

Mastering Excel

SPREADSHEET INQUIRE



Mark Moore

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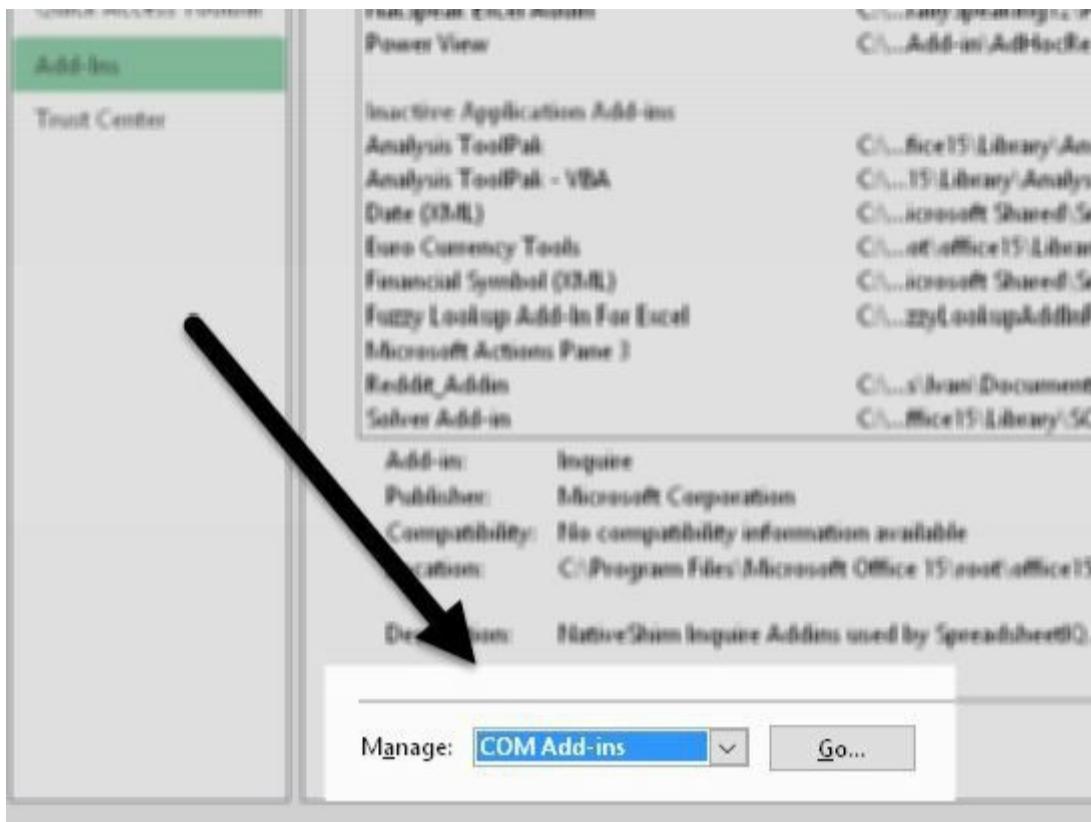
---IMPORTANT---

Before we start, I need you to be aware of something. This lesson covers an Excel feature called Spreadsheet Inquire.

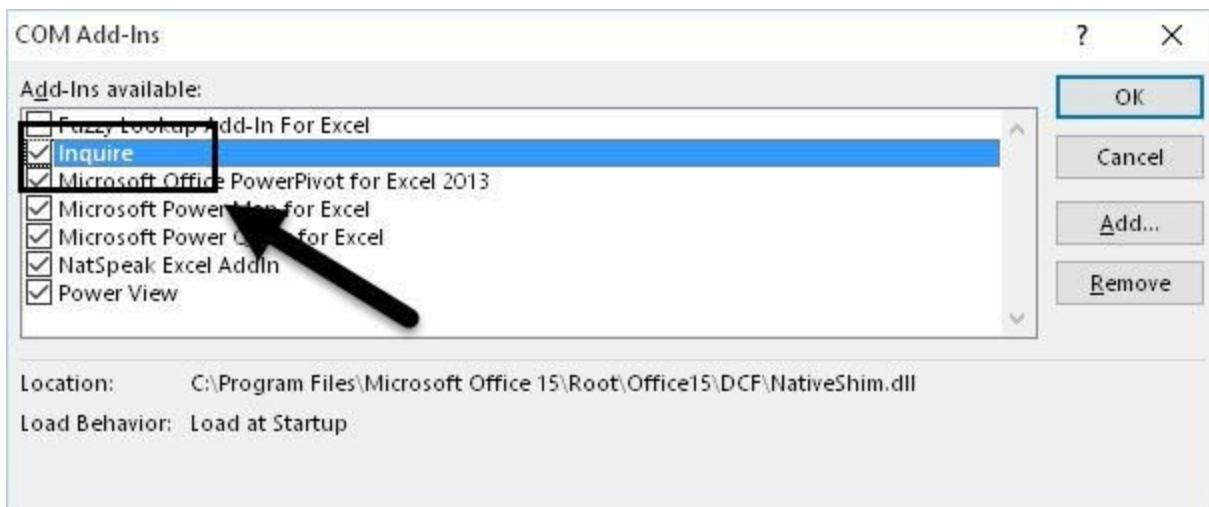
NOTE: Spreadsheet Inquire is only available for Microsoft Office 365 Professional Plus or Office Professional Plus. If you do not have either one of these, you will not be able to use this lesson.

The easiest way to see if you can use this lesson is to try to install Spreadsheet Inquire.

1. Open Excel.
2. Click on File.
3. Click on Options.
4. Click on Add-Ins.
5. Select COM Add-Ins from the drop down list.



6. Click Go.
7. Look for the **Inquire** entry.



8. If you have Inquire, select it and click OK.

If you do not have Inquire you cannot follow-along with the exercises.

However, you can read through the lesson and see if this functionality is valuable enough for you to upgrade your Excel (or maybe talk your boss into upgrading).

Introduction

Welcome to another Mastering Excel lesson. If you have completed previous lessons, thanks for sticking around. If you are new, I hope you enjoy the lesson. The lessons are easy-going, relaxed, no-nonsense and easy to understand. I try my best to explain complex topics in a simple and entertaining way. My goal is that you will finish reading each lesson and have immediately applicable skills you can use at work or home.

This lesson will focus on an almost unknown feature that Microsoft packaged in Excel: Spreadsheet Inquire. Spreadsheet Inquire is pretty awesome. It gives you several tools that you can use to audit and analyze your workbooks. If you find yourself constantly trying to figure out how other people's Excel files work or what they changed or anything like that, this will be right up your alley. It's the kind of thing that once you see it, you'll wonder how you ever lived without it.

If you want to work along with the exercises in this lesson (I strongly recommend this), please go to my website and download the follow-along workbooks.

My website is: <http://markmoorebooks.com/spreadsheet-inquire/>

A bit of clarification on how to get the follow-along workbooks. You will input your name and email address. You will receive a confirmation email. Once you confirm, you will receive a second email with the follow-along workbook.

Why do I do this?

I can't package an Excel file with an eBook. Amazon will not allow it. Also, the only thing I do with your email is send you the workbook and periodically send you updates about new lessons that I am working on. Every once in a

while, I hold raffles for my readers. No really, I do. You get free stuff just for hanging around and learning Excel. Of course, you can unsubscribe after getting the follow-along workbook but you'll regret not participating in the raffles!

There are several workbooks for this lesson (they are all linked together) and I have put them all in a zip file.

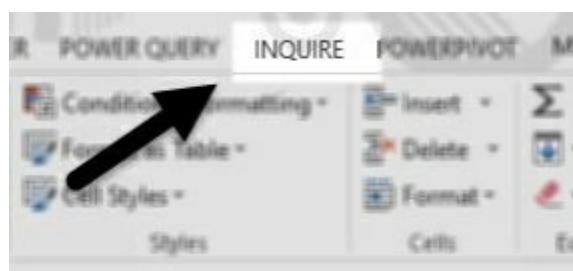
In my examples, I created a new folder in the C drive called Common. I extracted all my workbooks to that folder. You can do the same if you want your exercises to match the images in the lesson.

Installing Spreadsheet Inquire

You should already have Inquire installed. You read the section before the Introduction, right? If you didn't go back a few pages and read that section! There are only two versions of Excel that come with Spreadsheet Inquire, **Office 365 Professional Plus and Office Professional Plus**. If you don't know if you have either one of those, just follow the steps in the 'Before We Begin' section to install Inquire. If you don't see it there, you have the wrong version.

Note: I am using Excel 2016. If you are using previous versions of Excel, the steps might be a bit different.

After you have Inquire installed, you will see a new tab in Excel.



Workbook Analysis

If you find yourself in situations where people send you workbooks and you have to figure out how they work, workbook analysis is precisely what you need.

Here's the situation: You sent an invoice out to an old customer, Wile E. Coyote. He's not the most sane customer and he tries to pull a few tricks on you every so often. Today, you received an angry email from him telling you that the invoice you sent was incorrect. He returns the invoice to you. You have to figure out what happened. Did you make a mistake or is he trying to trick you?

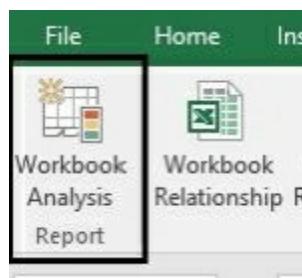
Let's use Inquire to analyze the workbook:

1. Open the follow-along workbook, Workbook Analysis.xlsx.

The workbook looks okay doesn't it? Let's analyze it to see a ton of information about it.

	A	B	C	D	E	
1						
2		Acme Inc.				
4		9511 Nowhere				
5		Somewhere, Some State, 123456				
6						
7		BILL TO				
8		Mr. Wile E. Coyote				
9		Nefarious Industries, LLP.				
10		The Desert				
11						
12						
13		DESCRIPTION	Qty	Price	Extended Price	
14		No-slip Rubber Bands	100	0.25	25.00	
15		Roller Skates	25	8.00	200.00	
16		Rubber Mallet	15	10.00	150.00	
17		Road Runner Traps	125	72.00	8,000.00	
18		Shovel	1	15.00	15.00	
19		First Aid Kit	20	1.80	36.00	
20		Crutches	2	50.00	100.00	
21						
22						
23						
24						
25				Subtotal	\$8,526.00	
26				Tax Rate	7.0%	
27				Tax Due	\$596.82	
28				Total Due	\$9,122.82	
29						

- Click on the Workbook Analysis button in the Inquire tab.



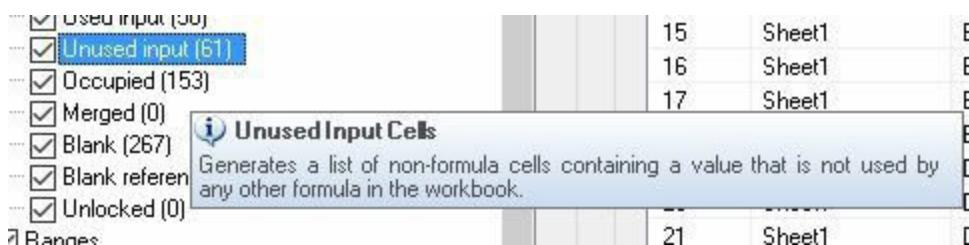
Wait a while for Excel to analyze the workbook. Keep in mind that the bigger the workbook, the more time this will take to analyze. When it is finished, a new window will appear. This new window lists tons of information about the workbook.

For example, I clicked on the Formula item in the left pane.

Workbook Analysis Report - [C:\Common\Workbook Analysis.xlsx]				
Items		Results		
	Item	Sheet Name	Cell Address	Formula
1	Sheet1	E14	=IF(C14=0,"",C14*D14)	25
2	Sheet1	E15	=IF(C15=0,"",C15*D15)	200
3	Sheet1	E16	=IF(C16=0,"",C16*D16)	150
4	Sheet1	E17	=IF(C17=0,"",C17*D17)*1000	8000
5	Sheet1	E18	=IF(C18=0,"",C18*D18)	15
6	Sheet1	E19	=IF(C19=0,"",C19*D19)	36
7	Sheet1	E20	=IF(C20=0,"",C20*D20)	100
8	Sheet1	E21	=IF(C21=0,"",C21*D21)	
9	Sheet1	E22	=IF(C22=0,"",C22*D22)	
10	Sheet1	E23	=IF(C23=0,"",C23*D23)	
11	Sheet1	E24	=IF(C24=0,"",C24*D24)	
12	Sheet1	E25	=SUM(E14:E24)	8526
13	Sheet1	E27	=E26*E25	596.8200000000005

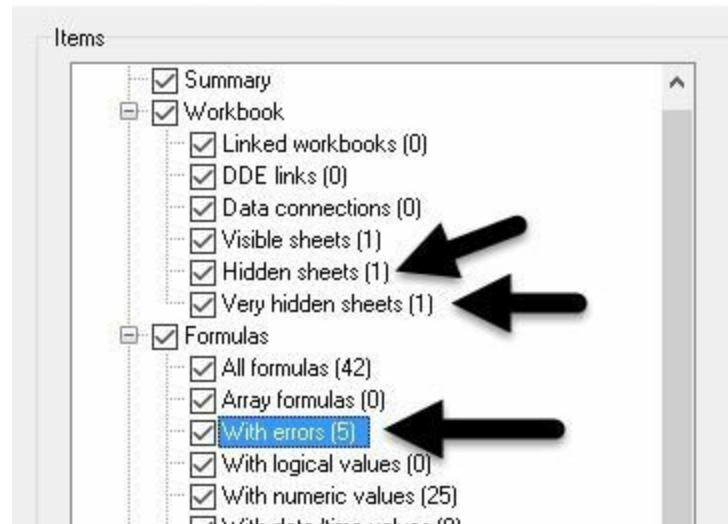
I can see that the workbook has 42 formulas and they are all listed in the right-hand pane. I can see the worksheet and cell the formula is in, the formula itself, and the result.

Most of the items are self-explanatory and you can figure them out just by reading them. If there is an item that you don't understand, hover your mouse over it and an explanatory pop up will appear. Here is the pop up explaining what 'Unused input' cells are.



For this workbook, look at the Workbook group. You can see that there is one Hidden worksheet and one Very Hidden worksheet. Looking at the Formulas group you can also see there are five formulas with errors.

Workbook Analysis Report - [C:\Common\Workbook Analysis.xlsx]



This is an excellent tool for auditing your workbooks and workbooks you receive from others.

Very Hidden (Optional Exercise)

If you don't know what a Very Hidden worksheet is, I'm not going to leave you wondering. You're about to find out. Now, not many people know about this trick...so remember to use your new-found powers for good and not for evil.

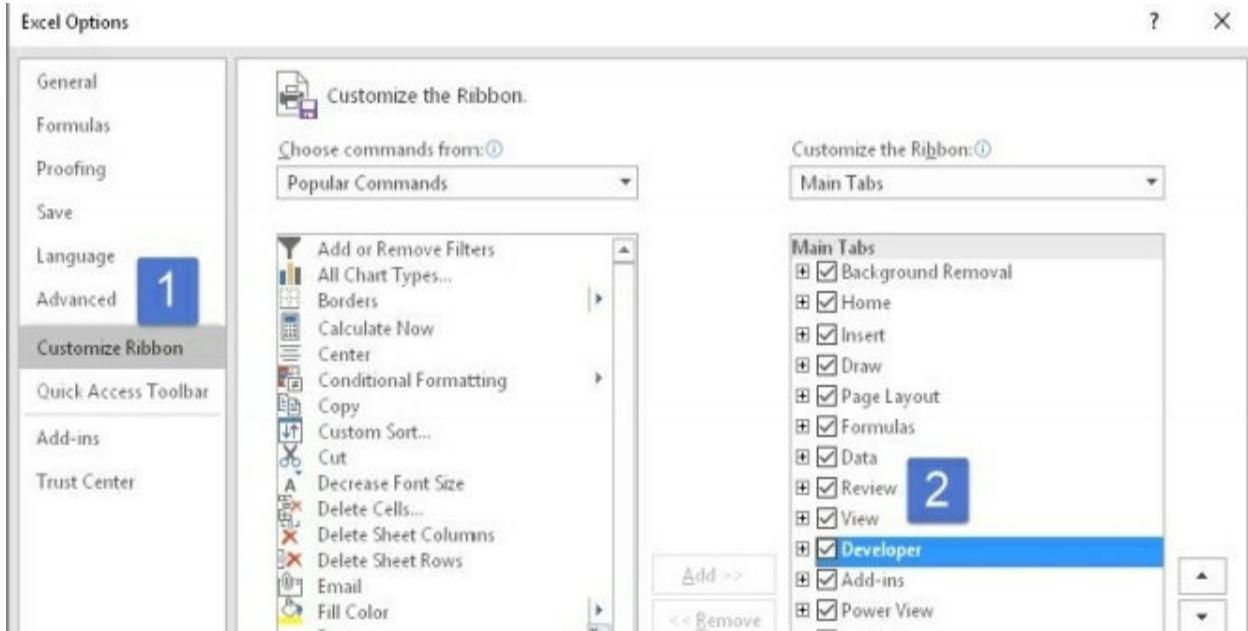
First thing you need to do is get Excel to show you the Developer tab. The Developer tab is where you can program macros but I'm not going to program anything. I'm just going to use the extra features in there.

Again, I am using Excel 2016. If you are using previous versions of Excel, the steps might be a bit different.

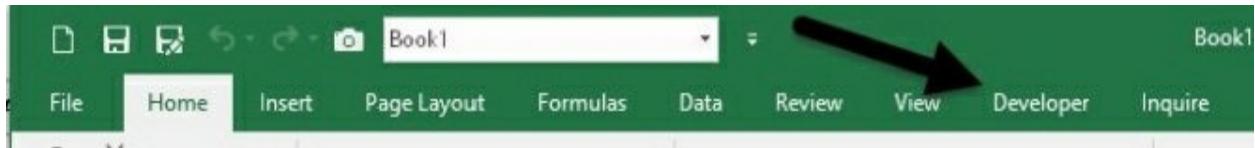
Showing the Developer Tab

1. Create a new workbook .
2. Add a second sheet to the workbook.
3. Click on File.
4. Click on Options.

5. Click on Customize Ribbon.
6. Click on the Developer checkbox.

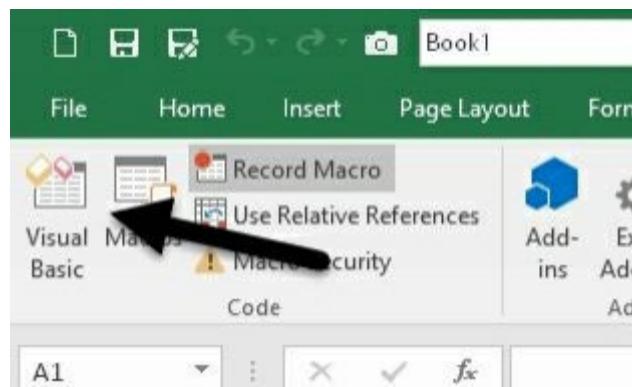


7. You should now have a new tab titled Developer in Excel.



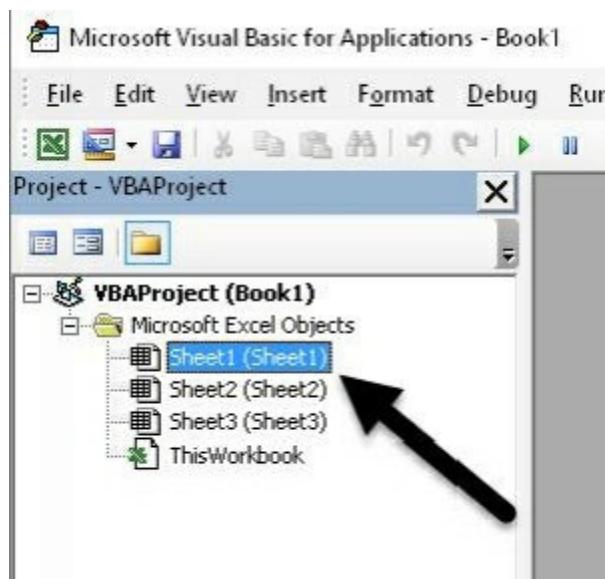
Ok, now let's make Sheet1 Very Hidden.

8. Click on the Developer tab.
9. Click the Visual Basic button.

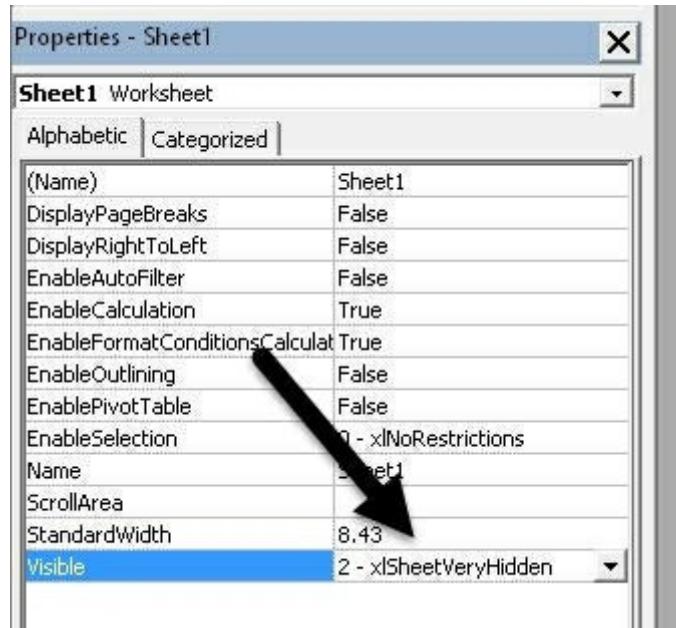


A new window will appear.

10. On the left pane, select Sheet 1.

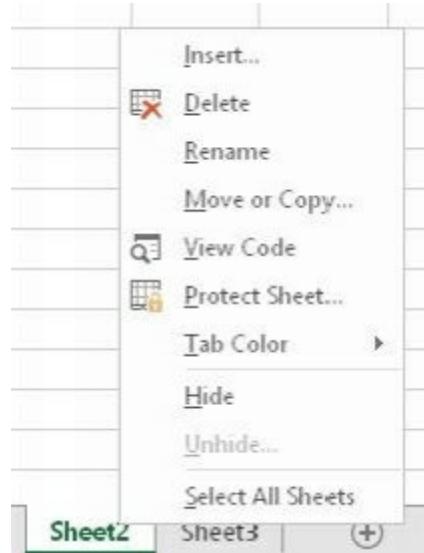


11. In the bottom pane, select Very Hidden in the Visible row.



Sheet 1 is now very hidden. Big deal you say? What did this do, you ask?

12. Go back to Excel.
13. Right-click on sheet 2 and select ‘Unhide’.



Aha! You can't select Unhide. That's because a **Very Hidden worksheet will not appear in the Unhide window. By definition, it is Very Hidden**. This is a

sneaky way you can ‘extra’ hide worksheets.

Of course, now with Inquire and Workbook Analysis, you can see if there are any Very Hidden worksheets in the workbook.

Now you can unhide all the information in the workbook and call Mr. Coyote and tell him that the file has been compromised. I’m sure he’ll understand.

Workbook Relationship

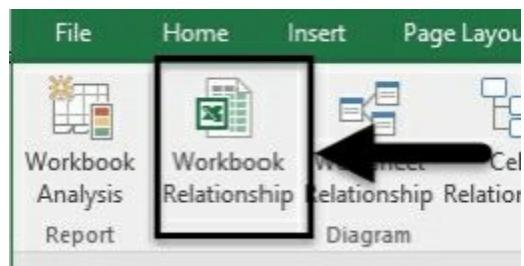
This feature gives you a graphical representation of how different workbooks are related. This exercise will help you figure out how an unknown file is related to other files.

1. Open Q1 Sales.xlsx.

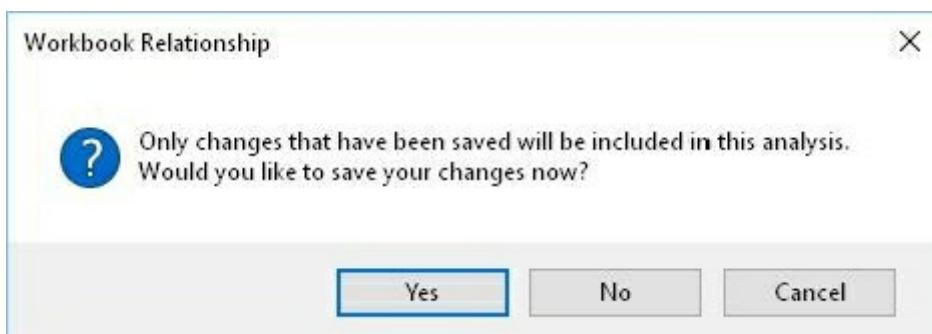
	A	B	C	D	
1	Salesperson	Jan	Feb	Mar	
2	Anna	362	300	758	
3	Bob	413	619	375	
4	Cindy	136	955	855	
5	Mark	574	941	843	
6	Todd	705	248	589	
7	Frank	156	729	150	
8	Sonia	345	457	490	
9	Brenda	502	222	936	
10	Freida	834	923	109	
11					

This file has sales by month for several salespeople.

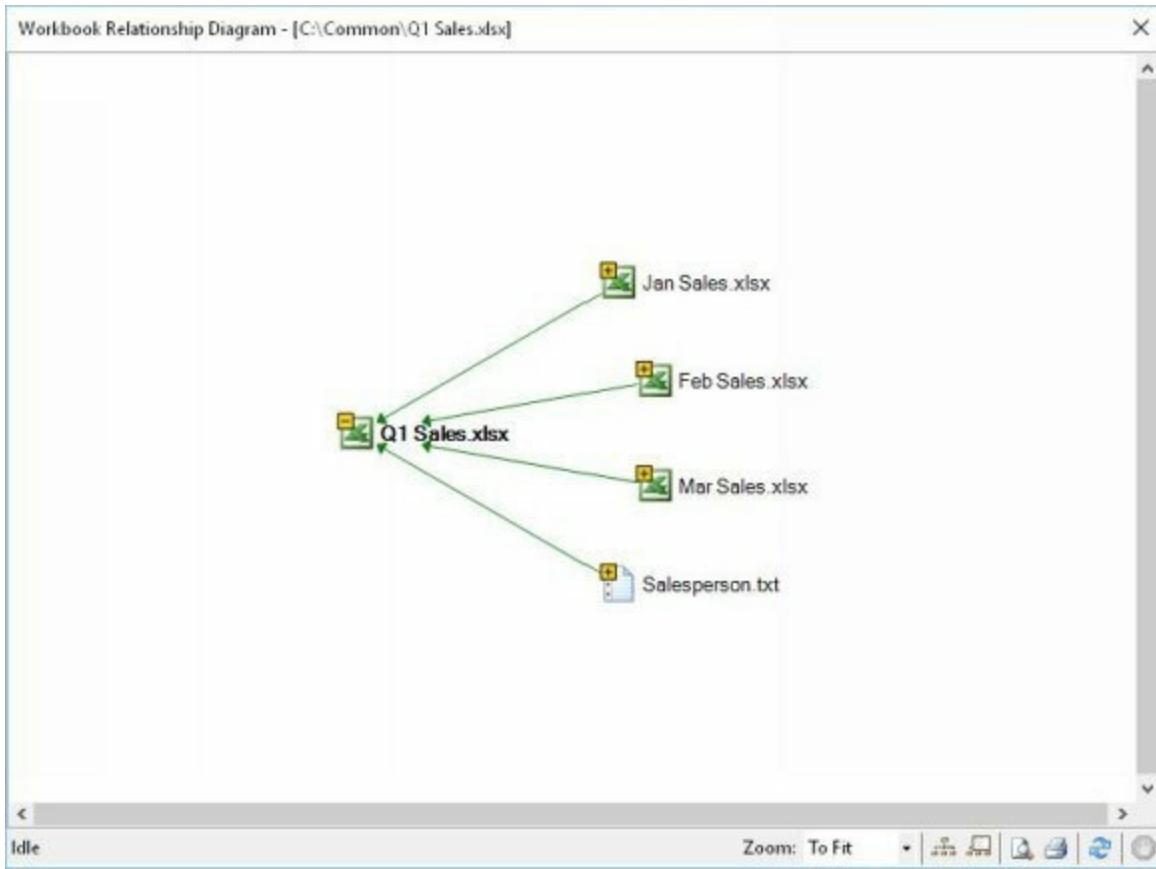
2. In the Inquire ribbon, click on Workbook Relationship.



3. Excel will prompt you to save the workbook. Click Yes to save the workbook.



4. A new window will appear that will show the relationship between all the workbooks.



Think about how useful this is. If you receive a file from another department, this is an easy way to see what feeds this file. Also note that there is a text file named Salesperson in there! The salesperson list was a query in Excel that extracted the names from a text file. That connection is also displayed.

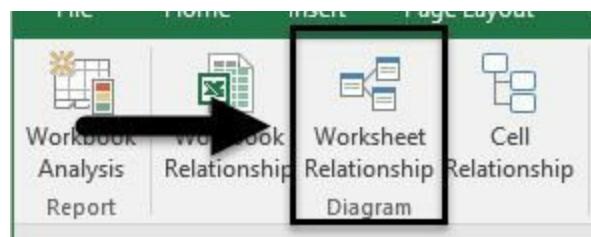
At the bottom right of the Relationship Diagram, there are several buttons that you can use to zoom in/out, print and refresh the view. If you hover over the buttons, a description will appear that tells you what the button does. I'm not going to cover every button here because they are self-explanatory.

You can also collapse and expand the links in each workbook. For example, if you click the small highlighted minus sign in the Q1 Sales.xlsx icon, all the links will be hidden. Granted, in this simple example, this feature is not that useful but for very complex workbook relationships, this feature lets you focus on one particular data path.

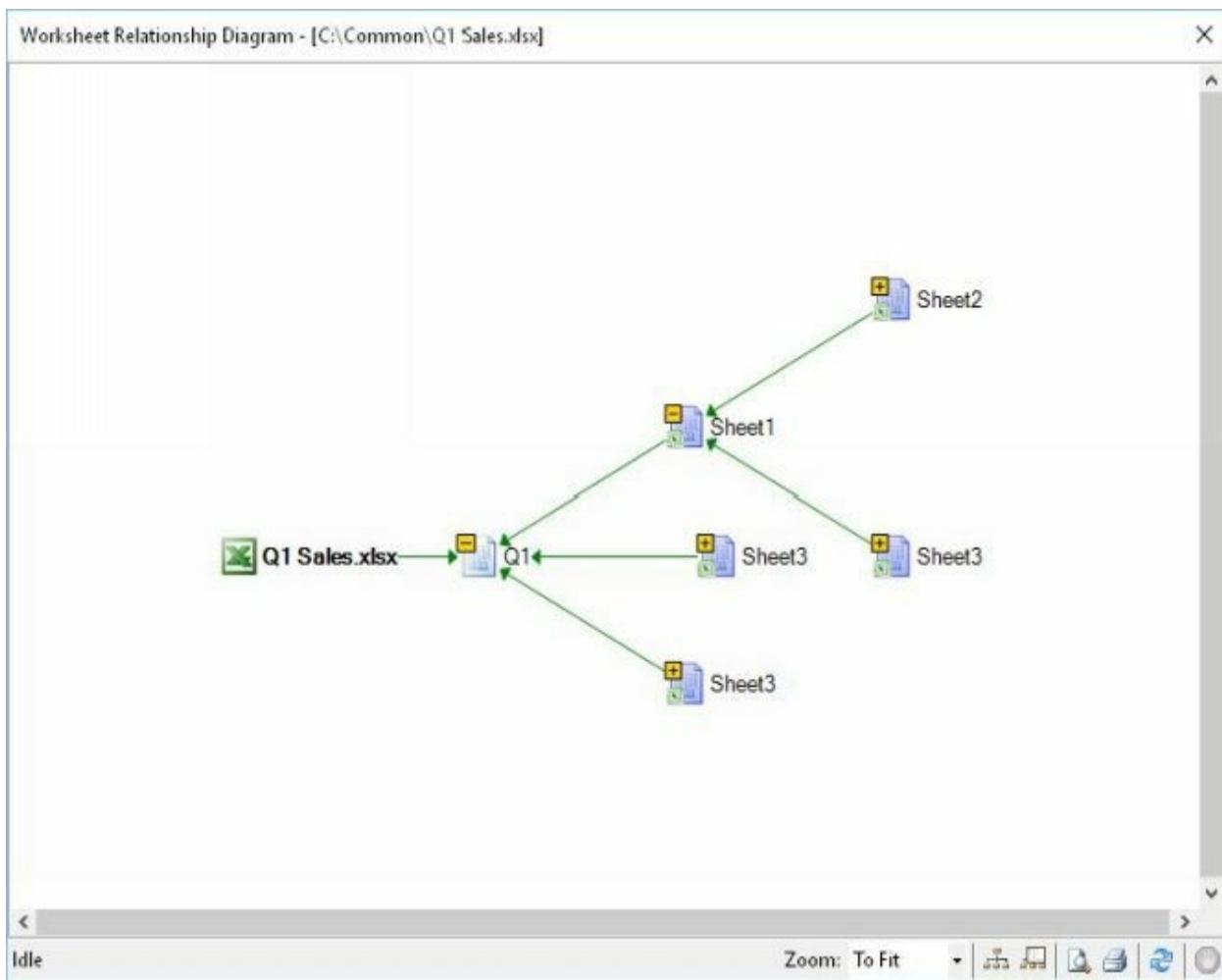
Worksheet Relationship

Analyzing worksheet relationships works very similar to the Workbook Relationship but there are a few features I want to point out.

1. If you have the file Q1 Sales.xlsx open, good. If you closed it, open it again.
2. Click on Worksheet Analysis on the Inquire ribbon.



3. The Worksheet Analysis pane appears.



So far, it looks the same as the Workbook Relationship right? Yes, but analyze the image a bit more closely. I inserted a couple of subtle errors in the workbooks.

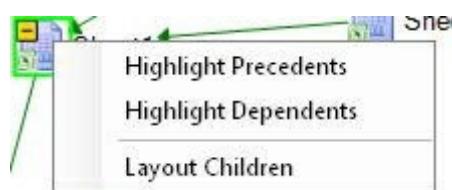
The first thing to notice is that the Worksheet Analysis follows the data to the source. Look at the top branch. Sheet1 is in another workbook (Jan Sales.xlsx). You can see that Q1 is linked to Sheet1. However, Inquire went one level deeper and shows that Sheet 1, is in turn linked to Sheet2 and Sheet3.

In summary, this feature will show you the worksheet relationships in the currently-opened workbook and the source workbooks, all in one image.

Per Microsoft, if you hover over the worksheet links, you should get a pop-up displaying the workbook name. For some reason, it's not working for me.

You can click and drag the worksheets around to change the layout as you see fit.

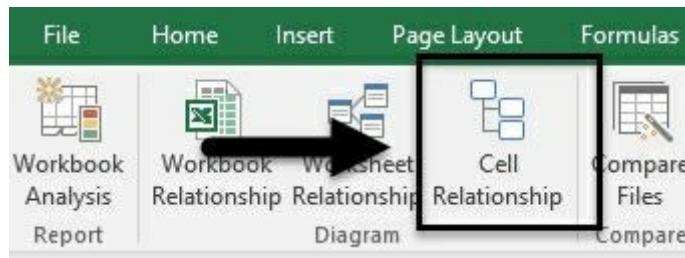
Finally, if you right-click on a worksheet, you can select to highlight the dependents or precedents. Since this feature will drill-down to all the source workbooks, the image can get complex quickly. Highlighting a specific data path is very convenient.



Cell Relationship

The Cell Relationship is the lowest level of audit Excel will perform. The highest level is the Workbook Relationship, then the Worksheet Relationship and finally the Cell Relationship.

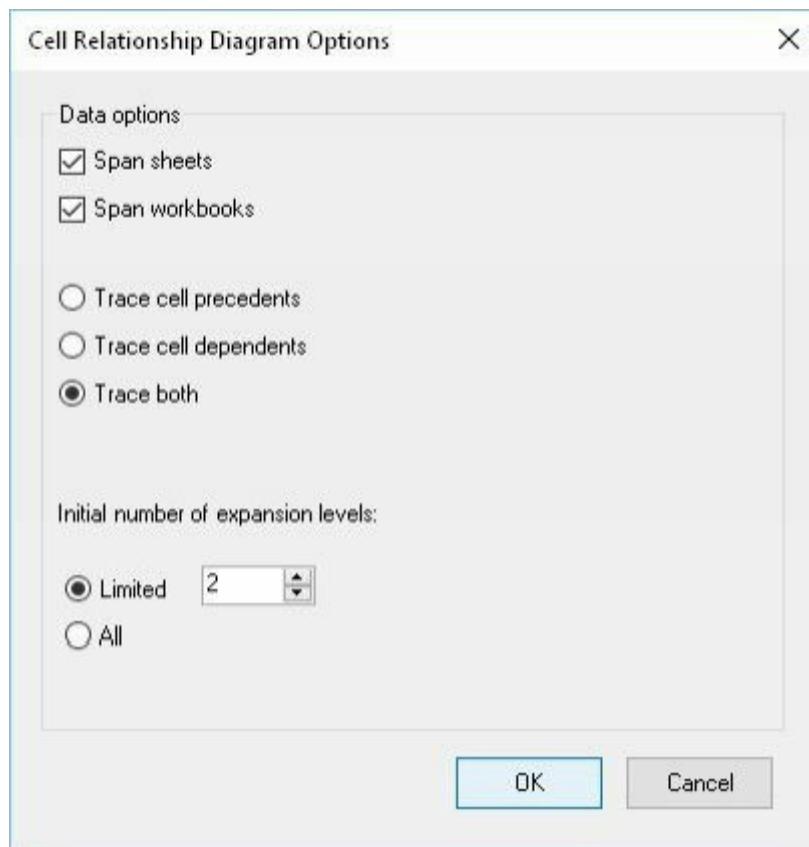
1. In the Q1 Sales.xlsx workbook, click on cell B2.
2. Click on Cell Relationship.

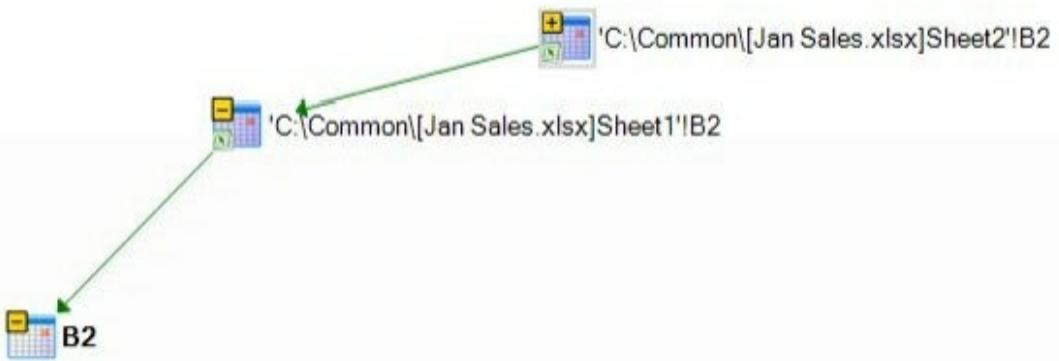


(If prompted to Save, click Yes.)

A new Cell Relationship window appears. Here you can limit the audit to just one worksheet, one workbook, number of expansions, and so on.

3. Use the default choices and click OK.





Inquire will trace back the selected cell (B2) and open the source files until it finds the source cell.

If Inquire cannot find a directly-linked cell (if Jan Sales.xlsx is not available, an error message telling you the file could not be opened will appear.

If a downstream file, has a link to a file that cannot be opened, Inquire will stop auditing the data at that point.

Compare Two Workbooks

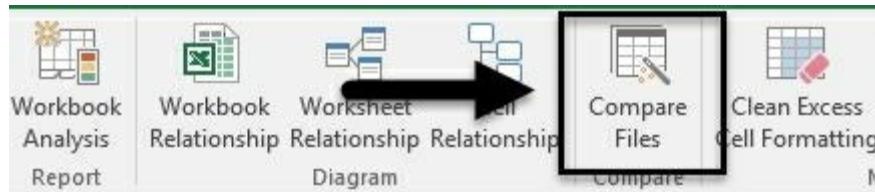
Based on the title of this section, I can assume you can already see how immensely useful this feature is.

In this scenario you have received a dispute from your favorite customer Mr. Wile E. Coyote. Mr. Coyote sent you an invoice and it doesn't match the one you sent him. You need to build a case before you reject his claim.

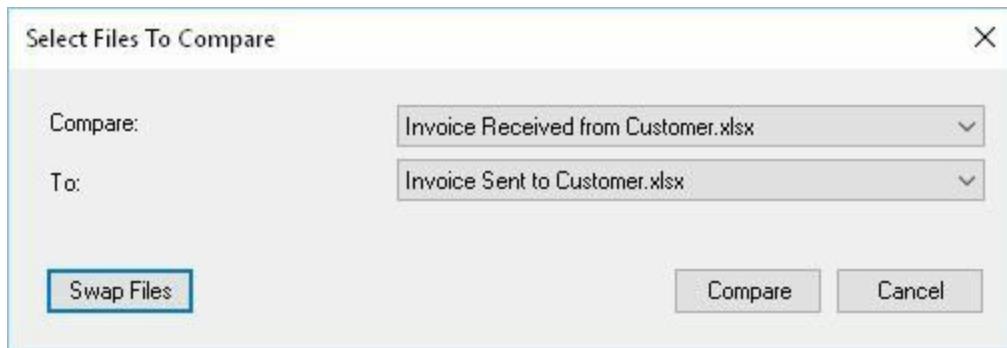
In order to compare two files, both files must be open in Excel.

1. Open the file Invoice Sent to Customer.xlsx.
2. Open the file Invoice Received from Customer.xlsx.

3. Click the Compare Files button on the Inspire ribbon.



4. Select the files to compare and click Compare.



The top part of the compare screen shows both files and highlights the differences.

	A	B	C	D	E				
1									
2	Acme Inc.								
3									
4	9511 Nowh								
5	Somewher								
6									
7	BILL TO								
8	Mr. Wile E.								
9	Nefarious I								
10	The Desert								
11									
12									
13	DESCRIPTI	Qty	Price	Extended P					
14	No-slip Rub	100	0.25	25.00					
15	Roller Skat	25	8.00	200.00					
16	Rubber Mal	15	10.00	150.00					
17	Road Runn	125	72.00	8,000.00					
18	Shovel	1	15.00	15.00					
19	First Aid Kit	20	1.80	36.00					
20	Crutches	2	50.00	100.00					
21									

	A	B	C	D	E				
1									
2	Acme Inc.								
3									
4	9511 Nowhere								
5	Somewhere, Som								
6									
7	BILL TO								
8	Mr. Wile E. Coyot								
9	Nefarious Industri								
10	The Desert								
11									
12									
13	DESCRIPTION	Qty	Price	Extended P					
14	No-slip Rubber Ba	100	0.25	25.00					
15	Roller Skates	25	8.00	200.00					
16	Rubber Mallet	15	10.00	150.00					
17	Road Runner Trap	125	75.00	9,375.00					
18	Shovel	1	15.00	15.00					
19	First Aid Kit	20	18.00	360.00					
20	Crutches	2	50.00	100.00					
21									

The bottom portion of the window has three sections.

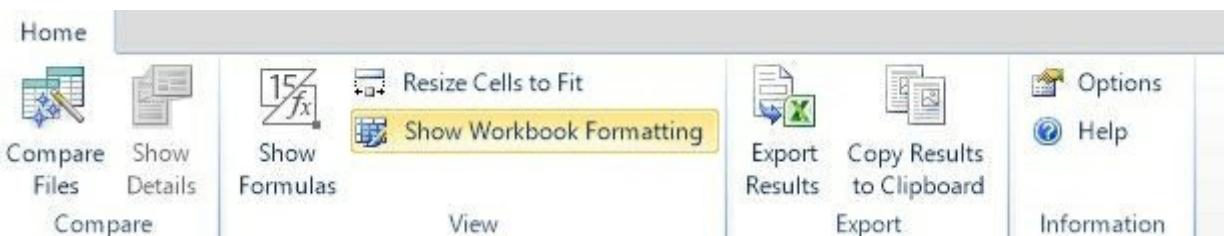
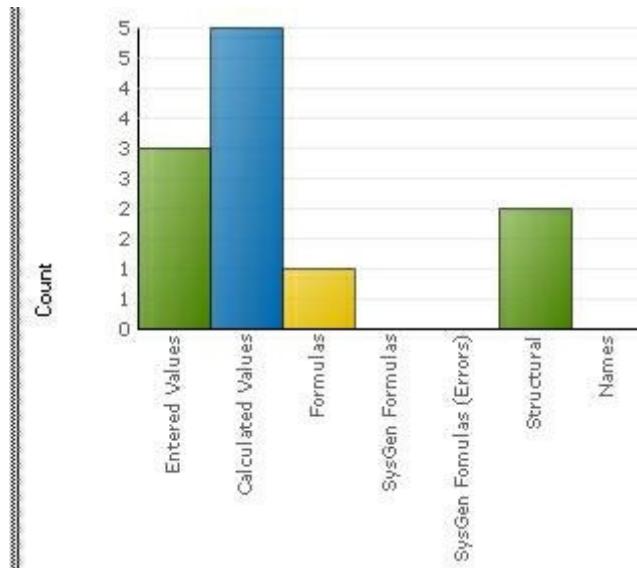
The left section lets you filter results. You can uncheck a box to hide those results from the window. Each type of change is highlighted in a different color in the bottom pane **and** in the top section.

The screenshot shows the Change Tracker interface. At the top is a grid of changes with columns for Row, Cell, Value 1, Value 2, and Change Description. The grid contains rows 15 through 24, with various values and colors indicating the type of change. Below the grid is a filtering sidebar with two main sections: 'Enable' and 'Sheet'. The 'Enable' section has checkboxes for 'Selected' (unchecked), 'Entered Values' (checked, highlighted in green), 'Calculated Values' (checked, highlighted in teal), 'Formulas' (checked, highlighted in purple), 'SysGen Formulas' (unchecked), 'SysGen Formulas Errors' (unchecked), 'Structural' (checked, highlighted in red), and 'Names' (checked, highlighted in yellow). The 'Sheet' section lists sheets with their corresponding checked status: Sheet2 (unchecked), Sheet3 (unchecked), Sheet1 (checked), Sheet1 (checked), Sheet1 (checked), Sheet1 (checked), Sheet1 (checked), Sheet1 (checked), and Sheet1 (checked).

The middle section lists every change, with the font color set to match the type of value changed. Note that columns Value 1 and Value 2 show the formatted value and the unformatted value within parentheses.

Sheet	Cell	Value 1	Value 2	Change Description
Sheet2				Deleted Sheet From Position 2.
Sheet3				Deleted Sheet From Position 3.
Sheet1	E17	=IF(C17=0,"",C17*D17)-1000	=IF(C17=0,"",C17*D17)	Formula Changed.
Sheet1	D17	72.00 (72)	75.00 (75)	Entered Value Changed.
Sheet1	D19	1.80 (1.8)	18.00 (18)	Entered Value Changed.
Sheet1	E26	7.0% (7.0000000000000007E-2)	8.0% (0.08)	Entered Value Changed.
Sheet1	E17	8,000.00 (8000)	9,375.00 (9375)	Calculated Value Changed.
Sheet1	E19	36.00 (36)	360.00 (360)	Calculated Value Changed.
Sheet1	E25	\$8,526.00 (8526)	\$10,225.00 (10225)	Calculated Value Changed.
Sheet1	E27	\$596.82 (596.8200000000005)	\$818.00 (818)	Calculated Value Changed.
Sheet1	E28	\$9,122.82 (9122.82)	\$11,043.00 (11043)	Calculated Value Changed.

The third section displays a column chart comparing the types of changes found.



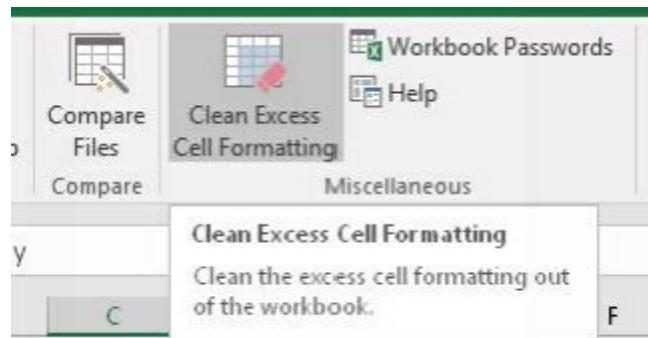
The Compare toolbar is self-explanatory but I want to point out the very useful ‘Export Results’ feature. Clicking that button generates a file that you can store and use for further analysis/recordkeeping.

I generated a file for this workbook. An image of it is shown below.

A	B	C	D	E	
1	Differences				
2	Sheet	Range	Old Value	New Value	Description
3	Sheet2				Deleted Sheet From Position 2.
4	Sheet3				Deleted Sheet From Position 3.
5	Sheet1	E17	=IF(C17=0,"",C17*D17)-1000	=IF(C17=0,"",C17*D17)	Formula Changed.
6	Sheet1	D17	72.00 (72)	75.00 (75)	Entered Value Changed.
7	Sheet1	D19	1.80 (1.8)	18.00 (18)	Entered Value Changed.
8	Sheet1	E26	7.0% (7.0000000000000007E-2)	8.0% (0.08)	Entered Value Changed.
9	Sheet1	E17	8,000.00 (8000)	9,375.00 (9375)	Calculated Value Changed.
10	Sheet1	E19	36.00 (36)	360.00 (360)	Calculated Value Changed.
11	Sheet1	E25	\$8,526.00 (8526)	\$10,225.00 (10225)	Calculated Value Changed.
12	Sheet1	E27	\$596.82 (596.82000000000005)	\$818.00 (818)	Calculated Value Changed.
13	Sheet1	E28	\$9,122.82 (9122.82)	\$11,043.00 (11043)	Calculated Value Changed.

Clean Formatting

This feature cleans all excess formatting from a worksheet or workbook. Having too many formatting elements will increase Excel file size and slow down your workbook (if you have many, many formats).



Sounds pretty simple and intuitive right?

Let me ask you...what is ‘excess formatting’? In the image below, which cell shouldn’t be formatted? B2? or B7? Maybe its B13? Interesting problem huh?

	A	B	C	D	E	
1						
2		Acme Inc.				
4		9511 Nowhere				
5		Somewhere, Some State, 123456				
6						
7		BILL TO				
8		Mr. Wile E. Coyote				
9		Nefarious Industries, LLP.				
10		The Desert				
11						
12						
13		DESCRIPTION	Qty	Price	Extended Price	
14		No-slip Rubber Bands	100	0.25	25.00	
15		Roller Skates	25	8.00	200.00	

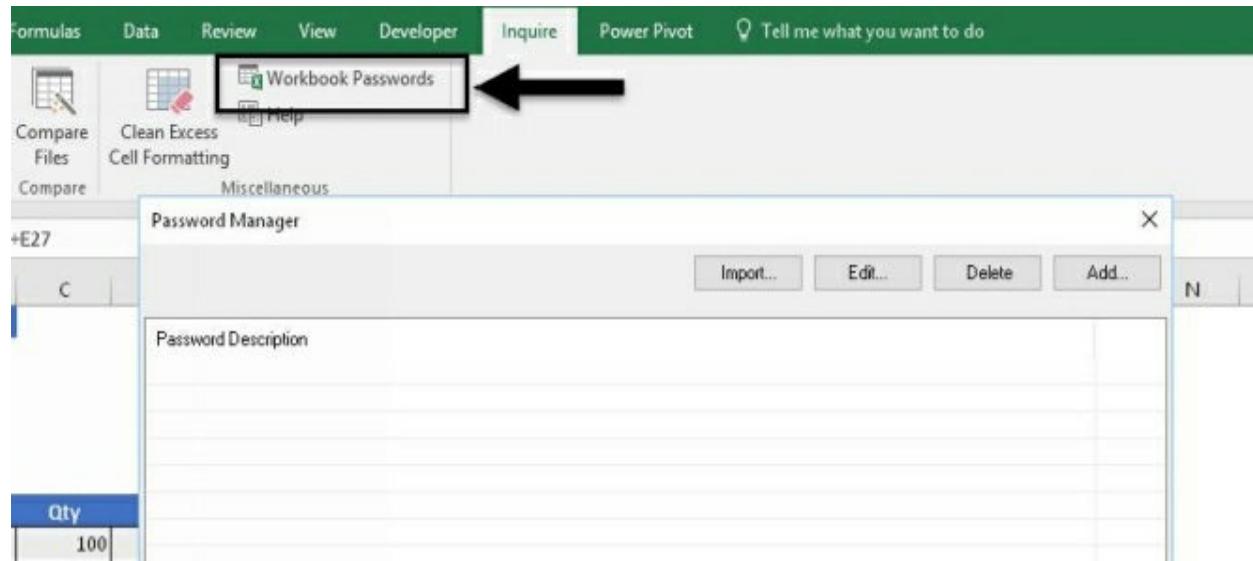
Well, Excel is not psychic. It can't tell which formatting you meant to include and which cell you did not mean to include. What Excel does is clean out all the formatting past the last cell that isn't blank. That last cell defines the active range.

A simple exercise will explain it much simpler than paragraphs of text.

1. Open the file Invoice Sent to Customer.xlsx
2. Click on Cell A1
3. Press CTRL+END keys

The active cell moved to the last cell in the active range. The cell should be E28. Clean Excess Cell Formatting will erase all formatting under and to the right of this cell. For example, if you set conditional formatting on all of row 14, the conditional formatting will be removed past column E (the last column as defined by cell E28).

Workbook Passwords



If any of the workbooks you are using Inquire on are password protected, you will need to input their passwords in the Workbook Password window so that Inquire can open and analyze them.

Other Lessons

I have many other lessons covering various Excel topics.

You can find all of them on my website at: <http://markmoorebooks.com/excel-lessons/>

If this lesson has helped you, please take a few minutes and leave a review on Amazon. The more reviews the lesson gets, the easier other students will be able to find it.

Thank you!