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BEFORE you can get the feel of the controls, you need to know where they are and what they do. This chapter discusses the essential commands, controls, tools, and techniques you need to operate the Microsoft Excel 2013 machine.

Examining the Excel 2013 workspace

This section takes you on a tour of not only the dashboard of Excel 2010 but also the trunk and the glove compartment. We might even slip on some gloves and take a peek under the floor mats.

Facts about worksheets

Here are some tidbits of information about the grid called the *worksheet*, shown in Figure 2-1:

- Column letters range from A through XFD. (After column Z comes column AA, after column ZZ comes column AAA, and so on, up to XFD.) Row numbers range from 1 through 1,048,576.
- The currently selected cell is referred to as the *active cell*. When you select a range of cells, only the cell in the top-left corner is considered the active cell. The reference of the active cell appears in the Name box on the left end of the formula bar.
- The headings for the columns and rows containing selected cells are highlighted, making it easier to identify the location of selected cells.
- With 16,000 columns and 1,048,576 rows, your worksheet contains more than 16 billion individual cells. Before you try to unravel the mysteries of the universe on a single worksheet, however, remember that the number of cells you can use at one time is limited by the amount of memory your computer has. Although Excel allocates memory only to cells containing data, you might have trouble actually using all the cells on one worksheet, no matter how much memory you have.

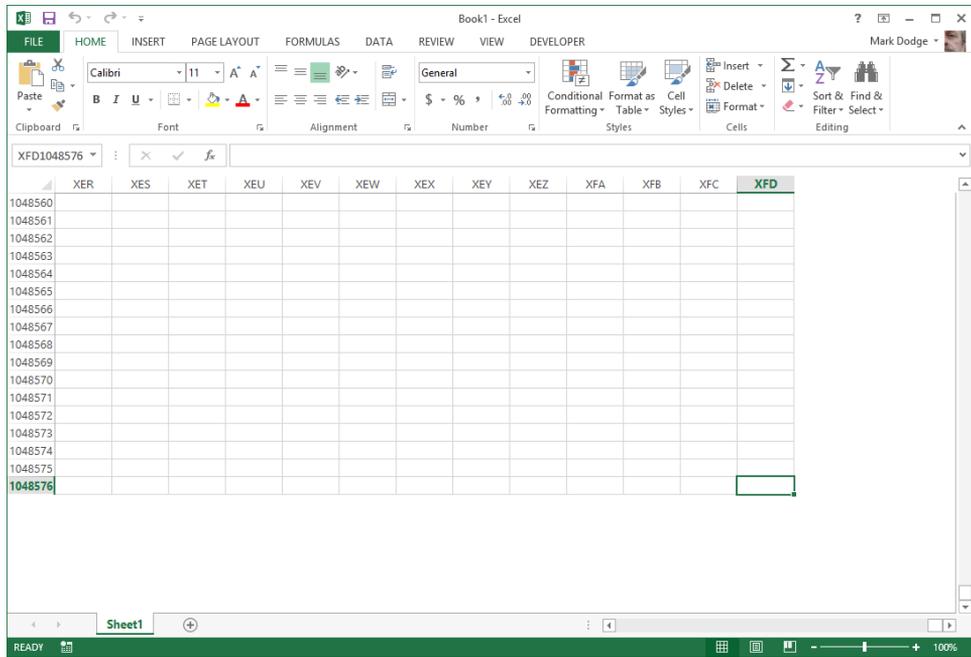


Figure 2-1 There is a huge amount of available space on a worksheet.

The porthole window

The workbook window is like a porthole through which you can see only a portion of a worksheet. To illustrate, suppose you were to cut a small, square hole in a piece of cardboard and place the cardboard over this page. At any given time, you could see only a portion of the page through the hole. By moving the cardboard around the page, however, you could eventually read the entire page through the window in your piece of cardboard. Viewing worksheets in Excel is much the same. You can also open another window to view different sections of the same worksheet simultaneously.

Using the workbook window

A new workbook, shown in Figure 2-2, originally consists of a single worksheet; you click the New Sheet button to add more sheets. This is a change from previous versions, in which new workbooks contained multiple sheets.

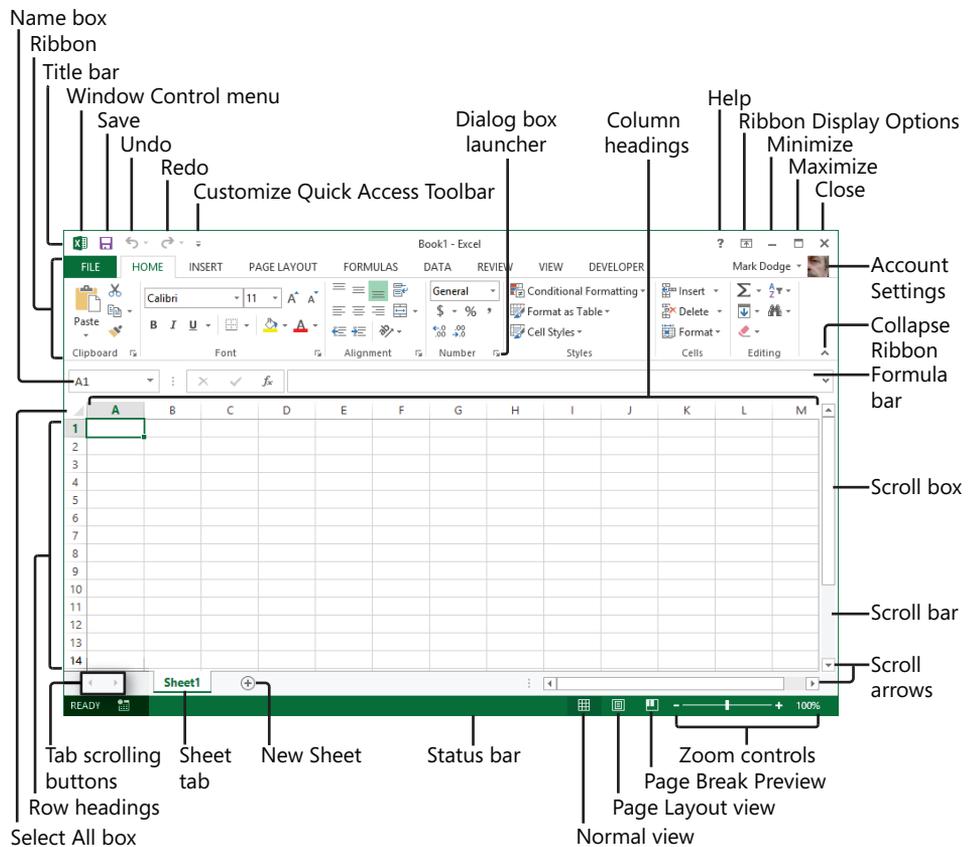


Figure 2-2 Workbooks initially comprise a single sheet, but you can add as many as you need.

For more information about using workbooks, see Chapter 7, “How to work a workbook.”

Workbooks are great organizational tools. For example, you can keep in the same workbook all the documents that relate to a specific project, department, or individual. Workbooks can eliminate a considerable amount of clutter on your hard disk. The more documents you have to manage, the more valuable workbooks become. You can use workbooks as a multiuser management tool. For example, you can organize worksheets in groups for individual tasks or individual users. You can also share a workbook so that more than one person can work on it at the same time.

If you routinely create folders on your hard disk to contain groups of related files, you can think of workbooks as folders where you can keep all related worksheets.

For more information about using and sharing workbooks, see Chapter 26, “Collaborating on a network or by email.”

Getting around in the workbook

At the bottom of the workbook window are controls you can use to move from sheet to sheet in a workbook. Just click any sheet tab to activate it, but if there are too many tabs to fit across your screen at once, sheet-navigation controls appear to help you get around, as shown in Figure 2-3. Note that the More Sheets (ellipsis ...) buttons will not appear until there are too many sheets to display at once.

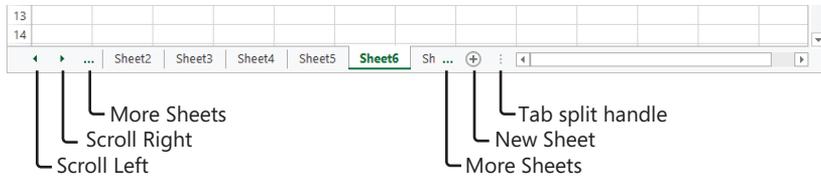
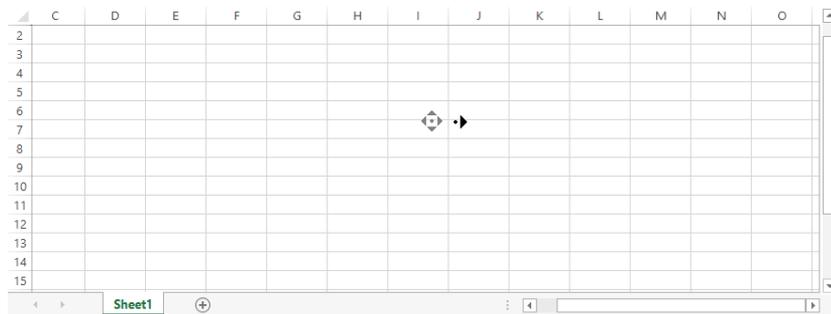


Figure 2-3 Use the workbook navigational controls to move among undisplayed worksheets.

If you have a wheel mouse

If you have one, you can use the wheel on your Microsoft IntelliMouse (and most other wheeled pointing devices) to scroll through your worksheet. Turn the wheel toward you to scroll down or away from you to scroll up. To scroll left or right (called *panning*), press the wheel button, and drag the mouse in the direction you want to move. A gray four-headed arrow appears, anchored to the spot where you pressed the wheel button. The speed of panning depends on how far you drag away from the anchor. As you press the button down and drag, a black arrow appears, pointing in the direction you're dragging:



You can change the default behavior of the wheel from scrolling to zooming. To do so, click the File tab and then click Options. In the Advanced category, below Editing Options, select the Zoom On Roll With IntelliMouse check box. For more information, see “Zooming worksheets” in Chapter 6, “How to work a worksheet.”

Workbook navigation tips

Many features and controls can help you navigate through the rows, columns, and worksheets in a workbook. Here are the highlights:

- Use the sheet tab navigation buttons to view all the sheet tabs in your workbook; click a tab to view the contents of that worksheet.
- Drag the tab split handle to the right if you want to see more sheet tabs at the expense of the horizontal scroll bar's width. To return to the usual tab display, double-click the tab split handle.
- Press Ctrl+Page Down to activate the next worksheet in the workbook; press Ctrl+Page Up to activate the previous worksheet.
- Press Ctrl+Home to jump to cell A1 from anywhere on a worksheet.
- Right-click any scroll bar to display a shortcut menu dedicated to scrolling actions, as shown in Figure 2-4.

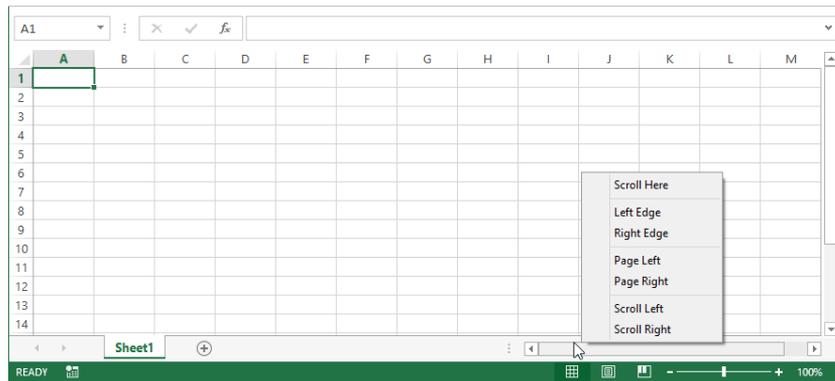


Figure 2-4 Right-click a scroll bar to display a shortcut menu of navigational commands.

- Drag the scroll box (also known as the *scroll thumb*) to move around the worksheet. Click the scroll bar anywhere outside the scroll box to move one screen at a time in the direction in which you clicked.
- The size of the scroll box changes depending on the size of the scrollable area. For example, the scroll boxes shown in Figure 2-4 are more than half as large as the scroll bars themselves, indicating there is little more to see in the active area of the worksheet—nothing, in fact, because this is a blank worksheet. As you add data to more columns and rows than can appear on a single screen, the scroll boxes get

proportionally smaller, giving you immediate feedback about the size of the worksheet. A tiny scroll thumb indicates a huge worksheet.

- Using the scroll arrows at either end of the scroll bars, you can move through the worksheet one column or row at a time.
- The Name box at the left end of the formula bar always displays the active cell reference, regardless of where you scroll the window.
- To scroll the worksheet without changing the active cell, press Scroll Lock. For example, to scroll to the right one full screen without moving the active cell, press Scroll Lock and then press Ctrl+Right Arrow.

Note

The active area of a worksheet is simply the rectangular area that encompasses all the data the worksheet contains. So, if you have just three rows and columns of actual data in the top-left corner of the worksheet, the active area would be A1:C3. If, on the same worksheet, a stray character (even a space) happens to be in cell AB1299, the active area would be A1:AB1299. On a new blank worksheet, however, Excel considers the default active area to be roughly what you can see on the screen, even before you enter any data.

Working with workbook windows

In Excel 2013, workbook windows behave differently than in any previous version. Previously, there was one Excel window that contained all open worksheets, which appeared as separate windows within the Excel *workspace*. (Even the term “workspace” has been retired for 2013.) Each workbook appears as a separate *instance* of Excel in the 2013 version. If you have three workbooks open, there will be three windows, each with a complete Excel interface, including ribbon tabs, a formula bar, a status bar, and other such items.

So workbook windows now behave like any other windows in Windows. At the right end of each title bar are the familiar Minimize, Maximize/Restore, and Close buttons. After you maximize a window, a button with two small boxes—the Restore button—takes the place of the Maximize button. Clicking the Restore button changes the maximized window into a floating window.

INSIDE OUT

See more rows on your screen

You can set the Windows taskbar at the bottom of the screen to automatically hide itself when not in use. Right-click the taskbar to display the shortcut menu, click the Properties command, and on the Taskbar tab of the Taskbar Properties dialog box select the Auto-Hide The Taskbar check box and then click OK. Now the taskbar stays hidden and opens only when you move the pointer to the bottom of the screen.

When you click the Minimize button (the one with a small line at the bottom), the window collapses and is relegated to an icon in the Windows taskbar, which you can click at any time to restore the window to its previous configuration. You can also drag the borders of any window to control its size.

Because you can open multiple windows for the same workbook, you might find it convenient to view different parts of the workbook, or even different parts of an individual worksheet, side by side in separate windows, rather than switching between worksheets or scrolling back and forth in one large window.

For more information, see “Opening multiple windows for the same workbook” in Chapter 7.

INSIDE OUT

Microsoft and the SDI

What is SDI? The single document interface (SDI) initiative that Microsoft implemented in its Office programs several versions ago was only an option in Excel 2010, but now... it's the law! Prior to SDI, regardless of the number of documents you had open, the applications were individual; if you had three Excel workbooks open, only one instance of Excel was visible in the Windows taskbar.

Microsoft's SDI initiative now dictates that each document now generates its own window, each of which becomes a separate item on the Windows taskbar. Open three Excel workbooks, and three items appear on the taskbar. This is arguably a more realistic way to handle documents, which is why Microsoft did it in the first place. Multiple-monitor users rejoice!

So in 2013, multiple document interface (MDI) is no more; long live the SDI. By the way, you won't see these terms used very much—for good reason: “multiple” DI creates a single window, and “single” DI creates multiple windows. Geek double-speak!

Exploring the ribbon

After you get the raw data into Excel by whatever means, you'll spend a lot of time using the ribbon to massage and beautify your data. The ribbon was introduced in Microsoft Office 2007 and was one of the most sweeping user interface (UI) changes ever implemented, redefining the workflow in every Office program. By this time—the third generation of the ribbon—the dust has settled, and even grumpy, old Excel users have come to terms with it. Figure 2-5 shows the ribbon at rest.

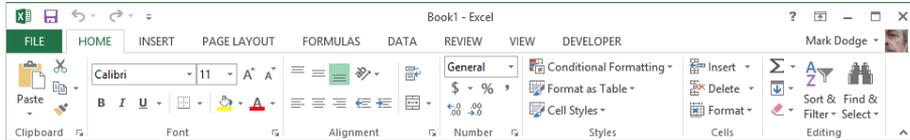


Figure 2-5 The ribbon dominates the top of the Excel window.

Does your ribbon look different?

The screen images shown in this book were captured at the screen resolution, magnification, and text size that is optimum for publication purposes. The ribbon on your screen might not look the same as the one shown in the book. For example, you might see more or fewer buttons in each of the groups, the buttons you see might be represented by larger or smaller icons than those shown, or the group might be represented by a single button that you click to display the group's commands.

The ribbon comprises a number of tabs, each containing several ribbon groups, which in turn contain sets of related controls: commands, buttons, menus, galleries, and dialog box launchers. The hierarchy within and among ribbon tabs is designed to approximate a general workflow model, with the most-often-used features and options stacked more or less from left to right within and among tabs. For example, the Home tab contains commands you need when you create a new worksheet and start performing tasks such as cutting and pasting, formatting, and sorting, while the Review tab contains commands related to documents that are more or less complete, addressing issues such as verifying spelling and protecting the document.

Note

The 2007 version of the ribbon was not customizable; thankfully, this was remedied in Excel 2010 and continues to be customizable in 2013. Die-hard toolbar-modification aficionados such as your friendly Excel book authors were thrilled. This is explored in detail in “Customizing the ribbon” in Chapter 3, “Custom-tailoring the Excel workspace.”

The ribbon speaks

For years now, many of us in the computer-book-writing business have been anticipating early retirement due to the expected advent of stunningly simple user interfaces and the holy grail of “self-documenting” software. In reality, this goal has proven as elusive as the “paperless office,” so we’ve kept pretty busy. But Office 2013 represents another fine attempt at rendering our jobs obsolete. You can gain helpful information about your immediate surroundings simply by brandishing your pointer. For example, the left side of Figure 2-6 shows the ScreenTip that opens when you rest the pointer anywhere in the Number Format drop-down list. The right side of Figure 2-6 shows what happens when you click the Number Format drop-down list.

The icons representing the various options in the Number Format drop-down list shown in Figure 2-6 are another step in the right documentation direction, although further exploration might be required to discover the meaning of items such as the cryptic “12” icon for the Number format. (See “Using Accounting formats” in Chapter 9, “Worksheet formatting techniques.”) And, as always, you can press F1 at any time to open the Excel Help window and gain additional insight.

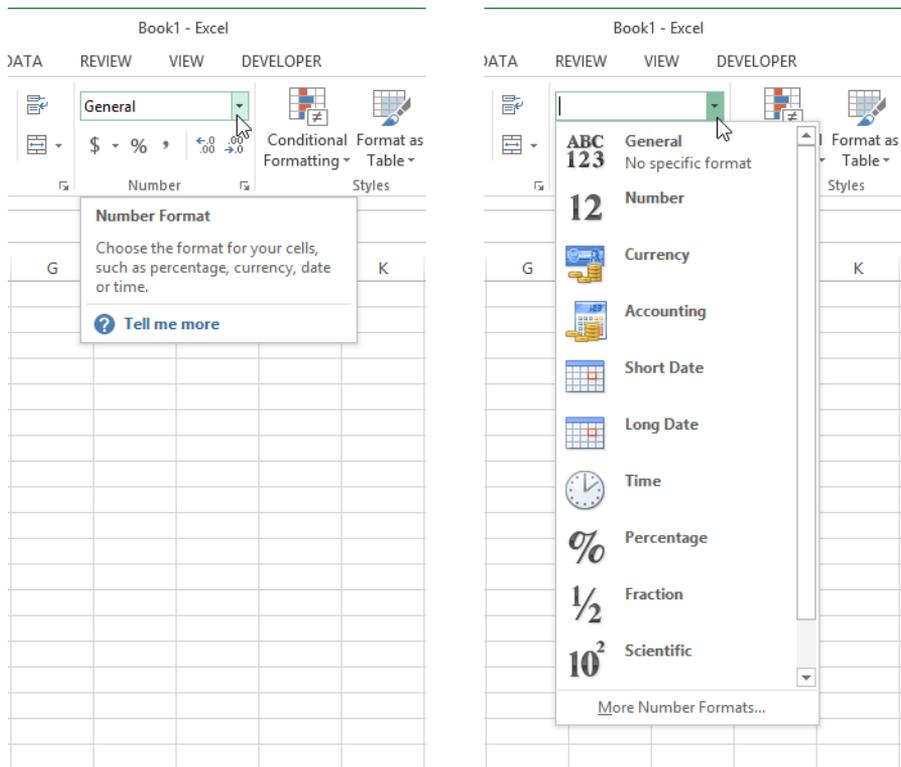


Figure 2-6 Rest your pointer on an object on the ribbon to display an explanatory ScreenTip. Click any arrow on the ribbon to display a menu, list, or gallery of options.

Note

If you need to maximize your worksheet area, you can temporarily hide the ribbon by double-clicking the active tab. Once it is hidden, clicking any tab puts the ribbon back into view.

Drop-down lists and dialog box launchers

The Number group on the Home tab, shown in Figure 2-6, contains the aforementioned Number Format drop-down list, four regular buttons, and a menu button (the \$ sign), which acts like any other button when you click the button proper, but when you click the arrow next to it, it displays a drop-down list of alternate actions for that button. Anytime you see an arrow directly to the right of a button or a box on the ribbon, clicking the arrow reveals more options. (Just to confuse the issue a bit, the Increase Font Size and Decrease Font Size buttons in the Font group display arrows that are identical to the menu arrows but are actually part of the button images and don't invoke drop-down lists.)

Many groups display a tiny button in the bottom-right corner called a *dialog box launcher* (labeled for your convenience in Figure 2-2). This is a visual cue telling you there is more you can do there. When you rest the pointer on a dialog box launcher, a ScreenTip opens with details about its function; click the dialog box launcher to display the promised result, as shown in Figure 2-7.

INSIDE OUT**Just pin it**

Whether you have Windows 7 or Windows 8, Excel lives in similar surroundings. In Windows 8, Excel runs on the desktop, which is similar to Windows 7, but without a Start button. This means that there is no Start menu with programs pinned to it, and no All Programs menu, either. If you are on the Windows 8 Start screen, click the Excel tile, which activates the desktop and starts Excel. But if you're on the desktop, you have to go back to the Start screen to start Excel. Or you can pin it to the taskbar. The taskbar is standard equipment in both Windows versions. On the Windows 8 Start screen, right-click the Excel tile, and then click the Pin To Taskbar icon. In Windows 7, right-click the Excel icon and click the Pin To Taskbar command.

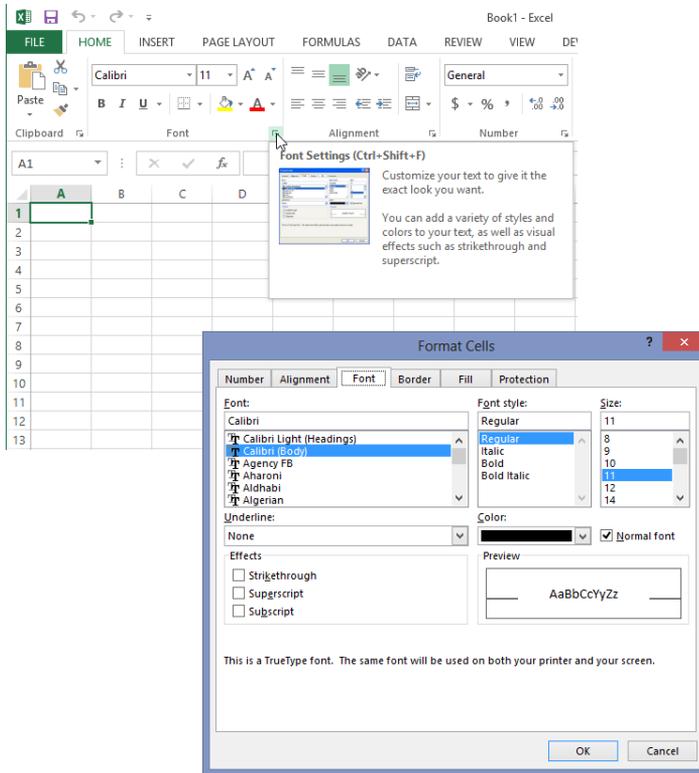


Figure 2-7 Rest the pointer on a dialog box launcher for an explanation of its function; click it to open the corresponding dialog box.

Sometimes dialog box launchers actually launch dialog boxes, as shown in Figure 2-7; other times, clicking the dialog box launcher displays a task pane on the side of the window, as shown in Figure 2-8. In the latter case, the dialog box launcher acts as a toggle—that is, clicking it opens the task pane, and clicking it again closes the task pane.

Another way to access advanced options relegated to dialog boxes is to look for commands sporting an ellipsis (...) at the bottom of menus and galleries. For example, at the bottom of the Number Format drop-down list shown in Figure 2-6 is a command called More Number Formats. Just as you can with the dialog box launcher, you can click this command to display the Format Cells dialog box. As was the case in previous versions of Excel, an ellipsis adjacent to the name of a command indicates that clicking that command displays a dialog box with additional options rather than immediately issuing the command.

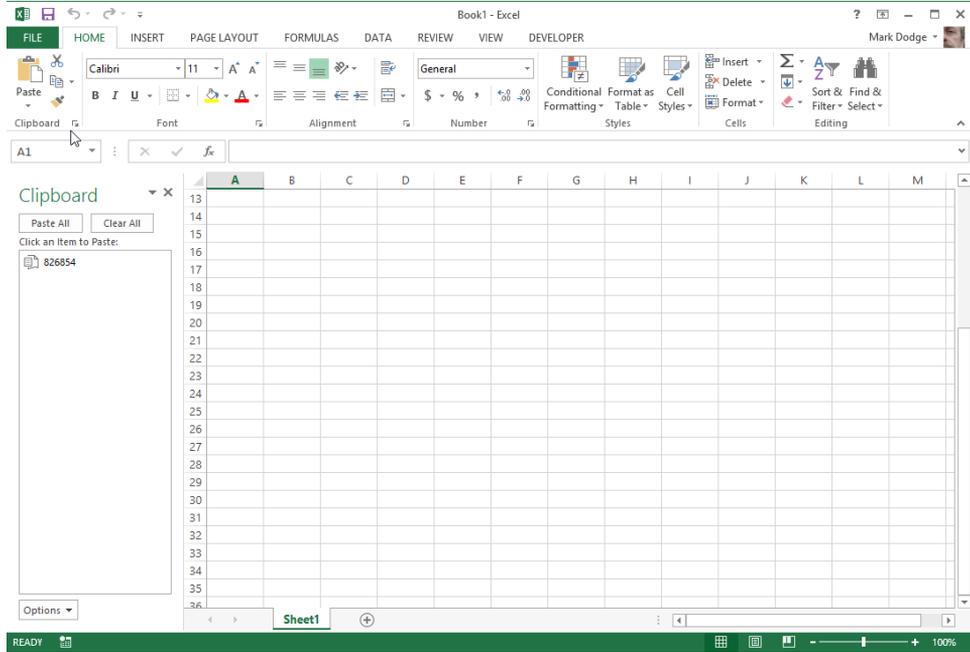


Figure 2-8 Clicking some dialog box launchers causes a task pane to open, docked to the left or the right of the worksheet.

Galleries and live preview

The concept of galleries goes way back. The idea is to provide a visual clue about what's going to happen when you click something, besides just the name of a command or button. Microsoft has done this with fonts for some time now. When you click the Font menu or drop-down list, each font name appears in its own font. Excel 2013 includes a bunch of other galleries that provide similar visuals and adds nifty functionality called *live preview*. Taking the same example one step further, Figure 2-9 shows the Font drop-down list displaying the available fonts in situ. With live preview, you simply rest the pointer on the font name to momentarily cause selected cells to display that font. (In the figure, the entire worksheet is selected.) Helpfully, the selection highlight temporarily disappears while you are previewing fonts.

As you can see in Figure 2-9, Berlin Sans FB Demi is perhaps a questionable choice for a table of sales totals, but it's easy to get a look at a lot of options this way. And helpfully,

although you need to select the cells you want to format, the selection highlight goes away temporarily while you are live-previewing. The cell contents are not affected; this is simply a way to visualize what would happen if you actually commit by clicking. Have some fun by dragging the pointer up and down the list of fonts, and watch the cell contents change almost as fast as you can drag.

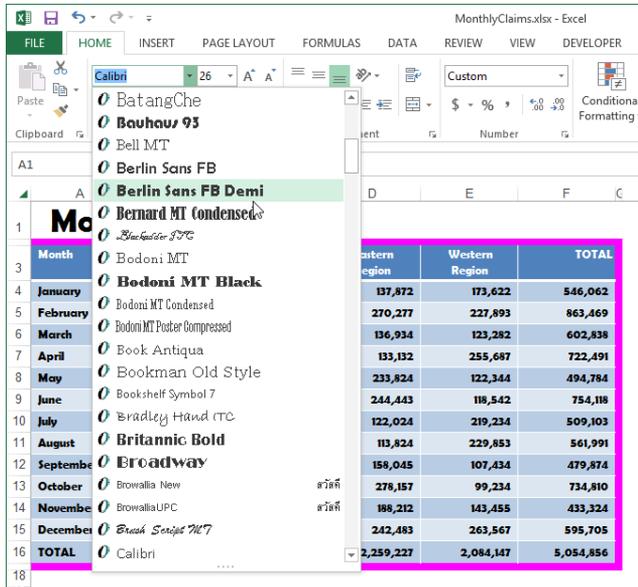


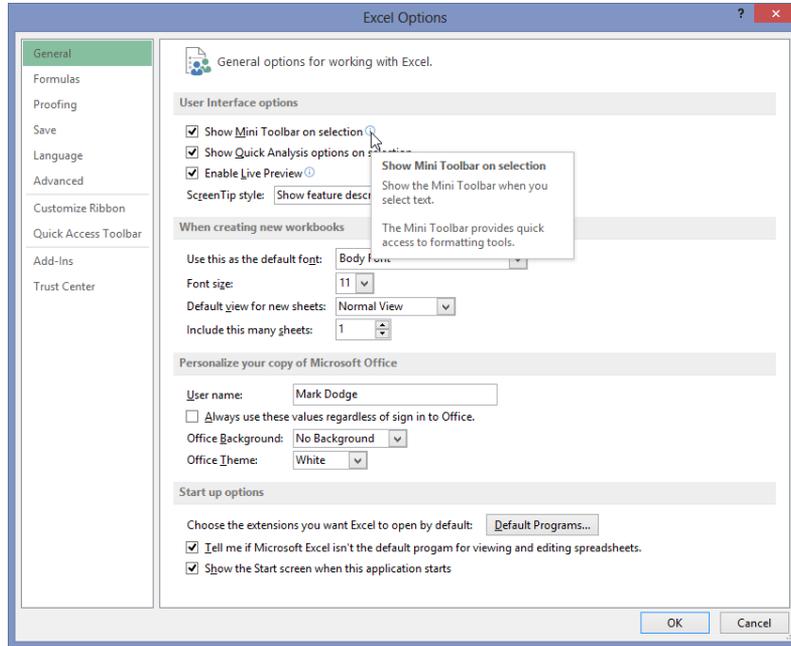
Figure 2-9 Not only are font names displayed in their respective fonts in the drop-down list, but simply resting the pointer on a font name temporarily displays that font in selected cells. (All cells are selected here.)

Note

Not all of the seemingly gallery-like items on the ribbon exhibit live preview behavior. For example, you might think the Number Format drop-down list would be an excellent application of live preview, but it doesn't work that way. As we explain features in detail throughout the book, we'll point out any live preview opportunities.

The omnipotent Excel Options dialog box

The dialog box that opens when you click the File tab and then click Options is probably the most important dialog box in Excel. The Excel Options dialog box controls nearly every aspect of Excel, including general settings such as how many sheets appear in a default workbook and the name and point size of the default font:



You'll see little *i* (for information) icons adjacent to many of the items shown in the dialog box; rest the pointer on them to display ScreenTips. The Excel Options dialog box also provides special settings for default file-saving formats, worksheet-level and workbook-level display settings, and many other hard-to-classify options. If you take a moment to click each category on the left side of the dialog box and look through the options available, you'll get an idea of the scope of the program as well as the degree of control you have over your workspace. If you're unsure about what a particular setting or option does, simply click the Help button (the question mark icon) in the title bar of the dialog box to open the Help system.

Understanding contextual tool sets

Microsoft has been dancing with context sensitivity for several releases now. In Office 2000, Excel shipped with default “learning” menus and toolbars that modified themselves based on usage patterns, which turned out to be somewhat unpopular because commands would tend to “disappear” with lack of use. Some of this functionality carried through to Excel 2003, with a somewhat better implementation. Since the 2007 release, context sensitivity is smarter and, best of all, does not take little-used items away like the previous approaches—in fact, the ribbon and its normal contents remain steadfast, while additional context-triggered tools appear on ribbon tabs that are displayed only when needed. Figure 2-10 shows what happens when you click a chart object.

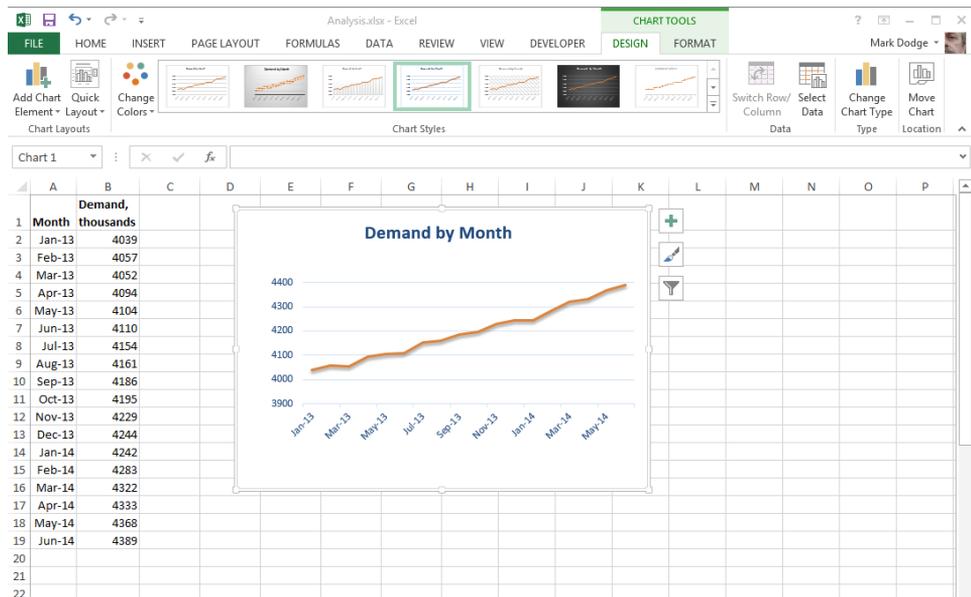


Figure 2-10 When you select an object, tabs appear containing tools that apply only to that object. Here, two tabs of chart tools appear on the ribbon when you select a chart.

Not only do two new tabs appear on the ribbon in Figure 2-10—Design and Format—but a higher-level heading, entitled Chart Tools, is displayed above the new tabs. Headings like this appear over sets of contextually triggered tabs to define their overall function. Chart objects are complex enough that clicking one triggers several tabs’ worth of contextual tools; other objects might generate only one tab. This functionality helps reduce clutter in the interface, taking groups of task-specific tools out of the way until you need them.

Using the Quick Access Toolbar

It's hard not to think of the ribbon as a toolbar, especially if you skipped a couple of upgrades. The ribbon is not a toolbar according to Microsoft, and only one "real" toolbar is left. It's at the top of the screen, and it's called the Quick Access Toolbar, as shown in Figure 2-11.



Figure 2-11 The Quick Access Toolbar sits atop the Excel workspace unless you move it under the ribbon.

Note

To suit your work style, you can add buttons and even entire ribbon groups to the Quick Access Toolbar. For more information, see "Customizing the Quick Access Toolbar" in Chapter 3.

The Quick Access Toolbar is pretty much like toolbars as you knew them, with a few exceptions. You can dock it in only two locations—either above or below the ribbon—unlike previous toolbars that could "float" over the worksheet or be docked at the top, bottom, or sides of the screen. And you cannot close or hide the Quick Access Toolbar.

INSIDE OUT

Toolbar and ribbon customization

Some of us have spent a lot of time modifying the UI of pre-2007 versions of Excel by changing and adding toolbars and menus. Since Excel 2007, there has been only one toolbar, and you cannot create new ones. Perhaps not surprisingly, 98 percent of the Excel-using public will not miss this functionality. (This statistic was gleaned from usability surveys.) Those of us in the other 2 percent can customize the Quick Access Toolbar, and since 2007, we have been able to tweak the ribbon as well. Hooray! See "Customizing the Quick Access Toolbar" in Chapter 3 for more information.

Accessing commands with the keyboard

When you press the Alt key, Excel activates keyboard command mode and displays little pop-up labels adjacent to each tab and toolbar button, as shown at the top of Figure 2-12.

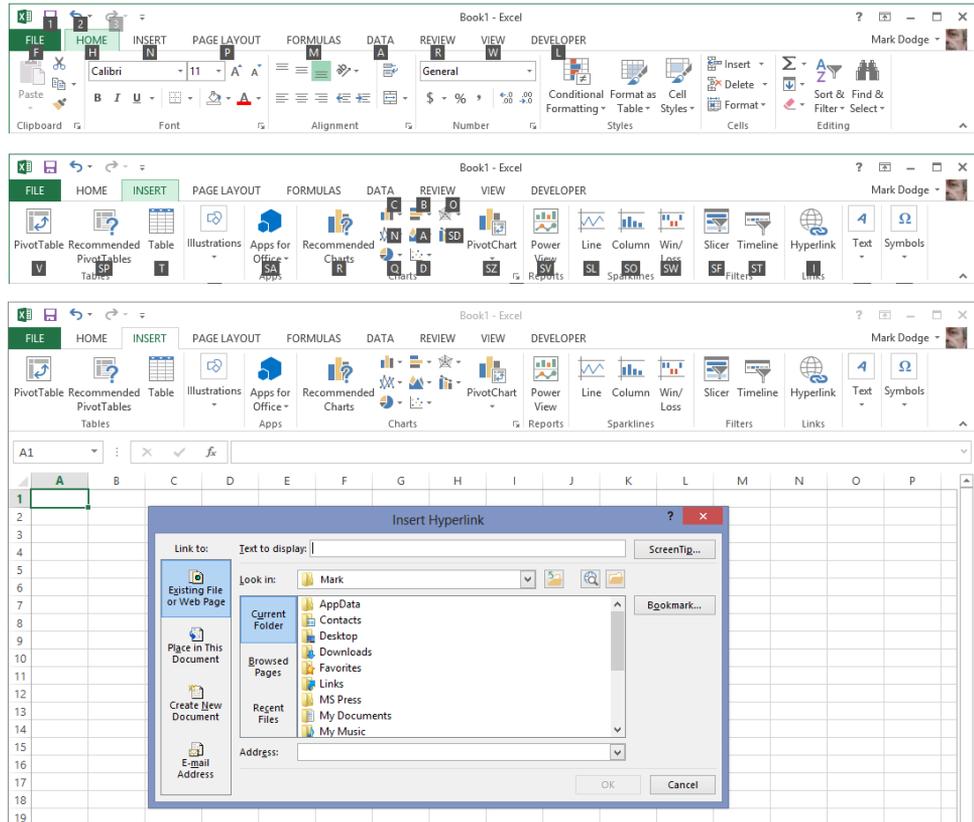


Figure 2-12 Press the Alt key to activate keyboard command mode and display pop-up labels showing you the keys you can press to activate the respective tab, button, or command.

For example, after you press the Alt key to activate the pop-up labels, you can press the N key to display the Insert tab and add pop-up labels to the commands it contains. Then, press the H key—the pop-up letter adjacent to the Hyperlink button—to display the Insert Hyperlink dialog box, as shown in Figure 2-12. So, instead of reaching for the mouse, simply pressing Alt, N, H gets you there. This makes for extremely fast command access after you learn the right keys for tasks you do often.

Keyboard command activation options

You can use the slash (/) key just like the Alt key to access the Excel command structure. But you can alternatively set a different key to activate menus. Click the File tab, click Options, select the Advanced category, scroll way down to the Lotus Compatibility options, and then type a different character in the Microsoft Excel Menu Key text box.

The joy of shortcut menus

Shortcut menus contain only those commands that apply to the item indicated by the position of the pointer when you activate the menu. Shortcut menus provide a handy way to access the commands most likely to be useful at the pointer's location and to help minimize mouse movements (which are hard on wrists!).

To access a shortcut menu, right-click. The menu opens adjacent to the pointer, as shown in Figure 2-13.

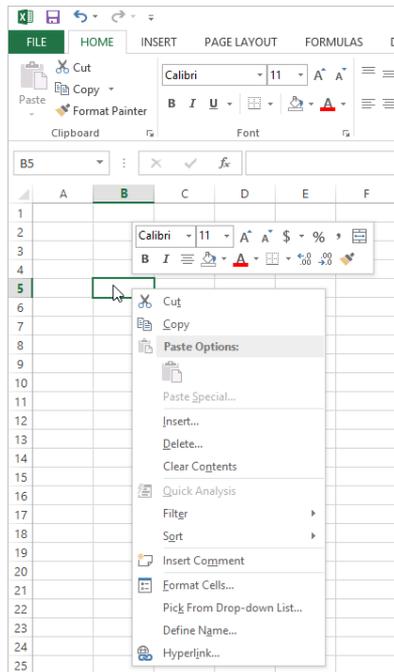


Figure 2-13 Right-clicking almost anywhere displays a shortcut menu with pertinent commands.

Shortcut menus can contain many combinations of commands, depending on the position of the pointer and the type of worksheet. For example, if you display a shortcut menu when the pointer is on a cell rather than a column heading, some of the commands change to ones specific to cells rather than columns.

Belly up to the mini-bar

A small floating toolbar opens along with the shortcut menu whenever the selected object might contain any kind of text, as you can see in Figure 2-13. You can control whether the Mini toolbar appears by using the Excel Options dialog box. Click the File tab, and click Options. Then, in the General category, select or clear the Show Mini Toolbar On Selection check box.

Using the Quick Analysis tool

The top 2013 addition to the Excel cavalcade of context-sensitivity is the Quick Analysis tool, which pops up in the lower-right corner of the selected range any time you select more than one non-empty cell. The Quick Analysis tool takes some of the most sophisticated features of Excel and puts them right near the action. One reason this is helpful is that, often, menus and palettes on the ribbon drop down and obscure the cells you are trying to format. Putting the Quick Analysis tool in the lower-right corner of the range allows you to position the selection on the screen so that you can see more of the cells you are modifying. For example, in Figure 2-14, we selected the totals in cells B4:E15, scrolled the worksheet down a bit to allow room below the table, and clicked the Quick Analysis tool. Resting the mouse pointer over any icon displays a live preview.

The Quick Analysis tool is like a mini-ribbon; across the top are categories (tabs) you click to reveal different sets of icons. The type of data you select determines the tools that are active and available for application. You can use the Quick Analysis tool to apply and remove formatting, insert formulas and tables, create charts and PivotTables, and more.

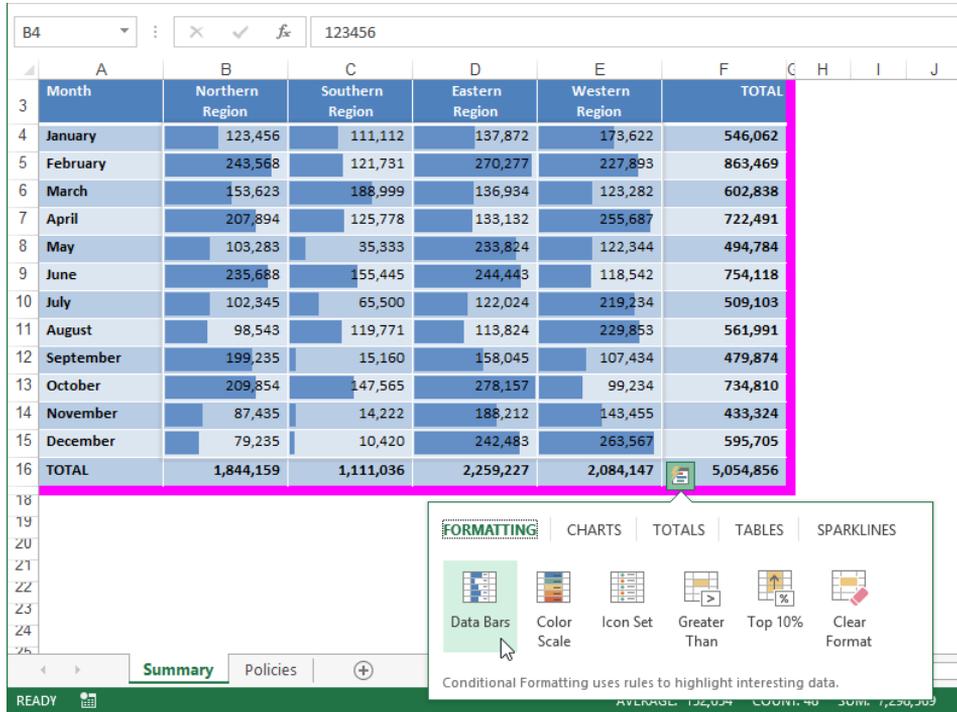


Figure 2-14 Click the Quick Analysis tool to display a context-sensitive “ribbon” with “tabs” containing appropriate actions you can apply to the selected cells.

Meet the formula bar

Worksheet cells are the building blocks of Excel. They store and display the information you enter on an Excel worksheet so that you can perform worksheet calculations. You can enter information directly in a cell, or you can enter information through the formula bar, as shown in Figure 2-15.

The contents of the active cell appear in the formula bar, and the address of the active cell appears in the Name box at the left end of the formula bar. The formula bar split handle and the Insert Function button are always available, but the other two formula-editing buttons are active only while you are entering or editing data in a cell, as shown in Figure 2-15. Click the Cancel button to cancel the current action in the cell, which is the same as pressing the Esc key. Click the Enter button to consummate the current action in the cell, which is the same as pressing the Enter key.

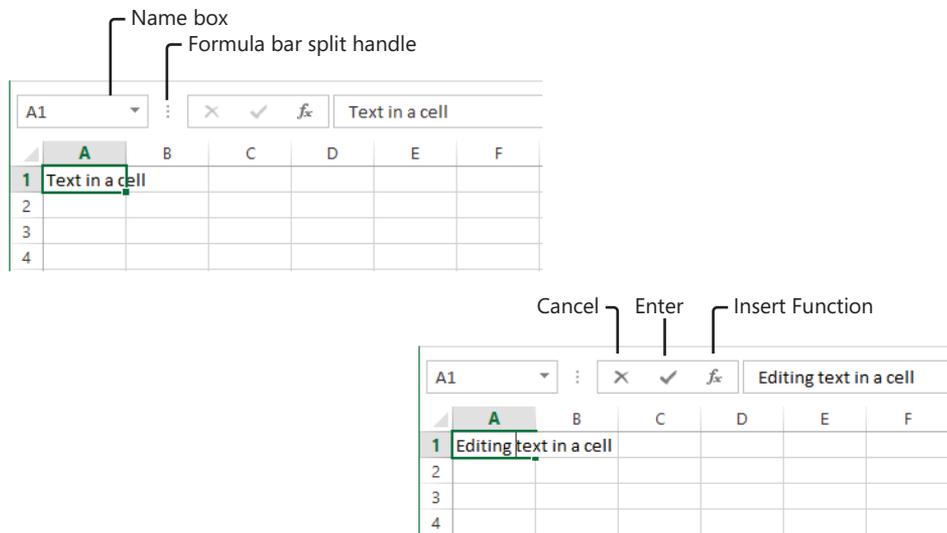


Figure 2-15 The formula bar displays the contents of the active cell.

Note

When you press Enter, Excel finishes the action in the active cell and moves the selection down one cell. You can change this behavior by clicking the File tab, clicking Options, and clicking the Advanced category. If you clear the After Pressing Enter, Move Selection check box, the active cell does not change after you press Enter. Or leave the option selected and choose a different direction (Up, Right, or Left) from the drop-down list.

You can drag the formula bar split handle to the left to make more room for formulas, or to the right to increase the size of the Name box; double-click it to return to the default position. Clicking the Insert Function button displays a dialog box that helps you construct formulas. For information about creating formulas and using the Insert Function dialog box, see Chapter 12, “Building formulas.”

Note

By default, Excel displays the formula bar in your workspace. If you prefer to hide the formula bar, click the View tab and clear the Formula Bar check box in the Show group. To redisplay the formula bar, simply reverse this process.

Excel allows you to expand and contract the formula bar to display or hide long formulas. The formula bar split handle helps a bit, but for really long formulas the formula bar is vertically expandable, as shown in Figure 2-16.

When you select a cell containing a long formula, you see only part of the formula in the formula bar. If there is more of the formula to be seen, Excel displays a set of up and down arrows at the right end of the formula bar that you can use to scroll through the formula one line at a time. At the far right end of the formula bar is the Expand Formula Bar button (down arrow), which when clicked expands the formula bar as shown in Figure 2-16. If you need to see more, drag the bottom border of the formula bar as far as you need to. (This particular 100-cell formula is good for illustrating the expanding formula bar, but failure to use the SUM function in this situation might get you drummed out of the Sensible Formulas Guild.) The next time you click the Expand Formula Bar arrow, the bar expands to the last size you specified.

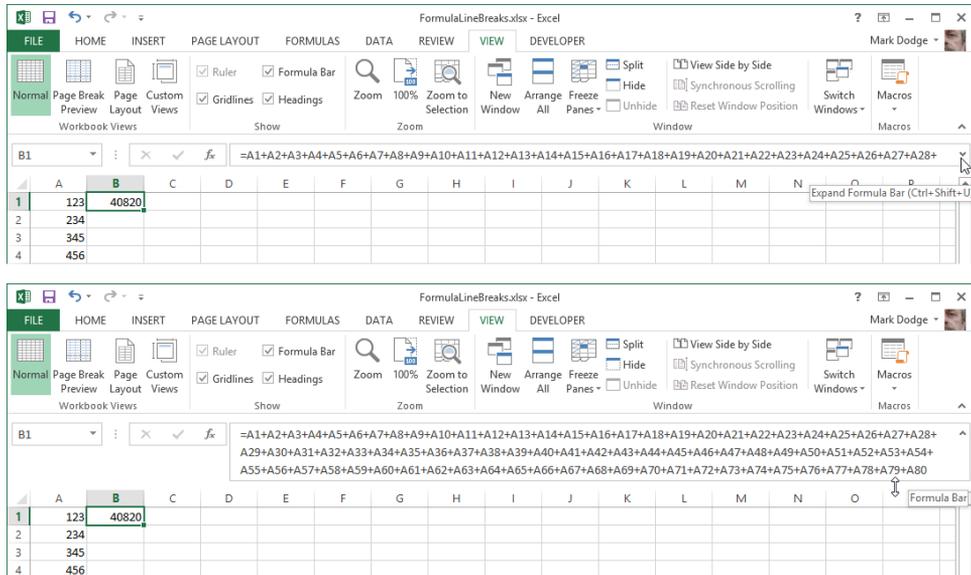


Figure 2-16 The formula bar expands and contracts to show or hide long formulas.

To return the formula bar to its regular size, click the Collapse Formula Bar button. (The Expand Formula Bar button changes its name when the formula bar is expanded.) Note that in the bottom screen shot in Figure 2-16, the pointer turns into a double-headed arrow when you position it over the lower border of the formula bar. You can also drag this border to expand the formula bar.

Note

Functions are the Clydesdales of Excel—they do most of the heavy work. To learn all about them, see Chapter 13, “Using functions.”

Facts about the status bar

The status bar, located at the bottom of the Excel window, displays information about what’s happening in your workspace. For example, most of the time, Excel displays the word *Ready* at the left end of the status bar. When you type, the status bar displays the word *Enter*; when you double-click a cell that contains data, the status bar displays the word *Edit*.

Several items appear at the right end of the status bar: a few buttons, a slider, and a display area for various purposes—including summary information, keyboard modes, page numbers, and much more—any of which you can turn on or off. Right-click the status bar anywhere to show the Customize Status Bar shortcut menu filled with options, as shown in Figure 2-17.

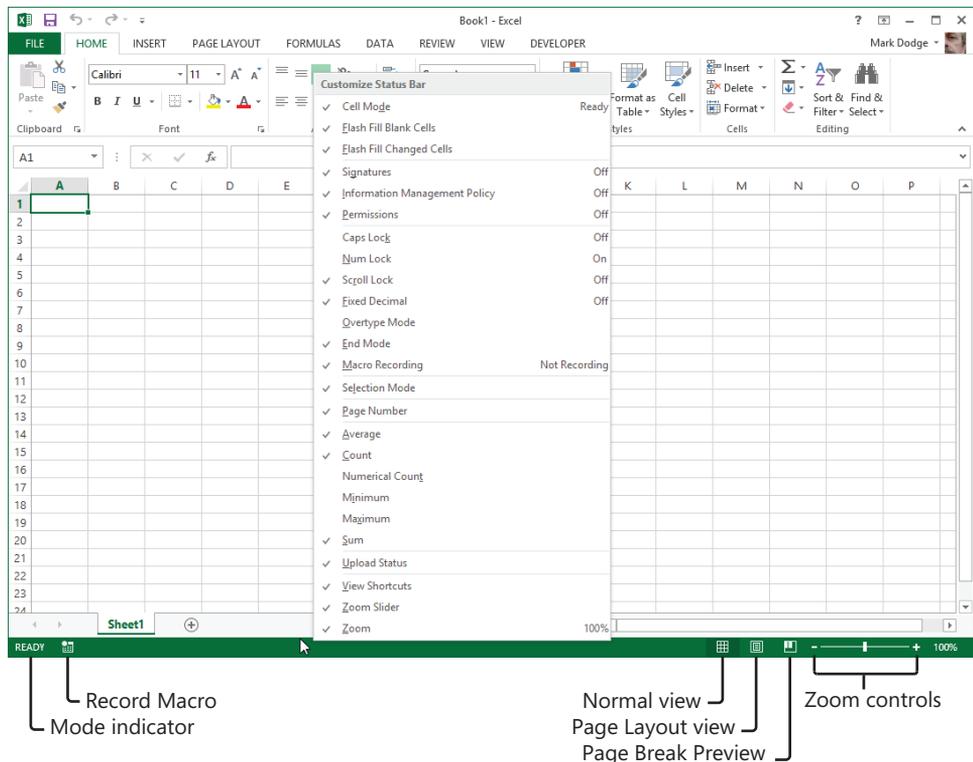


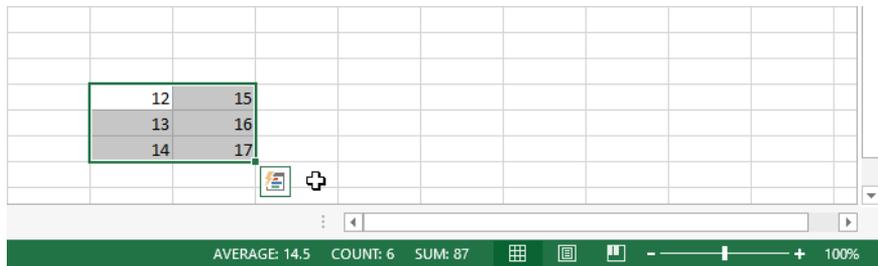
Figure 2-17 You have numerous options for displaying information on the status bar.

All the commands on the Customize Status Bar menu with check marks adjacent to them are turned on by default. Most of the commands on this menu control the display of different types of information, depending on what is selected. Cell Mode refers to the aforementioned Ready/Enter/Edit indicators when working in cells. The icon that looks like a worksheet with a dot, shown in Figure 2-17 on the left side of the status bar, is a record button for macros. The Macro Recording command controls its display. (If any macros are available, a Play arrow appears next to the icon, the display of which is controlled by the Macro Playback command.) The last three commands on the menu control the display of items on the right end of the status bar. View Shortcuts turns on or off the display of the three buttons (Normal View, Page Layout View, and Page Break Preview) visible next to the Zoom percentage and the Zoom slider, which also have corresponding commands controlling their display. Drag the Zoom slider to change the percentage, or click the percentage indicator to display the Zoom dialog box for more precision.

For more information about keyboard modes, see “Navigating regions with the keyboard” in Chapter 6. For more about views, see Chapter 11, “Printing and presenting.” For more about macros, see Chapter 28, “Recording macros.”

Quick totals on the status bar

When you select two or more cells that contain values, Excel displays summary information using those values on the status bar:



This is the AutoCalculate feature. The status bar normally displays the sum and average of the selected values, as well as the number of cells selected that contain any kind of data (blank cells are ignored). As you can see in Figure 2-17, additional AutoCalculate options are available, including Minimum and Maximum values in selected cells and Numerical Count, which counts only cells containing numbers and ignores cells containing text.

Introducing Backstage view

At first, when you begin working with one of the “ribbon versions” of Excel (starting with Excel 2007), it looks like the old menus are still there across the top of the screen—until you start clicking and you see that no menus are dropping down. Even more interesting if you have been using Excel 2007 is that the File menu, which had been removed, came back in Excel 2010 (and remains in 2013) as a tab, and the Office Button, which was where the File menu used to be, is gone. Now, when you click the File tab, what you see is not so much a menu or a dialog box, but a screen full of information and options that Microsoft calls *Backstage view*. Here you can find the familiar File menu commands, and Backstage view also serves as the access point for most of Excel’s “behind-the-scenes” commands and settings.

Clicking the File tab on the ribbon reveals the default Info screen in Backstage view, as shown in Figure 2-18.

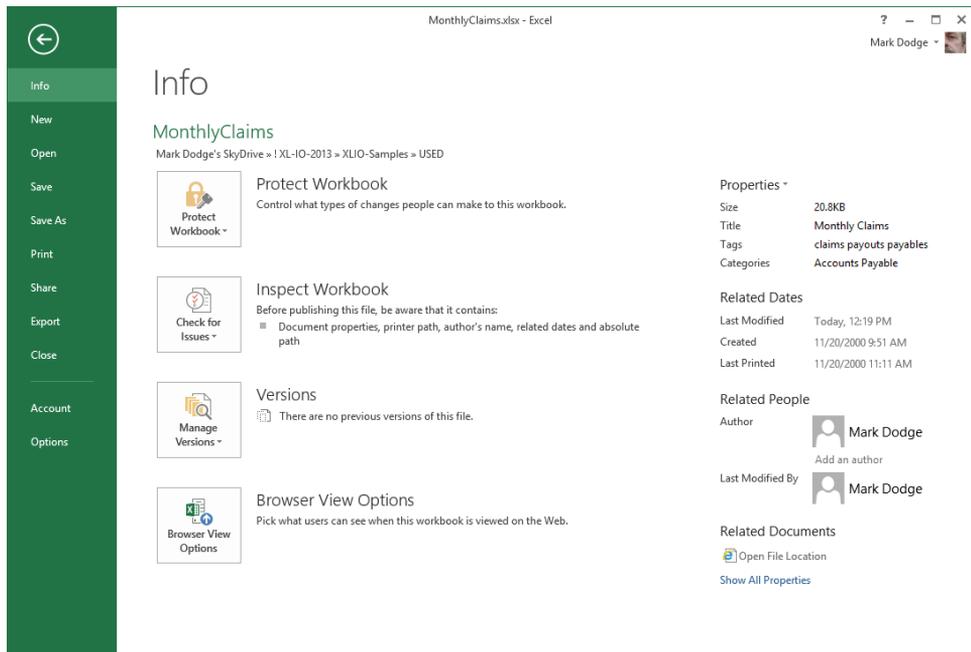


Figure 2-18 Click the File tab to open Backstage view, which includes the old File menu commands; click the arrow button in the upper-left corner to return to the worksheet.

As you can see, many of the old File menu commands are still here as clickable items on the left side of the screen, and the right side of the screen provides additional clickable items. Clicking Info, New, Open, Save As, Print, Share, Export, or Account controls the content

visible on the right side of the screen, which offers pertinent options and commands. Clicking Save, Open, Close, or Options launches a separate dialog box.

You can use the new Account command to change settings for your Microsoft account, including connected services such as SkyDrive, and to select a common theme. There is also a Background menu you can use to personalize the appearance of your Office programs using selected designs that appear in the title bar area.

You'll be seeing more of Backstage view and all of its "children" throughout this book.

Exploring file-management fundamentals

One of the advantages of working with computers is the convenience of electronic files. In this section, we describe both the usual and unusual ways you can manage your Excel files.

Creating workbooks

To create a new workbook, click the File tab and then click New to display the screen shown in Figure 2-19. Click the arrow at the top left of the New screen at any time to return to the worksheet. Click Blank Workbook, and a fresh workbook opens. Each new blank workbook you create during the current Excel session is numbered sequentially: Book1, Book2, and so on.

Excel 2013 offers a staggering array of sophisticated templates representing hundreds of hours of thought and effort, and revealing the potential of Excel. There are a lot of helpful templates you can use right away. And if you ever need some inspiration, open a template you find interesting and examine it to see how it was constructed. There is a lot to learn just by looking. Templates are continually added to the online inventory, so be sure to use the search box to see what's new and available on the web. Suggested Searches are clickable links that display categories of available templates gleaned from the Microsoft website at the moment.

Excel is more web connected than ever. Some templates are installed on your system, but most are in the cloud. This not only saves space for you, but also makes it possible to offer more templates, more complex templates, and a constant source of new templates. Keeping templates in the cloud also makes it easy for developers to fix problems and make enhancements. Figure 2-19 shows the nifty templates available with an Internet connection. Figure 2-20 shows the search box disabled and the selection of relatively Spartan (but equally useful) templates that are available when your computer is offline.

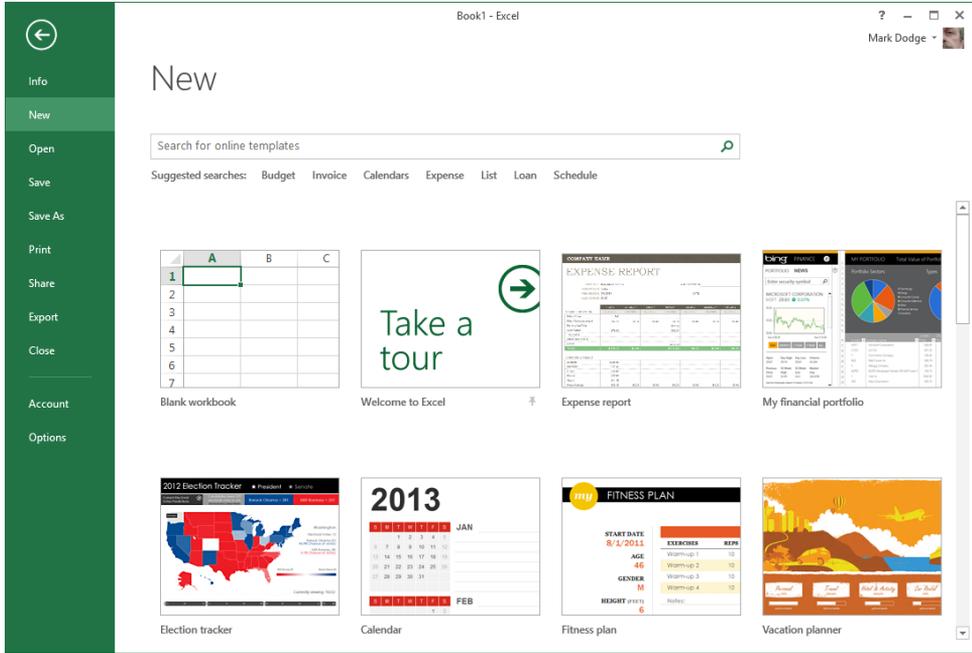


Figure 2-19 Click the File tab and then click New to display a selection of available templates, both installed and online.

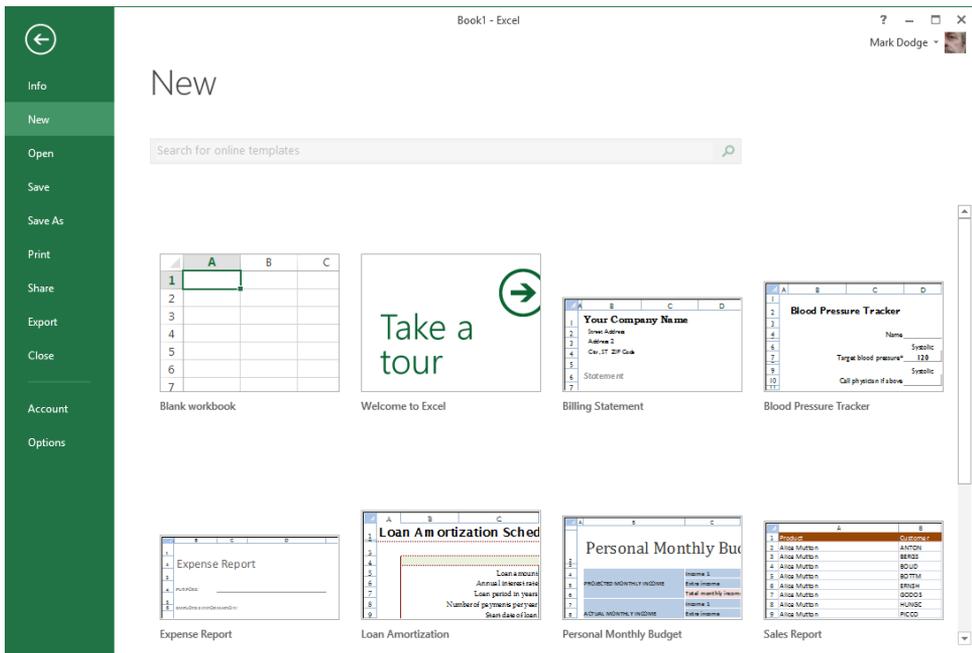


Figure 2-20 The selection of available templates narrows considerably when no Internet connection is available.

Installing your own templates

Creating your own templates is a great idea for worksheets you use a lot. The steps involved are a little different in Excel 2013 than in previous versions. First, organize and format a workbook the way you want (minus the data). Then when you're ready to save the template, click the File tab, click Save As, click Computer, and then click Browse to display the Save As dialog box. Click the Save As Type box and select *Excel Template (*.xltx)* from the list, and the destination folder immediately changes to the Custom Office Templates folder, as shown in Figure 2-21.

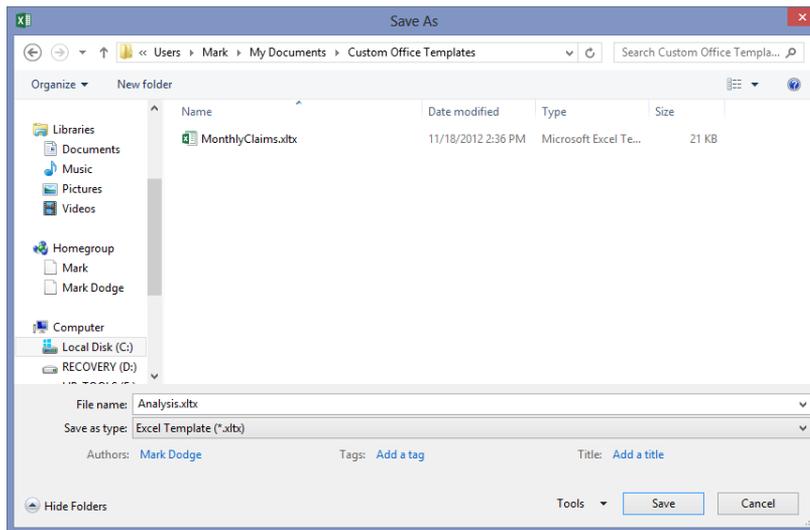


Figure 2-21 Choosing the Excel Template file type activates the Custom Office Templates folder.

When you click the Save button, your new template is installed. You can find this folder in the following locations:

- **Windows XP** C:\Documents and Settings*<your name>*\Application Data\Microsoft\Custom Office Templates
- **Windows 7 or Windows Vista** C:\Users*<your name>*\AppData\Roaming\Microsoft\Custom Office Templates
- **Windows 8** C:\Users*<your name>*\My Documents\Custom Office Templates

Templates in this folder appear on the New screen in the Personal category, as shown in Figure 2-22. The two categories, Featured and Personal, appear only after you save a template for the first time.

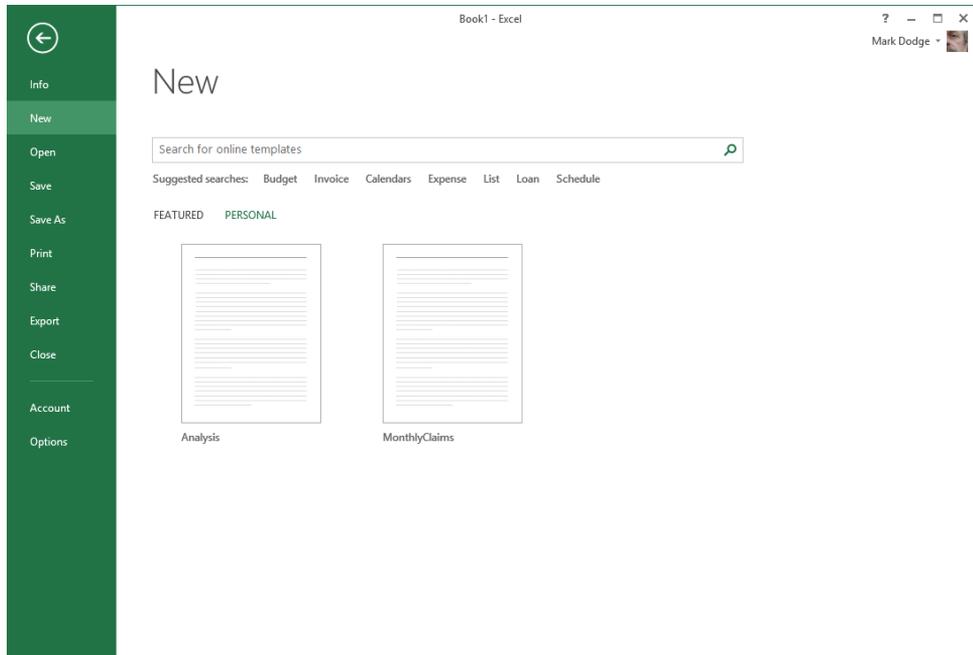


Figure 2-22 When you save a template, two new categories appear on the New screen, Featured and Personal; in this figure, the Personal category is active.

INSIDE OUT

Hidden Windows folders revealed

You probably have to change a Windows setting to find the AppData folder (Application Data in Windows XP) because it is normally hidden. To reveal it, navigate to the folder that bears your name in File Explorer (or Windows Explorer in Windows 7, Windows Vista, or Windows XP), as shown in the previous paths. Then, in Windows 8, click the View tab and select the Hidden Items option in the Show/Hide group. In Windows 7, click the Organize menu (the Tools menu in Windows XP), click Folder And Search Options, and on the View tab, select Show Hidden Files And Folders. Note that *<your name>* is the user name you use when logging on to Windows.

Saving files

Arguably, the most important function of any computer application is preserving data. In Excel, you can save your files in many ways, including by clicking the Save, Save As, Share, or Export command. You can also click the Close command or click the Windows Close button (X) and you'll be prompted to save, if you have made any changes. The easiest way to save is either by clicking the Save button on the Quick Access Toolbar or by pressing Ctrl+S on the keyboard.

One other command that saves your workbooks is the Share Workbook command in the Changes group on the Review tab. When you click this command, you save your workbook in shared mode. Besides saving the file, this command makes the workbook available to others on a network, who can then open it and make changes of their own.

For more information, see “Sharing workbooks on a network” in Chapter 26.

The first time you save a file, the Save As screen appears in Backstage view, as shown in Figure 2-23.

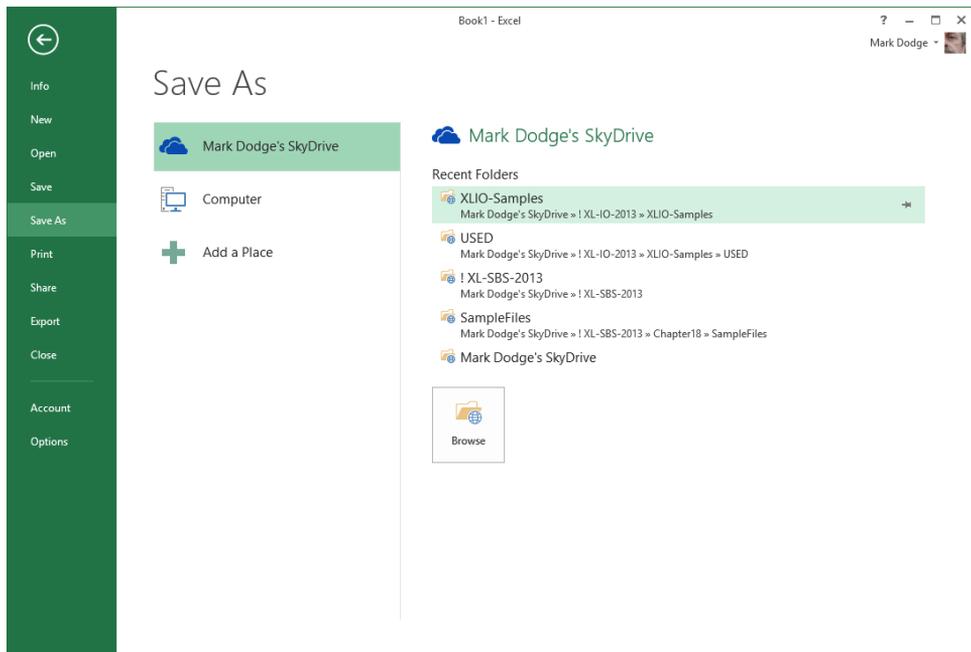


Figure 2-23 The Save As screen appears when you save a file for the first time.

Note

If you use the same folder most of the time, you can specify that folder as the default location that the Open, Save, and Save As dialog boxes use when you first open them. Click the File tab, click Options, select the Save category, and type the full path and file name for the folder you want to use in the Default Local File Location text box.

The Save As screen offers another set of choices, including SkyDrive and your computer. The most recent folders used in the location selected on the left are shown on the right. If the one you want is not listed, click the Browse button, which displays the Save As dialog box, as shown in Figure 2-24.

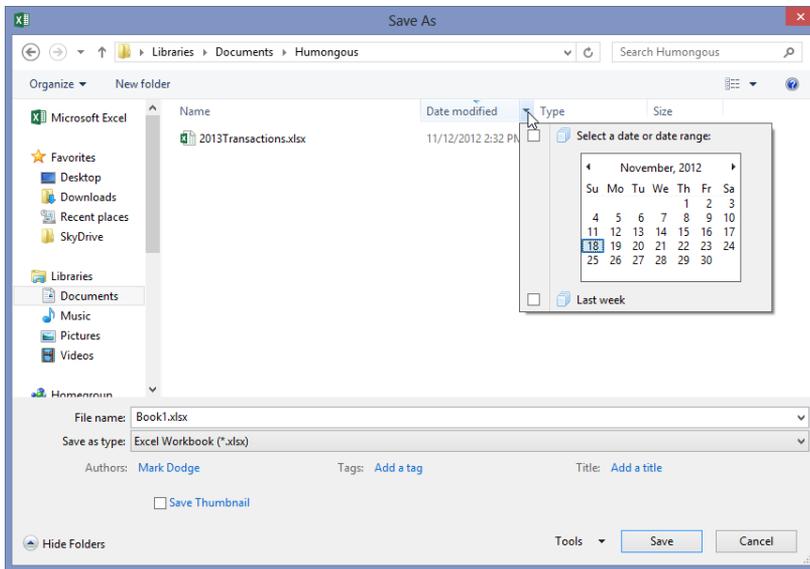


Figure 2-24 When you select a destination or click Browse, the Save As dialog box appears, which you can use to specify a date or date range, if desired.

The Save As dialog box (along with other dialog boxes that are provided by the operating system, including Save and Open) has a sophisticated file interface that includes a number of useful features, such as the ability to find files by using a date range you specify using a calendar, as shown in Figure 2-24. For details, click the Help button (the question mark icon) in the Save As dialog box to display the corresponding Windows Help file.

Rules for file naming

File names in Excel can have up to 218 characters. They can include any combination of alphanumeric characters, spaces, and special characters, with the exception of the forward slash (/), backslash (\), greater-than sign (>), less-than sign (<), asterisk (*), question mark (?), quotation mark ("), pipe symbol (|), colon (:), and semicolon (;). Although you can use any combination of uppercase and lowercase letters, keep in mind that Excel does not distinguish case in file names. For example, to Excel the names MYFILE, MyFile, and myfile are identical.

The old familiar MS-DOS-style file name extensions (which are usually four characters these days, not three) help identify your Excel files, and they are added automatically when you save a file. Table 2-1 lists Excel extensions in the order in which they appear in the Save As dialog box's Save As Type list.

TABLE 2-1 The Excel file extensions

Document type	Extension
Excel Workbook	.xlsx
Excel Macro-Enabled Workbook	.xlsm
Excel Binary Workbook	.xlsb
Excel 97-2003 Workbook	.xls
XML Data	.xml
Excel Template	.xltx
Excel Macro-Enabled Template	.xltm
Excel 97-2003 Template	.xlt
XML Spreadsheet 2003	.xml
Microsoft Excel 5.0/95 Workbook	.xls
Excel Add-In	.xlam
Excel 97-2003 Add-In	.xlm

INSIDE OUT

Hidden file name extensions revealed

File name extensions might not appear with Windows file names, depending on your settings. To display file name extensions in Windows 8, click the File Explorer, click the View tab, and select the File Name Extensions option. In Windows 7, click the Start button, click Computer (Control Panel in Windows XP), click the Organize menu, select Folder And Search Options and on the View tab, and then scroll down and clear the Hide Extensions For Known File Types check box.

File formats

In addition to providing the file name and location, you can specify a different file format in the Save As dialog box. Click the Save As Type drop-down list, which expands to reveal all the formats in which you can save your files.

The default format is Excel Workbook (*.xlsx), and you'll almost always use this option. If you want to export an Excel file to another program, however, you can use one of the other options to convert the file to a format that is readable by that program.

For more information about the Excel export formats, see “Importing and exporting text files” later in this chapter.

Ensuring file compatibility with previous versions of Excel

When you open a workbook in Excel 2013 that was created in a previous version of Excel, it automatically opens in Compatibility mode, a condition that is indicated in the Excel title bar, as shown in Figure 2-25. You can always tell by looking at the title bar whether you've converted a file to the new format.

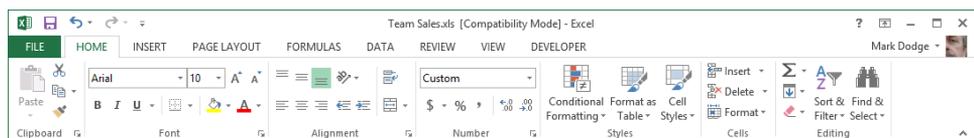


Figure 2-25 Files created by any previous version of Excel open in Compatibility mode.

You can work normally with Compatibility mode, and when you save the file, it remains in the old file format. If, however, you make any changes using features that are not compatible with the older version, the Excel Compatibility Checker intervenes when you save and displays a dialog box like the one in Figure 2-26.

The Compatibility Checker lets you know exactly what is causing the problem, so you can click Cancel and rework your worksheet using a different approach or save it anyway. Clicking the Copy To New Sheet button adds a new worksheet to the current workbook titled Compatibility Report, containing a copy of the information displayed in the dialog box—sort of a compatibility paper trail. If you clear the Check Compatibility When Saving This Workbook check box, this dialog box no longer opens when you save the current workbook. You might prefer this if you plan to repeatedly edit and save without updating the workbook to the new file format.

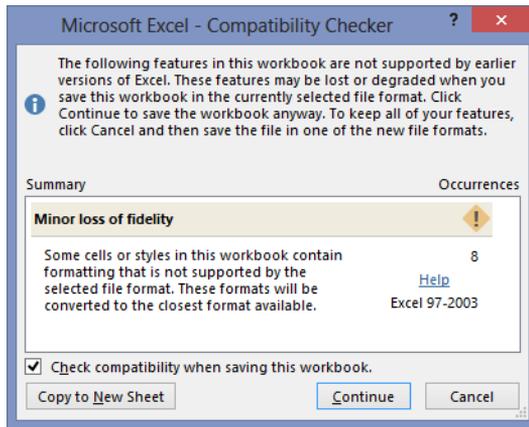


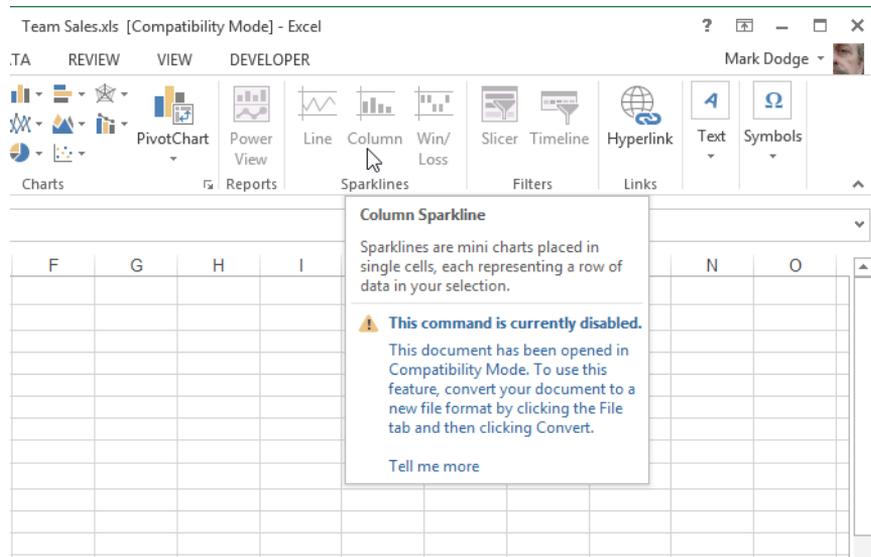
Figure 2-26 The Compatibility Checker opens when you try to save an old-format workbook containing features not supported by the older version of Excel.

But fear not, you can always look for problems at your convenience. Click the File tab, click the Info command, click Inspect Workbook, and click Check Compatibility to display the same dialog box shown in Figure 2-26.

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What doesn't work in Compatibility mode?

When Compatibility mode is on, Excel disables a number of features that produce results that cannot be transferred to older versions of Excel. You can still click disabled commands, but when you do, Excel displays a ScreenTip explaining why you can't use them. For example, sparklines were introduced in Excel 2010. If you are working on a workbook saved as an Excel 97-2003 workbook (.xls), Excel displays a ScreenTip when you hover the pointer over one of the sparklines buttons:



Here are some of the things that can trigger compatibility error messages:

- A workbook contains too many rows, columns, or both
- A formula exceeds the maximum allowed number of characters
- A formula exceeds seven nested levels
- A formula exceeds the maximum number of arguments in a function
- A formula contains more than 40 operands
- A workbook contains too many cross-sheet array formulas
- A workbook has more than 4,050 unique cell formats
- A PivotTable field has more than 32,500 unique items
- A PivotTable item has a string length greater than 255 characters
- A PivotTable caption has more than 255 characters
- A PivotTable field list has more than 1,024 fields

In case you're wondering how to get out of Compatibility mode, all you have to do is use the Save As command to save the workbook in one of the new file formats, such as XLSX or XLSM, and then close and reopen the new converted file you just saved.

If you need to save files in other formats, the Save As Type drop-down list in the Save As dialog box includes a number of special formats you can select, including Excel 97-2003 Workbook and Microsoft Excel 5.0/95 Workbook.

For more information about the newer, less-restrictive limitations of Excel, see “If you missed the last two upgrades” in Chapter 1, “What’s new in Microsoft Excel 2013.”

Understanding the “XL” formats

Although Microsoft trimmed some of the lesser-used file formats from the last release, the volume of native Excel file formats has swelled somewhat, largely due to accommodating *legacy* file formats—that is, file formats employed in previous versions of Excel. We’ll explain the major differences here:

- **Excel Workbook (XLSX)** This is the default Excel 2013 (and Excel 2010 and 2007) file format, which is based on XML and uses ZIP compression for reduced file size and increased security. Unlike the default file format in older versions of Excel (XLS), this format does not support VBA or XLM macro code.
- **Excel Macro-Enabled Workbook (XLSM)** Microsoft created a completely separate XML-based file type to be used for workbook files containing VBA or XLM macro code. This increases security by making it impossible to inject macro code into non-macro-enabled workbooks and makes for easier identification of files containing code.
- **Excel Binary Workbook (XLSB)** This is a lean and mean file format designed for the fastest possible loading and saving. It supports all the features of Excel 2013 and also supports macro code, but it is not XML based, does not use compression, and is less secure than XML-based formats.
- **Excel Template (XLTX)** This is the template version of the Excel 2013 (and Excel 2010 and 2007) file format. This format does not support VBA or XLM macro code.
- **Excel Macro-Enabled Template (XLTM)** This is the template version of the Excel 2013 (and Excel 2010 and 2007) file format that does allow VBA and XLM macro code.
- **Excel 97-2003 Workbook (XLS)** This is a legacy file format used by previous versions of Excel.
- **Microsoft Excel 5.0/95 Workbook (XLS)** This is a legacy file format used by previous versions of Excel.

- **Excel 97-2003 Template (XLT)** This is a legacy template format used by previous versions of Excel.
- **Excel Add-In (XLAM)** This is a special type of VBA-enabled workbook that can be loaded as a supplemental program in Excel.
- **Excel 97-2003 Add-In (XLM)** This is a legacy type of VBA-enabled workbook that can be loaded as a supplemental program in Excel.

In addition to these “XL” file types, there are two XML file types that are somewhat related. XML Spreadsheet 2003 (XML) is the previous XML file format provided as an option in Excel 2003. Another format, XML Data (XML), shares the same extension but produces entirely different results. This format is a proprietary XML format that requires specific programmatic data maps to be present before you can even save the file. You’ll know if you need it.

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What is XML?

The Excel 2013 (and Excel 2010 and 2007) file format is based on XML, which was created as a way for structured data to be interpreted and was originally envisioned for use on the web. Excel 2003 introduced XML as an optional file format; Excel versions from 2007 through 2013 use XML as their default format, indicated by the file name extension *.xlsx*. Based on a file format specification called *SpreadsheetML*, Microsoft’s implementation of XML has undergone significant improvements since being introduced. At first, the format didn’t have, shall we say, sufficient language skills to interpret all of what Excel could do, including objects such as charts and graphics. Now, *SpreadsheetML* can handle everything Excel can dish out and does so in a much more efficient manner than the old XLS format, resulting in significantly smaller file sizes. The new XML formats also provide improved recovery of damaged files and better overall security. And because *SpreadsheetML* is part of an overall extensible Open XML format initiative, it’s easier for developers to create ways to hook things together.

For some additional information about XML, see “Working with XML files” in Chapter 25, “Working with external data.”

Specifying the default file format

Usually when you save a new workbook, you save it in the Excel Workbook format (XLSX). You can specify a different format as the default for saving files. This might be helpful, for example, if you share files regularly with users of Excel 2003. To do so, click the File tab, click Options, and select the Save category, shown in Figure 2-27.

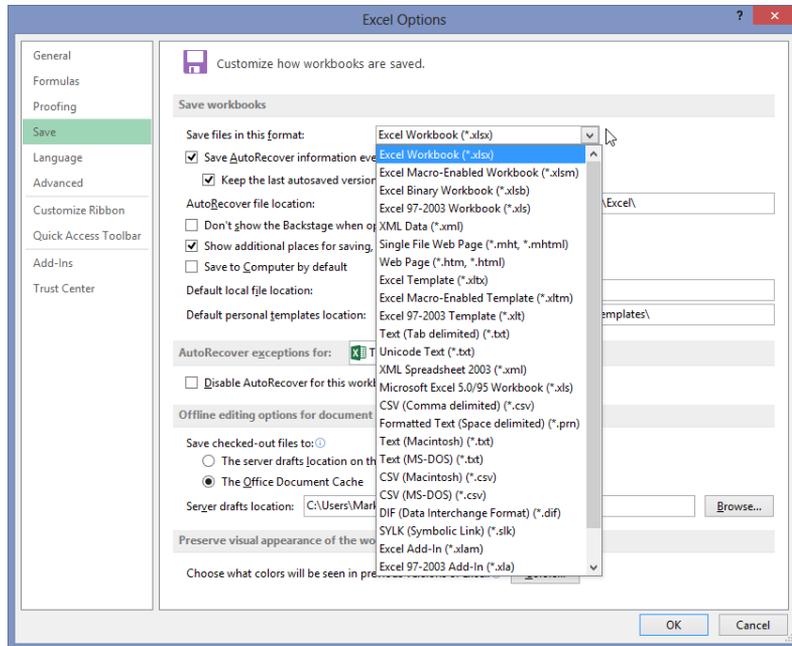


Figure 2-27 You can specify the default format to use when saving.

The Save Files In This Format drop-down list contains all the same file formats as the Save As Type drop-down list in the Save As dialog box.

Creating automatic backup files

You can have Excel create a duplicate copy of your file on the same disk and in the same folder as the original every time you save. Click the File tab, click Save As, click Tools at the bottom of the Save As dialog box, and click General Options to display the dialog box shown in Figure 2-28. Then select the Always Create Backup check box.

The backup file is a duplicate file that carries the same name as your original, but the name is preceded by “Backup of” and has the file name extension *.xlk*.

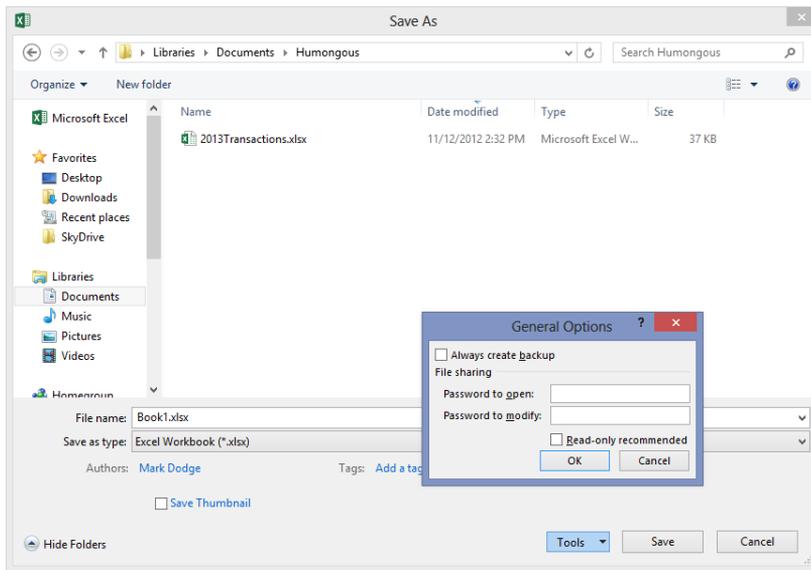


Figure 2-28 To display the General Options dialog box, click the File tab, click Save As, and then click Tools, General Options.

Protecting files

You can password protect your files by using options in the General Options dialog box shown in Figure 2-28. Select from two types of passwords: Password To Open and Password To Modify. Passwords can have up to 15 characters, and capitalization matters. Thus, if you assign the password *Secret* to a file, you can't reopen that file by typing *SECRET* or *secret*.

- **Password To Open** Excel prompts you to supply the password before reopening the file.
- **Password To Modify** Anyone can look at the file, but they need the password to edit it.
- **Read-Only Recommended** This politely suggests that the user open the file as read-only.

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Create a better password

Although Microsoft has tightened the under-the-hood security measures of Excel over the years, some people delight in finding new and better ways to crack passwords. You can help by simply building better passwords. Make sure your password is eight or more characters long—the longer, the better—and try to use a healthy mix of uppercase and lowercase alphanumeric characters and nonalphanumeric characters. Never use birthdays, anniversaries, or the names of your children or pets as passwords.

Adding summary information to files

When you click the File tab, the Info screen that first appears includes a short list of properties on the right. The Properties heading is a button; click it and a menu appears. Click Show Document Panel to display the Document Properties panel, which appears below the ribbon, as shown in Figure 2-29. Use this to record general information about the active workbook. If you juggle a lot of files, getting into the habit of adding properties can make it a lot easier to find something later. Windows looks at these property values when you use the Search command to locate files on your computer.

You can quickly view properties for the active workbook by clicking the File tab and looking on the right side of the Info screen. Several properties are displayed there. Click Properties, and then click Advanced Properties to display the Properties dialog box, as shown in Figure 2-30. Most of the information visible on the Document Properties panel is available and editable on the Summary tab.

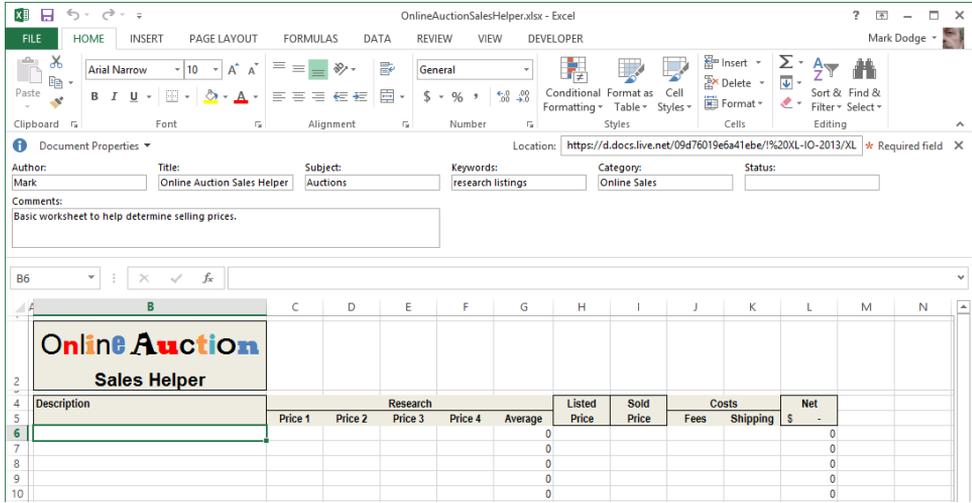


Figure 2-29 Use the Document Properties panel to add descriptive information you can use later when looking for that needle in a file stack.

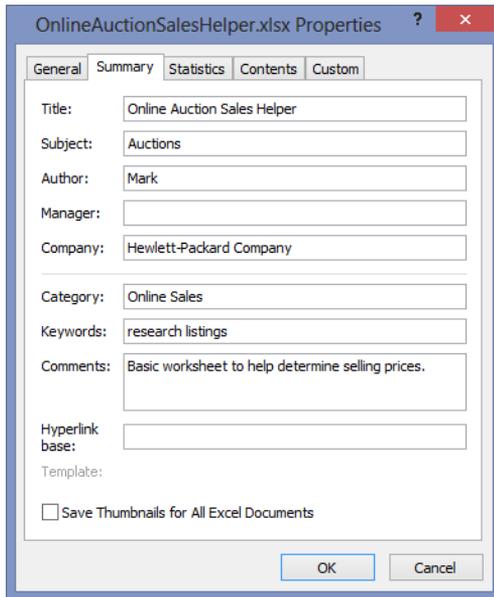


Figure 2-30 View properties about any file before you open it.

Linking custom properties to cells

You can link your own custom-built properties to named cells on your worksheet. When you do, the value of the custom property becomes whatever the named cell contains and changes whenever the value in the cell changes. First you must name a cell. (See “Rules for naming” in Chapter 12.) Then click the File tab, click Properties, and then click Advanced Properties. On the Custom tab in the Properties dialog box, selecting the Link To Content check box displays the workbook’s defined names in the Value box (which changes to a drop-down list named Source when linking content), as shown in Figure 2-31.

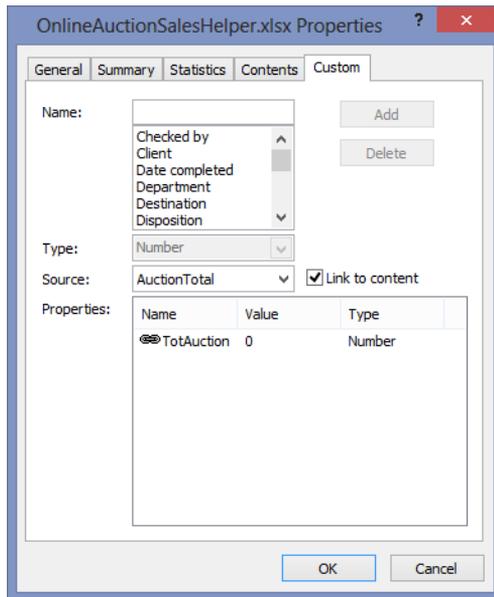


Figure 2-31 Use named cells to create dynamic properties based on worksheet cells.

Select or create a name for the custom property in the Name box. (The Type drop-down list becomes unavailable when you’re linking to content.) When you’ve specified a source (the named cell to which you want to link), click Add, and the custom property appears in the Properties list.

If the link is broken (the defined name is later deleted, for example), the Properties dialog box stores the last value recorded for that property.

If the name defines a range of cells, only the value in the cell in the upper-left corner of the range appears as the property value.

Opening files

Only slightly less basic than saving files is opening them. Click the File tab, and click Open to display the Open screen in Backstage view, shown in Figure 2-32.

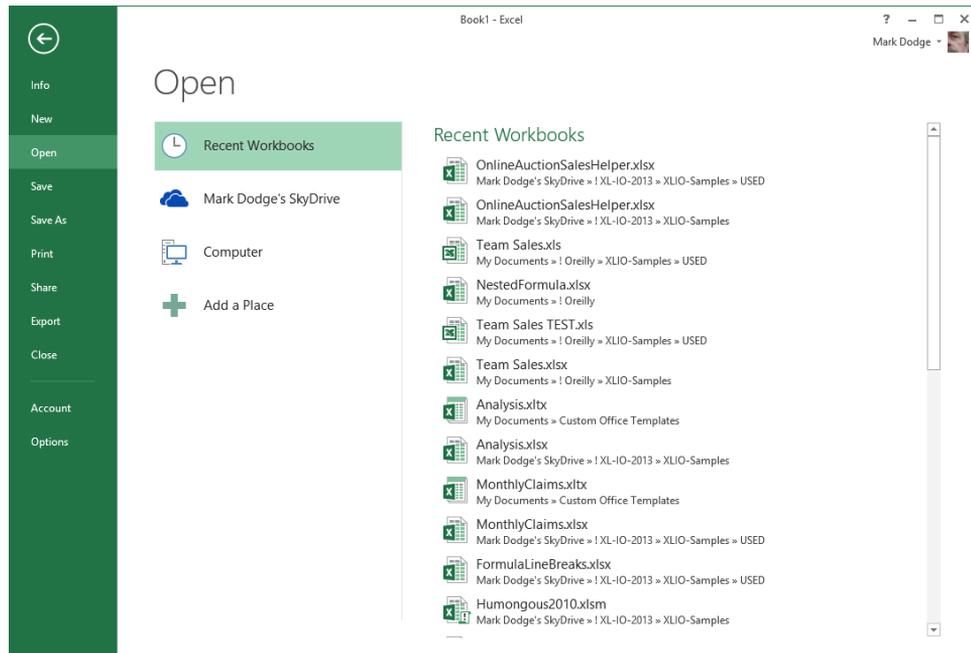


Figure 2-32 Click the Open command, and select a location or a recent workbook.

Click one of the icons on the left side of the dialog box to display the corresponding files on the right side. Recent workbooks are displayed when you first click the Open command. If you click one of the other locations, the recent folders are displayed. If you need something that is not recent, click the Browse button to display the Open dialog box, as shown in Figure 2-33.

The drop-down list to the right of the File Name text box at the bottom of the Open dialog box determines which files are available for selection. The default option is All Excel Files, which displays file names whose extensions begin with *xl*. You can display specific file types or all files by clicking the arrow to the right of the text box.

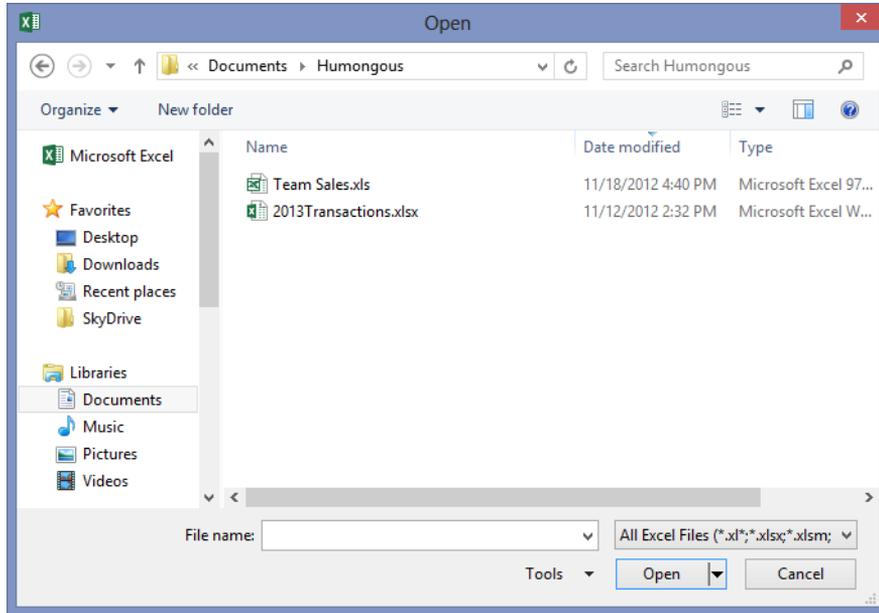


Figure 2-33 Click the Browse button to display the Open dialog box.

Note

To open several files at once, press the Ctrl key and select each file you want to open.

Notice that headings appear at the top of the file list in the Open dialog box. When you click one of these headings, you sort the files in order, based on that heading. For example, if you click the Date Modified heading, you sort the files in date order. Click the same heading again to re-sort in reverse order. You can further refine your quest by using the hidden menus adjacent to each heading. When you rest the pointer on a heading, a downward-pointing arrow appears to the right of the heading; click it to display a menu of additional options pertinent to that heading.

Note

You can right-click most files listed in the Open and Save As dialog boxes to display a shortcut menu that contains commands you can use with the selected file. For example, you can delete a file displayed in the Open dialog box by using this shortcut menu.

Each heading has its own menu of options, some of which are based on the actual files contained in the current folder. For example, when you click the menu arrow for the Type heading, you can select from a list of file types contained in the folder.

Special ways to open files

To the right of Open at the bottom of the Open dialog box is a small arrow. Clicking this arrow displays a menu containing the following options:

- **Open Read-Only** This opens the file so that you cannot save any changes made to it without renaming it.
- **Open As Copy** This creates a duplicate of the selected file, adds the words *Copy of* to the file name, and leaves the original untouched.
- **Open In Browser** This applies only to HTML documents and opens the selected file in your default web browser.
- **Open In Protected View** This opens the document for viewing but not editing. All active content is disabled, including any kind of macro or HTML code. Once you have established the bona fides of the file, you can click the Enable Editing button to carry on.
- **Open And Repair** This is a powerful feature you can use to try opening corrupted files. For more information, see “Recovering corrupted files” later in this chapter.

Opening files when you start Excel

If you have files you need to work on every day, you can store them in a special folder called XLStart. Every time you start Excel, any files in the XLStart folder automatically open. The XLStart folder is created when you install Excel (or you can create it yourself) and is located in the following place:

- **Windows 8, 7, or Vista** C:\Users*<your name>*\AppData\Roaming\Microsoft\Excel\XLStart
- **Windows XP** C:\Documents and Settings*<your name>*\Application Data\Microsoft\Excel\XLStart

If you want to start Excel and simultaneously open files that are in a folder other than the XLStart folder, you can specify an alternate startup folder. Click the File tab, click Options, and select the Advanced category. Scroll down to the General category, and in the edit box labeled At Startup, Open All Files In, type the full path of the folder. This feature is particularly useful if your computer is connected to a network and you want to open files from a shared folder.

Recovering corrupted files

Figure 2-33 shows the Open dialog box, where you can find the Open Options menu (click the arrow next to the Open button) containing the Open And Repair command. This command gives you a fighting chance at either repairing a corrupted file or extracting the data from it if it doesn't respond to a repair attempt. When you select a file and click the Open And Repair command, the message box shown in Figure 2-34 opens.



Figure 2-34 The Open And Repair command gives you a ray of hope for recovering lost data.

Try the Repair button first, and if Excel still has no luck opening the file, try the Extract Data button, which displays the message box shown in Figure 2-35.



Figure 2-35 The Extract Data button offers two ways to recover your data.

You'll have to make a judgment call here—if you think your formulas will be OK after extraction, click Recover Formulas; otherwise, click Convert To Values. Recovering formulas will probably work unless the formulas include references to cells that were lost in corruption. Whatever you select, the Extract Data feature pulls all the data from your workbook, including all worksheets and tabs, in the same order in which they appear in the original file. Unfortunately, the recovery process ignores all formatting, charts, and other objects—you can recover only the actual cell contents (the important stuff).

Note that unless the part of the file that became corrupted was the part storing passwords, you probably won't be able to use this technique to retrieve data from a password-protected file.

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Recover data using links

You can try to recover data from a corrupted workbook by using another trick. It is essentially the same trick used by the Excel Open And Repair command, but it still might be worth a try if Open And Repair fails.

First, open two new workbooks. Select cell A1 in one of the workbooks, and then press Ctrl+C to copy. Activate the second workbook, and right-click cell A1. Click Paste Special, and then click the Paste Link button. Next, click the File tab and click Edit Links To Files on the Info screen (this command is in tiny type at the bottom of the shaded area on the right), click Change Source, and locate the corrupted workbook. Click OK, and then click Close to close the Edit Links dialog box.

If luck is with you, data from cell A1 in the lost workbook appears in cell A1, thanks to the linking formula. If it does, press F2 to activate Edit mode, and press F4 three times to change the absolute reference $\$A\1 to its relative form, A1. Finally, copy the formula down and across until you can see all the data you need to retrieve. Repeat for each worksheet in the workbook. You lose the formatting and formulas, of course, and zeros appear in every blank cell, but at least you can get at the important stuff. Although you can save this worksheet with linking formulas, you might consider converting all the formulas to their underlying values, just in case the original corrupted file has any further degradation. To do so, select all the cells containing the formulas you just created, click Ctrl+C to copy, right-click, click Paste Special, select Values, and then click OK.

For more information about document recovery, see “Recovering from crashes” later in this chapter. For more information about passwords, see “Hiding and protecting workbooks” in Chapter 7.

Importing and exporting files

Excel gracefully accepts proprietary data created in many other applications. Excel also makes it easy to import data from text files and helps you parse it into worksheet columns.

Note

Mountains of very specific, sleep-inducing technical details are available about importing and exporting files. If you need details, you should consult Microsoft Office Online (office.microsoft.com). Also, for information regarding sharing data with other Microsoft Office 2013 applications and working with external databases, see Chapter 32, “Integrating Excel and Word,” and Chapter 25, “Working with external data.”

Importing and exporting files

To import a file from another application or from an earlier version of Excel, click the File tab, click Open, select a location, and click Browse to open the Open dialog box. Then to specify the file type you want to import, use the drop-down list adjacent to the File Name box. If you're not sure, select All Files (*.*), or select a file type and only files of that type are displayed.

To export an Excel file to another application or to an earlier version of Excel, click the File tab and click Export. Then select either Create PDF/XPS Document or Change File Type, as shown in Figure 2-36.

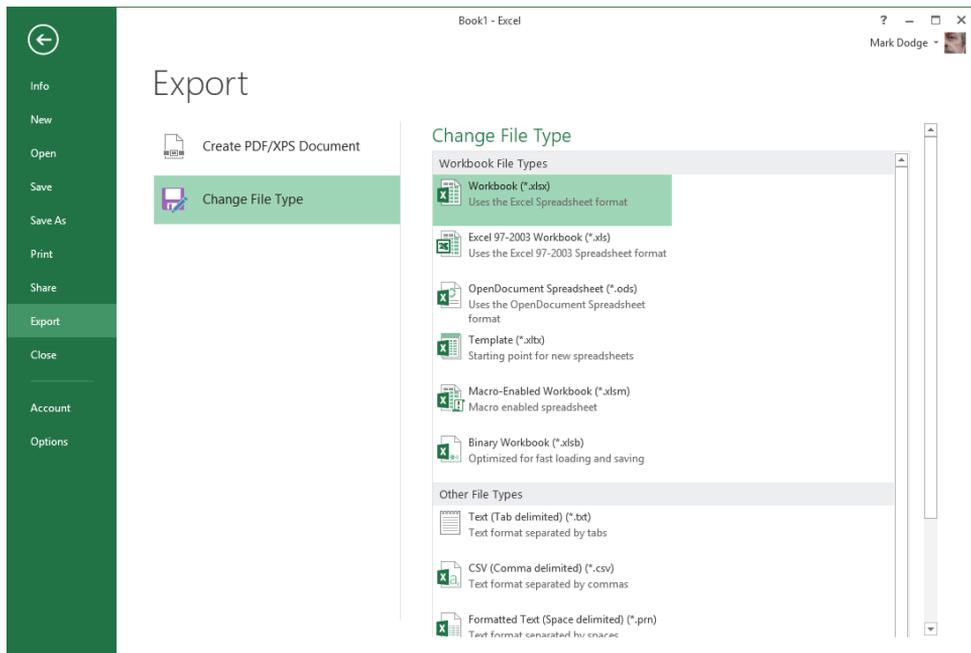


Figure 2-36 Use the Export screen in Backstage view to change to another file type.

Portable Document Format (PDF) and XML Document (XPS) are formats that allow accurate visual representations of documents to be easily shared across platforms by using free and easily obtainable web-based viewers.

Sharing data with Excel for the Macintosh

Excel for the Macintosh since 1998 has been using the same file format as Windows versions of Excel from Excel 97 through Excel 2003. You can share these files with Macintosh users by simply transferring files from one computer to the other. (Note that you cannot share Excel files containing macros—.xslm files—with Macintosh Excel versions through 2011.)

To save an Excel 2013, 2010, or 2007 file to share with someone using the Macintosh version of Excel, click the File tab, click Save As, select a location, and click the Browse button. You can save it as a regular Excel Workbook (*.xlsx) file when sharing with users of Macintosh Excel 2011, or for greater compatibility, select the Microsoft Excel 97-2003 Workbook (*.xls) option in the Save As Type drop-down list.

To import Macintosh files to your PC, you first need to transfer the file to your PC via a cable, a disk, a thumb drive, a network, an email attachment, a website, or a software tool such as MacOpener. Exporting files from a Windows version of Excel to the Macintosh version is just as easy as importing Macintosh files. Simply transfer the file from the Windows computer to the Macintosh using your method of choice, and then use the Open command to load it into Excel.

Adjusting date values

Although the Windows and Macintosh versions of Excel share many characteristics and capabilities, they might not use the same date system. In the Windows version of Excel, the base date is January 1, 1900. Macintosh Excel 2011 uses the same date system as all Windows versions, so you can share these files as you will. In Macintosh Excel version 2008 and earlier, the base date is January 2, 1904. When you transfer files either to or from the Macintosh, Excel maintains the date type by selecting or clearing the Use 1904 Date System check box in the When Calculating This Workbook area in the Advanced category in the Excel Options dialog box. This technique is usually acceptable, but it can cause problems when a date from a Macintosh file is compared with a date from a Windows file. For this reason, we suggest you use the same date setting on all your machines.

Sharing data beyond Excel

Yes, some people don't use Excel, and you might meet one someday. Seriously, plenty of reasons exist for making Excel-based data accessible outside the program, whether or not Excel is available at the destination. Posting data to a website or creating data sets for proprietary analysis software are two possible applications where you might want data that can fly free, independent of the Excel mother ship.

Office Web Apps

Office Web Apps give you a familiar Office experience when you are away from your Office applications on your computer. With your Office files uploaded to a web storage location such as your own website or Windows Live SkyDrive, you don't need your own computer or software to view and perform light editing of Word, Excel, PowerPoint, and OneNote files. You just need a computer running a popular Web browser.

For more information about Office Web Apps, see Chapter 27, "Working in the cloud."

Using web file formats

Two options in the Save As Type drop-down list in the Save As dialog box produce files you can use as webpages: Web Page (HTM, HTML) and Single File Web Page (MHT, MHTML). They produce essentially the same result, the important difference being that the Web Page format saves not only a main HTML file but also a folder containing supporting files that must travel with the main file. As you might expect, the Single File Web Page format manages to cram it all into a single file without using the supporting folder. Single File Web Page has the advantage of being more portable, but Web Page gives you more control over individual elements. A separate cascading style sheet is created using the Web Page format, along with individual HTML files for each worksheet in the workbook. Figure 2-37 shows the contents of the supporting folder that is created after saving a five-sheet workbook named Team Sales using the Web Page file format.

If you are an HTML aficionado, you can open the supporting files in other programs. For example, if the original workbook contains graphics, Excel saves them as separate image files (JPEG, PNG, or GIF) you can modify with an image-editing program. Or you can change the fonts used by editing the cascading style sheet with a text editor such as Notepad. This is not work for the timid, of course. The slightest editing error in the HTML code for any of the files has the potential to render them all unusable.

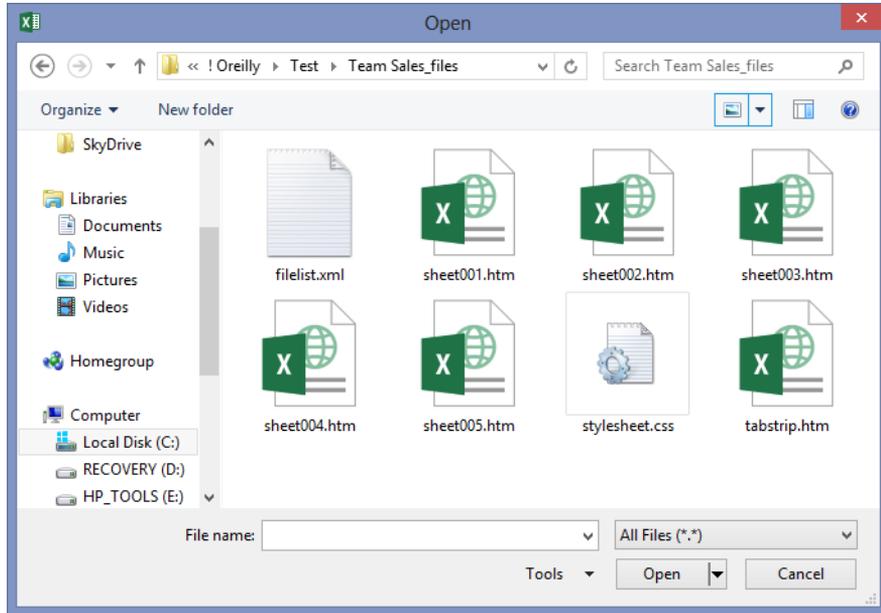


Figure 2-37 The Web Page file format creates a folder full of supporting files to go with the main webpage.

Importing and exporting text files

To export an Excel file as a text file, select one of the following eight text formats from the Save As Type drop-down list in the Save As dialog box. In all of these formats, Excel saves only the current worksheet. Number formatting is preserved, but all other formatting is removed.

- **Formatted Text (Space Delimited) (*.PRN)** This creates a file in which column alignment is preserved by adding space characters to the data in each column so that each column is always filled to its maximum width.
- **Text (Tab Delimited) (*.TXT)** This separates the cells of each row with tab characters.
- **Unicode Text (*.TXT)** This is a worldwide standard text format that stores each character as a unique number; Unicode defines a number for every character in every language and on any computer platform.
- **CSV (Comma Delimited) (*.CSV)** This separates the cells of each row with commas. Comma-delimited text files are preferable to tab-delimited files for importing into database management programs. (Many database management programs can accept either form of text file, but some accept only .csv files.) Also, many

word-processing applications can use .csv files to store the information for mail merge operations.

- **Text (Macintosh) (*.TXT)** This saves the current worksheet as a tab-delimited text file using the Macintosh character set.
- **Text (MS-DOS) (*.TXT)** This saves the current worksheet as a tab-delimited text file compatible with the character-based MS-DOS interface.
- **CSV (Macintosh) (*.CSV)** This saves a comma-delimited text file using the Macintosh character set. The differences between the normal, Macintosh, and MS-DOS variants of each file type have to do only with characters that lie outside the normal 7-bit ASCII range.
- **CSV (MS-DOS) (*.CSV)** The MS-DOS options use the IBM PC extended character set. (You might see this referred to also as *OEM text*.) Select one of these options if you intend to import your text file into a non-Windows-based application.

Note

Excel 2013, 2010, and 2007 use a file format that is incompatible with previous Excel versions. Excel versions 97 through 2003 share a file format that is incompatible with even older versions. However, you can use the Save As command and Save As Type list to export Excel 2013, 2010, and 2007 workbooks using two formats that play nicely with older versions of Excel: Excel 97-2003 Workbook and Microsoft Excel 5.0/95 Workbook.

If you regularly share files with colleagues using different vintages of the program, you might want to read “Ensuring file compatibility with previous versions of Excel” earlier in this chapter.

Other file formats

You can use a few other file formats, most of which you won’t even need unless you have a particular program with which you want to share data. Data Interchange Format (DIF) is a legacy format that allows the specification of data in rows and columns, saves only the active worksheet, and does not process graphic content. Symbolic Link (SYLK), a format that dates back to the days of VisiCalc and Multiplan, is a sort of “rich-text format” for spreadsheets that saves only the active worksheet and does not process graphic content.

Using the Help system

Excel was a powerful program right out of the starting gate way back in 1985. Over the years, Excel has developed into an extremely complex and sophisticated application. It's so complex that most people need to learn only about 20 percent of its capabilities. Many people turn to books like this one to help them make sense of it all. But almost every Excel user turns to the Help system; all Excel users should. After years of working out the kinks, Microsoft has made the Help system more "helpful," less obtrusive, more comprehensive, and much easier to use.

Help on the surface

Although the mythical, magical, space-age vision of easily understood, self-documenting software has yet to be fully realized, Microsoft is taking steps in the right direction. Dynamic pop-up labels called ScreenTips have been around for quite a while providing visual clues to elements in the interface. Many of these ScreenTips have increased in size considerably over the years, and they contain more and better information. Simply rest the pointer on any button or command on the ribbon or the Quick Access Toolbar to display a ScreenTip, as shown in Figure 2-38.

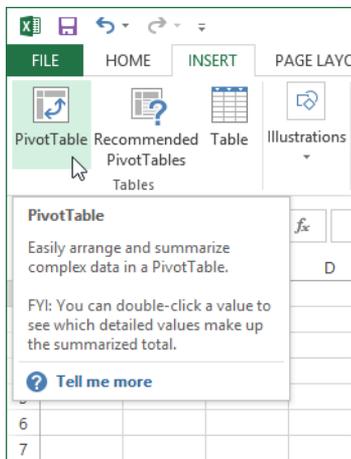


Figure 2-38 Rest the pointer on any command or button on the ribbon or the Quick Access Toolbar to display a ScreenTip.

Help in the form of ScreenTips is also available for many items in dialog boxes such as Excel Options. (To open this dialog box, click the File tab and then click Options.) In this context, look for the little *i* (for *information*) icons next to items in the dialog box, which indicate more information is available. Just rest the pointer on the icon to display the ScreenTip, as shown in Figure 2-39.

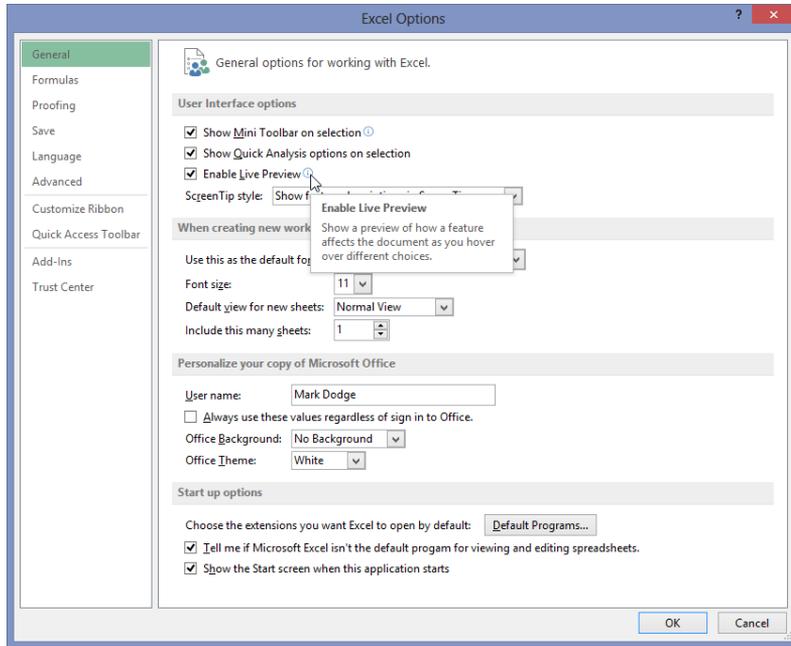


Figure 2-39 A little circle icon containing an *i* means you can see more information by simply resting the pointer on the icon.

Help in depth

When you need more information than a ScreenTip can provide, it's time to invoke the Help dialog box. Simply click the Help button (the question mark icon) that is always available in the upper-right corner of the screen (or any dialog box) to display the Help dialog box. When you first open the dialog box, it attempts to connect to the Microsoft Office Online website, as shown on the left in Figure 2-40. If you are connected to the Internet, the dialog box should quickly display an opening menu of topics, similar to the one shown on the right in Figure 2-40. As mentioned previously, one of the beauties of web-based Help is that it can be continually updated, so it is quite possible this opening screen will change in content and appearance over time; more and more Help topics should be added as well.

As long as you have the Help dialog box open and your Internet connection remains active, web-based Help continues to be available. If you lose your Internet connection, Excel stops trying to connect to the web and displays the “offline” Help system—that is, only those Help topics installed on your computer. You can also do this manually by clicking Connected To Office.com at the bottom of the Help dialog box and clicking Show Content Only From This Computer.

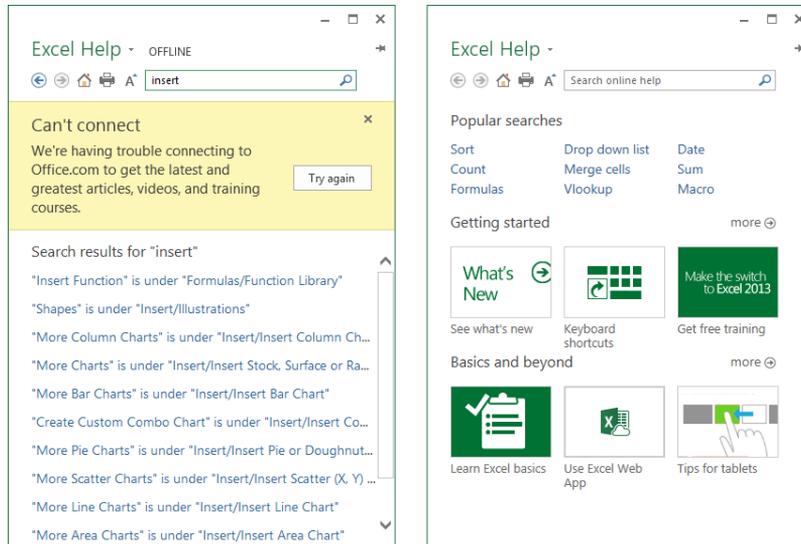


Figure 2-40 Your Help system works best when you're connected to the web.

You can prevent Excel from automatically trying to connect to the web by using the Trust Center dialog box. See "Privacy options" in Chapter 4, "Security and privacy."

You'll find that not much good information is available if you're not connected to the web. The few search results shown on the left in Figure 2-40 are simple Excel menu-to-ribbon command references. The help content is all on the web now, but it's robust with procedures, templates, samples, interactive quizzes, tutorials, introductions, references, live samples, and more as time goes by.

You'll notice that the Help dialog box has a tiny toolbar with controls that look—and act—similarly to the controls on your web browser's toolbar. The first two buttons are Back and Forward, which operate like their browser counterparts—they move you to the next or previous topic in your history list. The Home button returns you to the opening Help screen, and the Print button prints the current topic. Clicking the Use Large Text button is a toggle; click to make the text a bit larger, and click again to return to normal.

The pushpin button in the Help dialog box is Keep On Top. It is set to Keep On Top by default. When the pushpin is horizontal, the dialog box behaves like a normal window, giving way to the active window when you click outside the dialog box. When the pushpin button is vertical, the window stays on top of the Excel workspace, allowing an unobstructed view of the Help window while you work. This button is a toggle; repeated clicking changes the pushpin's ScreenTip from Keep Help On Top to Don't Keep Help On Top. Whatever setting was active when you close the dialog box persists the next time you open it.

Note

Most dialog boxes include a Help button located in the title bar (identified by a question mark icon). Clicking this button displays a Help topic describing the function of and options within that dialog box. If you click the Help button in a tabbed dialog box, you'll see information pertaining to that particular tab.

INSIDE OUT

A user-assistance odyssey

The implication of the term *online Help* has changed somewhat over the years. It used to mean that in addition to the primary source of user assistance—the printed manual—how-to topics and explanations of commands and features were available right on your computer by pressing F1. What a concept! Today, Help really is online, and an Internet connection is almost essential—preferably broadband.

Those who write user-assistance topics and implement the Help system historically had to limit the amount of actual assistance they could provide, being constrained by the amount of space allocated for Help files on the installation CDs (or floppy disks!). Over the past few Office releases, the need for Help files actually shipped on CD has decreased because of the new user-assistance paradigm: web-based Help. This offers tremendous advantages over in-the-box Help. First, instead of having to cram increasing amounts of information into a finite amount of space on a CD, keeping Help files on the web allows virtually unlimited information to be made available. Second, it allows information to be more up to date, which is actually an incredible understatement.

Consider that under the old paradigm, Help content had to be written early and sent through the editorial pipeline many weeks prior to shipping the software—often before developers were finished tweaking features. (Add another month or so for printed manuals! Remember those?) With the constraints on disk space, tough decisions often were made regarding helpful topics and useful aids such as videos and presentations that would simply have to be eliminated to save room. No wonder Help systems have historically been dissed for being inaccurate and incomplete. Under the new “truly online” Help paradigm, topics that would never have made it onto the CD are instead available on the web, and user-assistance writers can update and add more Help topics, videos, presentations, and templates long after the product ships.

Recovering from crashes

In the past, *crash recovery* largely involved an initial flurry of expletives followed by a brisk walk around the office and perhaps a couple of aspirin. Excel 2013 provides something beyond comfort and sympathy for digital mishaps—an actual mechanism that attempts to tuck away open files before the program comes screeching to a halt. And it works pretty well. If Excel encounters a problem, it attempts to save any files that are open at the time the problem occurs, before bad things happen to them when the program crashes and burns.

Understanding AutoRecover

Over the years, Excel has greatly improved its ability to recover lost work after a crash. By default, all unsaved workbooks are backed up automatically every 10 minutes, storing what Excel calls AutoRecover information. This is not the same as saving your workbook, because Excel stores AutoRecover information in a different place with a cryptic file name. You might lose a few minutes worth of work, but you can change the time interval anywhere from 1 to 120 minutes. If Excel or your system crashes, the AutoRecover feature presents a list of rescued versions of all files that were open when the crash occurred the next time you start Excel.

To change settings or turn off AutoRecover, click the File tab, select Options, and select the Save category to display the dialog box shown in Figure 2-41.

AutoRecover File Location is set to a subfolder buried deep in your hard disk—this is OK because you should save the real files elsewhere rather than cluttering up your working directories with recovery files. If you want, you can easily change the location. You can also choose to disable AutoRecover for specific workbooks without having to turn it off and on manually. You can use the AutoRecover Exceptions For area in the dialog box to do this. Just select a workbook in which you want to disable AutoRecover from the drop-down list displaying all the currently open workbooks, and select the Disable AutoRecover For This Workbook Only check box. You can do this separately for any open workbook.

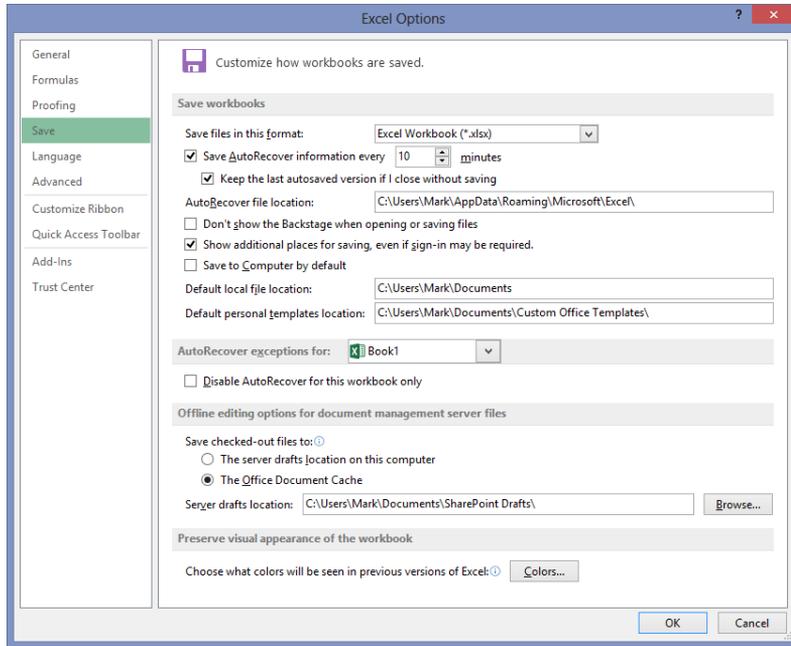


Figure 2-41 With AutoRecover, you can specify how often Excel automatically saves your work.

Managing versions

The AutoRecover feature essentially stores a copy of each unsaved workbook every 10 minutes (unless you specify otherwise). So what happens to these copies? Excel stores one copy of each file you work on—and fail to save—for four days, deleting older copies automatically. Luckily, Excel provides access to these copies. Click the File tab, click Info, click Manage Versions, and click Recover Unsaved Workbooks to display the dialog box shown in Figure 2-42, a version of the Open dialog box, which automatically opens to the specified AutoRecover location.

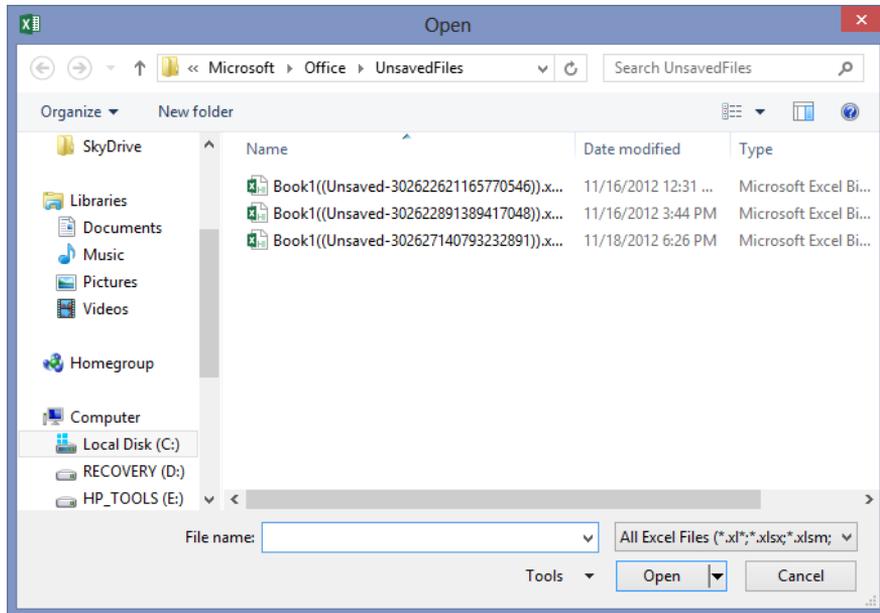


Figure 2-42 You can recover recent versions of your workbooks by using the Recover Unsaved Workbooks command.

When you open an unsaved workbook, it opens in read-only format, and Excel displays “Unsaved File” in the message bar, along with a handy Save As button in the warning area above the formula bar. If you do nothing, the previously scheduled four-day deletion schedule remains and the draft is removed. Clicking Save As displays the dialog box of the same name, open to your normal documents folder.