

[Feed 4 GB of RAM to 32-bit Windows Vista](#)

No more memory limitations

It's a known fact that 32-bit platforms have limitations when it comes to address volumes of memory larger or equal to 4 GB. And in this respect, the [x86 editions of Windows Vista](#) are no exception. Vista will literally eat up RAM, swallowing a consistent amount, larger than 500 MB in the scenario where you would run a 32-bit edition of the operating system on a configuration with 4 GB of RAM.

Windows Vista's memory manager in the x86 variants of the operating system is restricted to 4GB of memory due to the limitations of the 32-bit hardware. The 32-bit address range cannot be filled exclusively with RAM, because the physical address space needs to be divided among the hardware in your system.

Due to these limitations, 32-bit Windows Vista will only be able to address approximately 3.5 GB of RAM. However, there is a way around this. One that will enable you to enjoy the full extent of 4 GB of memory. Still, you should be aware of the fact that in the vicinity of 4 GB of memory, 32-bit Windows Vista will not manage RAM efficiently.

If you indeed want or need to use more than 4 GB of RAM, then you should consider switching to 64-bit platforms. The 64-bit editions of Windows Vista deliver support for as much as [128 GB of memory](#), so you can go all out.

But as far as 32-bit versions of the operating system are concerned, all you have to do is access cmd via Start, then enter cmd in the search bar and make sure you run it with administrative privileges. Next simply type "BCDEdit /set PAE forceenable" and hit enter. This command will enable Physical Address Extension (PAE) in 32-bit Windows Vista, and the operating system will be able to address memory larger than 4 GB. Via BCDEdit, you will be able to configure the boot configuration data store via the command line.