



# BUG-BYTES

THE MONTHLY ONLINE NEWSLETTER OF *COMPUTER BUGS*

VOL. 6, ISSUE 11

NOVEMBER 2007

## SO YOU WANT TO BUY A PRINTER?

CONSIDER YOUR MANY CHOICES

A word to the wise. When you buy a printer, you are buying a whole printing system, where the cost of the printer is but a small part of the life cycle cost of owning the product. The biggest cost is for the ink and other consumables (paper, photo paper, labels, etc.)



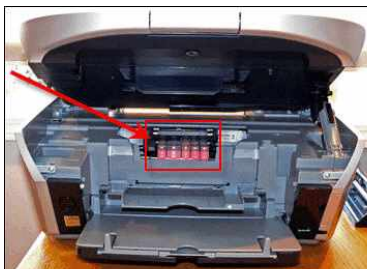
Any printer you choose to buy will “work,” However, the real question is how well will it work for your particular set of requirements? All printers involve some trade-offs. For example, what will be the primary use for your printer—printing pictures, printing plain text, or printing mixed media with lots of graphics and color?

Do you want a single function printer, such as a photo printer that does one task exceedingly well, or do you want an all-in-one printer that can copy, scan, fax on some models (requires a phone line), read memory cards, and print? Many all-in-one printers do all jobs very well.

Do you want an ink-jet printer or a laser printer? Laser printer are geared more toward business buyers.

Is the paper capacity of the printer important to you? Some printers have very small drawers for paper, others may have multiple drawers. Is there a separate drawer for photo paper?

Does the printer come with separate ink tanks for the different colors or does it include just one or two tanks? Printers with more tanks usually save you money on buying ink. That is because the tanks of printers that combine three or more colors to a single tank run out of ink (such as the black or one color) long before the other colors are used up. See the screen shot at the right. It shows a Canon



MP500 with five ink tanks—one black for text, one black for photos, a cyan, a magenta, and a yellow ink tank.

If you plan to buy ink cartridges locally, how easy will it be to find ink for your printer? For instance, Costco stocks ink for Canon, Epson, HP, and Lexmark. If you buy your ink online, then you are in fat city. For example, Amazon.com stocks ink for most brands at competitive prices, and shipping is free for orders over \$25.

Compare the online reviews of printers that you are considering. They may disclose facts that are important for your buying decision. Note that a seemingly more expensive printer may cost far less in the long run when you consider the cost of buying ink. Some cheap printers guzzle ink while their more expensive, faster, and better performing cousins, sip ink.

When you buy a printer, the software that comes with it is a very important part of your purchase. Some printers are very easy and intuitive to use, while others are much less so. What do the reviews say?

How reliable is the brand or brands that you are considering? If something goes wrong, what kind of support can you expect? The reviews help you to determine that.

Do you want a printer with a very small footprint, because you have limited space near your computer, or can you accommodate a larger printer, one with or without an automatic document feeder?

Now days all-in-one printers are a very good investment. Unlike in the early years when they were first introduced, they are cost effective and very reliable. Most models will copy documents without even turning on your computer. Your spouse will like that feature

Do you have any special paper handling requirements such as automatically printing on both sides of the paper (duplex printing). Does your printer need to handle paper larger than 8.5"x11" Do you want archival inks?

Are you small office/home office user with a high monthly page count? If so, the duty cycle of the printer may be important to you. However, for the average user, most of the printers you might choose to buy have duty cycles that will

far exceed the number of pages you typically print each month.

If you are comfortable shopping online, you can quickly compare the cost of buying your printer, the features, and how users rate your intended purchase. Pricegrabber is a good place to start. See [www.pricegrabber.com](http://www.pricegrabber.com).

## PRINTER INSTALLATION TIPS

### DON'T WING IT

#### PRINTER INSTALLATION

Printers are not hard to install (hookup to your computer) IF you carefully follow the installation instructions step-by-step. Where many users go astray is that they hookup the USB cable to their printer before installing the printer software. That is usually a no-no. Wait until you are told to connect the USB cable during the software installation.

Read the fold-out instruction, or the quick install instructions before you do anything with your printer. In particular, be sure you have removed all of the shipping materials included in or on your printer. That includes any plastic locks used to hold the carriage in place during shipping, and any shipping tape.

Follow the instruction for how to install the ink cartridges, or the toner cartridge (laser printer). For ink cartridge, carefully remove the plastic tape or film that covers the cartridge printhead, and the cap cover if your cartridge includes one. Do not touch the copper strip that is part of the printhead. You may damage it with static electricity or leave finger oils on the printhead that clog it.

In a Canon MP500 all-in-one printer each of the cartridges are lighted with a red light. If a cartridge is low on ink, that cartridge blinks. Some printers, such as this Canon, come with a separate black cartridge designed specifically for photos. Another black cartridge is used to print text and graphics.

#### AFTER THE PRINTER IS INSTALLED

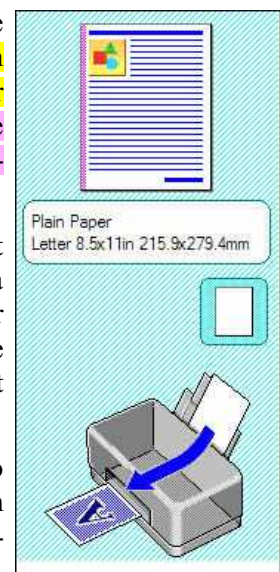
After your printer is installed do a test print. That will check that everything is working properly. Then, set the defaults for how you normally want to print. Do the following:

- Set the paper type (media type)
- Set paper source (auto sheet feeder, cassette, etc.)
- Set the print quality you want (draft, normal, photo)

- Set color/intensity
- Set whether you want all jobs to print in greyscale
- Set whether you want your printer to preview each print job
- Set the page layout (Normal-sized print, print-to-fit, or other options provided by your printer)
- Set duplex if your printer offers that option and you want everything to print on both sides of the paper. Turn off duplexing for photos. Duplex can save paper if you mainly print documents and stuff from the Internet.

- Set portrait or landscape for the orientation of the print on the paper. **Portrait is up and down with the long side of the paper up**, and **landscape rotates the print job to print with the narrow side of the paper up**.

#### PORTRAIT MODE



- Set whether or not to start printing with the last page of a job. This option stacks your document so that it is in the correct order when you take it out of the paper tray.
- Set whether or not you want to collate your document when you are printing multiple copies of the same document. Your documents come out in sets rather than with copies of the same page next to one another. If you don't let your printer collate your documents for you, then you have to do the collating by hand. ☹️

- Experiment with printing envelopes. Learn which way to insert envelopes so that the print comes out on the front of the envelope.
- Add a shortcut to the Printer and Fax dialog and place it on your desktop, or drag the shortcut to the Quick Launch area of your taskbar. That way, you can quickly cancel a job or check the status of pending print jobs. In XP, Right-click on Printers and Fax from Start, Control Panel. Click on Create Shortcut. Answer Yes to place the shortcut on your desktop.
- You are done. Enjoy your new printer.

# HOW TO CHANGE YOUR HOME PAGE

YOU'RE NOT STUCK WITH YOUR VENDOR'S CHOICE



Your home page is the page that displays every time you open Internet Explorer, Firefox, Opera, or a similar program. It may shows you local and international news, and other items of interest.

Did you know that you can change that page to better reflect your viewing preferences? You are not stuck with the home page choice made by your computer vendor, or cable operator. Your current home page may be [www.msn.com](http://www.msn.com), [www.charter.net](http://www.charter.net), or [www.roguelink.com](http://www.roguelink.com). However, there are many good choices from which to pick.

## THE WORLD IS YOUR OYSTER

You are in the drivers seat. You can pick which service to use for your home page based upon how much or how little you want to see, and how the information is displayed on your screen. Then to top it off, you can personalize the information to show only those items of interest to you, and in the order that you want to see that information.



As you are reading this article, I invite you to try some of the following sources to see what they offer, and how they compare to your present home page. Without leaving this page, click on the Outlook Express icon. Press the Alt key and then the Tab key to toggle back and forth between this page and Internet Explorer.

Remember that most of the web page services allow you to personalize your data. To do that, you create an account with an ID name and a password. That way, your preferences are stored so they load the next time you open your favorite home page. The following are in alphabetical order. Yes, Virginia, you can also have a newspaper as your home page.

- AOL ..... [www.aol.com](http://www.aol.com)
- CHARTER ..... [www.charter.net](http://www.charter.net)
- DAILY COURIER ..... [www.thedailycourier.com/](http://www.thedailycourier.com/)
- EXCITE ..... [www.excite.com](http://www.excite.com)
- GOOGLE ..... [www.news.google.com](http://www.news.google.com)

MAIL TRIBUNE ..... [www.mailtribune.com](http://www.mailtribune.com)

MSN ..... [www.msn.com](http://www.msn.com)

YAHOO ..... [www.yahoo.com](http://www.yahoo.com)

After it is personalized, Yahoo becomes [www.my.yahoo.com](http://www.my.yahoo.com)

YAHOO NEWS ..... [www.news.yahoo.com](http://www.news.yahoo.com)

Your home page might also be one of the popular PC magazines.

Maximum PC ..... [www.maximumpc.com](http://www.maximumpc.com)

PC Magazine ..... [www.pcmag.com](http://www.pcmag.com)

PC WORLD ..... [www.pcworld.com](http://www.pcworld.com)

## HOW TO PERMANENTLY CHANGE YOUR HOME PAGE

Click on the "make this your home page" link at the top of the vendor's page, if the option exists. If you don't see such a link, do the following.

When you have made your home page selection, and personalized it, in Internet Explorer, click on Tools, Internet Options. On the General Tab, under Home Page, click on Use Current. Click OK. That's all there is too it.

## USE LINKS TO DISPLAY MORE THAN ONE HOME PAGE OPTION

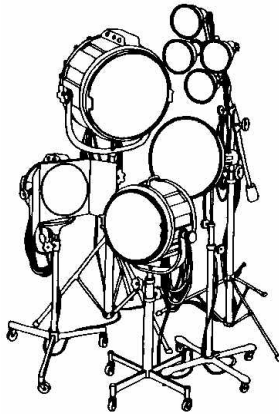
In Internet Explorer, click on Views, Toolbars, Links. Be sure to turn off Lock the Toolbar. A double row of horizontal dots appears as a separator bar just in front of the word Links. You can drag the links items to where you want them to appear.Unlock the Toolbars as shown in the top screen shot above.



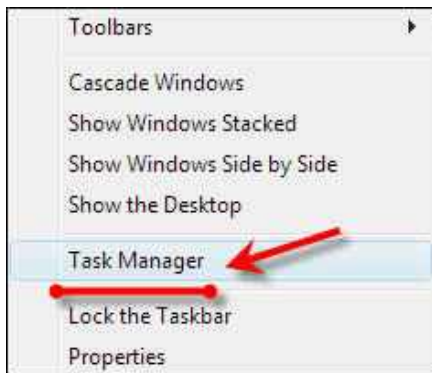
Select any existing links that you don't want, and press the delete key. Drag new links from the location bar, such as the my yahoo.com link shown immediately above. Lock the toolbars again, if you wish.

## THE SPOTLIGHT IS ON - TASK MANAGER

Take a fresh look at your friend the task manager. It does much more than help you to shut down an errant program. You see the task manager when you press together the control, alt, and delete keys. You can also see it by right-clicking on the taskbar at the bottom of your screen and clicking on Task Manager.



This is what you see when you right-click on the taskbar.

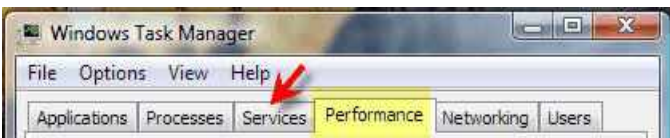
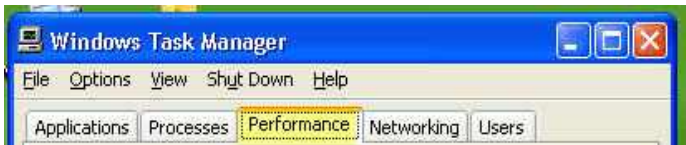


The Windows Task Manager is a wonderful source of information about what is going on in your compute, behind the scenes .

There is an application tab, processes tab, performance tab, and network tab, and

users tab.

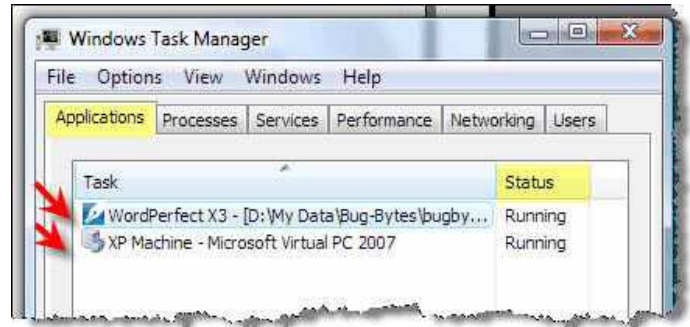
The screen shot, below, shows the XP Task Manager menu bar followed by the Vista Task Manager menu bar. Note the services tab on the menu bar which shows the status of each service that Windows recognizes.



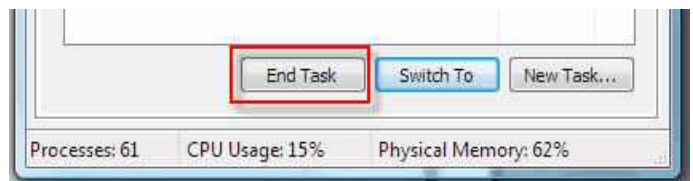
### APPLICATIONS

The applications dialog lists all of the applications that are currently running. For instance, in the screen shot below, the

dialog shows that I'm running Vista and that WordPerfect is open, and that I have *Microsoft Virtual PC 2007* running. The status column shows that the programs are running. If one of them had stopped running (because there was a problem) it would show that.



If something stops working, you can manually end the task by highlighting the stopped application and clicking on End Task as shown in the screen shot following. These two



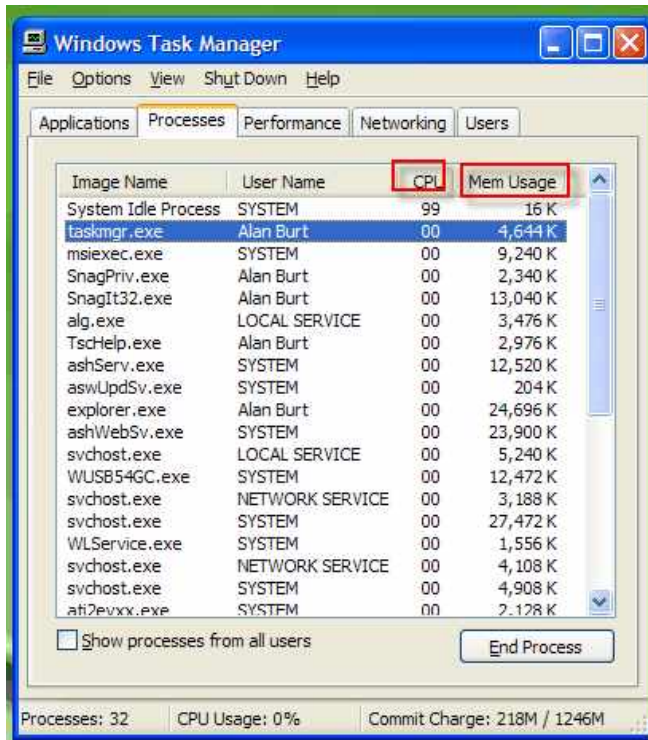
screen shots are from Vista, but XP has a similar look.

### PROCESSES

The processes tab lists all processes that are currently running either just for you as a single user, or for multiple users if your computer is setup with more than one user account. The processes are related to parts of the operating system and to applications that were opened upon startup, plus any applications that you manually started.

The processes tab is useful as a means to spot anomalies such as a process that is consuming a large amount of CPU resources for a long period of time. It is helpful to use an old trick to see which processes are using the most CPU or memory resources. That is, click on the CPU header to sort the data in that column until the largest numbers show at the top of the column. One click and the data is shown in ascending order, and another click to sort the data in descending the order. You want the data in descending order to make it easy to spot the processes that are using the most resources. One of the processes, which is okay, is System Idle Process. That tells you how much CPU or memory capacity is uncommitted and available for your computer.

The next screen shot makes this a little clearer. Notice that 99 percent of the CPU's resources (the first line) is available



and that only 16K of memory is being used by the idle process. In this example, I sorted on the CPU column. If I wanted to see which process was using the most memory I would sort on the Mem Usage column. To sort, click on the column you want sorted. As you click, the column toggles from ascending order to descending order and back as you continue to click on the column heading. In the above case, you would click on the CPU heading.

At first, you may have to use Google or another search engine to identify what each item is and what it does. The User Name column tells you whether the process is related to the system, to a local service, a network service, or is something that you loaded. For instance, note that line four and five above relate to SnagIt, the program I use to create screen shots and to annotate them. Those lines are identified with my user account. If you were using SnagIt, your user name would show there instead.

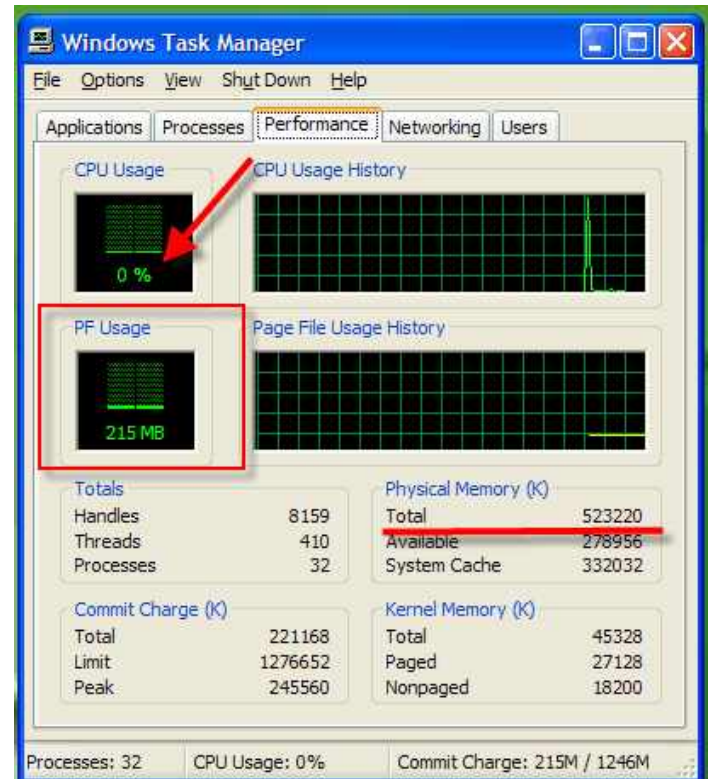
It is not important to recognize every line in the Processes dialog. What is important is to recognize when something is grabbing all of your resources and that results in your computer slowing down. You can then use that information to resolve the problem. For example, you may have inadvertently given permission for a spyware program to load on

your computer. You can use your favorite search engine to look for information about the offending process.

Vista adds a description header that makes it easier to figure out what each entry does.

## PERFORMANCE

The performance tab shows a graphical representation of what is going on in your computer over time. Take a look at the next XP screen shot for a sample shot.



Under Physical Memory, it shows that this computer has a total of 523,220K (thousands of bytes), or about 512 megabytes of RAM random access memory). A megabyte contains 1,024 bytes of memory.

In the example above, that computer was using 215 MB of its 512 MB of memory, at that moment, for Page File (PF) Usage. That number would fluctuate depending on what the computer was doing at the time. The chart entitled CPU Usage History graphs what transpired over time.

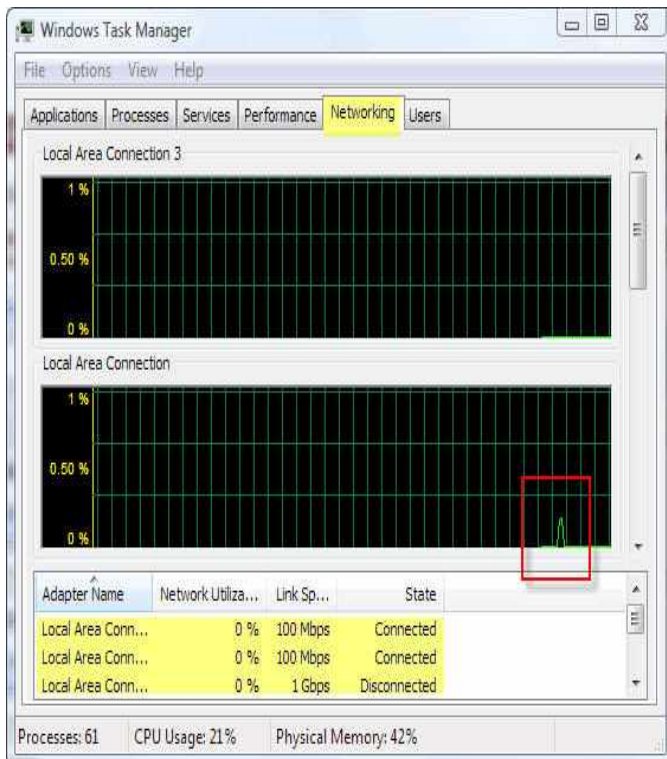
One good way to use the Performance tab is to open the Task Manager shortly after you start your computer. Then you will see is that it requires considerably more memory and CPU cycles to start your computer than it does once everything settles down after a few minutes.

Computers that are memory starved (due to not enough memory) have to read and write to the much slower hard drive. If the PF Usage number is greater than the amount of RAM you have installed in your computer, then consider adding additional RAM. **Normally, RAM is very cheap. It is the single most effective computer upgrade.**

## NETWORKING

The networking tab shows you your current usage of network resources. The dialog shows each of your network adapters, the percentage utilization, and the state of the adapter. At the time this screen shot was taken, the only program using the network adapters was Internet Explorer.

The usage was so low it almost didn't register. Normally, you should not have to look at the network information. If you suspect a problem, then check to see if the usage is widely out of wack with what you think should be going on.



## USERS

The user tab simply lists all of the user accounts. If you don't share your computer, then there will be only one account. If multiple accounts are setup then each account will be listed.

## SUMMARY,

The task manager is a very useful tool. With it you see which programs and processes are using computer resources, you can disable programs that have stopped working, or you can check on their status, and you can review your CPU usage and memory usage, and view the performance of your computer over time.

If your computer suddenly slows down, you may be able to pin point which process is responsible for the slowdown.

The task manager is a helpful tool for spotting anomalies, or to just verify that everything is healthy and working as it should be working.

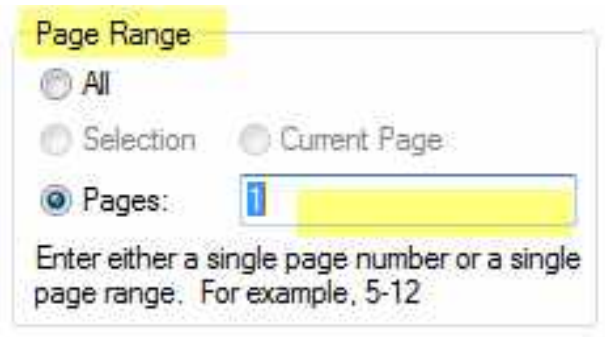
## WEB PAGE PRINTING TRICKS

While some printers provide special programs for printing Internet web pages, there are tricks you can use with any printer to make printing web pages easier and less wasteful of printed pages and ink.

Say that you want to print just the first page from a series of web pages, or just a particular page and none of the other pages. Here is how to do those things.

Choose a web page article that you want to print. In Internet Explorer, Click on File, Print Preview. Look at the bottom of the dialog box to see how many pages are used by the article.

Use Print Preview to help you to visualize the possible print job BEFORE committing it to paper. Some printers offer a print-to-fit option from Print Preview although the size of the print may be smaller than you want.



Click File, Print, and select the page or page range that you want to print. Show 1 if you want to print just the first page, or a specific page of many pages, such as 2-3 if you want to print pages 2 through 3. Select All to print all pages.