

Is there a Windows software , that I can run on the local machine, that will backup only ever backs up files that have changed or been created since the last sync. to a permanently connected USB flash or SSD drive?



Yes, there are several Windows software options that can back up only files that have changed or been created since the last sync, a process commonly known as "incremental backup." Here are some popular options:

1. File History (Built-in Windows Tool)

- **Description:** Windows has a built-in tool called File History that automatically backs up files in your libraries, desktop, contacts, and favorites to a connected drive.
- **How It Works:** File History only backs up files that have been changed or created since the last backup.
- **How to Use:** You can access it through the Control Panel or Settings > Update & Security > Backup.

2. FreeFileSync

- **Description:** FreeFileSync is a free and open-source software that lets you compare and synchronize files and folders.

- **Incremental Backup:** You can set it up to perform incremental backups by syncing only the files that have changed.
- **Additional Features:** It supports mirror sync, versioning, and can handle large file structures efficiently.
- **Website:** FreeFileSync

3. SyncBack

- **Description:** SyncBack is a versatile backup and synchronization software with a free version available.
- **Incremental Backup:** It allows you to back up only changed or new files, saving time and storage space.
- **Additional Features:** Offers advanced options like file versioning, encryption, and scheduling.
- **Website:** SyncBack

4. AOMEI Backupper

- **Description:** AOMEI Backupper is a comprehensive backup solution that supports incremental and differential backups.
- **Incremental Backup:** You can configure it to back up only the files that have changed since the last backup.
- **Additional Features:** Includes options for full system backups, disk cloning, and scheduling.
- **Website:** AOMEI Backupper

5. Cobian Backup

- **Description:** Cobian Backup is a free, multi-threaded program that can be used to schedule and automate backups.
- **Incremental Backup:** It supports incremental backups, which only back up the files that have been modified since the last backup.
- **Additional Features:** Offers encryption, compression, and remote backup options.
- **Website:** Cobian Backup

6. Macrium Reflect Free

- **Description:** Macrium Reflect is a disk imaging software that also provides file backup capabilities.
- **Incremental Backup:** The free version supports differential backups (backing up only changes since the last full backup), while the paid version supports full incremental backups.
- **Additional Features:** Provides disk imaging, cloning, and scheduling features.
- **Website:** Macrium Reflect

7. Goodsync

- **Description:** GoodSync is a reliable file backup and synchronization software that offers real-time data synchronization.
- **Incremental Backup:** It supports both one-way and two-way sync, ensuring only new or changed files are backed up.
- **Additional Features:** Can sync with cloud services and remote locations.

- **Website:** GoodSync

These tools are widely used and can be configured to back up only the files that have changed, which helps save time and storage space on your USB flash or SSD drive.



How about xcopy?



Yes, you can use the `xcopy` command in Windows to perform incremental backups, where only files that have changed or been created since the last backup are copied. Here's how you can set it up:

Basic `xcopy` Command for Incremental Backup

The basic syntax for using `xcopy` for incremental backup is:

cmd



```
xcopy [source] [destination] /D /E /C /H /R /Y
```

Explanation of the Parameters:

- `[source]` : The directory you want to back up.
- `[destination]` : The directory where you want to store the backup.
- `/D` : Copies only files that are newer than the existing files in the destination. If no date is

given, it will copy only the files that have been modified since the last backup.

- `/E` : Copies all subdirectories, including empty ones.
- `/C` : Continues copying even if errors occur.
- `/H` : Copies hidden and system files.
- `/R` : Overwrites read-only files in the destination.
- `/Y` : Suppresses prompting to confirm overwriting a file.

Example:

Suppose you want to back up the `C:\MyDocuments` directory to a USB drive located at `E:\Backup`. You can use the following command:

cmd

 Code kopieren

```
xcopy "C:\MyDocuments" "E:\Backup" /D /E /C  
/H /R /Y
```

How It Works:

- The `xcopy` command will scan the `C:\MyDocuments` directory and compare it with the `E:\Backup` directory.
- It will only copy files that have been modified since the last time the command was run or files that are not already present in the destination.

Automating the Process with a Batch

File:

You can automate this process by creating a batch file (`backup.bat`) with the `xcopy` command:

1. Open Notepad and paste the `xcopy` command.
2. Save the file as `backup.bat` .
3. You can then run this batch file whenever you want to perform an incremental backup, or you can schedule it using Task Scheduler.

Example Batch File (`backup.bat`):

cmd

 Code kopieren

```
@echo off xcopy "C:\MyDocuments"  
"E:\Backup" /D /E /C /H /R /Y echo Backup  
completed successfully! pause
```

Notes:

- `xcopy` is a powerful tool but does not offer advanced features like versioning or differential backups. For more sophisticated needs, dedicated backup software might be more appropriate.
- Ensure that the destination drive has enough space to accommodate the files being backed up.

This approach is simple and effective for straightforward backup tasks.