

PC Preventive Maintenance

August 2007

Most PC users do not think about their computer having problems – until they actually happen!

Comspec have compiled a list below of Preventive Maintenance measures which can easily be carried out by users themselves. These measures can help reduce breakdowns, maintenance costs and generally improve the lifespan of your PC.

1) Physical Environment

- All PC cases have **air vents**. These are crucial to the interior airflow within your PC case and to keep your components cooled to a safe temperature. Ensure that when you position your PC none of these vents are covered, and have a reasonable distance between them and any walls or other surfaces.
- Do not place your PC too close to any heating or cooling source (eg. Radiators, direct sunlight, air conditioners, etc). Excessive heat and cold can damage your PC.
- Ensure your PC is not situated anywhere which builds up **moisture**. Moisture is really bad for your internal components.
- Do not position your case directly onto a carpeted surface. If you are not putting it onto a desk, then place something underneath the case. The carpet can reduce air intake and/or increase heat build up.
- Do not **smoke** around your PC. You would be amazed at how much damage smoke causes some of your PC's components.
- Regularly vacuum around your PC case to remove the potential build up of dust or dirt. This can clog up vents and extraction fans to the point of destruction.
- Always turn off the power to your PC before moving it, even if you are only sliding it along the floor a little.

2) Storage Devices

- Always take regular **backups** of important data. This will be crucial if/when you have a major crash.
- External Hard Drives or USB memory devices are inexpensive, but very effective for backing up data. Remember it is not advised to backup data onto CD/DVD media as these are not reliable enough.
- Store backups away from your computer, preferably in another room or building entirely.
- Remove unnecessary programs from your computer. This can either be done using an 'Uninstall' routine supplied with it, or under <Control Panel> <Add/Remove Programs>. Ensure that you know what you are removing and do not remove any programs you cannot identify (they may be part of your system and needed).
- The **Disk Cleanup** utility (free with Windows) is very useful for removing clutter from your PC. We recommend that you run this once a month. This

program is found under <All Programs> <Accessories> <System Tools>. Ensure that all of the following options are ticked prior to running the cleanup:

- Downloaded Program Files
- Temporary Internet Files
- Offline Webpages
- Recycle Bin
- Temporary Files
- Webclient/Publisher Temporary Files

Do not choose (tick) the option to Compress Old Files – this is unnecessary and may cause confusion at a later date.

Ensure that you run this utility for ALL hard drives on your PC.

- **Disk Defragmenter** is another useful utility which comes free with Windows. As with Disk Cleanup, this should be run regularly, but only about every three months. Please ensure that you run the Disk Cleanup prior to running the Defragmenter.

It can be found under <All Programs> <Accessories> <System Tools>.

Once you choose to run it, click the ‘Analyse’ button for a fragmentation report, this will tell you if you need to actually defragment or not.

Ensure you run this utility for ALL hard drives on your PC.

3) The Internet

- The internet is a source of numerous problems for PC users from Viruses, Spyware, Spam etc. Preventive Maintenance is crucial to keep your PC running smoothly.
- Ensure you have Anti-Virus software running at all times on your PC. This should be automatically loaded when your PC starts up and set to automatically update itself from the internet regularly.
- At reasonably regular intervals (or when you think your computer is slowing down) run a full system scan manually from your Anti-virus program yourself.
- Check your Anti-virus program ‘**exceptions**’ list from time to time. Sometimes a virus can amend this and it can prevent your AV program from finding it.
- Whilst Norton is a widely used **Anti-Virus** package, we at Comspec recommend AVG as it takes up less of your PC’s resources and is much easier to use. Please see the notes at the bottom of this article for further information regarding AVG and their range of products.
- Ensure you have **Anti-Spyware** software running and updated regularly too. Again, a regular manual full scan is useful – even if your software runs its own scheduled scan.
- No matter what email system you use, whether it be Outlook, Outlook Express, Windows Mail, Webmail, Mozilla, etc – ensure you use the email **Rules** functionality to set up rules to catch spam emails and place them into your junk folder. Unfortunately Spam is a certainty in this day and age, and must be dealt with as well as possible to avoid it becoming a problem.
- Never click on any email you cannot identify, and definitely never open a spam email. Opening a spam email lets the sender know they have reached a ‘live’ person and it will increase the number of spam emails you get.

- Never open any attachments to emails unless you are certain of the sender. Again, opening an attachment could infect your PC with a virus or dramatically increase the number of spam emails you will receive.
- Avoid using shareware or free to download wallpapers or desktop backgrounds. Some of these will require extra resources to run and may slow your PC operation down a little.
- Ensure that your Windows **Firewall** is turned on. If it is not, you will probably get a message from your PC anyway, but ensure that you put it on.
- Be extra careful when using these **Peer-to-Peer** sharing/downloading sites (Limewire, Filedonkey, Kazaa, etc) as these can leave your PC wide open to viruses and infection. You can also be very vulnerable to hacking and your files could be in danger if not protected properly. If you are unsure about ANY download, do not open it (remove it immediately).
- When giving your email address to someone on a chatroom or a forum, ensure to use 'at' instead of the '@' symbol in your address – leaving them to manually substitute the correct symbol. This will reduce the chances of spammers/bots using the address.
- No organisation will ever ask you to confirm your personal details via email. ANYONE who asks you for **personal details** via email (be it address or financial details) is trying to SCAM you, so be wary. Some of the scammer emails you will receive may look real enough ('Ebay' or 'bank' scam emails look very official), but they are not.
- Ensure that you have some sort of **Parental Controls** installed before allowing children to access the internet. These can either be provided as part of your ISP's service, or bought from a 3rd party. Parental Controls are not foolproof, so ensure you are aware of what your children are actually doing while online.
- If you are not totally certain of a company you are going to buy something from online, check they have full contact details (an address, not a PO Box, plus a telephone number), and call them to test their validity.

4) Power

- Ensure that you are not plugging any PC equipment directly into home/office wiring. Always use **Anti-Surge** devices (be it an anti-surge power block or a UPS).
- The monitor belonging to your PC should always be turned off when not in use. This will extend its life. Even if your PC is still on, you can switch your monitor off.
- Ensure that you always power off your PC before cleaning it or around it. A slight vacuum around the case is useful, but ensure you are not trying to vacuum near an operational fan, etc.

5) Peripherals

- Print a test page occasionally to any inkjet printers which are not being used. This will help keep the nozzles clean and avoid ink clogging them up.
- Clean your mouse occasionally. If it is a ball mouse, then remove the ball and gently clean the contacts inside with a cotton bud. If not, clean around the underside with a cotton bud.

- Turn your printer off using the power switch on it rather than just unplugging it. The printer knows the difference!
- Turn your keyboard upside down and shake it to clear crumbs, etc. You can also use a brush to lightly clean between the keys (a clean paintbrush will suffice).
- Magnets or Electric Motors can cause PC problems, so keep these away from your PC at all times.

Please note – Comspec recommend that ALL PC users have at least one Preventive Maintenance visit a year from ourselves or someone like us. We can clean your PC and improve its performance in greater detail than any user has access to. We will also ensure your security settings are correct and remove any unwanted items which may be slowing your PC down. Please call us for details.

AVG internet security products were referred to during this article. Comspec recommend AVG because of its price, resource-use and reliability. If anyone wants further information regarding AVG or its range of products, please call us or visit our website at www.ComspecComputers.co.uk