

De-Mystifying Excel Macros

By Ken Puls, CMA

There is no disputing that Excel is one of the main tools in the accountants' toolbox, and yet most of us are self-taught in its features. And while we usually feel quite comfortable with the basics, there are often more efficient ways to accomplish routine tasks that we may not be aware of. One specific tool that I have found to be under-utilized is the use of VBA macros in Excel.

Many users feel that programming is too complicated, difficult to understand or set-up properly. This perception is undeserved as Excel's built-in Macro Recorder allows you to record your actions, read the code, and learn how it works.

Other users simply feel that they have no need for automation. I disagree with this stance, as in my organization it has been the adoption of macros that has allowed us to weather staff cuts of one-third, while being able to still produce a comparable quantity and quality of work. Macros have saved our company a conservative estimate of \$400,000 in the past eight years, increased the reliability of our reports and cut time at month end. Simply put, using macros has decreased the time our staff spend on repetitive tasks, allowing them to focus on what they do best: analyzing and solving problems.

To display the simplicity and power of macros let's look at an example. Assume that we have a prepaid expense continuity schedule as shown above:

	A	B	C	D	E
1	Home Renovators (un) Ltd.				
2	Prepaid Expenses				
3	January 31, 2008				
4					
5	Vendor Name	Opening Balance	Additions	Usage	Ending Balance
6	Laminate Floors Inc	6,510.83			6,510.83
7	Safe T Supplies	3,127.61	173.56	750.00	2,551.17
8	Bored Foot Lumber	2,946.33			2,946.33
9	Lee King Gutters	5,273.04		567.89	4,705.15
10		-			-
11		17,857.81	173.56	1,317.89	16,713.48

Most users would advance this to the next month by copying the Ending Balance, pasting it as a value over the Opening Balance, clearing the Additions and Usage fields, and updating the date. With a very simple macro, however, we can make this occur at the click of a button, or the press of a keystroke combination.

Recording Macros

For Excel 2007 users, you will need to display the "Developer" tab on your ribbon. To do this, go to the *Office button > Excel Options > Popular > Show Developer Tab in the Ribbon*.

Let's select to record a new macro. In Excel 97-2003, you'll go to *Tools Menu > Macro > Record New Macro*. In Excel 2007, you can do so from *Developer Tab > Record Macro*

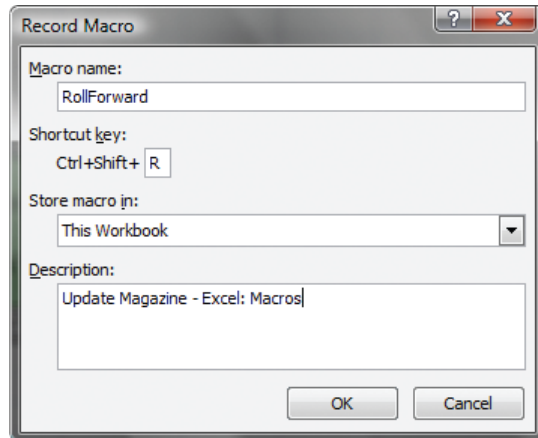
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When prompted, give the macro a name of **RollForward**, and use an uppercase **R** for the shortcut. (It should then show as **CTRL+SHIFT+R**.) Leave the macro stored in "This Workbook".



Click OK to return to the worksheet, and carefully follow the steps below.

1. Select cells **E6:E10**
2. Right click them and choose **Copy**
3. Right click cell **B6** and choose **Paste Special**
4. Choose **Values** and click **OK**
5. Select cells **C6:D10**
6. Press **Delete**
7. In cell **A4** enter the following formula **=A3+32-day(A3+32)**
8. Right click cell **A4** and choose **Copy**
9. Right click cell **A3** and choose **Paste Special**
10. Choose **Values** and click **OK**
11. Select cell **A4** and press **Delete**

From the **Tools > Macro** menu (Excel 97-2003), or the **Developer tab** (Excel 2007), click **Stop Recording**.

Now, let's try out the macro. Enter some numbers into the Additions and Usage columns then press **CTRL+SHIFT+R**. (Alternately, you can press **ALT+F8** and choose your macro from the list.) You'll see the closing balances copied to the opening balances, and the date automatically advanced for you.

While the example here may be small, the implications are huge. You no longer need to worry about a user accidentally copying over the formulas or deleting too large a range. Your users also won't forget to advance the date as it will always be advanced to the last day of the next month.

To review or edit your macro, choose **Macros** from **Tools > Macro** (Excel 97-2003) or the **Developer tab** (Excel 2007), click the name of your macro in the list and choose **Edit**. At this point you'll be taken directly to your macro in the Visual Basic Editor. If you read the code carefully, you'll see that it has recorded each step listed in the sequence above, allowing you to learn its sequencing and syntax. To expand the range of data we wish to copy, we simply need to change the cell reference in the line that reads **Range("E6:E10")**. **Select**.

I cannot recommend strongly enough that Excel macros are worth exploring. Recorded macros are not always elegant, but they do give you a great starting point and allow you to reduce the number of repetitive tasks your staff may be doing in Excel. Worried you have to learn macros alone? Don't be. Visit www.vbaexpress.com for free help from some of the world's best VBA (macro) experts.



Ken Puls, CMA, is the *Controller and Director of IT at Fairwinds Community & Resort*. Ken is a *Microsoft MVP for Excel*, the principal of www.excelguru.ca and *Senior Administrator at* www.vbaexpress.com.

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