

Desktop Performance Solutions

The problem There are many areas of a computer system that can cause it to run slowly. Some examples are: the CPU's performance, the motherboard's bus speeds, the amount of RAM, the network connection or even the video card. However, the slowest component is normally the hard drive. Why? Because it relies on mechanical parts while the rest of a computer's components that process data are entirely electronic. A slow down caused by the hard drive is called a "disk I/O bottleneck" and is quite common.

Bottlenecks If your desktop or laptop system seems to be running slowly, then you may have a disk I/O (Input/Output) problem or bottleneck. A bottleneck occurs when some component of your computer system can't keep up with the others. Typically one computer component will be working at its maximum speed, forcing other, faster components to repeatedly wait for a response from it before continuing their own tasks. Consequently, a disk I/O bottleneck can severely lower overall system performance.

How can you determine if you have a disk I/O bottleneck? If your system seems to be slow all the time, then the problem may be insufficient RAM. Windows XP needs at least 256 MB to run well. If the computer is several years old, you may be trying to do more than what the hardware is capable of. Consider upgrading the hardware (e.g. new and faster CPU, more RAM, video card, etc.), or possibly replacing the computer.

On the other hand, does your system only seem to slow down while performing particular tasks? Look at the hard drive activity light. Is the light steadily flashing while performing these tasks? If the answer is yes to both these questions, then you probably have a disk I/O bottleneck. This kind of performance degradation occurs with applications or programs that heavily rely on the hard disk, such as games, image editors, database, etc.

The solution Our patented cache, hybrid cache, and RAM disk products are designed to remove specific kinds of disk performance bottlenecks. They do this by intelligently using your computer's memory and processor to reduce the work of the hard disk. With sufficient system memory and the appropriate product and configuration, the throughput or responsiveness of your machine may improve by many times.

The following table indicates the products many desktop users have found beneficial for particular applications or programs:

PERFORMANCE SOLUTIONS USING SUPERSPEED PRODUCTS

Application/Product	SuperCache	SuperVolume	RamDisk	RamDisk Plus
Database	✓	✓	✓	✓
Software Development	✓		✓	✓
Streaming Media		✓	✓	
Speech Recognition	✓	✓ ¹		
Graphics	✓ ¹	✓	✓	✓
Games	✓ ¹	✓		✓
Web Browser			✓	
Page File	✓	✓ ¹		

✓¹ For specialized applications this product can enhance performance.