

Macros in Excel: Recording, Running, and Editing

This document provides instructions for creating, using, and revising macros in Microsoft Excel. Simple, powerful, and easy to customize, Excel macros can save you time and increase your productivity.

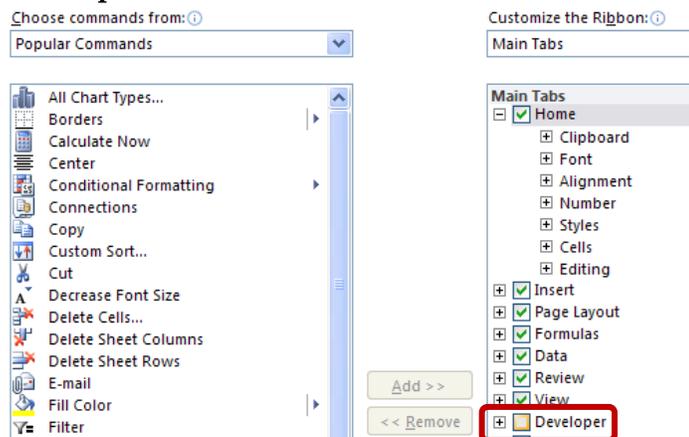
Overview of Macros

Are there common tasks that you perform over and over in Excel? For instance, do you often apply the same combination of formats, or do you receive data every week or month that you organize and analyze the same way every time? You can use a macro to combine all of the steps in a task into a single command.

A macro records your mouse clicks and keystrokes while you work and lets you play them back later. You can use a macro to record the sequence of commands you use to perform a certain task. When you run the macro, it plays those exact commands back in the same order, causing Excel to behave just as if you had entered the commands yourself.

Note for Office 2007 users: In Excel 2007, macro tools are found on the Developer tab in the Ribbon. If the Developer tab is not displayed,

1. Click the **File Button**.
2. Click **Options**.
3. In the **Customize Ribbon** category, under **the right column (Main Tabs)**, check **Show Developer**.

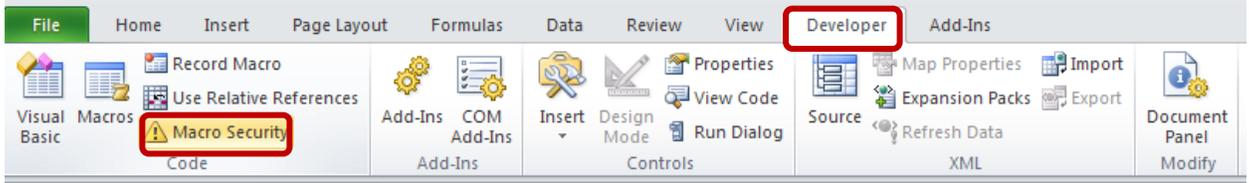


Macro Security

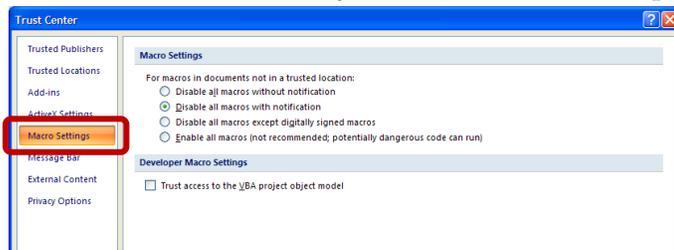
As you are probably aware, macros from unknown sources can cause harm to your computer. You can change the macro security settings to control which macros run and under what circumstances when you open a workbook. Under all settings, if antivirus software that works

with the 2007 Microsoft Office system is installed and the workbook contains macros, the workbook is scanned for known viruses before it is opened.

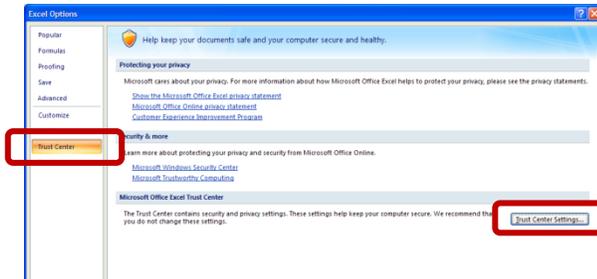
1. On the **Developer** tab, in the **Code** group, click **Macro Security**.



2. In the **Macro Settings** category, under **Macro Settings**, click the desired option. Please note that any changes you make in the Macro Settings category in Excel apply only to Excel and do not affect any other Microsoft Office program.



3. You can also access the Trust Center in the **Excel Options** dialog box.
 - a. Click the **File Button**.
 - b. Click **Options**.
 - c. In the **Trust Center** category, click **Trust Center Settings**.



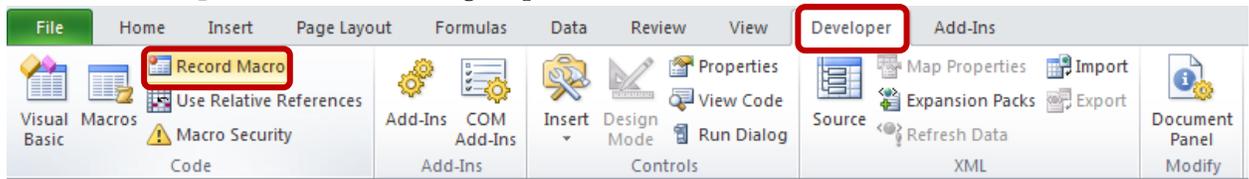
- d. Click the **Macro Settings** category.



Recording a Macro

Please note that navigation on the Ribbon is not captured in the recorded steps.

1. On the **Developer** tab, in the **Code** group, click **Record Macro**.

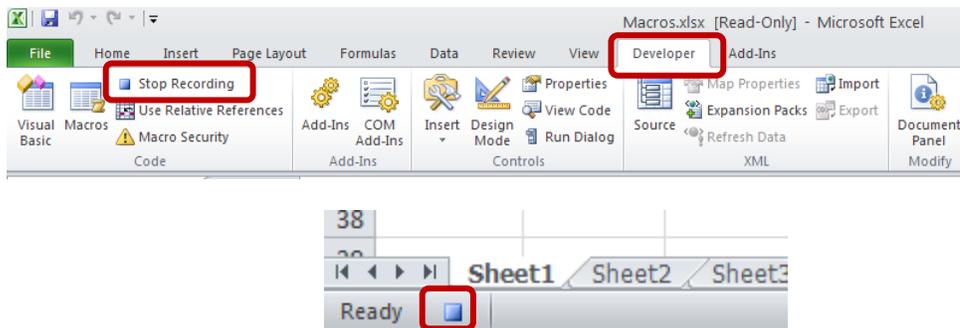


2. Complete the Record Macro dialog box.



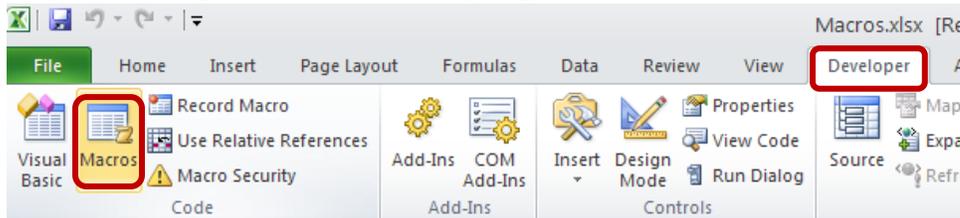
- a. In the **Macro name** box, enter a name for the macro.
 - i. The first character of the macro name must be a letter.
 - ii. Subsequent characters can be letters, numbers, or underscore characters.
 - iii. Spaces cannot be used in a macro name; an underscore character works well as a word separator.
 - iv. If you use a macro name that is also a cell reference, you may get an error message that the macro name is not valid.
 - b. A shortcut key can be assigned to run the macro. In the **Shortcut key** box, type any lowercase letter or uppercase letter that you want to use.
 - i. Please note that the shortcut key will override any existing Excel shortcut key while the workbook that contains the macro is open.
 - ii. For a list of CTRL combination shortcut keys that are already assigned in Excel, see <http://office.microsoft.com/en-us/excel/HP100738481033.aspx>.
 - c. In the **Store macro in** list, select the workbook where you want to store the macro.
 - i. If you want a macro to be available whenever you use Excel, select **Personal Macro Workbook**. Excel creates a hidden personal macro workbook (Personal.xlsm) if it does not already exist, and saves the macro in this workbook.
 - ii. You may also choose to store the macro for use only in the current workbook or only in new workbooks.
 - d. In the **Description** box, type a description of the macro, if desired.
3. Click **OK** to start recording and perform the actions that you want to record.

- When you are finished recording, on the **Developer** tab, click **Stop Recording**. You can also click the **Stop Recording** button on the left side of the status bar.

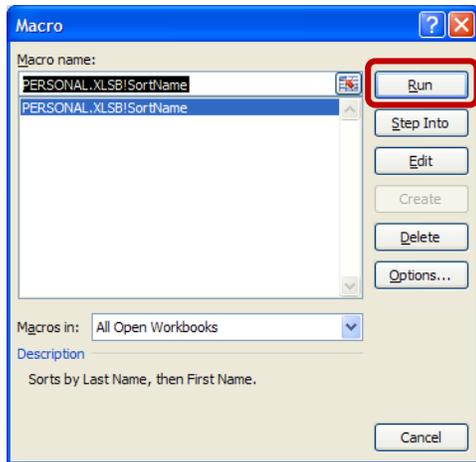


Running a Macro

- On the **Developer** tab, in the **Code** group, click **Macros**.



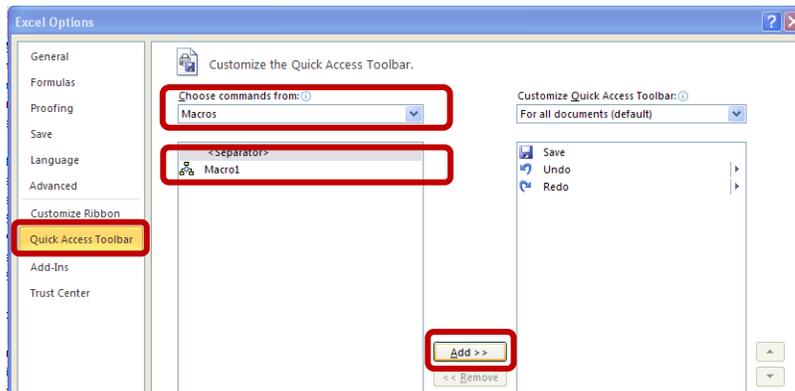
- In the **Macro name** box, select the macro that you want to run. Then click **Run**.



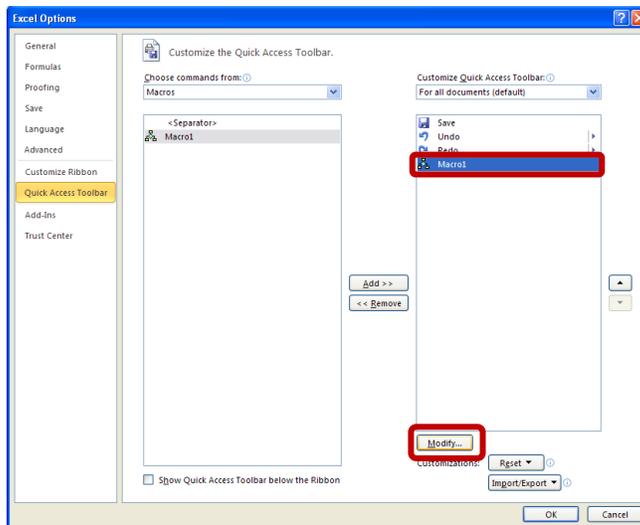
Setting Up a Macro to Run from the Quick Access Toolbar

- Click the **File Button**, and then click **Options**.
- Click **Quick Access Toolbar**, and then in the **Choose commands from** list, select **Macros**.

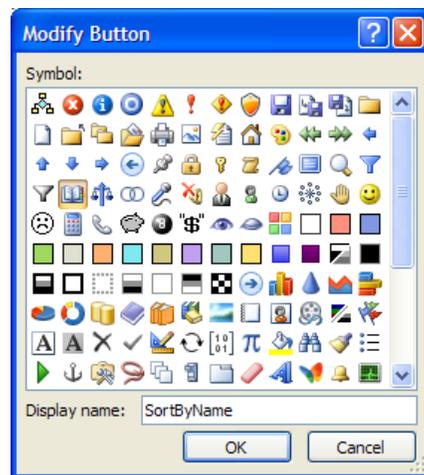
3. In the list, select the macro, and then click **Add**.



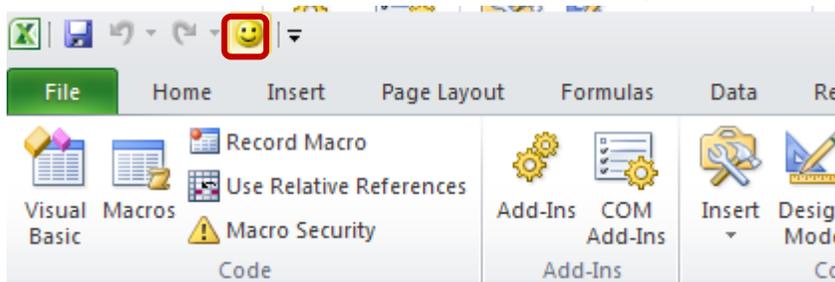
4. To change the button image of the macro, select the macro in the list on the right, and then click **Modify**.



5. Under **Symbol**, click the button image that you want to use. To change the name of the macro that is displayed when you rest the pointer on the button, in the **Display name** box, type the desired name. Click **OK**, then click **OK** again to add the macro button to the **Quick Access Toolbar**.



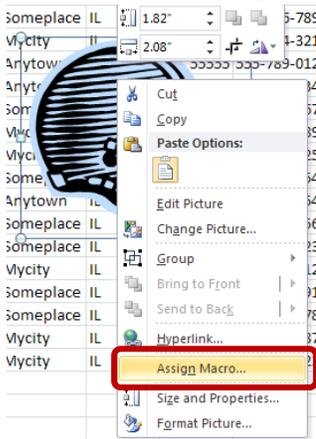
6. To run the macro, click the macro button on the **Quick Access Toolbar**.



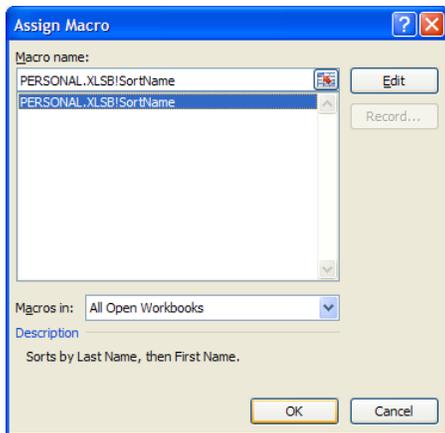
Assigning a Macro to an Object, Graphic, or Control

Macros can also be associated with a graphic object. To run a macro by clicking an object,

1. Right-click the object, graphic, or control to which you want to assign an existing macro, and then click **Assign Macro**.



2. In the **Macro name** box, click the macro that you want to assign. Click **OK**.



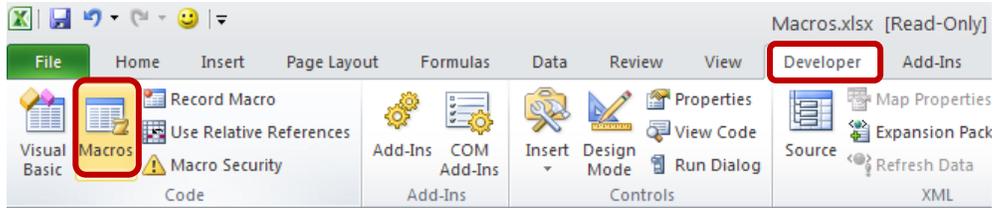
3. Click the object to run the macro.

Editing a Macro

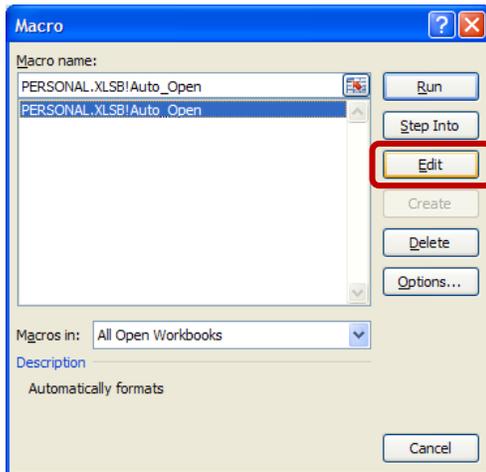
Macros can be edited in the Visual Basic Editor, which requires expertise with Microsoft Visual Basic. For those who are not familiar with Visual Basic, macros can be deleted and then re-recorded.

To edit a macro in the Visual Basic Editor,

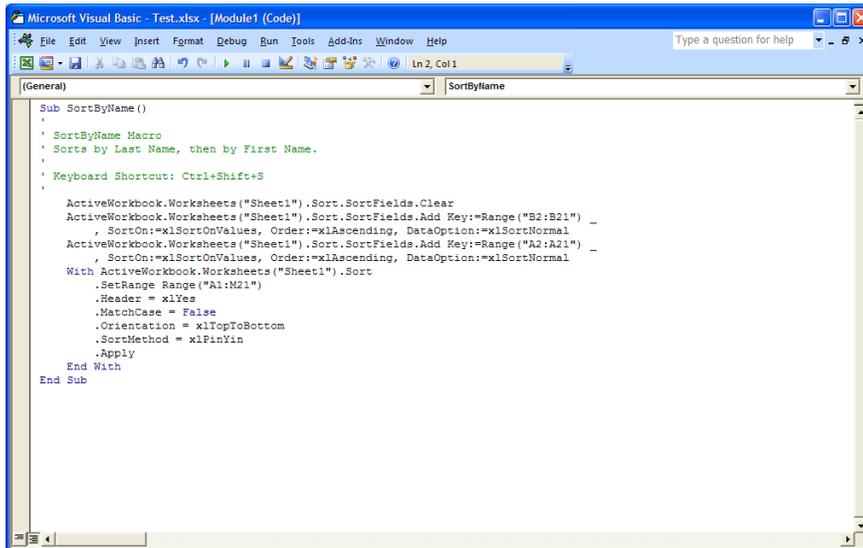
1. On the **Developer** tab, in the **Code** group, click **Macros**.



2. In the **Macro name** box, select the macro that you want to edit. Then click **Edit**.

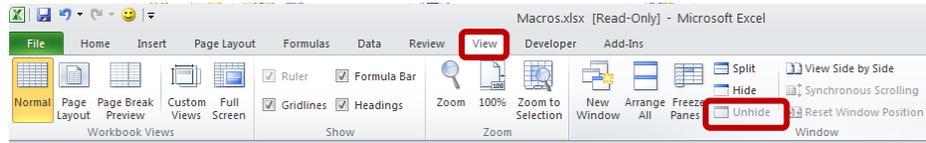


3. The macro opens in the Visual Basic window and can now be edited.

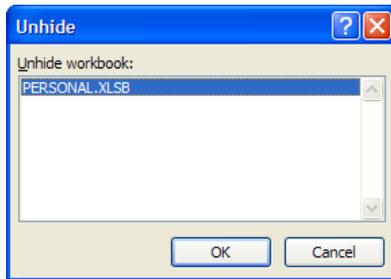


Deleting a Macro

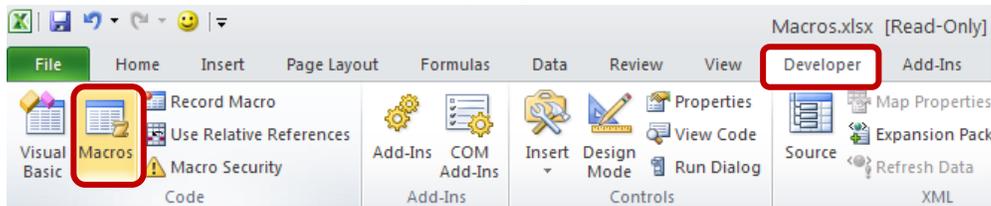
1. If the macro that you want to delete is stored in the personal macro workbook (Personal.xlsm), and this workbook is hidden:
 - a. On the **View** tab, in the **Window** group, click **Unhide**.



- b. Select **PERSONAL**, and then click **OK**.



2. On the **Developer** tab, in the **Code** group, click **Macros**.



3. In the **Macro name** box, select the macro that you want to delete and click **Delete**. Please note that deleting a macro does not undo its actions.

