

Data Loss Following Hard Disk Crash

Among all the hardware-oriented problems, hard drive failure is the single greatest reason for causing data loss.

What is Hard Disk Crash?

When the hard disk stops functioning due to a physical or logical error, we say that the hard disk has crashed. This means that the data inside the disk is now inaccessible. Once the hard disk has been attended to, the data may be restored. But, for the time being, the computer won't work as it is supposed to. We will be dealing with this in detail below, but to put it in a nutshell, if your computer is not booting, it's better to ask for help and not tinker around with it.

Why Does it Happen?

Hard disk crash can happen due to a number of reasons. Broadly speaking, these factors can be divided into two groups, physical and logical. The former involves hardware-related issues while the latter involves problems that have something to do with software.

A. Physical Reasons for Data Loss

We cannot see the disk itself unless we break the casing and take it out – which is a very difficult task, and should not be attempted under any circumstances. But a hard drive is susceptible to dust, water, heat, humidity, moisture, temperature fluctuations and shock.

Natural calamities such as earthquake, fire, flood, or any other such event will cause damage to the hard disk as well. Terrorist attacks may destroy data too. A modern disk is hardier than before, and can withstand heat up to the melting point of iron, beyond which the data will simply melt. It can also stand impact up to a certain level, but this depends on the height from which it falls. This does not mean you can try experimentally dropping a disk to see if something happens to it.

A disk may lose data through power fluctuations or electrostatic discharge. This can happen if a bolt of lightning strikes your house too, or you do a sudden shutdown.

A disk may not respond if the read or write head or any other hardware component is damaged.

B. Logical Reasons for Data Loss

Data loss can happen when the Operating System of your computer crashes.

It can be caused by virus. Hackers can cause a disk to crash through various innovative tactics.

Accidental deletion and formatting of disk is a simple and sad way to lose all data at a go.

Extreme fragmentation of a file may result in its corruption to the extent where it is lost. If the file is fragmented to a point where it is not possible to piece together its contents anymore, chances of recovery are very slim.

Symptoms of a Disk Crash

How do you know when the disk is about to crash? Here are some common symptoms.

The machine refuses to boot. It displays a blank blue screen only and does not take DOS prompt either.

There are unfamiliar humming and crunching noises coming from the machine.

There seems to be less space though you have performed disk clean up.

There are too many bad sectors cropping up.

Several files are refusing to open, the screen keeps hanging, some files are corrupt etc.

How to Recover Data

If you have experienced data loss through hard disk crash, there are two options left to you.

If it has been caused by a software problem such as virus attack or accidental formatting, you can try out DIY software available on the net as downloads. But if you are not sure of how to use it, get someone else to operate it.

If it is a hardware problem or you are simply unsure of the cause, call a professional data recovery company to help you.

How to Avoid Data Loss through Hard Disk Crash

Prevention is better than cure. So to avoid data loss, follow simple steps such as:

Take regular backups on CDs etc.

Save data online by mailing yourself.

Do not put data on the same drive with the OS.

Maintain a recovery disk for laptops.

Regularly update your antivirus software. Install a firewall and make sure it is updated.

Do not open suspicious attachments.

About the Author

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Source: <http://www.articletrader.com>