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Five tips for speeding up Windows XP performance

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You may be able to improve a sluggish Windows XP system with a trip to the Performance Options dialog box. Here are a few tweaks worth trying.

If some of your Windows XP clients run slower than others, it could be due to some of the default settings located in the Performance Options dialog box. You can change the options in this dialog box to boost the performance of a Windows XP client. Let's examine the settings you can change to improve Windows XP's performance.

Note: These tips are based on an entry in our Microsoft Windows blog.

1: Access the Performance options

The most useful Windows XP performance-tuning options are on the Visual Effects and Advanced tabs of the Performance Options dialog box. Go to Start | Control Panel | System | Performance | Settings to open this dialog box. **Figure A** shows both the Visual Effects and Advanced tabs with the performance options you can easily modify.

Figure A

Visual Effects Advanced
Select the settings you want to use for the appearance and performance of Windows on this computer.
O Let Windows choose what's best for my computer
Adjust for best performance
• Custom:
 Show translucent selection rectangle Show window contents while dragging Slide open combo boxes Slide taskbar buttons Smooth edges of screen fonts Smooth-scroll list boxes Use a background image for each folder type Use common tasks in folders Use drop shadows for icon labels on the desktop Use visual styles on windows and buttons
ОК Cancel Apply
Performance Options
Visual Effects Advanced
Visual Effects Advanced Processor scheduling
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Visual Effects Advanced Processor scheduling By default, the computer is set to use a greater share of processor time to run your programs. Adjust for best performance of: Programs Background services Memory usage By default, the computer is set to use a greater share of memory to run your programs. Adjust for best performance of: Adjust for best performance of services
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Visual Effects Advanced Processor scheduling By default, the computer is set to use a greater share of processor time to run your programs. Adjust for best performance of: Programs Background services Memory usage By default, the computer is set to use a greater share of memory to run your programs. Adjust for best performance of: Programs System cache Virtual memory Virtual memory
Visual Effects Advanced Processor scheduling By default, the computer is set to use a greater share of processor time to run your programs. Adjust for best performance of: Programs Background services Memory usage By default, the computer is set to use a greater share of memory to run your programs. Adjust for best performance of: Programs System cache Virtual memory A paging file is an area on the hard disk that Windows uses as if it were RAM.
Visual Effects Advanced Processor scheduling By default, the computer is set to use a greater share of processor time to run your programs. Adjust for best performance of: Programs Background gervices Memory usage By default, the computer is set to use a greater share of memory to run your programs. Adjust for best performance of: Programs System cache Virtual memory System cache Virtual memory A paging file is an area on the hard disk that Windows uses as if it were RAM. Total paging file size for all drives: 768 MB Change

2: Change Visual Effects settings

The Visual Effects tab is the easiest place to start when troubleshooting certain performance problems. By default, Windows XP enables visual effects, such as the Scroll option for the Start menu. These effects consume system resources. If you're troubleshooting a sluggish system, try choosing the Adjust For Best Performance option, which will disable many of these visual effects settings. Of course, you'll lose the cool visual effects, but there's always a tradeoff for performance.

3: Change Processor Scheduling settings

If you're troubleshooting something more than sluggish screen redraws, you'll need to adjust the performance options on the Advanced tab of the Performance Options dialog box. There are three sections on this tab: Processor Scheduling, Memory Usage, and Virtual Memory. The settings in these sections have a major impact on how your system operates.

The Processor Scheduling section controls how much processor time Windows XP devotes to a program or process. The processor has a finite amount of resources to divide among the various applications. Choosing the Programs option will devote the most processor time to the program running in the foreground. Choosing Background Services allocates equal processor time to all running services, which can include print jobs and other applications running in the background. If your users complain about slow-running programs, you could try setting the processor scheduling to Programs.

On the flip side, if users complain that print jobs never print or are slow to print, or if they run a macro in one application while working in another, you may want to assign equal time slices (called *quanta*) to each process by choosing the Background Services option. If you use the Windows XP machine as a server, you're better off choosing the Background Services option.

4: Change Memory Usage settings

The Memory Usage section governs how Windows XP uses system RAM. The first option, Programs, allocates more RAM to running applications. For desktop systems with very little RAM, this selection gives the best performance. For a server or a desktop with a lot of RAM, however, choosing the System Cache setting will yield better performance. When set to System Cache, the system will use most of the available RAM as a disk cache, which can result in major performance improvements on systems that depend on disk I/O.

5: Change Virtual Memory settings

A number of settings in the Virtual Memory section affect how Windows XP performs. Virtual memory is an area on the disk that Windows uses as if it were RAM. Windows requires this type of system in the event that it runs out of physical RAM. The virtual memory space is used as a swap space where information residing in RAM is written to the virtual memory space (also called the page file or swap file) to free up RAM for other processes. When the system needs the information in the swap file, Windows puts it back into RAM and writes something else out to the disk in its place.

Windows XP has a recommended default page file size of 1.5 times the amount of system RAM. You can let Windows completely manage this file or have no file at all. I highly recommend that you do

not remove the paging file because you'll experience a noticeable degradation of system performance without it.

One way to boost system performance is to place the paging file on a separate physical hard drive from the operating system. The only caveat is if the second drive is slower than the primary drive, you'd want to leave the paging file where it is.

You can also span the paging file across multiple disks to increase performance. To make changes to the virtual memory, click the Change tab on the Advanced tab of the Performance Options dialog box, make your desired changes, and click Set. Any changes you make will take effect after you reboot the machine.

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