

Practical Skill for Seagate HDDs Data Recovery - Instant Power on Method

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There is a relatively common problem of Seagate HDDs, which is brief ready first, and then the status is long busy, any ATA commands can't be conducted. The reason why is that in background process running, HDD firmware reads the wrong data. It results in firmware system crashed.

if you want to extract data from this kind of HDD, there are two solutions. First solution has been published in public tutorial information on MRT website. For details see *Repair the breakdown of ready first and long busy of Seagate HDD*. The method in the text is to use MRT Menu *Diagnosis - Common Problems - Repair ready first and long busy status of HDD* this function to solve. This function of MRT is usually can fix this kind of problem. But there are exceptions, such as in the case of the poor writing performance of heads, it will fail. If the first solution doesn't work, then you can try the second solution: Reading data with Instant Power on Method.

Instant power on Method is to read data when the HDD just power on, without giving the opportunity for the HDD to pause. Usually, if it is successful to read data with instant power on, it can read until the whole disk image finishes. The principle: Because this breakdown is caused by firmware background process running error. Therefore, when it reads HDD data just

Let's demonstrate the instant power on method.

1. Loading module list by instant power on method.

This HDD has the problem of brief ready at first, and then when you execute any ATA order, the status is long busy. We power off it first, and then power on. When the status of HDD is about to be ready from "BSY", let's refresh the module list. We can see the module list is loaded successfully. After loading, wait a while, trying to load module list again, the status of HDD is long busy at this time. Because the firmware background process is running right now, and the error has already happened. At this point, do you fully understand the principles of the instant power on method?

2. Let's operate it in DE.

Because of this HDD is generally not well to recognize the device, we need to disable DE identification device operation. The source disk capacity should be inputted manually. We need to input the correct capacity. We power off the source disk first, and then power on.

When the status of HDD is "BSY", we start to copy data instantly. DE will wait for while and HDD will be ready. DE discovers the HDD is ready and will copy data immediately after ready. Then the mirroring image could be finished smoothly. We can see that it can copy the data now. If in the midway, the status is lost because of bad tracks, then you need to re-power off, and power on, then start the DE copy. As we can see, with instant power on method, the mirroring image of this faulted HDD can be successful. We can setup DE, in case the status is lost, then DE will automatically power off. In Timeout, please ensure that switching power supply is selected. When it is necessary, do not select the soft reset and hard reset. When the status is lost, DE will not attempt to reset, but power off and power on directly.

3. Those are the basic application of instant power on method. Beside those, it also can be used in other advanced applications occasions.

For example, there are some HDDs which have the problems of " brief ready first, and then the status is long busy" and "front sectors are good, sequent sectors are bad" at the same time. This is very difficult to deal with.

The correct approach is to use compiler recovery tools and instant power on method to deal with. This is to power on first, opening the compiler recovery tools immediately when the HDD is about to become BSY status. Input the address of bad sectors, and start to repair. It will get the repair order of "front sectors are good, sequent sectors are bad" when the HDD is just ready. Then the compiler can perform the recovery process all the way.

There are some other magical effects with instant power on method. It requires everyone to gradually accumulate experience in the process of practice.

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