

Technology IQ: 256 is not enough

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I am starting to see an interesting problem with many of my client's computers. Systems that previously ran fine suddenly start to slow down. Nothing seems to be awry. There isn't any spyware or viruses infecting the system. No insidious software is using the computer to send SPAM. Nothing seems wrong, except the computer is abysmally slow.

In most cases, these computers are slowing down due to lack of RAM memory and the increased demands of the software that has been installed. 256 megabytes (MB) of RAM memory are a bare minimum for any Windows or Macintosh system. Since late last year, I have been recommending that any new computer should have a minimum of 512 MB of RAM. Despite Microsoft's protestations that Windows works fine with 256, once you run your anti-virus program, your anti-spyware program, networking, AOL and all those cute utilities that everyone installs, there is little memory left for running applications like MS Word or Internet Explorer.

(Note: I am now recommending 1 gigabyte (GB) of RAM in any systems purchased today, in order to accommodate the increased demands of Microsoft Windows Vista. This is the new version of Windows that should start appearing early next year.)

Furthermore, each new version of these programs eats up more and more memory, slowing your machine even farther. This has been the case in 2 recent appointments. This particular system was running fine, although a bit slow, but once the owner installed the latest version of their anti-virus software, it slowed to a crawl. It would take 5 minutes to open Internet Explorer or any other program. The new version had significantly greater memory requirements than the previous version and pushed the computer "over the edge."

When your computer runs out of memory (RAM) it starts to use the hard disk as virtual memory. As you run each new program, the other, inactive program's information is swapped to the disk until you need it again. The process is much slower than using actual RAM memory, though, and you will notice that your hard disk activity light is constantly flashing. I call this phenomenon "thrashing". Your computer is spending so much time swapping information to and from the hard disk; it doesn't have any time to do actual work.

While I don't want to overstate the effect of adding memory to your computer, if you find yourself in this "thrashing" situation, adding more memory will dramatically speed up your computer. The fact is, the lack of memory is not allowing the computer to work at its full speed. Adding memory won't make your computer any faster than its main processing chip, but it will, at least, allow it to work up to its potential.

If your computer was purchased less than 2 years ago and only has 256 MB of RAM, you may want to consider a memory upgrade. Using the free CRUCIAL MEMORY ADVISOR™ TOOL located at <http://crucial.com/> you can find exactly the type of memory you need for your particular system. You can then purchase the memory through Crucial or visit your local computer/electronics store.

Need assistance upgrading your computer's memory, or finding out how much memory you currently have installed? Give me a call at 818-601-0051 and I can assist you.