

# Re: Boot Disk Failure Needs CD to Boot Windows (Imaging Vs Cloning)

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- *From:* "Anna" <[myname@xxxxxxxxxx](mailto:myname@xxxxxxxxxx)>
  - *Date:* Wed, 22 Nov 2006 10:32:49 -0500
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Paul:

My comments are inline...

"Chebi" <[Chebi@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:Chebi@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx)> wrote in message  
[news:6DBC7279-8163-4561-B2AE-F954E9170EB3@xxxxxxxxxxxxxxxxxxxx](mailto:news:6DBC7279-8163-4561-B2AE-F954E9170EB3@xxxxxxxxxxxxxxxxxxxx)

Anna: Thanks for your thorough response. I wish I had started this thread under a different heading so as to help others with the same interest.

A couple of comments and further questions come to mind:

1- My apology regarding my mis-use of the terms "Movable" or "Removable" drives. They all should refer to an external USB drive, and the one I have in mind is the Maxtor USB2 external 250 GB ULTRA ATA 133. And after reading various threads and comments on the subject, I am inclined to go the Imaging Vs Cloning for my backups.

My goal is to backup my 60GB desktop drive (NTSF) and Laptop drive that came partitioned ~45GB NTSF and 11GB FAT32 (Don't know why), both running XP SP2, on the same external USB drive

I assume your laptop contains a so-called "recovery" partition (the FAT32 one) and/or was created by the laptop's manufacturer to contain this or that program. Leave it be, at least for the moment. Check your laptop's user guide or with the manuf. to determine its contents. But don't modify or delete the partition or any of its contents unless you're absolutely certain it wouldn't cause future grief.

2- I recall reading in one of the threads that Acronis would convert FAT32 formats to NTSF, and am wondering if that would affect the restored performance on the Laptop. Would the restored disk consist of two NTSF drives

## Re: Boot Disk Failure Needs CD to Boot Windows (Imaging Vs Cloning

then or a single consolidated NTFS drive similar to the desktop? and does it matter at all? (Again if this might be the case when Cloning not Imaging my apology)

The resultant clone or disk image will retain the original file system. There's no conversion involved affecting the file system currently on the source disk. The only time this issue would arise would be if you would clone the contents of an XP OS whose file system was NTFS onto a USB external HDD that had been formatted FAT32 (as many of them are as they come from the factory). In that case the resultant clone would retain the NTFS file system of the source HDD.

3- With regards to verification of the integrity of the image on the USB drive, would it be possible to reboot either computer off the USB drive directly with its corresponding image after modifying the boot bios to do so?

According to the literature the drive is bootable if bios support function is available. (How do I find out?)

This is sort of a controversial issue. In our experience, working with scores of USB external HDDs and a large variety of motherboards, we have \*never\* been able to boot an XP OS from a USB HDD. And I have never directly witnessed nor come across a fully documented & repeatable instance where this capability was achieved. I must admit I get somewhat weary hearing or reading the oft-cited "Yes, you can boot to a USB external hard drive if your motherboard's BIOS supports this capability". All I can say is that I've worked with many motherboards that presumably had this "capability", but I've still never been able to boot an XP OS from a USB HDD.

But...

Having said all this, there have been reports that this capability has been achieved. One of the more prominent ones is an article by Fred Langa at <http://www.informationweek.com/shared/printableArticleSrc.jhtml?articleID=177102101>

Also, I have another reference...  
<http://www.ngine.de/index.jsp?pageid=4176>

(I haven't checked out these links lately but you may want to do so as well as do a Google search on the subject.)

4- Is there an advantage for SATA Vs ATA? the model comes in these two versions with a minor price difference. I inadvertently ordered the ATA without knowing any better. Is it worthwhile switching?

## Re: Boot Disk Failure Needs CD to Boot Windows (Imaging Vs Cloning)

Yes, there is a considerable advantage in using the SATA interface rather than a PATA one with respect to the disk cloning process. Understand I'm referring to a direct SATA to SATA interface; I'm *\*not\** referring to an external device where a SATA HDD would be used as a USB device. So if you have a motherboard with SATA capability and the external enclosure you're using supports a SATA to SATA connection, it would be most desirable to use that type of interface for the disk cloning operation. There are two significant advantages...

1. Data transfer rates (disk cloning) would be considerably faster since the SATA HDD is treated as an internal HDD and as such, its performance is substantially superior to a USB-connected HDD.

2. And perhaps the more important consideration...

The resultant clone *\*would\** be bootable since the SATA HDD in that situation is considered an *\*internal\** HDD by the system notwithstanding that it's physically outside the computer's case.

Our advice to most users who are in the market for an exterior enclosure is to consider purchasing one that has this SATA-to-SATA interface capability as long as their system supports SATA. Nearly all of these enclosures are also equipped with a USB interface as well.

5- When restoring after a crash do you need to reformat the source drive after using a bootable recovery disk, before restoring?

No. Presumably you would be using the Acronis so-called "Bootable Rescue Media" CD that you had created from the Acronis program. Assuming the original source HDD is non-defective (mechanically/electronically) it would be recognized by the Acronis program on the bootable CD and recovery could proceed.

6- According to the literature, the USB Drive comes with "Backup4all" one touch backup software allowing Full, Differential, Incremental and *\*Mirror\** backups. Do you think I still need Acronis?

I have never worked with that program so I can't give you any input on it. I guess the only way to tell is to work with it, yes?

Anna

Many thanks again.

Paul Chebi

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"Anna" wrote:

"Chebi" <Chebi@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote in message  
news:DD1624C6-E5AE-4B48-AF65-F5B893F1EE1D@xxxxxxxxxxxxxxxxxxxx

Anna: I am in the process of gearing up for an external USB drive principally to image my HDD in case of a catastrophic incident. I have been following up with great interest your posts on the subject especially your step by step instructions for imaging and restoring the main drive. I have a few questions, however:

1- My computer XP SP2 came with two partitions and was wondering how to handle this imaging process with Acronis . Do I need to image the two partitions consecutively or would Acronis do that automatically? and would the imaged destination movable drive be bootable on the source drive in either case? regardless of the imaging sequence?

2- Can you image two separate computers' drives (each with 2 partitions) on the same movable drive, and how would you manage restoring the two (twin) images to their respective source drives? If so do you need to partition the destination drive for each of the two source drives? and how would that affect your answer to your step 7 of your instructions regarding partition deletion on the destination drive?

3- Could you treat the removable destination drive as a

## Re: Boot Disk Failure Needs CD to Boot Windows (Imaging Vs Cloning

regular storage  
for  
various data files from two computers in addition to the  
images?

4—After imaging and/or cloning how could you verify you  
actually did  
clone  
or image on the movable drive? and could you safely restore  
to, say,  
your  
still working drive as a dry run to verify the process before  
you  
really  
need  
and have to?

Thanks for your help in the matter

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Paul Chebi

Paul:

1. Yes, the Acronis program has the capability of imaging all the  
partitions  
on one's HDD "in one fell swoop" as it were. In effect, you would be  
creating a disk image of the entire disk which would include, of course,  
all  
the partitions present on the disk. Incidentally, the program does have  
the  
capability of creating disk images of \*individual\* partitions of a  
multi-partitioned HDD.

2. Yes, you could use the same HDD to store the images of different  
computers. I assume your reference to a "movable drive" refers to an  
external HDD (USB or Firewire) but no matter; an internal HDD  
(presumably  
secondary to one's primary boot drive) could also be used as the  
recipient,  
i.e., the destination drive, of the disk images.

You need not partition the destination drive in that situation. Merely  
designating different file names for the backup archives (files) would be  
sufficient. (Obviously you would name them in such a way as to identify  
from  
whence they came, right?)

With respect to your question re step 7 of the instructions – please note  
that the information contained in that step referred to the disk-to-disk  
cloning process – not the disk imaging process described in the second

## Re: Boot Disk Failure Needs CD to Boot Windows (Imaging Vs Cloning)

section of the instructions. Recall that there are two basic backup methods employed by the ATI program – disk-to-disk cloning and disk imaging.

Up to this point I've interpreted your questions as they relate to the disk imaging process – *\*not\** the disk cloning process. When you use the Acronis program to clone the entire contents of one HDD to another HDD only then is it necessary for the disk cloning process to delete all partitions on the destination HDD. The Acronis program does not have the capability of *\*cloning\** individual partitions to another HDD. In that situation it's an "all or nothing" proposition. As we've indicated, you *\*can\** create disk images of individual partitions.

3. Absolutely

4. If you used the disk cloning process and the recipient of the clone was a USB or Firewire external HDD, the only way to definitively determine that a clone was created would be to re:clone the contents of that external HDD to an internal HDD – either the original source drive or another internal HDD. Then, of course, you would boot to that drive to ensure all is well.

While you could, of course, peruse the cloned contents on the external HDD following the disk cloning operation, this would not ensure that a viable clone had been created.

If the HDD in its USB or Firewire external enclosure is removable (it's not a commercial one-piece device nor are warranty issues involved), one could remove the HDD from its enclosure and install it (temporarily) as an internal HDD in the PC (I'm assuming we're talking desktop PCs here) and boot to it. Admittedly that would be an awkward methodology for most users but it is an option.

If, however, one had used another internal HDD as the recipient of the clone, then it would be simply a matter of booting to that newly-cloned drive to determine that all went well. Please note the cautionary note re disconnecting the source HDD *\*before\** booting to the destination HDD in that situation.

Insofar as disk images are concerned, you would need to undertake the

## Re: Boot Disk Failure Needs CD to Boot Windows (Imaging Vs Cloning

normal

recovery process to determine with assurance that a viable clone had been created.

Our experience with the Acronis True Image program over nearly two years has

been quite positive. It has proven very reliable with respect to both the disk cloning & disk imaging backup & recovery processes. But it (nearly) goes without saying that using either process you must begin with a bootable

operating system that's completely functional and without significant problems. If you clone garbage, garbage is what you'll get. I point that out

because it's amazing how many users we come across that somehow have the idea that disk cloning (or disk imaging) will somehow remedy whatever problems they were having with their system.

Anna