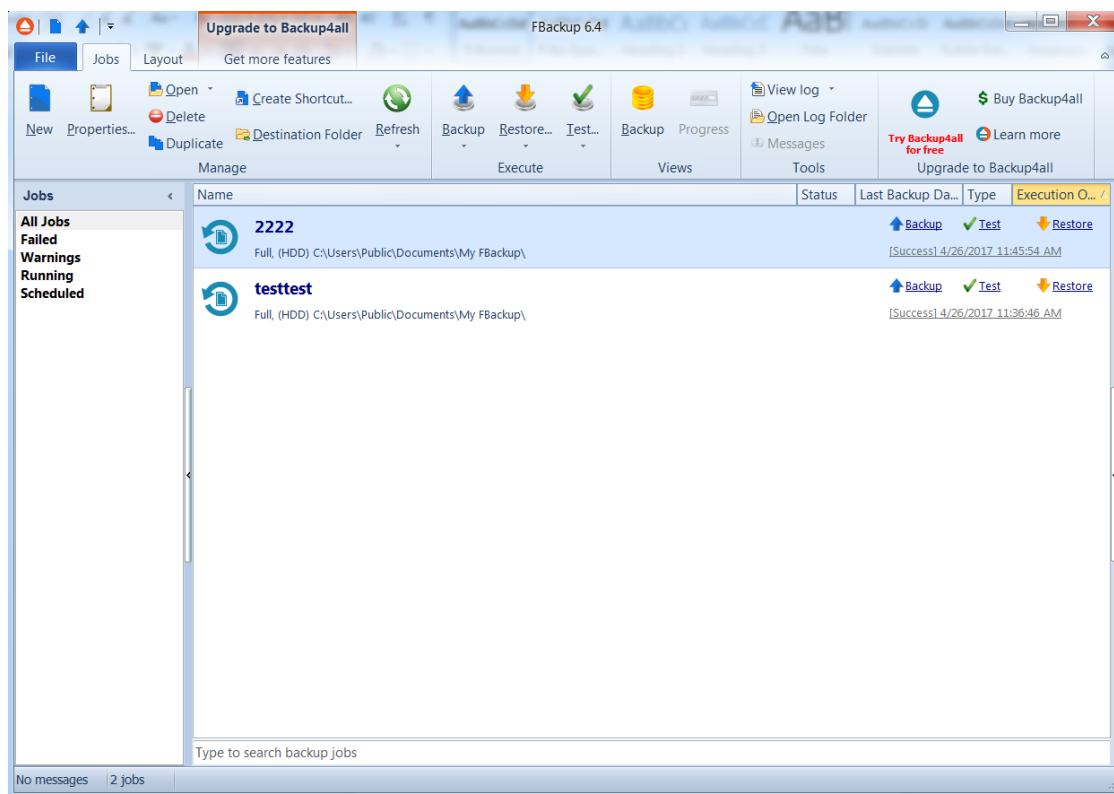


Introduction of Data Management

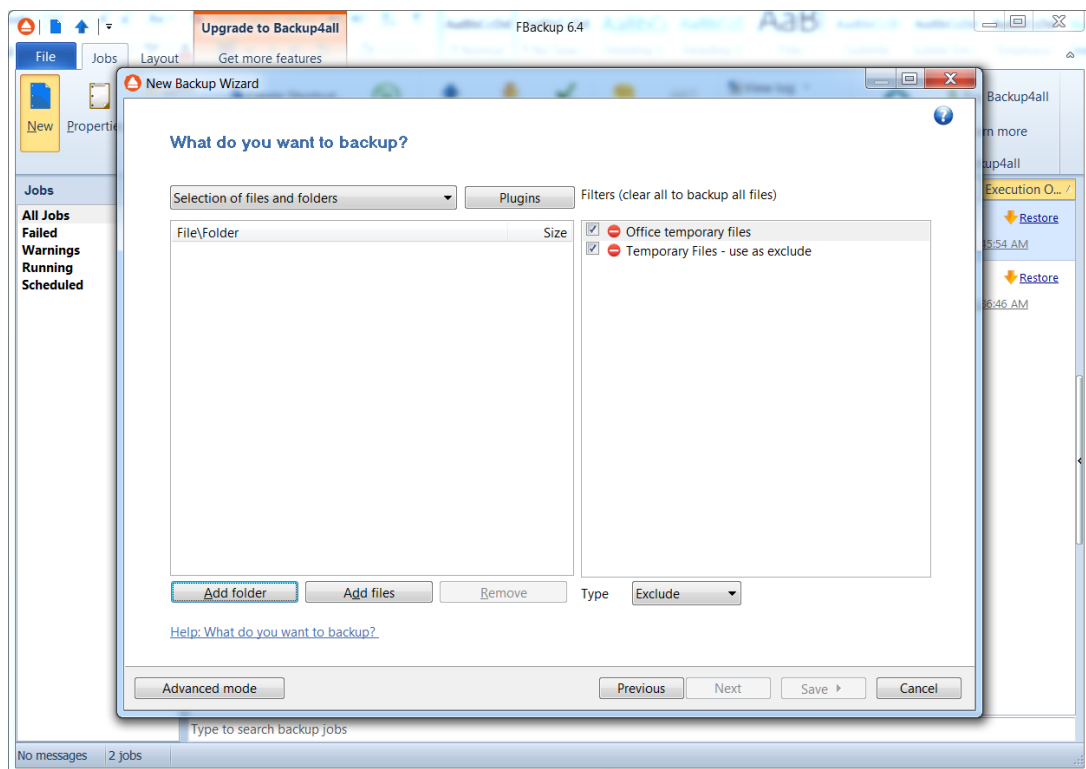
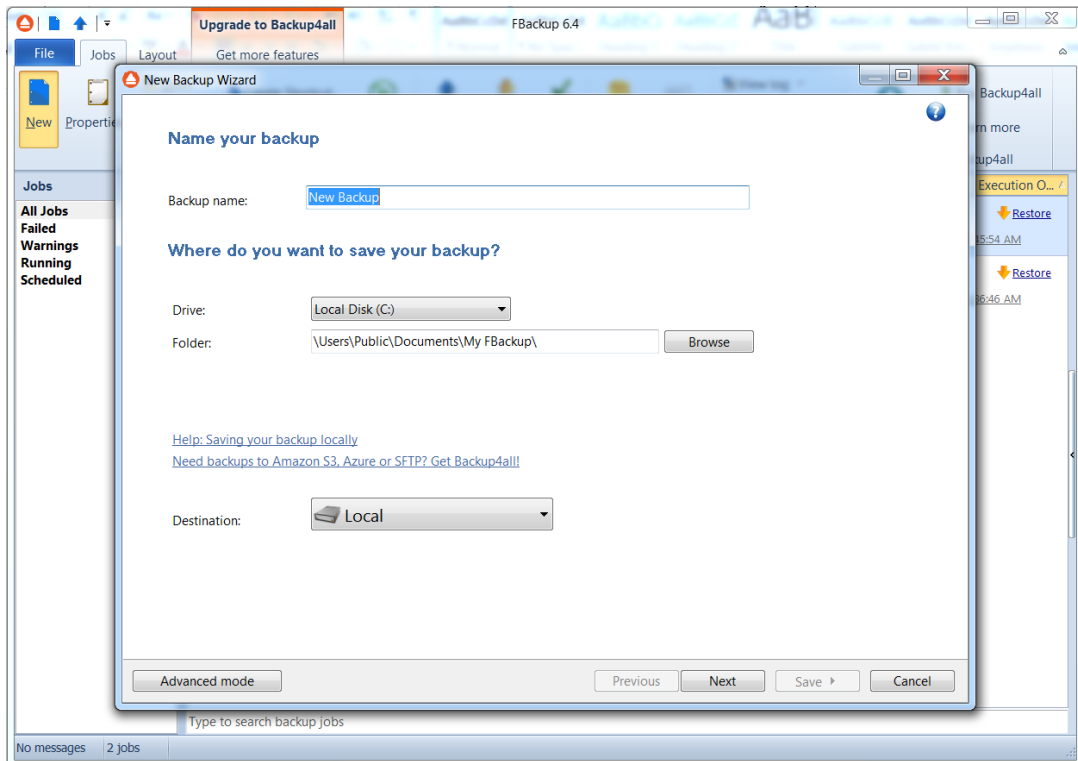
The purpose of data management is to expedite the process of recovery if any disaster happens to the data repository. Data backup and Data recovery are some of the functions fall under data management. However, the data backup and data recovery has different meaning. Data backup refers to the copying or virtual files or databases to a secondary site for preservation in case of equipment failure or the catastrophe. Data recovery is the process of restoring data that has been lost, accidentally deleted, corrupted or made inaccessible. Backup is like to prevent the file lost in any situation and make a copy for backup safety purpose. One the latest version file lost in disaster, backup file which has earlier version can proceed to work. Recover mean file lost or delete accidentally without any backup or saved, find the way to recover the things accidentally lost or delete.

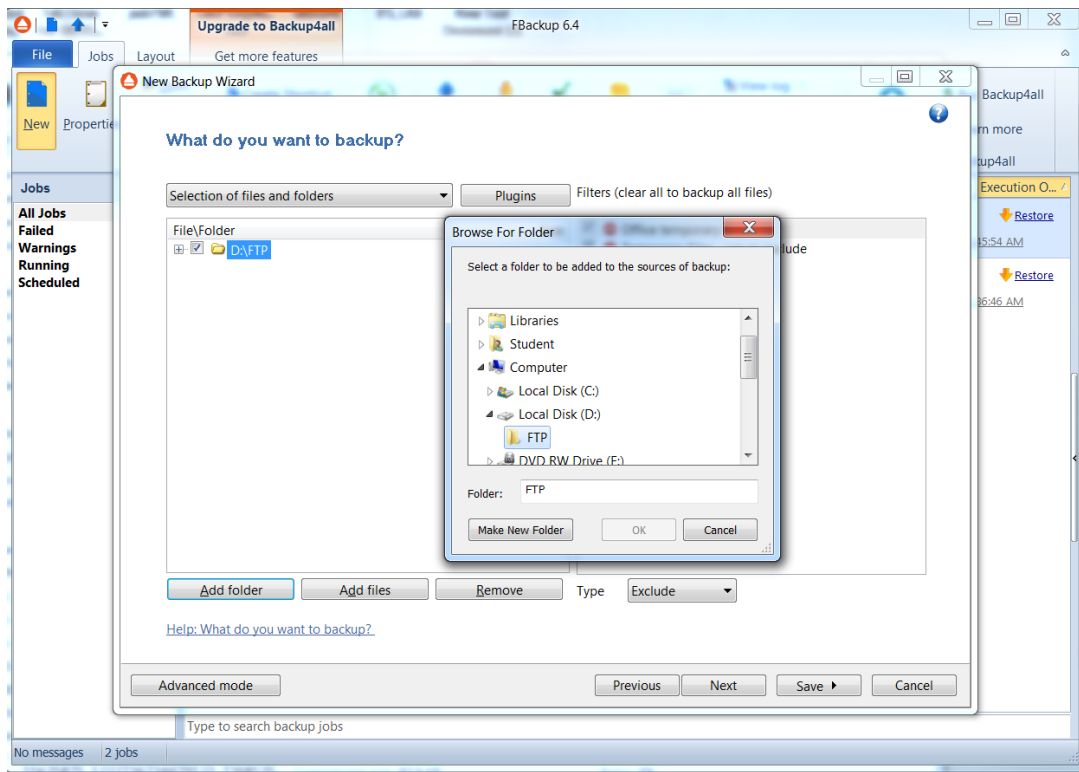
FBackup

- 1) This is the default interface for the fbackup software which allows you to back up a particular directory in the case of any loss of data.

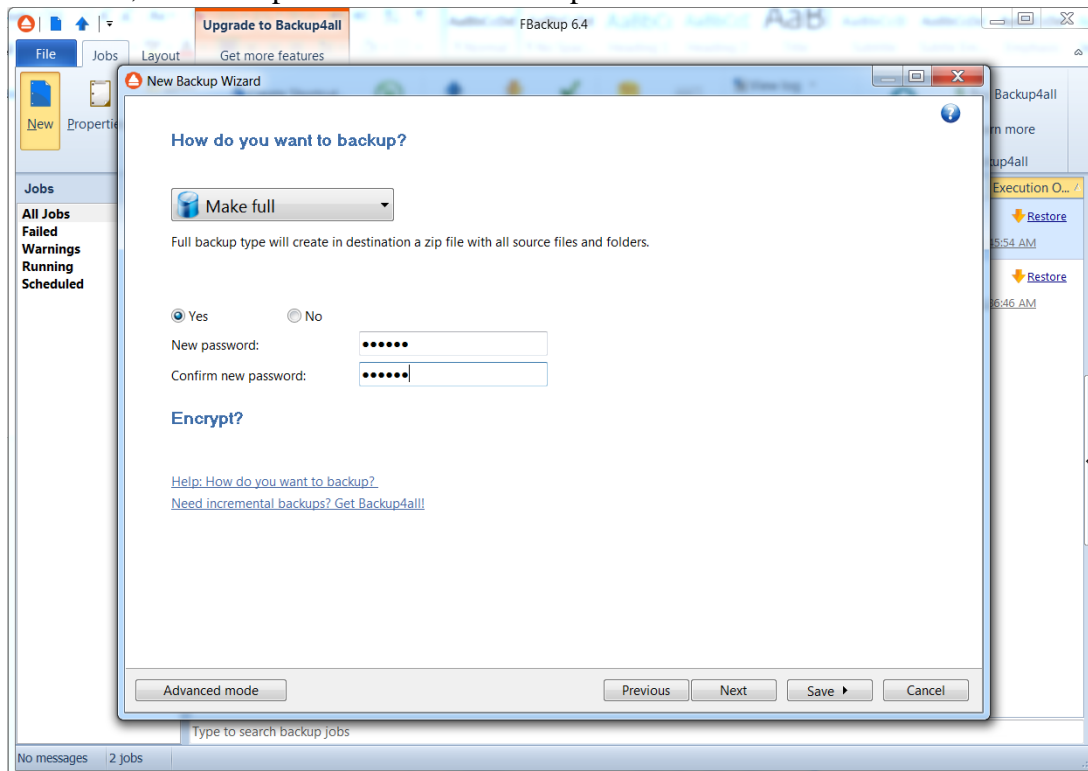


- 2) First, click on the New button on the interface to create a new backup volume. Then add the important folders that is intended to be backup.

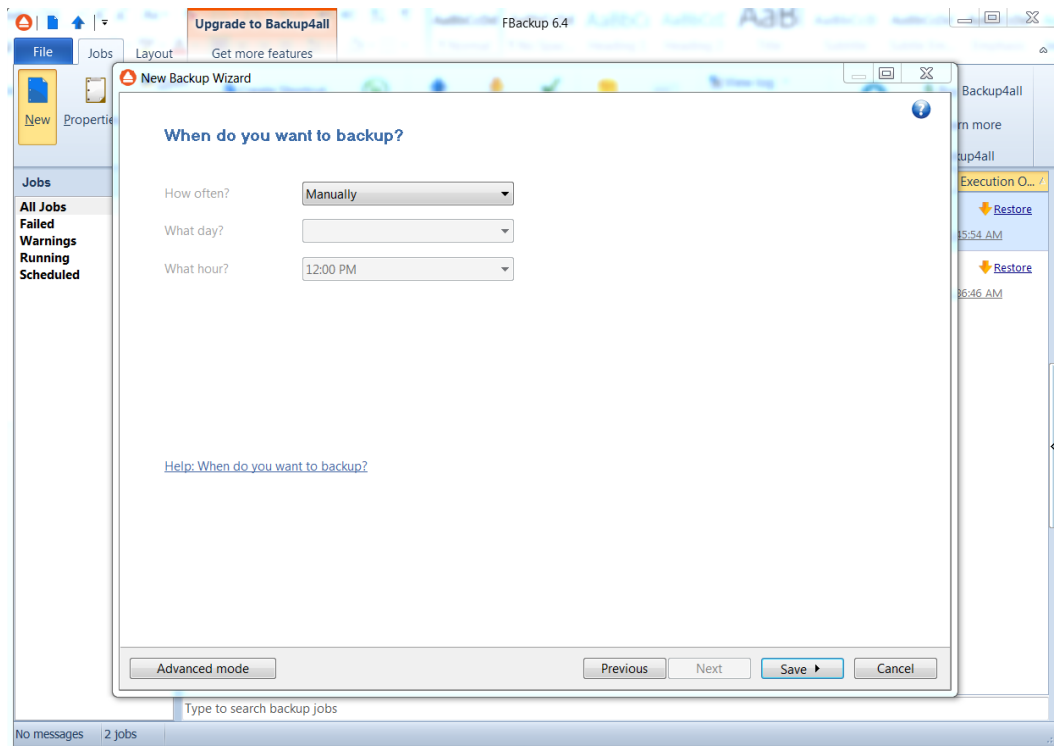




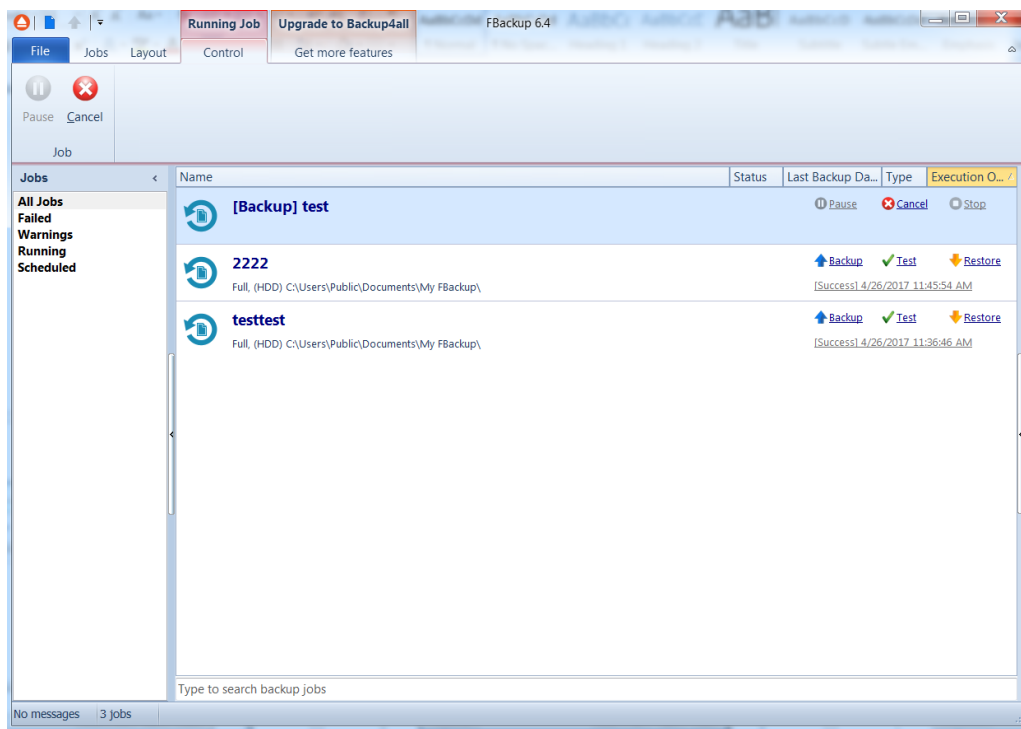
3) After that, insert the password for the backup volume.



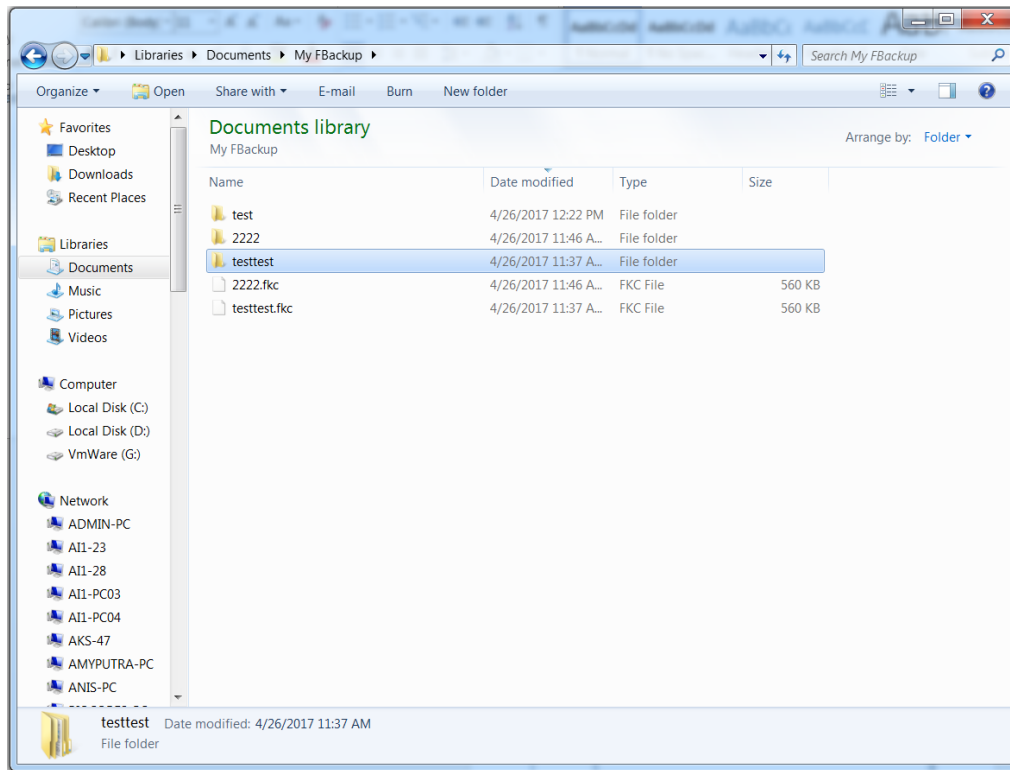
- 4) In continuation to that, choose the backup option to select how frequent we have to back up the backup volume.



- 5) After saving the configuration, the backup volume will be created successfully.

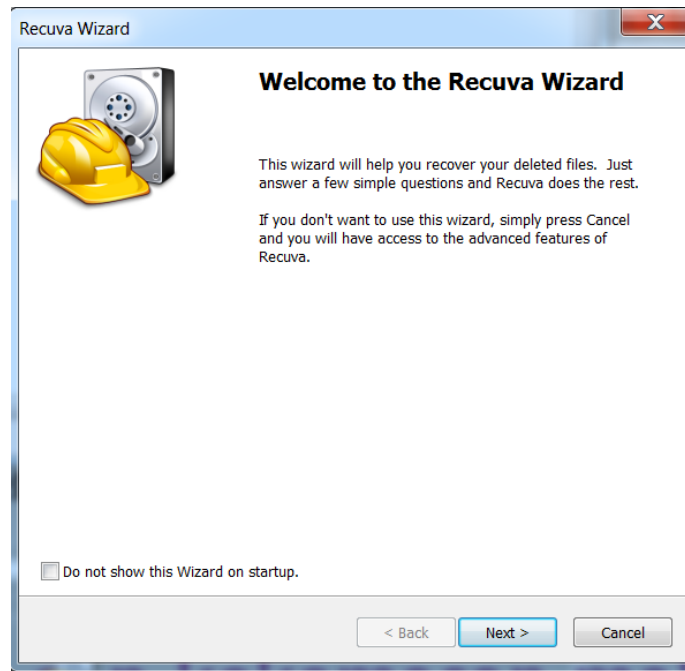


6) The backup volume will be created in the software directory.

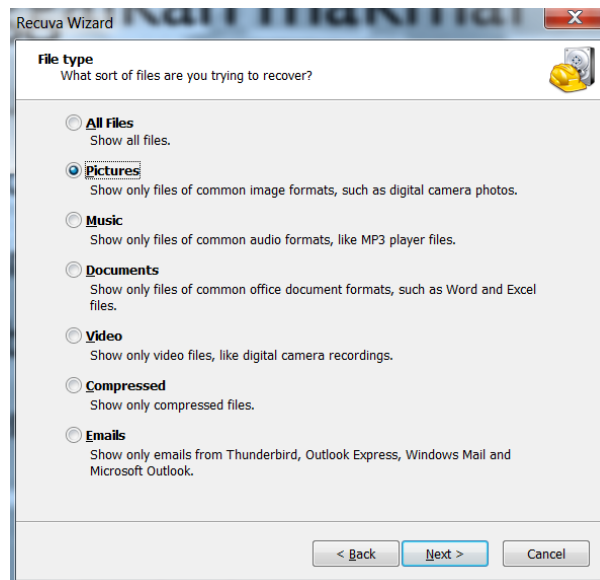


Recuva

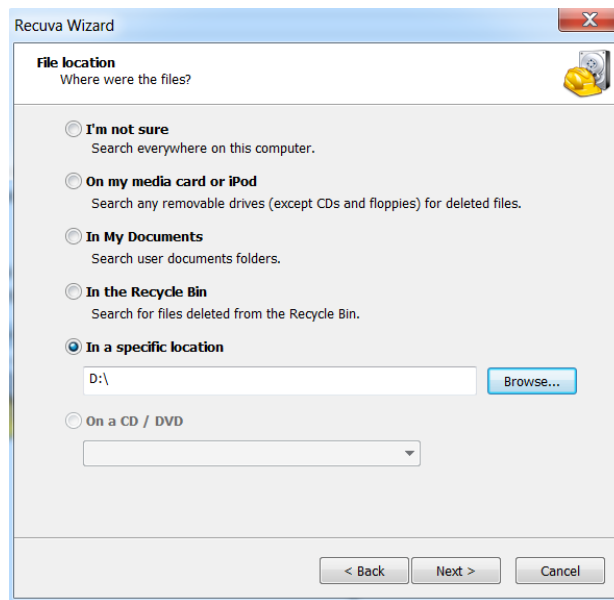
1. Download and install Recuva. Click “Next button.



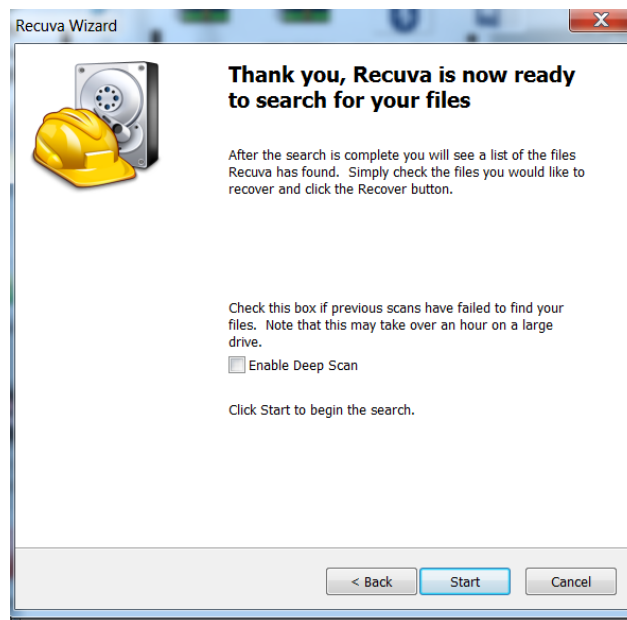
2. In Recuva Wizard, select types of files that user want to recover. In this case, we will retrieve picture .Then, click”Next”.



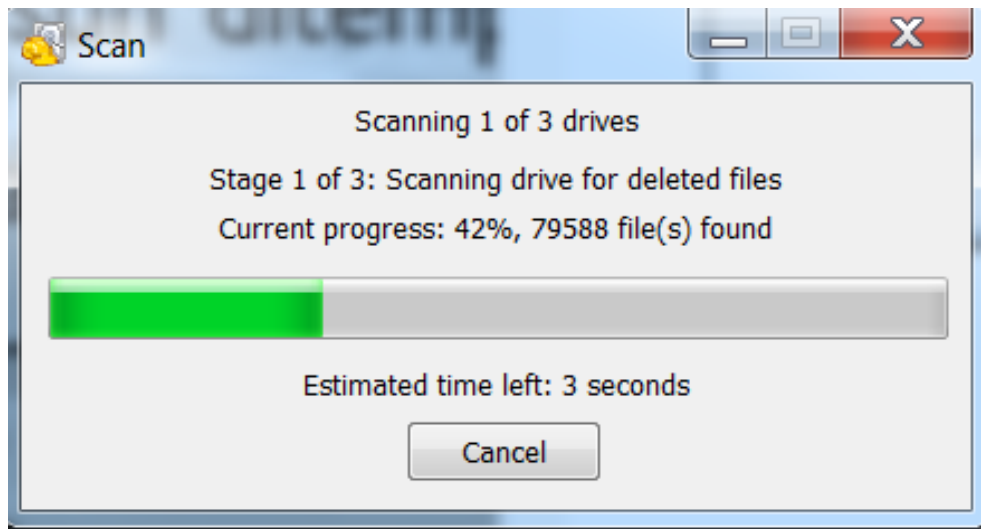
3. Select location that you want to retrieve the files from. In this case, we choose “in a specific location” which browse files from the local D:/



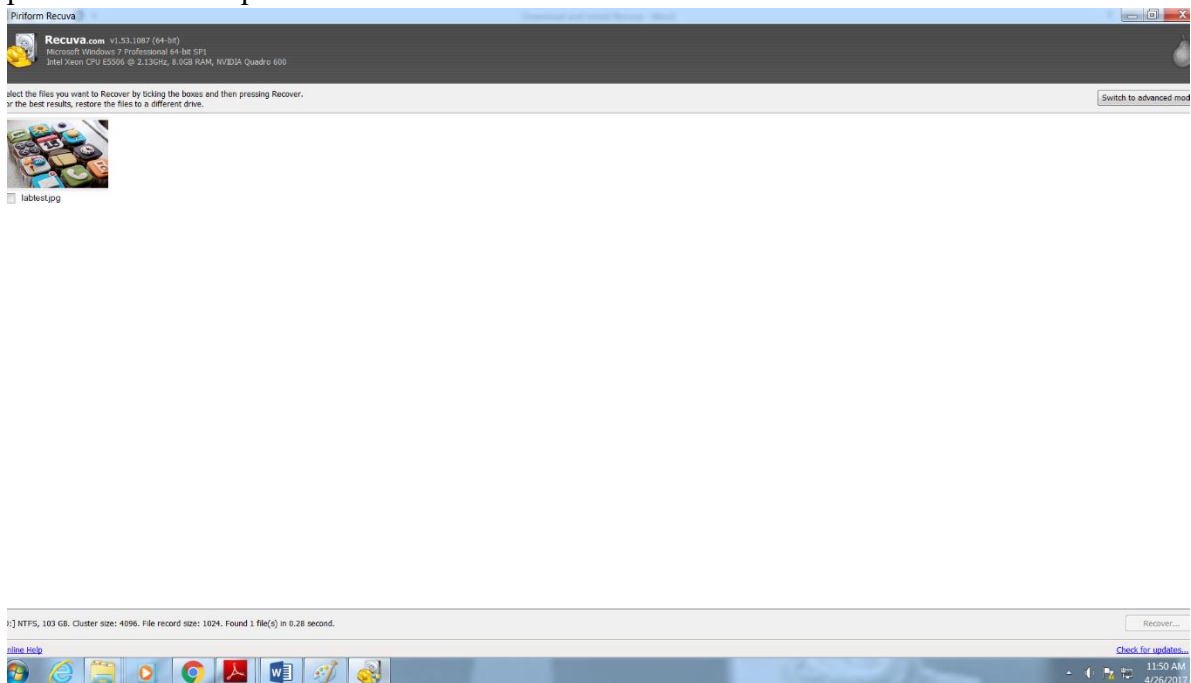
4. Click “start” button. Ensure the “enable deep scan” is untick (unless the user are fails to recover the files for the first attempt).



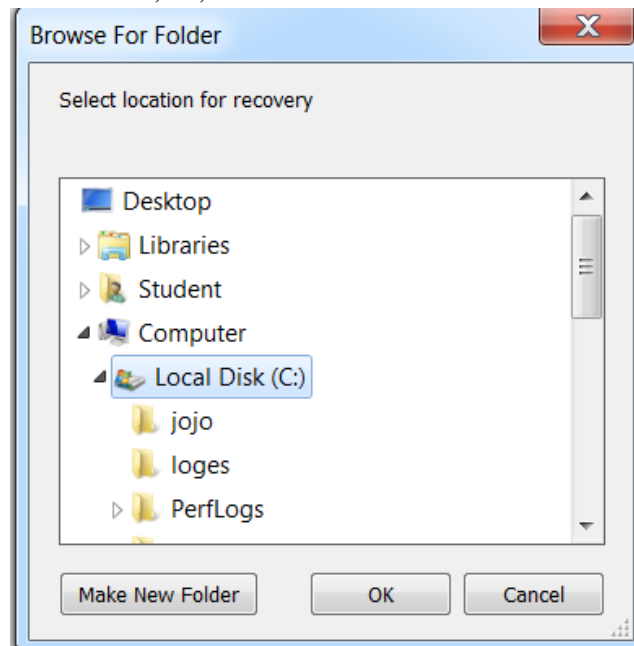
- Wait few second to let the recuva to scan the files.



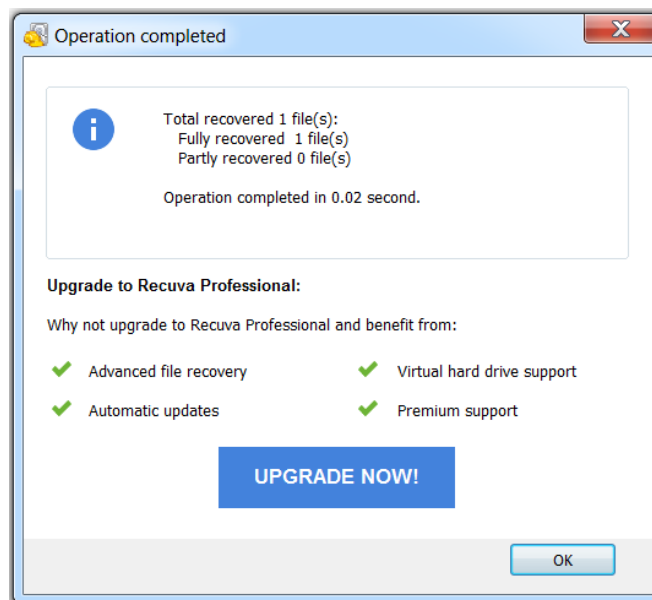
- It will display all the picture that user deleted from the local disk (D:). To recover the pictures. Select the picture that user want to recover and click "recover" button.



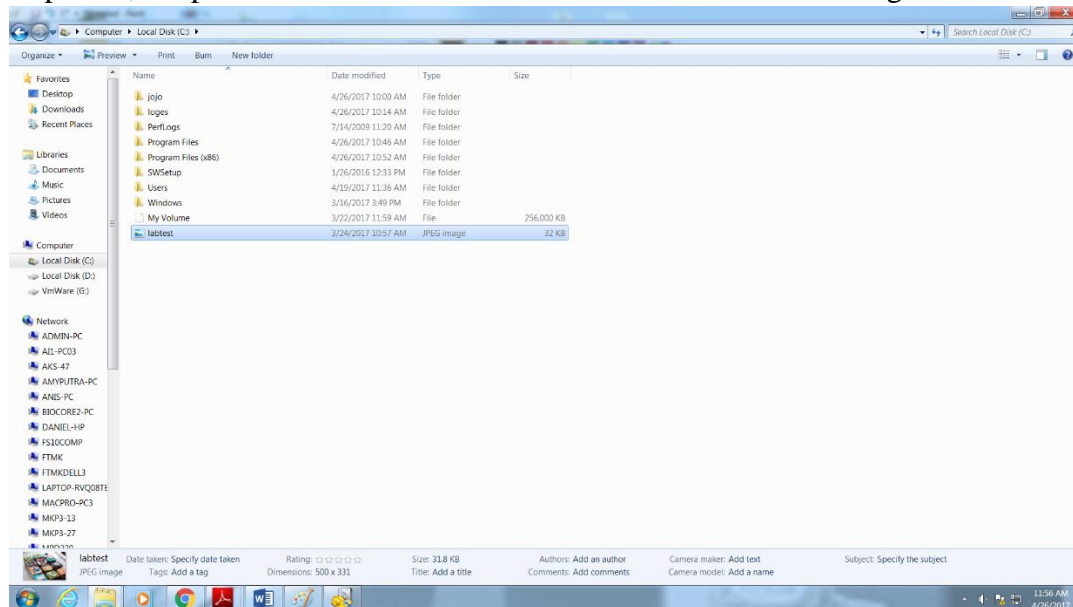
7. Select the folder or disk that it difference from the scanned disk. In this case, the picture is deleted from the local disk D, so, I will recover to the local disk C



8. If the recovery process is success, the system will pop up the message.



9. As expected, the picture will be recover to the local disk C: as we setting before.



Comparison between Tools

FBackup Application

- Authentication- The application can be access by all user once they install the application to use.
- Access Control- No access control since all users are able to download it free and access to the application.
- Data Confidentiality- Once application install, user can copy the backup file and move to another computer can restore the backup at that computer. There is no data confidentiality.
- Data Integrity- The backup file can be modified by anyone and any user at any time so there is no data integrity.
- Non-Reputation- no repudiation because the file recover is not the original file

Recuva Application

- Authentication- the application can be access by all user without any specific identity.
- Access Control- no access control since all users are free to use and access it.
- Data Confidentiality- no data confidential because anyone with access to your drives can run Recuva to retrieve old files even your privacy files.

- Data Integrity- no data integrity since the file recovery might be in corrupt file or the name is changed.
- Non- Repudiation- no repudiation because the file recover is not the original file

Conclusion

In my opinion, I think FBackup is the best tool based on my understanding. Fbackup application backup the files with the optional option which is whether want to add on encryption to the backup file. Confidentiality could have in this application to make sure backup file secure. This application has less secure of data integrity. Once another user where the backup file location located, this user can go and modify it and it became non-original file as what we backup last time. Availability of this application is good. All user can download it for free and access it also it is easy to use.