

Vista reports less memory than installed

By Ken Foster 9/1/2008

Ever noticed that most new computers that have Vista 32 bit installed only come with 3Gb of Ram installed? Doesn't that seem odd? In the past, you always installed RAM in even sets, 512Mb, 1Gb, 2Gb, etc.. Well this is due to a memory addressing issues that still remains in the 32 bit operating system space that affect addressing beyond 3 Gb. This article will show you a free and simple way to allow your computer to see all its memory. {more...}

What's the issue?

Depending on your hardware (a 64bit processor is required), you may run into a situation where you're Bios reports 4 Gb or more of memory, but Windows Vista will only report approximately 3GB. This has to do with a memory mapping issue inherent in all 32 bit OS. The most common example of why this happens is increased memory of Video cards, which the OS must reserve memory address space.

Now What?

Well, there is a solution. Its hardware dependant and now necessarily support by Microsoft. In an effort to address this issue, Microsoft developed the Physical Address Extension (PAE) driver that allows certain OS's to work around this limitation. Microsoft provides a brief overview for those interested.

Instructions:

Rather than rewriting these instructions, I am going to direct you to the site I used when I performed these steps. Alan McCloskey does an excellent detailed this procedure. As with all unsupported procedures, there is no guarantee will work or that you may not run into other issues as a result. Please read the article in its entirety and evaluate your situation and the risks before proceeding.

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