

CLONING YOUR ENTIRE HARD DRIVE TO AN EXTERNAL USB HARD DRIVE USING ACRONIS TRUE IMAGE SOFTWARE

Beginners' Kaffee Klatch
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Before you begin, you will need these items:

- Acronis True Image software (www.ugr.com/Products.html) (\$29)
- An external USB hard drive (prices will vary)
- A CD-RW or DVD-RW drive (most newer computers have this drive)
- A blank CD-RW or DVD-RW disk

The **Acronis True Image 11 Home** program is a great tool to help you clone (copy) your entire hard drive and everything on it to an external USB hard drive. Then should your system hard drive fail for any reason, you will be able to restore your entire system back to the original hard drive or to a new hard drive (should your original hard drive physically fail).

First Step: Purchase Acronis True Image software

Your first step is to purchase, download, and install the most recent version of Acronis True Image (version 11). Once you have it installed on your hard drive, open the program.

Second Step: Create a unique Bootable Rescue Media for Your Computer

With this Bootable Rescue Media, you can run Acronis True Image Home on a blank hard drive or on a crashed computer (faulty hard drive) that cannot boot.

To do so, you will need a bootable media with the standalone Acronis True Image Home version. If you purchased the boxed product or ordered the CD version from Gene Barlow at www.ugr.com, you already have such a bootable CD, because the installation CD contains the Acronis True Image Home standalone bootable version. If you purchased Acronis True Image Home on the Web, you must create a bootable CD/DVD using the Bootable Media Builder. **It is important that you create the bootable CD immediately. If you wait until your hard drive fails, it is too late!**

On the program's home page, click on the Management Tools, then from the left pane of the next page, select ***Create Bootable Rescue Media***.

The Acronis Media Builder wizard will open. Click **Next**.

On the next screen, click **Next**.

Accept the two defaults: *Acronis True Image Home (Full Version)* and *Acronis Drive Cleanser*, then Select **Next**.

On the next screen (Bootable Media Options), click **Next**.

On the next screen (Bootable Media Selection), chose CD-RW drive and select **Next**.

The next screen will inform you that “the Acronis Media Builder is ready to start the media creation process. Click **Proceed**. Once this procedure is completed (be patient; it takes awhile), you will have a bootable CD that you can use if (or when) your internal hard drive crashes.

Label the CD “Acronis 11 Bootable” and store in a safe place.

Third Step: Clone Your Internal Hard Drive to Your External USB Hard Drive

Acronis True Image Home will help you clone (copy) your entire source hard drive (the one inside your computer), including your operating system, applications, documents and personal settings to a target external USB hard drive. Wizards and a user-friendly interface will make your work very convenient and user-friendly. Just answer a few simple questions and Acronis True Image Home will take care of everything else! When a system problem occurs with your internal hard drive, the software will get you up and running in short order.

To clone a disk:

Open the Acronis True Image program.

On the home window, click on the *Disk Utilities* icon.

On the next screen, click on *Clone Disk*.

Before proceeding, make sure you have your external USB Hard Drive connected to one of your USB ports.

Follow the Disk Clone Wizard steps.

There are two transfer modes available: By selecting the Automatic mode (it’s the default), you will only have to take several simple actions to copy all the data, including your complete operating system, partitions, folders and files, from your internal hard drive (source) to your external USB drive (destination).

Now select the source disk (your internal Hard Drive) and click **Next**.

select the destination (your external USB Hard Drive) where the disk information will be copied. The previously selected source becomes grayed-out and disabled for selection. Select the destination disk and click Next to continue.

If there are any partitions on the destination disk, they must be deleted first. Therefore, choose the first option: *Delete partitions on the destination hard disk*. To continue, select the first choice and click **Next**.

The next page will review the Disk Drives Structure. Review the source hard drive layout (before cloning) and the destination hard drive layout (after cloning) that will be created during the cloning procedure. Click **Next**.

No real changes or data destruction will be performed at this moment! For now, the program will just create a cloning script. All changes will be implemented only when you click **Proceed**, after the script is formed.

The next screen will be a Warning Message, informing you that a reboot is required for completing this operation; the operation will be cancelled if you choose not to reboot now. Select **Reboot**.

Your computer will reboot and show the progress of the cloning process. After several minutes delay, you will be told that the cloning operation was successful and that you should strike any key on your keyboard to shut down your computer. Therefore, strike any key.

Disconnect your external hard drive from its USB port and store it in a safe place. You may wish to affix a small piece of masking tape to the drive with the date that the clone was made. Now, when your internal hard drive crashes (and it will!), you will be able to clone back to a newly installed hard drive from the external USB hard drive.

You may wish to perform this cloning task at least once a week in order to be assured that all your files (and that's everything!) are up-to-date, i.e., no older than the date of your last clone.

Clone Back to Your Internal Hard Drive from Your USB Hard Drive

The process of cloning from your USB Hard Drive back to an internal hard drive is easy to accomplish provided you have an authorized copy of the Acronis 11 CD or you have created a unique Bootable Rescue Media for your computer as described on page one of this presentation. As was mentioned earlier, you cannot wait until your computer crashes to make a bootable rescue disk. By that time it is too late!

The first step in this process is to examine the boot sequence of your computer. When turned on (booted), many computers will go immediately to the master hard drive (usually Drive C:) since that is the drive that contains the operating system. If the hard drive is defective, the computer will not find the operating system and will simply stall. However, if you have your boot sequence set to find your CD drive first, the Acronis 11 Bootable Rescue Disk will load outside of Windows and will make it possible clone from your external USB drive back to the internal drive (if it is not physically damaged) or to a new internal drive replacement.

To change the boot sequence of your computer, you will need to strike the F2 key (sometimes it's the Delete key; on some computers the F12 key will take you directly to the boot sequence options) several times immediately after you turn on the power button. This will take you to the BIOS (Basic Input-Output System) where the boot sequence can be changed. Not all bios pages look the same, but you should be able to click on the several tabs across the top until you come to a page that shows you the current boot sequence of your particular computer. (Some Setup Utilities have a tab called "boot".) You will want to have your computer boot first to your CD/DVD and second to your Master Hard Drive. Once you have the boot sequence changed, strike the F10 key to Save and Exit, then hit Enter.

Once you change this sequence, you can retain these settings permanently. Thereafter, whenever you wish to use your Rescue Disk, your computer will be ready to boot from your CD/DVD drive. If you do not have a bootable CD/DVD disk in your drive bay, the computer will move on and seek out the Windows operating system on your master hard drive. Absolutely no harm done!

Once you strike the F10 key and then Enter, if the operating system stored on your master hard drive is not corrupted, it will continue to boot up normally. If that should be the case, simply go through the normal shutdown routine. Before you shutdown completely, however, it is a good idea to open your CD/DVD tray and insert the Rescue Disk.

If the master hard drive is corrupted or damaged, you will get a black blank screen. During this time, open your CD/DVD tray and insert the Rescue Disk. Once the disk has been inserted, turn off the power to your tower (computer) by holding down on the start button until the computer turns off (this may take several seconds).

With the Rescue Disk now inserted in the CD/DVD tray, turn on your computer. Acronis will boot to a homepage and give you three choices. select **Acronis True Image Home**.

After several seconds (it seems like forever; just be patient), a screen will appear that gives you **Pick a Task** options. Select **Clone Disk**. *Extremely important: make sure that you have your external USB hard drive inserted into a USB port on your computer.*

At the next screen, accept “Automatic” and click **Next**.

At the next screen, highlight your USB External Hard Drive (source) and click **Next**.

At the next screen, your Internal Hard Drive (destination) will be pre-selected. Click **Next**.

If your destination hard drive is “non-empty”, i.e. contains partitions or data, select *Delete partitions on the destination hard drive*. (If you are cloning to a new disk, your selection of this option will not be required.) Click **Next**.

The next page will review the Disk Drives Structure. Review the source hard drive layout (before cloning) and the destination hard drive layout (after cloning) that will be created during the cloning procedure. Click **Next**.

No real changes or data destruction will be performed at this moment! For now, the program will just create a cloning script. All changes will be implemented only when you click **Proceed**, after the script is formed.

The next screen will show the progress of the cloning operation. The time needed to complete this process is dependent upon several variables, including external hard drive speed, size of the drives, etc.

The final screen will advise that the *disk cloning was successfully completed*. Click **Next**.

Important: Remove both the USB external hard drive from the USB port and the Acronis Rescue Media CD from the CD/DVD drive.

Close the Acronis True Image Home window.

Turn off the power to your tower (computer) by holding down on the start button until the computer turns off (this may take several seconds).

You have now cloned the entire contents (including your Windows operating system) of your external USB drive back to the internal hard drive that was corrupted (but not physically damaged) or to a newly installed hard drive replacement.