

I could easily fill this page with expletives that have been used when an innocent hard disk gives up the ghost, goes belly up and journeys skyward to hard disk heaven. These words are usually louder and accompanied by banging and (often) whimpering when that crucial backup that was promised was ignored in favour of "getting stuff done".

Thankfully all is not lost. Actually in 99% of cases nothing is lost - all the data is still there it's just a case of getting at it.

A good analogy for a Hard Disk is that of an old vinyl record player. The data is written onto platters which are the equivalent of the record (except there is more than one). A data reading head shoots across the platter reading the data just like the needle of the record player but much faster. When the Hard Disk crashes one of two things usually happens. Either the head crashes or it loses synchronisation with the data. If the head has crashed the needle has analogously hit the record and damaged it. You can usually tell if the head has crashed as the drive will make some fairly odd noises. Often if you shake the drive gently you can hear things moving around. If this is the case it's time to find a good data recovery lab where the platters can be removed and placed in a new drive. This must be done in a "clean room" which is essentially a sealed room with no dust. It must be done by professionals who know how delicate the operation is. Unfortunately, all this costs money and you should expect to pay upwards of 300 bucks.

However, in the majority of cases there is little physically wrong with the drive. It has just lost synchronisation with the data or the data has become corrupt in some way. If this is the case all you need to do is have someone read the gobbledegook from the drive then re-format the drive and put your operating system back on. Or you could try doing it yourself.

I run a computer repair company in Vancouver BC. It alarms me the number of people who are about to pay \$400 to a data recovery company (and wait a week) when I can get their data back in 10 minutes at their house for \$25. I have to be careful and ensure that the head has not crashed as the process I use to get the data back could easily damage the platters further. I also ask people to evaluate the risk. If they have some data that their life depends on then I refer them to a reputable data recovery company.

At the end of the day it's all a question of what your data is worth. If it's just some recent family photos are they really worth 400 bucks. If it's your PHD thesis and there is no backup then yes, send it to a data recovery company.

I mentioned earlier that you could do the process I do yourself. In this case you will need another hard disk to put a new operating system on. Next make the dud disk a slave (move the jumpers on the disk). Now in 'My Computer' you should see both disks. If the problem was data corruption affecting your operating system then you should be able to see all your old data. Excellent. If the data is unsynchronised gobbledegook then use a program such as Filescavenger. Filescavenger looks for clues in the data to put it back together. For example word document and picture files have distinct headings. One these headings are found the rest of the file can be recovered. Job done. Filescavenger is great but currently costs around 50 bucks. A free option that I am told is reliable is [PC Inspector](#).

In summary if your hard disk has crashed you have 4 options:

- 1) Get a data recovery company to sort it at great cost
- 2) Get a roving PC repair person round to sort it at reasonable cost
- 3) Get a new/spare hard drive and fix the problem yourself at no cost
- 4) Throw your PC/Laptop in the bin and vow never to use one again

Happy Computing!

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