



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...	Norton ◊◻ (uk.norton.com) Although previously regarded as world's worst(!), now uses BullGuard (existing installations will upgrade to Norton) & Avira, so MASSIVELY better protection: block & remove viruses, malware, spyware, ransomware & phishing. Firewall, parental controls, VPN, payment & webcam protection & password manager. 360 Standard, 1 device, 10GB cloud storage, 1 year=£19.99 360 Gamer, 3 devices, 50GB cloud storage, 1 year=£24.99 360 Deluxe, 5 devices, 50GB cloud storage, 1 year=£34.99 360 Premium, 10 devices, 75GB cloud storage, 1 year=£64.99 Kaspersky ◊◻ (kaspersky.co.uk) Standard: Block & remove viruses, malware, spyware, phishing, tracking, ransomware & fileless threats. Performance optimizer, payment, keylogger, stalkerware & webcam/mic. protection, firewall, ad blocker, private browsing, software updater Plus: + VPN, disc checker, password manager Premium: + ID protection, data leak checker, remote support (see kaspersky.co.uk for prices) Avira Security ◊◻ (FREE) (avira.com) Block & remove viruses, malware & spyware. System privacy, cleanup & optimize, browser protection, password manager, VPN, file shredder, software & device driver updater. Kaspersky Free ◊ (FREE) (kaspersky.co.uk/free-antivirus) Block & remove viruses, malware, spyware & ransomware. Data leak & vulnerability checker. Fast & low resources. Bitdefender Free ◊◻ (FREE) (bitdefender.co.uk) Block & remove viruses, malware, spyware, rootkits & phishing. Behavioural analysis, exploit detection, ID & fraud protection. Comodo Internet Security ◊◻ (FREE) (comodo.com) Cloud based anti-virus, behavioural analysis & publisher white-listing, auto-sandboxing, secure shopping & banking, website filtering & gaming mode firewall. Suitable for advanced users!	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 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 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 £39). Also 'less good'(!): ESET, F-Secure (ISPs often rebrand), IObit, Malwarebytes, Panda, Sophos, Spybot, SuperAntiSpyware, Trend Micro & Webroot. NOTE: If using bad security or unsafe browser, Windows is highly likely to get infected, so keep important files backed up!
see page#7 for setup	More than one active anti-virus or firewall will HEAVILY slow down computer & cause conflicts! run AdwCleaner (see below) before changing security & periodically thereafter	
Windows 7 & 8.1 are both discontinued, so upgrading to 10 (supported until October 2025) or 11 (both possibly still free - see page#5) is HIGHLY recommended. Windows 10/11 need higher spec hardware (minimum: 2GHz dual core with 3MB cache (details on cpu-world.com), 8GB RAM & SSD (HDD is too slow & SSD can make slower CPU tolerable), extensive configuration & a better start menu (see page#10). However, they're safer, have better hardware support (less compatible with older devices/software), 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 as 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 (e.g. TotalAV) that reports non-existent infections: programs that claim to speed up or optimize Windows (e.g. CCleaner), but actually slow it down, fake police messages saying illegal software/activity detected, fake reviews or 'editorials' & always read user comments from more than one website, checking both the good & bad reviews. They're just trying to get bank/card details from you to steal money! Most damaging is ransomware, which encrypts your files & demands £100s to decrypt!
use with active security (above) to (hopefully!) remove existing infections, NOT protect against new infections		
software updates to help prevent security vulnerabilities	Whilst it's obviously important to keep Windows & antivirus up-to-date, unlike Linux (see page#4), Microsoft updates do NOT include 3rd party programs. It's CRITICAL to keep ALL installed software updated (most doesn't auto-update) else attackers could 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 (Mx7) ◊◻ (maxthon.com) Fast, safe & secure browser with built-in pop-up & autoplay blocker, dual web engines for greater compatibility, multiple tabs/startup pages/search engines, print preview, mouse gesture control, multi-language spell checker, RSS sniffer, website speed dial, online bookmarks/notepad/settings, 5GB FREE cloud storage & sharing for Windows/Android/iPhone, auto form fill, split-screen, PDF support, secure password generator/manager, URL aliases, zoom, themes, GPU acceleration, picture-in-picture, night mode, history cleanup, screen capture, incognito mode, undo, download manager, DNS-over-HTTPS, customizable layout, Chromecast support, Chrome compatible plug-ins, world's first Block Chain compatible browser & available in 150+ languages. Opera ◊◻ (opera.com) Fast, safe & secure browser with built-in pop-up & advert blocker, website speed dial, VPN, DNS-over-HTTPS, themes, Chromecast support, Chrome compatible plug-ins & Facebook, Instagram, WhatsApp, TikTok, Twitter & Telegram messengers.	Internet Explorer(IE)/Microsoft Edge ◊◻ (microsoft.co.uk) IE & (old) Edge (both discontinued) were very basic, incompatible, slow & unsafe - Microsoft said they couldn't make IE safe, after 20 years of trying(!) & Edge had many of the same vulnerabilities! NOT required to connect to internet - your LAN, WiFi or modem connection does that! New Edge is better, but unsafe unless setup. Mozilla 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! Google 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: Internet Explorer, Edge, Firefox & Chrome easily & frequently get infected - all are EXTREMELY unsafe!
see page#7 for setup		
most infections are web based, so a correctly setup & safe web browser is CRITICAL		
Recommend: "Link Virus Check" extension		

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office suite <small>see page#7 for setup</small>	LibreOffice ◻◻ (libreoffice.org) Free, easy to use office suite, for Windows, Linux & Apple, 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.
copying files to/from phones or computers	Send Anywhere (send-anywhere.com) (also supports email) Send any files to/from Windows, Linux, macOS, Android or iOS. Lists most recent files first & devices can be anywhere.	Windows File Explorer (microsoft.co.uk) Only supports to/from Android (unless Apple drivers installed) & devices must be physically connected or on same network.
data backup	Personal Backup ◊ (rathlev-home.de) Easy to use backup for files & folders. Supports schedules, compression, encryption, synchronization & real-time monitoring.	Windows Backup ◊ (microsoft.co.uk) Basic backup that includes many extra/worthless files, creating huge backups with very little actual data!
PDF reader & creator	Foxit PDF Reader ◻◻ (foxitsoftware.com) (untick 'extras') Fast, safe, easy to use & supports all PDF formats. CubePDF Utility ◊ (cube-soft.jp) create, merge, split, extract, delete, rotate & re-order 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.
audio/video player	Media Player Classic ◊ (codecguide.com) (untick 'extras') Install K-Lite Mega Codec Pack (see page#7 for install & setup details) to support most audio & video formats in high quality.	Windows Media Player ◊/ Groove Music ◊ (microsoft.co.uk) Supports very little, but what it can play, it plays poorly! Also not good/unsafe: QuickTime, RealPlayer & VLC.
music/video player/sync	MediaMonkey ◊ (mediamonkey.com) Easy to use music/video player, ripper, organizer, converter & sync Windows, Android, Apple, TVs, DLNA media players & cloud.	Apple iTunes ◻◻ (apple.com) VERY slow, not user friendly & expensive to buy music! Be careful with sync as wipes device to copy from PC.
picture viewer / converter	IrfanView ◊ (irfanview.com) Very fast picture viewer/converter - supports most formats.	Windows Picture Viewer (microsoft.co.uk) Slow, very few options & doesn't support many formats.
photo 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, replaced with Paint3D, but both now relegated to Windows app store.
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 & supported 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 ◻◻ (audacityteam.org) 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/BD 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 (e.g. psiphon.ca) or goto unblockit.date	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	Snappy Driver Installer Origin (snappy-driver-installer.org) 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 8+).
hardware status	HWmonitor (cpuid.com) Shows CPU, graphics, motherboard, HDD/SSD & memory temperatures & battery charge, 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.
HDD/SSD health	Crystal Disk Info (crystallmark.info) Shows drive spec, SMART attributes, temperature & health.	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 cache & 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 ◻◻ (ccleaner.com) - removes little & installs PUPs. Worse: System Mechanic ◊ (iolo.com) - 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 in Windows 10/11 unless drive > 120GB.
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 (Vista+) 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). Prettier, similar features, easy to use: WinRAR ◊ (win-rar.com)	Windows Explorer ◊ (microsoft.co.uk) Supports only ZIP & CAB & no 'solid' or 'recovery' options. Worse: WinZip ◊ (winzip.com) - often bundled with spyware!





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USB formatting	Rufus ◊ (rufus.akeo.ie) Supports many USB flash drive format options, including Windows/Linux installs & diagnostics (e.g. HDAT2, page#7)	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	9DataRecovery All In One (9datarecovery.com) Recover files after deleting, formatting or even corruption.	Windows Recycle Bin ◊ (microsoft.co.uk) Deleted files are copied to recycle bin, but once emptied, are lost.
remote assistance	RustDesk ◻ (rustdesk.com) Secure, remote computer control allowing assistance without needing to take computer anywhere. 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.
Windows privacy	O&O ShutUp10** ◊ (oo-software.com) Privacy settings control to prevent Windows collecting your web browsing history & search queries, logins & passwords to web sites & social networks, everything typed on the keyboard, call logs, geo-location coordinates, calendar entries, email contents & data recorded from microphone & webcam!	Windows settings ◊ (microsoft.co.uk) In theory, many privacy & telemetry settings are available from within Windows, but since they're not grouped together & you're unlikely to know what they've called them (or even that they exist in the first place!), it won't be quick or easy to find them & many settings will be absent!
recommended Internet Service Providers (ISP) for fibre broadband	Utility Warehouse (0333-777-3-212, quote B14690) Unlimited downloads, free wireless router, 18 month contract, £30 connection fee, LLU exchanges only, average speeds listed Fibre : 35Mbit=£13.99/month, 63Mbit=£18.99/month FttP : 100Mbit=£21.00/month, 500Mbit=£31.00/month UK's cheapest services: line rental £19.00 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, Shell Oil (was Post Office), BT/EE The UK has some of the world's slowest & least reliable internet service providers & TalkTalk (hacked & entire customer details leaked multiple times), Sky (expensive), Shell Oil (previously Post Office) & BT/EE are officially (OFCOM) the worst, consistently coming bottom in reviews for speed, reliability & customer support & yet, 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!

CornerStone Companion: 300+ programs, 10000+ clipart/fonts/pictures/sounds for £5.00 + cost of 32GB USB3 flash drive (or bring your own, USB3+ ONLY) - takes about 1 hour to copy files, so best to book in advance!

	CornerStone Computer Centre (Est.1997) Bognor Regis / Bersted	Microsoft Registered Partner Director: Michael Corner	07919-376677 support@CornerStone.me.uk www.CornerStone.me.uk
CornerStone Hints & Tips			
Issue	How to ... (NOTE: yellow shaded heading indicates recent change to document)		
remove virus & spyware infections from computer	<p>As infections generally run at start-up, their files are often in use & therefore possibly non-removable, so if you have access to another Windows computer, remove the infected Windows boot drive (i.e. HDD or SSD) & attach as a secondary drive - this will mean, when booting that computer normally, the infected drive's files won't be in use, so all will be scanable & any detected infections removable. You'll need to open the case up & it'll need to have a spare SATA power lead (coming off the PSU) & a SATA data lead - can use the one from the infected computer or we sell them for £2.50 or, if present, temporarily disconnect the DVD/BD drive & use those cables. If the infected drive is a M.2 SSD, the second computer may not have a compatible socket available, so you'd need to obtain a USB external caddy/dock (you could also do this for a SATA drive to save opening the other PC or if the other computer is a notebook or laptop or if there's not a spare SATA connector on the motherboard). You can then run virus, malware & spyware scans using up-to-date & reliable scanners (i.e. <i>Emsisoft Anti-Malware</i> with <i>Norton</i>, <i>Kaspersky</i> or <i>Bitdefender</i> (see page#1)). Use <i>Microsoft's AutoRuns</i> (learn.microsoft.com/en-gb/sysinternals/downloads/autoruns) - download, extract ZIP contents (right click, extract) & then right click <i>autoruns64.exe</i> (or <i>autoruns.exe</i> if using 32bit Windows) & select <i>run as administrator</i>, allow initial scan to complete & then click <i>File, Analyse Offline System...</i> & select the infected drive to scan's <i>System Root</i> (e.g. D:\) & <i>User Profile</i> (e.g. D:\User\Owner) to check it's start-up programs (uses VirusTotal service with 70+ scanners) & untick/delete anything suspicious. If you have only one computer (you may need to do this on another computer if Windows isn't viable), download <i>Emsisoft Emergency Kit</i> (emsisoft.com/en/home/emergency-kit), extract ZIP contents to a DOS bootable USB flash drive (see <i>Rufus</i>, page#3) &/or download <i>Kaspersky Rescue Disk</i> (support.kaspersky.com/krd18/howto/14227) &/or <i>Avira Rescue System</i> (support.avira.com/hc/en-us/articles/360007776058-Creating-and-using-Avira-Rescue-System) & create a bootable USB flash drive (see <i>Rufus</i>, page#3) - most modern computers don't have a DVD/BD drive, but if yours does, you could maybe instead create a bootable DVD/BD (see <i>Ashampoo</i>, page #2). Boot created media (first check/setup <i>BIOS</i> for boot key/order & disable <i>Secure Boot</i> (if still unable to boot media, you might also need to disable <i>UEFI</i> &/or enable <i>CSM/legacy</i>), connect to internet, update virus definitions & run scan(s). Make a note of any infected programs, which will later need to be removed & reinstalled & if Windows itself is infected, backup (can be done to USB flash/HDD/SSD) within this booted environment) any data files (e.g. documents, pictures, music, videos, etc - you can't backup programs) you want to keep first, else they'll later be lost! Delete any infections found & return drive (if it was removed) & in <i>BIOS</i>, re-enable <i>UEFI/Secure Boot</i> (if disabled). Next, or if scanning was done directly from within Windows, turn on computer & for Windows 8+, during boot, wait for the spinning dots, then turn off, wait a few seconds & turn on again, repeat these steps until it says, "<i>Please Wait</i>", select <i>Troubleshooting, Advanced, Startup options</i> & select <i>SAFE MODE WITH NETWORKING</i> (Windows 7 & earlier supported just pressing <i>F8</i> before boot to get to the same options!) - this provides internet access & restricts running programs. Login to an <i>administrator account</i>, download <i>Emsisoft Anti-Malware</i> (emsisoft.com/en/anti-malware-home), install, update, &/or download <i>Kaspersky Virus Removal Tool</i> (kaspersky.com/downloads/free-virus-removal-tool), run full scan(s) & delete all infections detected. After, download & run <i>AdwCleaner</i> (toolslib.net/downloads/viewdownload/1-adwcleaner) & delete anything found. Restart Windows & if everything's working ok, you've successfully removed the (noticeable!) infections (you may need to run additional scanners to clear all infections, but it should now be doable), else you'll need to reinstall Windows, which will also require reinstalling device drivers, any software you previously had & re-setting up internet connection, peripherals & copying back data files you backed up earlier! As Windows got infected, either your internet security isn't good enough, or you have vulnerabilities, most likely via out-of-date software. See pages #1 & #2 for good/bad security, how to remove old security & how to update programs. Remote scans generally take 1-2 hours & local scans about 30-60 minutes (both dependant on computer speed & number of files). 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 £39 (valid product key required (newer computers use a UEFI code stored in BIOS)).</p>		
quickly remove infections WITHOUT(!) scanning	Boot from 'live' (doesn't affect existing Windows installation) Linux disc (<i>see below</i>) & 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 Temp & Temporary Internet Files folders (in <i>Users</i> or <i>Documents and 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! Linux has Microsoft compatible office suites, secure email, firewall, 1000's of games, video/music players, video/picture editors & 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> (see page#2) or <i>Rufus</i> (see page#3) to make bootable DVD/USB. Recommended: <i>Manjaro</i> (manjaro.org): fast, cutting-edge & always up-to-date, or <i>Mint</i> (linuxmint.com): good for beginners. Linux install with updates & extensive software suite=from £39 or £2.50 to make DVD/USB (+ cost of drive or supply your own USB3+ drive) for self install.		
setting up a router (cabled or wireless)	<p>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 a new router, load your web browser (e.g. <i>Maxthon</i>, <i>Opera</i>, <i>Chrome</i>, <i>Firefox</i>, <i>Edge</i>, etc), type router's (IP) address into the address bar (check manual or label, e.g. 192.168.2.1), if prompted, enter router's login username & password (e.g. admin/password), click <i>internet/setup</i> & for most connection types, just enter your internet account username & password & click save. However, depending on router make/model & connection type, you may first need to setup for UK: <i>VPI=0, VCI=38, encapsulation=VcMux, protocol=PPPoA</i> or <i>PPPoE</i>.</p> <p>To secure a wireless router, click <i>wireless/WLAN</i>, select <i>WPA2+</i> with <i>AES</i> encryption (safer & faster than <i>WEP/WPS</i>) & enter a password to prevent others nearby from accessing your internet & even your computer, phone, tablet, WiFi camera, etc, which would slow your browsing, use-up your download allocation (if not unlimited) & is potentially a serious security risk - it's illegal, with fines &/or prison time. Check router's WiFi connections to see a list of current connections & if there's any devices you don't recognize, change your WiFi password straight away (which will mean you'll have to manually reconnect all your WiFi devices) & consider contacting the police (make a note of the device name).</p>		

	CornerStone Computer Centre (Est. 1997) Bognor Regis / Bersted	Microsoft Registered Partner Director: Michael Corner	07919-376677 support@CornerStone.me.uk www.CornerStone.me.uk
CornerStone Hints & Tips			
Issue	How to ... (NOTE: yellow shaded heading indicates recent change to document)		
router password	Routers are often shipped with a default login & WiFi password... to limit attacks, change router's name (SSID) & both passwords as there's software available to show default WiFi password from router's default name. This is clearly a potentially huge security issue, which ISPs are fully aware of, but until enough people complain about it, they'll continue to do it!		
broadband speed issues?	<p>Apart from poor line quality & unreliable Internet Service Providers (i.e. TalkTalk, Sky, Shell Oil (previously Post Office) & BT/EE), there are other, less well known issues that can affect internet speeds: 1) a faulty component in an electrical device (e.g. TV, 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. ADSL instead of ADSL2+) will also limit speeds. 5) (A)DSL 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 - WEP can cause up to 30% performance loss(!) - use either WPA2+ or MAC filtering! 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. BT) 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!</p>		
upgrading Windows 7 or 8.1 to 10 or upgrading 10 to 11 or installing 10 or 11	<p>Before starting, first check hardware (specifically HDD/SSD & RAM, see page#7), as if failing, you'll just be wasting your time! To manually upgrade Windows 7 or 8.1 to 10 (backup data files first), goto: microsoft.com/en-gb/software-download/windows10, download <i>Media Creation Tool</i>, run, select <i>Upgrade this PC now</i> & follow prompts (takes a LONG time & transfers everything compatible, including any infections! Anything deemed not compatible will be removed & a list created in a file on desktop - mostly, these can just be re-installed afterwards as they probably ARE compatible(!), but make sure to download the latest version, just to be sure. Ideally, only upgrade if using Windows 7 (or non-UEFI 8+ without stored licence keys) & product key sticker is missing or unreadable as upgrade won't ask for it. Remember to setup a <i>Microsoft Account</i> login so the digital licence that's created during activation is registered to your email address, else registered to current hardware & if anything later changed, would deactivate! Microsoft recommends, if upgrading, after activating, wipe & perform fresh install to remove any legacy issues as now don't need to enter product key, just email details. To upgrade Windows 10 (at least 10.2004 with 2109 updates installed) to 11, goto: <i>Settings, Update & Security, Check for updates</i>, if offered, follow instructions (will also take a LONG time!). The same website also has Windows 8.1 or 11 installation media by changing <i>10 to 8 or 11</i>.</p> <p>For fresh install (preferred), run <i>Media Creation Tool</i>, select <i>Create installation media</i>: select <i>keyboard layout</i> (e.g. UK), <i>language</i> (e.g. English), <i>64bit</i> (if CPU is 32bit, it isn't good enough!), <i>non-N</i> & after download, write USB flash drive (most modern computers don't have a DVD drive & 11 won't fit anyway - 10:8+GB, 11:16+GB), enable <i>UEFI & Secure Boot</i> (if available) in BIOS, boot USB for clean (erase everything) install. Enter product key when prompted or leave blank if computer came with Windows 8+ & UEFI stored licence keys or you're reinstalling. Be mindful, even if you previously had Windows 10 or 11, that doesn't mean the current version (last ever version of Windows 10 (22H2), will be discontinued October 2025) is still compatible with your hardware.</p> <p>Windows 11 requires 4GB RAM, 64GB drive, DirectX12 compatible graphics, TPM-v2.0 (security feature in BIOS, which needs to be enabled) & at least an Intel 8xxx or AMD Ryzen 2xxx CPU (none of that is checked on a manual installation if UEFI BIOS with stored licence keys!). If your hardware is compatible, Windows 11 is recommended over Windows 10 as it's faster, has better hardware support, is safer & is under active development, so new features will be released each year. To allow TPM-v1.2 & bypass CPU checks during inline upgrade, run <i>REGEDIT</i>, browse to: <i>HKEY_LOCAL_MACHINE\SYSTEM\Setup\MoSetup</i>, right-click (on pane), <i>New, DWORD</i>, "<i>AllowUpgradesWithUnsupportedTPMOrCPU</i>", double click & change value to "<i>1</i>", exit, restart Windows & then run <i>Media Creation Tool</i> for Windows 11 (see below).</p> <p>Microsoft now insist on having a Microsoft email address to register Windows during installation - there are lots of advantages to this, such as synchronization between different devices (including Edge browser), OneDrive online backup &, most importantly, the licence will be registered to the email address NOT the current hardware, so a later reinstall, after changing hardware, will still activate. However, they also track & record a lot of data (there are numerous programs available to prevent this), so to bypass & allow creating a local account, enter email address: <i>no@thankyou.com</i>, with any password, which will say "Oops, something went wrong", or press Shift-F10 to open a command prompt, enter: <i>Oobe\BYPASSNRO</i> & Windows will automatically reboot & upon return to same screen will offer "I don't have Internet", or use <i>Rufus</i> (see page#3) to create USB media (from previously downloaded ISO file) & select bypass options.</p> <p>If install fails (upgrade or fresh install), update BIOS (recheck BIOS settings after as some are likely to have been reset) - get program/file from either motherboard manufacturer's website (if custom-build PC) or computer manufacturer's website (if branded) & either run in Windows (which might require first installing an earlier version of Windows!), copy to DOS bootable USB flash drive (see <i>Rufus</i>, page#3), boot that (requires CSM/Legacy to be enabled in BIOS) & run program or, some motherboards can do this from within BIOS. Which method is applicable should be listed on manufacturer's website. After updating, try again.</p> <p>If Windows is infected or corrupted, you may not be able to upgrade or download <i>Media Creation Tool</i>, if so, you'll need to use a different computer to create media to perform a fresh install. Alternatively, we charge from £39 to install Windows.</p>		

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CornerStone Hints & Tips			
Issue	How to ... (NOTE: yellow shaded heading indicates recent change to document)		
installing Windows	Before installing Windows, make sure only one disc drive is connected (so can't accidentally wipe or install to wrong drive!) & download & copy device drivers (not needed if have new enough driver CD(s) (& you have an optical drive!) & also possible Windows 8+ could auto-detect (although likely to be out-of-date)). Windows 11 has the best hardware support of any version of Windows & it's not uncommon it'll recognize or at least download the latest/current device drivers for most hardware.		
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+, during boot, turn off/on until says, "Please Wait", select Trouble shooting, Advanced, Startup options, Safe Mode), press <i>Windows key + R</i> , enter " <i>MSCONFIG</i> ", check <i>Startup</i> (in 8+, <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. Since 2022, all Windows installations <i>CornerStone</i> have performed have also included <i>SmartFix</i> , an enhanced Windows Trouble shooter (integrated into Windows Trouble shooter menu), which can reset settings, run scans with a choice of multiple anti-malware scanners & can fix boot issues.		
Windows internet & network fixes	If internet settings in Windows become corrupted (e.g. connected to router, but no internet), to fix: <i>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 still not fixed, it's a bigger problem so bring in for further diagnosis.		
internet connection issues	If 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 still 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. cloudflare.com , opendns.com , comodo.com or quad9.net) & to access blocked websites, a Virtual Private Network (VPN) (e.g. psiphon.ca), where (in both cases) your internet is routed through another computer that filters attacks & caches web pages for safer & faster browsing. Changing your router's DNS settings (e.g. for CloudFlare: IPv4: family=1.1.1 & 1.0.0.1, no malware=1.1.1.2 & 1.0.0.2, no malware & no adult sites=1.1.1.3 & 1.0.0.3; IPv6: family=2606:4700:4700::1111 & 2606:4700:4700::1001, no malware= 2606:4700:4700::1112 & 2606:4700:4700::1002, no malware & no adult sites= 2606:4700:4700::1113 & 2606:4700:4700::1003) would mean ALL devices connected to it are protected. Simpler would be to just install CloudFlare's WARP program, which can do all this for you on each device (versions available for Windows, Android, macOS & iOS)! Check correctly setup by going to: <i>1.1.1/help</i> in browser.		
export browser passwords	Some web browsers support exporting stored passwords to a 'Comma Separated Values' (CSV) file, so they could be imported into another browser or backed up. To export Google Chrome (the least safe browser!) passwords stored in online account: passwords.google.com , click <i>cog</i> at top-right, select <i>Export passwords</i> . Be mindful this will be a plain text list of your web passwords, so store securely. Opera: <i>menu</i> , <i>Settings</i> , <i>Advanced</i> , <i>Privacy & security</i> , <i>Autofill</i> , <i>Passwords</i> , <i>Saved Passwords</i> (3 dots), <i>Export passwords</i> Microsoft Edge: <i>menu</i> (3 dots), <i>Settings</i> , <i>Profiles</i> , <i>Passwords</i> , <i>More actions</i> (3 dots), <i>Export passwords</i> Google Chrome: <i>menu</i> (3 dots), <i>Settings</i> , <i>Autofill</i> , <i>Passwords</i> , <i>Saved Passwords</i> (3 dots), <i>Export passwords</i> For other web browsers, check their extension/addon store for a 3rd party plug-in to perform the export.		
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 <i>Repair</i> , <i>Command Prompt</i> , for Vista+: type <i>bootrec /fixmbr</i> , <i>bootrec /fixboot</i> (if error: <i>bootsect /nt60 sys</i> & retry), <i>bootrec /scanos</i> , <i>bootrec /rebuildbcd</i> (for Windows XP: type <i>fixmbr</i> , <i>fixboot</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 forced through via syringe & tube on nozzle is quicker & more effective.		
UK/USA keys	If quotes (") & at (@) are reversed then you have USA keyboard layout - change to UK in <i>Settings</i> , <i>Time & Language</i> , <i>Language</i>		
portable internet	Never buy a 3G, 4G or 5G USB modem (wrongly called 'dongle') - get a MiFi: same running costs, no software, setup or cables & supports 5 (some do more) WiFi devices.		
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> shows many more applicable hits, has no tracking or recording of your data & has selectable country & date ranges. When searching, if you enclose words in quotes ("), that'll show ONLY web pages with that exact phrase (e.g. " <i>Bognor Regis</i> "); prefix words with minus (-) to show web pages that contain the other words, but without that word (e.g. <i>-Bognor, Regis</i>); prefix words with plus (+) to show web pages that contain the other words, with that word too (e.g. <i>+Bognor, Regis</i>); include asterisk (*) as wildcards to represent any words before or after others (e.g. <i>mr * sky</i> to find results with <i>Mr. Blue Sky</i>); be vague with the initial search criteria, to find more results & then be more specific if need be (e.g. <i>Regis</i> then <i>Bognor Regis</i>).		
change email password	For client based (i.e. Microsoft Office Outlook, Mozilla Thunderbird, etc), then nothing can be done locally as NOT supported. For web based (or, if client based, by going to website of service) you MUST know either the old password or know & have access to the telephone number or secondary email address that's ALREADY allocated to the email account. If you know the old password, just login & goto account/profile settings to change. If not, click 'Forgot password' & you'll be asked for the telephone number or secondary email address for them to contact you either via text with a number to enter or email with a link to click... after, as that confirms you're the account holder, you can just enter a new password. In addition, if logging in from a different IP address (location), most web based email would also request 2 factor authentication, so again, without access to the telephone number or secondary email already allocated to the account, there can be no access.		

CornerStone Hints & Tips

Issue	How to ... (NOTE: yellow shaded heading indicates recent change to document)
elevated Command Prompt	Some commands or functions cannot be run within the Windows graphical environment & need instead to be typed into a 'DOS' style text box known as <i>Command Prompt</i> . Many also require administrative access rights (referred to as ' <i>elevated privileges</i> ') to be able to make changes: <i>start menu</i> , right click <i>Command Prompt</i> (it's menu location varies on different versions of Windows, but if there's a search box on menu, just start typing it's name & it'll be in the list), select <i>Run as administrator</i> .
How to enter Norton licence	Entering new licence into Norton is oddly not obvious: open <i>Norton</i> , <i>sign in</i> (if not already), click <i>user icon</i> next to <i>my account</i> , <i>Subscription Status</i> , <i>Enter a Key</i> , type licence (doesn't matter if entering upper or lower case letters), click <i>Next</i> & you're done.
Avira settings	Astoundingly, after installing Avira anti-virus, the anti-virus component isn't included by default(!) - click <i>Security</i> , <i>Protection options</i> , install <i>anti-virus</i> .
Comodo settings	<i>Settings</i> : <i>Sandbox</i> : <i>Enable Auto-Sandbox</i> : tick <i>Ask for untrusted...</i> , <i>Save files with trusted rating...</i> , <i>Network Traffic...</i> : tick <i>Block incoming...</i> , <i>Block outgoing...</i> , <i>Firewall</i> : tick: <i>Create rules for safe apps</i> & all in <i>Advanced</i> , <i>Defence</i> : <i>HIPS</i> : tick: <i>Enable HIPS</i> , <i>Create rules for safe apps</i> , <i>Enable adaptive mode...</i> , <i>Enable enhanced protection</i> , <i>Antivirus</i> : <i>Exclusions</i> : remove <i>recycle</i> .
Windows 10+ ransomware	<i>Settings</i> , <i>Update & Security</i> , <i>Windows Security</i> , <i>Virus & Threat Protection</i> , <i>Ransomware Protection</i> , <i>Manage Ransomware Protection</i> , <i>Controlled Folder Access</i> , enable, <i>Login to OneDrive</i> , enable. Choose folders to monitor & block. NOT available if anti-virus installed!
Maxthon (Mx7) settings	<i>Menu</i> : <i>Settings</i> : <i>General</i> : <i>Search engine</i> : choose (i.e. NOT Google!), <i>Tabs</i> : choose, <i>Start/Exit</i> : choose, <i>Appearance</i> : choose, <i>Gestures & Shortcuts</i> : choose, <i>Privacy & Security</i> : tick <i>Send "Do Not Track"...</i> , <i>Site settings</i> : <i>Cookies and site data</i> : <i>Block third-party cookies</i> , <i>Secure DNS</i> : tick <i>Enable</i> , <i>Select</i> : choose (if DNS errors, then disable as not compatible with ISP (common with: BT, TalkTalk, Sky & Shell Oil)), <i>Smart address bar</i> : choose, <i>Advanced</i> : <i>System</i> : choose, <i>Extensions</i> : <i>Open Chrome Web Store</i> : <i>Extensions</i> : <i>More</i> : add <i>UBlock Origin</i> (& any others required, e.g. Google Translate) & configure as required, <i>Menu</i> : <i>More tools</i> : <i>Set as default</i> , <i>Customize UI</i> : choose, <i>Speed Dial</i> : add/edit entries.
Opera settings	<i>Sidebar setup</i> : choose, <i>Set up your city</i> : choose, <i>Menu</i> : <i>Settings</i> : <i>Privacy protection</i> : <i>Block ads</i> : enable, <i>Manage exceptions</i> : choose, <i>Manage lists</i> : choose, <i>Block trackers</i> : enable, <i>Privacy and security</i> : <i>Cookies</i> : <i>Block third-party</i> : enable, <i>Do Not Track</i> : enable, <i>Display/Receive promotional</i> : disable, <i>Appearance</i> : choose, <i>Search engine</i> : choose (i.e. NOT Google!), <i>Default browser</i> : <i>Make default</i> , <i>On startup</i> : choose, <i>Advanced</i> : <i>VPN</i> : choose, <i>Enhanced address bar</i> : choose, <i>Battery saver</i> : enable if applicable, <i>Start page</i> : <i>Hide search box</i> : enable, <i>Adjust Speed Dial</i> : enable, <i>User interface</i> : <i>Show tab previews</i> : enable, <i>Downloads</i> : <i>Ask</i> : enable, <i>System</i> : <i>DNS-over-HTTPS</i> : choose (if DNS errors, then disable as not compatible with ISP (common with: BT, TalkTalk, Sky & Post Office)), <i>Shortcuts</i> : choose.
bookmarks & passwords	In case of system crash or HDD/SSD 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 Mega Codec Pack installation & Media Player Classic setup	INSTALL : <i>Advanced</i> , <i>Preferred audio player</i> : choose, <i>Amount of components</i> : <i>Everything</i> , <i>Select Components</i> : <i>Lots of stuff</i> , <i>Additional Tasks</i> : choose; <i>MPC-HC configuration</i> : choose; <i>Hardware Acceleration</i> : select <i>D3D11VA</i> (if available, else <i>native</i>) & tick all; <i>Preferred language</i> : choose; <i>File association</i> : choose; <i>File associations for MPC-HC</i> : choose; <i>Audio configuration</i> : choose; <i>Thumbnails</i> : choose; decline offers (if shown); Install . SETUP : <i>View</i> : <i>On Top</i> , <i>While Playing Video</i> , <i>View</i> : <i>Options</i> : <i>Player</i> : <i>Other</i> : tick <i>Trayicon</i> , <i>Show OSD</i> , <i>Last window</i> , <i>Snap</i> , <i>Process priority</i> ; <i>History</i> : tick all; <i>Formats</i> : <i>Run as administrator</i> : click <i>Associate with all formats</i> , OK; <i>Logo</i> : choose; <i>Playback</i> : <i>Capture</i> : select country.
LibreOffice settings	Click <i>Tools</i> , <i>Options</i> , <i>Load/Save</i> , <i>General</i> , set <i>Default File Format</i> types to <i>Microsoft 1997-2003</i> & tick <i>Always create a backup copy</i> . For awkward, Microsoft-like ribbon, instead of easy-to-use menu, Click <i>View</i> , <i>User Interface</i> then select preferred layout.
Hard Disc (HDD)/Solid State (SSD) drive problems? (set UEFI BIOS to CSM/Legacy. NOTE: not supported by all computers!)	ALL disc drives (HDD or SSD) 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 <i>ISO</i> or <i>EXE</i> & use <i>Ashampoo</i> (see page#2) to write <i>ISO</i> contents to CDR or <i>Rufus</i> (see page#3) to create DOS bootable USB flash drive & copy <i>EXE</i> file. Boot (may need to change <i>SATA/AHCI</i> to <i>IDE/ATA</i> in BIOS (press <i>F2/F10/Del</i> /etc before boot)) CD & select drive type or USB & type file name. Select drive to test, <i>SMART Menu</i> , <i>Read Log Menu</i> & check for error details: <i>READ</i> or <i>WRITE</i> errors mean drive is no longer reliable. <i>HDAT2</i> can perform <i>SMART short & extended</i> tests (<i>SMART Menu</i> , <i>Routine Menu</i>) to check if <i>SMART</i> 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. Defragmenting drives 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</i> , free USB, save & unpack ZIP file, run included program to create bootable USB flash drive. Boot it & any errors indicate faults or incompatibility. Just because memory is detected, doesn't mean it's ok! In Windows, <i>OCCT</i> (ocbase.com) can test/stress CPU, GPU, RAM & VRAM to confirm stability & detect issues.




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CornerStone Hints & Tips

Issue	How to ... (NOTE: yellow shaded heading indicates recent change to document)
fix drive reported as read-only	<p>If drive (e.g. HDD, SSD, SD, flash, etc) reports <i>read only</i>, it's possible it's in <i>write-protect</i> mode or it's corrupted: Press Win+R, enter CMD, enter DISKPART, enter LIST DISK to show disks, enter SELECT DISK # (replace "#" with required drive), enter ATTRIBUTES DISK CLEAR READONLY (you can also enable write protection with ATTRIBUTES DISK SET READONLY). This can also be done by editing the registry (always create a backup or system restore point first & be careful when editing): Press Win+R, enter REGEDIT, browse to: HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\StorageDevicePolicies (if StorageDevicePolicies isn't present, right click Control, select New, Key, enter StorageDevicePolicies then right click that, select New, DWORD, enter WriteProtect), double click WriteProtect, change 1 to 0 (0=disable, 1=enable), close REGEDIT, restart computer. This could also be a corrupted file system:</p> <p>On menu, type CMD in search box, right click Command Prompt, click Run as administrator, enter CHKDSK x: /F /R /X (change x: to required drive letter), allow to check & fix errors if found, enter EXIT, see if can now write/change.</p> <p>This could also be a permissions issue:</p> <p>Click File Explorer (or open My Computer/This PC), right-click drive reporting read-only, click Properties, click Security tab, Click Edit, select Group or user name (e.g. SYSTEM), tick Read & Write in Allow column. click OK/Apply, close & restart computer.</p> <p>Lastly, could be a failing drive - to test, see page#7.</p>
portable computer use, cleaning & battery	<p>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(s) & heatsink(s)) 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 £100 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' once every few months 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 £20-£30, let it die & just replace it!</p>
data backup	<p>If you have important files (e.g. documents, pictures, etc) then make sure they're kept backed up, ideally, EVERY time they change! ALL disc drives fail or infections can corrupt files! Use external drive, USB flash or on-line storage. If you can, keep multiple backups on different devices, in case of drive failure or 'ransomware' encryption! Online services (e.g. Microsoft's OneDrive) can automatically upload files after a change. Although as a 'one-off', you can backup files/folders with <i>File Explorer</i> & just copy from source & paste to destination, upon next backup, most of those files won't have changed & so you'd get 'file exists' prompts asking whether to overwrite or not - the more files, the more prompts & it's just wasting time (& wearing drive out!) to copy something that hasn't changed - better to use a backup program (see page#2) & select 'differential', so only changed files are backed up, which is quicker.</p>
downloading & installing	<p>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.</p>
Windows 7 & 8.1 updates	<p>Both Windows 7 & 8.1 are now fully discontinued with no further support or updates, paid or otherwise. However, whilst you can NOT be safe or secure while online, as any vulnerabilities will never be fixed, it's ok to use them offline! If software requires (possibly only specific) Windows updates to be present to run & if you're willing to risk potential attacks while installing them (ideally, download via another computer, running supported Windows (10/11) & good anti-virus (see page#1) or use Linux), as updates can take a LONG time, these security rollups & Service Pack #2 will greatly reduce the time: catalog.update.microsoft.com, download & install: KB's: 3020369, 3125574 (SP2), 3172605, 3179573, 4019990, 4463376, 4474419, 4490628, 4534310, 4539602. Disable <i>Windows updates</i> (<i>Control Panel, Windows Update, Change settings, Never check for updates</i>), disconnect internet & restart Windows BEFORE installing & then re-enable after. There will be other updates available, but as most is now present, it'll take a LOT less time.</p> <p>For Windows 8.1, disable <i>Windows updates</i> (as per Windows 7, above), install: KB's: 2883200, 2894029, 2894179, 2999226, 3021910, 3172614, 3179574, 3185279, 4463376 & 5022352. After, set <i>Windows updates</i> to <i>Check for updates but let me choose whether to download and install them, Check for updates</i>, look for KB2919355 & untick it (if this is installed, it'll corrupt Windows, preventing booting!), then set to <i>Install updates automatically</i>.</p> <p>After installing the last of the updates, once again disable Windows updates (as per above) as, even if you're not online, Windows still tries to check for updates, which clearly it can't do, but this does slow computer whilst it's checking!</p>
prevent Windows 10 or 11 upgrades	<p>Settings, Network & Internet, select connection type (Ethernet or Wi-Fi), select connection, Metered connection, 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 free disc space will need another computer to create USB media for complete wipe & reinstall, ideally, every time a new version is released (Windows 10 was discontinued in October 2022 so upgrade to at least 10.22H2 or, preferably, Windows 11).</p>
prevent Windows 10+ driver updates	<p>run REGEDIT, browse to: HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows, right-click (on pane), New, Key, "WindowsUpdate", right-click, New, DWORD (32-bit), "ExcludeWUDriversInQualityUpdate", double click: 0=include, 1=exclude, exit, restart.</p>
Windows 10+ slow to boot	<p>If <i>Microsoft Compatibility Telemetry</i> has high CPU usage at boot, to fix: <i>Windows Administrative Tools, Task Scheduler, Task Scheduler Library, Microsoft, Windows, Application Experience, Microsoft Compatibility Appraiser</i>, right click, Disable, restart.</p>
hibernate	<p>Windows creates a <i>hibernate</i> file at least equal in size to the amount of memory (RAM) in computer, so when used as shutdown option, it'll save a copy of RAM contents to this file & then shutdown. Upon restarting, Windows will just load this file into RAM, to allow you to carry on where you left off. However, if only leaving the computer for a short while, it's quicker to use <i>sleep</i>, which also doesn't use any disc space. Additionally, programs allocate resources (RAM & disc space) upon loading & 'should' release them upon exit, but often don't, so if using hibernate, resources can quickly 'run out' & Windows becomes either slow or unusable! To disable hibernate, from elevated <i>Command Prompt</i>, type: powercfg -h off, then del /f %systemdrive%\hiberfil.sys to remove it.</p>
Windows XP Support	<p>Microsoft officially ended Windows XP support on 8 April 2014... however, it's still fully supported, just disabled: run REGEDIT, browse to: HKEY_LOCAL_MACHINE\SYSTEM\WPA, right-click (on pane), New, Key, "PosReady", right-click, New, DWORD, "Installed", double click & change value to "1", exit, restart Windows & check for updates. Alternatively, goto softpedia.com, search "Windows XP SP4", download & install 10+ years of updates quickly & in one go & includes additional Windows features!</p>

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CornerStone Hints & Tips			
Issue	How to ... (NOTE: yellow shaded heading indicates recent change to document)		
Microsoft Office online	Microsoft Office (you'll need an account & sign-in) have free online versions (you'll need a fast computer with fast internet): Microsoft 365 Admin Centre - admin.microsoft.com , Outlook - outlook.office.com , Microsoft Teams - teams.microsoft.com Word Online - microsoft365.com/launch/word , Excel Online - microsoft365.com/launch/excel		
Process with high CPU	If <i>Task Manager</i> shows process with constant high CPU: <i>Event Viewer</i> , <i>View</i> menu: tick <i>Show Analytic and Debug Logs</i> , click <i>Applications and Service Logs</i> , <i>Microsoft</i> , <i>Windows</i> , <i>WMI-Activity</i> , <i>Operational</i> : locate most recent process with error & note <i>ClientProcessID</i> . <i>Task Manager</i> : <i>Services</i> : locate matching <i>PID</i> , disable (or uninstall if not needed) & restart Windows to see if fixed. If not, test service is using too many resources: <i>Services</i> , select <i>Windows Management Instrumentation</i> , click <i>Restart</i> & restart Windows to see if fixed. If not: hold <i>shift</i> key BEFORE clicking Windows <i>Restart</i> , wait for <i>trouble shooter</i> to load, click <i>Advanced</i> , <i>Startup options</i> , <i>Safe Mode</i> , from elevated <i>Command Prompt</i> , enter " <i>msdt.exe -id MaintenanceDiagnostic</i> ", if issues detected, allow to fix, enter " <i>msdt.exe /id PerformanceDiagnostic</i> ", if issues detected, allow to fix. Restart Windows to see if fixed. If not, to restart associated services: from elevated <i>Command Prompt</i> , enter: <i>net stop IPHLPSVC</i> , <i>net stop WSCSVC</i> , <i>net stop WINMGMT</i> , <i>net start WINMGMT</i> , <i>net start WSCSVC</i> , <i>net start IPHLPSVC</i> . Restart Windows to see if fixed. If still high CPU, bring in for further diagnosis.		
Windows update KB5034441 January 2024 error Ox80070643	This update fixes a vulnerability in <i>BitLocker</i> , but <i>Windows Recovery Environment</i> partition needs to have 250MB free space to apply, which it almost certainly won't have, hence update not installing (the error is a generic message & is actually a bug as it should have said insufficient space!). Microsoft released these instructions to resize partitions, but if WinRE partition is at end of disc, just use MiniTool Partition Wizard (see page#3) to shrink Windows partition, move WinRE back & resize, else: 1. open <i>elevated Command Prompt</i> (see page#7) 2. to check WinRE status, type: <i>reagentc /info</i> If WinRE installed, there should be a "Windows RE location" with path to WinRE directory, for example: "Windows RE location: [file:///3f/GLOBALROOT/device/harddisk0/partition4/Recovery/WindowsRE]\\?\\GLOBALROOT\\device\\harddisk0\\partition4\\Recovery\\WindowsRE." (number after "harddisk" & "partition" is index of disc & partition WinRE is located on) 3. to disable WinRE, type: <i>reagentc /disable</i> 4. shrink OS partition & prepare disc for new recovery partition: to shrink OS, type: <i>diskpart</i> type: <i>list disk</i> (take note whether there's an asterisk (*) under "Gtp" column for OS disc & if not, disc is <i>MBR</i>) to select OS disc, type: <i>sel disk <OS disc index></i> (this should be same disc index as WinRE) to check partition under OS disc & find OS partition, type: <i>list part</i> to select OS partition, type: <i>sel part <OS partition index></i> type: <i>shrink desired=250 minimum=250</i> (if WinRE partition was originally at the start of disc, change 250 to 1000) to select WinRE partition, type: <i>sel part <WinRE partition index></i> to delete WinRE partition, type: <i>delete partition override</i> 5. to create new recovery partition, if GPT, type: <i>create partition primary id=de94bba4-06d1-4d40-a16a-bfd50179d6ac</i> then type: <i>gpt attributes=Ox8000000000000000</i> , else if disc is MBR, type: <i>create partition primary id=27</i> 6. to format partition, type: <i>format quick fs=ntfs label="Windows RE tools"</i> 7. to confirm WinRE partition created, type: <i>list vol</i> (WinRE will be at end of disc. If previously at start, there'll now be an unallocated & therefore wasted/lost partition of around 500MB) 8. to exit diskpart, type: <i>exit</i> 9. to re-enable WinRE, type: <i>reagentc /enable</i> 10. to confirm where WinRE is installed, type: <i>reagentc /info</i> 11. If error "Windows RE image was not found" during above, then WinRE is missing, but can be added: download Windows 10/11 (as appropriate) ISO file (see page#5) open <i>elevated Command Prompt</i> (see page#7) to disable WinRE, type: <i>reagentc /disable</i> to create a new folder ready to mount Windows image, type: <i>md c:\\WinMount</i> to mount image, type: <i>dism /mount-wim /wimfile:E:\\Sources\\install.wim /index:1 /mountdir:C:\\WinMount /readonly</i> (replacing E: with the next available drive letter (check what's already used in <i>File Explorer</i>)) to copy recovery, type: <i>xcopy C:\\WinMount\\Windows\\System32\\Recovery*.* C:\\Windows\\System32\\Recovery /h</i> to set recovery image path, type: <i>reagentc /setreimage /path C:\\Windows\\System32\\Recovery /target C:\\Windows</i> to re-enable WinRE, type: <i>reagentc /enable</i> to confirm where WinRE is installed, type: <i>reagentc /info</i> If WinRE partition is at start of disc (which is usually is for Windows 10), then, as an alternative, create 'Live Linux' media (see page#4), disable WinRE (see above), boot into Linux & run <i>GParted</i> to shrink OS partition, move WinRE to end & resize, boot back into Windows & re-enable WinRE (see above). Be mindful, the more used disc space, the longer the operation will take, but at least there now won't be any lost space! ALWAYS create a backup before making changes to partitions!		
corrupted Windows app	If a Windows 8+ app (installed via Microsoft Store (some apps come pre-installed with Windows), as opposed to a (e.g. ".exe") program), isn't working correctly, you can either <i>repair</i> or <i>reset</i> it via: <i>Settings</i> , <i>Apps</i> , <i>Apps & features</i> , select app, <i>menu</i> (three-dots), <i>Advanced options</i> , select either <i>Repair</i> or <i>Reset</i> . The Windows 11 Photos app locked settings issue is fixed with <i>Reset</i> .		

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CornerStone Hints & Tips			
Issue	How to ... (NOTE: yellow shaded heading indicates recent change to document)		
Windows sudden shutdown, restart or BSOD	If Windows/programs crashing or computer restarting for no obvious reason: 1) Check hardware: CPU, GFX, RAM, VRAM, HDD/SSD (see page#7), overheating or over-clocked, enough amps on PSU +12v rail, correct power connectors in securely, no blown capacitors. 2) Check <i>Event Viewer</i> for possible error details (in Windows Logs) 3) Hardware incompatibility: remove any recent added device(s)/component(s). 4) Software incompatibility: uninstall any recently added software. 5) Update ALL device drivers (either from manufacturer's websites or see page#2) . 6) Corrupted files: from elevated <i>Command Prompt</i> , type: <code>CHKDSK {drive letter (e.g. C:)} /F</code> & repeat for any other drives/partitions (e.g. D:). 7) Corrupted system files: from elevated <i>Command Prompt</i> , type: <code>SFC /scannow</code> . 8) Update Windows - repeat until no more updates. 9) Update ALL installed software (see page#1). 10) Update motherboard BIOS & HDD/SSD firmware. 11) Disc drive device driver: change SATA driver in <i>Device Manager</i> to <i>Standard SATA AHCI Controller</i> (right click device, <i>Properties</i> , <i>Driver</i> , <i>Update Driver</i> , <i>Browse my computer for driver software</i> , <i>Let me pick from a list of device drivers on my computer</i> , select, <i>Next</i> , <i>OK</i>). 12) <i>Control Panel</i> , <i>Power Options</i> , <i>Choose what the power button does</i> , <i>Change settings that are currently unavailable</i> , <i>Shutdown</i> =untick <i>Turn on fast startup (recommended)</i> . 13) <i>Control Panel</i> , <i>Power Options</i> , <i>Change plan settings</i> , <i>Change advanced power settings</i> , <i>Hard disk</i> , <i>Turn off hard disk after</i> =0/Never, <i>Sleep</i> , <i>Sleep after</i> =0/Never. 14) <i>Advanced settings</i> , <i>System Properties</i> , <i>Advanced</i> , <i>Startup and Recovery</i> , untick <i>Automatically</i> . If still getting issues, it's something more serious, so bring to us for further diagnosis.		
Blinitializelibrary Oxc00000bb error	If Windows not booting, with this error: 1. test HDD/SSD & memory (RAM/VRAM) (see page#7); 2. Disable <i>Secure boot</i> in BIOS... this is a security feature to help prevent malware, but can cause issues; 3. Fix boot sequence... see <i>Master Boot Record virus?</i> on page#6; 4: Tweak Memory Management key... see <i>Windows loading problems?</i> on page#6 to boot into <i>Safe Mode</i> , run <i>REGEDIT</i> , browse to <code>HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Session Manager\Memory Management</code> , double click <i>ClearPageFileAtShutdown</i> , set to <i>1</i> , exit & restart Windows & if booting ok, repeat to change back to <i>0</i> ; 5: Enable <i>Above 4G Decoding</i> in BIOS... this is common if 'bitcoin mining' or if 2 graphics cards are present; 6. Windows refresh... this is only possible if you can sometimes/eventually boot ok, with Windows installation media, run <i>setup.exe</i> & perform <i>Upgrade install</i> , which keeps programs, settings & data; 7. Windows reinstall... this will lose EVERYTHING, so make sure you have an up-to-date data backup (programs can NOT be copied) first (you could use a Live Linux disc (see <i>Linux - FREE Windows / macOS alternative</i> on page#4) to boot up to copy data).		
corrupted Windows Registry causing BSOD	If Windows not booting with BSOD, "BAD_SYSTEM_CONFIG_INFO", this implies corrupted Registry (specifically, the SYSTEM Hive, although in practice that's unlikely, so generally means missing or wrong Registry entries) & it might be addressable within <i>Troubleshoot (Advanced options, Startup settings, Safe Mode</i> (do nothing & just restart) & if that doesn't work, then <i>System restore</i>). However, if you can't even load <i>Troubleshoot</i> , boot Windows install media (you'll need to make (see page#6) on another, working computer, if you don't have) & select <i>Repair</i> , <i>Command Prompt</i> , then enter: <code>C:, CD \Windows\System32\config, dir .\RegBack</code> (check for the following files WITHOUT file extensions else this method can't be done), <code>ren DEFAULT *.old, ren SAM *.old, ren SECURITY *.old, ren SOFTWARE *.old, ren SYSTEM *.old</code> , <code>CD RegBack, copy DEFAULT ..., copy SAM ..., copy SECURITY ..., copy SOFTWARE ..., copy SYSTEM ...</code> , exit, restart computer & see if booting ok. If not, could be hardware issues (see above), corrupted boot tracks (see page#6) or the Registry isn't viable & you'll need to do a fresh Windows installation, which will lose all programs (& potentially all data files if you format or delete partitions)!		
Windows restore points & Registry backups	Windows does NOT automatically create restore points before programs are installed, but if you create them yourself, <u>BEFORE</u> making any changes, you'll have known, working settings to restore to. See page#2 for automatic scheduling. To enable registry backup at startup: run <i>REGEDIT</i> , browse to: <code>HKLM\System\CurrentControlSet\Control\Session Manager\Configuration Manager</code> , right-click (on pane), <i>New</i> , <i>DWORD</i> , enter " <i>EnablePeriodicBackup</i> ", double click: <i>enable</i> , <i>disable</i> , exit, restart.		
Windows 10/11 passwords	Windows 10/11 passwords now expire (since 10.1909), forcing users to change them regularly. To disable expiry: from elevated <i>Command Prompt</i> , type: <code>wmic UserAccount where Name='xxxx' set PasswordExpires=False</code> (replacing <i>xxxx</i> with account name).		
System tray	To show desired shortcuts in Windows 11 System Tray (most hidden by default): click carat (^) & drag each needed to taskbar.		
taskbar notifications	To enable Windows 11 taskbar icon notification badges: <i>Settings</i> , <i>Personalization</i> , <i>Taskbar</i> , <i>Taskbar Behaviours</i> , <i>Show badges (unread messages counter) on taskbar apps</i> .		
Windows version	To identify the installed Windows version, licence type & activation status, from <i>Command Prompt</i> , type: <code>slmgr.vbs/dli</code>		
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 the world & you can't get infected from malicious attachments!		
email accounts	Create multiple email accounts, that you use for specific correspondence, to drastically reduce spam & increase safety... Don't share the email addresses with anyone outside the group & don't use for any other purposes, so if you receive unrelated emails, you know they're spam or scams. Also, if an attacker manages to get details of one email account, they don't immediately get access to everything else! You can create as many email addresses as you like/want/need for free & they don't even have to be with the same provider (e.g. Yahoo, Outlook, Gmail, etc). As a good start (have more or less as needed): personal (family & friends); shopping & promotions; banking or financial (mortgage, loans, etc); work or government; dating.		
start menu	User friendly start menu for Windows 8+: <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.		
configure Windows 11	Windows 11's default layout & presentation is not remotely user-friendly or easy to use & has only minimal configuration options, meaning you are very limited in what you can now setup properly. To overcome this, install <i>Explorer Patcher</i> (github.com/valinet/ExplorerPatcher) which adds back in Windows 10-like desktop & taskbar setup options.		
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 (use TweakUI in XP)</i> .		
PC Power Supply Unit	To check if PSU is sufficient to power PC, add up each component's amps & check PSU's lowest +12v value has at least minimum required. Graphics cards often need more than 30amps on their own & PSU will go 'bang' if overloaded!		

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CornerStone Hints & Tips			
Issue	How to ... (NOTE: yellow shaded heading indicates recent change to document)		
failing (BGA) graphics chip	If notebook/laptop/netbook 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, but as repair costs ~£130 & takes 3-4 weeks to get parts, it's only cost effective for high-end computers! Since Covid, there's been massive stock shortages & a huge rise in delivery cost, so expect price to be higher & time to be longer, at least until 2023!		
Epson chip	Older Epson printers can have ink chip reset so can print till ink runs out, rather than chip saying empty: ssclg.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, BT/EE, Butlins, Costa, Domino's, Hatters Inn, Hothampton Arms, Halifax, Howards Café, Ladbrookes, Lidl, Lloyds Bank, London Road Coffee Shop, Central Café, Matalan, Mezza, Morrisons, O2, Picturedrome, Punch & Judy, The Railway, Santander, Vodafone, William Hardwicke.		
useful websites	softpedia.com sourceforge.net filehorse.com zamzar.com	huge library of free & trial software biggest library of open source software new & old versions of popular programs online file format converter (1200+ types)	gametop.com pexels.com saynoto0870.com giveawayoftheday.com free, high quality arcade & puzzle games 1000's of free HD desktop pictures lists 'real' landline telephone numbers! free commercial software for PCs & phones