

Hard Disk Backup Program Review

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[1960 PC Users Group](#)

The most important reason for backing up one's hard disk is the eventual recovery process. Backup programs that can't fully recover all of your files, including the operating system, are of little value.

Most hard disk recoveries are required when a hard disk fails and is being replaced. Other times are when the operating system will no longer boot or has become so corrupted that it needs to be replaced from a backup that was made before the ensuing problem.

Most of the backup programs on the market are file backup programs. Since open files (files in use by the operating system or other running programs) at the time of the backup are not accessible, they do not become a part of the backup. This is an operating system limitation.. File backup type programs are useless unless the entire operating system can be fully recovered. Although in order to recover an un-bootable operating system with a "file backup" type program, one must reinstall the operating system before using a "file backup" recovery program. This can be a lengthy and laborious process that does not always work. "Drive/Partition image backup" programs do this with little effort and can even be used for cloning hard disks.

I've been using Powerquest's Drive Image series of backup software for years, having started with "Drive Image 5" through "Drive Image 7" and "Drive Image 2002". After Powerquest was acquired by Symantec in the fall of 2005, I started looking for an "Image Backup" software product that had additional features.

My backup requirements:

- The "Image file" must be compressed to save space.
- The rescue/recovery disk (floppy or CD) must be self booting.
- It must be able to backup or recover either a partition or the complete hard disk from the self bootable recovery/rescue disk.
- It must be able to store and retrieve the "Image files" to external devices (USB and Firewire) as well as networked computers.
- It must be able to retrieve individual files from the "Image file" from the self bootable recovery/rescue disk.
- It must include a "task scheduler" for scheduling automatic backups.

- It must be able to back-up individual files or directories/folders from an unbootable computer.
- And last, it must be able to backup and recover all Microsoft Windows and Linux file structures.

Known commercial drive/partition image backup programs:

(There may be others that I haven't found)

Acronis "[TrueImage 11.0](#)"

Symantec "[Norton Ghost 14.0](#)"

Terabyte "[Image for Windows](#)"

I have also found a free program called "[DriveImage XML](#)"

A brief review of each of these programs:

PowerQuest "Drive Image 2002" (no longer available):

"Drive Image 2002" was a DOS based system that met all of my requirements except it was unable to save its image files to external hard drives or other networked computers. It also did not have a "task scheduler", although, it did backup Linux file structures.

PowerQuest "Drive Image 7.0" (no longer available)

"Drive Image 7.0" written specifically for the Windows 2000 and Windows XP operating systems, will not run on Windows 98x systems. The Recovery/Rescue disk is the bootable installation disk and will not do backups. In order to do backups the operating system must be operational.

Acronis "TrueImage 11.0" (\$49.99 MSRP)

Acronis "TrueImage 11.0" not only met all of my requirements, it also had the additional capability of creating incremental and differential backups. This saves disk space when multi backups are made over a time period. During installation one has an opportunity to create a standalone rescue/recovery CD. This CD which is a bootable copy of Linux can not only recover disk images (or individual files), but can be used to backup to external drives or network drives.

Norton "Ghost 14.0" (\$69.99 MSRP + \$9.95 shipping)

Norton "Ghost 14.0" (Windows 2K, XP or Vista only) and its companion program Norton "Ghost 2003" (Windows 98x,) are basically repackages of the old Powerquest "Drive Image" programs. Although the GUIs (Graphical User Interface) have been glitzed up, only the addition feature of creating incremental

images has been added. As with “Drive Image 7.0”, rescue/recovery is made from the installation disk which is bootable. Norton has changed the calling of their “drive images” to “recovery points”, which is probably more descriptive.

Terabyte “Image for Windows” (\$38.94 MSRP + \$9.95 shipping)

Terabyte “Image for Windows” is one of two programs, one for DOS (IFD) and the other for Windows (IFW). The DOS (IFD) can be installed on a bootable floppy disk and used as a standalone backup and recovery system. The Windows version (IFW) is installed and runs in the Windows environment. Both programs are command oriented programs that are executed with numerous parameters. In order to backup a partition with an active operating system in the IFW version, an auxiliary program needs to be run first.

DriveImage XML (Free Internet Download)

“DriveImage XML” is a backup program that allows you to backup a drive/partition from within Windows XP. It can image a drive/partition that is currently in use (such as the system drive) but only restore that image to another partition/disk. In order to restore an operating system drive, a recovery/rescue disk will need to be created. This is done by making a BartPE bootable CD-ROM with the program installed on it, something not for the inexperienced computer user. Also it did not have a task scheduler for scheduling automatic backups nor was it able to backup to external hard drives or other networked computers.

Comparisons:

Backup compression and speed comparison.

For comparison purposes the same 340 MByte data file was backed up by the following programs.

Program (Compression Level)	Time (Minutes)	Compression (percent)
Acronis “TrueImage 11.0” (none)	0:25.16	-0.3 %
(normal)	0:30.50	5.1 %
(high)	1:09.33	6.7 %
(maximum)	1:16.57	6.9 %
Norton “Ghost 14.0” (none)	0:48.06	-0.7 %
(standard)	0:52.44	3.9 %
(medium)	1:00.53	6.2 %
(high)	1:39.70	6.6 %

It should be noted that Norton “Ghost 14.0” and the old Powerquest “Drive Image 7.0 had the same compression and time values.

Ease of Use:

Acronis “TrueImage 11.0” usage is relatively intuitive to use, similar to PowerQuest “Drive Image 7.0). Norton “Ghost 14.0”, on the other hand, requires you to establish a “task” before executing a backup, although this can be convenient when making repetitive backups.

Norton “Ghost 14.0” required the uninstalling of all PowerQuest “Drive Image” programs before making the installation. When looking at the file extensions one can understand why, since they both used the same file extension.

Since Terabyte’s “Image for Windows” and “DriveImage XML” did not meet most of my requirements they were not tested.

Conclusion:

Although this is a judgmental decision, considering price, speed, size of the backups, meeting my requirements and ease of use, my preference is the Acronis “TrueImage 11.0” backup system. Although the street prices are considerable less than their manufacture’s suggested retail price (MSRP), the Acronis “TrueImage 11.0” program was the least expensive when obtained through the PC User Group Relations site (www.ugr.com)..

If you haven’t tried or tested your recovery system, how do you know it works? You could possibly lose those memorable photos or irreplaceable files some time in the future.

As they say; if you don’t back up your computer, you’re paying “Russian Roulette” with most of the chambers loaded.

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