

Starting With the Basics

After a brief hiatus from the last two issues, I intended to come back and hit the ground running with a series about computer security and antivirus software. After some time struggling with the complexity of the topic I realized that I should probably start with the basics first and work up from there. I decided instead to address a few much less significant however more widespread misconceptions that I encounter on a day to day basis. Here's the top three:

On vs. Off

Clients always tell me they've been told to leave their computers on. The most oft-cited reason is that it uses more energy to power up than to run continuously. Even in cases where that is true, I think the difference in power consumption and its associated cost is negligible and leaving your PC on could cost you more in other ways. Computers contain a number of mechanical and electrical parts that aren't made to last forever; fans, hard drives and capacitors. Running your computer 24x7 will cause those components to die more quickly and can leave you with a serious problem! Additionally, turning off your PC clears the RAM - the short term storage of a computer, it's "memory" - which can help improve your day to day performance.

If you have a desktop or workstation that must remain running after hours - because it's performing a special function or because you need access to it from home or in the evening - you should make it a point to turn it off before you begin your day.

Built-In Wireless

A longstanding feature on laptops and an increasingly pervasive feature on desktops; built in wireless technology allows users to connect to the Internet without being tethered to a wall or near a router. Most people, however, believe that just because their computer has "WiFi" they will be able to go anywhere, pop open their PC and surf the Web - this is not the case. In order to utilize the wireless capabilities of your computer, you must be somewhere with an existing, hard-wired Internet connection and a wireless router that can broadcast the signal over the air. If you don't already have it, or aren't familiar with the technology, it's very simple to setup in your home and relatively simple to deploy for your business, though you should consult an expert to design the most effective network. If you're looking to be able to use your computer on the road to check email, for example, you're looking for something a little different. It's called mobile broadband and it requires special service (usually through a mobile phone provider) and an add-on card, adaptor or an additional built in chip for your computer.

Space vs. Memory

Often I'm asked to upgrade memory, but rarely do users understand the different types of internal memory and how each affects the system. Sometimes they're actually referring to random access memory (RAM) and sometimes they're referring to their hard drive space. RAM functions as your computer's short term memory. It stores files and applications that are currently in use and allows the processor to easily access the data. Information stored in RAM is held only as long as your computer needs it and is completely cleared when you turn off your PC. There are many variables that affect your computer's speed but RAM is usually the major contributing factor. On the other hand, your hard drive functions as long term memory. It operates at a slower speed than RAM therefore it's impractical for frequent access; however it comes in greater capacities so it's more practical for saving and archiving. If you're looking to hold more music, movies, photos or documents, you'll want to look at increasing your hard drive space.

At the very least, I hope I've clarified a few common misconceptions and perhaps even assisted in facilitating your next conversation with your IT consultant!

Until next issue,
Robert Merva



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