



managed **computer networks**

Caring for Your Technology



**Caring For Your PC;
Top Tips**

Improving technology increases the demands on people to achieve more in less time. The humble PC enhances our productivity so has grown into an essential business tool.

It doesn't matter what spec your PC is; if it isn't maintained right it'll soon start causing you problems and slowing you down. You either need to manage your computer yourself or employ a service like MCN to do this work for you.

You don't need to be an expert to keep your PC in relatively good nick. You just need to perform a little basic PC maintenance and, more importantly, be observant.

Here's what needs doing to keep your PC performing:



Check Disk Space

Uninstall Unused Programs

Keep Your Drive Clean

With the amount of information available for download on the internet, it's easy to rapidly fill up your valuable hard drive space, turning your state of the art PC into a sluggish, unresponsive monster.

Fortunately, keeping free space on your hard drive is simple and effective when performed on a regular basis. Follow this disciplined process and you'll keep your PC running like a well-oiled machine.

You can discover how much hard drive space is available on your computer by accessing the DriveSpace program in your System Tools. A pie graph will show you the amount of used and unused space for each of your drives. Aim to keep at least 400MB of space free and check this often to keep an idea of how much space you are using.

A new program will regularly come along that you want to investigate and evaluate. But after a day of trial you stop using it. These programs take up valuable space so should be removed. You might be tempted to delete these programs from your drive, but doing so will cause problems. You must use the uninstall function of Windows for the program to be removed safely and completely.

The same applies to trial software that often comes pre-installed on your PC. This could be games, security suites, even applications like QuickBooks or Microsoft Office. They remain on the system, wasting space and bloating the Windows Registry. Over time, this can lead to performance problems, causing Windows to become sluggish and unreliable. Again, use the uninstall function of Windows for the program to be removed safely and completely.

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Clean Out Temporary Files

In the event you do install new software **PAY ATTENTION** to the actual items you are installing. Many applications will attempt to install partner software on your system. In almost all cases you'll be asked whether or not you want this extra software installed although usually it's a pre-checked box you need to uncheck. The trick to keeping unwanted applications off your PC is to actually pay attention during the install and actually read every screen that pops up rather than mindlessly clicking on "next" until the process finishes.

It's good practice to check installed programs regularly. If you find something installed without your authorisation, uninstall it immediately.

When your computer is not shut down properly, it will pass information from memory into fragmented files. Also, while you are running programs, your computer will write information that it does not immediately need into temporary files. Installation files will also expand themselves into the temporary folder and will not always clean up after themselves. You can delete these temporary files safely by using the Disk Cleanup option in your System Tools.

Empty Your Internet Cache

As you surf the internet your computer stores web pages and images into a temporary internet cache so that it can quickly recall and access information when you move back and forth between pages. This backup information can quickly add up and consume valuable hard drive space.

Whether you use IE, Firefox, or one of the many other browsers available, emptying out your cache is quick and easy. Simply follow the instructions in the Help files located within your web browser. It's a good idea to set a maximum file size for your cache folder, so that it's not allowed to run rampant.

Empty Your Email

It's easy to browse through your email and leave old messages there, promising yourself you'll sort them out later. One or two messages don't take up much space, but hundreds certainly do; especially those with attachments. Take the time to sort through these old emails and delete what's not important and archive old email to your server or a DVD.

Create folders and organise what is left. Make it a habit that when new emails come in, they are either filed immediately or thrown away. Set your email program to empty your deleted items folder each time you close your mail program.

Empty Your Recycle Bin

Once you've emptied your drive of clutter; you also need to empty your recycle bin to permanently remove what has been placed there in the process.

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Scandisk and Defrag

When Windows installs programs, it will put the files it needs anywhere it can find free space, and not necessarily directly after the last program installed. As a result, your hard drive has patches of empty space on it that are effectively useless; not big enough to fit a full program. A drive space error may occur if you attempt to install something new, even if you have enough memory for that new application.

Scandisk your drive to check for lost file fragments and fix any errors it finds, then Defrag to pack all of the program files together at the beginning of your drive. This will clear out those empty patches and move all of the free space you've just created to the end of your drive.

Now that you've got it clean, keep it that way. Perform this quick maintenance routine each week. Before you close down your PC on a Friday afternoon is perfect. When you return on Monday, you'll have a computer that's clutter-free and as responsive as it should be.

Manage Your Downloads

Direct all downloads to the same folder. This will help you easily find them and delete them when necessary, or move them to zip disks for storage.

Keep track of the programs that you install. For trial versions, note the date that they will expire on a calendar. This will remind you to uninstall the programs you no longer use. In addition, if you run into problems, keeping track of new downloaded and installed programs and the corresponding date they were installed will help you identify the cause of problems.



Reduce Startup Tasks

If your PC takes an age to startup (boot), you can investigate and make easy improvements to reduce time spent waiting. Most often a slow startup is the result of many programs starting up at the same time. If you reduce the number of programs at startup, you can improve the boot speed. All programs in your Windows System Tray (in the lower left of your screen) are running on your computer. Close them if you don't need them or run them and configure them not to load when you boot up. To do this you can either change the settings of that program, or use the system configuration utility.



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Sometimes one of the programs in startup may malfunction and grind your PC to a halt. To identify if a program is giving trouble, go to Task Manager when the system boot is almost completed (Ctrl + Alt + Del) and identify the process that is taking the most of your CPUs power. If you locate a troublesome piece of software you can try repairing or reinstalling that program.

Registry errors are another source of slow system startup. The registry is the place which has the configuration settings for your PC hardware and software.

Shut Off Properly

Cutting the power can also result in lost data or Windows files so it's safest to never, turn your computer off with the power switch without letting Windows shut down first.

The only exception to this rule is when your computer locks up and your hard drive isn't running (hard drive light not blinking). In this situation, you can turn the power off without harmful effects to the drive.

Whenever possible, recover from crashes by pressing the Ctrl + Alt + Delete keys at the same time. Press them again to reboot your computer.

We have already learnt that sudden loss of power (switching off) can also result in lost data or Windows files. Not surprisingly, the same applies to power outages.



Power Back Up

Purchasing an UPS (uninterruptable power supply) for your PC will keep it from crashing during power outages, and also protects against low and high voltage occurrences.

An UPS is far superior to a simple surge protector and will save your computer from almost any type of power disaster.

The time to backup is whenever you create something you can't afford to lose. In business that means everyday. Don't wait until tomorrow to start a backup process; it could be too late!



Drive Back Up

Fire, flooding, theft and earthquakes are a real world occurrences. They have a devastating effect but it's possible with the right backup system to get your business back up and running fast to minimise the financial implications.

You should backup, any data you cannot afford to lose to at least two separate physical drives. You can save backup data to external hard drives, DVDs, or online to an external data centre.

It's a good idea to keep two backups. One onsite; created daily and one offsite; either at a data centre or on a backup disk regularly swapped or cycled. These backups will protect your business in case of a disaster affecting your business.



Never Pull a Powered Device

Never unplug peripherals from the computer when it is powered up. Unplugging with the power on can "short out" the connector socket or the motherboard. The only exception to this rule is if you know a peripheral is "hot pluggable". If you don't know what "hot pluggable" means or are unsure about a particular device, it's best to play it safe.



Run Virus Protection

Use a virus checker regularly. Everyone should use a virus checker. The best type of protection is continuous monitoring from a dedicated anti-virus program like MCN Protect.

You should also make sure your antivirus software is regularly updated.



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Most antivirus applications load an icon in the Windows tray, which lets you verify its status at a glance. Always verify that the application is running after starting Windows.

In addition, your antivirus should be configured to perform definition updates everyday and complete system scans should take place at least once a week.



Create and Keep Restore Disks



Keep track of the software disks you receive with your computer and new peripherals. These disks contain valuable software drivers and programs for Windows and are needed if Windows needs reinstalling. Keep these disks and your Windows software disks in a safe, dry, place; you never know when you will need them.

On most new PC's the restore disks are not included. This is to cut costs for the manufacturer but it means more time invested by you. You need to follow the commands as you power up to create your own restore disks. Don't continue to ignore this!

Dust Off to Keep Cool

The fan inside the system keeps the computer cool and its worst enemy is dust and hair. To prevent your computer from overheating you need to keep the inside clean. A monthly brush inside your PC or a spray with a can of compressed air will keep your PC running smoothly and more efficiently. Pet hair and body hair is attracted to a PC like a magnet so if Chewbacca is often spotted close by, you might want to clean the fans and coolers more regularly.





Patch Up

Since Windows 98, Microsoft has provided access to Windows Update. Windows Update scans your system and updates it with the latest security patches and service packs. These are broken down into Critical and Recommended updates.

In addition to Windows, Microsoft Update also patches a variety of Microsoft applications, including Office and Windows Defender. You can schedule these updates to run automatically. This is a good idea provided you can deal with your PC shutting down from time to time or having a periodically slow startup while updates are loaded. Configure Windows Update to suit your needs. Click on the Start button, All Programs and scroll through the list to find it.

Non Microsoft applications should also be regularly scanned for patch updates. Programs that you use everyday like Adobe Acrobat Reader, QuickTime, Real player, Skype, and WinZip are prone to security risks and need regular updates. Even applications that run in the background like Flash and Java are at risk.

System Restore

Some software can wreak havoc to your system causing all sorts of strange problems. Having a restore point gives you peace of mind by significantly reducing your downtime.

System Restore functionality is built into Windows and allows you to wind back your PC's system files. This effectively allows you to go back in time and get your PC working well in the event of a bad install.

To create a system restore point go to Control Panel and select Backup and Restore or for Windows 7 users click "Recover system settings or your computer". You should always create a System Restore point before loading any new software.

