EXCEL ‹‹‹‹‹‹

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Using Named Ranges in Excel

Accountants spend much of the day working in Excel. While we're very comfortable with cell names and ranges such as J10, A1:E5, and Sheet2!A:B, Microsoft offers a way to assign a name to certain cells or ranges. Before you think that you don't have a need to replace a cell address such as B3 with an easier name, there are many exotic benefits to using named ranges in Excel.

Using Names

Every version of Excel offers a Name Box to the left of the formula bar. To quickly assign a name, select a cell or range of cells, click in the Name Box, type the name you want to use, and press Enter. Excel will add this name to the dropdown list in the Name Box, as shown in Figure 1.

Valid names in Excel must start with a letter, an underscore, or a backslash. Names can then contain letters, numbers, a period, or an underscore. Note that a name can't contain a space. Valid names might be Sales09, Net.Sales, or Sales_Tax.

Make sure that your name doesn't look like a valid cell address. GP99 isn't a valid name because there's already a cell named GP99. To avoid future problems, stay away from names that start with

AAA through XFD followed by a number. TAX2009 or ROI2010 are valid in Excel 2003, but they will become invalid when opened in Excel 2007 or, soon, Excel 2010.

With Formulas If you define a name and then later build a formula that refers to that cell, the formula will include the cell name instead of the cell address. This allows you to build formulas such as =Revenue-Expenses. While this is cool, you need to create the names before you create the formula. If you create the names after formulas already exist, Excel won't update the formulas automatically

Figure 1

to use the names.

To force Excel to use the newly defined names in existing formulas in Excel 2003, go to Insert, Name, Apply. In Excel 2007, select Apply Names from the Define Names dropdown on the Formula ribbon.

When you're typing a formula, you can insert a name into it by pressing F3. Excel brings up a list of all defined names. Double-click a name in the list to insert it into the formula.

In VLOOKUP When you're typing a VLOOKUP formula that points to a lookup table on another worksheet, the second argument in the lookup formula is a difficult to remember mix of apostrophes, exclamations, and dollar signs, e.g., =VLOOKUP(C26,'Sales Results'!$A$1:$G$11,2,FALSE). By naming the lookup table on the other worksheet, you can use the simpler =VLOOKUP(C26,Sales Table,2,FALSE).

For Off-Sheet Validation Lists You can add a dropdown list to any cell. Go to Data, Validation. In the Allow dropdown, choose List. You can then specify any range on the current worksheet for the list of valid values.

Figure 2

	A	B	C	D	E	F	G
1							
2		3626	=SUM(Gizmos Mar)				
3							
4	Hoozits						
5	Apr						
6		1539	=SUM(INDIRECT(A4) INDIRECT(A5))				
7							
8		Jan	Feb	Mar	Apr	May	Jun
9	Da Kines	1395	1423	1550	1603	1646	1702
10	Doodads	1624	1715	1878	1983	2138	2164
11	Doohickeys	1870	2036	2138	2194	2402	2640
12	Gizmos	3100	3354	3626	3677	3927	4190
13	Hoozits	1364	1389	1488	1539	1690	1768
14	Veeblefetzers	43	4771	5153	5462	5943	5163
15	WhatNots	17					52
16	Whatsits	13					79
17	Widgets	27					43
18	Yaddas	24					82
19							
20							
21							
22							
23							

The problem with this feature is that even if you hide the list in AZ1:AZ10, there's the chance that someone will inadvertently ruin your list by deleting rows 5 and 7. It would be much better if you could store the list on a hidden worksheet, but Microsoft says that the list must be on the current worksheet. You can work around this annoying limitation by storing the list on another worksheet and naming the list. For example:

◆ Insert a new worksheet named Lists.
◆ Type your list in A1:A10 on the Lists worksheet.
◆ Name that range with the name RepList.
◆ Optionally, hide the Lists worksheet. For Excel 2003, go to Format, Sheet, Hide. In Excel 2007, right-click on the worksheet tab and select Hide.
◆ Back on the original worksheet, choose Data, Validation, and then change the Allow box to List. In the List box, type =RepList and press Enter. Excel will now use the list from the hidden worksheet to populate the dropdown in the cell.

As Bookmarks Names make great bookmarks in large workbooks. Rather than navigating from Sheet1 to Sheet25 by using Ctrl+PgDn 24 times, you can define a named range on Sheet1 and another named range on Sheet25. Open the Name Box dropdown, and choose the appropriate name to jump to the named cell on the worksheet.

For Storing a Constant A name doesn't have to refer to a cell. You can create a name such as Sales Tax and store a constant such as 0.065 to that name. To do this, you'll have to use the Names dialog box. In Excel 2003, use Insert, Name, Define. In Excel 2007, use Formulas, Define Name.

Using Existing Headings to Create Names

If you already have headings to the left or above your cells, you can use those headings to create names. Select the data and the headings. In Excel 2003, go to Insert, Name, Create. In Excel 2007, it's Formulas, Create from Selection. In Figure 2, the name "Gizmos" will apply to the range B12:G12, and the name "Mar" will apply to the range D9:D18.

Using the Intersection Operator to Perform a Two-Way Lookup

You've probably created SUM functions that use the colon or comma operator. No explanation is needed for =SUM (B9:G18) or =SUM(B9,B11,B13). Did you know that a space inside the SUM function is an intersection operator? The formula =SUM(B17:G17 D9:D18) will sum up the cell(s) at the intersection of those two ranges. You can use this type of intersection operator in conjunction with the names created in Figure 2. Type a formula such as =SUM(Widgets Mar) to return the value at the intersection of the Widgets row and the March column. (The formula =Widgets Mar will also work if the intersection is a single cell.)

Of course, you might want to have the names Widgets and Mar in other cells. In Figure 2, the formula in cell A6, =SUM(INDIRECT(A4) INDIRECT(A5)), returns the value at the intersection of the chosen month and product. **SF**

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