

SUPERSIZE THE SWAP FILE TO GET MORE SPEED AND RELIABILITY FROM "WINDOWS XP", "WINDOWS VISTA", AND "WINDOWS 7"

Objective and Desired Result:

If you have some extra hard drive space or multiple hard drives or multiple NTFS partitions on a hard drive, you can use the extra hard drive space to speed up your "Windows.." computer by supersizing the swap file.

64-BIT VERSIONS OF WINDOWS

If you have 64-bit versions of "Windows..", you can go to "Control Panel"-->"System" --> "Advanced System Settings" --> "Settings" in "Performance"-->"Advanced" tab -->"Change" in order to supersize a "Custom" swap file.

Experiment with different sizes to see how they affect the speed of a specific computer. We have utilized swap files as small as 10000 Megabytes (=10 Gigabytes) and as large as 200000 Megabytes (=200 Gigabytes).

If hard drive space is not an issue, we always set a "Custom" sized swap file and we set both the "Initial size" and the "Maximum size" to the same value in order to prevent the swap file(s) to cause hard disk defragmentation.

32-BIT VERSIONS OF "WINDOWS XP"

If you have 32-bit versions of "Windows XP", you usually have to edit the "boot.ini" file by adding

/PAE

to the "Operating System" entry, prior to setting a swap file that is greater than 4095 Megabytes (=4 Gigabytes).

"PAE" stands for "Physical Address Extension" is a Windows kernel extension. In rare instances, you might encounter a processor chip that does not support "PAE" and your computer will only boot in "Safe Mode" with a press of the F8 key during bootup. Once you get into "Safe Mode", you would then have to edit the "boot.ini" file to remove the

/PAE

that you entered in earlier.

You might have to temporarily turn on "Show hidden files, folders, and drives" and temporarily turn off "Hide protected operating system files" in "Folder Options" in the Windows "Control Panel" prior to editing the "boot.ini" file.

If you are running Windows XP inside an "Oracle VM VirtualBox" virtual machine, prior to editing the "boot.ini" file, you will probably have to turn on

"Enable PAE/NX" as follows:

Use the right mouse button to click on the "Windows XP" virtual machine in the "Oracle VM VirtualBox Manager" window.

Select "Settings" from the pop-up context menu.

Click on the "System" selection of the "Settings" box.

Click on the "Processor" tab.

Put a checkmark in the box to the left of "Enable PAE/NX", if there is not one already.

Click on the "OK" button of the "Settings" box.

32-BIT VERSIONS OF "WINDOWS VISTA" OR "WINDOWS 7"

If you have 32-bit versions of "Windows Vista" or "Windows 7", you can use the "EasyBCD" software utility to "Force On" PAE:

"EasyBCD" is free for "private, non-commercial use".

On versions 2.1 and higher of "EasyBCD" are capable of performing a "Force On" for "PAE" for 32-bit versions of "Windows Vista" or "Windows 7".

Go to <http://neosmart.net/dl.php?id=1>

Click on the text that says "Download free for limited, non-commercial use" near the bottom of this Web page.

Install the "EasyBCD" program into your computer.

Start the "EasyBCD" program.

Click on "Advanced Settings".

Click on the "Advanced Tab".

Used the drop-down list button at the right end of the "PAE Support" field to select "Force Enable".

Click on "Save Settings".

Reboot your computer.

Now you can go to

"Control Panel"-->"System" --> "Advanced System Settings" --> "Settings" in "Performance"-->"Advanced" tab -->"Change" in order to supersize a "Custom" swap file.

32-BIT VERSIONS OF "WINDOWS XP" INSIDE AN "ORACLE VM VIRTUALBOX" VIRTUAL MACHINE

If you are running Windows XP inside an "Oracle VM VirtualBox" virtual machine, you will probably have to turn on "Enable PAE/NX" as follows:

Use the right mouse button to click on the "Windows XP" virtual machine in the "Oracle VM VirtualBox Manager" window.

Select "Settings" from the pop-up context menu.

Click on the "System" selection of the "Settings" box.

Click on the "Processor" tab.

Put a checkmark in the box to the left of "Enable PAE/NX", if there is not one already.

Click on the "OK" button of the "Settings" box.

ADDITIONAL TWEAKS TO SPEED UP SLUGGISH "WINDOWS.." COMPUTERS

Speeding up Windows 7:

http://aztcs.org/meeting_notes/winhardsig/speedupWindows/windows7speedup/windows7speedup.html

Speeding up Windows Vista:

http://aztcs.org/meeting_notes/winhardsig/speedupWindows/vistaspeedup/vistaspeedup.html

Speeding up Windows XP:

http://aztcs.org/meeting_notes/winhardsig/speedupWindows/xp_speedup.pdf

APPENDIX 1

SWAP FILE IN "WINDOWS 98" AND "WINDOWS ME"

In "Windows 98" and "Windows Me", increasing the swap file can have the self-defeating effect of slowing down your computer unless you add the following line to the system.ini file of the root of the C: hard drive:

```
ConservativeSwapFileUsage=1
```

See

http://www.gilsmethod.com/optimize_swap_file