

Title:

How to Avoid Hard Drive Overheating

Word Count:

514

Summary:

Although there are several different reasons why a hard drive can fail, the most common is overheating. Viruses and crashes are common as well, along with theft and accidental deletion.

Keywords:

hard, drive, hard drive, drives, hard drives, overheating, platters, data, common, fans, damaged, drive overheating, cool, overheating read write

Article Body:

Even though the hard drive stores data, it isn't perfect by any means. Hard drive failure is very common with all computers, with no real way to prevent it. Although there are several different reasons why a hard drive can fail, the most common is overheating. Viruses and crashes are common as well, along with theft and accidental deletion.

With the older style and mechanics of hard drives, the RPM speed was low, meaning that the drives wouldn't overheat. The hard drives we use now days, have speeds between 7,200 and 10,000 RPM, meaning that they can get quite hot when they start working. Computers of this day and age come with fans to cool everything down, with most hard drives including temperature sensors as well, so you can keep track of just how hot your hard drive becomes.

With hard drives today, overheating is a very common problem. The faster hard drives come with speeds of 10,000 RPM, which can make the temperature soar above 70 degrees F, really heating things up inside the drive. The mechanics on the inside are built to withstand the heat, although if things become too hot, you'll encounter problems. If a drive becomes too hot and ends up losing the data, it may be next to impossible to retrieve the information - no matter how good your data recovery specialists may be.

One area that suffers from the drive overheating is the platters, which are magnetic media. Platters are what carry the data throughout the hard drive. Platters are constructed from optical glass, aluminum, or ceramic and normally coated with a layer of magnetic material. Once the hard drive begins to heat up,

the platters will start to expand, which changes their size. When this happens, the magnetic surface on the platters will get destroyed, which results in a loss of data. If the physical area of the platters are damaged, it will result in unreadable sectors.

Other areas of the hard drive that can be damaged due to overheating are the read and write heads, head actuator, and the controller chip. Hard drives are very sophisticated pieces of hardware, and can't handle overheating. The read and write heads are a common example, as they can easily render the drive useless if they become damaged.

To prevent your hard drive from overheating, you should always make sure that it is cooled properly and well ventilated. You can always get additional fans and coolers, which will improve both ventilation and the flow of air in your computer. You can buy fans and coolers at very affordable prices, which makes them an ideal investment for keeping your hard drive or hard drives cool.

You can also get software that monitors the temperature of your hard drive as well. Whether it's software, or additional fans, you should always ensure that your hard drives are kept cool. By keeping them cool, you'll greatly reduce the amount of crashes. You'll also increase the stability of your hard drive as well, which will make your entire computer perform much better.