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Chapter 5

Installing the Operating System, Drivers and Programs

Key Terms

Operating System (OS): Windows is an operating system that allows the user to install and use programs such as the Internet Explorer, email, word processing, and many others. It allows the user to organize the computer by making folders for files. It uses “Drivers” to tell it how to make sound, connect to a printer, even to connect to a phone. The operating system talks to the computer, then gives the user information that is understandable. Without an OS the user would have to be able to read “binary code” which is groups of 0 and 1 in different combinations. Windows makes the computer screen visually understandable, and gives it the ability to make sound. Linux is another operating system that does the same things as Windows. It has some differences, but is a good alternative. The MAC computer uses its own operating system that is found on only Apple hardware. It does the same thing as both Windows and Linux. Many people select just one of these operating systems and will not use the others. The reality is all three operating systems are good. If a job or school calls for the use of one type of operating system, then person needs to learn to use it. Currently Windows, Linux and the MAC are so similar that cross over learning is not a large issue. There is a sub category of operating systems for telephones and hand held devices. Windows, Linux and the Apple MAC all have their own operating systems for these devices.

Program: A computer program is installed by the user on the operating system they use. Windows programs do not easily install on a Linux or Apple MAC computer. MAC programs do not easily install on a Windows or Linux computer. For now, keep the Windows programs on the Windows computer and the Linux programs on the Linux computer, and the MAC programs on the MAC. A program can be designed to do one, or many different things. Microsoft Word is a word processor that allows you to type, spell check, save and print documents. Windows Media Player allows you to organize and play music and other audio files. Internet Explorer is a program that allows you to go onto the internet to read the newspaper, play a song, talk to friends, and find out about things you are interested in. The internet lets you look at local bus routes, shop, bank, and even order pizza! There are millions of internet or web sites that give you the

chance to learn and grow. There are college classes online, how to, and directions for making or cooking different things. Internet Explorer is a program that opens up a whole new world to millions of users.

Software: Very much like the “Program” discussed above. This can be an operating system, program or a driver.

Driver: A driver is a program that tells the computer how to talk to an item inside of it, or attached to it. For example, if you want to attach a printer, you will need to install the driver for that printer. When you buy your printer a CD will come in the box with the printer. This CD will have the driver you need to install on the computer. Once this is done, your computer will talk to and print documents to the printer. There are drivers for sound, video, and many other devices.

Key: A key is a set of numbers, or letters and numbers combination that allows an operating system or program to be installed. The “Key” is found on the package the operating system or program came in.

Internet Service Provider: This is the company you pay once a month in order to be able to go onto the internet. There are many companies. Several of the larger companies are Comcast, AT&T, America Online and Net Zero. Check your local area for the service providers near you.

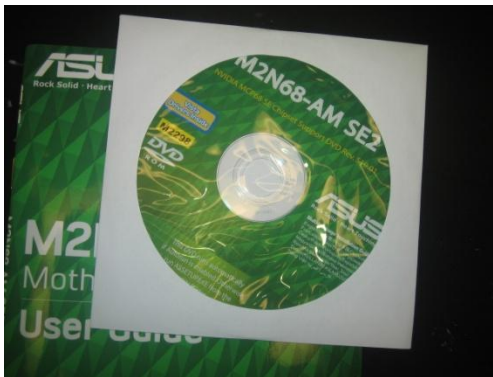
Steps to Installing the Operating System, Drivers and Programs

1. Open your package containing the Windows OS CD. There will be a KEY (a group of number and letter combinations) on the package. If you cannot read this key, have someone either record, Braille, or write these letters and numbers in large print.



2. Turn on your computer. As the computer starts press the button to open the CD ROM drive drawer. Place the CD in the drawer. Close the drawer by either pressing gently on the front part, or pressing the same button that you pressed to open the CD ROM drive.
3. At this point of the install you are going to need someone with sight to help you. The computer will not talk, nor will it enlarge at this stage of the install. If after a moment the computer does not show a blue screen or a similar colored screen and say something about "Analyzing Your Computer...", press the control alt delete key combination to re-boot the computer. If the CD does not go into the Windows install, re-boot with control alt delete and watch the opening screen for a key you can tap to select what drive you want to boot from. Tap this key then tap the number for the CD ROM drive. If there is no way to select the CD ROM drive, press control alt delete, look for the key that takes you into setup, go to "Boot" in the C-MOS, and change the boot order of the drives to have the CD ROM drive boot first. Save and close (the C-MOS will tell you which key to press).
4. Windows will analyze your computer, then put an agreement on the computer screen. Tap the F8 key to accept this agreement. Eventually the screen will ask about where to install the Windows operating system. Tap enter to install Windows on the C drive (C is the hard drive that you installed in your computer). A window will come up asking if you want a full or quick format of the hard drive. Your hard drive is new, therefore up arrow one time and tap enter for the quick format. There are advantages to the long format, but not necessary at this point.
5. In about fifteen or twenty minutes the open screens of Windows will appear. You will be asked to set the date and time, to name your computer (you can type one simple word and that will be fine), then it will want the Product Key. Remember the 25 number and letter combination from above. Type it in now and tap enter. Windows will continue to install. There will be a screen where the monitor is readjusted. When this comes up click "OK," and the monitor will be reset. Windows will reboot the computer several times during the installation, and will take from forty minutes to an hour to completely load.
6. There may be introduction screens at the beginning of the first full start of Windows. You will need to keep clicking "next" to bypass these screens. If you cannot see the screen have a person with sight do this for you. A screen should come up for authorizing Windows. If you are connected to the internet click on the button to "Activate Windows Over the Internet..." If you are not connected to the internet you can choose to activate over the telephone, or you can wait until you are connected to the internet.
7. Your computer is on and Windows has been installed. It does not make sound, and will not do some things because the drivers for the motherboard/computer

have not been installed. Take the CD disk out of the box your motherboard came in. Place it in the CD ROM drive.



In a moment a screen will come up with information concerning installing drivers. Each type of motherboard has slightly different opening screens. What you want to do is click on the button or link that installs the drivers. In specific, you want to install the drivers for the sound, video and Ethernet. Do not install any virus checking software on this disk! The computer will install and reboot. It may ask you if you want to reboot, click "Yes," or the button by a phrase that says you want to restart your computer. When the computer restarts you should hear sound. Your computer screen may look smaller. If you are connected to the internet, you should now be able to go onto the internet. Take the CD that came with your CD ROM and place it in the CD ROM drive. A screen will come up concerning installing a driver and possible other programs. Install the driver for the CD ROM drive and then reboot your computer (See "Shutting Down and Restarting Your Computer below). If your monitor or keyboard came with a CD, install drives for those items. Your basic Windows installation is done.

8. You are now at the point where you can install a program to make the computer talk, or make the screen larger. Many of these programs can be downloaded as demos from the internet, or installed as demos from a CD or a memory stick. If you own your own screenreader or screen enlarger, now is the time to place the CD for that program into you CD ROM drive. Follow the directions that are spoken to install your program. You now have a computer with basic Windows and an adaptive program that lets you use the computer.
9. Before going any further you need to install a virus scanning program. There are free programs that can be downloaded from the internet, you might own your own virus check and have a CD for it, or your internet service provider may have a virus checker that you download from their site. Comcast lets you download McAfee for free. AT&T gives you a virus checker that you can download for free, as does America Online. There is a free version of AVG virus scanning software

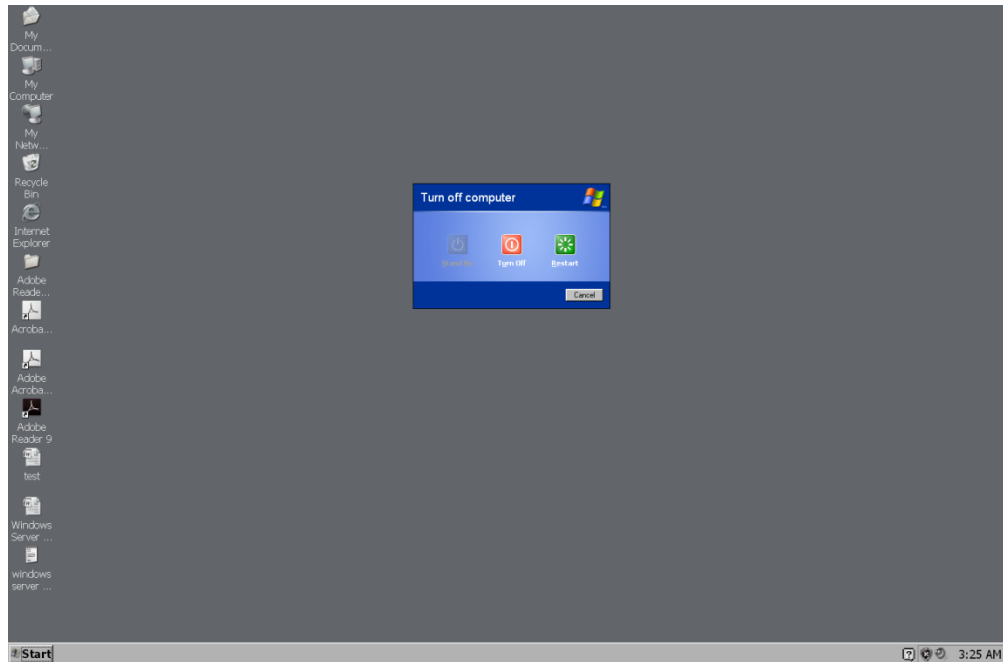
that can be downloaded from the internet. It is important that you install the virus checker now.

10. You are now at the point where you have a computer that will go onto the internet and do some basic tasks. If you want to do serious word processing, spreadsheets, or slideshows, you need something more powerful. You can choose to download and install Open Office from www.openoffice.org, or install a suite of programs such as Microsoft Works or Microsoft Office. For now, we are going to install the Microsoft Office Student Edition. Place the Office CD into the CD ROM drive, with the computer turned on. A screen will come up and ask for a key. The key is located on the package that Office came in. Type in this key. If a green checkmark appears it is fine to click the “Install” button. If a red mark appears, retype the Key and click install when you see the green checkmark. After the program installs open Word. One way to do this is to press Windows key (hold it down) and tap the letter r. Type “winword” (without the quotes). Tap enter and Word will open for the first time. A screen will come up asking you to authorize Word. Click the button that indicates you want to authorize Word over the internet, then click the OK or “next” button. Word will be authorized and Office will be ready to use.
11. Your computer is now ready to use for many things. You can be entertained, do school or job related work, or simply browse the internet.

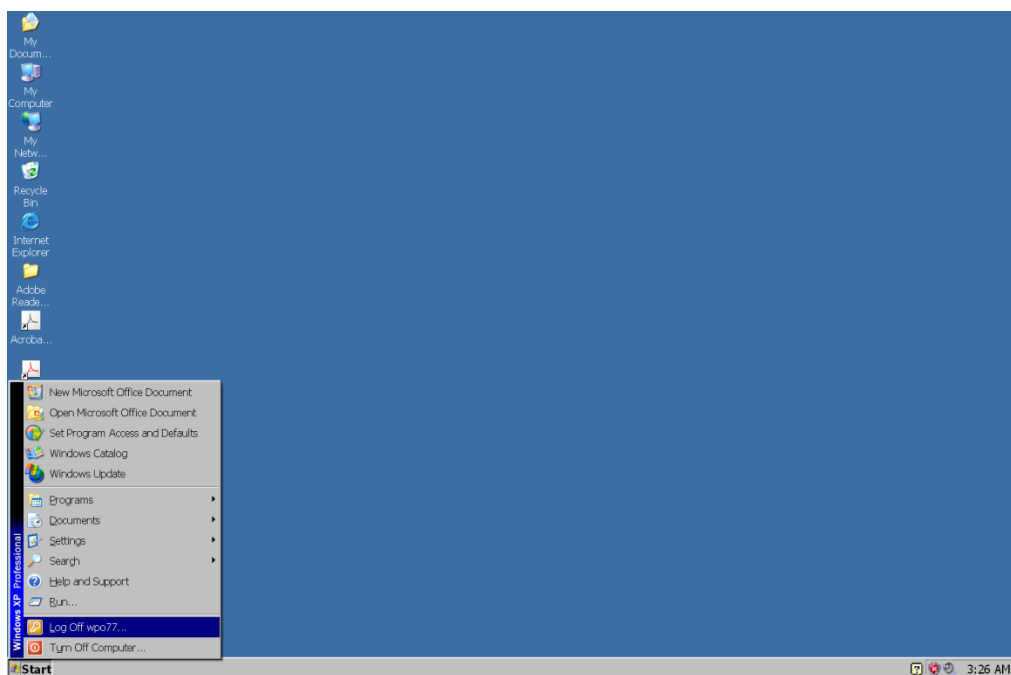
Shutting Down and Restarting Your Computer

Your computer is turned on and you want to shut it down. How do you do this? Do not unplug it. Do not press and hold the Power button until it turns off. Do not press the toggle switch on the Power Supply. Do not press the “Reset” button. The preceding are techniques that can be used if the computer “freezes,” “locks up,” or “crashes (known as the ‘Blue Screen of Death’).” You can make a computer go to sleep but not turn off. This is called “Hibernating.” You can make a computer “Restart” for those times when you add a new program, “Update,” or the computer tells you that it needs to restart (another word for this is “reboot”). You can completely shut down your computer.

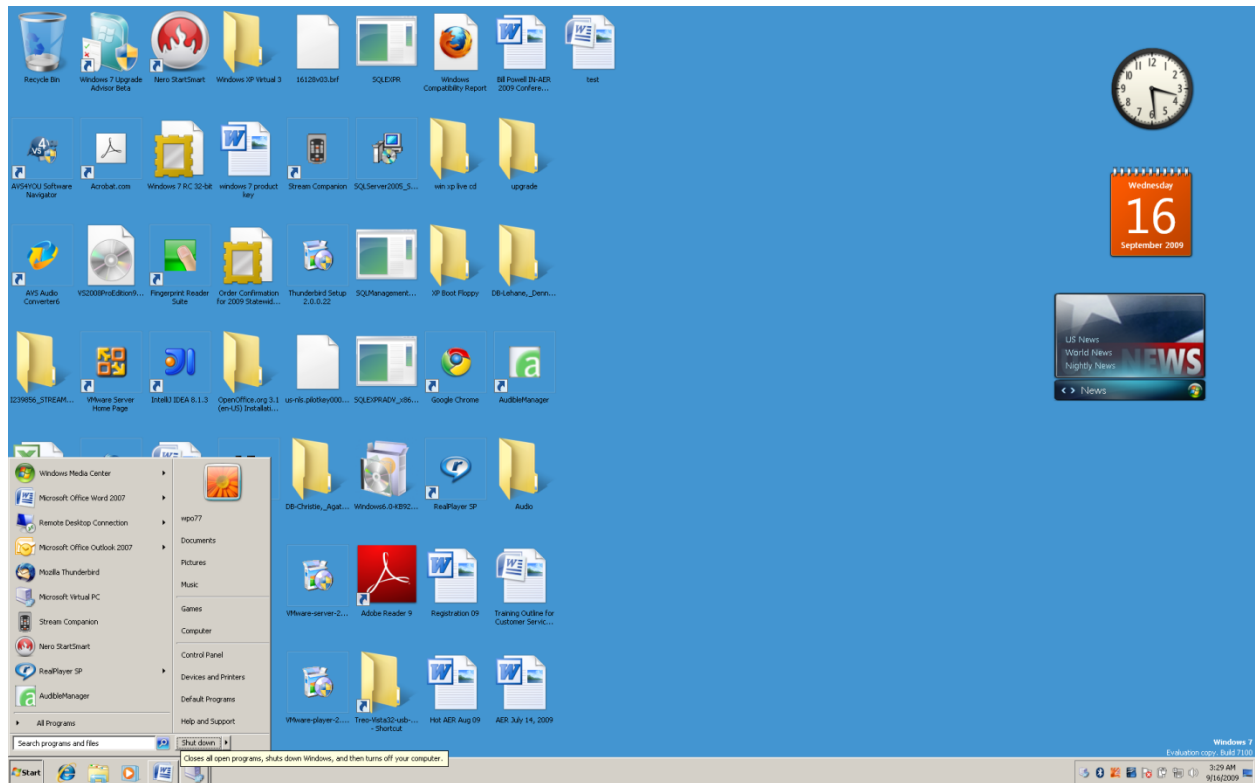
Windows XP and Windows 7 have slightly different methods for the shut down process. In Windows XP you tap the Windows (Start) Key one time. Make sure you have released this key (taken your finger off of it). Tap the letter u one time. On most Windows XP computers you can tap the letter u a second time to shut down the computer, tap the letter r to restart the computer, tap the letter s to “Standby” (this is hibernating)—you must tap your power button to bring your computer out of “Standby.”



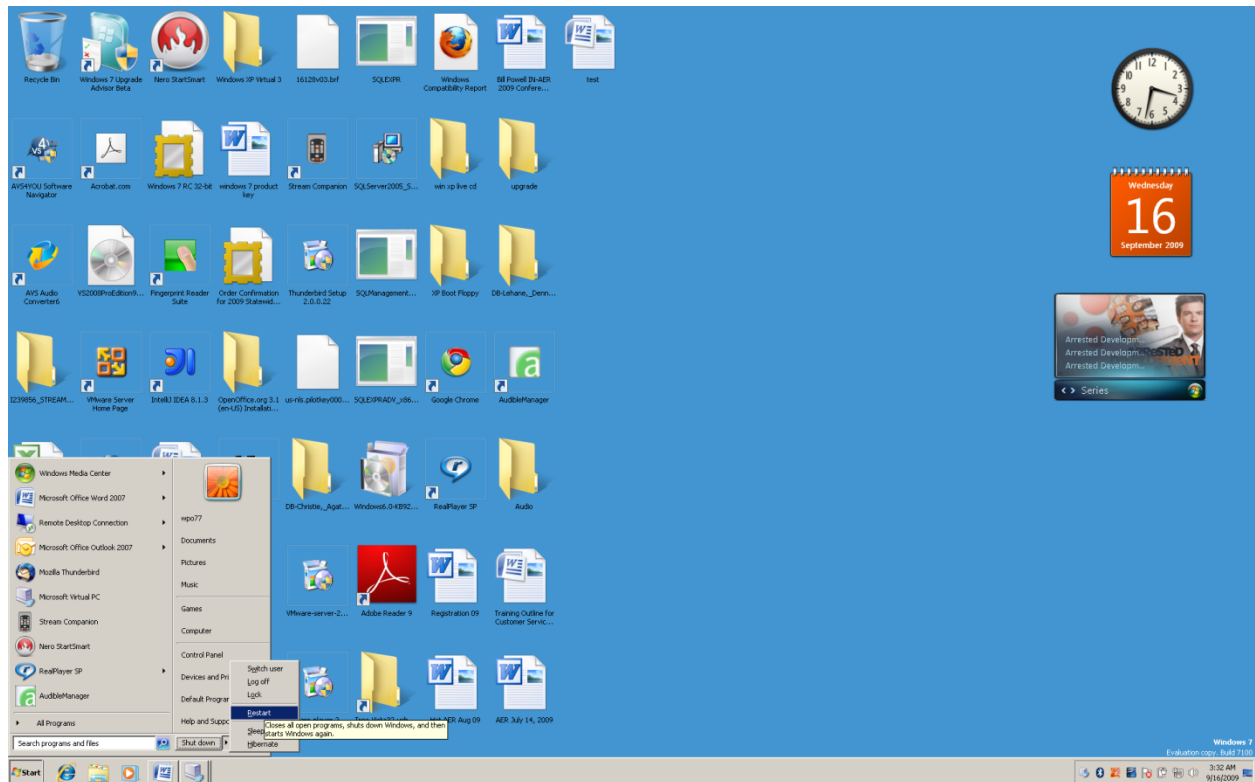
If you are on a network computer at your place of work, you can tap the Windows (Start) Key one time, and then tap the letter I one time to “logoff” of the computer. If you want to lock your work computer, press the Control Alt Delete key combination, release these keys and tap the spacebar one time. The computer is locked. When you want to go back into Windows press Control Alt Delete and a login screen comes up. Type your “username,” tap the Tab key one time and type your “password,” and then tap the Enter Key one time. You are now logged back into your Windows (computer).



If you want to shutdown (turn off) a Windows 7 (or Windows Vista) computer, tap the Windows (Start) Key one time. Tap the right arrow one time, and then tap the Enter Key one time. The computer will shut down (turn off).



If you want to switch user (if there is more than one user account on your computer), log off, lock, restart, sleep, or hibernate, tap the Windows (Start) Key one time. Right arrow two times, and then use your up or down arrow to go through the menu items until you hear or see the one you want. Tap the Enter Key one time on this item and the computer will do that operation.



Chapter 5 Review

Test Your Knowledge

1. Name an operating system.
2. Name one program.
3. Name one internet service provider.
4. What is a “Key?”
5. Where can you get a virus checker?
6. Why do you think a virus checker is important.
7. Where can you get demos of adaptive programs (i.e. programs that make the computer talk, or enlarge the computer screen).
8. Describe the sequence for shutting down your computer.