True Image Home
Beginner's Guide to ***restoring*** a basic full disk archive

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with much appreciated input from Menorcaman

These basic steps apply to image recovery inside Windows
as well as using the Acronis bootable rescue CD.
Illustrations made using version 9 (build 3,666).

Typical recovery/restore procedure when restoring from a previously created Acronis True Image Backup archive. This example could apply to restoring the original hard drive or upgrading to a new drive ***of the same size***. See notes on page 3 if upgrading to a larger capacity drive or if your restoration differs from this example.

To restore an entire disk, a prior backup archive (image) of the entire disk is needed. All partitions (visible or hidden) must be included within the image. For this example, all partitions are being restored but having a full disk backup does enable other restore possibilities. See notes below.

Assumptions:

The entire disk (all partitions) being restored to their original locations (same disk).
The disk contains 3 partitions (no hidden partitions) which include
...one system (c:) and two data partitions (d: & e:)
Acronis Bootable Recovery CD previously created.
User aware of contents of the "Beginner's Guide to creating a basic full disk archive."
Previously archived .tib files stored on another internal or external drive.

1. Attach any external drives involved with recovery. These external units must be powered up and data cable attached.

2. Boot the computer using the previously created Acronis Rescue CD. Select either the **Full** or **Safe** version option–whichever you had previously confirmed as being able to see all required devices.

   Note: The images below were captured whilst running True Image in Windows mode. Some of the screenshots will differ slightly when running True Image from the Rescue CD.

3. **Pick A Task:** Select **Recovery** from the list of tasks. Refer image R-1 & R-2.

4. **Archive Selection**: Navigate to the drive/folder containing your previously created .tib archive files and select the archive for intended restoration. If there have been no incremental or differential backups created, selecting any .tib archive file in a multi-volume split image will restore the entire set. Refer image R-3. However, if incremental/differential backups do exist for a full archive, then an Archive Date Selection screen will appear so that you can choose whether to restore the original full archive or a particular incremental/differential version thereof. Refer image R-4.

5. **Restoration Type Selection**: This example restores a disk/partitions archive so your computer will be bootable. Refer image R-5.

6. **Partition or Disk To Restore**: Select the correct system disk via its unique name previously assigned by you as detailed in Link 1 below. Tick the Disk 1 checkbox, which will select all partitions plus the MBR and Track 0 for restoration (*see Note 2 & 3 for different restore options*). Refer image R-6.

7. **Restored Hard Disk Drive Location**: Select the hard disk drive to be restored. You are going to overwrite the existing main system disk. Use disk size or disk model number to assist in making the correct choice. The first drive listed may or may not be the correct drive. Choose carefully. Refer Image R-7.

8. **Non-empty Destination Hard Disk Drive**: True Image is seeking permission to overwrite the old partitions with the data contained in the backup archive being restored. Select "Yes, I want to delete all partitions on the destination hard disk before restoring" and then click Next. Refer image R-8.

9. **Next Selection:** True Image is asking whether you wish to restore another partition or hard disk drive. Select "No, I do not" because you have already selected all partitions for restoration as indicated in R-6. Refer image R-9.

10. **Choose Restore Options:** Verify setting or set Restore options manually. Refer image R-10.
    a. Tick the "Set current date and time for restored files" if you want the current date and time applied to all restored files and folders. My recommendation is that this option be **unchecked** so that restored files and folders retain their original dates and times.
    b. The option to "Validate backup archive before restoration" should be **checked**. This causes True Image to determine the integrity of the archive before partitions on the destination hard drive are deleted.

11. Image R-11 is summary of intended changes. Click ***Proceed*** to commit the task or ***Cancel*** to abort the planned operation.

12. **Disk Cloning:** This procedure is not covered by this guide. However a brief clarification of terminology can be found at the end of this document.

13. **User Awareness**: It is important that the user be aware of the existence of all partitions that exist on their computer–especially their system disk. The **Disk Management** feature can provide a graphical display of all disks and their partitions (both hidden or diagnostic) that exist on the computer. This display will illustrate whether the computer has one or more partitions and whether any of the partitions are manufacturer recovery partitions. Please take the time to acquaint yourself with your own disk specifications as illustrated via image DM1 on page 9 of this guide.

    There are multiple ways to open the Disk Management feature:
    a. Click the Start menu button and **Right** click on the "**My Computer**" menu option (or desktop icon) and click the "**Manage**" option
    b. Or, click on the Start/Run option and paste this command and press Enter
       %windir%\system32\diskmgmt.msc
    c. Or, open the Control Panel and select the Administrative Tools/Computer Management/Disk Management option.

Notes

Note -1: Extract from Acronis Support postings:

> "Please be aware that the actual reason why we recommend to re-create the same partition layout on the destination hard drive as it was on the "original" disk is that the restored\transferred operating system may not boot or function incorrectly (usually it "hangs" on the "logon" or "Windows logo" screens) if some partitions this particular Windows installation is "aware" of are missing. If you restore Windows to a partition of the different number than it was installed originally it will not boot until you will make the appropriate changes to the boot.ini file."

Note -2: Extract from forum postings:

a. If the new drive is the same size as the old one you simply restore the entire disk image (Disk 1 checked, all the partitions and MBR will autocheck) as described in this guide. The entire disk restore does not allow for partition resize.

b. The illustrations in this guide is geared to restoring a full "disk" backup to the existing drive or to a new drive of the ***same size***. However, if the new drive is larger then the old one (or you suspect the old drive had bad sectors), then a **"partitions restore with resize"** procedure is required rather than a full disk restore described in this guide.

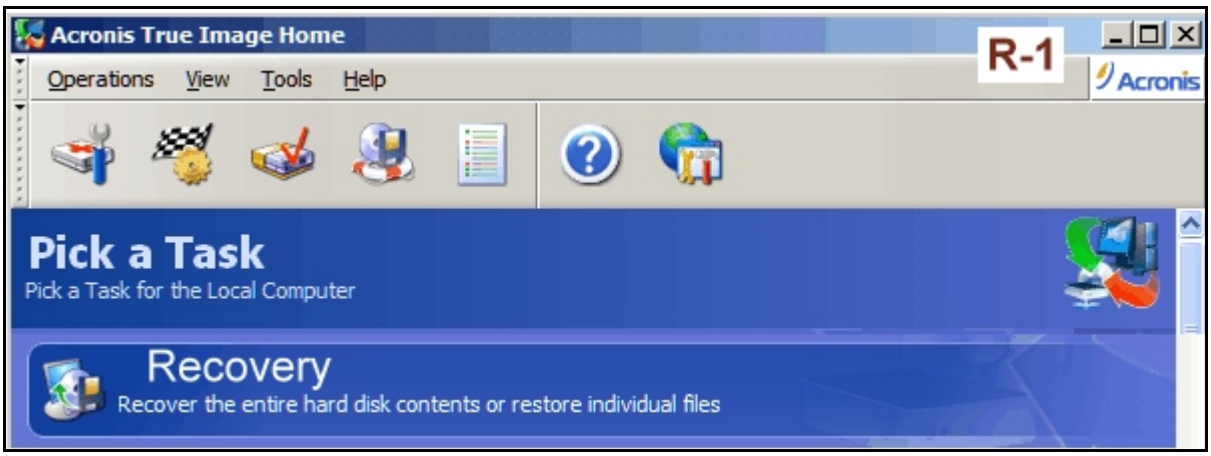
Restoring to a larger capacity disk?
Then use my **Partition Restore with Resizing** guide available here.
The same full "disk" backup image is used but the restore method differs because resizing is required. Also, when creating a new disk using the Restore with Resizing method, the partitions must be restored in the same partition order as the original drive.
Note: Partition order may not be the same as drive letter sequence.

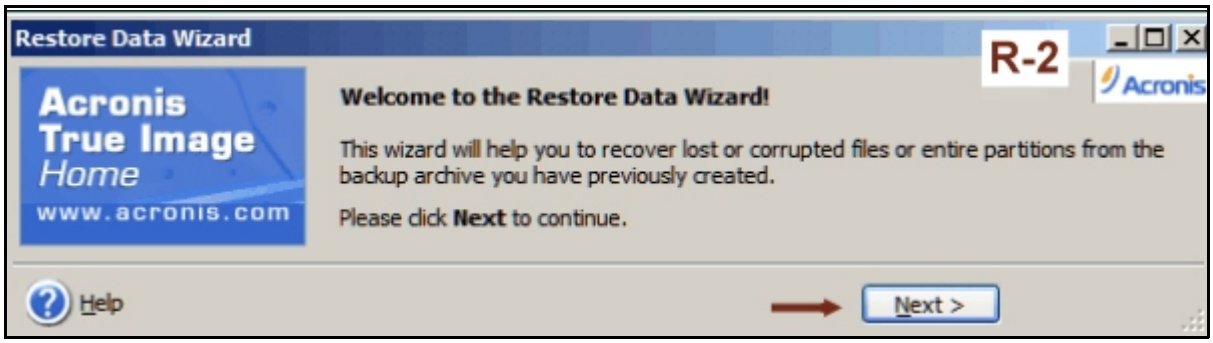
Note -3: Alternate choices of restoration on Image R-6:

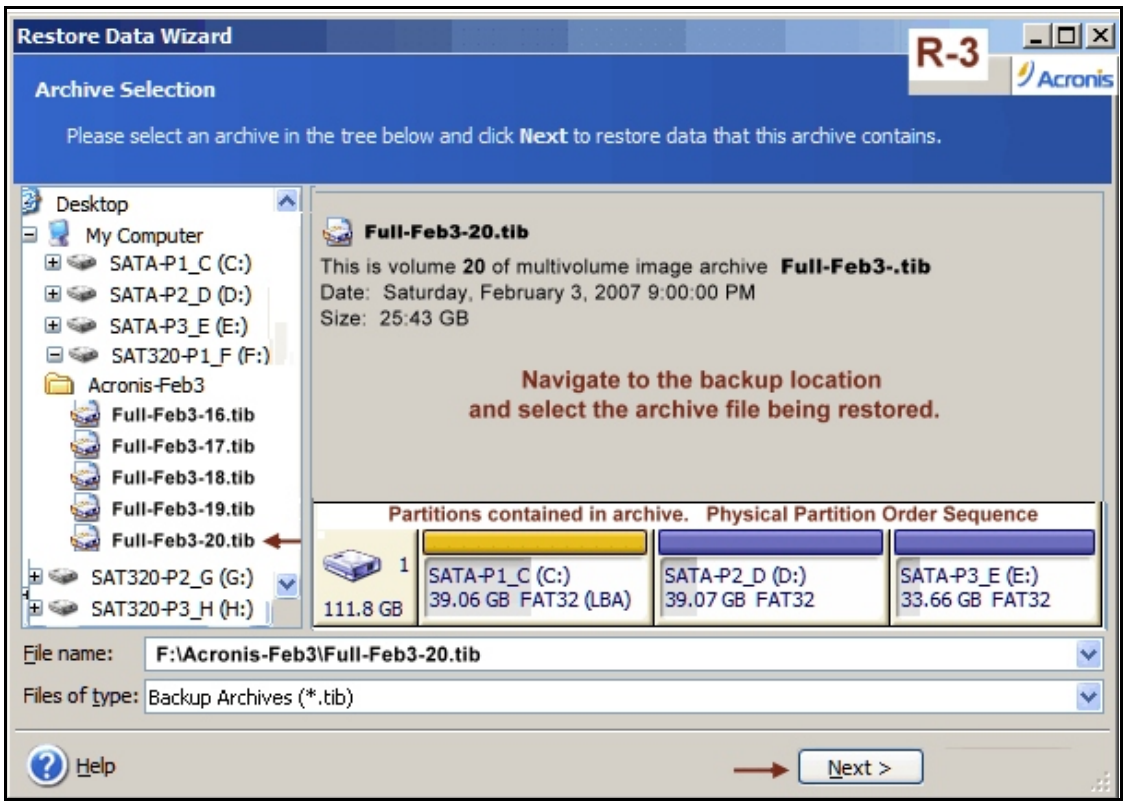
a. Drive D: and E: are data-only partitions which can be restored from within either Windows mode or via the Acronis Rescue CD. Partitions D: and E: would be ticked and Disk 1 would be un-ticked.

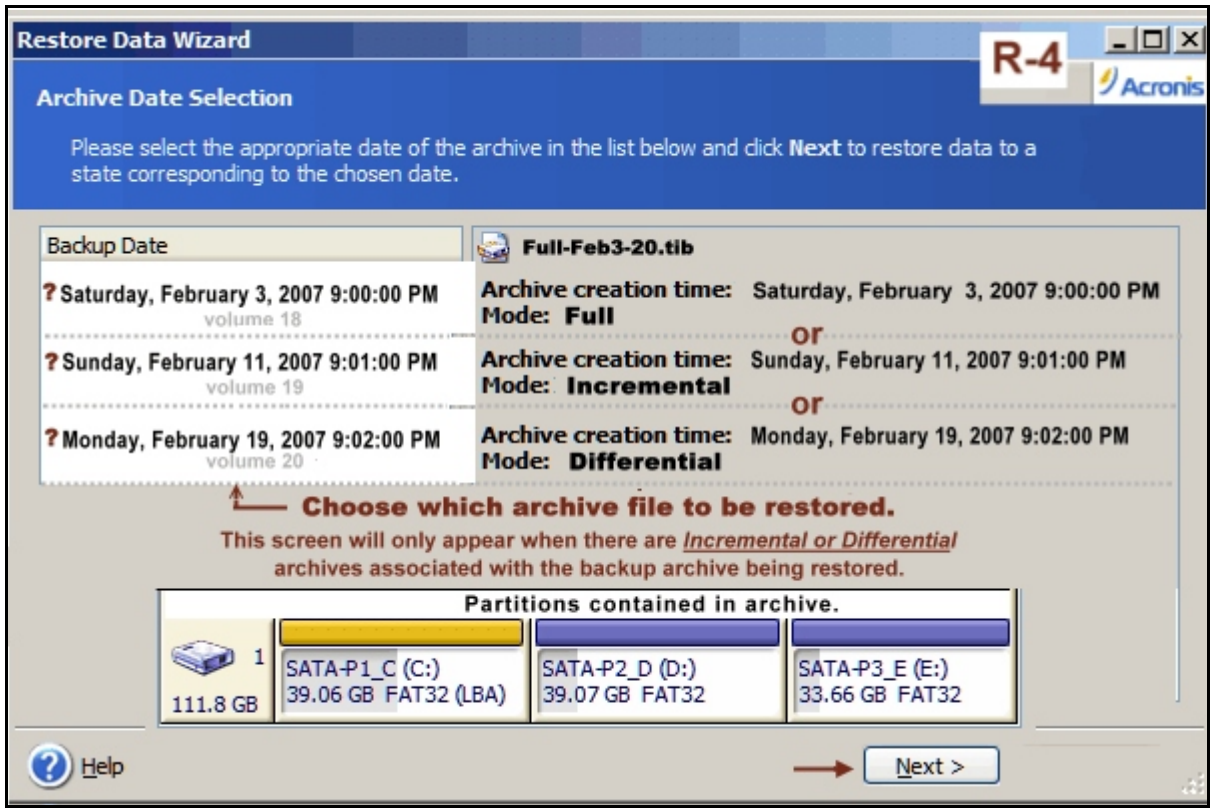
b. Drive C: is the system partition. This is best restored via the Rescue CD, although restoration can be initiated from within Windows but with a resulting reboot into rescue mode. If only drive C: is being restored, then Disk 1 should be un-ticked and the C: partition ticked. The MBR and Track 0 can be left is un-ticked if restoring back to the original, bootable, hard disk.

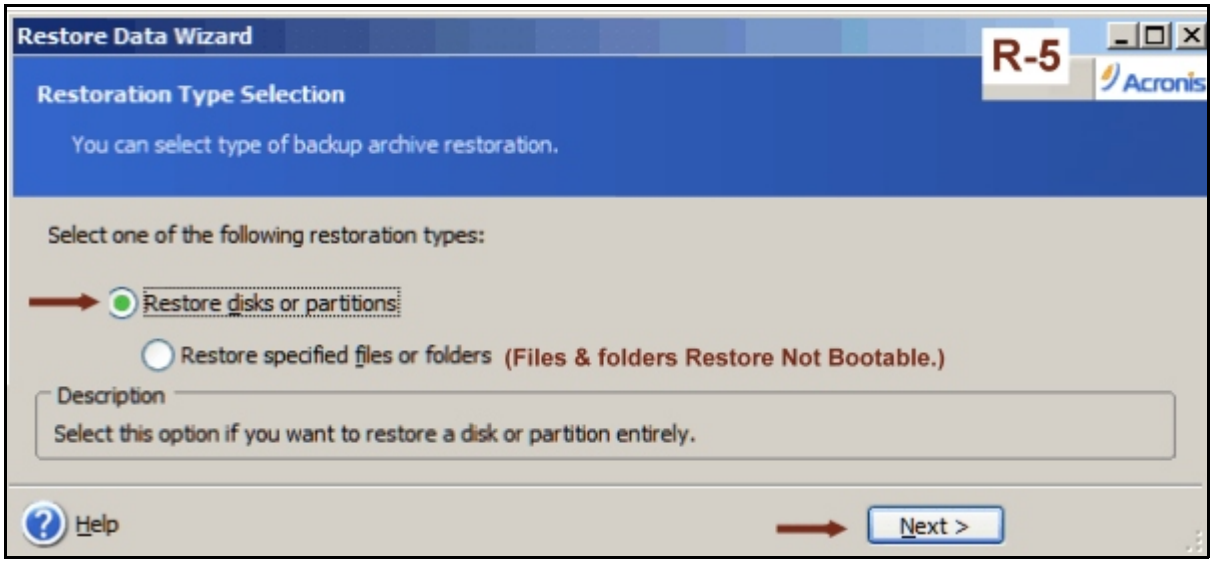
c. If the restoration is being applied to a new hard disk, then ensure the **MBR** and Track 0 is ticked as shown in Image R-6. Windows should ***not*** be allowed to see both the old disk and the new disk on first boot-up after a full disk restore. **Therefore be sure to remove either one or other of the two disks before a reboot occurs**.

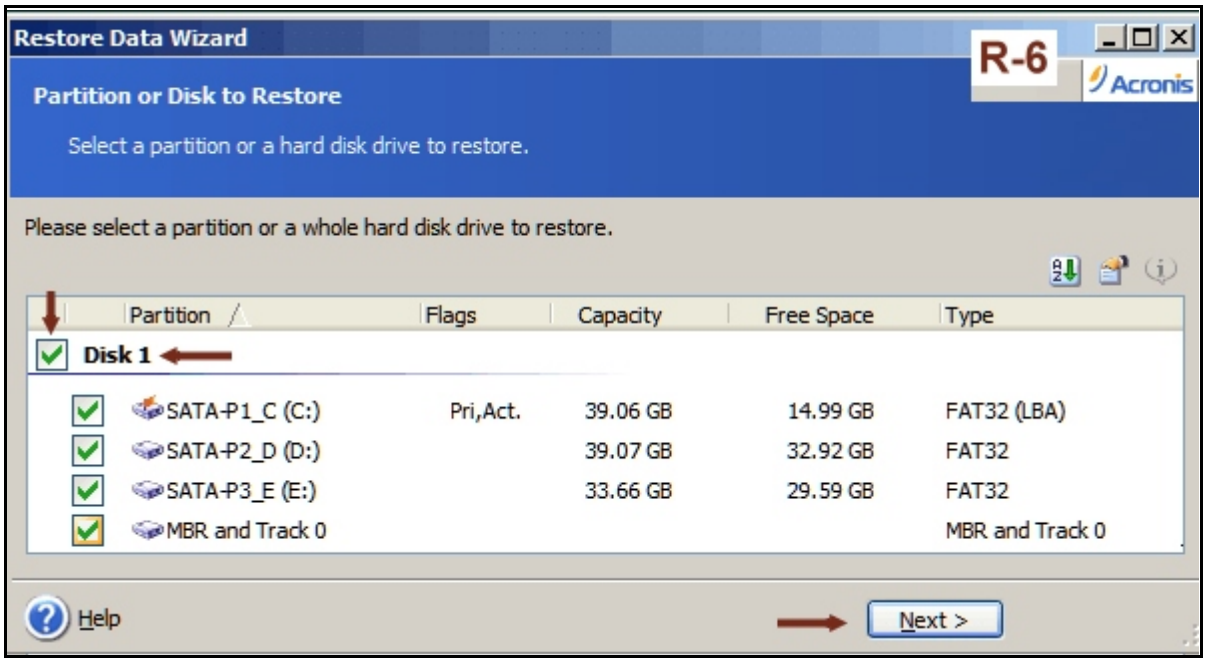

Acronis True Image Home
R-1
Operations
View
Tools
Help
Acronis
Pick a Task
Pick a Task for the Local Computer
Recovery
Recover the entire hard disk contents or restore individual files


Restore Data Wizard
R-2
Acronis
Acronis True Image Home
www.acronis.com
Welcome to the Restore Data Wizard!
This wizard will help you to recover lost or corrupted files or entire partitions from the backup archive you have previously created.
Please click Next to continue.
Help
Next >


Restore Data Wizard
R-3
Acronis
Archive Selection
Please select an archive in the tree below and click Next to restore data that this archive contains.
Desktop
My Computer
SATA-P1_C (C:)
SATA-P2_D (D:)
SATA-P3_E (E:)
SAT320-P1_F (F:)
Acronis-Feb3
Full-Feb3-16.tib
Full-Feb3-17.tib
Full-Feb3-18.tib
Full-Feb3-19.tib
Full-Feb3-20.tib
SAT320-P2_G (G:)
SAT320-P3_H (H:)
Full-Feb3-20.tib
This is volume 20 of multivolume image archive Full-Feb3-.tib
Date: Saturday, February 3, 2007 9:00:00 PM
Size: 25:43 GB
Navigate to the backup location
and select the archive file being restored.
Partitions contained in archive. Physical Partition Order Sequence
1
111.8 GB
SATA-P1_C (C:)
39.06 GB FAT32 (LBA)
SATA-P2_D (D:)
39.07 GB FAT32
SATA-P3_E (E:)
33.66 GB FAT32
File name:
F:\Acronis-Feb3\Full-Feb3-20.tib
Files of type:
Backup Archives (*.tib)
Help
Next >

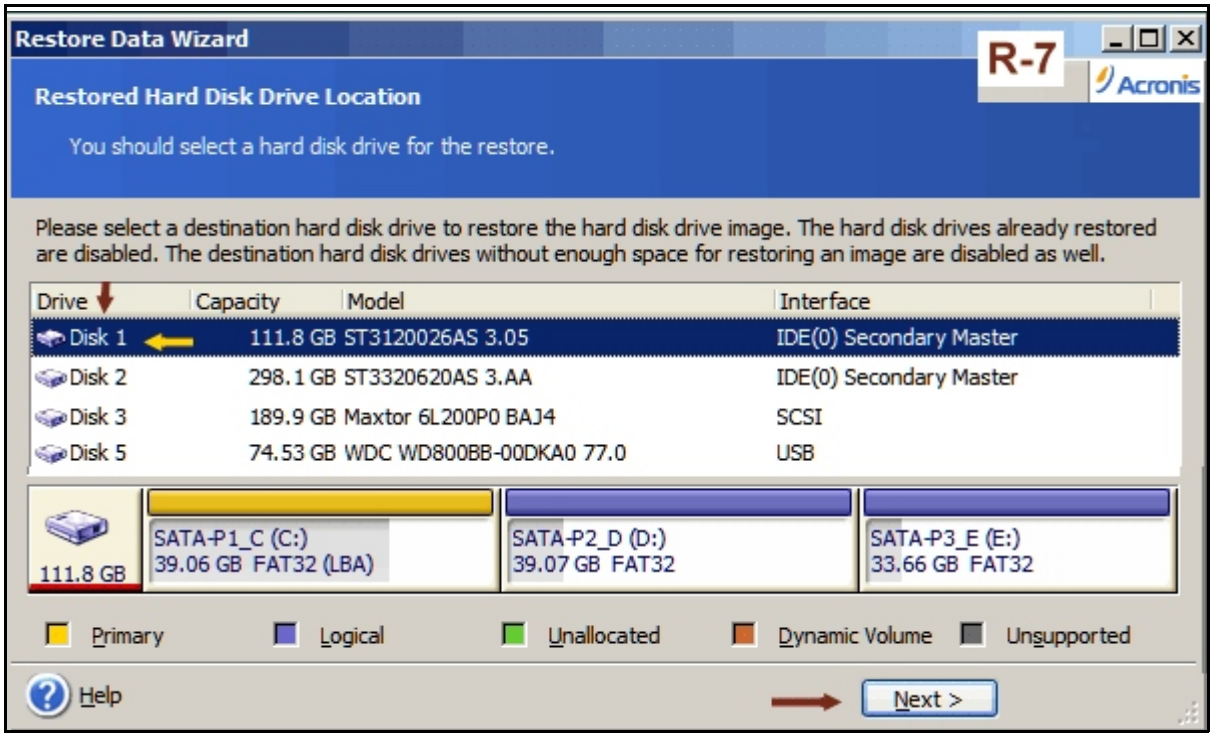

Restore Data Wizard
R-4
Acronis
Archive Date Selection
Please select the appropriate date of the archive in the list below and click Next to restore data to a state corresponding to the chosen date.
Backup Date
Saturday, February 3, 2007 9:00:00 PM
volume 18
Sunday, February 11, 2007 9:01:00 PM
volume 19
Monday, February 19, 2007 9:02:00 PM
volume 20
Full-Feb3-20.tib
Archive creation time: Saturday, February 3, 2007 9:00:00 PM
Mode: Full
or
Archive creation time: Sunday, February 11, 2007 9:01:00 PM
Mode: Incremental
or
Archive creation time: Monday, February 19, 2007 9:02:00 PM
Mode: Differential
Choose which archive file to be restored.
This screen will only appear when there are Incremental or Differential archives associated with the backup archive being restored.
Partitions contained in archive.
1
111.8 GB
SATA-P1_C (C:)
39.06 GB FAT32 (LBA)
SATA-P2_D (D:)
39.07 GB FAT32
SATA-P3_E (E:)
33.66 GB FAT32
Help
Next >

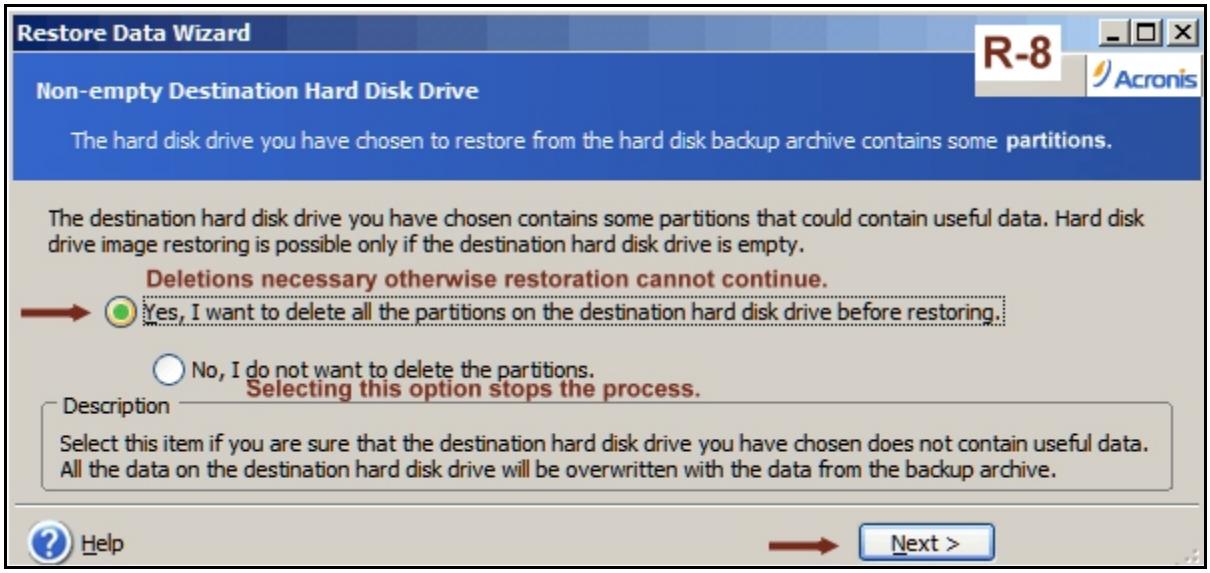

Restore Data Wizard
R-5
Acronis
Restoration Type Selection
You can select type of backup archive restoration.
Select one of the following restoration types:
Restore disks or partitions
Restore specified files or folders (Files & folders Restore Not Bootable.)
Description
Select this option if you want to restore a disk or partition entirely.
Help
Next >

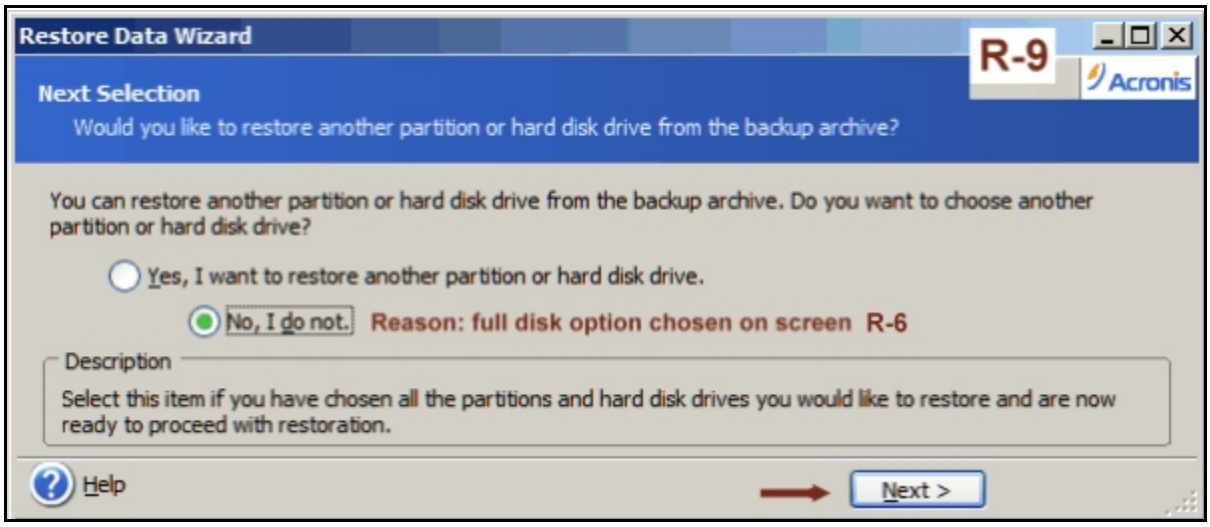


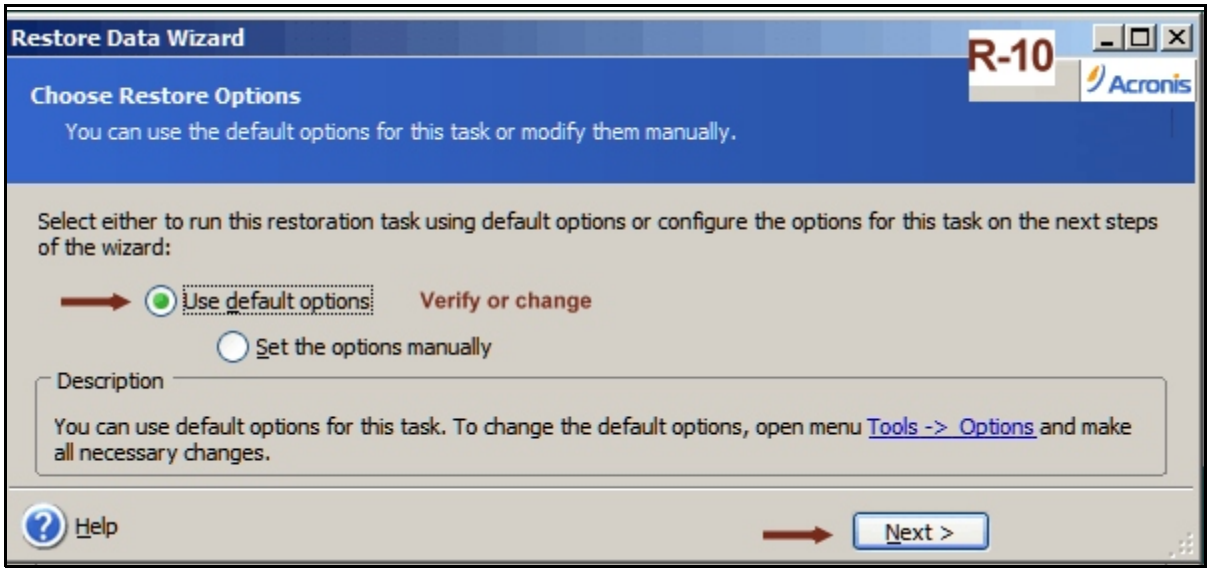
Disk backup (all partitions) image being restored.

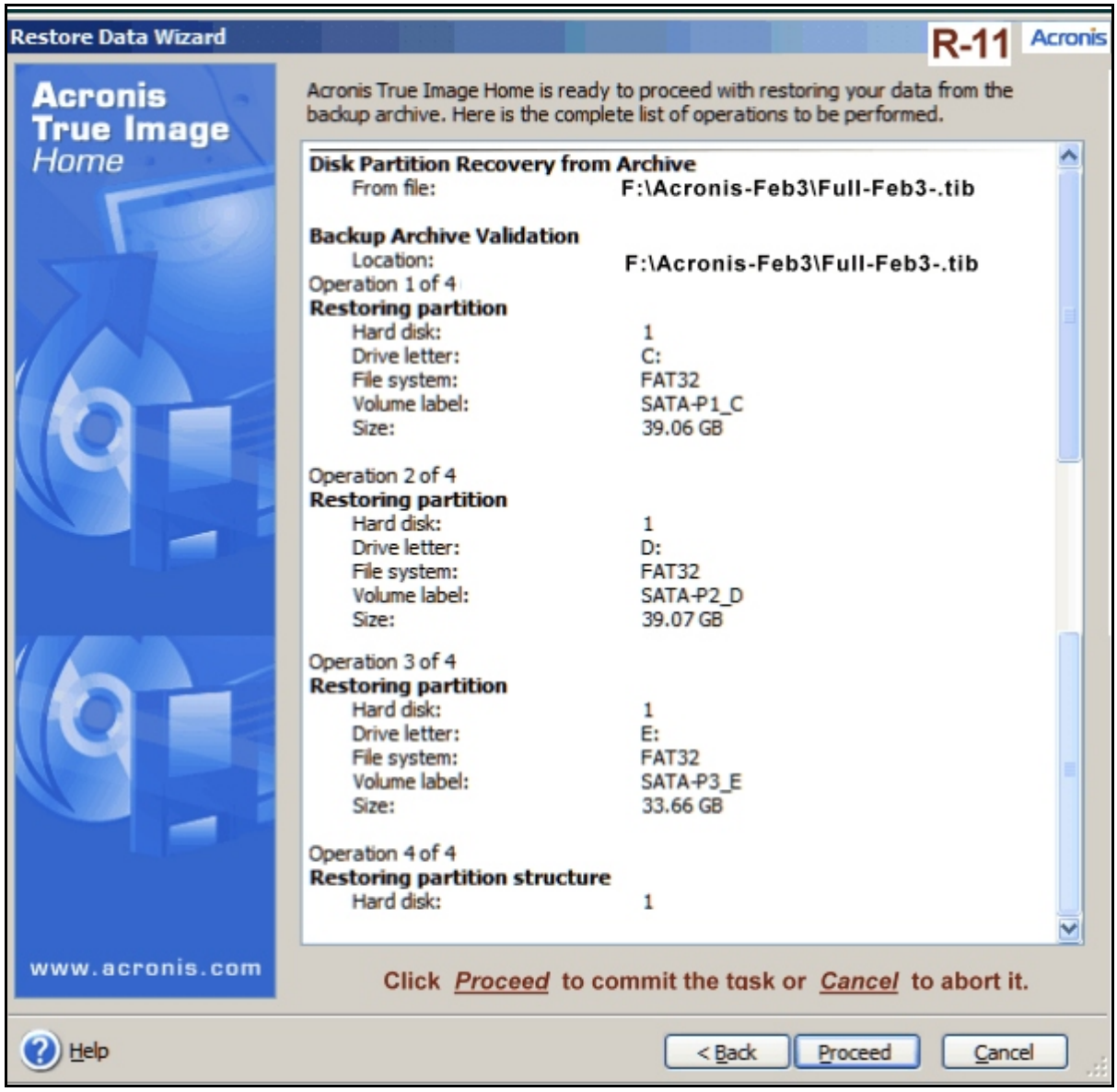
Image R-6 illustrates restoring all partitions to the same disk or to a new disk of the same size capacity. If you are restoring to a new disk which is larger or smaller than the one used to create the disk backup image, then you should use the instructions listed in **Note-2 b** found on page 3 of this guide.




Restore Data Wizard
R-8
Acronis
Non-empty Destination Hard Disk Drive
The hard disk drive you have chosen to restore from the hard disk backup archive contains some partitions.
The destination hard disk drive you have chosen contains some partitions that could contain useful data. Hard disk drive image restoring is possible only if the destination hard disk drive is empty.
Deletions necessary otherwise restoration cannot continue.
Yes, I want to delete all the partitions on the destination hard disk drive before restoring.
No, I do not want to delete the partitions.
Selecting this option stops the process.
Description
Select this item if you are sure that the destination hard disk drive you have chosen does not contain useful data. All the data on the destination hard disk drive will be overwritten with the data from the backup archive.
Help
Next >


Restore Data Wizard
R-9
Acronis
Next Selection
Would you like to restore another partition or hard disk drive from the backup archive?
You can restore another partition or hard disk drive from the backup archive. Do you want to choose another partition or hard disk drive?
Yes, I want to restore another partition or hard disk drive.
No, I do not.
Reason: full disk option chosen on screen R-6
Description
Select this item if you have chosen all the partitions and hard disk drives you would like to restore and are now ready to proceed with restoration.
Help
Next >


Restore Data Wizard
R-10
Acronis
Choose Restore Options
You can use the default options for this task or modify them manually.
Select either to run this restoration task using default options or configure the options for this task on the next steps of the wizard:
Use default options
Verify or change
Set the options manually
Description
You can use default options for this task. To change the default options, open menu Tools -> Options and make all necessary changes.
Help
Next >



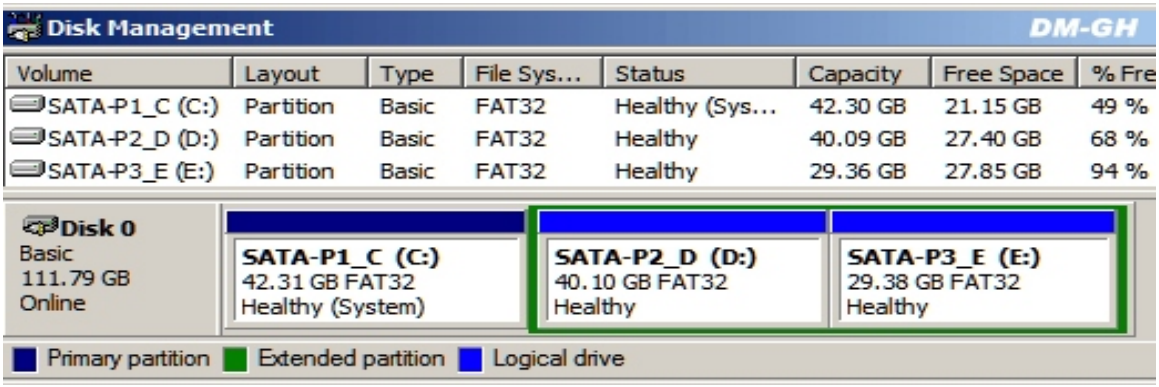
Summary of the actions that occur after the Proceed option is selected.

Recommendation: Do ***not*** click the proceed button until after you have made several practice runs so you feel comfortable with your selections.

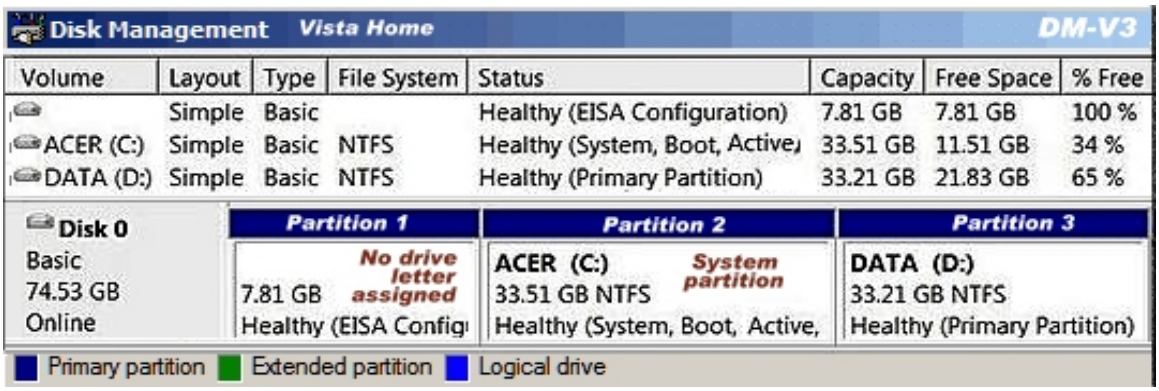
A few extra minutes spent performing simulations can help to provide a better understanding of the correct choices and may prevent troublesome errors.

Examples of Disk Management Displays

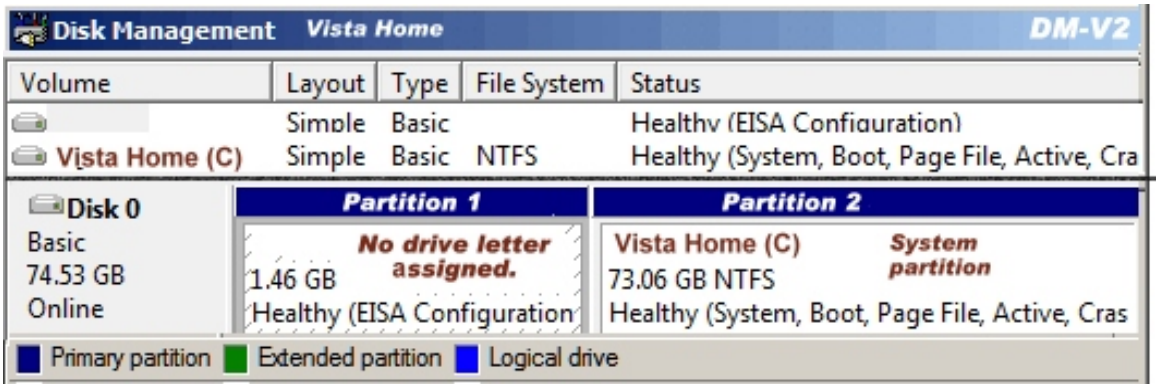
(your display may differ)



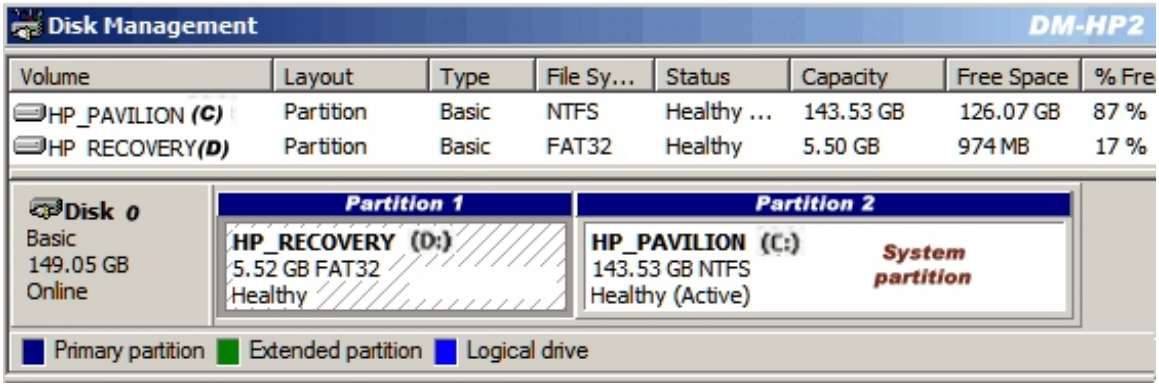
Note system partition ***is*** the first position



Note system partition is ***not*** the first partition.



Note system partition is ***not*** the first partition.



Note system partition is ***not*** the first partition.

When the Disk Management (DM) shows the system partition *is not the first partition*, this information controls which options the user selects when restoring a system to a new drive.

> **Explanation: The first partition shown in the DM must be the *first* partition restored when restored to a new disk. This partition selection will occur on the "Partition of Disk to Restore" screen when restoring via a Partition restore function.**

Don't let page 9 and the preceding two paragraphs alarm you but it is information you need to know if your Disk Management shows that your system partition is ***not*** listed first. This information is only applicable if using the Partition restore method (not covered by this guide). This is discussed in the Note section 1 & 2 discussed on page 3 and in more detail with the Partition Restore with Resize Guide**.** The information shown on page 9 and the two preceding paragraphs are mostly for informational purposes and not relative to this guide.

This guide that you are reading covers **restoring a basic full disk archive** via the "disk" option method. Therefore, the user does not have to select individual partitions but selects (checkmarks) the "disk" as shown in image R-6. This means the disk is being restored without any changes either to the old disk or to a new disk of the same size or smaller.

Cloning / Imaging Terminology

(extracts from Acronis Support postings)

Clone Disk - migrates/copies the entire contents of one disk drive to another (e.g., install a larger disk) to achieve two identical drives with the same file structure. During the cloning process you are presented with a choice what to do with the old drive - keep it as it is, or erase.

When you use the "Disk Clone" tool, you effectively copy/move all of the contents of one hard disk drive onto another hard disk drive. This function allows you to transfer all the information (including the operating system and installed programs) from a small hard disk drive to a large one without having to reinstall and reconfigure all of your software. The migration takes minutes, not hours, but it is not generally used as a backup strategy.

Backup - (Imaging) creates a special archive file for backup and disaster recovery purposes--which also includes new drive replacement. Archive file can be created within Windows mode or from Acronis bootable Rescue CD. Archive files stored can be stored in folders and/or alternate drives or media.

If interested in backing up your hard drive for the **disaster recovery** purposes, the Backup approach is recommended. Moreover, there are several advantages of creating an image over the disk cloning procedure such as: you can create an image without rebooting your PC, image creation can be scheduled for the particular point in time, Acronis True Image allows you to create incremental and differential images, image archive contains only the actual data and so it has a smaller size, images are ordinary files and so they can be stored on any type of the supported media, etc. However, the final choice is always up to your needs.
