

Cleaning and Defragmenting Your Computer

Removing Temporary Files

Sometimes when computers run programs the system will “borrow” some temporary work space from the hard drive. This allows the program to run more efficiently, but can create temporary files on the hard drive. Since the computer does not clean up after itself very well, these temporary files can pile up taking up valuable storage space. Just as in any home, it’s necessary to dispose of any trash lying around. There are several utilities you can use to “clean up” temporary files, and one that works very well is a free program called [CCleaner](#).

After downloading the file, double click on it and go through the setup wizard. Once completed, you’ll be presented with the screen in Figure 1.

Click **ANALYZE** and Ccleaner will check your system and report back how much space these temp files are taking up (usually in megabytes, or gigabytes).

When the analysis is complete, click **RUN CLEANER**. You will be warned that these temp files will be deleted from your hard drive. Click **OK** to remove the temp files.

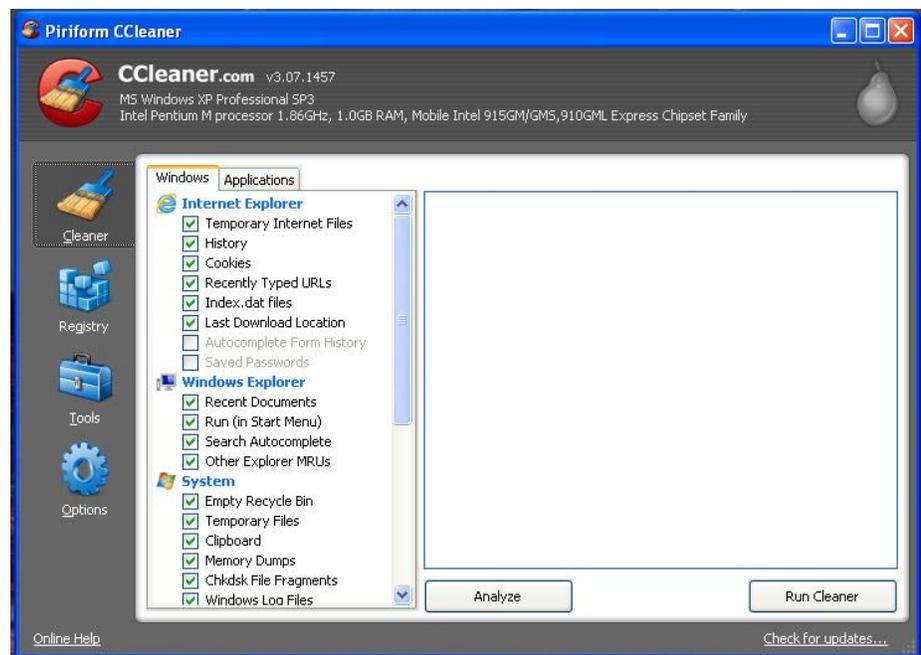


Figure 1: Ccleaner home screen

Ccleaner will also help optimize your registry by removing references to files and programs that are no longer present on your system. Click the **REGISTRY** icon and then **SCAN FOR ISSUES**. After Ccleaner analyzes your registry, you are free to click the **FIX SELECTED ISSUES**. If you want to back up your changes to the registry, you can click **YES** at the next prompt, or simply click **NO** and then **FIX SELECTED ISSUES** for the references to be removed.

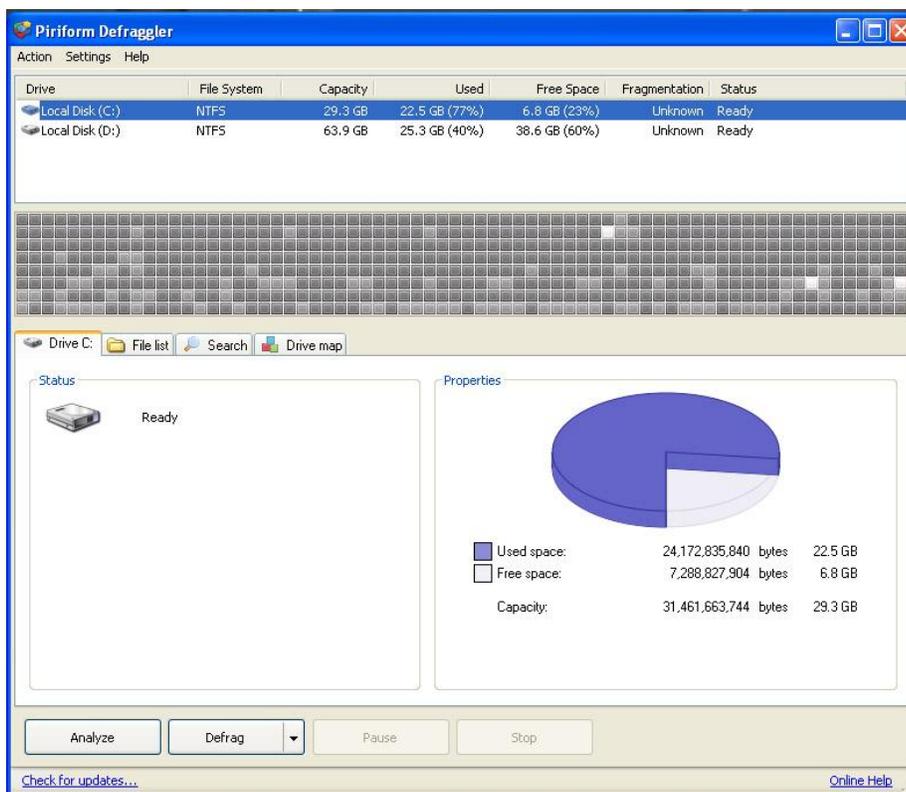
This procedure can be run monthly for best results.

DEFRAGMENTATION

If you're constantly deleting, saving and moving files around you're creating "holes" or empty sectors on your hard drive. Think of a room full of people, and 10 of those people get up from various parts of the room and leave. There are now 10 empty chairs scattered around the room. A family comes to join the meeting and they'd all like to sit together, but the usher tells them to take the first available seat. You now have members of this family "fragmented" all over the room. The same thing happens when you delete, save or create files; the computer take the first available space on the drive and you may have pieces of this file, or "fragments" all over the hard drive. In order for the file to open, the computer finds all of the pieces, loads them into RAM and the file is opened for you to work with. If all the pieces were "sitting together" on the hard drive, the computer could work more efficiently. Defragmenting your hard drive simply allows all of the families to sit together for optimal performance.

A very effective tool for defragmenting your hard drive is another freebee called [Defraggler](#).

After installing Defraggler, you will get what is shown in Figure 2.



If you have several hard drives in your computer they will be listed under the DRIVE area at the top of the window. Click the drive you wish to defrag, and then click the **ANALYZE** button. Defraggler will give you a report on what percentage of your drive is fragmented, and the amount of defragmented files. You can then click **DEFRAG** and the process will begin. You can repeat the procedure for other drives.

Figure 2: Defraggler Screen

The defrag process could take several hours, and since the process should not be interrupted, or any programs running at the time, starting defrag before going to bed, or leaving for the day would make sure the process completes with no problem. Monthly is a good routine to run Defraggler. You'll notice an improvement in your computer's performance.