Windows Vista

Windows Vista ReadyBoost Technology for USB Drives
Data furnished By Microsoft, Presented by Ron Mettler
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A package received by CUGG recently from Microsoft included the following information regarding the use of a USB flash drive as a memory boost to computers running Vista. The explanation indicates that Vista has a feature that can be enabled when a flash drive is plugged into a USB port. A Google search for "ReadyBoost enhanced" included a link that lists compatible jump drives. It appears that some SD and CF memory cards are also ReadyBoost compatible. Go to http://www.grantgibson.co.uk/misc/readyboost/ for the listing.

The Kingston and SanDisk 1 GB USB drives that I recently purchased for $20 each are on the list of compatible Jump drives.
If you are contemplating an upgrade to a Vista equipped computer, this may be a very inexpensive way to enhance the performance.

Windows ReadyBoost ™

Adding system memory (RAM) is often the best way to improve your PC's performance. More memory means applications can run without needing to access the hard drive. However, upgrading memory is not always easy. You need to know what type of memory you need, purchase the memory, and open your computer to install the memory—which sometimes can invalidate your support agreement. Also, some machines have limited memory expansion capabilities, preventing you from adding RAM even if you are willing to do so.

Windows Vista introduces a new concept in adding memory to a system. Windows ReadyBoost lets users use a removable flash memory device, such as a USB thumb drive, to improve system performance without opening the box. Windows ReadyBoost can improve system performance because it can retrieve data kept on the flash memory more quickly than it can retrieve data kept on the hard disk, decreasing the time you need to wait for your PC to respond. Combined with SuperFetch technology, this can help drive impressive improvements in system responsiveness.

Windows ReadyBoost technology is reliable and provides protection of the data stored on your device. You can remove the memory device at any time without any loss of data or negative impact to the system; however, if you remove the device, your performance returns to the level you experienced without the device. Additionally, data on the removable memory device is encrypted to help prevent inappropriate access to data when the device is removed.

System Requirements

To use Windows ReadyBoost, PCs must be preinstalled with Windows Vista™ and have access to a non-volatile flash memory buffer with at least 1GB of storage capacity. The flash memory buffer must also meet the requirements for random reads and random writes specified in the Windows Vista Logo "Storage-0009 WLP" specification:
- 5 MB/sec throughput for random 4k reads across the entire device
- 3 MB/sec throughput for random 512k writes across the entire device

Frequently Asked Questions

Q. How do I enable the Windows ReadyBoost feature?
A. You must be running Windows Vista to take advantage of the Windows ReadyBoost feature. Once the flash device is plugged into a Windows Vista PC, the AutoPlay dialogue box will launch. If the flash device is Windows ReadyBoost-capable an option to "Speed up the system" will be displayed. Clicking on the "Speed up my system" option will allow you to allocate the amount of storage available to improve system performance. Flash devices that use the "Enhanced for ReadyBoost" Trademark meet the minimum requirements to take advantage of this feature.

Q. Is this Windows ReadyBoost a replacement for adding more RAM?
A. No, using Windows ReadyBoost is not the same thing as adding more system memory. While adding more system memory is often the best way to improve a PC's performance, upgrading memory can be difficult and costly. ReadyBoost is a simpler alternative for improving system responsiveness.

Q. What does it mean to be "Enhanced for Windows ReadyBoost™?
A. The phrase "Enhanced for Windows ReadyBoost" will be used to market flash devices that are large enough and fast enough to consistently work with Windows ReadyBoost. A drive that is Enhanced for Windows ReadyBoost must be at least 512MB and must have random read and random write speeds of 5MB/sec and 3MB/sec, respectively.

Q. What kind of performance gains will Windows ReadyBoost give me?
A. The amount and type of gains will differ based on the configuration of your PC and how you use your PC. For instance, if you have a lot of system memory and aren't in the habit of keeping many Windows open at once, the gains will be more modest. But if you find yourself switching between applications frequently then ReadyBoost will have a more beneficial effect on your experience.

Q. How much flash memory should I allocate to Windows ReadyBoost when I first set it up?
A. We recommend taking the default value specified by the system. This will devote most of the flash drive to Windows ReadyBoost, but leave room for storing files on the flash device as well.