

Re: 4GBs of RAM Miscount

Source:

<http://www.tech-archive.net/Archive/Windows/microsoft.public.windows.server.sbs/2007-04/msg00174.html>

- *From:* "Charlie Russel – MVP" <charlie@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>
 - *Date:* Sun, 1 Apr 2007 19:46:12 –0700
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You would then also need to modify the BIOS to tell it to try to put those up out of the way. Something about a "reserved memory hole?" I can't check any of my boxes, I'm on the road and only my laptop. Which tops out at 2GB.

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Charlie.

<http://msmvps.com/xperts64>

<http://mvp.support.microsoft.com/profile/charlie.russel>

"Daniel Jewel" <cyberdudeiq@xxxxxxxxxxxxx> wrote in message
[news:e1gV\\$2LdHHA.420@xxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:news:e1gV$2LdHHA.420@xxxxxxxxxxxxxxxxxxxxxxxxxxxx)

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> wrote in message
news:ODsK1VLdHHA.4516@xxxxxxxxxxxxxxxxxxxxxxxxxxxx

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> wrote in message

Re: 4GBs of RAM Miscount

news:OG9YRKLdHHA.420@xxxxxxxxxxxxxxxxxxxxxxxxxxxx

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?
tks,
Dan

"SuperGumby [SBS MVP]" <not@xxxxxxxxxxxx> wrote in message

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"

Re: 4GBs of RAM Miscount

<cyberdudeiq@xxxxxxxxxxxx> wrote in message

[news:%23u9A\\$MKdHHA.4172@xxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto: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...?

Dan,

"Charlie Russel – MVP"

<charlie@xxxxxxxxxxxxxxxxxxxxxxxx>

wrote in message

news:AAAC4A14-5AF9-4C56-977F-7F85E7C686E0@xxxxxxxxxxxxxxxxxxxx

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,

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eliminating
the
problem.
And many
BIOS have
the ability
to reduce
this hit with
one of
several
configuration
changes.

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Charlie.
<http://msmvps.com/xperts64>

"Daniel
Jewel"
<cyberdudeiq@xxxxxxxxxxxx>
wrote in
message
<news:OYg7W68cHHA.2088@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>

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

Re: 4GBs of RAM Mismatch