Computer Cleanup and Maintenance

By Matt Harmon, Jerry Michel, and Josh Heisler October 17, 2017

Physically Cleaning Your Computer

- Always turn off and unplug your computer before performing physical maintenance.
- Air dusters are great for cleaning debris out of keyboards and computer interiors.
- Microfiber cloths are a must for cleaning computer screens and wiping off delicate computer components.

All-in-One Cleaners

All-in-one cleaners are very useful for cleaning up your computer's registry, deleting temp files, and cleaning up any files left behind by uninstalled programs. All of these can slow your computer down.

Top PC All-in-One Cleaners



Ccleaner

www.piriform.com/ccleaner



IObit Advanced Systemcare

www.iobit.com/en/advancedsystemcarefree.php



Iolo System Mechanic

www.iolo.com/downloads/download-system-mechanic

Top Mac All-in-One Cleaners



Ccleaner

www.piriform.com/ccleaner-mac



AppCleaner

www.freemacsoft.net/appcleaner



CleanMyMac

www.macpaw.com/cleanmymac



Dr. Cleaner

www.drcleaner.com/dr-cleaner

Browser Extensions

There are thousands of browser extensions across Google Chrome, Firefox, Safari, and Microsoft Edge. Extensions can do things like change the way your browser looks, make YouTube and Facebook much more enjoyable, or automatically check the internet for coupons before you make a purchase on Amazon. The most widely used extension is an adblocker. These are two of the best options available:





Note: Having a lot of extensions (or any programs) installed at once can cause your computer to run slower.

Passwords

Passwords are an *extremely* important part of the digital world. They help prove who you are and keep others from viewing your personal and confidential information. Don't take your passwords lightly. Here are a few tips to always remember:

- Use strong passwords for your accounts.
 - Passwords like "123456" and "password" are easy to remember but they're also incredibly easy for someone to hack.
 - Adding symbols is an easy way to make your passwords stronger (!,@,#,\$,%, etc.).
- Don't use the same password for all of your accounts.
- Keep them written down or stored somewhere safe.
 - o On a Google Drive sheet which is accessible anywhere
 - Physically written in a notebook
 - In a password manager
- If you forget/lose your password or username, try recovering it before making a new account.
 - Most websites have a "Forgot your password?" or "Forgot your username?" link to help you recover your account.
 - Having multiple passwords, usernames, and emails written down for one account makes it much harder to remember your current login information.
 - o If you end up having to change your username or password, write it down *immediately* and get rid of the old information.

Password Managers

Password managers store and manage all of your passwords in one secure place. Instead of remembering twenty different complex passwords you can just remember one "master" password and the manager does the rest. There are quite a few password manager options out there, most of which work with PC, Mac, Android, and iOS.

Antivirus and Malware Removal

Malware is a term that refers to a variety of hostile or intrusive software, including viruses, worms, spyware, and adware. There are a variety of reasons people create malware: to make money, steal personal information, cause trouble, or even just to prove that they can.

Preventative Measures

- Don't download files or click on links if you're not 100% sure of what they are.
 - Some viruses are sent to your email through someone in your contacts list to make it look as if it came from someone you know.
- Don't let anyone remote into your computer.
- Microsoft/Apple/Google will *never* call you.
 - If you receive a call from one of these companies, it is a scam. They will never call you, ask for money, or ask to remote desktop into your computer.

Antivirus

Antivirus software actively runs in the background of your computer looking for malware (viruses, spyware, adware, etc.). They typically scan sites as you visit them and files as you download them, trying to prevent malware from getting on your computer in the first place. These are your first line of defense. Below are two of the best free antiviruses you can get.



Avast Antivirus

www.avast.com/en-us/index



Kaspersky Free

www.kaspersky.com/free-antivirus

Malware Removal Software

These tools do not actively run in the background and need to be run manually. If malware gets through your antivirus, these are your best bet for finding and removing it. You should generally run a quick scan at least once a week and a full scan once a month. Below are two malware removal tools that we recommend.



Malwarebytes

www.malwarebytes.com/



Malwarebytes AdwCleaner

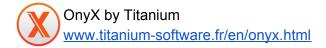
www.malwarebytes.com/adwcleaner/

Mac OS Maintenance

Mac OS is an operating system developed by Apple. Macs are known for being relatively free of hassle and most users can get away with little to no maintenance at all. Regardless of that fact, macs are not immune from becoming sluggish overtime. To avoid problems from developing, here are a few simple and routine tasks.

Built-in Solutions

- Login Items
 - o Remove or disable the amount of login items that run at startup.
- OS & App Updates
 - Keep your operating system, drivers, and apps updated all through the app store.
- Optimize Storage
 - Use the Optimize Storage feature to delete individual apps and files that are no longer needed.
- Activity Monitor
 - Monitor your CPU, memory and energy usage and eliminate the resource heavy apps.
- Time Machine
 - o Back up all of your files to an external storage device so that you can restore them later.
- Disk Utility
 - Use Disk Utility to partition, erase, repair, restore, and clone your drives.
 - You could also use a more powerful and more efficient third-party program like the one below.



OnyX is a multifunction utility for Mac OS which you can use to verify the startup disk and the structure of its system files, to run miscellaneous tasks of cleaning and system maintenance, to configure some hidden parameters of many of Apple's applications, and more.

Chrome OS Maintenance

Chrome OS is an operating system developed by Google and uses the Google Chrome web browser as its principal user interface. The combination of cloud-based services and multi-layer protection make it one of the most secure and low-maintenance operating systems. Because of the fact that Chrome OS primarily supports Google's own applications, it is nearly impossible to get a virus. Here are a few built-in tools that will keep your Chrome OS device running like it should.

Built-in Solutions

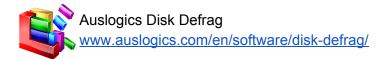
- Keep OS Updated
 - o Major OS updates are automatically ran about every 6 weeks, but can be manually ran more often.
- Reset to Factory Settings (Powerwash)
 - Remove all user accounts and reset your Chrome OS device to be just like new.
- Create OS Recovery Media
 - o Install a fresh version of the OS as a last result for devices that are not working as they should.
- Reset Hardware
 - Hard reset your device if you notice certain peripherals not responding properly.
- Reset Settings
 - Restore settings to their original defaults.

Windows OS Maintenance

Microsoft Windows, or simply Windows, is a metafamily of graphical operating systems developed, marketed, and sold by Microsoft. It consists of several families of operating systems, each of which cater to a certain sector of the computing industry with the OS typically associated with IBM PC compatible architecture. Windows 10 is a personal computer operating system developed and released by Microsoft as part of the Windows NT family of operating systems. It was first released on July 29, 2015. Unlike previous versions of Windows, Microsoft has branded Windows 10 as a "service" that receives ongoing "feature updates".

Built-in Solutions

- Organize file and keep them off the desktop
 - Use Shortcuts instead.
- Uninstall programs you are rarely/never used
 - Before removing a program do a little research on what it is used for on Google.
- Disable the amount of programs running at startup.
- Change your power options to high performance mode.
- Run Windows built-in troubleshooter.
- Learn some basic task manager skills.
- Update your software and Operating system regularly
- Update your computer drivers.
- Optimize and defrag your HDD.
 - Windows has it's own built in defragging tool.
 - A better option would be to use a third-party program, like the one below.



Auslogics Disk defrag is a free tool that defrags and optimizes your HDD which becomes fragmented over time. It can also optimize your SSD since SSD do not need to be defragmented. There are features in this program that can speed up your computer by moving your system files to the beginning of the disk, which is generally the faster part of your hard drive. You can also optimize file placement in prefetch which speeds up application loading times.

Hardware Solutions



Crucial.com is a website for upgrading your computer's internal hardware such as RAM and SSD. Crucial guarantees compatibility with your computer and they will assist you when finding a product that will work with your computer.

