

## What the Tech?!: OS Maintenance by Joe McCormick

If you use your computer daily, you want to make sure you stay on top of keeping your operating system clean. This task has been made easy by some great software, CCleaner and the Windows Disk Defragmenter. CCleaner is a wonderful little program that searches your computer for all the temporary files you may have and removes them. Disk Defragmenter helps organize the information on your computer, so it can be accessed and stored faster.

Temporary files are created whenever a program needs to store information to be used for the duration of your task; generally, Internet usage creates the most temporary files. Based on what you do on the Internet, there could be quite a big chunk of space used up from temporary files. Over time, these files can build up and slow down your system.

CCleaner can easily be found on Google, and installation is just as simple. Once installed, using it is even easier than downloading it. A cool feature is that they have tacked on CCleaner options to the recycling bin. Simply right click the recycling bin icon sitting on your desktop, and you should see an option called "Run CCleaner." If you don't, you can always find newly installed programs by going to Start>All Programs.

After you run CCleaner from the recycling bin icon, you're done. There is nothing else to do. This is a great thing about the program. What it has just done is removed all sorts of useless files. If you have your Internet browser remember your log-in status on some websites, that will be gone and you'll have to log-in again. This only happens the first time after you clean your temporary files.

If you don't want CCleaner to delete your Internet files, or any kind of temporary files, all you have to do is tell it not to. Once again right click on the recycling bin icon on your desktop, and this time select "Open CCleaner." This will bring up the application window, and you should see a list of files with check boxes next to them. Simply uncheck the file type that you don't want to be deleted. Internet log-in credentials are generally stored as "Cookies" but could also be under "Temporary Internet Files."

The next step is making sure your hard drive is as organized as can be, which will allow it to find and use files faster. Your hard drive stores information on a metal disk. When you add information, this disk fills up sequentially, in the order you added it. When you delete information, it creates empty gaps in the information chain, and this is why computers slow down. Eventually your data becomes spread out and, as you begin to put data on the outer edges of the disk, it takes longer for the needle reading the information to get back to the inner edge. The most important time to clean is when you've recently added or deleted a large amount of disk space.

To clean, we use the Disk Defragmenter. To get to the Disk Defragmenter simply click Start>Programs>Accessories>Disk Defragmenter. You can schedule your computer to defrag whenever you want, but that's generally not necessary. Simply click on your main hard drive, typically the C: drive, and hit "Defragment Disks." This is a long process and can take hours depending on the speed of your hard drive and the last time you cleaned, so you'll want to do it when you aren't using the computer.

First the program will analyze your hard drive and see how the files are allocated on it. Because of this, and the actual defrag process, you do not want to be using your computer during this time. Almost every time we use a computer, temporary files are created. This creation will slow down the defrag process, so avoid use. After analysis, the program will proceed to reorder the information on your hard drive so that it all falls back in a continuous line, putting the empty space at the end. In theory this can speed up your computer greatly if you haven't done it in a long time.

You'll want to run CCleaner about once a week, to keep up on the files that build up. If you do a lot of work with large files you'll want to defrag maybe every two weeks, but every month at least.

Doing these two things will put you on the right track to keeping your computer running smoothly.

Have question for What the Tech?! Email us at [wtt.globe@gmail.com](mailto:wtt.globe@gmail.com).