



Custom VBA macro to Save Results

Using the macro recorder is a simple and effective way to create VBA macros. However, there are some things, such as looping or logical IF tests that can not be recorded. Custom VBA macros allow enhanced flexibility for developing macros. In this tip, a custom VBA is illustrated to save results from one page of a spreadsheet to a table on another page.

Suppose that we have a spreadsheet with a page named Model, as illustrated in Figure 1.

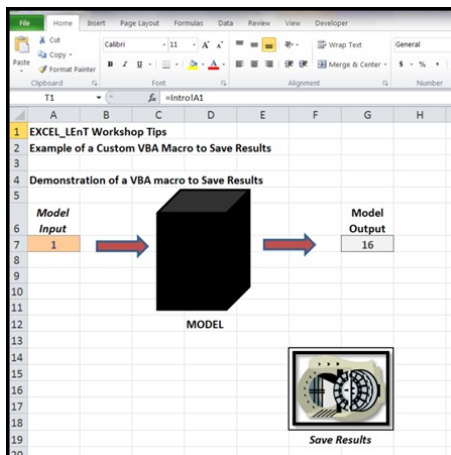


Figure 1. View of the Model page

Suppose that we want to save the pair of input and output values to a table on a page named Results, as illustrated in Figure 2.

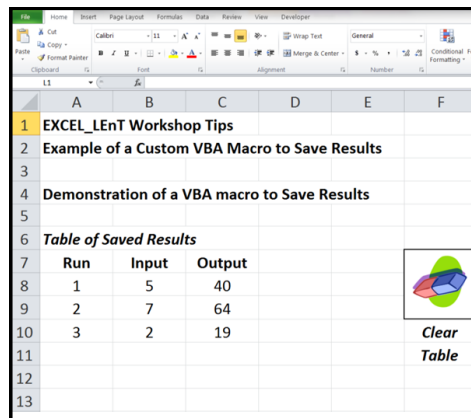


Figure 2. View of the Results page

Notice that we want new sets of results to be appended to the bottom of the existing Table of Saved Results. We also want a number to be generated that will serve as a counter of the

number of saved results. To create the custom macro first go to the Visual Basic Editor by clicking on the Visual Basic icon on the Developer tab. Click on the Insert menu and choose Module. Enter the following code into the module:

```
Sub SaveResults()  
' This macro saves selected results from the Model page  
' to the Results page  
,  
' Start on the Model page  
Sheets("Model").Select  
' Get the values to save  
x1 = Range("A7").Value  
x2 = Range("G7").Value  
' Go to the Results page  
Sheets("Results").Select  
' Find the next blank row where results can be written  
rctr = 8  
Do Until Cells(rctr, 1).Value = ""  
    rctr = rctr + 1  
Loop  
' Write out the results and a number of the saved result  
Cells(rctr, 1).Value = rctr - 7 ' This creates a result number  
Cells(rctr, 2).Value = x1  
Cells(rctr, 3).Value = x2  
' Return to the Model Page  
Sheets("Model").Select  
End Sub
```

The lines preceded by the single quote (the lines in green) are called comments. These comments allow you to add annotations to your code to explain what the different parts of the code will do. These lines are not executed.

The code first selects the Model page and it takes the values from the input and output cells and puts the values into variables named x1 and x2. The code then selects the Results page. Beginning in row 8, it searches the values in column A until it finds a blank cell. This determines the row that will hold the output in the table. The next step is to write out a results counter and the value stored in the variables x1 and x2. The final step is to return to the Model page.

This macro is assigned to the icon of the safe on the Model page. Then whenever the user wishes to save a set of results, they click on the icon of the safe.