

Re: The /3GB Switch..

Source:

<http://www.tech-archive.net/Archive/WinXP/microsoft.public.windowsxp.basics/2009-02/msg00219.html>

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If Adobe tells you that Photoshop is LARGEADDRESSAWARE (which I am quite sure it is) and if you have a large amount of RAM (which you do have) I have no doubts that Photoshop should benefit from the use of the switch. If you want you can create a second entry in the boot.ini file which would allow you to select to boot Windows with or without the switch. You can also fine tune the 4GT option with the use of the /userva switch:

How to use the /userva switch with the /3GB switch to tune the User-mode space to a value between 2 GB and 3 GB

<http://support.microsoft.com/kb/316739>

John

JD wrote:

After reading that, I'm not so sure I need to /3GB switch. I was just doing it for Photoshop and Photoshop is running OK now. Thanks for the link!

John John (MVP) wrote:

The /3GB switch doesn't directly allow the application to access more RAM as such, it allows applications to have a greater share of the 32-bit Virtual Address Space which in turn may allow them to have a greater share of physical RAM.

On workstations the greatest concern is probably that the reduction in the available Non-Paged Pool (the RAM which cannot be paged) may seriously affect drivers, especially poorly written drivers. On servers the greatest concern is usually the severe drop in the Free PTE's which may affect the server's ability to map system pages. You will find answers to many of your questions in the following article:

Memory Management – Demystifying /3GB

<http://blogs.technet.com/askperf/archive/2007/03/23/memory-management-demystifying-3gb.aspx>

John

Re: The /3GB Switch..

JD wrote:

Any downside to using the /3GB switch?

I manage my pagefile. I have a pagefile on my C: drive, 2046 – 4989 and I have a pagefile on my second hdd, G: 2046 – 4989. Both drives have multiple partitions. C,D and E on drive 0, F and G on drive 1.

John John (MVP) wrote:

It doesn't really matter where you put the switch in the boot.ini file, as you posted
.../noexecute=optin /fastdetect /usepmtimer
/3GB will be ok.

John

JD wrote:

I'm using Windows XP, home edition, SP3 and I'd like to try using the /3GB switch to use more of my 4GB of RAM for Photoshop.

My notes indicate: On systems that have 1 GB or more of physical memory, two startup switches can be used to allocate more memory to applications (3 GB) and less memory to the operating system (1 GB).

The /3GB switch is used to effect this allocation change. The switch is entered in the system's boot.ini file and takes effect after a restart.

C:\boot.ini

[boot loader]

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```
timeout=30
default=multi(0)disk(0)rdisk(0)partition(1)\WINDOWS
[operating systems]
multi(0)disk(0)rdisk(0)partition(1)\WINDOWS="Microsoft
Windows XP Home
Edition" /noexecute=optin
/fastdetect /3GB
```

The last line of my boot.ini
file looks like this:

```
Edition" /noexecute=optin
/fastdetect /usepmtimer
```

The AMD driver for my X2
dual core processor added
the /usepmtimer , because
the default processor
timestamp-counter (TSC) is
not synchronized properly
between cores, and causes
certain applications to run at
double speed.

So where do I put the /3GB?

Do I make the last line of
my boot.ini look like this?

```
Edition" /noexecute=optin
/fastdetect /usepmtimer
/3GB
```

Is this going to work or am I
just asking for trouble?

Thanks.