

# BYOD – Keep Your Device Running Smoothly

## Backing up schoolwork and saving documents

- It is vitally important to back up all important files on a regular basis as a computer can stop working correctly in any number of ways at any time. Ideally back up to a USB flash drive or portable hard drive but make sure you keep multiple copies of important files as that external drive could also fail. The easiest way to back up your data is using copy and paste: <http://windows.microsoft.com/en-au/windows7/copy-and-paste-a-file> (The procedure is basically the same for Macs but if using the shortcuts, substitute command key for control key.)
- Another option if you don't have a backup location available is emailing the file to yourself.
- Backing up to "the cloud" can be a problem if you need to access files at home and at school as the proxy environment at the school can prevent files from synchronising properly.
- Remember when creating a new document always save the document before you start work on it with a meaningful file name and in a location you will remember. Otherwise if your computer crashes you will lose the document and have to start again from scratch. Also make sure you save your document regularly while you are working on it or after major changes. Autosave does not work on unsaved documents, nor can you be sure it is always functioning correctly or at all, so do not rely on this for saving your work.

## Virus and malware protection and the differences between the two

- Viruses are a specific type of malware designed to replicate and spread, while malware is a broad term used to describe all sorts of unwanted or malicious code, such as spyware, adware, potentially unwanted programs (PUPs), trojans and viruses. In general antivirus programs will best protect you from malware obtained from sources such as emails and USB flash drives while antimalware programs will best protect from malware picked up while you browse the internet or install programs with bundled unwanted software.
- Although some antivirus suites aim to cover all types of malware, most people recommend running an antivirus program alongside an antimalware program. The antivirus should be running in the background all the time but it is sufficient just to run the antimalware on demand if you think your device may be compromised. There are plenty of free options for both to provide you with a high level of protection.

## Antivirus for Windows

- New Windows laptops almost always come with a free trial of an Antivirus program e.g. McAfee or Norton. However once the trial expires the program becomes effectively useless as without updated virus definitions to deal with new malware your computer is no longer properly protected.
- You don't have to use the program that was preinstalled as there are a range of antivirus options, free or paid. It is your choice entirely so if you don't want to pay for a subscription, you will need to remove the preinstalled program and use either the inbuilt antivirus, Windows Defender (Windows 8.1 and 10), or install a different free (or paid) program. To do this open "Control Panel", go to "Programs" and select "Uninstall a program". Then right-click on the program from the list and select "Uninstall". You may be asked to restart the computer.
- After you have removed the preinstalled antivirus program, open Windows Defender in the Control Panel and make sure it is active and updated. You will also need to check Windows Firewall in Control Panel to make sure that is active as well.
- Alternatively you may choose to install a different antivirus program. If you elect to use a free version, here is a review of programs available: <http://www.techsupportalert.com/best-free-anti-virus-software.htm>
- Whatever antivirus option you choose, make sure it is up to date at all times and run scans regularly.
- When installing programs read every step carefully to avoid installing unwanted bundled programs and malware. Choose the "advanced" installation method if available to facilitate this.

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## Antimalware for Windows

- There are many free versions of antimalware e.g. Malwarebytes (select the “free download” link at <https://www.malwarebytes.org/antimalware/> ) that will provide excellent protection however if you want live protection you will generally have to pay for it. In most cases the free version will be more than adequate as long as you run it on a regular basis or when you think your device may have been compromised.
- Reviews of antimalware programs may be found here: <http://www.techsupportalert.com/best-free-spyware-and-adware-remover.htm> and <http://www.techsupportalert.com/best-free-trojan-horse-scanning-and-removal-software.htm>

## Antivirus/Antimalware for Mac

- It is a common misconception that Mac devices are immune from viruses and malware. This is not the case. For more information in regards to this read this article: <http://www.macworld.co.uk/how-to/mac-software/how-remove-mac-malware-for-free-viruses-keranger-3594625/>
- There are multiple choices of antivirus for Mac and the free versions are actually very highly rated. In fact there have been issues with Norton Antivirus for Mac preventing internet access in the school proxy environment so this is not an option we would recommend. The following article recommends Avira and Avast as the best free antivirus options for Mac however there are other options available as well: <http://www.tomsguide.com/us/best-antivirus,review-2588-6.html>
- As with Windows devices, an on demand antimalware program is a good idea to be used when your Mac may have been compromised with adware, unwanted programs, etc. Malwarebytes free for Mac is a highly recommended option: <http://www.howtogeek.com/223116/how-to-remove-malware-and-adware-from-your-mac/> and may be obtained here: <http://www.howtogeek.com/223116/how-to-remove-malware-and-adware-from-your-mac/>

## General procedures to keep your device running smoothly

### *Shut down and restart*

- If you do not shut down your computer regularly it will slow down due to the memory filling up with currently used programs and files etc. Shutting down and restarting the device is like a clean start and often will fix little niggling issues that may occur. This is also the time when many updates will install, essential for keeping your device up-to-date and secure.
- We recommend developing the habit of shutting down your computer every night as that way you know it will perform optimally. Make sure you follow the correct procedure, do not just press the power button as this can cause damage and data corruption.
- For Windows devices right-click (Windows 8.1/10) or left-click (Windows 7) on the Windows icon in bottom left of the screen and select “Shut down”. Alternatively if you want to immediately reboot select “Restart”.
- For Macs select the Apple menu in the top left of the screen and select “Shut down”, or “Restart” if you want to reboot immediately.
- DO NOT shut down your device by holding down the power button as this can cause data corruption or hard disk damage as you are prematurely powering off while files are being saved or processes completing. For a while you may be lucky and not experience any issues but eventually a crucial file or program may be damaged or the operating system so corrupted that you cannot even boot up. The only exception to this rule is when your device may have become frozen for a long period of time. In this case there is very little choice but to force shut down by holding the power button for a few seconds until the power switches off. Even so, there is still the potential for data corruption doing this so only force shut down as a last resort.

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## *Remove unnecessary programs from startup*

- By default, many programs will be set to run in the background when you start your computer. This will slow boot up time and also use up memory, potentially slowing down your computer overall. It is a good idea to remove unnecessary programs from startup but make sure you don't remove anything required for the running of the operating system. Many programs will have a setting allowing you to choose whether to run it when you start your device but if not, you can use the following procedures. If in doubt, leave it as is.
- Removing unnecessary startup items from Windows 8.1/10:  
<http://www.pcadvisor.co.uk/how-to/windows/how-change-windows-10-startup-programs-3615075/>
- Removing unnecessary startup items from Windows 7:  
<http://www.groovypost.com/howto/performance-disable-startup-programs-windows-7-vista/>
- Removing unnecessary startup items from Mac OS X:  
<http://www.macworld.com/article/2047747/take-control-of-startup-and-login-items.html>
- This website will allow you to search for specific programs in your list of startup items on your Windows computer and determine if they are considered to be malware, optional, unnecessary, or necessary to run:  
<http://www.bleepingcomputer.com/startups/>

## *Keep your device updated*

- It is essential to keep your version of Windows or Mac OS X up to date, not only for bug fixes and operating system updates but even more importantly for security updates which will patch newly discovered vulnerabilities.
- How to update Windows 10:  
<http://www.howtogeek.com/223068/what-you-need-to-know-about-windows-update-on-windows-10/>
- How to update Windows 8.1:  
<http://www.ricksdailytips.com/check-for-new-windows-updates-in-windows-8-1/>
- How to update Windows 7:  
<http://windows.microsoft.com/en-au/windows7/install-windows-updates>
- How to update Mac OS X:  
<https://support.apple.com/en-us/HT201541>

## **Further information and useful links**

- *PC Maintenance for Beginners*  
<http://www.howtogeek.com/school/pc-maintenance-for-beginners/lesson4/all/>
- *10 Quick Ways to Speed Up a Slow Windows PC*  
<http://www.howtogeek.com/228570/10-quick-ways-to-speed-up-a-slow-windows-pc/>
- *10 Easy Ways to Make Your Mac or PC Run Faster*  
<http://mentalfloss.com/article/70516/10-easy-ways-make-your-mac-or-pc-run-faster>
- *13 Easy Ways to Make Your Mac Run Faster*  
<http://www.businessinsider.com/ways-to-speed-up-your-mac-2015-11?IR=T>
- *Gizmo's Freeware - A Community Site for Reviewing and Rating the Best Free Software*  
<http://www.techsupportalert.com/>
- *The Difference Between Antivirus and Anti-Malware (and Which to Use)*  
<http://lifehacker.com/the-difference-between-antivirus-and-anti-malware-and-1176942277>
- *What's the Difference Between Antivirus and Anti-Malware?*  
<https://www.malwarebytes.org/articles/antivirus-vs-antimalware/>
- *Reasons to Reboot Your Computer Nightly*  
<http://smallbusiness.chron.com/reasons-reboot-computer-nightly-38604.html>