

Version 0.9

User's Guide CS3215 Team9: 0110

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1.About CleanSync

1.1 Overview

Frequently need to work on the same files and folders on 2 different computers? Having trouble ensuring both sets of files and folders are updated? Let CleanSync handle that for you!

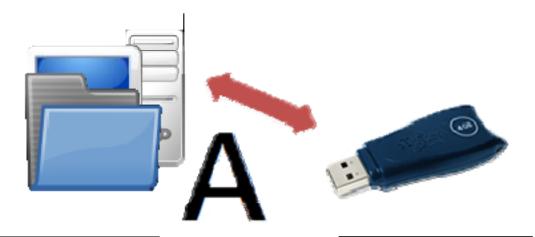


Consider this scenario: You have to ensure that files and folders in a certain folder are the same in Computer A and Computer B. If the directory contains hundreds of files and folders, how will you keep track of updates, deletes and modifications to any of the files and folders in both computers? It is possible to copy every file and folder into the removable device, but this takes up unnecessary space. CleanSync monitors updates to your files and folders for you, and ensures minimum disk usage on the external hard disk.

1.2 Clean Synchronization

So, how does CleanSync work? CleanSync does synchronization through a process called Clean Synchronization. Through Clean Synchronization, synchronizing folders in Computer A and B is done in 2 easy steps:

Step 1: Synchronize with Computer A. Assuming that Computer A has a new file(File3.txt), a modified file (File5.txt) and File4.txt has been deleted since the last synchronization. All these information will be acknowledged by the removable device.



PC A:

File1.txt File2.txt

File3.txt -- Detected new file

File5.txt -- Detected to be modified

File6.txt

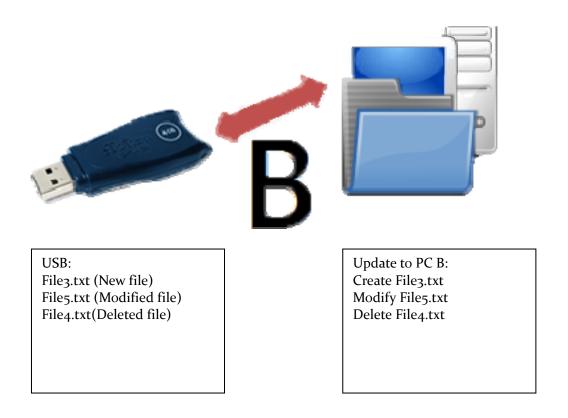
Detected File4.txt has been deleted.

Copied to USB: File3.txt (New file)

File5.txt (Modified file)

File4.txt(Deleted file)

Step 2: Unplug the removable device, and synchronize with Computer B. CleanSync will automatically copy File3.txt, modify File5.txt over to Computer B and delete File4.txt. It will also repeat Step 1 on Computer B, to synchronize Computer B's updates to Computer A.



That's it! Through Clean Synchronization, synchronization is easy, quick and efficient.

2.CleanSync guide

2.1 Installing CleanSync

Unzip CleanSync_v1.0.zip to any directory in your computer*. A folder "CleanSync v1.0" will be created in that directory. No installation is necessary.

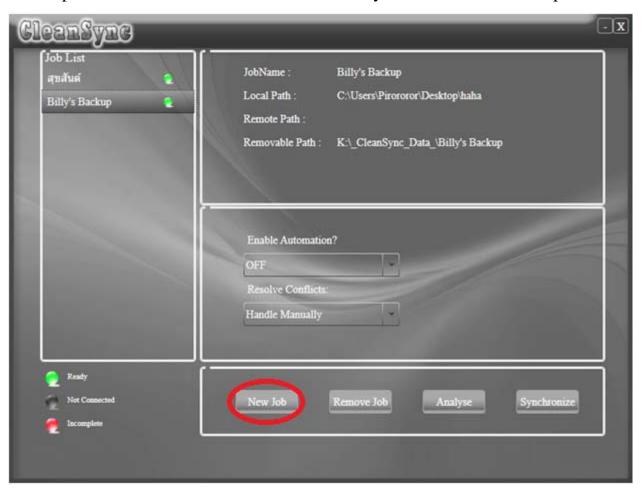
* Do not unzip to a directory on an removable device or CleanSync will not run properly.

2.2 Starting CleanSync

To start, click on CleanSync.exe located inside the CleanSync v1.0 folder.

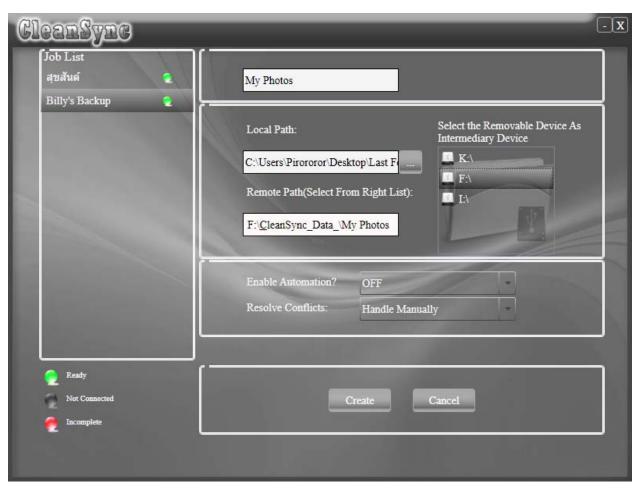
2.3 Creating a new CleanSync job

CleanSync keeps track of the folders to be synchronized through CleanSync jobs. A CleanSync job stores the data of the folders to be synchronized in both computers and the removable device used to synchronize the two computers.



From the main screen

• Click on "new job" to create a new job.

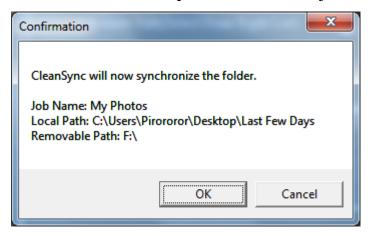


You will now be at the screen for creating a CleanSync job

- Enter a name for the job.
- Select the directory on this computer to synchronize. Note: You can only synchronize folders on the computer. Synchronizing folders on external devices are not allowed.
- Select the drive to the removable device to be the intermediary device. A
 folder "_CleanSync_Data_" will be created on the root directory of the
 device if it does not exist. Inside this folder, another folder with the name of
 this job will be created, and files and folders to be transferred over to the
 other computer is stored within this folder.
- You can choose the option to enable automation. When automation is enabled, the job will synchronize automatically whenever the removable

- device is plugged into this computer while CleanSync is running, and whenever CleanSync starts up with the removable device plugged in.
- You can also choose to let CleanSync handle any conflicts found during synchronization by specifying to always write in this computer over the other computer or vice versa. By default any conflicts found will be handled manually. Conflicts will be explained in detail below.

All the information required to create the job on this computer is done.



- Click on "Create". A pop-up window will prompt for confirmation to create this job. Check the details of the job.
- Click on "Ok" to create the job. CleanSync will then proceed to synchronize the directory with the removable device for the first time.

After synchronization is done, creating a job on this PC is complete! You can now plug the removable device into another computer with CleanSync installed for the other computer to accept this CleanSync job.

2.4 Accepting a CleanSync job

Now that the CleanSync job has been created, the job is not complete yet as the other computer is yet to know of this CleanSync job. Now plug in the removable device into the other computer with CleanSync and start the program from there.



- From the main screen, if a removable device with a job that has not been accepted is plugged in, it will be shown on the main menu and you will have the option of accepting the CleanSync job.
- To accept, select the incomplete job, select the folder on the computer to synchronize with and click on "Accept".
- Accepting a CleanSync job is now complete! Now that CleanSync has
 information about both computers and their folders to synchronize, the
 CleanSync job is complete.

2.5 Synchronizing a job



- From the main screen, select the job you want to synchronize.
- Only complete jobs with their removable devices plugged in are allowed to be synchronized.
- Click on "Analyse" to view the impending changes, or click on "Synchronize" to synchronize immediately without viewing the impending changes.
 - Idenotes a new file/folder to be copied over
 - denotes a modified file or a folder whose contents have been changed.
 - denotes a deleted file or folder.



 After viewing the changes that will happen from removable device to PC and from PC to removable device, click on "Synchronize" to start synchronization.



2.5.1 File/Folder renaming

Files and folders copied to the USB will be renamed to prevent naming conflicts. They will be renamed back correctly when copied back to the PC.

2.6 Conflicts

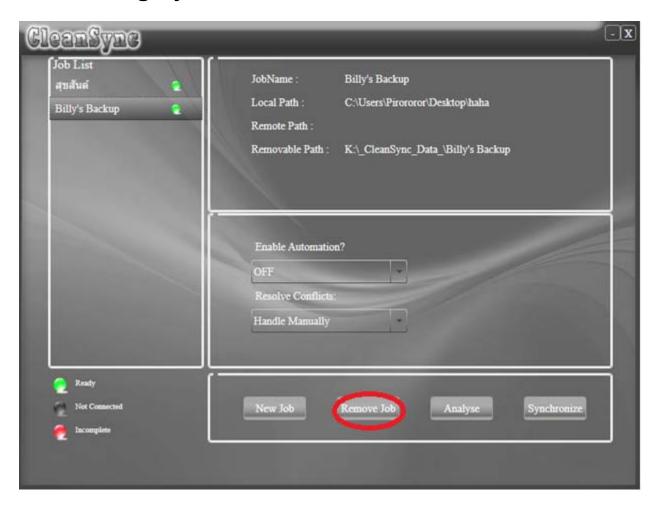
During analyzing or synchronization, in the event of conflicts, i.e files to be copied from removable device to PC has already been modified on the PC, a conflict window will appear:



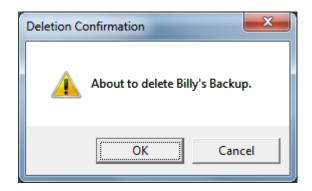
The status symbol on the left denotes the update on this computer, while the status symbol of the right shows the update from the other computer on the removable device.

For version 1.0, checking the removable device's update will cause the removable device's update to be updated on the computer and not checking the removable device's update will cause the computer's update to be copied over to the removable device. Checking the computer update will have no effect on how conflict is handled.

2.7 Deleting a job



To delete a job, select the job you want to delete and click on "Remove Job".



Click on OK to confirm deletion of the job. If the removable device is not plugged in, the data on the removable device will be deleted the next time the removable device is plugged in. To delete the job on the other computer, just plug in the removable device into the other computer.

3 About Us

0110 consists of 6 members. Through CleanSync, we hope to channel our passion for software development to develop a product that is beneficial to the general public.

Group Leader: Li Yi

Group Members: Gu Yang

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Special thanks to Mr Damith for his mentorship and guidance, Mr Soo for his invaluable advice about CleanSync's architecture, Ms Susu for pointers to improve our coding and everyone who gave us invaluable feedback on our product.