



CornerStone Hints & Tips

Item	Good (◊=requires setup, ◻=available on macOS)	Bad
internet security: anti-virus anti-spyware anti-malware anti-phishing anti-ransomware firewall etc...	Bullguard Internet Security ◊◻ (bullguard.com) Six layers of protection to block & remove viruses, malware, spyware, scams, rootkits, phishing & ransomware. Dynamic machine learning, community & cloud based analysis blocking even zero-day threats. Privacy & browser protection, email & chat messenger scanning, parental controls with website content filtering, safe search, vulnerability checker, system cleanup & optimize, game booster & gaming mode firewall, automatic upgrades & (hourly) updates, 24/7 online support. Encrypted online backup to DropBox, OneDrive or Google Drive. Easy to use. 60 day FREE trial. Which? recommended, many times! 1 year, 1xPC=£17.99, 3xPC=£20.50 (if bought with hardware).	Norton ◊◻ (symantec.com) Renowned for low detection & being slow & incompatible! Removal: liveupdate.symantecliveupdate.com/upgrade/RnR/NRnR.exe McAfee ◊◻ (mcafee.com) Low detection, high memory usage & extremely slow! John McAfee himself said it's, "the worst software on the planet"! Removal: download.mcafee.com/products/licensed/cust_support_patches/MCPR.exe
see page#4 for setup	Kaspersky Security Cloud ◻ (FREE) (kaspersky.co.uk) Cloud based (good for slow/low specification computers), block & remove viruses, malware, spyware, ransomware, adware & phishing, email & chat messenger scanning & automatic updates. Bitdefender Antivirus ◻ (FREE) (bitdefender.co.uk) Block & remove viruses, malware, spyware, scams, rootkits, phishing & ransomware. Automatic updates. Comodo Antivirus ◊◻ (FREE) (comodo.com) Cloud based anti-virus, behavioural analysis & publisher white-listing, auto-sandboxing, game mode & automatic updates.	AVG ◊◻ (avg.com) free or paid version VERY low detection, very slow, extremely high memory usage & collects & sells user data! Any professional recommending AVG are doing so maliciously - knowing you'll get infected, they're hoping they can charge you again & again! Easily, world's worst security! Removal: avg.com/en-us/avg-remover Avast ◊◻ (avast.com) free or paid version Low detection, slow, poor support & expensive as separate purchase per feature. Able to hide itself, so you don't even know it's running & auto-installed with other programs (e.g. CCleaner). Removal: files.avast.com/iavs9x/avastclear.exe
More than one active anti-virus or firewall will heavily slow down computer & cause conflicts!	WinPatrol (FREE) (winpatrol.com) - use with above Monitors Windows Registry (settings) to allow or undo changes. Crystal Security ◊(FREE) (crystalsecurity.eu) - use with above. Blocks unknown programs from installing/running via multi-engine cloud based scanning & application white-listing.	Microsoft Defender ◊ (microsoft.co.uk) Don't bother - they didn't - has VERY low detection! If it was any good, there'd be no other anti-virus & no infected computers! NOTE: Use HiBit Uninstaller (page#2) to uninstall security BEFORE running above REQUIRED removal tool. If Windows is heavily infected, reinstalling is recommended (from as little as £29).
run AdwCleaner (see below) before changing security & periodically thereafter		Also 'less good'(!): Ad-Aware, Avira, ESET, F-Secure (rebadged by ISPs), IObit, Panda, Malwarebytes, Sophos, Spybot, SuperAntiSpyware, Trend Micro. NOTE: If you use any of these bad security or unsafe web browsers, you're highly likely to be/get infected (quick check with AdwCleaner), so keep important files backed up!
Upgrading Windows 7 or 8 to 10 can still be done for free (see page#3) & since 7 was discontinued 14th January 2020, is highly recommended. Be mindful 10 needs higher spec hardware (ideally minimum: 2.5GHz dual core with 1MB L2 + 4MB L3 cache (CPU details on cpu-world.com) & 4GB RAM (changing HDD to SSD can mean performance is bearable even with lower spec CPU or RAM), extensive configuration & a better start menu (see page#4). However, 10 is safer, has better built-in hardware support (but often NOT compatible with older devices), updates are more frequent & install quicker.		
anti-virus detection & effect	Anti-virus will generally find nothing when scanning as anything it knows would have been blocked from getting in!! Use anti-malware scanners (see below) & 'no virus detected' is not the same as not being infected - today's infections make great effort to hide themselves & malicious websites (accessed mostly via email, Google 'search' or Facebook), with auto-installing malware, are prime attack methods. If something isn't working correctly, or is corrupted or you can't even login, it's likely to be damage caused by infection(s)!	
restricted & emergency access	Most (98%!) malicious software requires administrative access rights to allow it to install/run... To limit these (you'll be prompted to enter password), make a password protected <i>administrator</i> account that is only used if other accounts get infected/corrupted, allowing scans to be run or a new user account created (to copy files from 'bad' account) & then set all other users to <i>standard/limited</i> .	
email/phone scams	Malicious callers/emails claim they've detected problems/infections on your computer & charge £100's for a bogus 'support' contract! Never allow them access to your computer, but if you've already been a victim, contact police & report to your bank - you've been robbed!	
Ideally, virus/malware scans should be run in 'safe mode with networking': it's faster & more infections can be removed.		
FREE anti-malware & adware scanners	AdwCleaner (toolslib.net) Quickly detect & remove adware, toolbars, hijacks & PUPs. Emsisoft Anti-Malware ◊ (emsisoft.com) High detection rate & classifies risk level. Supports direct disc access, heuristic scanning & PUP removal. Free mode after trial. AutoRuns ◊ (sysinternals.com) Allows disable or removal of any program that loads at startup & can check with VirusTotal using 70+ anti-malware scanners. Use with extreme caution - can stop Windows loading!!	Spyware & malicious browser 'plug-ins' (in IE, Edge, Chrome & Firefox) are far more common than viruses & affect security, performance & stability or pass on your personal details. Beware of fake antivirus that reports non-existent infections; programs that claim to speed up or optimize Windows, but actually slow it down; fake police messages saying illegal software/activity detected & most damaging, ransomware that encrypts your files & demands £100s to decrypt! All are just trying to get bank/card details from you to steal money! Beware too fake reviews or 'aditorials' & always read user comments from more than one website, looking at both the good & bad reviews.
software updates to help prevent security vulnerabilities	Whilst it's obviously important to keep Windows & antivirus up-to-date, unlike Linux (see page#3), Microsoft updates do NOT include 3rd party applications. It's CRITICAL to keep ALL installed software updated (most doesn't auto-update) else attackers can gain access via security vulnerabilities (backdoors). Patch My PC ◊ (patchmypc.com) can help (Options: tick <i>Create Restore Point Pre-update & Disable Silent Install of Apps</i>). Alternatively, create a free account on softpedia.com (hosts 1.5 million programs!), search for each program you have installed & add them to your <i>watch list</i> . Softpedia will email you when new versions are released, so you don't need to check! After updating, check for new features needing configuration.	
safe internet web browsers	Maxthon (MX5) ◊◻ (maxthon.com) Fast, safe & secure browser with built-in pop-up, autoplay & (plug-in) advert blocker, dual web engines for greater compatibility & speed, multiple tabs/startup pages/search engines, print preview, mouse gesture control, skins, multi-language spell checker, RSS sniffer, online favourites/notepad/settings, website speed dial, 5GB FREE cloud storage & sharing for Windows/Android/Apple, secure password generator/manager, PDF support, anti-spam virtual mailbox, auto form fill, GPU acceleration, split-screen, zoom, video picture-in-picture, history cleanup, URL aliases, media sniffer (e.g. YouTube), screen capture, mute, undo, privacy mode, night mode, download manager, resources status bar, customizable layout, plug-ins & available in 43 languages.	Internet Explorer(IE)◊/(original)Edge ◊◻ (microsoft.co.uk) Very basic, slow, incompatible & unsafe - Microsoft say they can't make IE (now discontinued) safe, after 20 years of trying(!) & Edge has many of the same vulnerabilities! Using IE is often said to be the quickest way to get infected: Google, Adobe & even governments have been hacked via IE! NOT required to connect to internet - your LAN, WiFi or modem connection does that!
see page#4 for setup		Firefox ◊◻ (mozilla.com) Very basic, slow, incompatible, unsafe & high memory usage! Each version has 1000's of bugs, many beta releases & relies on 3rd party 'plug-ins' to provide functionality. Lost 75+% of their users! Chrome ◊◻ (google.co.uk) Basic, VERY high memory usage, incompatible & VERY unsafe - collects & sells user data, runs in the background, slowing computer & no internet security can protect Windows from it! NOTE: We see Internet Explorer, Edge, Firefox or Chrome (by far the worse!) infected daily - all are EXTREMELY unsafe!
most infections are web based: a safe web browser is absolutely CRITICAL	Opera ◊◻ (opera.com) Built-in pop-up & advert blocker, website speed dial, VPN, light/dark themes, Chromecast support, plug-ins & Facebook, Instagram, WhatsApp, Twitter, Telegram & VK messengers.	

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Item	Good (all software listed is FREE!)	Bad
office suite <small>see page#4 for setup</small>	LibreOffice (formerly OpenOffice) (libreoffice.org) Windows, Linux & Apple compatible easy to use office suite, compatible with Microsoft Word, Excel, PowerPoint & Publisher. Includes a database & supports Works, PDF & EPUB3 documents.	Microsoft Office (microsoft.co.uk) NOT part of Windows, but trial versions often included. Very expensive & not user friendly! For compatibility between other office suites (including Microsoft's!) use 1997-2003 format.
secure eMail client	Mozilla Thunderbird (thunderbird.net) Windows, Linux & Apple secure email client with spell check, anti-SPAM, anti-phishing, auto-update & customizable interface.	Outlook Express/Windows Mail (microsoft.co.uk) Both discontinued, basic email clients with no protection against anything, no built-in spell checker or anti-spam.
emailing large files	WeTransfer (wetransfer.com) (supported in Thunderbird) Send files up to 2GB via email (20GB with paid account).	Microsoft Outlook (outlook.com) Account required & limited to 34MB or 2GB if sent via OneDrive link.
file backups & disc imaging	Personal Backup (rathlev-home.de) Easy to use backup for files & folders. Supports schedules, compression, encryption, synchronization & real-time monitoring. Macrium Reflect (macrium.com) for complete disc imaging.	Windows Backup (microsoft.co.uk) Basic backup that includes many extra/worthless files, creating huge backups with very little actual data! System Image Backup (microsoft.co.uk) deprecated in 10!
PDF reader & creator	Foxit PDF Reader (foxitsoftware.com) (untick 'extras') Small, fast, safe, easy to use & supports all PDF formats. PDF Creator (pdfforge.org) or CutePDF (cutepdf.com) Virtual printer to create PDF files.	Adobe Acrobat Reader (adobe.com) Reader only & VERY slow, VERY unsafe & VERY unreliable - often can't display/print & installs components not listed in Windows or uninstallers. Acrobat Creator writes, but isn't free.
video player	Media Player Classic (codeccguide.com) (untick 'extras') Install K-Lite Mega Codec Pack (see page#4 for setup) to support most audio & video formats in high quality.	Windows Media Player (microsoft.co.uk) Supports very little, but what it can play, it plays poorly! Also not good/unsafe: QuickTime, RealPlayer & VLC.
music player/sync	MediaMonkey (mediamonkey.com) Easy to use music player, organizer, converter, recorder & sync. MusicBee (getmusicbee.com) similar features, but prettier.	Apple iTunes (apple.com) VERY slow, not user friendly & expensive to buy music! Be careful with sync as wipes device to copy from PC. Now discontinued.
picture viewer / converter	IrfanView (irfanview.com) (untick 'extras') Very fast picture viewer/converter - supports most formats.	Windows Picture Viewer (microsoft.co.uk) Slow, very few options & doesn't support many formats.
picture editing	Krita (krita.org) Feature rich professional painting/photo editor. Available for Windows, Linux & Apple. Simpler: Paint.Net (getpaint.net)	Windows Paint (microsoft.co.uk) VERY basic, not many features or formats supported & now discontinued & replaced with Paint3D (Windows 10 only).
video converter & editor	XMedia Recode (xmedia-recode.de/en) Simple, easy to use interface & supports most formats. VSDC Free Video Editor (videosoftdev.com) Create videos with effects & filters - supports most formats.	Windows Movie Maker (microsoft.co.uk) Very basic & supports very few video formats. Upgraded to Windows Live Movie Maker (included in Windows Live Essentials (discontinued in 2017), but still very few features.
audio recorder / editor	Audacity (sourceforge.net) Easy to use sound recording, editing & filtering.	Windows Sound Recorder (microsoft.co.uk) Ha ha ha - no! An absolute joke! Don't bother, they didn't!
CD/DVD/Blu ray reader/writer	Ashampoo Burning Studio (ashampoo.com) Reliable & easy to use with lots of features.	Windows Disc Writing (microsoft.co.uk) Basic & unreliable - can't set write speed & verify only for ISO.
downloading music, films, TV shows, etc	qBittorrent (qbittorrent.org) Open-source torrent client with built-in search. To access blocked websites, use VPN from psiphon.ca or goto unblockit.la	µTorrent/Limewire/iMesh/Ares/BearShare/etc... Peer-2-Peer programs are often bundled with or contain spyware & falsely claim downloading music & films is legal - it isn't!
device drivers	Snail Driver (snailsuite.com) (untick 'extras') Install or update device drivers (needs internet connection).	Windows Update (microsoft.co.uk) Finds very few drivers & are often years out-of-date (better in 10).
hardware status	HWMonitor (cpuid.com) Shows CPU, graphics, motherboard, hard disc drive & memory temperatures & battery level, capacity & wear level.	Windows Power Options (microsoft.co.uk) Only shows battery charge level: 100% of nothing is still nothing! No temperature monitoring of anything.
hard disc drive health	Crystal Disk Info (crystallmark.info) Shows HDD spec, SMART attributes, temperature & health status.	Windows Disc Check (microsoft.co.uk) Checks files & can mark bad sectors, but no health/error details.
disc & registry clean up	Wise Care 365 (wisecleaner.com) Removes Windows' & application's temp files, clears browser history, removes redundant Registry entries, optimizes Windows settings, reports startup time & CPU temperature.	Windows Disc Cleanup (microsoft.co.uk) Doesn't check applications or Registry, leaves lots & is VERY slow. Bad: CCleaner - removes little & tries to install unsafe software. Worse: System Mechanic - can corrupt Windows!
Windows Restore Points	Registry Backup (tweaking.com) Schedule complete, all user, registry backups to allow 'rollback'.	Windows System Protection (microsoft.co.uk) Not automatic & disabled by default in Windows 10!
program uninstaller	HiBit Uninstaller (hibitsoft.ir) Remove files & settings normal uninstall would leave behind. Do NOT restart after & check items relate only to uninstalled.	Add/Remove (XP) / Programs & Features (V/7/8/10) Most programs leave files & settings after uninstalling which can cause conflicts, waste disc space & slow down computer.
file compression	7Zip (7zip.com) Add & extract files from most archives (e.g. 7z, ZIP, RAR, etc).	Windows Explorer (microsoft.co.uk) Supports only ZIP & CAB & no 'solid' or 'recovery' options.
USB formatting	Rufus (rufus.akeo.ie) Supports many USB flash drive format options, including Windows/Linux installs & diagnostics (e.g. HDAT2, page#4)	Window Explorer (microsoft.co.uk) Supports very few formats, limits options based on drive size & doesn't support bootable (except for floppy diskette!).
hard disc partitioning	MiniTool Partition Wizard (partitionwizard.com) Easily create, delete, resize, copy, move, merge, split, wipe, convert, manage, test & explore partitions in many formats.	Windows Disc Management (microsoft.co.uk) Can only create, delete or resize partitions, is very slow, often doesn't work & supports very few formats!
file recovery	Wise Data Recovery (wisecleaner.com) Recover deleted or lost files (even if disc formatted) from HDD, SD, USB, etc. Use portable version to not overwrite lost HDD files!	Windows Recycle Bin (microsoft.co.uk) Deleted files are copied to recycle bin & can be restored, but once emptied, are marked as 'free space' & will, in time, be overwritten.
remote assistance	TrustViewer (trustviewer.com/en) Secure, remote computer control allowing assistance without needing to bring computer to shop. We charge £5 per 10 minutes.	Windows Remote Assistance (microsoft.co.uk) Requires sending an email with a password to invite access & needs to open ports in the firewall.
recommended Internet Service Providers (ISP) for ADSL/fibre broadband	Utility Warehouse (0333-777-3-212, quote B14690) Unlimited downloads & free wireless router... ADSL : No minimum contract, no connection fee, up to 16Mbit: £9.99 (LLU, e.g. Bognor Regis, else £16.99) per month. Fibre : 18 month contract, £30 connection fee, LLU only, up to 38Mbit: £14.99 or 76Mbit: £19.99 per month. UK's cheapest services: line rental £18.00 with unlimited FREE off-peak landline calls (inc. 0845/0870). Low price electric, gas, insurance, mobiles & new line installation. Replace all your home light bulbs for LED for FREE! UK based support & voted UK's best value services by Which? for 10+ years! Plusnet (plus.net) Don't be put off by their ad, it's a good, reliable service!	TalkTalk, Sky, Post Office, BT/EE The UK has some of the world's slowest & least reliable internet service providers & TalkTalk (hacked & entire customer details leaked many times), Sky (expensive), Post Office (all 3 have speeds below UK legal minimum levels!) & BT/EE are officially (OFCOM) the worst, consistently coming bottom in reviews for speed, reliability & customer support! Despite repeated poor reviews, their services are often more expensive (BT are the highest, closely followed by Sky) & their support isn't technical, with customers reporting unresolved calls of over 2 hours! Some have very high contention ratios (how many people share the same line - often 300:1 as opposed to the standard 50:1) - meaning sometimes, you won't even be able to connect, sometimes you'll get disconnected & it'll be slow most of the time, dropping literally to zero at peak times!
good software	Get 250+ programs, 700+ fonts/pictures/sound effects on our CornerStone "Companion DVD" for only £5.00!	

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Issue	How to ... (NOTE: shaded heading indicates recent change to document)
remove virus & spyware infections from computer	As infections often run at startup, their files are in use & therefore possibly non-removable, so ideally, if you have another computer, remove hard disc drive & attach as secondary (or external via caddy/dock) & run virus & spyware scans using up-to-date & reliable scanners (i.e. <i>Emsisoft with Bullguard, Qihooor Kaspersky</i> (websites listed on page#1). Use <i>AutoRuns</i> (analyse offline system) to check startup programs & untick/delete anything suspicious. If you have only one computer, download <i>Emsisoft Emergency Kit</i> (you may need to do this on another computer), open & extract files to a DOS bootable USB flash drive (see <i>Rufus</i> , page#2). Boot USB (check/setup BIOS for boot key/order/legacy), connect to internet, update virus definitions & run scan. In either case, any infected programs will need to be reinstalled & if Windows itself is infected, backup any data files (e.g. documents, pictures, music, videos, email, contacts, favourites, etc - you can't backup programs) you want to keep first, else they'll be lost! You'd also need to install hardware device drivers & you'd need to re-setup internet connection, any peripherals & copy back data files you backed up! Delete any infections found & return drive (if it was removed). Next, or if scanning directly within Windows, turn on computer, press <i>F8</i> before boot (for 8/10, during boot, turn off/on until says, "Please Wait", select Trouble shooting, Advanced, Startup options) & select <i>SAFE MODE WITH NETWORKING</i> (provides internet access & restricts running programs), login to an <i>administrator account</i> , download <i>Emsisoft Anti-Malware</i> , install, update, full scan & delete all infections. After, download & run <i>AdwCleaner</i> . Restart Windows & if everything's working ok, then you've successfully removed the infections, else you'll need to reinstall Windows! Obviously, as Windows got infected, either your internet security isn't good enough, or you have security vulnerabilities, most likely via out-of-date software. See page#1 for good security, how to remove old security & how to update programs. Remote scans generally take 1-2 hours & local scans about 30-60 minutes. If preferred, we can do this for you: remote scan=£20 (3 scanners), local scans=from £20 (5 scanners), data backup=up to 50GB=50p/GB & over=25p/GB (minimum £10, maximum £50), Windows install=from £29 (valid product key required).
quickly remove infections WITHOUT(!) scanning	Boot from 'live' (doesn't affect existing Windows installation) Linux disc (see below) & you can delete any files as none are in use! The trick is knowing what to delete! As a good start, remove: <i>pagefile.sys</i> & <i>hibernat.sys</i> files in <i>C:\</i> & all files in <i>System Volume Information</i> , <i>Recycle bin</i> , Windows Temp & user's <i>Temp</i> & <i>Temporary Internet Files</i> folders (in <i>Users</i> or <i>Documents</i> and <i>Settings</i>) & the <i>JAVA</i> cache. Restart computer & see if problem has gone. If not, hopefully, you can now run scans, though this will NOT repair file corruption/bad settings/deleted files infections may have caused.
Linux - FREE Windows / macOS alternative	Linux looks like Windows/macOS, but is MUCH faster & safer, can run most Windows software (install Wine & PlayOnLinux) & is FREE! It includes: Microsoft compatible office suite, email, firewall, games, video/music player, video/picture editor & much more! Most versions of Linux support booting into a 'live' system, so you can try it without changing/losing anything on computer! You could also backup files or test hardware on a non-booting computer! Download ISO file & use <i>Ashampoo</i> or <i>Rufus</i> to make bootable DVD/USB. Recommended: <i>Manjaro</i> (<i>manjaro.org</i>): most popular version of Linux, cutting-edge & always up-to-date, or <i>Mint</i> (<i>linuxmint.com</i>): good for beginners. Linux install with updates & extensive software suite=from £29 or £2.50 to make DVD for self install.
setting up an ADSL / fibre router (cabled or wireless)	If you've just had Windows installed or have a new computer & your router was already setup, then no software/setup is required - just reconnect as before - else, to setup an ADSL router, load your internet browser (e.g. <i>Maxthon</i> , <i>Chrome</i> , <i>Firefox</i> , etc), type router's (IP) address into the address bar (check manual, e.g. <i>192.168.2.1</i>), if prompted, enter router's login username & password (e.g. <i>admin/password</i>), click <i>internet/ADSL setup</i> & for most routers, just enter your internet account username & password & click save. However, depending on make/model, you may first need to setup for UK: <i>VPI=0, VCI=38, encapsulation=VcMux, protocol=PPPoA</i> or <i>PPPoE</i> . To secure a wireless router, click <i>wireless/WLAN</i> , select <i>WPA2 encryption</i> (safer & faster than <i>WEP/WPS</i>) & enter a password to prevent others nearby from accessing your internet/computer, which would slow your browsing & use-up your download allocation - NOTE: this can cost you money, possibly £100's, if they cause you to go over your (usually 40GB) limit! It's illegal (fines & prison time) & you should report suspected attacks to the police.
router password	Routers are often shipped with a default login & WiFi password... to limit attacks, ALWAYS change router's name (SSID) & both passwords as there's software available to show default WiFi password from router's default name.
ADSL / fibre broadband speed issues?	Apart from poor line quality & unreliable Internet Service Providers (e.g. <i>TalkTalk</i> , <i>Sky</i> , <i>Post Office</i> , <i>BT/EE</i> , etc), there are other, less well known issues that can affect internet speeds: 1) a faulty component in an electrical device (e.g. <i>TV</i> , set-top box, microwave oven, etc) can omit more electrical noise than usual, reducing your line speed by up to 75%! To identify which item is faulty, tune an AM radio to 627KHz then switch items off/on, listening for crackle. However, a faulty CRT TV up to 200m away can still cause problems! An interstitial plate (iPlate) should rectify this. 2) Poor quality telephone wiring is the single biggest connection issue - plugging your router into the master telephone socket is easiest way to limit this. 3) Ask your ISP to use the <i>Reactive Repair Tool</i> to see a detailed line speed history to identify potential issues. 4) Updating your router's firmware can fix problems & incompatible routers (e.g. <i>ADSL</i> instead of <i>ADSL2+</i>) will also limit speeds. 5) <i>ADSL</i> filters fail - try replacing them. 6) The magnet in a landline telephone can block wireless radio signals - move telephone or router to another location. 7) Interference from another device (e.g. another router (if you have an Android mobile, install <i>WiFi Manager</i> to check signal strength & channel numbers), microwave oven, baby monitor & even Christmas tree lights!) - try changing your router's position or wireless channel (like fine tuning a radio). 8) Wireless encryption - <i>WEP</i> can cause up to 30% performance loss(!) - use either <i>WPA2</i> or <i>MAC filtering</i> ! 9) Change the lease time on router setup to fewer hours (i.e. 6 hours or less) so 'bad lines' are refreshed more frequently. 10) Ask provider (e.g. <i>BT</i>) to 'up the gain' on the line - it increases electric power & can make devices more stable/reliable. 11) To increase WiFi signal strength, take a sheet of tin foil, fold in half, crimp edges then bend into parabolic curve & place behind router. 12) Lastly, a contentious fix, ask your ISP to turn on interleaving - this improves stability by preventing errors, but could actually reduce overall speed!
Windows loading problems?	If Windows doesn't load/run properly then start computer in <i>SAFE MODE</i> (press <i>F8</i> at startup BEFORE booting (for 8/10, during boot, turn off/on until says, "Please Wait", select Trouble shooting, Advanced, Startup options, Safe Mode), press <i>Windows key+R</i> type " <i>MSCONFIG</i> ", check <i>Startup</i> (in 8/10, <i>Startup</i> is in <i>Task Manager</i> (press <i>Ctrl+shift+Esc</i>)) & <i>Services</i> tabs (<i>Hide All Microsoft Services</i>) & untick anything that looks suspicious! This just stops it loading when Windows starts, thus allowing you to identify & remove malicious/incompatible software. You can also try, "Last known good configuration" or, "System Restore", both of which will revert settings to an earlier state.
upgrading Windows 7 or 8.1 to 10 via the Media Creation Tool	To manually upgrade (backup data files first), goto: <i>microsoft.com/en-gb/software-download/windows10</i> , download, run, select "Upgrade this PC now" & follow prompts (takes a LONG time & transfers everything compatible, including infections!). Microsoft recommends, after Windows 10 has activated, wipe & perform fresh install to remove any legacy issues. Ideally, NEVER upgrade (unless Windows product key sticker is unreadable as upgrade won't ask for it, but remember to setup Microsoft Account (Live ID) login so digital licence registered to email address), safer/faster to select "Create installation media": UK, English, 64bit, non-N & after download, write DVD or USB (8+GB) flash drive, boot DVD/USB for clean (erase everything) install. Enter Windows product key when prompted or leave blank if computer came with Windows 8/10. The same website can also download installation media for Windows 7 or 8.1 by changing the <i>10</i> to <i>7</i> or <i>8</i> or we sell installation DVDs for £5. If Windows is already infected or corrupted, you may not be able to upgrade or download, if so, you'll need to use a different computer to create media. Alternatively, we charge from £29 to install & setup Windows with good security, a safe web browser, a PDF reader/creator & a better start menu.
installing Windows	Before installing Windows, make sure only one disc drive is connected (so can't accidentally install to wrong drive!) & download & copy device drivers (not needed if have driver CD(s) & also possible Windows 8 or 10 could auto-detect).
Windows password	If you use a <i>Microsoft Live ID</i> (email address or PIN) to login to Windows, make sure you also create a <i>local account</i> as if you forget your password (or it gets corrupted), only a <i>local account</i> can have the password removed (we charge £5).
Windows internet & network fixes	If internet settings in Windows become corrupted (e.g. connected to router, but no internet), to fix: press Windows key+R & type CMD (for XP: <i>click Start, All Programs, Accessories, Command Prompt</i>), <i>NETSH INTERFACE IPV4 RESET</i> , <i>NETSH INTERFACE IPV6 RESET</i> (for XP: <i>NETSH INT IP RESET</i>), <i>NETSH WINSOCK RESET</i> , <i>IPCONFIG /RELEASE</i> , <i>IPCONFIG /FLUSHDNS</i> , <i>IPCONFIG /RENEW</i> . Restart Windows & if not fixed, it's a bigger problem so bring in for further diagnosis.
internet connection issues	If getting no internet connection: 1) Make sure LAN/WiFi/router turned on. 2) Boot to safe mode with networking. 3) Reset networking (see above). 4) Uninstall LAN/WiFi device driver & reinstall. 5) Upgrade (all) device drivers to latest. 6) Uninstall/disable firewall. 7) Boot 'live' Linux CD (see above) & if not working, bring in for further diagnosis.
secure internet connection	Criminals use <i>port scanners</i> probing ALL internet connections. Your firewall should block these, but if you have a 'backdoor' software vulnerability, they can access your computer! To limit this, use a DNS proxy server (e.g. <i>opendns.com</i> , <i>comodo.com</i> or <i>quad9.net</i>) & to access blocked websites, a Virtual Private Network (e.g. <i>psiphon.ca</i>), where (in both cases) your internet is routed through another computer that filters attacks & caches web pages for safer & faster browsing.
Master Boot Record virus?	There's a virus type which can survive Windows reinstall or recovery, even if partitions are deleted & formatted! To remove: boot from Windows disc, select Repair, at command prompt, for V/7/8/10: type <i>BOOTREC /FIXBOOT</i> , then <i>BOOTREC /FIXMBR</i> , then <i>BOOTREC /SCANOS</i> , then <i>BOOTREC /REBUILDBCD</i> or for XP: type <i>FIXBOOT</i> , then <i>FIXMBR</i> & after restart.
printer issues	If inkjet printer not used often, heads will clog. Head cleaning uses ~10% ink & may need to be repeated many times & it'll only work if heads haven't failed & ink hasn't dried out. Cleaning fluid (ebay!) forced through via syringe & tube on nozzle is quicker.
UK/USA keys	If quotes (") & at (@) are reversed then you have USA keyboard layout - change to UK in <i>Settings, Time & Language, Language</i>

CornerStone Hints & Tips

Issue	How to... (NOTE: shaded heading indicates recent change to document)
Bullguard settings	<i>Settings: General, Main:</i> tick <i>Minimize notifications, Updates, Check for updates, select Every hour, Antivirus, Tuning</i> ; tick <i>Scan only files loaded for execution, Scan inside archives, Max depth level=Max, Misc:</i> tick <i>Preserve last access timestamp on files.</i>
Comodo settings	<i>Settings: Sandbox, Sandbox Settings:</i> Enable <i>Auto-Sandbox</i> ; tick <i>Ask for untrusted applications, Save files with trusted rating outside Sandbox automatically, Network Traffic Control Over Sandboxed Apps</i> ; tick <i>Block incoming..., Block outgoing...</i>
Windows 10 ransomware	<i>Settings, Update & Security, Windows Security, Virus & Threat Protection, Ransomware Protection, Manage Ransomware Protection, Controlled Folder Access,</i> enable, <i>Login to OneDrive,</i> enable. Choose folders to monitor & block. NOT available if anti-virus installed!
Maxthon settings	<i>Menu: Settings: General: Default search...:</i> select (i.e. NOT Google!), <i>Default browser: Check..., Download Settings: Open..., Functions & Addons: Addons: Get more, search AdBlock, Install, Advanced, Smart Address Bar: Show favourite..., Browsing: Always use..., Video floatbar: Disable Autoplay, Spell Check: select language, Others: Customize...:</i> select browser (if website 'needs' specific browser for compatibility). <i>Menu: Skins:</i> select preferences, <i>ABP: ...settings,</i> untick <i>Allow some...</i> . Copy URLs from adblockplus.org/en/subscriptions for additional filters. <i>Speed Dial:</i> edit <i>Facebook, YouTube & Bing</i> web addresses to go to standard home pages.
Opera settings	<i>Menu: Settings: Advanced: Block ads:</i> enable, <i>Manage exceptions:</i> choose, <i>Manage lists:</i> choose, <i>Search engine:</i> select (i.e. NOT Google!), <i>Privacy and security: ... "Do Not Track": Site settings: Cookies: Block third-party..., Battery saver: Save battery automatically</i> (if notebook/laptop). <i>Start page: Hide search box, Adjust Speed Dial..., User interface: Show tab previews, System: ...DNS-over-HTTPS,</i>
bookmarks & passwords	In case of system crash or HDD failure, to prevent loss of stored bookmarks, passwords & settings, most web browsers support creating an online account to sync local & online values, shared between each device using same browser & account.
Klite install settings	<i>Advanced.</i> Set as <i>Preferred audio player, Amount of components to install: Everything, MPC-HC configuration:</i> tick all except <i>Store settings in INI file, Hardware Acceleration, Decoding Method:</i> select <i>native</i> & tick all boxes. File associations: tick all. Decline offers.
LibreOffice settings	Click <i>Tools, Options, Load/Save, General,</i> set <i>Default File Format</i> types to <i>Microsoft 1997-2003</i> & tick <i>Always create a backup copy.</i> For Microsoft-like ribbon, instead of easy-to-use menu, Click <i>View, User Interface</i> then select preferred layout.
Hard Disc Drive (HDD) problems? (set UEFI BIOS to CSM/Legacy. NOTE: not supported by some computers!) HDD or RAM diagnostic CD only £2.50 each	ALL hard disc drives (HDD) fail, so if computer running slow for no apparent reason, a FREE diagnostic program can check status, test & (maybe) repair errors: <i>HDAT2</i> (hdat2.com), download latest ISO or EXE & write ISO contents to CDR (use <i>Ashampoo</i>) or use <i>Rufus</i> (see page#2) to create bootable USB & copy EXE file. Boot CD (you may need to change SATA/AHCI to IDE/ATA in BIOS (press F2/F10/Del/etc before boot)) & select HDD type or boot USB & type file name. Select HDD to test. <i>SMART Menu, Read Log Menu</i> & check for error details: READ or WRITE errors mean HDD is no longer reliable. <i>HDAT2</i> can perform <i>SMART short & extended tests</i> (<i>SMART Menu, Routine Menu</i>) to check if SMART errors are within tolerance. Check <i>Read Attribute Data:</i> look for current/pending sector errors - <i>HDAT2</i> can check these via: <i>Device tests menu,</i> select test ('most powerful' is the most thorough, but could take a LONG time!) - this 'surface repair' can possibly make an unreadable drive, readable again! Backup data files BEFORE running test. HDD defrags will give no appreciable performance gains, but will help wear out drive & can actually make it slower!
memory (RAM) problems?	If getting memory (RAM) errors or system is unstable, there's a FREE diagnostic program to run a thorough RAM check: memtest86.com , click <i>Download, free ISO or USB, save & unpack ZIP file,</i> write ISO contents to CDR (use <i>Ashampoo</i>) or run included program to create bootable USB. Boot it & any errors indicate faults or incompatibility. Just because memory is detected, doesn't mean it's ok!
portable computer use, cleaning & battery	Dust clogs up fans & air vents causing components to overheat & burn out! This can often be a costly repair, sometimes more than computer is worth! Check regularly for dust build up & clean when necessary. Thermal paste (between chip & heatsink) should be replaced if dried out. We charge £20 for this service. If portable computer has air vents on base or mechanical (rather than solid state) hard disc drive, then it's a <i>notebook</i> NOT <i>laptop</i> & MUST be used on flat & steady surface to limit overheating & drive damage. In addition, Windows product key sticker can wear off & costs over £80 to replace! Using fan cooler pad under computer will help keep it cool & extend usable life. Since battery is for portable use, after charging, remove it when mains powered (switch off first!) else over-charging will reduce battery capacity (it'll need to be 'topped up' about once a quarter as if it dissipates to zero, that'll kill battery completely)! Alternatively, to prevent data loss on open files during a power cut, as most batteries only cost £15-£20, let it die & just replace it!
data backup	If you have important files (e.g. documents, pictures, etc) then make sure they're kept backed up, ideally, EVERY time they change! Hard discs fail or infections can corrupt files! Use external hard disc, USB flash or on-line storage. If you can, keep multiple backups on different devices, in case of 'ransomware' encryption! Online services (e.g. Microsoft's OneDrive) can automatically upload files after a change.
downloading & installing	Check link on browser status bar BEFORE downloading software/files & when installing, select <i>custom/options</i> to exclude unwanted settings or other software! These are common methods for how adware/malware gets installed.
Windows updates	<i>WSUS Offline Update</i> (wsusoffline.net) quickly downloads updates for Windows 8 & 10 that can later be installed while offline. Windows 7 updates can take a LONG time: these security rollups & Service Pack #2 fix this: catalog.update.microsoft.com , download & install: KB's: 3020369, 3125574 (SP2), 3172605, 3179573, 4019990, 4463376, 4474419, 4490628, 4534310, 4539602 & 4586827. Disable Windows updates (<i>Control Panel, Windows Update, Change settings</i>), disconnect internet & restart BEFORE installing & then re-enable after. For Windows 8.1, install: KB's: 2883200, 2894029, 2894179, 2999226, 3021910, 3172614, 3179574, 3185279, 4463376 & 4586845.
prevent Windows 10 upgrades	<i>Settings, Network & Internet,</i> select connection type (Ethernet or Wi-Fi), select connection (if Wi-Fi), <i>Metered connection,</i> click On (repeat if change connection). As support only lasts 18 months, you'll HAVE to upgrade eventually else risk unpatched vulnerabilities! Computers with <10GB space will need another computer to create media for complete wipe & reinstall, ideally, every 6 months!
Windows XP Support	Microsoft officially ended Windows XP support on 8 April 2014... however, it's still fully supported, just disabled: run <i>Regedit</i> , browse to: <i>HKEY_LOCAL_MACHINE\SYSTEM\WPA,</i> right-click (on pane), <i>New, Key,</i> enter " <i>PosReady</i> ", right-click (on pane), <i>New, DWORD,</i> enter " <i>Installed</i> ", double click & change value to " <i>1</i> ", exit, restart Windows & check for updates. Alternatively, goto softpedia.com , search " <i>Windows XP SP4</i> ", download & install 10+ years of updates quickly & in one go & includes additional Windows features!
Windows restore points	Windows does NOT automatically create restore points when programs are installed, but if you create them yourself, BEFORE making any changes to Windows, you'll have known, working settings to restore to. See page#2 for automatic scheduling.
Windows 10 registry backups	To enable registry backup at startup: run <i>Regedit</i> , browse to: <i>HKLM\System\CurrentControlSet\Control\Session Manager\ Configuration Manager,</i> right-click (on pane), <i>New, DWORD,</i> enter " <i>EnablePeriodicBackup</i> ", double click & change value to " <i>1</i> ", exit, restart Windows.
Windows passwords	Windows passwords now expire, forcing users to change them regularly. To disable: Start, Windows System, right click Command Prompt, run as administrator, type: <i>wmic UserAccount where Name='xxxx' set PasswordExpires=False</i> (replacing xxxx with account name).
search engine	<i>Google</i> call themselves a <i>content provider</i> NOT a <i>search engine</i> - listing mostly sponsored links, including malicious websites. <i>DuckDuckGo</i> (add to Maxthon: https://duckduckgo.com/?q=%u.s) shows many more applicable hits, no tracking & selectable country.
YouTube	Some videos require login to view, bypass (not all supported!) by preceding URL with "NSFW" (e.g. youtube.com/watch?v=i234567 becomes nsfwyoutube.com/watch?v=i234567 or if routed to accounts.google.com/xyz, change to nsfwyoutube.com/xyz).
eMail	Use webmail (e.g. <i>outlook.com</i>) so when you change ISP, you don't lose email address (e.g. yourname@talktalk.net). For SPAM email, NEVER unsubscribe else you've confirmed address is 'live' & you'll get far more & malicious emails! Webmail never needs to be backed up, you can access it from anywhere on world & you can't get infected from malicious attachments!
start menu	User friendly start menu for Windows 8/10: <i>Open-Shell</i> (open-shell.github.io/Open-Shell-Menu) or <i>Start Menu X</i> (ordinarysoft.com) - both have ease of use similar to Windows 7 with additional or enhanced functionality & selectable colours, buttons, themes & layouts.
Win 10 menu setup	Right-click desktop, Personalize, Start, Choose which folders..., turn on/off choices (or just install a better menu (see above)!).
auto play	If <i>AutoPlay</i> is enabled, infected USB flash drives can automatically infect Windows & Windows infections can automatically infect/corrupt USB flash drives when inserted! Disable <i>AutoPlay</i> via <i>Control Panel</i> (use <i>TweakUI</i> in XP).
3G/4G internet PC Power Supply Unit	Never buy a USB modem - get a MiFi router: same running costs, but no software, setup or cables & supports up to 5 WiFi devices. To check if PSU is sufficient to power PC, add up each component's amps & check PSU's lowest +12v has at least minimum required. Graphics cards often need more than 30amps on their own & PSU will go 'bang' if overloaded!
failing (BGA) graphics chip	If notebook/laptop getting no image on screen but back light illuminated, turns on but shuts off immediately, beeps & no display, has distorted video, works with external monitor but not on internal or failed to work after installing graphics driver, then it's most likely failing BGA chip & as repair costs ~£130 & takes 3-4 weeks to get parts, it's only cost effective for high-end computers!
Epson chip	Older Epson printers can have ink chip reset so can print till ink runs out, rather than chip saying empty: ssclq.com , click Epson CSIC, English version, download & install, select printer & close. Right-click icon for new reset & clean options.
Bognor Regis WiFi hotspots	Admiral Casino, Bognor Town, Brewers Fayre, Butlins, Clarks, Costa, Hatters Inn, The Hothampton Arms, Howards Café, Lloyds Bank, London Road Coffee Shop, Macari's, The Martlets, Punch & Judy, The Railway, Santander, Wilkinson's, William Hardwicke.
useful websites	softpedia.com huge library of free & trial software sourceforge.net biggest library of open source software filepuma.com new & old versions of popular programs zamaz.com online file format converter (1200+ types) gametop.com free, high quality arcade & puzzle games wallpaper-gallery.net 1000's of free HD desktop pictures saynoto0870.com lists 'real' landline telephone numbers! giveawayoftheday.com free commercial software for PCs & phones