10 Backing Up Windows 7

This chapter looks at the options that are available in Windows 7 for backing up your system. In some cases additional software may be supplied by the manufacturer of your computer to backup it up. If this is not the case, Windows 7 comes with software called "Backup and Restore". Backup and Restore provides basic backup functionality for your documents and also allows the computer to be recovered from a complete loss, such as a hard disk failure or if a computer is lost or stolen.

Backup Destinations

Backup and Restore supports a number of different backup locations outlined below. Backup and Restore does not support backing up to the following.

- Tape drives
- Backing up to the same drive as Windows 7
- Backing to drives encrypted with BitLocker

Second Hard disk

If you have a second hard disk in your computer, either internal or external, Backup and Restore can use this second drive for backups. The hard drive does not need to be the same size as the original hard disk it is backing up; it only needs to be large enough to hold the backup.

Optic Drive

Backup and Restore supports backing up to optic media like CD, DVD and Blu-ray. Backup and Restore supports splitting the backup over multiple discs. With the low price of optic media, this can be a cheap way to backup your system if you have are happy to repetitiously insert one disc at a time during backup. Since the backup may require more than one disc, if you use the scheduling option in Backup and Restore, you will only be able to backup your documents. To backup the complete system to optic media, you need to manually run a backup each time you want to backup everything.
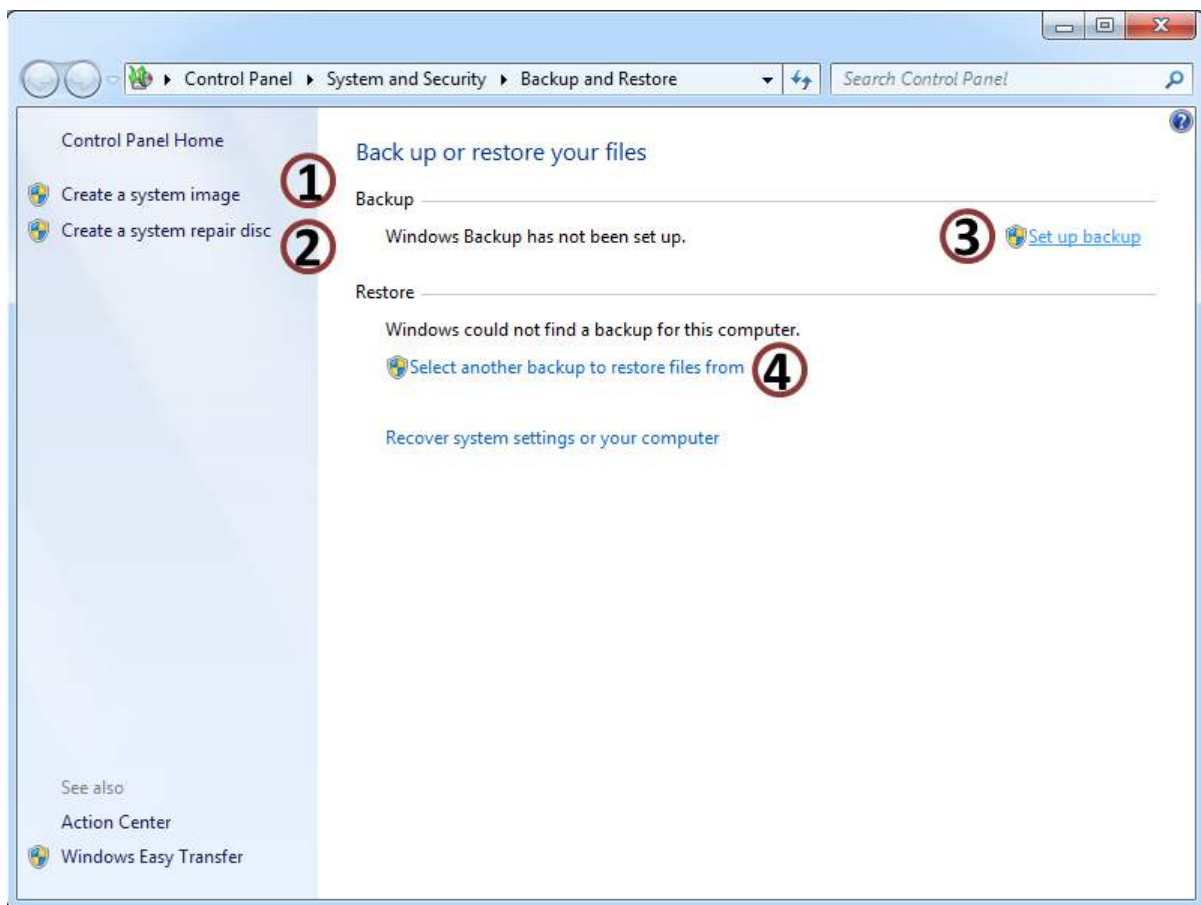
Network

If you are running Windows 7 Professional, Enterprise and Ultimate Backup and Restore also gives you the option to backup Windows 7 to the network. Backing up to the network requires a network share. This can be on another computer or a network device like Network Attached Storage (NAS). The backup is generally slower than other options due to the speed of the network.

USB Flash Drive

USB Flash Drives are supported however due to the small amount of space on a USB Flash Drive compared with other media you will not be able to save a complete backup on flash media. This means only documents can be backed up on the flash drive, not system or program files.
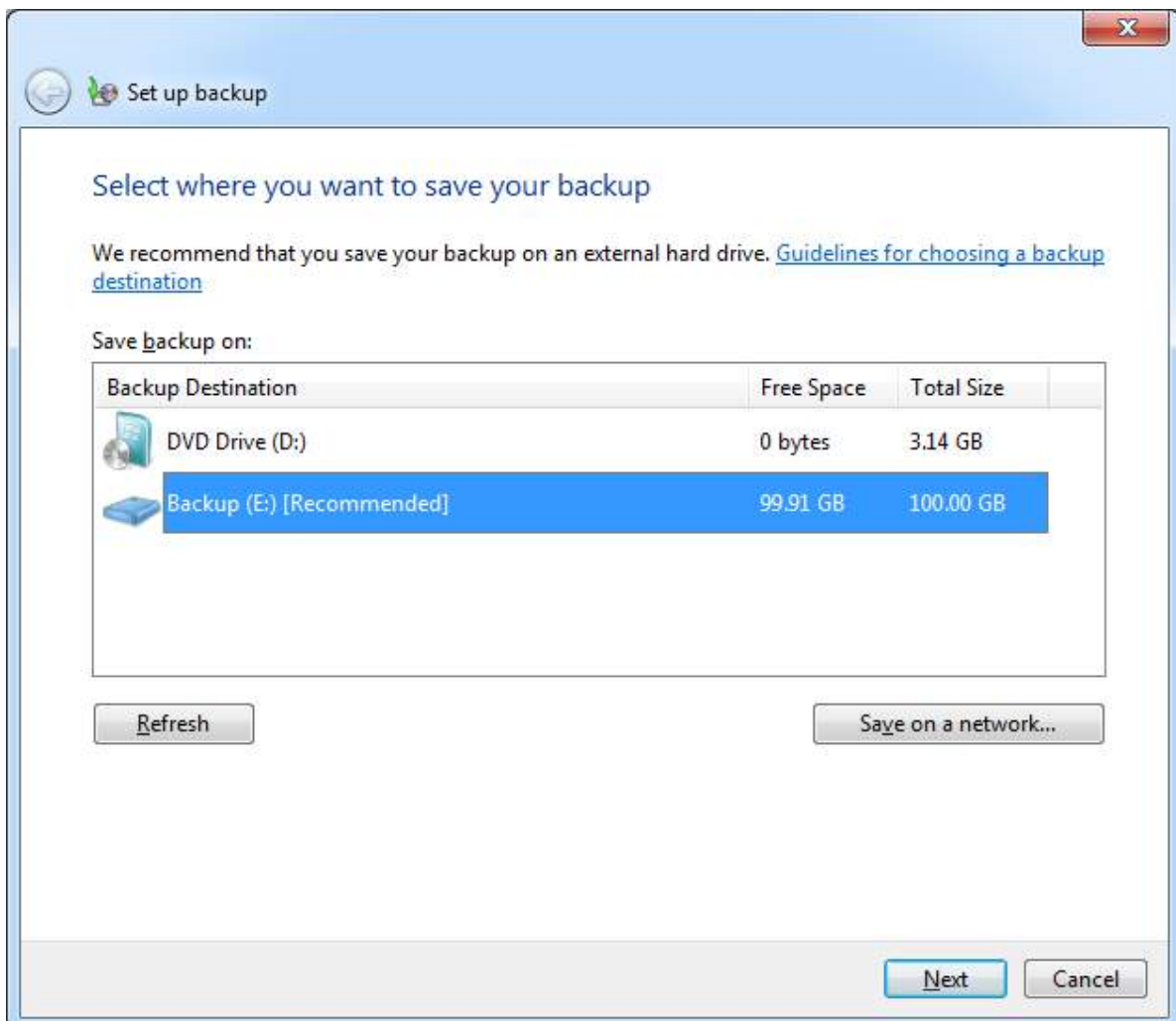
Performing a Backup

To setup Backup and restore, go to the Control Panel from the Start Menu, then System and Security, then Backup and Restore. Shown below is the Backup and Restore control panel.
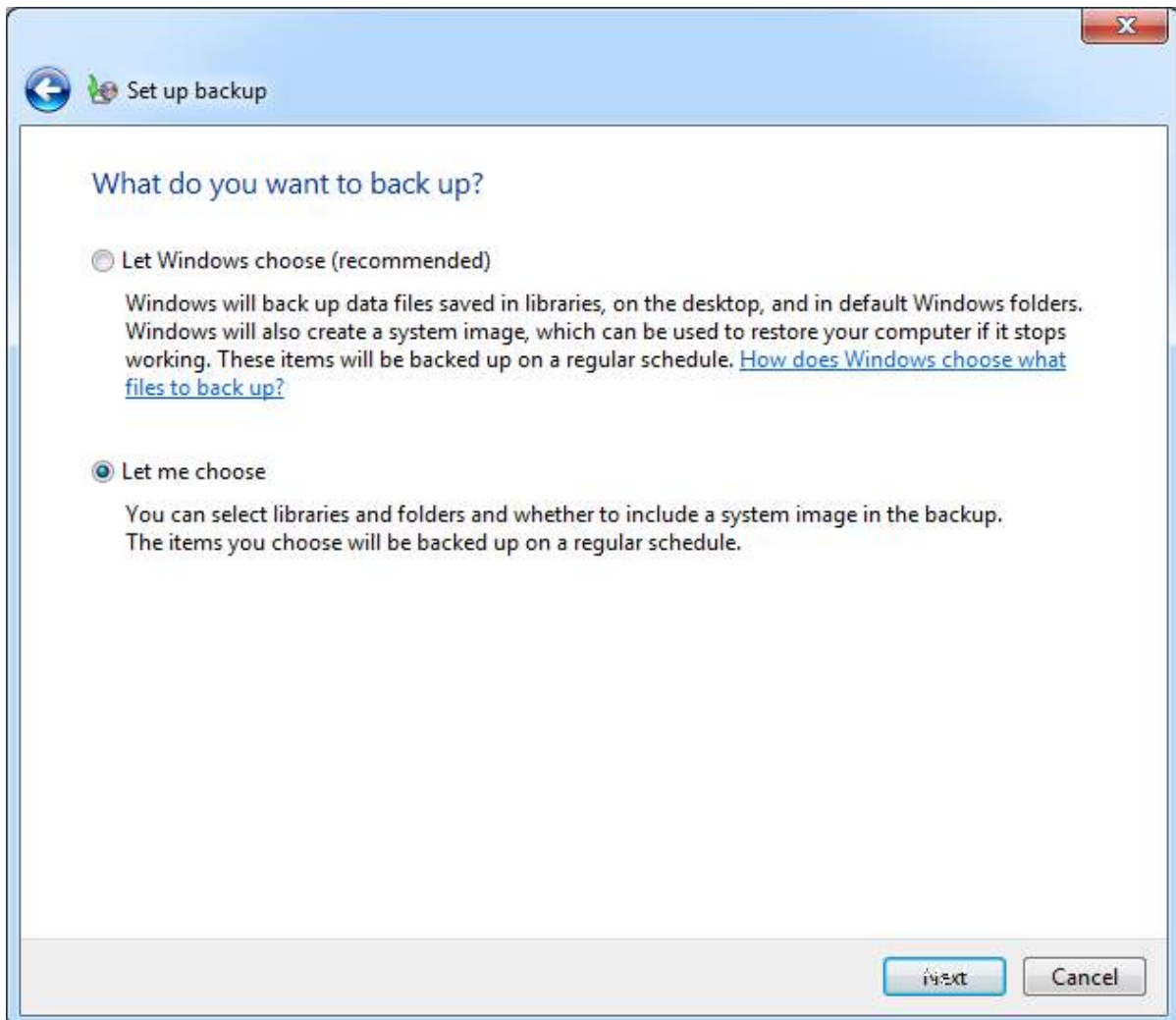

①   Create a system image: This option creates a full backup of the computer. This includes all operating system files and data files. A system image can be used to recover the computer if the hard disk were to fail. The disadvantage of a system image is that an individual file cannot be restored by themselves, it is all or nothing.

② Create a system repair disc: A system repair disc contains a number of tools that can be used to fix a Windows system or restore the system from a backup. Since the repair disc is a standalone, this can be used to boot the computer if no operating system is available, such as if the hard disk were to fail. You can also access the same tools by using the original Windows 7 setup DVD. When booting off the setup disc, select the option, Repair your computer to access these tools.

③ Set up backup: This option runs a wizard which allows you to configure a backup on your system. This wizard is covered next.

④ Select another backup to restore file from: In some cases you may want to recover files from another backup, maybe a backup that was done on another computer. This option lets you choose any backup to restore from.
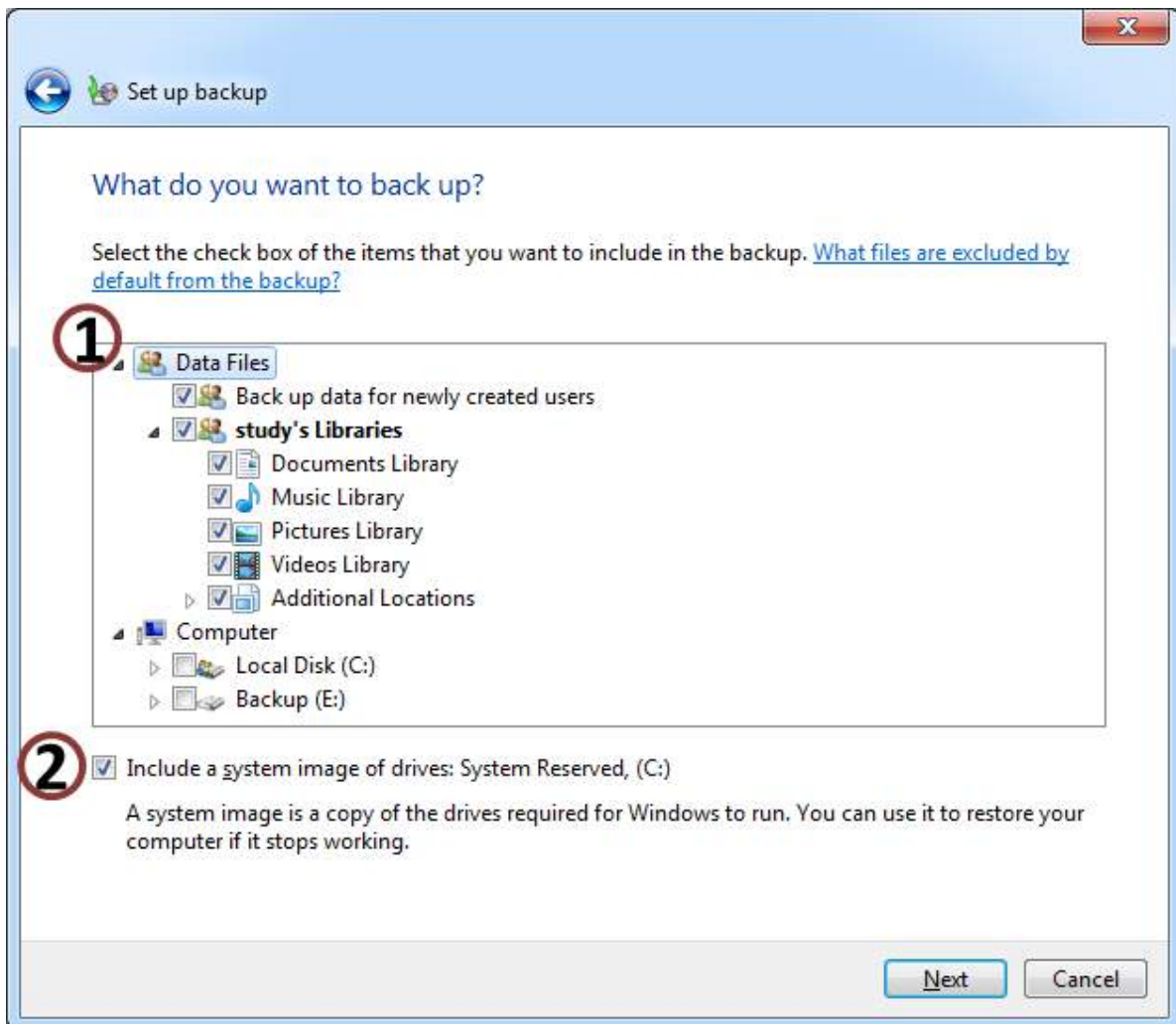
The best way to configure a backup is to select the option Set up backup. This will launch a configuration wizard. The first screen of the wizard is shown below. This allows you to choose a backup location. To save to a network location, select the option, seen below, Save on a network.

The next screen of the wizard shown below, allows you to decide what should be backed up. The top option, Let Windows choose (recommended), automatically backups all Windows system files and documents. However, if you want to have some control over what Backup and Restore includes in the backup, select the second option, Let me choose.
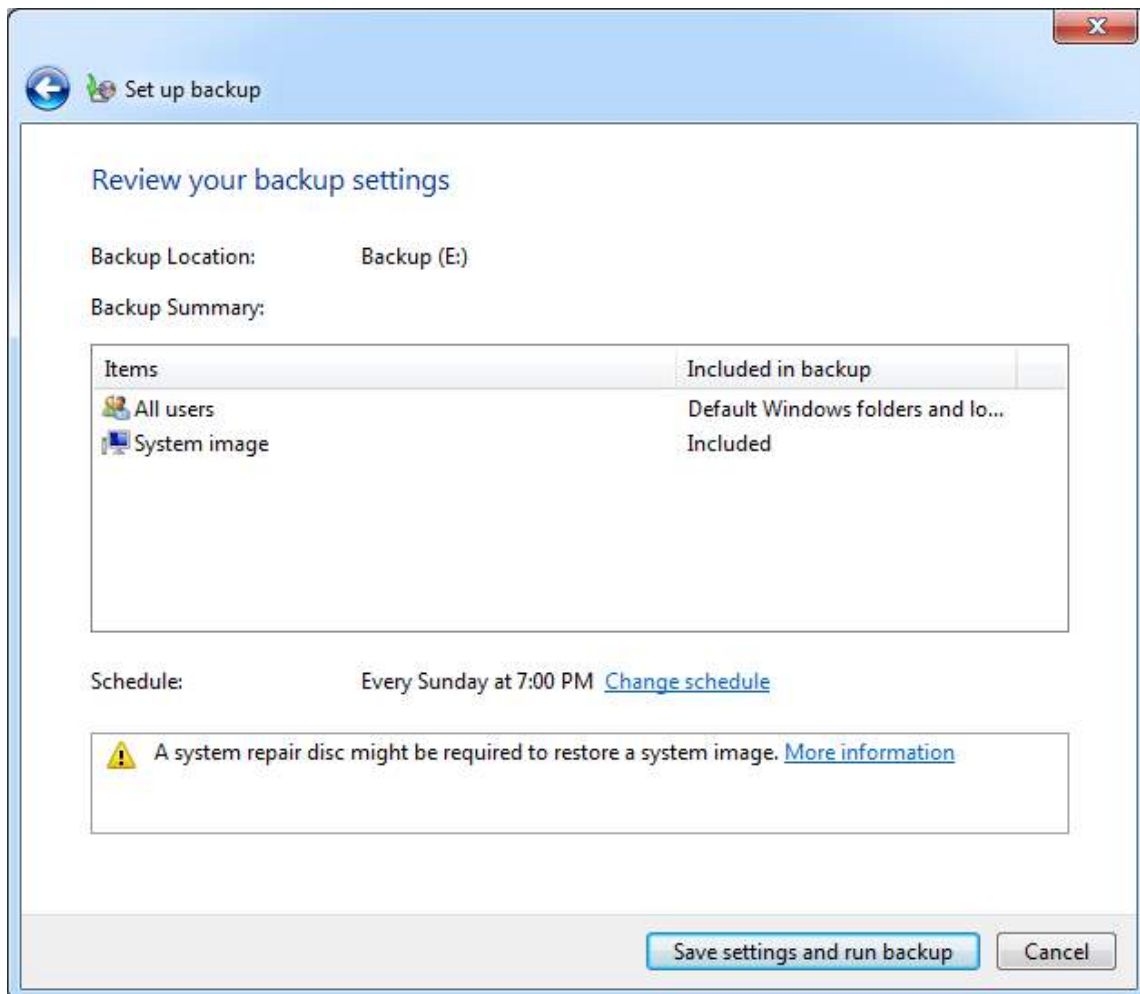
The next screen of the wizard shown below will appear if you choose to decide what is included in the Backup. This is divided into two parts.

① The top part allows you to decide which files to include in the backup. Backup and Restore only allows you to choose categories to backup. For example, you could choose to backup your documents library but would not be able to choose which documents in the library to backup.

② The option, Include a system image of drives: System Reserved – will include in the backup what is referred to as a system image. A system image contains all files on the hard disk including the operating system files. If you do not tick this option, you will not be able recover the operating system if the hard disk was to fail.

The last screen of the wizard shown below will ask you to confirm your settings. Windows Backup and Restore will run by default on Sundays at 7:00 pm. You can change this to run daily, weekly or monthly. The backup can only be scheduled to run once per day, but you can choose the time that it will run.

Summary

Backup and Restore can backup your complete system, but it is important to make sure that you use the correct settings. If you need to recover a complete Windows 7 system, you will need a system image. Due to the time and space required if you include a system image with a backup, some users will elect to manually run a system image at regular intervals. For user documents, you may schedule a backup to run that does not include a system image. With this approach, it is important to remember that when you install additional programs or make system changes, you need to create a new system image. Without a system image, if you restore the system at a later date, you will need to reinstall any additional programs that were installed after the system image was taken.

For a video demonstration for how to use Backup and Restore see
http://itfreetraining.com/70-680/backup-and-restore-windows-7