

Chapter Two



Operating Systems and File Management

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1. Introduction

As you learned back in Chapter 1, the software and operating system make your hardware work. The operating system for most personal computers is Microsoft Windows, and you need to know how to use Windows to use your PC. Windows pretty much runs your computer for you; if you don't know your way around Windows, you won't be able to do much of anything on your new PC.

2. Introducing Windows

Windows is a type of software called an operating system. An operating system does what its name implies—operates your computer system, working in the background every time you turn on your PC.

Equally important, Windows is what you see when you first turn on your computer, after everything turns on and boots up. The "desktop" that fills your screen is part of Windows, as are the taskbar at the bottom of the screen and the big menu that pops up when you click the Start button.

Windows 10 is a recent version of the operating system from Microsoft. Officially it was released in 2015 and was initially offered free of charge to legitimate users of Windows 7 and Windows 8.1. This new version combines features from those two previous installments to suit the users in a better way for both desktop/laptop computers as well as mobile devices.

The most notable change in Windows 10 is that Microsoft replaced the Start screen tiles from Windows 8, and brought back the Start Menu. They also removed the vertical toolbars (or "charms") that appeared from the sides of the screen. These changes make this Windows version easier to use for users of both desktop/laptops and mobile devices.

The Lock Screen

When you turn on a Windows 10 machine, the first thing you see is a colorful curtain that's been drawn over the computer's world. It's the <u>Lock screen</u> see fig 2-1.

The Lock screen serves the same purpose it does on a phone: It gives a quick glance at the time, the date, the weather ,your WiFi signal strength, and (on laptops and tablets) your battery charge.





Figure 2-1: Windows 10 look screen

When you do want to go past the Lock screen to log in, there's nothing to it. Almost anything you do that says, "I'm here!" works:

- Touchscreen: Swipe a finger upward. (Swipe downward to jump into Camera mode.)
- Mouse: Click anywhere. Or turn the mouse wheel.
- **Keyboard**: Press any key.

The Lock screen slides up and out of the way, revealing the Login screen.

The Login Screen

The second thing you encounter in Windows 10 is the Login screen. Here, at lower left, you see the name and photo for each person who has an account on this machine as in fig. 2-2. This is also where you're supposed to log in—to prove that you're you. But logging in no longer has to mean typing a password.

The Desktop

The desktop is the home base of Windows. See fig. 2-3. You can, and should, make the desktop look like whatever you want. You can change its background picture or color scheme; you can make the text larger; you can clutter up the whole thing with icons you use a lot.



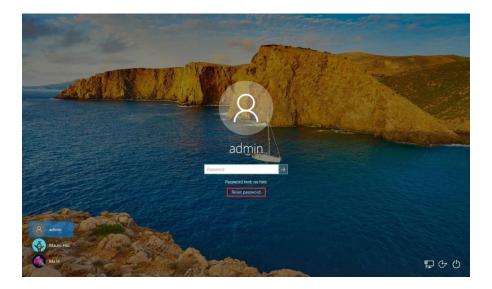


Figure 2-2: Windows 10 login screen.

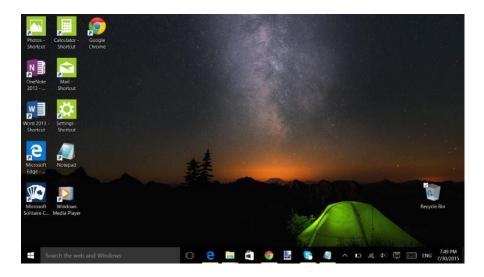


Figure 2-3: Windows 10 desktop.

Meet the Start Menu

The Start menu is so important. It lists every useful piece of software on your computer, including commands, programs, and files. Just about everything you do on your PC begins—or can begin—with your Start menu. In Windows 10, as you've probably noticed, the word "Start" doesn't actually appear on the Start menu, as it did for years; now the Start menu is just a square button in the lower-left corner of your screen,



bearing the Windows logo (). The Start menu is split into two columns. For convenience, let's call them the left side and the right side. See fig. 2-4

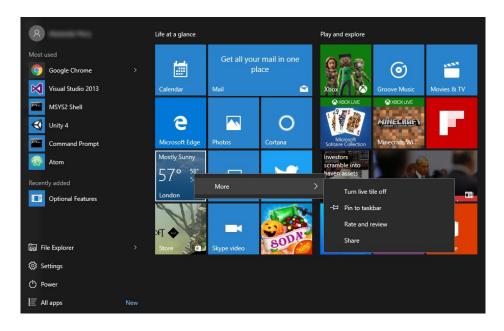


Figure 2-4: Windows 10 Start Menu: The left and right sides.

Start Menu: The Left Side

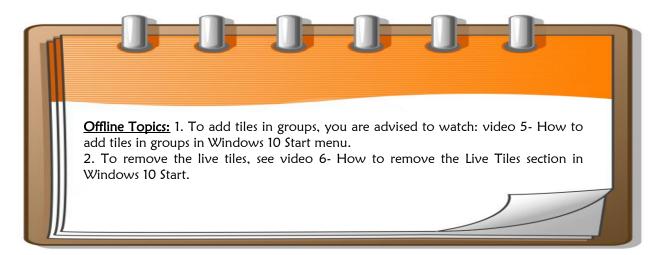
The left side may look like the Start menu that's been in Windows from the beginning. The left side has five sections, described here from top to bottom:

- 1) Your name: See your account name and picture in the upper-left corner of the Start menu.
- 2) Most Used: Beneath your name icon, you get a list of the programs that Windows sees you using a lot.
- 3) Recently Added: The middle section of the left side shows one item: whatever app you've most recently downloaded or installed
- 4) Important Places: In general, the bottom of the left side is devoted to listing important places on the computer, such as downloads, default folders and recycle bin.
- 5) All Apps: When you click "All apps" at the bottom of the Start menu, you're shown an important list indeed: the master catalog of every program on your computer



Start Menu: The Right Side

The right side of the Start menu displaying your files, folders, and programs as big rectangular tiles.



Shutting Down

Shutdown: As shown in fig. 2-5, shutting down is only one of the options for finishing your work session. Shutting down your computer requires only three steps now. Open the Start menu, Choose Power, and then "Shut down". When you shut down your PC, Windows quits all open programs, offers you the opportunity to save any unsaved documents, exits Windows, and turns off the computer.

Sleep: The instant you put the computer to sleep, Windows quietly transfers a copy of everything in memory into an invisible file on the hard drive but it still keeps everything alive in memory. If you do return soon, the next startup is lightning-fast. If you don't return shortly, then Windows eventually cuts power, abandoning what it had memorized in RAM. Now your computer is using no power at all; it's in hibernate mode.

Restart: This command quits all open programs and then quits and restarts Windows again automatically. The computer doesn't actually turn off. You might do this to "refresh" your computer when you notice that it's responding sluggishly, for example.





Figure 2-5: Shutting down your computer

Use the Search Box

This thing is awesome. The instant you press the key, your insertion point blinks in the new "Ask me anything" search box below the Start menu

3. Windows 10 File Management

When using your Windows 10 system to create information, over time, we accumulate a lot of files that store on our hard disk. A critical part of how Windows 10 organizes this is by using a File System that manages how files are stored and accessed on your computer. The part you and I see when we interact with the records that we create on our computers, such as documents, audio files, pictures, and videos is the File Manager. In the case of Windows, it's File Explorer. We thought you'd like to take a look at using File Explorer in Windows 10.

Using File Explorer in Windows 10

You'll use the File Explorer to manage your files and folders. To open File Explorer,

- Click the File Explorer icon located on your Taskbar or
- Click Start > File Explorer as shown below in fig. 2-6 or
- Double-click any folder on your desktop.





Figure 2-6: Opening Windows 10 File Explorer

The initial File Explorer window is comprised of the following sections, see fig. 2-7:

- 1) The **File Explorer ribbon**, which resembles the ribbon featured in Microsoft Office. The ribbon contains buttons for common tasks to perform with your files and folders.
- 2) The **Navigation Pane** gives you access to your libraries of documents and pictures, as well as your storage devices. It also features frequently used folders and network devices.
- 3) The **Frequent folders** section on the right features the folders you've worked with recently to allow for quick access to them.
- 4) The **Recent files section** in the lower part of the window features files and documents that you've opened recently.

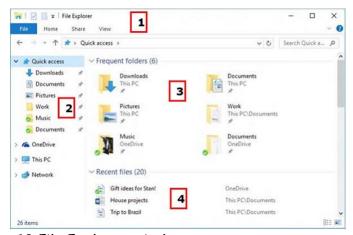


Figure 2-7: Windows 10 File Explorer window



Change How Files Display in Windows 10 File Explorer

You can change how your files look by using the View tab. When you activate this tab, you will see various groups for changing the layout of the window, files, current view, or hide certain things you see onscreen. Within the Layout group, click one of the available options to change how your files display onscreen. You can also preview the layout before confirming by hovering over one of the available options. See fig. 2-8.

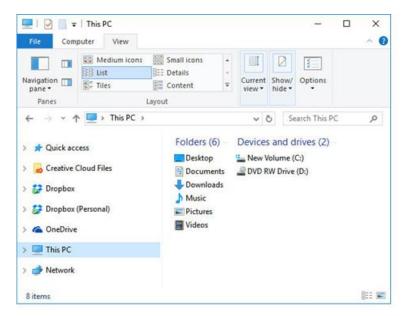


Figure 2-8: File Explorer provides different ways to view your files

Organizing Files and Folders

If you have a lot of files on your Windows 10 system computer, you'll want to organize them. So if you need to see recent files created or older files or you need to archive certain files elsewhere, you can easily do so. The View tab provides options for sorting how files are displayed. Here, in fig. 2-9, I have chosen to sort my files by name.



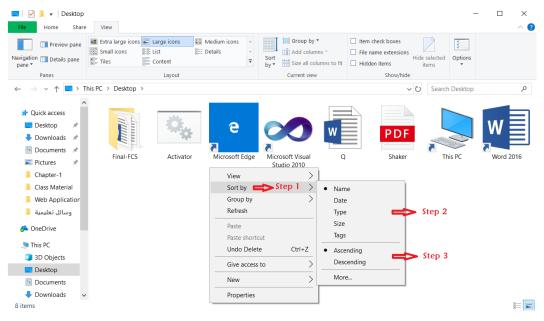
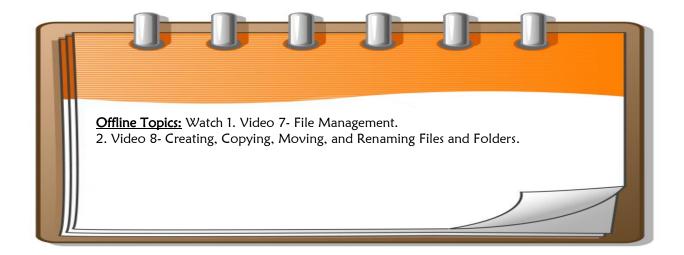


Figure 2-9: Organizing files by name.

Searching for Files and Apps

To search for something on your computer—like a specific file or application—click the **Start** button, then start typing. Alternatively, you can press the **Windows** key on the keyboard to begin a search. In the example below, see fig. 2-10, we're searching for a presentation file.





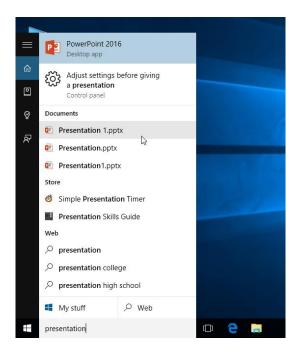


Figure 2-10: Searching for a presentation file.

Adjusting your settings

At some point, you may want to adjust your computer's settings. For example, you might want to change your desktop background or modify your Internet settings. You can change these settings and more from the Control Panel- control panel is a component of Windows 10 that provides the ability to view and change system settings. However, in Windows 10, the Control Panel has mostly been replaced by the Settings app. The Control Panel is still available, but most of the tasks and settings are now also located in the Settings app. To open the app, click the Start menu, then select Settings, see fig. 2-11.

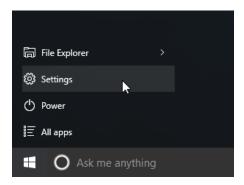


Figure 2-11: Settings app.



Understanding user accounts

A user account allows you to sign in to your computer. By default, your computer already has one user account, which you were required to create when you set up your computer. If you plan to share your computer with others, you can create a separate user account for each person.

Why use separate user accounts?

At this point, you may be wondering why you would even need to use separate user accounts. But if you're sharing a computer with multiple people—for example, with your family or at the office—user accounts allow everyone to save their own files, preferences, and settings without affecting other computer users. When you start your computer, you'll be able to choose which account you want to use.

Administrator, Standard, and Managed accounts

Before you create new user accounts, it's important to understand the different types.

- Administrator: Administrator accounts are special accounts that are used for making changes to system settings or managing other people's accounts. They have full access to every setting on the computer. Every computer will have at least one Administrator account, and if you're the owner you should already have a password to this account.
- Standard: Standard accounts are the basic accounts you use for normal everyday tasks. As a Standard user, you can do just about anything you would need to do, such as running software or personalizing your desktop.
- Standard with Family Safety: These are the only accounts that can have parental controls. You can create a Standard account for each child, then go to the Family Safety settings in your Control Panel to set website restrictions, time limits, and more.

Switching between user accounts

If you have multiple user accounts on your computer, it's easy to switch between users without signing out or closing your current apps. Switching users will lock the current user, so you won't need to worry about someone else accessing your account.



To switch between user accounts:

Click the current user icon on the left side of the Start menu, then select the desired user from the drop-down menu. The user will then need to enter a password to sign in, see fig. 2-12.

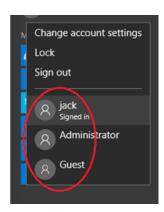


Figure 2-12: Switching between user accounts.