and the column can change).

The following table summarizes how cell references change when copied:



Original Reference:	Changes To:
<b>\$A\$1</b>	<b>\$A\$1</b> (absolute reference)
<b>A\$1</b>	<b>C\$1</b> (column is relative; row is fixed)
<b>\$A1</b>	<b>\$A3</b> (column is fixed; row is relative)
<b>A1</b>	<b>C3</b> (column and row are both relative)

When entering a cell reference, press **F4** to see how Excel toggles through different types of references for you.

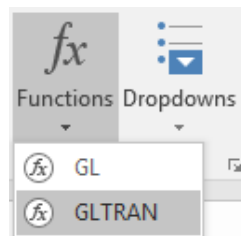
## 5.4 Insert GLTRAN

This section steps through how to build a report that sums up transactions. There may be instances where you need to calculate by week, for example, and GLTRAN is used for this scenario.

The GLTRAN formula is very similar to GL and NGL but uses a start/end date range instead of a period parameter.

### 1. F9 Ribbon

- Select a **new blank worksheet**
- From the **F9 Ribbon**, click **Functions**
- Select **GLTRAN**



A task pane will next open in Excel.

### 2. Insert GLTRAN

- From the F9 task pane, select the following:

F9 GLTRAN

Source ? ⚙

**Company Controls** ^

Companies:  
INS

Amounts:  
Net

AccountMasks:  
\*\_\*

**Transaction Dates**

From Date: 15-Apr-2019 To Date: 30-Apr-2019

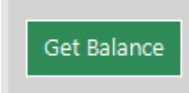
**Account Segments**

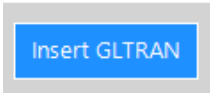
Account: 4\*

Segment 1: \*

**Note:**

- All of the dropdowns represent parameters that will be included in the GLTRAN formula.

- Click  The sum displays beside the button.

- Next, click  to have F9 create a new GLTRAN formula template on the worksheet.

	A	B	C	D	E	F	G
1	Segment 1:	*					
2							
3	Companies:	INS			Start Date:	15-Apr-2019	
4	Amounts:	Net			End Date:	30-Apr-2019	
5							
6	4*				Revenue - Commercial	-32,846.15	
7							

- Select the cell with the GLTRAN formula and then click on the **Excel formula bar**; parameters display as **color-coded**:

	A	B	C	D	E	F	G
1	Segment 1:	*					
2							
3	Companies:	INS			Start Date:	15-Apr-2019	
4	Amounts:	Net			End Date:	30-Apr-2019	
5							
6	4*				Revenue - Commercial	\$B\$4	
7							

- From the **Excel Ribbon**, select **Formulas + Insert Function**

Function Arguments ? X

GLTRAN

Account	BSPEC(\$A6,\$B\$1)	= "(4*)(*)"
FromDate	F\$3	= "15-Apr-2019"
ToDate	F\$4	= "30-Apr-2019"
Company	\$B\$3	= "INS"
Type	\$B\$4	= "Net"

= -32846.15

No help available.

**Account**

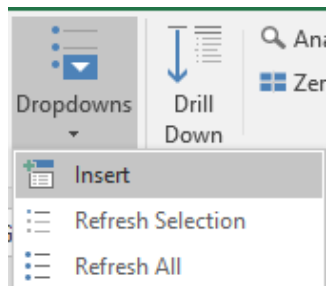
Formula result = -32,846.15

[Help on this function](#) OK Cancel

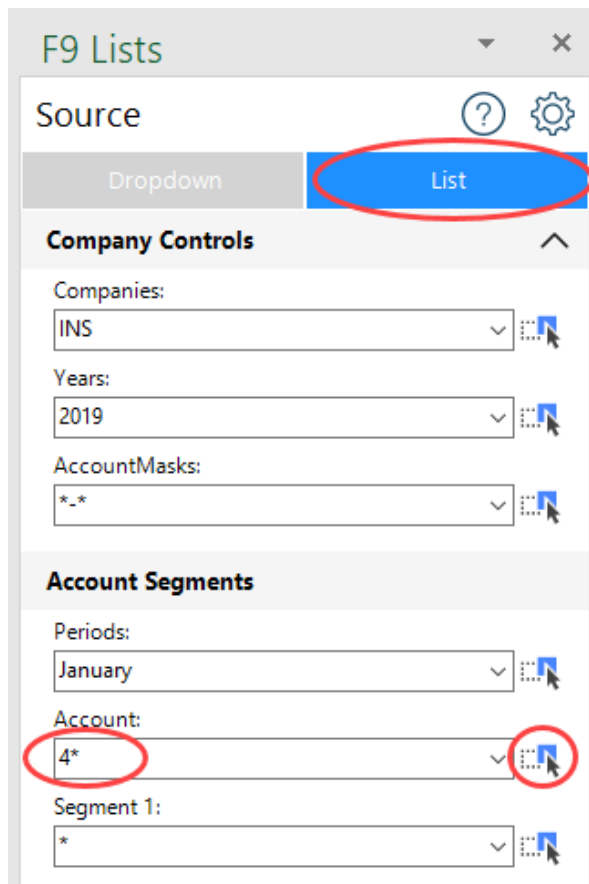
### 3. Expand Report


The next steps will show how to extend results by rows using F9.

- From the **F9 Ribbon** select **Dropdowns + Insert**



- Highlight **List**
- Enter **4\*** for **Account**



- **Drag the Account filter** by selecting its button:  and drop to **cell A7** in the worksheet.



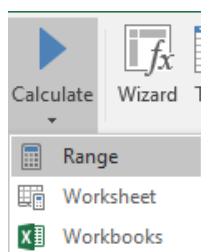
	A	B	C	D	E	F	G
1	Segment 1:	*					
2							
3	Companies:	INS			Start Date:	15-Apr-2015	
4	Amounts:	Net			End Date:	30-Apr-2015	
5							
6	4*				Revenue - Commercial	-32,846.15	
7	40000						
8	41100						
9	41200						
10	41300						
11	41400						
12	41500						

Note:

- The above step copies all Account segments for **40000 to 41500**
- List was chosen to return a partial list of accounts as text
- Next **select cells E6 to F6** (the first description and amount row)
- **Drag to row 12**

	A	B	C	D	E	F	G
1	Segment 1:	*					
2							
3	Companies:	INS			Start Date:	15-Apr-2019	
4	Amounts:	Net			End Date:	30-Apr-2019	
5							
6	4*				Revenue - Commercial	-32,846.15	
7	40000				Revenue - Commercial	-32,846.15	
8	41100				Revenue - Commercial	-32,846.15	
9	41200				Revenue - Commercial	-32,846.15	
10	41300				Revenue - Commercial	-32,846.15	
11	41400				Revenue - Commercial	-32,846.15	
12	41500				Revenue - Commercial	-32,846.15	
13							

- **F9 Ribbon: Calculate + Range** (to update selection only)



	A	B	C	D	E	F
1	Segment 1:	*				
2						
3	Companies:	INS			Start Date:	15-Apr-2019
4	Amounts:	Net			End Date:	30-Apr-2019
5						
6	4*				Revenue - Commercial	-32,846.15
7	40000				Revenue - Commercial	0.00
8	41100				Revenue Concrete - Commercial	-10,010.00
9	41200				Revenue Electrical- Commercial	-4,777.95
10	41300				Revenue Framing - Commercial	-9,469.58
11	41400				Revenue Plumbing - Commercial	0.00
12	41500				Revenue Roofing - Commercial	-8,588.62
13						

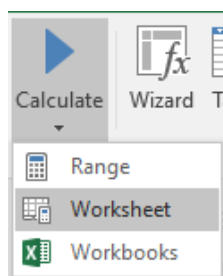
**Note:**

➤ F9 creates dropdown filters relevant to the GLTRAN formula

- Click on **cell B4**
- Select dropdown value **DR**:

	A	B	C
1	Segment 1:	*	
2			
3	Companies:	INS	
4	Amounts:	Net	
5		DR	
6	4*	CR	
7	40000	Net	

- **F9 Ribbon: Calculate + Worksheet**



	A	B	C	D	E	F
1	Segment 1:	*				
2						
3	Companies:	INS			Start Date:	15-Apr-2019
4	Amounts:	DR			End Date:	30-Apr-2019
5						
6	4*				Revenue - Commercial	333.96
7	40000				Revenue - Commercial	0.00
8	41100				Revenue Concrete - Commercial	0.00
9	41200				Revenue Electrical- Commercial	333.96
10	41300				Revenue Framing - Commercial	0.00
11	41400				Revenue Plumbing - Commercial	0.00
12	41500				Revenue Roofing - Commercial	0.00
13						

Notes:

- The F9 GLTRAN formula uses cell referencing for parameters and this allows you to **auto fill** (or copy) to other **rows**.
  - **F9 formulas** can **reside anywhere** in the worksheet which offers a high level of flexibility.
  - Because Insert GLTRAN started with row 9 (Account 3\*), we can delete this row as it's unique accounts are in the rows below.
- Rename the tab to: GLTRAN
  - Save the report file

## 5.5 DESC

We have seen how F9 formulas return dynamic results when recalculated and this includes account descriptions. The DESC function returns descriptions for full account codes. If the formula is used on a range or list of accounts, the first account description found will be returned. In short, DESC should be used to return the Natural Account description.

### Syntax:

**=DESC(Account, Company, Year)**

Parameter	Description	Examples
Account	GL account(s)	<i>100-000-00</i> <i>1150-*-*</i> <i>5000-01-*</i>
Company	Company database	<i>INS</i>
Year	Fiscal year	<i>2010</i>

F9 provides a number of tools to help build DESC formulas with the proper absolute and relative cell referencing:

- Table
- Insert Function - GL

An example of a DESC formula built using Insert GLTRAN is shown next.

	A	B	C	D	E	F
1	Segment 1:	*				
2						
3	Companies:	INS			Start Date:	15-Apr-2019
4	Amounts:	DR			End Date:	30-Apr-2019
5						
6	4*				=DESC(BSPEC(\$A6,\$B\$1),\$B\$3)	333.96

## 5.6 SDESC

The SDESC function is similar to DESC but returns descriptions for the individual account segment. If the formula is used on a range or list of segments, the first description found will be returned. When your reports split segment parameters into separate cells, we recommend using SDESC.

### Syntax:

**=SDESC(Segment, Segment Number, Company)**

Parameter	Description	Examples
<b>Segment</b>	GL account(s)	<i>1000</i> <i>1150</i> <i>500*</i>
<b>Segment Number</b>	Segment position in the full account code (1..N)	<i>1</i> <i>2</i> <i>3</i>
<b>Company</b>	Company database	<i>INS</i>

F9 tools and resources to help build SDESC formulas include:

- Wizard
- Sample Reports

Example of SDESC formula built by Wizard is shown next.

The screenshot shows an Excel spreadsheet with the following data:

	A	B	C	D
1		INS		
2	Periods	Horizontal		
3	Years	2018		
4	Account	Vertical		
5	Segment 1	1,2		
6				
7				
8				
9				

The formula bar shows: `=SDESC($C9,1, $B$1)`

The 'Sales Report' table is shown below:

Sales Report	
Description	J:
40000	=SDESC(\$C9,1, \$B\$1)

## 5.7 BSPEC

The BSPEC function expands the functionality of the Account code by **Building Account SPECifier** combinations. It is used for the **full account parameter** in F9 formulas where the segments are split in different cells.

### Syntax:

**=BSPEC(Segment 1, Segment 2, ... Segment N)**

You start to see the power of BSPEC when using different types of segments:

Segment:	Example:
Single	10050
Wild	5*
Range	101..112
List	10,14,18,22
Mixed	000,1*,505..525

The BSPEC formula is typically found within F9 formulas such as **NGL**, **GL**, and **GLTRAN** but can also reside in a cell by itself. The major benefit for using BSPEC is for account combinations and the next example illustrates this in detail.

For a product sales total, you need to include account codes ranging from 1000..1200 and 1500..1700. Additionally, certain divisions are excluded from the report which is the second segment of the account code. The divisions do not fit in a range but are listed as: 01,03, and 2\*

One way in Excel is to list all the unique account combinations in one cell as:

### Cell A1:

1000..1200-01, 1000..1200-03,1000..1200-2\*,1500..1700-01,  
 1500..1700-03, 1500..1700-2\*

And the GL formula is:

**=GL(A1,"this month",...)**

If you have more segments and more groupings, the number of combinations will quickly become complex and difficult to maintain!

Instead, with F9's **BSPEC** formula, the **combinations** are built for you. Simply provide the segment groups:

**Cell A1:** 1000..1200,1500..1700

**Cell A2:** 01,03,2\*

And the GL formula becomes:

**=GL(BSPEC(A1,A2),"this month",...)**

## 6 Dropdowns

Formulas are based on your GL parameters and F9 creates Excel dropdowns so that you do not need to memorize available values such as account segments, departments, and budgets that will change over time.

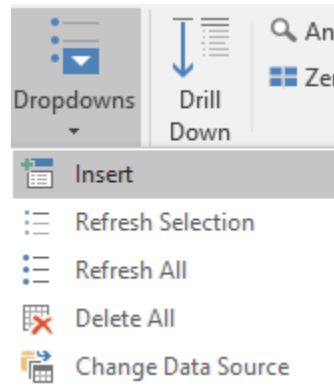
Creation of F9 dropdowns is automatic from reporting toolsets: Wizard, Table, PivotTable, Insert GL, and Insert GLTRAN.

When designing new reports, keep in mind that the dropdowns can reside anywhere in your Excel file and this section includes information on how to insert and work with individual dropdowns.

### 6.1 Insert

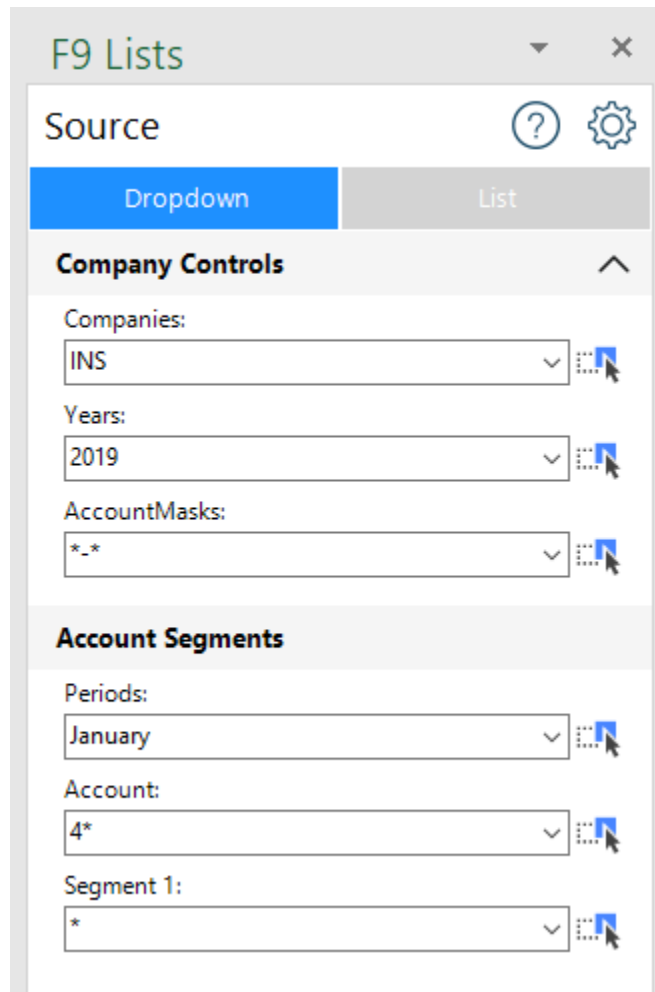
#### 1. Source

- Select a **new blank worksheet**
- From the **F9 Ribbon**, click **Dropdowns**
- Select **Insert**



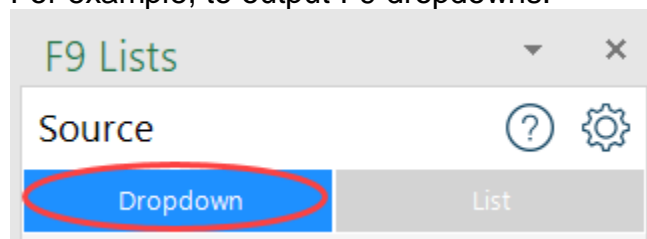
A task pane will display on the left.





There are three types of output that can be dragged into Excel: **Dropdown** and **List**. Simply select and it will be highlighted in blue.

For example, to output F9 dropdowns:



F9 parameters are dragged and dropped into Excel. With the mouse, you select and drag the icon to the right of its corresponding parameter.

## Dropdown

An F9 dropdown is dynamic and contains all values for a given parameter. From time to time, this information can be refreshed; for example, when a new fiscal year is opened or when new account segments are added.

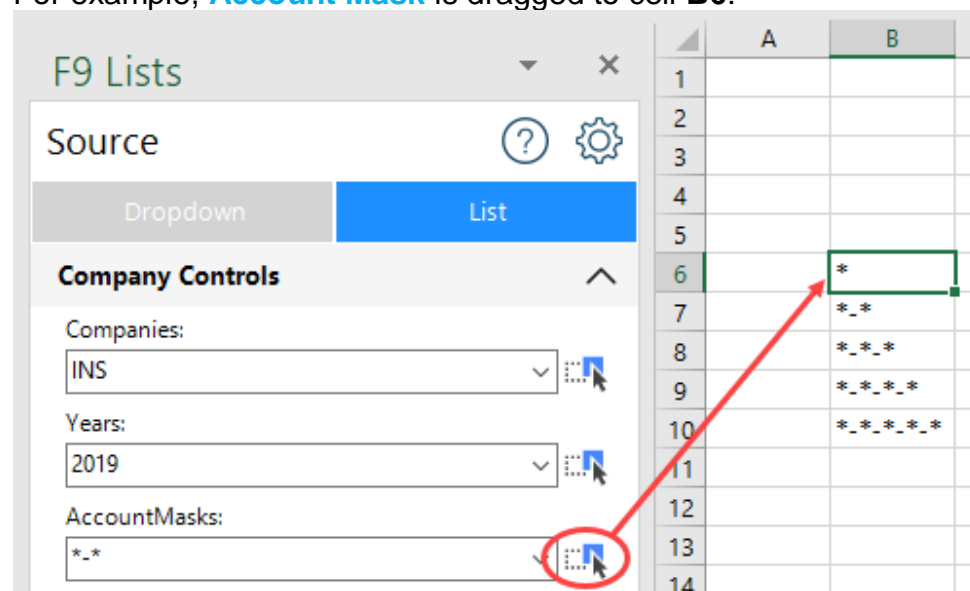
An example for Years:



## List

Copies a static list of parameter values into a range of cells.

For example, **Account Mask** is dragged to cell **B6**:



## Filter

Copies a partial static list of values into a range of cells.

For example, to output a **Account wildcard: 5\***

The screenshot shows the 'F9 Lists' application window. The 'Source' section has 'List' selected. Under 'Company Controls', 'Companies' is 'INS', 'Years' is '2019', and 'AccountMasks' is '\*\_\*'. Under 'Account Segments', 'Periods' is 'January', 'Account' is '5\*', and 'Segment 1' is '\*'. A red arrow points from the '5\*' field to the value '50000' in the spreadsheet cell B13.

	A	B
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		50000
14		51100
15		51200
16		51300
17		51400
18		51500
19		
20		
21		
22		
23		

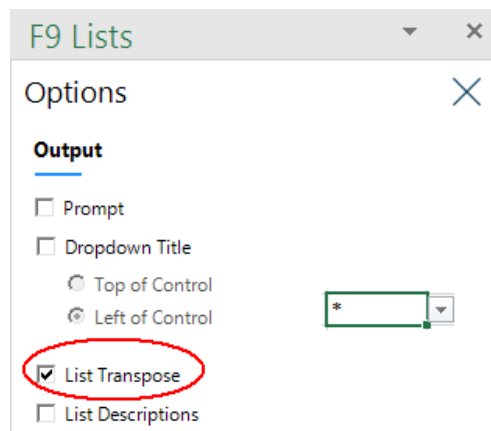
## 2. Options

There are additional settings which can be changed depending on how you want dropdowns or lists formatted. For example, if a new report needs to be created by department, we can drag the departments across columns.

- Click the **Options** button



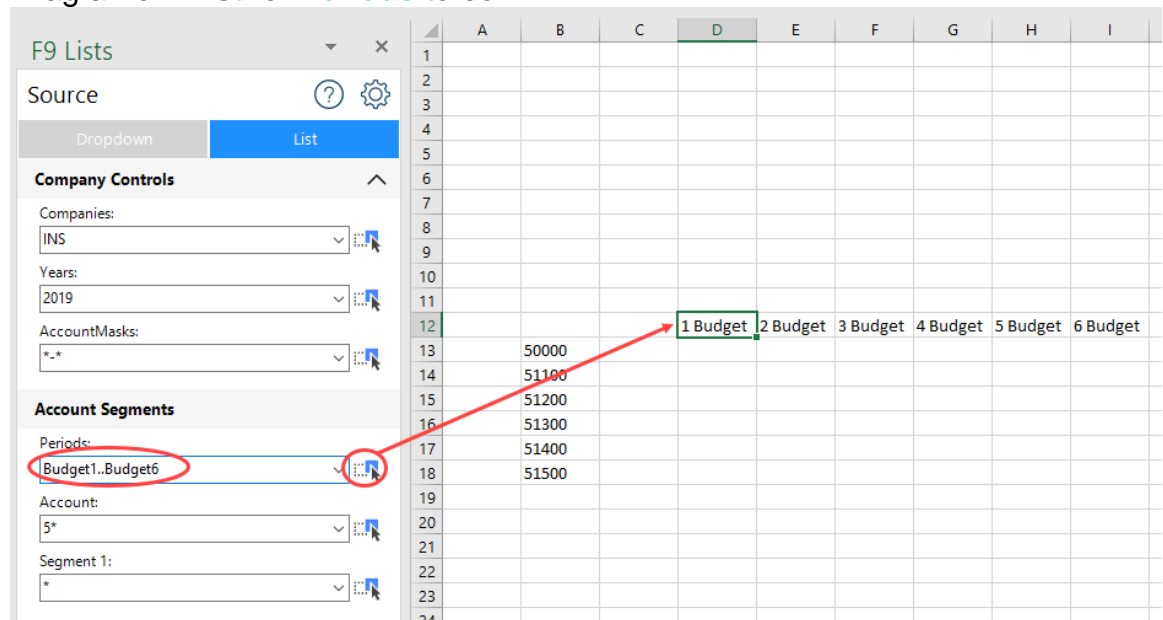
- Select List **Transpose**



- Click the **Close** button



- Drag a new **List** for **Periods** to cell **D12**



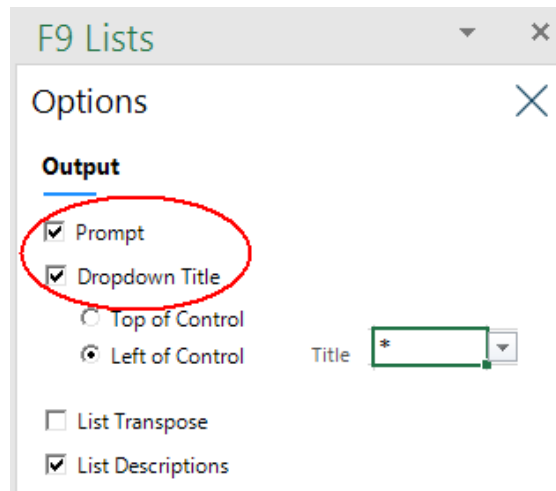
### 3. New Report Template

To learn more on how to leverage F9's Drag and Drop features, the following steps demonstrate creating a new report template from scratch.

- Add a **new blank Worksheet**
- Click **Options**



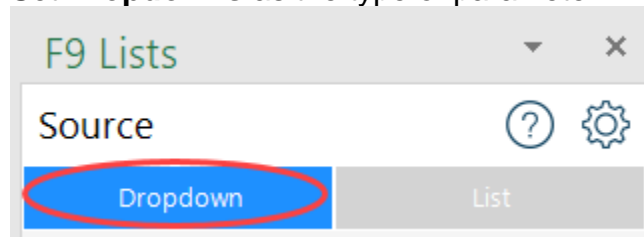
- Change to use a **Prompt** and **Dropdown Title**
- Ensure List Transpose is **not** checked



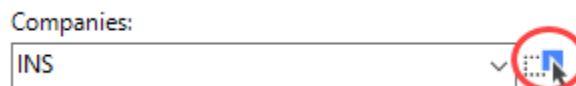
- Click **Close**



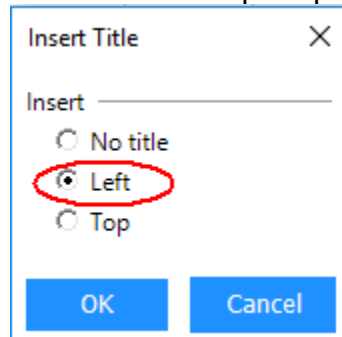
- Set **Dropdowns** as the type of parameter



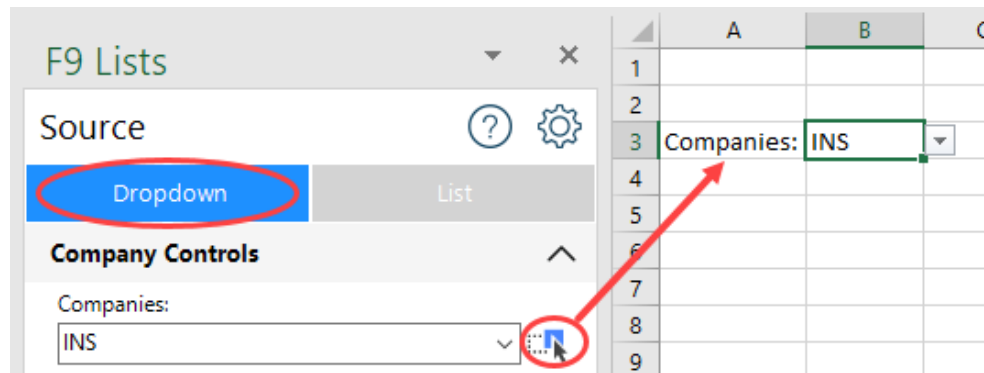
- Start dragging the **Company** parameter



- Click **Left** when prompted



- Drag and drop to **cell A3**

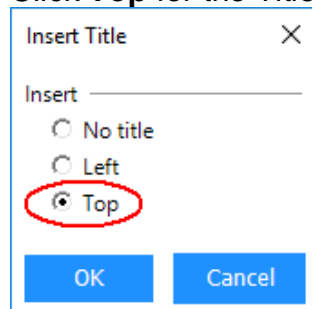


- Repeat the same steps and drag **Account Masks** and **Years** into subsequent rows:

	A	B	C
1			
2			
3	Companies:	INS	
4	Years:	2019	
5	AccountMasks:	*_*	
6			

Next, we will output two parameters where the title displays above.

- Start dragging **Segment1** to **cell B8**
- Click **Top** for the Title prompt



	A	B	C
1			
2			
3	Companies:	INS	
4	Years:	2019	
5	AccountMasks:	*_*	
6			
7			
8		Segment 1:	
9			
10			

- From the dropdowns, select **Segment1: 1**

- Resize the Excel columns if needed

	A	B	C	D
1				
2				
3	Companies:	INS		
4	Years:	2015		
5	AccountMasks:	*-*		
6				
7				
8		Segment 1:		
9		1 / NA		
10				
11				

This can be considered the control area for the new report template.

Next, for the report we should build in columns to represent budget balances for the entire fiscal year.

- Select **List** as the source type

The screenshot shows a 'Source' selection window with two options: 'Dropdown' and 'List'. The 'List' option is highlighted with a red circle.

- For **Periods**, enter the following range:

The screenshot shows a 'Periods' input field with the text 'Budget 1..Budget 12' entered. A mouse cursor is visible over the field.

- Start **dragging Periods** to **cell E12**
- Check **Transpose + OK**

The screenshot shows a 'Lists Options' dialog box. The 'Transpose' checkbox is checked and circled in red. The 'Descriptions' checkbox is also checked. There are 'OK' and 'Cancel' buttons at the bottom.

The result is F9 creates budget periods across 12 columns:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1																
2																
3	Companies:	INS														
4	Years:	2019														
5	AccountMasks:	*.*														
6																
7																
8		Segment 1:														
9		1 / NA														
10					1 Budget	2 Budget	3 Budget	4 Budget	5 Budget	6 Budget	7 Budget	8 Budget	9 Budget	10 Budget	11 Budget	12 Budget
11																
12																
13																

The next step for this template's parameters is to build in rows by main Account.

- Within **Accounts**, enter the following: 5\*

Account:

- Start dragging Accounts to cell B14 as a List
- Uncheck Transpose and Descriptions + OK

Lists Options ✕

---

Lists

Transpose

Descriptions

The result is that F9 adds in rows for the individual accounts.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1																
2																
3	Companies:	INS														
4	Years:	2019														
5	AccountMasks:	*.*														
6																
7																
8		Segment 1:														
9		1 / NA														
10					1 Budget	2 Budget	3 Budget	4 Budget	5 Budget	6 Budget	7 Budget	8 Budget	9 Budget	10 Budget	11 Budget	12 Budget
11																
12																
13																

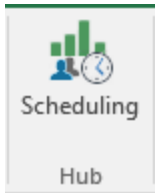
As a summary, eight report parameters were dragged and dropped into a new Worksheet. The control area contains F9 Dropdowns. Columns are based on budget periods and rows are setup by main segment.

With this report template, you can start building a single =GL formula that includes cell referencing to the parameters and then copy across rows and columns. Adding subsequent groups of accounts and subtotals should be a snap.



## 7 Scheduling

F9's Scheduling Hub is a robust, feature-rich application for running and distributing reports and a convenient point of access for managing them.



Some common scenarios:

- Run one or a group of reports
- Schedule overnight or hourly runs
- Email reports (or portions) to users
- Save to shared folders and sites
- Output to different formats such as PDF

With F9 Hub, you can easily automate the steps and this helps increase productivity.

F9 Hub also provides more advanced features such as: conditional email alerts, report filters, tree report generation, password protection, and Publish to Viewer.

F9 Hub runs as a separate application outside of Excel and replaces the older Scheduler from F9 Version 5. It can be launched from the F9 Ribbon or using Windows Start/Run.

For more information, visit the [product page](#) or refer to the installed **Scheduling Hub User Guide** to setup and begin using the F9 Hub!

## 8 Tools

With this guide, we will touch on two of F9's toolsets to cover tasks related to other products.

### 8.1 Publish to Viewer

There will be customers who install both F9 Report Writer licenses as well as F9 Viewers licenses.

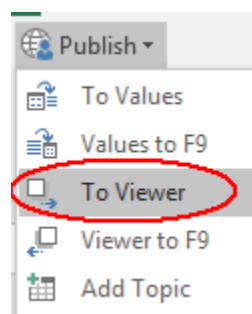
F9 Report Writer users design, create, and maintain F9 reports and are also responsible for sharing to other non-F9 users.

F9 Viewer is for decision-makers who want to do more than look at static reports. Viewer provides an interface to easily drill, filter, and recalculate financial results.

Both F9 Report Writer and F9 Viewer run inside Excel but have different formulas. F9 formulas can be edited and copied anywhere whereas Viewer formulas can only be recalculated.

Within F9, you can easily publish your report for use by F9 Viewer.

1. **Open Excel** and **set calculation to Manual**
2. **File Open** the F9 report
3. **F9 Ribbon**: Publish + To Viewer



4. Follow steps to save the file to a new name/folder.

For more details on F9 Viewer, visit the [product page](#) or refer to the installed F9 Viewer documentation and help.

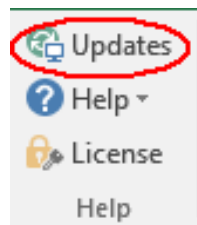
## 9 Resources

The information in this guide does not cover all aspects of F9's functionality but should provide a solid foundation.

We recommend referring to the installed product help topics for specific/more technical details as needed. The installed F9 sample reports showcase a variety of financial report scenarios and formulas which can be leveraged to build new reports. F9's website provides the entire picture for all products available including updates from the Downloads site.

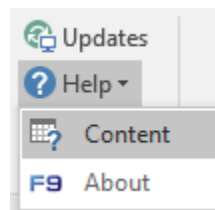
From the F9 Ribbon, you can navigate to a number of resources.

### 9.1 Updates



- Select **Updates** to have F9 check online to see if there any new updates for your product.

### 9.2 Help



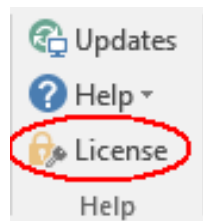
- Select **Content** to open F9's **detailed product Help**
- Click **About** to see your installed **program versions** of F9; this is often required by **F9 Technical Support**

### 9.3 License

When F9 is first installed, it initially runs as a trial.

A purchased license of F9 needs to be activated on either the workstation running F9 or a Server depending on what is required.

F9 can be easily activated by selecting its command from the F9 Ribbon.



For more details, please refer to the **product Help** content.

## 10 Appendix

### 10.1 Account Ranges

The majority of sample reports and formulas in this guide split the account segments into separate cells. Another option available is to use full account codes where segments are separated by dashes.

#### Syntax:

**Segment1-Segment2-...-SegmentN**

where **N** = total number of segments

A given segment can have wildcard characters and you can list multiple accounts in one cell. Examples:

Account Specifier:	Description:
*_*_*	All accounts
4000-*_*	All departments for account 4000
4*-010-00	All accounts starting with 4 for department 010 and subaccount 00
5?00-*_*	All accounts starting with 5 and last 2 characters 00 for all departments and subaccounts.
4000..5000-010-*	Range of accounts from 4000 to 5000 for department 010 and all subaccounts
4000-000-*;5100-010-*	Sum of 2 accounts: 4000-000-* and 5100-010-*
4000-010-00..5100-010-00	<b>Invalid – ranges only supported within each segment</b>
4000,4100,5000-010-00	<b>Invalid – use BSPEC to list segments</b>
4*..5*-010-00	<b>Invalid – a segment cannot mix ranges with wildcards</b>

Although these Account specifiers may seem to be able to accommodate every aspect of your reporting needs, imagine if you wanted to create a departmentalized report for each department. Using the above Account ranges will accomplish this, but you will have to recreate the report for each department, reentering the appropriate account ranges, each time specifying a different department.

A very important feature of F9 is allowing you to cell reference each segment of your account code individually, so that you can make your report turn on any segment of your account code. This is accomplished with the **BSPEC** Function.

## 10.2 Period Specifiers

In F9, period parameters use basic English words that related to accounting periods as well as calendar time lines. A variety of examples are listed in the reporting task panes (Pivot, Wizard, and Table) as well as F9 Dropdowns.

A given F9 parameter can consist of more than one period however, for best performance you should always use “year” or “ytd”. For example:

- **1,2,3,4,5,6 (slow calculation)** versus **YTD 6 (fast calculation)**

Period Specifier:	Description:
Month 2	Balance for fiscal period 2
This Month	Current (usually open) period
This Month Last Year	Current period in previous fiscal year
Last Month	Period before current fiscal period
Year, YTD, Year to Date	Total balance for periods up to current period
Change Month 5	Net period activity for period 5
September	Balance for colander month September
QTR 1, Quarter 1	Total for first fiscal quarter
Half Year 2	Last 6 periods of fiscal year
Running Year 10	Adds prior year periods (11,12) plus YTD 10

Another feature of F9's periods is that the balance returned follows general accounting principles and is based on the type of account (Balance Sheet or P&L). By default, F9 returns a year to date balance for Balance Sheet accounts and a net period amount for P&Ls. With the correct wording, F9 can return any type of balance.

Results vary depending on the account type as shown in the next table:

<b>Period Specifier:</b>	<b>Results:</b>
<b>Month 5</b>	<b>BS:</b> Open + 1 + 2 + 3 + 4 + 5 <b>PL:</b> 5
<b>YTD 5</b>	<b>BS:</b> Open + 1 + 2 + 3 + 4 + 5 <b>PL:</b> 1 + 2 + 3 + 4 + 5
<b>Change 5</b>	<b>BS:</b> 5 <b>PL:</b> 5
<b>Year Change 5</b>	<b>BS:</b> 1 + 2 + 3 + 4 + 5 <b>PL:</b> 1 + 2 + 3 + 4 + 5
<b>Open 1</b>	<b>BS:</b> Open 1 (open balance for year) <b>PL:</b> 0
<b>Open 5</b>	<b>BS:</b> 4 (ending YTD balance) <b>PL:</b> 0



## 10.3 Migrating from F9 Version 5

### Reports from F9 Version 5:

- All your F9 V5 reports will continue to run in F9 Version 6 without requiring any changes.

### New Functionality in F9 Version 6:

- **Table Refresh**
  - F9 Version 6 Tables can have the underlying data rebuilt. For example, if new accounts are added, these will appear in the refreshed F9 Table
  - For any F9 Version 5 Tables, you will need to recreate them with F9 V6 to have this new Refresh rows capability
- **PivotTable Refresh**
  - F9 Version 6 PivotTables can also have the underlying data rebuilt. For example, for new accounts.
  - For any F9 Version 5 PivotTables, you will need to recreate them with F9 V6 to have this new Refresh rows capability

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