

## Re: 4GBs of RAM Miscount

---

*Source:*

<http://www.tech-archive.net/Archive/Windows/microsoft.public.windows.server.sbs/2007-04/msg00098.html>

---

- *From:* "Daniel Jewel" <[cyberdudeiq@xxxxxxxxxxxxx](mailto:cyberdudeiq@xxxxxxxxxxxxx)>
  - *Date:* Sun, 1 Apr 2007 21:27:32 -0300
- 

SuperG,  
no luck yet...I added a seconf line (as a caution) and added the following switches /PAE /3GB  
OS still shows RAM to 2.87 GB  
Could it be the order of the switches ?

Dan

"SuperGumby [SBS MVP]" <[not@xxxxxxxxxxxxx](mailto:not@xxxxxxxxxxxxx)> wrote in message  
[news:ODsK1VLdHHA.4516@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:news:ODsK1VLdHHA.4516@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx)

I know of no adverse affects beyond discussions easily found at support.ms but those discussions are generally dealt with by current SP levels or deal with particular behaviours/circumstances.

Most of my sites are <20 users and the only heavy SQL site is still on SBS 2000, I haven't found it necessary to run 4GB. My personal opinion is that 2GB is a 'sweet spot' for SBS, covering a wide range of use. I would recommend more today but most of my client's systems have been in operation for some time. Long winded way of saying 'no', right?-) )

I suppose a cautious person would create a second boot.ini line, allowing the system to be started with/out PAE. Not sure, but I think 'safe mode' would be possible anyway.

"Daniel Jewel" <[cyberdudeiq@xxxxxxxxxxxxx](mailto:cyberdudeiq@xxxxxxxxxxxxx)> wrote in message  
[news:OG9YRKLdHHA.420@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:news:OG9YRKLdHHA.420@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx)

Many thanks SuperG !

have you ever applied the switch to a SBS 2003 box? The Server is beginning to work reasonably well now...and I just don't wanto to screw things up...to the best of your knowledge, do you think the switch will not screw things up?

tk,  
Dan

"SuperGumby [SBS MVP]" <[not@xxxxxxxxxxxxx](mailto:not@xxxxxxxxxxxxx)> wrote in message

Re: 4GBs of RAM Miscount

news:u7NyM2KdHHA.4344@xxxxxxxxxxxxxxxxxxxxxxxxxxxx

Daniel, please add the /PAE switch to your boot.ini line but also be aware of <http://support.microsoft.com/kb/834628/en-us> (and other articles viewable by plugging '2003 PAE' into the search box at <http://support.microsoft.com>) and let us know how much memory SBS reports.

This does not necessarily 'cure' your problem, TTBOMK it requires certain criteria to be satisfied which may include CPU, motherboard, and device capabilities.

The idea is that /PAE allows the system to move the reserved space for the devices out of the base 4GB, making the 4GB (or most of it) available to the OS. It does however have an impact on performance, it increases the 'pointers' for memory handling to allow 32b systems to access outside the 4GB flat memory model. Do you get better performance from the increased memory or by running without PAE and living with the reduced amount? If it works with your system we'll see :-)

<http://blogs.msdn.com/oldnewthing/archive/2004/08/18/216492.aspx>  
Myth: PAE increases the virtual address space beyond 4GB

and I'm sure there's a discussion of this on one of the SBS blogs but I've checked Susan, Sean, SBSdocs, and the 'Official' without luck

"Daniel Jewel" <cyberdudeiq@xxxxxxxxxxxx> wrote in message  
news:%23u9A\$MKdHHA.4172@xxxxxxxxxxxxxxxxxxxxxxxxxxxx

Many thanks Charlie,

had I only purchased 3 GBs of RAM would have the same impact on the overall performance?  
If yes, that means I threw 1 GB of RAM out the window...?

Re: 4GBs of RAM Miscount

Dan,

"Charlie Russel – MVP"

<charlie@xxxxxxxxxxxxxxxxxxxxxxxx>

wrote in

message

[news:AAAC4A14-5AF9-4C56-977F-7F85E7C686E0@xxxxxxxxxxxxxxxxxxxxx](mailto:news:AAAC4A14-5AF9-4C56-977F-7F85E7C686E0@xxxxxxxxxxxxxxxxxxxxx)

This is a direct byproduct of the limited flat memory space available to 32-bit Windows. The BIOS reserves space for PCI card BIOS and memory mapping below 4GB. Because of this, access to RAM in that memory space is blocked. With a 64-bit OS this can be remapped above 4GB, eliminating the problem. And many BIOS have the ability to reduce this hit with one of several configuration changes.

--

Charlie.

<http://msmvps.com/xperts64>

"Daniel Jewel"

<cyberdudeiq@xxxxxxxxxxxx>

wrote in message

[news:OYg7W68cHHA.2088@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:news:OYg7W68cHHA.2088@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx)

hello all,

this is the  
first time I  
see this  
(usually  
don't go  
over 2 GBs)  
that  
tere are  
4GBs  
installed but  
the OS  
(SBS2003

Re: 4GBs of RAM Miscount

R2  
Premium  
SP2) only  
shows  
2.87GB...I  
have  
nothing  
sharing the  
main  
RAM...

Also, do I  
have to add  
some sort of  
switch in  
boot.ini or  
someplace  
else?

Thanks,

Dan