

# Why is My PC Slowing Down?

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## What's Going On?

It's been happening a little bit at a time...your PC seems slower – maybe a LOT slower – than it used to. How can this be? What is going on?

The answer could be simple. You may have a hardware problem, a software problem, or simply a lack of PC maintenance. Well, we all know it isn't quite that simple, but these are the most frequent reasons for poor PC performance. Let's examine them.

## Hardware Issues

The following items most commonly slow your PC down:

- Hard drive is filled to capacity – no room for the swap file
- Not enough RAM (Minimum of 128 MB for Windows 9x, ME; 256 MB for Windows XP)
- CPU isn't up to the task of running new programs or the operating system

## Solutions

(Note: It's always a good idea to back up the registry prior to doing these tasks!)

1. Check the "c:\windows\temp" folder for excess files. Delete them.
2. Check the "c:\" (root directory) for excess files. Delete as necessary.
3. Uninstall unnecessary programs.
4. In XP, empty the "c:\windows\prefetch" folder.
5. Empty the "Recycle Bin".
6. Run "RegClean" or a similar registry utility (Windows 98 & ME).
7. Run "DeFrag" or a similar utility.

If your PC's performance is still affected, it's a good bet that the problem you have is software related.

## Software Issues

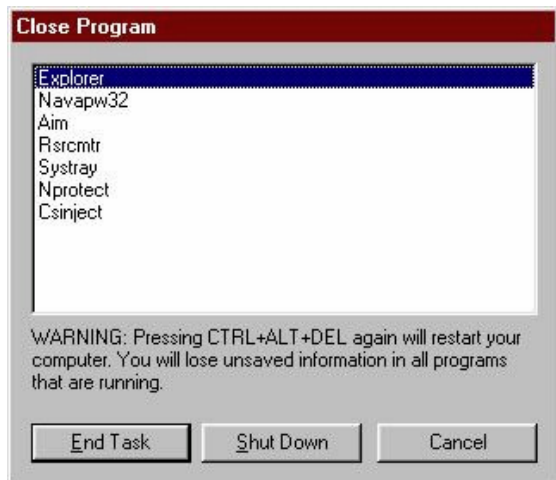
Every time you boot your computer, a number of "hidden" programs load in the background. Some of these hidden programs are essential, but many aren't. More frequently these days, some of them are viruses or malware! Turning off some of these hidden programs may significantly increase your computer's performance and reliability.

The first tools to use are **Task Manager** and **MSConfig.exe** in Windows 98, 98SE, ME, and XP. With them, you can identify and, if necessary, disable some of the programs that automatically load on start-up.

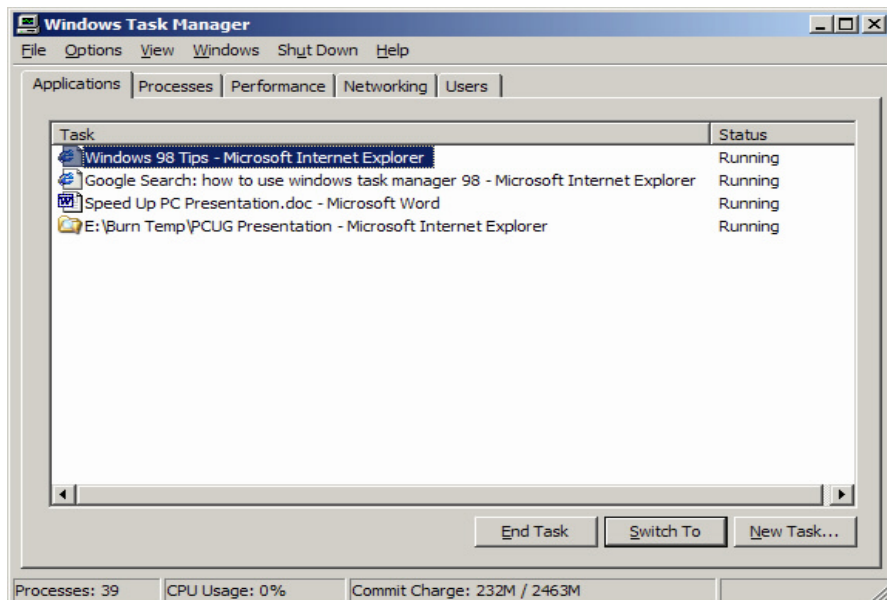
## Using the Task Manager

1. Enter the well known **Ctrl+Alt+Del** key combination to bring up the Task Manager

Windows 98



Windows XP



2. Carefully review the list – you may be able to recognize some obvious programs. To be certain, check the following website for a detailed explanation of each item:

Task List Programs: [http://www.answersthatwork.com/Tasklist\\_pages/tasklist\\_v.htm](http://www.answersthatwork.com/Tasklist_pages/tasklist_v.htm)

By reviewing this list, you can identify which programs should be running and those that are not needed. You may also discover that there are viruses or Spyware running in the background!

## Using the System Configuration Utility

Microsoft's System Configuration Utility – **MSConfig.exe** - can be used to diagnose Windows 98 configuration and performance problems. You will be presented with a list of programs that start when Windows is started. By using this list, you can identify exactly what these programs are. The System Configuration Utility gives you the ability to prevent these programs from loading during the Windows startup.

If you have 98, 98 Second Edition, Millennium Edition, or XP go on to the next step. If you have Windows 95 or 2000 you will not have MSCONFIG natively - but you can get it and install it easily. It's available from:

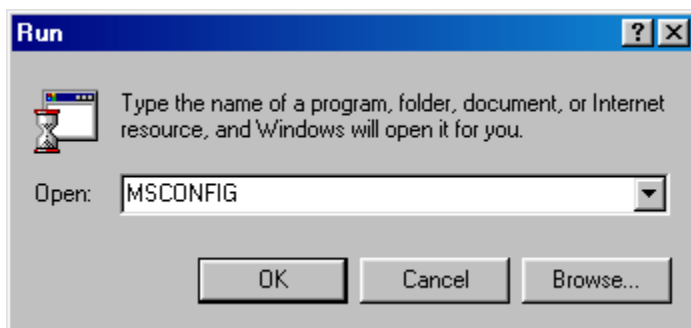
- [http://www.techadvice.com/specs/files\\_st.asp?fnid=174](http://www.techadvice.com/specs/files_st.asp?fnid=174) for Windows 95
- <http://www.thetechguide.com/downloads/msconfig.zip> for Windows 2000

Once you have the file just copy it to your C:\Windows\System (Windows 95) or C:\WINNT\System32 directory for Windows 2000.

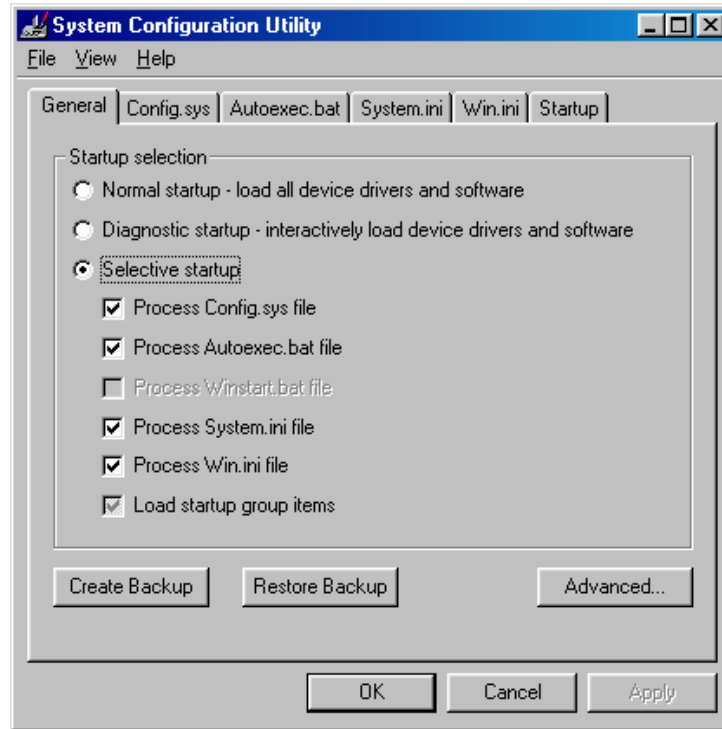
1. In Windows 98, go to **Start -> Run**



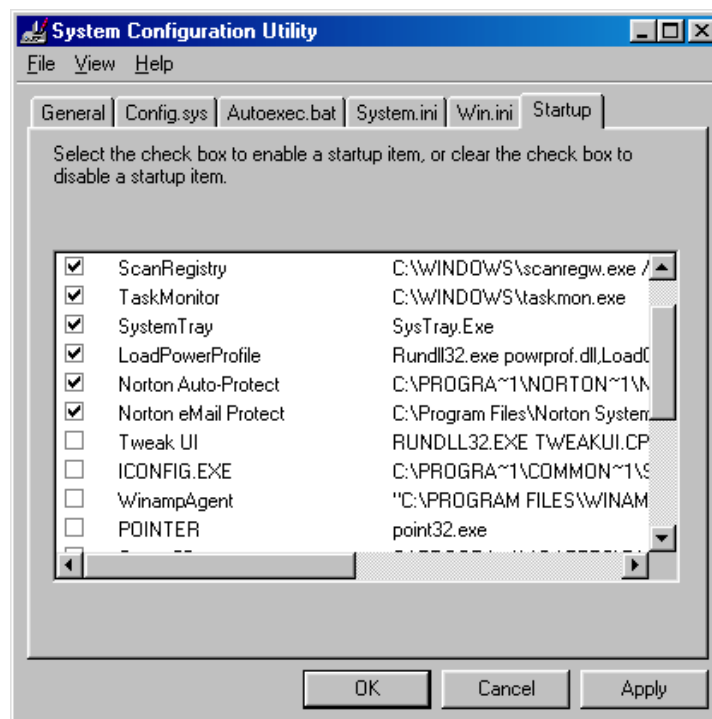
2. Type **MSCONFIG**



3. This launches Microsoft's System Configuration Utility. First, create a registry backup with the "Create Backup" button. Click on the Startup tab (the tab at the far right).



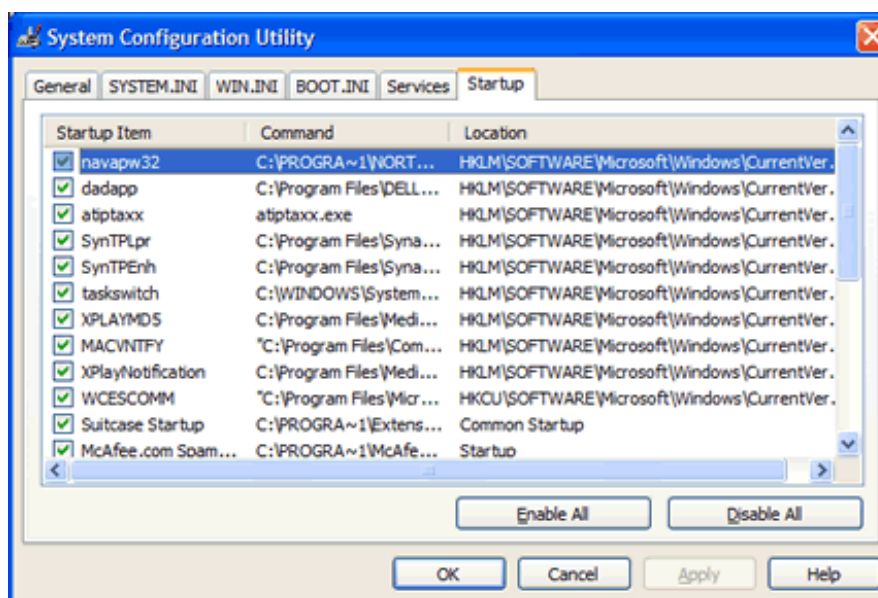
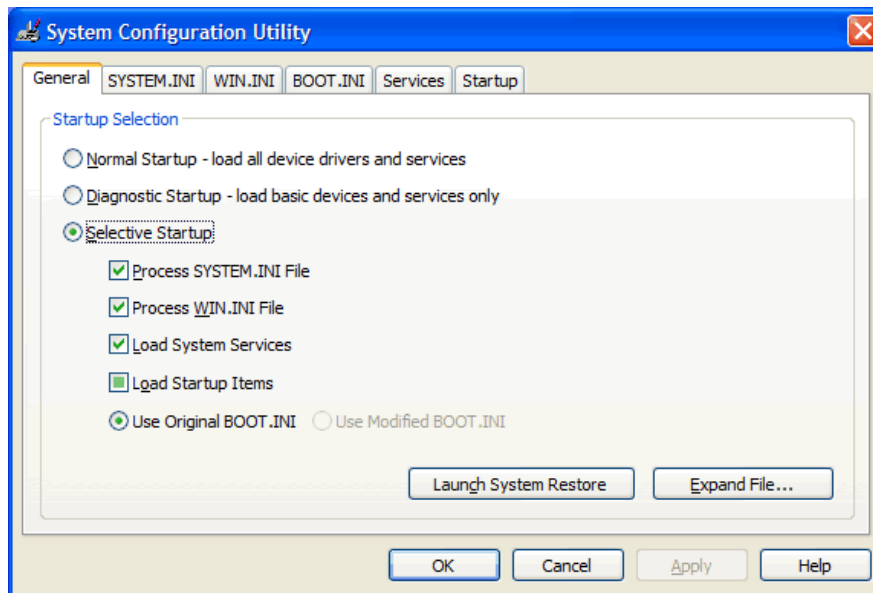
4. This takes you to a page with a list of "startup items." Startup items are programs that are automatically loaded every time you turn on your computer. Some startup programs are absolutely necessary; others are simply a waste of RAM.



The only startup items you absolutely need are:

- ScanRegistry
- TaskMonitor
- SystemTray
- LoadPowerProfile
- Your antivirus program

To run the System Configuration Utility in XP, once again go to **Start -> Run** and then browse to "C:\WINDOWS\pchealth\helpctr\binaries\msconfig.exe". In XP, all of Windows essential programs are loaded through "Windows Services." However, there is a Startup tab, just like in Windows 9X. Click on the Startup tab (the tab at the far right).



Look under the "Command" column to locate the file on the hard drive.

## **What do I do now?**

You've reviewed the lists and there are a number of entries you're not certain about. Some of these startup items are optional; others may be some type of malware. How can you tell? Look up and verify the file names listed in MSCONFIG using the databases provided by any of the following web sites:

- Comprehensive List of Startup Applications: <http://www.sysinfo.org/startuplist.php>
- Commercial Scumware Software List: <http://doxdesk.com/parasite>
- Malware List: <http://www.liutilities.com/products/wintaskspro/processlibrary>

The ones that are not needed can be disabled by clearing the check mark next to them in MSCONFIG. This action prevents them from starting up when the computer starts. If you want or need to have it start later, simply restore the check mark. When in doubt, leave it alone. By preventing these programs that are rarely used from running, your PC's performance is usually increased.

## **Virus or Malware**

Although I know that every user in this group religiously uses and updates their anti-virus software, occasionally something slips through. Keeping up with Microsoft's Security Updates and Patches is a necessity. However, if you discover that you do have a pest infestation, either malware or a virus, take the appropriate action.

### **Virus Removal:**

- AVG: [http://www.grisoft.com/us/us\\_dwnl\\_free.php](http://www.grisoft.com/us/us_dwnl_free.php) (Freeware)
- Avast 4 Home: [http://www.avast.com/eng/avast\\_4\\_home.html](http://www.avast.com/eng/avast_4_home.html) (Freeware)
- McAfee: <http://us.mcafee.com/>
- Panda: <http://www.pandasoftware.com/>
- Symantec: <http://www.symantec.com/>

### **Spyware / Malware**

- Ad-Aware: <http://www.lavasoftusa.com/>
- CW Shredder: <http://www.spywareinfo.com/~merijn/downloads.html>
- HiJackThis: <http://www.spywareinfo.com/~merijn/downloads.html> (File diagnostic tool - Use with care!)
- Spybot: <http://www.safer-networking.org/>