Re: Replacing Notebook Hard Drive

Source:
http://www.tech−archive.net/Archive/WinXP/microsoft.public.windowsxp.hardware/2007−05/msg00457.html

- *From*: Shyster <Shyster@xxxxxxxxxxxxxxxxxxxxxxxxx>
- *Date*: Sun, 20 May 2007 22:59:00 −0700

Anna,

Thank you for your very useful advice. I cloned the old HD over to the new one this evening and, so far (fingers crossed), I've been putting it through its paces without any trouble. I used Acronis True Image Home 10, which seems to be a pretty decent piece of software. I was really grateful for your step−by−steps, but I must admit that, once I familiarized myself with the procedures based on your posts, Acronis took me through the process without a hitch. As part of doing first the backup, and then the clone, Acronis found two disk sectors that it could not read; I am assuming that those were the problems that the diagnostic tests had hit on, but did not explicitly identify as such to me.

As for the Sony VAIO, when it dies, it dies; I'm not really interested in spending a lot of time diagnosing it or fixing it, unless there's an easy, obvious answer. I asked more just to see if there might be a limited group of "sounds like ..." or "it might be ..." out there based on the description. As far as what the problem is, I'm guessing its something physical, because when it happens, I don't hear the drive spinning up at all, and the light indicating the drive is active doesn't light up. I've hoofed the thing around in a (padded) backpack for quite a few years, and I'm sure that's taken a toll on it. Right now I just wish the manufacturers would get around to putting out some new systems based on the new Intel chip release so that I can buy a replacement.

Again, thanks for all your help,

Shyster

"Anna" wrote:

> "Shyster" <Shyster@xxxxxxxxxxxxxxxxxxxxxxxxx> wrote in message
> news:AA3ADBA5−7B2F−4ECB−A6A2−AE91F649352B@xxxxxxxxxxxxxxx
>
> (reply, take 2)

Anna/Malke:

Thanks for both of your posts; you seem both experienced with, and confident
in, this procedure, which gives me a great deal of comfort. I think that, with all due respect to Malke, I will follow Anna's procedure. I believe I
recall seeing your step−by−step for Acronis on another thread, Anna, but I would be very grateful if you were willing to repost it here.

I'm going to attempt the "surgery" this week−end, so I'll post a recovery/post−mortem update on Sunday.

BTW, since I've got the experts' attention here, anyone got any ideas about
an old Sony VAIO (I think it was the first one they released, back in 2003)
that has recently developed a problem with finding the HD on startup? It started about three weeks ago as an occasional problem, but has now degenerated to the point where I usually have to restart three to five times
before it will find the HD and boot.

I'm not particularly worried about this one since I'm going to be replacing
it soon anyway. I was planning on using it as a learner once I replaced it,
including physical learning, which means it will almost undoubtedly end up being trashed in any event, so I'm willing to have a go at taking it apart if
anyone can give me a sufficiently good reason to do so. Otherwise, once the
internal drive craps out for good, I'll probably just plug in a USB HD and set that up as the boot drive.

Regards,

Shyster

Shyster:
The step−by−step instructions for using the Acronis True Image program are posted below. You'll note that these instructions contain information on both the disk cloning & disk imaging capabilities of the ATI program. In your situation at present you'll be specifically concerned with the disk cloning operation. I wanted to make that clear to you at the outset. However the information concerning the ATI disk imaging capability may be of future interest to you (and others).

Re your last comment concerning the problem you're having with the Sony

machine that "I'll probably just plug in a USB HD and set that up as the boot drive." Please understand that ordinarily a USB external HDD is *not* a bootable device. While there have been a number of reports that it is possible to achieve this desirable result, we've never been able to do so.

I'll pass on offering any advice at this point re the problems you're experiencing with that Sony PC. Perhaps at a later date you can provide more details as to the precise nature of the problem, how it arose, the hardware/software involved and any other details that would assist someone suggesting this or that course of action. And if and when you do, be as comprehensive as you can.

Step−by−Step Instructions for Using the Acronis True Image Program to Backup & Restore One's Hard Drive...

Using the Acronis True Image program there are two different approaches one can take to back up the entire contents of one's day−to−day working HDD, i.e., the operating system, all programs & applications, and user−created data − in short, *everything* that's on one's HDD...

1. Direct disk−to−disk cloning, or,
2. Creating disk images

By using either of these strategies the user can restore his or her system should their day−to−day working HDD become inoperable because of mechanical/electronic failure of the disk or corruption of the system resulting in a dysfunctional operating system.

In undertaking either of these two backup & recovery processes you're dealing with two hard drives − the so−called source & destination disks − the source disk being the HDD you're backing up and the destination disk being the HDD that will be the recipient of the cloned contents of the source disk or the recipient of the disk image you will be creating.

When using either process it's usually best for most users to use an external HDD as the destination drive, i.e., the recipient of the cloned contents of the source disk or the recipient of the created disk image. This can be either a USB or Firewire or SATA external HDD. While another internal HDD can also serve as the destination disk there's an additional element of safety in using an external HDD since that drive will be ordinarily disconnected from the system except during the disk cloning or recovery process.

One other suggestion. After you install the Acronis program on your computer it's a good idea to create what Acronis calls their "Bootable Rescue Media" (CD). In most cases the recovery process (described below) will utilize that Acronis bootable CD to restore your system. This "rescue" CD is easily created from the program by clicking on the "Create Bootable Rescue Media" icon on the opening Acronis screen and simply going through the screens to create the bootable CD. The following are step−by−step instructions for using the Acronis True Image 9 program to clone the contents of one HDD to

an external HDD. (The steps are essentially the same using the newer ATI 10 version):

1. With both hard drives (source & destination disks) connected, boot up. Ensure that no other storage devices, e.g., flash drives, ZIP drives, etc., are connected. It's also probably a good idea to shut down any programs you may have working in the background − including any anti−virus anti−spyware programs − before undertaking this disk−to−disk cloning operation.

2. Access the Acronis True Image 9 program and under "Pick a Task", click on "Clone Disk". (In the ATI 10 version click on "Manage Hard Disks" in the "Pick a Tool" area and on the next screen click on "Clone Disk").

3. On the next "Welcome to the Disk Clone Wizard!" window, click Next.

4. On the next "Clone Mode" window select the Automatic option (it should be the default option selected) and click Next.

5. On the next "Source Hard Disk" window, ensure that the correct source HDD (the disk you're cloning from) has been selected (click to highlight). Click Next.

6. On the next "Destination Hard Disk" window, ensure that the correct destination HDD (the disk you're cloning to) has been selected (again, click to highlight). Click Next.

7. On the next window, select the option "Delete partitions on the destination hard disk". Understand that all data presently on the disk that will be the recipient of the clone will be deleted prior to the disk cloning operation. Click Next.

8. The next window will reflect the source and destination disks. Again, confirm that the correct drives have been selected. Click Next.

9. On the next window click on the Proceed button. A message box will display indicating that a reboot will be required to undertake the disk cloning operation. Click Reboot.

10. The cloning operation will proceed during the reboot. With modern components and a medium to high−powered processor, data transfer rate will be somewhere in the range of about 450 MB/min to 800 MB/min when cloning to a USB external HDD; considerably faster when cloning to another internal HDD.

11. When the disk cloning operation has been completed, a message will (usually) appear indicating the disk cloning process has been successful and instructs you to shut down the computer by pressing any key. Do so and disconnect your USB external HDD. If, however, the destination drive (the recipient of the clone) has been another *internal* HDD, see the NOTE below.

12. Note that the cloned contents now residing on the USB external HDD take

on the file system of the source drive. For example, if prior to the disk−cloning operation your USB external HDD had been FAT32−formatted and your XP OS was NTFS−formatted, the cloned contents will be NTFS−formatted.

There is no need to format the USB external HDD prior to the disk−cloning operation. Similarly, there is no need prior to the disk−cloning operation to format an internal HDD should you be using an internal HDD as the destination drive .

13. Restoration of the system can be achieved by cloning the contents of the data residing on the external HDD to an internal HDD through the normal disk−cloning process as described above.

NOTE: Just one other point that should be emphasized with respect to the disk cloning operation should the recipient of the clone be another internal HDD and not a USB or Firewire external HDD. Immediately following the disk cloning operation the machine should be shutdown and the source HDD should be disconnected. Boot ONLY to the newly−cloned drive. DO NOT BOOT IMMEDIATELY FOLLOWING THE CLONING OPERATION WITH BOTH DRIVES CONNECTED.
There's a strong possibility that by doing so it is likely to cause future boot problems with the cloned drive. Obviously there is no problem in this area should a USB or Firewire EHD be the recipient of the clone since that device is not ordinarily bootable in an XP environment.

Disk Imaging: The following are step−by−step instructions for using the Acronis True Image 9 Program to create disk images for backup purposes and using those disk images for recovery of the system. (The steps are essentially the same using the newer ATI 10 version):

Note: The recipient of the disk image, presumably a USB external HDD or an internal HDD, ordinarily must be a formatted drive and have a drive letter assigned to it. Recall that in the case of a disk−to−disk cloning operation as previously described, an unformatted or "virgin" HDD can be used as the destination disk.

Before undertaking this disk imaging process it's probably best to close all programs running in the background including your anti−virus and other anti−malware programs.

1. With both your source and destination hard drives connected, access the Acronis program and click "Backup" on main menu.

2. The "Create Backup Wizard" screen opens. Click Next.

3. The "Select Backup Type" screen opens with two options: a. The entire disk contents or individual partitions. b. Files and folders. Select a. and click Next.

(In the ATI 10 version four options will be listed: My Computer, My Data, My

Application Settings, and My E−mail. Select the My Computer option and click Next.)

4. The "Partitions Selection" screen opens. Disk 1 and Disk 2 are listed with their drive letter designations. Check the disk to be backed up − presumably Disk 1 − and click Next.

5. An informational message appears recommending an incremental or differential backup if an original full backup had previously been created.Since this will be the first backup we will be selecting, just click OK to close the message box. (You can check the box not to show that informational message in the future).

6. Next screen is the "Backup Archive Location". In the "File name:" text box, (in ATI 10 version it's the "Folder:" text box) enter your backup drive letter and enter a file name for the backup file, e.g., "F:\Backup 5−25". The Acronis program will automatically append the ".tib" file extension to the filename. Click Next.

7. "Select Backup Mode" screen opens. Select "Create a new full backup archive" option and click Next.

8. "Choose Backup Options" screen opens with two options:
a. Use default options
b. Set the options manually.
If you select the b. option, you can select various options listed on the next screen. Two of them are of interest to us:

Compression level − Four options − None, Normal (the default), High, Maximum. There's a "Description" area that shows the estimated size of the backup archive depending upon the option chosen, and the estimated "creation time" for each option.

Backup priority − Three options − Low, Normal, or High Low − "backup processed more slowly, but it will not influence other processes running on computer."
(Default) Normal − "normal speed but backup process will influence other processes running on computer." High − "normal speed but backup process will strongly influence other processes running on computer."

With respect to the compression levels, we've found that when using the Normal option the original data is compressed by about 20% − 25% and that the High and Maximum options will result in a compressed backup file only slightly higher than that. However, the amount of time to create the backup files when using the High or Maximum compression level is substantially greater than when using the Normal compression level. So unless disk space is very tight on the destination drive, i.e., the drive where the backup file will be saved, we recommend using the Normal compression level (at least initially).

NOTE: You can set the Compression level and Backup priority defaults from

the Acronis Tools > Options > Default backup options menu items.

9. "Archive comments" screen opens allowing you to add comments to the backup archive which you can review during the Recovery process. Click Next.

10. The next screen summarizes the backup operation to be performed. Review the information for correctness and click the Proceed button.

11. The next screen will display status bars reflecting the progress of the backup operation. After the backup operation finishes, an informational message will appear indicting the operation was successfully completed.

Incremental Backups (Disk Images)
1. After the initial backup archive has been created you can create incremental backups reflecting any data changes since the previous backup operation. This incremental backup process proceeds considerably faster than the initial backup operation. This, of course, is a major advantage of creating disk images rather than undertaking the disk−to−disk cloning process. Then too, since these created disk images are compressed files they are reasonable in size. And because the incremental disk images can usually be created very quickly (as compared with the direct disk−to−disk cloning process), there's an incentive for the user to keep his/her system up−to−date backup−wise by using this disk imaging process on a more frequent basis than the disk−cloning process.

Note that you must create the incremental backup files on the same HDD where you stored the original backup archive and any subsequent incremental backup files.

2. Access the Acronis program as detailed above and move through the screens. When you arrive at the "Backup Archive Location" screen, click on the original backup archive file, or if one or more incremental backup files were previously created, click on the last incremental backup file and verify that the correct drive letter and file name are shown in the "File name:" text box. After clicking Next, the program will automatically create a file name for the incremental backup archive file, using the original file name and appending a consecutive number − starting at 2 − at the end of the file name. For example, say you named the original backup archive file "Backup 5−25". The first incremental backup file will be automatically named "Backup 5−252" and the next incremental file "Backup 5−253", etc.

NOTE THAT ALL YOUR INCREMENTAL BACKUP FILES MUST BE PRESENT FOR RECOVERY

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