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10 Common pc problems and solutions

By P. Hopkins

1. Windows takes too long to start up

When windows takes too long to start up there are two strong contenders. The first is your computers memory which windows uses to run all the programs you use.

If Vista / Win 7 doesn't have enough of this ram to do the job, it starts using a special file on your hard drive to read and write the contents of ram in to it. This special file is called the page File or swap file. Ram is allot more faster than the hard drive so windows has to keep waiting for files to be moved on and off the page file and in/out of ram. This slows windows down because it spends more time waiting than it does processing tasks.

Right click on the computer item in the start bar or the 'My computer' icon on the desktop, then select properties <bottom menu item> XP is the same…. just looks different.
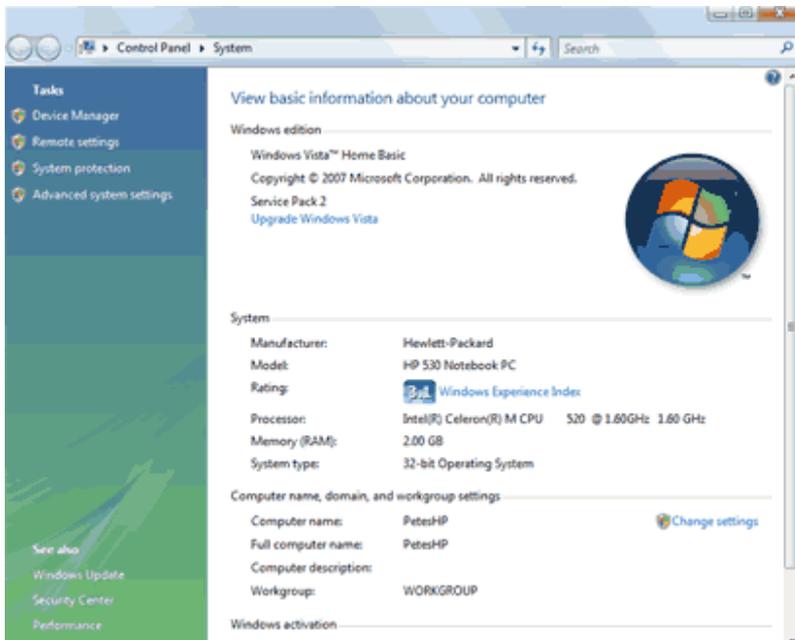
When the system properties windows opens, look in the system section at the item 'Memory (RAM)' to the right of it is how much ram your computer has.

If you're running 1gig of ram or less, windows will struggle more as you do more.

You may need more ram, so we need to find out what type of ram and if you have a free slot for a new or extra ram module.

Go to crucial.com or MRmemory.com and use their system scanner tool to check your ram type and available slots. When you find out the type you can order the memory from them or copy and paste the memory type into another website selling memory.

Some times you have to buy matching pairs of modules costing more. You may be able to mix the ram modules with different sizes (say a 1gig with a 2gig) but it could affect the speed and performance of the system, and you may have to change some settings in the bios to accept non matching pairs.

When you get the ram be careful not to touch it before grounding yourself. You do this by rubbing your hands over a grounded pipe or wearing an anti-static wrist strap. The static from your body can kill memory chips without you realizing it.

You should get instructions but if not...........

On desktop computers open the case and look for two or more long sockets with big clips at either end. As you push the clips down they pop up the ram for removal, push both ends at the same time.

Ram slots look like those blue ones bellow 2 - 4 slots.

Your new ran module shows you what the chips on your motherboard will look like, so you'll find them!
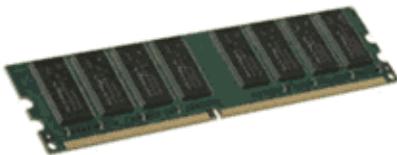
Ram modules look like the picture to the right and come inside a shiny anti-static bag to keep them safe.

See those notches on the side and the notch in the middle of the copper contacts.. You must line that notch with the solid part near centre of the socket then push the ram module evenly each end until the end clips close back into place.

Check the ram is seated correctly and clips are correctly locked in to the module before putting the case back on. If you get beeps when turning your pc on. you've either put the wrong type in or not seated ram in correctly or worse case killed the ram with your body static through not properly grounding yourself off first.

Here's a laptop ram slot and ram modules just so you know......
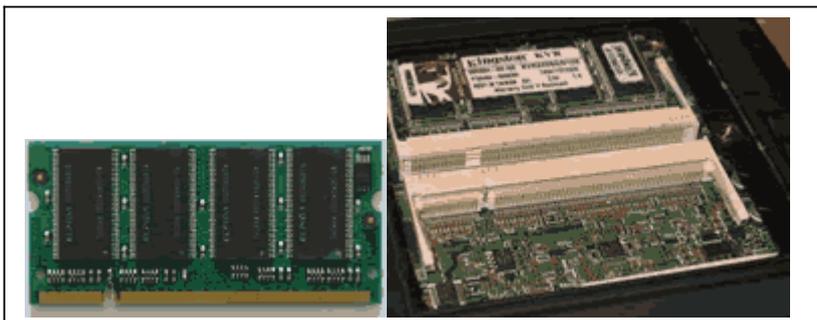
Laptop ram is smaller and has to have slot correctly lined up before it will fit. You have to position the ram almost stright up, then lower down as you push it into the slot' Panels normally centre of the base under laptop.

Keep pushing downwards until the clips pop in place.

The Slots can be side by side, stacked on top of each other, or worse case, one slot under a panel under laptop and one socket under the keyboard, meaning keyboard must be taken off to reveal the memory slot. Also some times slots are still bottom under laptop but hidden by the casing simply meaning a tighter angle.

If you have windows7 / vista and 2gig upwards you don't need any ram

If you have XP and 1gig upwards you should be ok. If you do video work or play high grade pc games or high end graphics work you could use more ram.

2. TSR's loading at start up and staying in memory

TSR's are little programs installed by bigger programs that you install like games or tools and utilities or virus and firewall software. These little program extras stay in the computers memory waiting to be used or monitoring system events like a dvd being inserted. TSR stand for (Terminate Stay Resident).

An example would be clicking on an icon in the system tray Also known as the 'Notification area' by the clock bottom right which loads your digital camera software to upload photos. You may only want to use the digital software once a week, but that little program by the clock loads every time you start windows regardless if you want to use it or not.

Not all these start up programs show themselves in the 'system tray' by clock but do still run and stay in memory as a process.

That process uses up memory and processor time, and many programs install TSR's that run all the time, so they can build up taking more and more ram and system resources away over time, as you install new software.

Install a start-up manager that will allow you to stop the TSR's you wont use much. You can still run the main programs from the start menu, when you need them.

For windows XP and Vista search for 'startup manager' in Google and download it. Cnet or FileHippo are two trusty places to try. If you use SpyBot S&D, activate advanced mode and

use the start-up tool to manage your TSR's, I believe its under 'tools' tab listed as 'system startup'.

Don't forget with SpyBot you must always right click it and select 'Run as Administrator' so it has permission to make system level changes.

In all Windows versions many of the programs you install have an option in their settings to start when windows starts. This option should have a disable setting to stop the programs TSR from loading at windows start up.
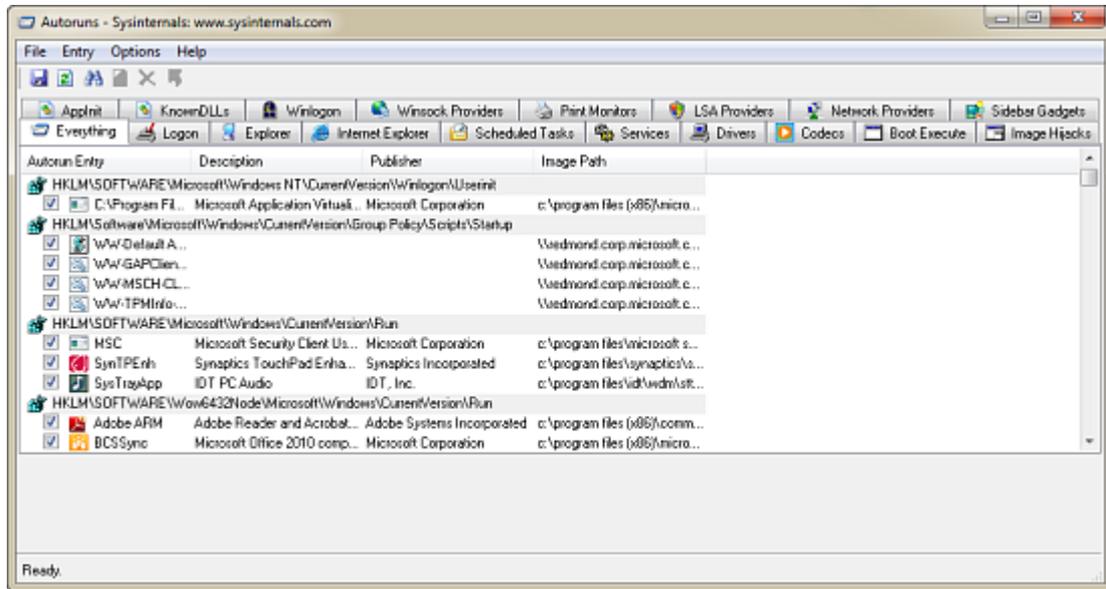
For windows Vista and 7 there's also a tool from Microsoft called 'AutoRuns' which is free to use and manages all the programs that stay resident in memory at start up. It will even run from a usb key, also known as a 'Thumb-drive'.

3. Free space on hard drive

Not always seen by many is the fact that Microsoft Windows likes to keep a certain percentage of free space to itself. There are many system functions that relay on free space to borrow whilst they work. Disk-defrag utility is one of them.

If you are running windows on low amounts of ram and also run low on disc space the special page file used as ram on the hard drive will become restricted and less efficient.

You should always try to keep at least 15% of your drives size in free space. Windows will normally start complaining when space gets low but problems can start before that comes.

So free up space clear out you documents and move files to external media or usb storage.

4. **Drive fragmentation**

If you still run XP or Vista then its built in drive defrag tools are, well,, crap. You're better off using the disk de-frag tool from **IObit** which is a free average tool. The best options are those like **Diskeeper** or **PerfectDisk** proper full blown stand alone tools to de-fragment the drive properly.

Good regular de-fragging of your drive with high quality tools say every 2 months will greatly contribute to system stability and extend the life of the hard drive.

There may also be the option to optimize the file system in these tools which means moving the most used files to the centre of the disc where access times are faster.

In windos-7 you Click **Start**, click **All Programs**, click **Accessories**, click **System Tools**, and then click **Disk Defragmenter**.

5. **System and driver up dates**

It's important to keep windows up to date for security and stability. It is also important to keep your systems drivers up to date. Sometimes in the optional section of windows updates there are driver updates for sound motherboard and chip sets on the motherboard. WiFi adapters and other usb devices may have updates available which will improve their performance.

Most manufactures of computer stuff keep driver and software updates for their products on their websites so go hunting with Google and see what you can find. There are some good driver update tools and software out there but there are also bogus ones so be careful in how you choose. Research your chosen tool in Google first before committing to anything.

6. **Run a disk checking tool**

Hard drives can pickup bad sectors over time which does cause issues for windows. Run the disk checking tools supplied with windows, by right clicking on the drives icon and selecting **properties** and then the **tools tab**. In Windows-7 Click **Orb**, click **All Programs**, click **Accessories**, and click **System Tools**

Take note that disk tools will take a long time to complete so don't start the operation unless your free of any work that needs doing, were talking about 1 – 1.5 hours-ish on 120 gig.

7. **Use ReadyBoost on Vista or Windows-7 (sorry XP)**

The **Readyboost** utility will allow you to use a USB pen or Thumb drive as ram. The pen has to be of a certain spec and you can read up on this at the Microsoft website. You can even split the pen into to drives but keep it simple for now and use a pen solely for this.

Stick your USB pen in then right click its icon and select properties then select the **Readyboost** tab. It's a pretty self explanatory dialog to work with.
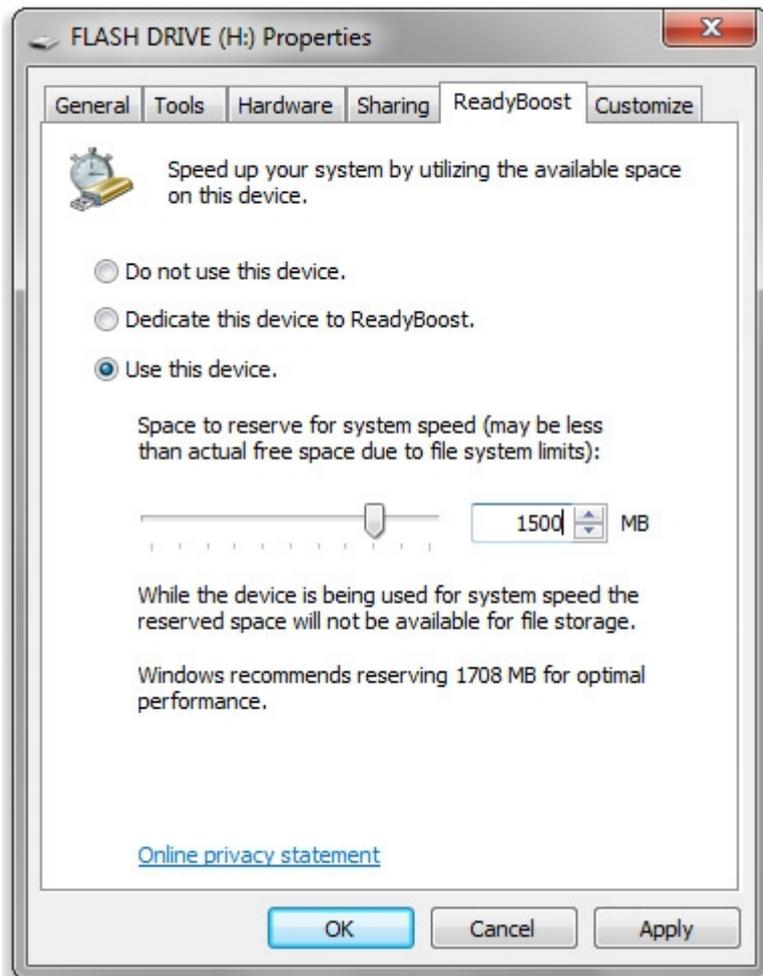
You should have a dialog like the one on the left.

Select '**Use this device**' then set the slider to something over 2gig if you cant then best set it to the maximum allowed.

Then click on Apply and you're done. It's that simple.

You cant use the pen for data storage whilst its being used by **readybost**. If you haven't used all the pens space for **readyboost** you can make a folder called data and store stuff in it. That folder can only be used when **readybosst** is off or you're on a system that's not using it.

8. **Clean the windows registry (carefully)**

You can get many free registry cleaners but to be honest I would better trust a decent commercial paid version of such a tool and when it's installed focus mainly on cleaning the user part of the registry and leave the system part (all other hives) well alone. Not un-installing programs properly can cause errors in the registry.

In most registry tools you just tick the box by the hive you want to clean so select the user one and un-tick the rest. Make sure the program backs-up the registry first.

9. Disable the systems indexing service

Sometimes we search for files on are computer but if your not doing it on a daily basis then the indexing service that indexes all files for faster search results is not worth the overheads on system resources.

To be honest as an engineer, I've never been able to get my head around this one. If you install a new program it should update the indexing database at that point. When windows update adds files it should update the indexing database. When Windows is first installed shouldn't it be doing this?

Why we have to waste recourses running a bloody service that's maintaining a database of what's on the hard drive is bizarre… update the index as it happens, not hunt for it later.

Anyway that's enough moaning…. To shut this system bottle-neck down, do the following for Vista and windos-7;

Go to **Control Panel** Double-click **Add/Remove Programs** Click the **Add/Remove** Window Components; Uncheck the **Indexing services**, Click **Next**

In **XP** go to **Control panel** double click the **Administrative Tools** then double click the **Services** icon. Scroll the services down 2 3rds and start looking for the **Indexing service**.

When you find it, double click it and select **Disabled** in the drop menu then click **apply** and close all windows. When you restart windows things should be better and the hard drive should be less active, unless your running on low ram, then its very active which is bad for it..

Now we start the last item, you did well reading this far, my fingers are numb on the ends.

10. (Da Da…) Make a new user account and use that!

Shocked? Well sometimes it works if the user part of the systems registry has a bad entry that's causing issues but not showing itself in scans or system reports.

So go into control panel open users app and setup a new Account with Admin rights and save it. Shut down (don't log off) or restart windows and log in to your new account.

If windows runs faster or a particular issue as vanished you know your normal user account has something wrong. Could be mal-ware or corrupted user files for that account. It may even be a bad system plug-in by a program that adds entries to context menu or the Explorer shell, which was installed on that user account and not enabled for all users.

PCpetes hopes this document was useful and is now logging off for a beer and movie.