Experiment No.2

Perform backup and restore of system

Theoretical Background

Backup & Restore

In information technology, a backup, or data backup is a copy of computer data taken and stored elsewhere so that it may be used to restore the original after a data loss event. Backups can be used to recover data after its loss from data deletion or corruption, or to recover data from an earlier time. Backups provide a simple form of disaster recovery; however not all backup systems are able to reconstitute a computer system or other complex configuration such as a computer cluster, active directory server, or database server.

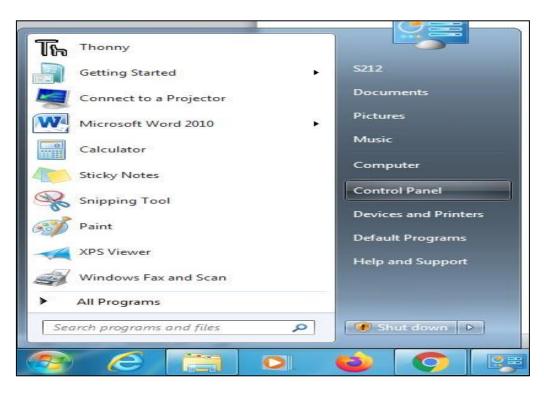
A backup system contains at least one copy of all data considered worth saving. The data storage requirements can be large. An information repository model may be used to provide structure to this storage. There are different types of data storage devices used for copying backups of data that is already in secondary storage onto archive files. There are also different ways these devices can be arranged to provide geographic dispersion, data security, and portability. Data are selected, extracted, and manipulated for storage. The process can include methods for dealing with live data, including open files, as well as compression, encryption, and de-duplication. Additional techniques apply to enterprise client-server backup. Backup schemes may include dry runs that validate the reliability of the data being backed up. There are limitations and human factors involved in any backup scheme.

Procedure

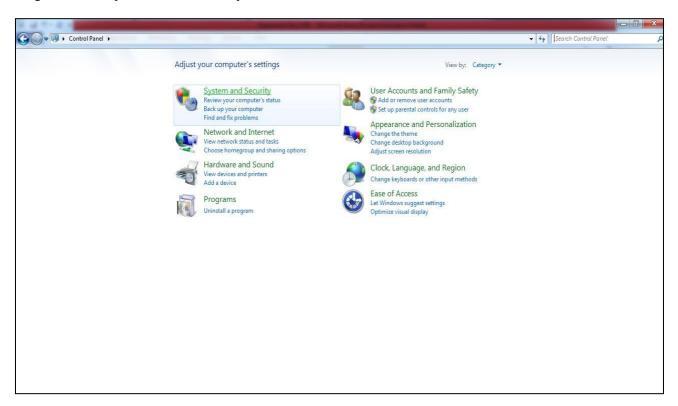
Backup folder/files

Step 1: Click **Start** Control **Panel**

The Control Panel is a component of Microsoft Windows that provides the ability to view and change system settings. It consists of a set of applets that include adding or removing hardware and software, controlling user accounts, changing accessibility options, and accessing networking settings. Additional applets are provided by third parties, such as audio and video drivers, VPN tools, input devices, and networking tools.



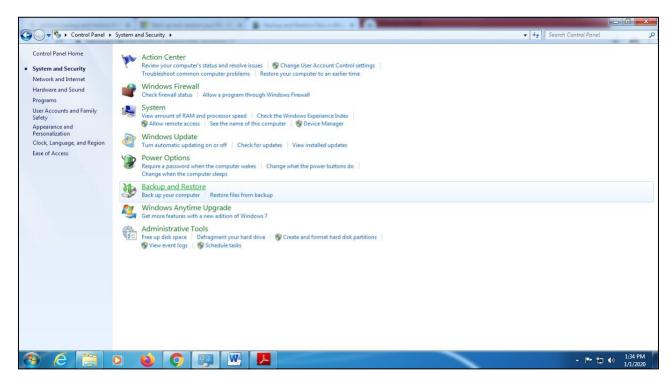
Step 2: Go to System and Security



Step 3: Click **Backup and Restore**

Backup and Restore supports two different types of backup: file backup and system image.

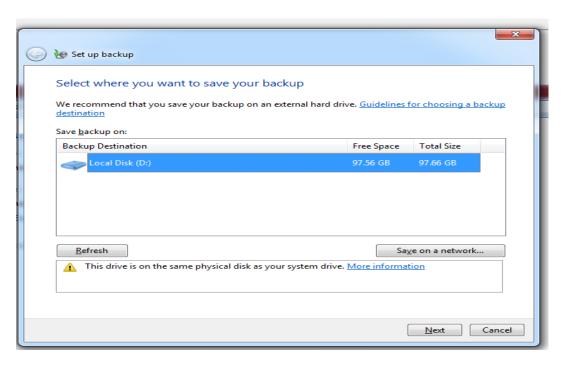
File backups are saved to ZIP files. Two methods of file backup are supported. The first, normal backup, stores everything selected for backup. The second, incremental backup stores only files that are changed after a previous backup.



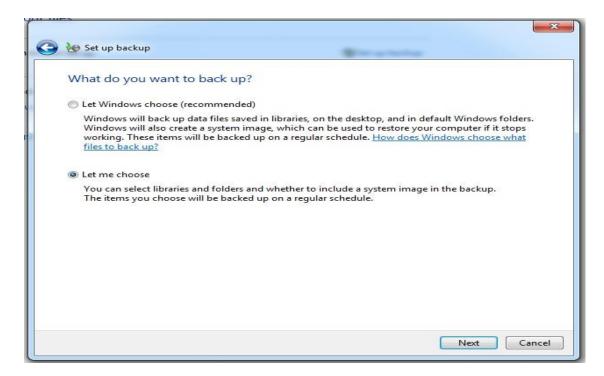
Step 4: In the Back up or restore your files window click the link to set up a backup



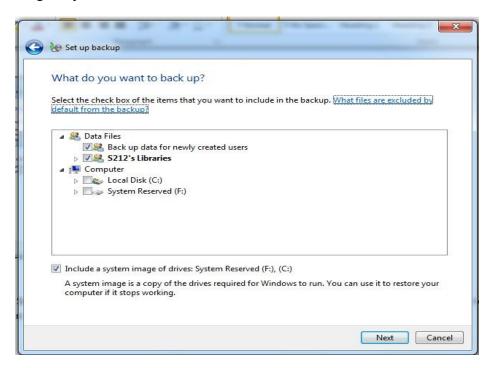
Step 5: Windows will search for a suitable drive to store the backup or you can also choose a location on your network. If you backup to a network location you might need the password to the share.



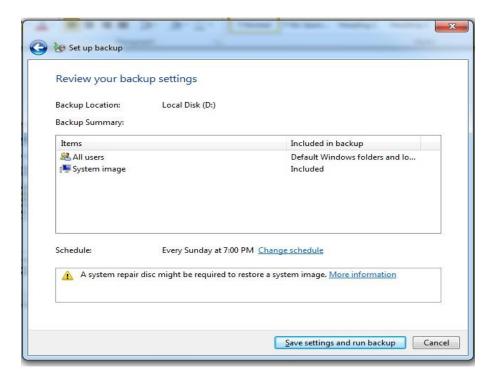
Step 6: You can choose **Let Windows choose** (recommended) what to backup or you can choose the files and directories as you want by selecting **let me choose.** You can have Windows choose what to backup or you can choose the files and directories. Because I like more user control for this tutorial I am choosing what to backup but it's completely up to you.



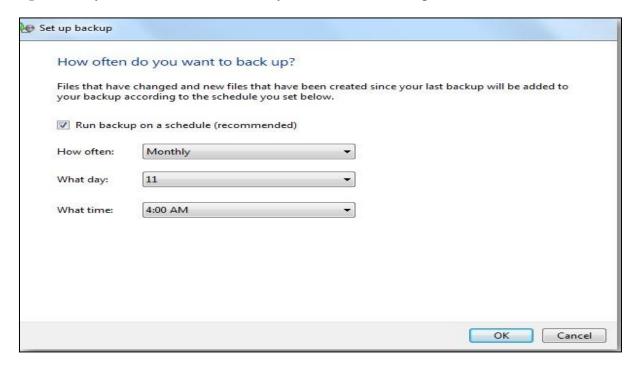
Step 7: Select the files and folder to include in the backup. Also notice you can select the option to create an image of your local drive.



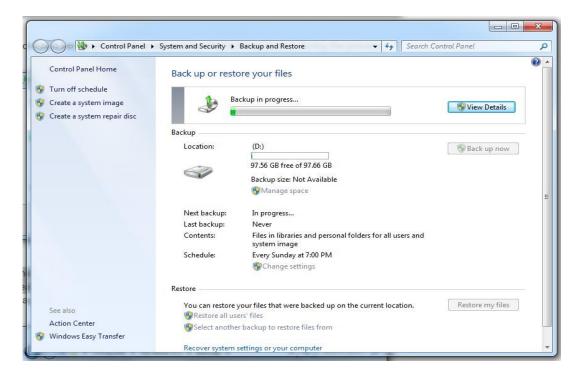
Step 8: Now review the backup job and make sure everything looks correct.



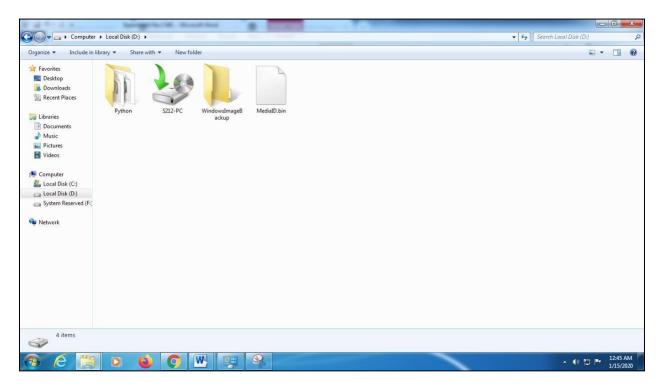
Step 9: Here you can also schedule the days and times the backup occurs.



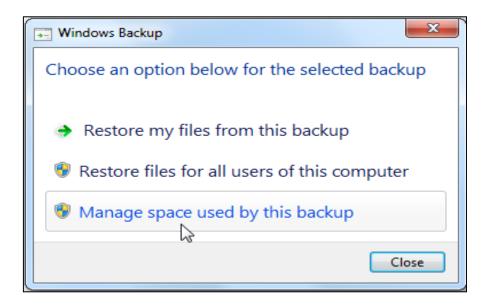
Step 10: Save the backup settings and kick off your first backup and while it runs you can monitor the progress.



Step 11: When the backup is complete you will see the two backup files and image folder if you created one.

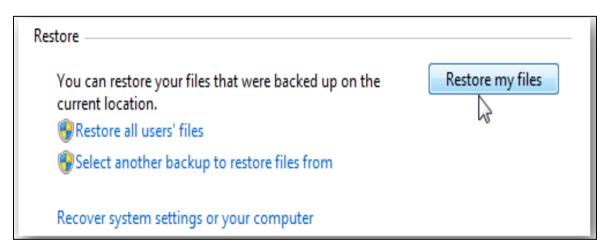


Step 12: Double click on the backup file and can restore files or manage the size of the backup folder.

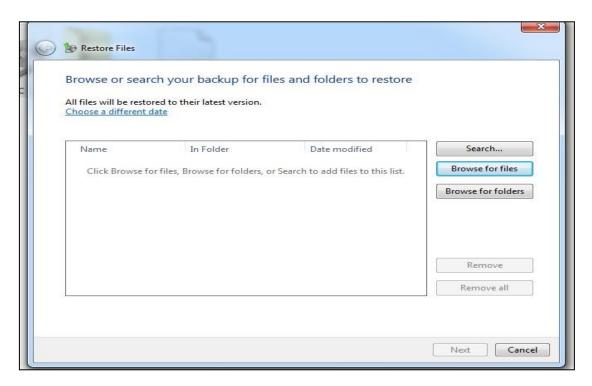


Restore Files from Backup

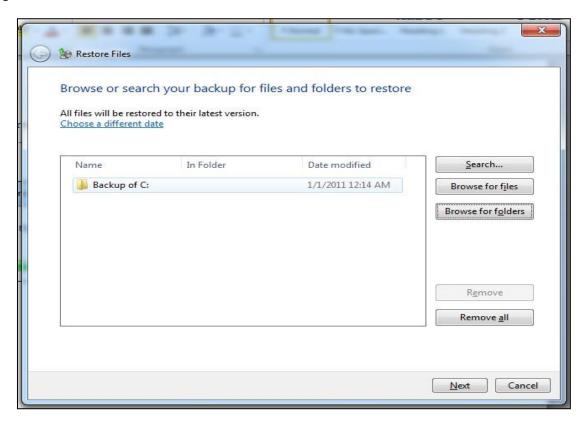
Step 1: If you need to go back and restore a file from a backup click on restore my files in the Backup and Restore Center.



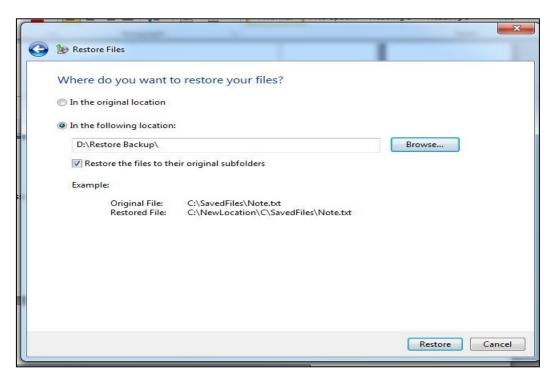
Step 2: Now you can browse or search the most recent backup for a file or folder.



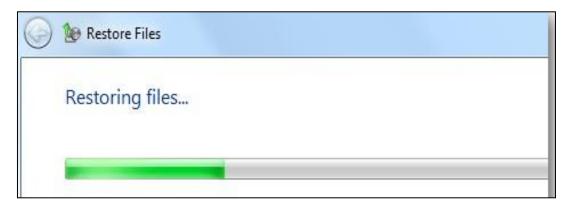
Step 3: Confirm selected files/folders are in list to be restored.



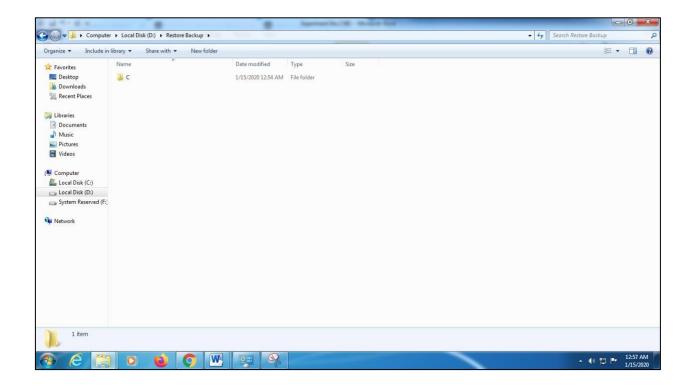
Step 4: Select the location where you want to restore the backed up files/folders. Here I will make a folder named **Restored Backup.**



Step 5: Progress of the restoration will vary depending on the size of the data and location it's restoring from.



Step 6: Here we can see the folder **Restore Backup** folder in which our backed up folders are restored in it.



Conclusion

We have conclude that how should we perform backup and restore our data in windows 7 operating system.

Exercise

- 1. What are the categories of backups?
- 2. How do I restore my files?
- 3. What is the most efficient way to protect my data?

Answers

| Network and Information Security(22620) | | | | |
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| Marks obtained | | | Dated signature of Teacher |
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| Process Related (15) | Product Related (10) | Total(25) | |
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