## MAINTENANCE TOOLS TO KEEP YOUR COMPUTER RUNNING SMOOTHLY

There are some free PC maintenance tools that make it easy to keep your system in top shape. Their functions generally include hard disk management; optimization of system settings; and deletion of unnecessary, duplicate or temporary files. Some free PC maintenance tools include scheduling of maintenance, diagnostic tests, backups, malware cleanup, and system-tweaking options for advanced users.

Smart users perform PC cleanup and tune-up operations at least once a month. Here's what some gurus recommend, and some free computer maintenance tools to help you do the job.

<u>CCleaner by Piriform</u> is a popular PC cleaner/optimizer/privacy tool that's developed a sterling reputation over many years. CCleaner zaps temp files, web browser history, cookies, and form inputs, to remove all traces of your online activities. It also mops up after Windows, cleaning out your Recycle Bin, removing unneeded log files, deleting memory dumps, and pruning obsolete registry entries. CCleaner does not include a defrag module, but Piriform also offers the free Defraggler, which does the job quite well.

The Glary Utilities is another PC maintenance suite, downloaded over 40 million times. It, too, does registry, privacy, defrag and junk files cleanup. It includes an application uninstaller that is more sophisticated than Windows Add/Remove app. For example, you can tag multiple applications to be uninstalled in one operation. It also includes a startup programs manager, a memory manager, and a utility to remove unwanted context menu items. Cleanup can include a sweep for duplicate files, empty file folders, and broken shortcuts. It will also backup and restore all your hardware device drivers. The latest version claims to be 800% faster at analyzing your PC for potential problems.

<u>PrivaZer</u> is a hard drive clean-up utility on steroids. It gets rid of junk files and wipes away traces of activity that could compromise your privacy. PrivaZer zaps duplicate files, temporary files, log files, unneeded Windows update files and old Windows installs left over from a system upgrade. In addition to cleaning files and

filesystems, Privazer does a thorough scrubbing of your Windows registry, and will also remove web browsing history, saved passwords, and cookies.

A few notes about defragmenting your hard drive. Traditional magnetic hard drives installed in most computers do benefit from defragmenting, as it speeds up disk access. However, SSD (solid state) hard drives do not require defragmenting, and some people believe that you can shorten the life span of an SSD by defragging. I don't think that's true of newer SSD's, but it's still a best practice to defrag only magnetic drives. Treat hybrid (magnetic/SSD) drives the same as magnetic drives. Also note that Windows 7, 8 and 10 have automatic defrag built in, but you may still benefit by running a third-party defragger a few times per year.

<u>Macrium Reflect</u> is a preferred software for making backups. The Free Edition offers backup, disk imaging and cloning solution for both commercial and personal use. It can schedule your backups to run automatically, which is considered desirable.

The <u>NirSoft</u> website provides a collection of freeware, including Windows password-recovery tools, network monitoring tools, and some privacy-related utilities.

**Speccy and Belarc Advisor** are two diagnostic programs you will rely on when a computer doesn't seem to be running optimally.

The **Windows Memory Diagnostic Tool** was built into Windows 7 and higher. To run it, click the Start button and type **memory** in the search bar. Click **Windows Memory Diagnostic** in the search results. You can choose to restart and check for memory errors or tell it to check for memory problems the next time you start your computer.