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

by Grover Hatcher with much appreciated input from Menorcaman

These basic steps apply to image backups inside Windows as well as using the Acronis bootable rescue CD.

Illustrations made using version 9 (build 3,666).

- 1. Uninstall any previous versions of True Image Home backup software.
- 2. Install new version. If purchased or upgrading, new & old serial numbers will be needed.
- Create the Acronis Bootable Rescue CD via the Acronis Tools/options menu. This creation is absolutely essential. Successful restores or disk upgrades will depend upon its use. See image BR1.
- 4. Attach and switch/power on any external drives used for backup storage or recovery purposes.
- Confirm all internal, external and CD/DVD drives are identified within *TI Windows mode*. This
 can be achieved by starting Truelmage and opening the Create Backup Wizard and proceeding
 as far as the Backup Archive Location screen. Refer Image B-5.
- 6. Re-boot using the *TI Rescue* CD. Select *Full* version option and confirm all internal, external and CD/DVD drives are identified within *TI Rescue mode*. Again, this is achieved by opening the Create Backup Wizard and proceeding as far as the Backup Archive Location screen. At this point, you can either create a backup image while booted into the Rescue CD; or, remove the TI Rescue CD and re-boot into Window. Part of your usage should be to create backups both from within Windows plus when booted from the TI Rescue CD.
- 7. **Begin backup task**: Start TI and commence a backup task via the Create Backup Wizard. Refer image B-1 to B-3.
- 8. **Partition Selection:** A backup consisting only of "Files & Folders" is not bootable. When restoring to a new drive, a backup (image) of the <u>entire</u> disk is needed. When **Disk 1** is ticked, the box beside each partition will be automatically checked. You need to identify your drives via unique disk volume names <u>assigned by you</u> as detailed in Link 1 below. Relying on just drive letters will cause confusion, as these will differ when using TI in Rescue mode. Refer Image B-4.
- 9. **File names:** Backup files are usually stored in identifying folders created either **prior to** or **during** the backup process. Use simple illustrative names, assign current dates and identify whether full disk or single partition, e.g. Full-Feb3-.tib or C-only-Feb3-.tib. Do <u>not</u> use multiple periods as part of the file name as use can render your backup useless. Use a dash (-) or hash (#) as ending character so multiple .tib files can be more easily identified. **Never ever use spaces** (or multiple periods) as part of a backup file name. Refer image B-5.

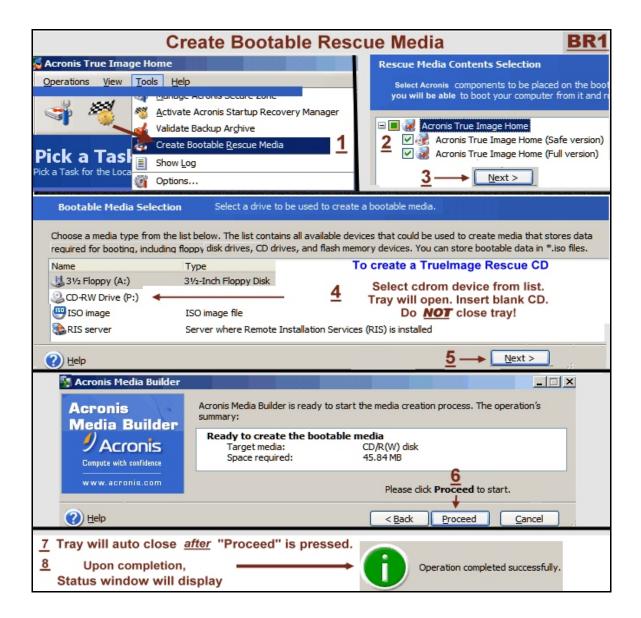
- 10. **Backup destination:** Backup files are best directed to other internal or external drives for more trouble free results. Backing up directly onto DVD's can be problematic, therefore, a better method (if DVD media to be used) is to create the backup on a hard drive (use the backup option to manually split the image into DVD sized chunks if spanning multiple DVDs) and then use 3rd party software to burn the image onto DVD's as a data compilation. Refer image B-8.
- 11. **Compression and Priority:** It's recommended that you set both the Compression Level and the Backup Priority options to Normal.
- 12. **Archive Validation:** It is important that archives are validated after they are created. This can be carried out as part of the backup task by ticking the Validate box in the Backup Creation Options. Refer image B-9. Validation can also be carried out as a separate task via the Backup Archive Validation Wizard. This is best done after booting from the TI Rescue CD as this will be the mode used when restoring your main system partition. If you subsequently copy an image to another location then it needs to be validated again after it's been copied.
- 13. **File sizes:** The NTFS drives do not split .tib backup files whereas FAT32 drives will split into 4gb increments. Both can be user controlled via Archive Splitting. Normal compression will reduce backup size approximately 40-50%. Audio/images/movies are already compressed and do not additionally compress during imaging. The XP Disk Management Tool (Image DM-1) can display how your disk is partitioned or which file system being used on your drives.
- 14. **USB tips:** Best results are usually obtained by connecting the external drive directly to the USB port on rear panel of computer. Do <u>not</u> use 2-4 port connectors. Sometimes, it is necessary to disconnect other USB devices if the Rescue mode CD does not properly identify the external drive. External drives must be connected & <u>powered up</u> (running) <u>prior</u> to starting TI either from within Windows mode or from the Rescue CD.
- 15. **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.
- 16. **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 Disk Management examples on page 11 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.

Helpful Links

Link 1: Assign unique names to your disk drives



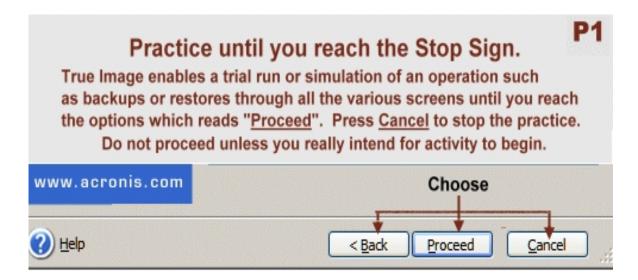
If the step 4 procedures above do not work for you, try either manually closing the tray before clicking the Proceed option. Or, select the ISO option which enables to save the file to your hard drive and then burn the ISO file using 3rd party burn software such as Roxio or Nero, etc. The TrueImage Help icon is displayed for additional assistance.

One of the purposes of this CD is to enable the user to perform backup or recovery or disk replacement when booted from the TI Rescue CD. After the successful creation of the TI Rescue CD, use a Sharpie pen and write both the version build and serial number on the CD.

Also suggest that you go to the Acronis website (link below) and register your serial number. Your purchase is NOT prerecorded. By registering your serial number, your serial will always be available even after future purchases/recordings. Your personal login page is also your access point for downloads of any newer builds released for your registered version--as well as the creation point for any official request for support from Acronis.

http://www.acronis.com/homecomputing/my/updates/

When installing a new version or update, it is also recommended that you uninstall any previous version before installing any new version. Each update is a standalone version and a prior installation is not necessary but a prior serial number may be required--if updating. Reminder: create a new TI Rescue CD for each new version build that you install; and write serial number and version/build number on each Rescue CD created.



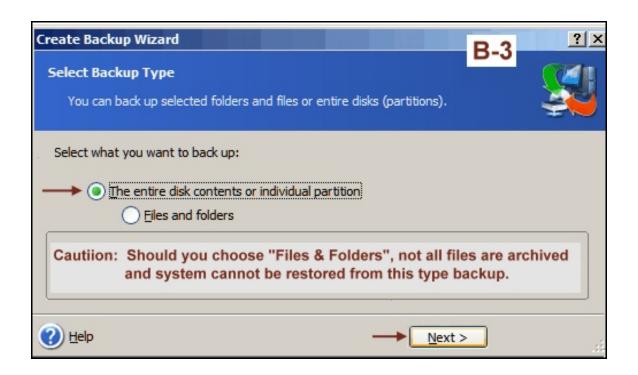
Perform several practice simulations before performing the task for real.

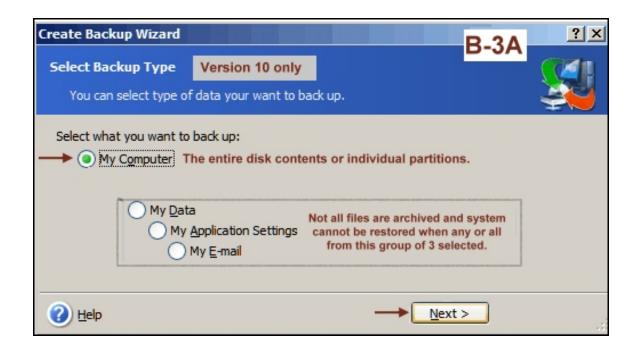
A few extra minutes spent performing simulations can help to provide a better understanding of the correct choices and may prevent troublesome errors.

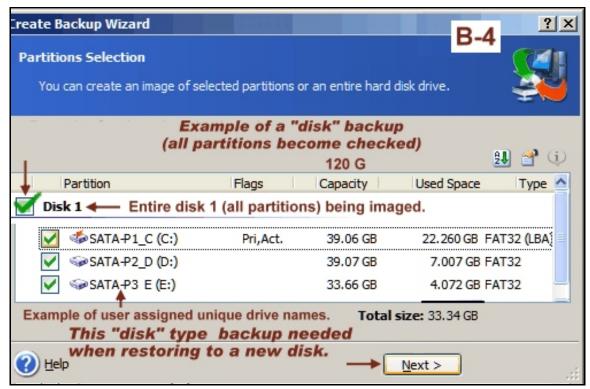
Create Full Disk Archive Begin Here





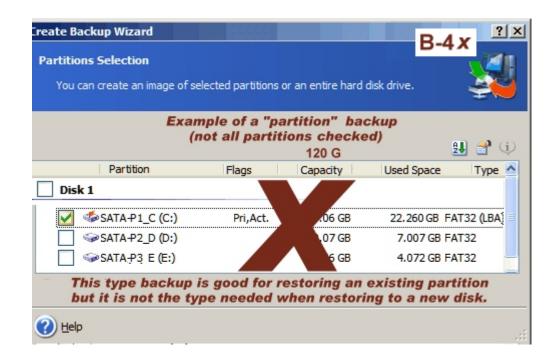


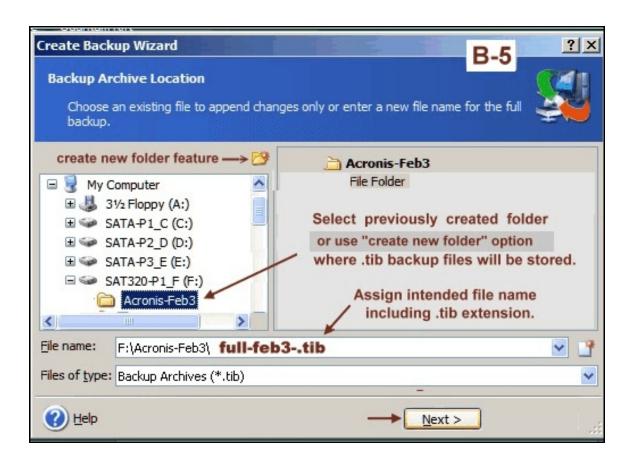


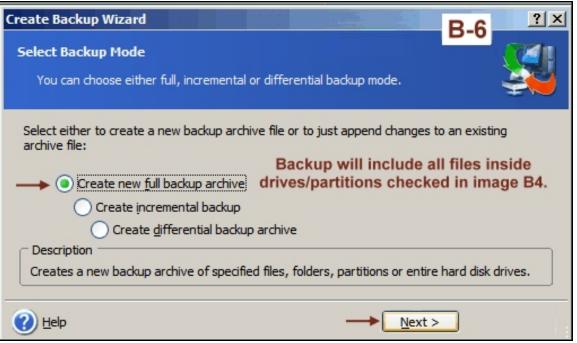


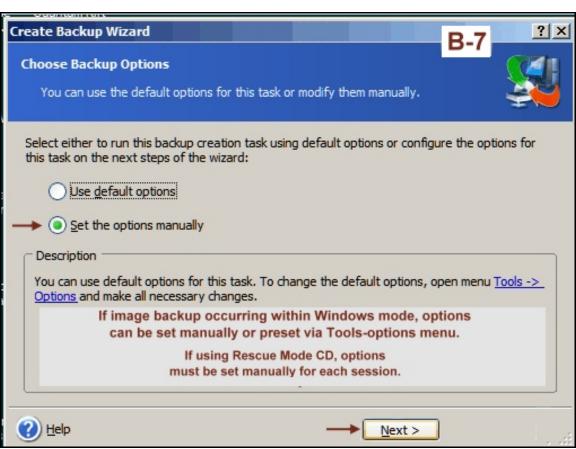
Once you have a "disk" type backup, you can then restore/overlay any of the single partitions; or restore all the partitions so the entire disk can be replaced.

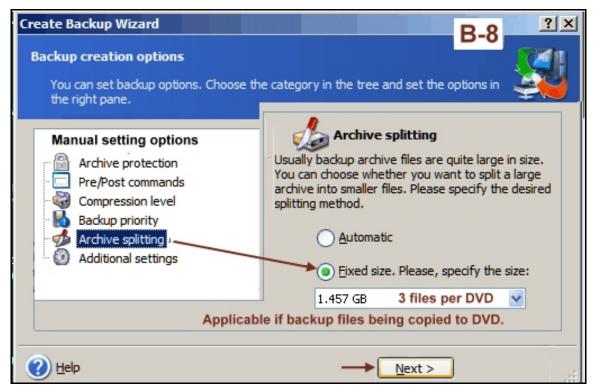
Conversely, if your backup is a "partition type (not all partitions selected), it becomes difficult and cumbersome to create a replacement disk because of the missing partitions. This is why a "disk" type backup is recommended as illustrated above.











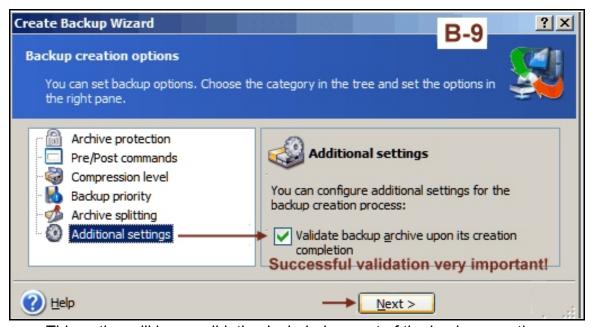
The size of each backup file (archive) is controlled by options selected on this screen.

If Fixed size selected (archive splitting),

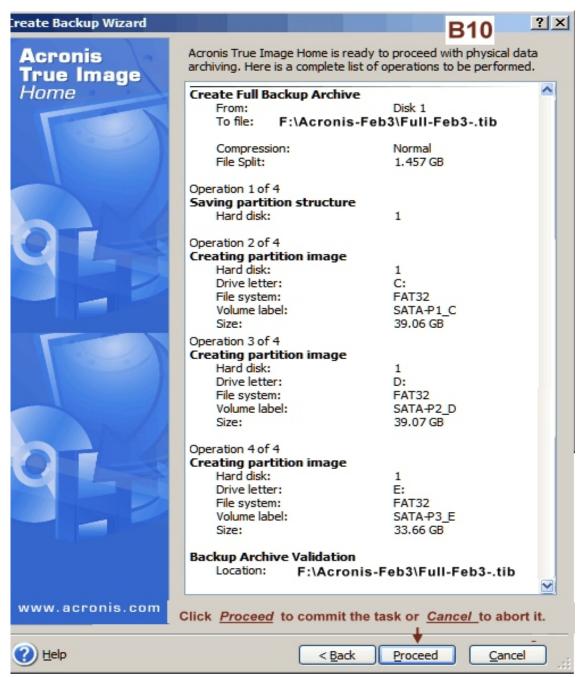
the individual file size will be according to the size keyed in this option. This enables user to later data copy the individual files to a blank CD or DVD.

If automatic is the option selected,

the backup file size will be controlled by the file system of the device being used for storage. If backup drive is NTFS, the backup file will **not** be split and the archive will be one large file. If backup drive is FAT32, the file size will be 4,194,304 kb for each file and each file will be sequentially numbered.



This option will have validation included as part of the backup creation.



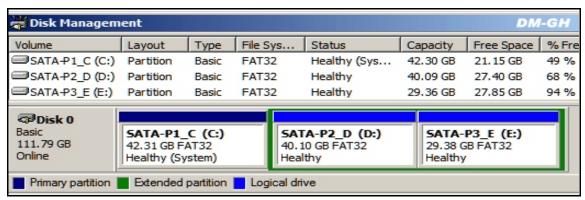
Summary of actions that will occur once the Proceed option is checked.

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

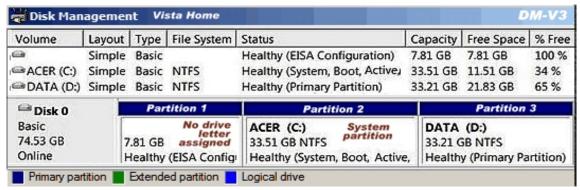
> A few extra minutes spent performing simulations can help to provide a better understand of the correct choices and may prevent troublesome errors.

Examples of Disk Management Displays

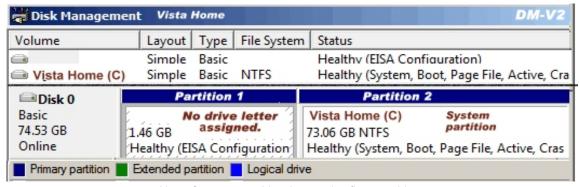
(your display may differ)



Note System partition is the first partition.



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



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



Note System partition is \underline{not} the first partition.

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 files 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.

gh-acronis-backup1.pdf Initial Release, dated March 8 2007 revised May 17, 2007 revised July 5, 2008