EXCEL ‹‹‹‹‹‹

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Mark an Invoice Paid Using a Picture Lookup

Excel veterans are accustomed to doing a VLOOKUP to get a rate from a lookup table. With a few extra steps, it's possible to do a lookup to return a picture from a table.

Setting Up a Table of Pictures

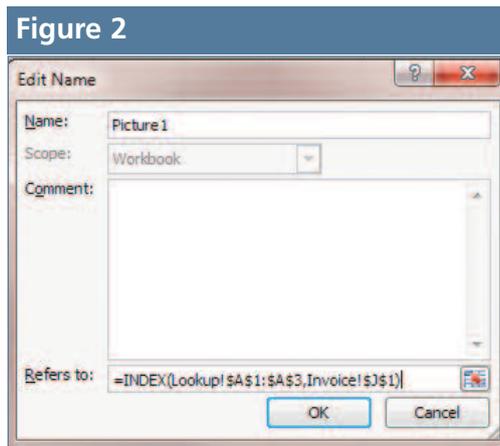Figure 1 shows a worksheet named Lookup. Each row is tall enough and wide enough so the picture fits completely within the cell. The various rubber stamp images were created using WordArt and adding a few customizations. For example, the font name and color were changed using the font tools on the Home tab. The border was drawn by clicking Format, Shape Outline, Weight and then Format, Shape Outline, Dashes. And the images were rotated slightly using the Rotation handle that appears above a selected image.

In this particular case, the three images are stored in Lookup!$A$1:$A$3.

A Lookup Formula in a Defined Name

For a picture lookup, you have to identify the cell that will contain a number (such as 1, 2, or 3). This might be a cell just outside of your print range. In this example, the lookup value will be in cell J1 on the Invoice worksheet (Invoice!$J$1).

The formula to point to the correct picture is =INDEX(Lookup!$A$1:$A$3, Invoice!$J$1). While INDEX isn't as common as VLOOKUP, its functionality is similar. It lets you specify a table of answers and a location to return from that table

Figure 1

Figure 2

of answers. In this case, the table of answers is A1:A3 on the Lookup worksheet, and the location to return is the value (1, 2, or 3) entered in cell J1 on the Invoice worksheet.

If you simply type that formula into a cell, however, the result will be zero (0) because the cells on the Lookup worksheet contain pictures instead of values. The workaround is to store the formula in a defined name. Since the formula must contain the lookup value, however, you must have a new defined name for every cell that is to return a picture. This makes it nearly impossible to do a lookup on every row in a data set. If the data set had 100 rows, you'd have to

define a different name for each row. This would quickly get unwieldy.

To create a defined name, go to the Formulas tab and choose Define Name. In the New Name dialog, type a name such as Picture1. In the Refers To box, enter our INDEX formula, as shown in Figure 2.

Creating a Linked Picture

On the Lookup worksheet, select cell A1 and copy it (using the copy icon or CTRL+C).

Go to the Invoice worksheet and select a blank area. You want to paste the clipboard as a linked picture. If you open the Paste dropdown on the Home tab, the bottom row is labeled Other Paste Options. The last icon in the dropdown is a picture with a chain link. This is the icon for Paste Linked Picture. You might remember this functionality in Excel 2003 when it was called the Camera Tool.

When you click on Paste Linked Picture, a picture of the Open stamp from Lookup!$A$1 will appear on the invoice. Initially, the linked picture is linked to Lookup!$A$1. If you click on the picture, the formula bar will show that the pic-

Figure 3

ture is coming from =Lookup!$A$1.

Linking the Picture to the Named Range

To make the linked picture respond to the value typed in the lookup cell, you need to replace the default formula assigned to the linked picture. Unfortunately, you can't assign the INDEX formula directly to the linked picture. The linked picture can be linked to a cell or to a named range.

Click on the linked picture. In the formula bar, delete the current formula (=Lookup!$A$1). Type =Pic. The formula autocomplete will show all the named ranges that start with Pic. Choose Picture1, press TAB, and then press ENTER.

The picture that appears on the invoice will now respond to the value in the lookup cell. Enter a 2 in cell J1, and the stamp will change from Open to Sent (see Figure 3). Type a 3, and the stamp will change to Paid.

While the picture lookup is a nice trick to be used here and there, the extra steps—particularly hard-coding the lookup cell in the named range—make it difficult to use on every worksheet in a workbook. **SF**

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