

Miscellaneous Tips
From March - July 2011



Written and Researched by Bob Pretty

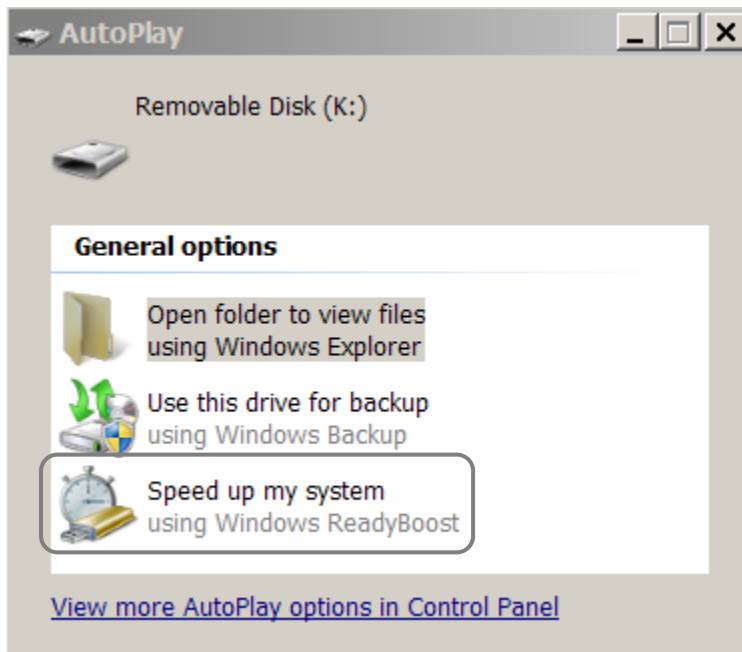
Version 2.02 August 2010

Table of Contents

FLASH DRIVES	3
LIFESPAN OF A FLASH DRIVE	3
MYTHS AND LEGENDS	7
THE INDIAN ROPE TRICK	7
CAN UNPLUGGING A FLASH DRIVE DAMAGE IT?	8
DOES USING THE ON/OFF SWITCH TO TURN OFF PC DAMAGE IT?.....	9
SLEEP MODE IS GOOD FOR THE ENVIRONMENT	9
EMPTY THE RECYCLE BIN FOR SAFETY.....	9
AIRPORT X-RAY MACHINES DAMAGE YOUR PHOTOS	9
MEGAPIXELS MORE MEANS BETTER.....	10
WHAT PRINTER DO YOU ADVISE	10
CAN COMPATIBLE INK CARTRIDGES RUIN MY PRINTER?.....	11

Flash Drives

I hear often that if you unplug a USB flash drive that you will lose all the data contained on it. This like many other urban legends is a myth at least up to a point. If you can be sure that the drive isn't being written to or having data read from it then you may just unplug it without any worry about loss of data. However, how do you know if it's being written to or not? Well if you haven't accessed any files on it in the last few seconds then it's safe to just pull it out. On the other hand sometimes you may be using a flash drive as a Windows Ready Boost in which case the drive should not be removed while the machine is on.



Using the Windows ReadyBoost if the file is switched on then again you shouldn't just unplug it because you are in no way informed by windows what it has on it at the moment.

Lifespan Of A Flash Drive

How long does it take for a flash drive to wear out?

This is a question I/m asked quite often by computer users. It's the same question as, "How long is a piece of string?"

If you purchase a flash drive and never used it for 10 years then (providing you still had the software to run it) - theoretically it should be as good as the day it was purchased. But who buys a flash drive never to use it, so let's disregard that answer and deal with real life situations.

Despite any protection and features supplied with a USB flash drive, it is inevitable that it will wear out.

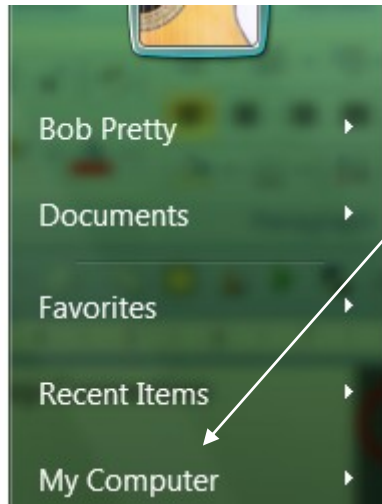
Every time you place data on a flash drive the memory is used and once the storage is done an electronic charge is sent to each memory slot this is flashed

to the drive and eventually the memory will wear out. This is the basics of a flash drive. This flashing of the memory cells means that the memory is now capable of retaining the data even when the power is switched off. The number of flashes that can be done to a flash drive without any detrimental effects is between 10,000 and 100,000 times. Some recent studies have suggested that this figure is far higher than this but I have yet to find any manufacturer that will guarantee it. This is the downside of a flash drive and what makes it eventually wear out. However, there is an upside and that is although you can no longer write to the thing you can still read from it.

Can we do anything to increase the life expectancy of a flash drive? Well, given that it is only possible to do a given number of writes to it before it will fail in that operation there isn't really a lot, maybe we should just forget the idea of life extension and take them for what they are. Personally I would consider that since the cost of them is now so cheap - it's not much more than \$10 for a 4GB flash drive these days and the cost for larger ones is decreasing all the time while the improvements are outstripping the older technology of them. But for those of us on a tighter budget here are some tips to increase the life expectancy of your flash drives.

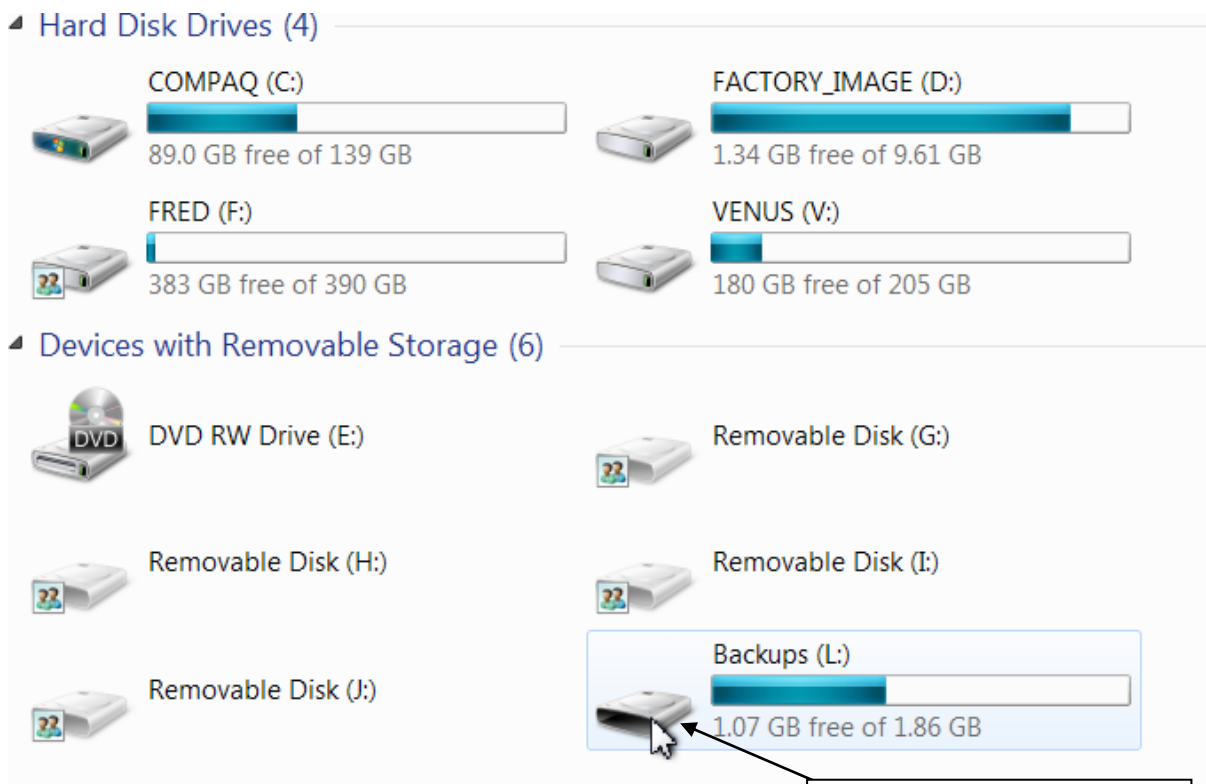
Don't use programs that change the data on the disk frequently, such as banking data copy and spreadsheet data. Tracking stock market share price changes, don't use compression programs these kind of files write to the data on the disk far more than you want them to when compare with static type of data such as photographic storage. Originally the flash drive was used for copying data between computers and because they were so much smaller than today being about 256MB in memory size that's about all they were good for. But they can today be use for more than that. If you notice that the flash drive appears to be getting slower in both read and write it's a sure sign that it's going to give up the ghost fairly soon. Buy a replacement now to save tears at a later stage.

So how can you tell what kind of condition your flash drive is in? Well the best way and easiest way to find out is to use the error-checking utility, which fortunately is already a part of Windows so there's no need to go looking for the utility on the web.



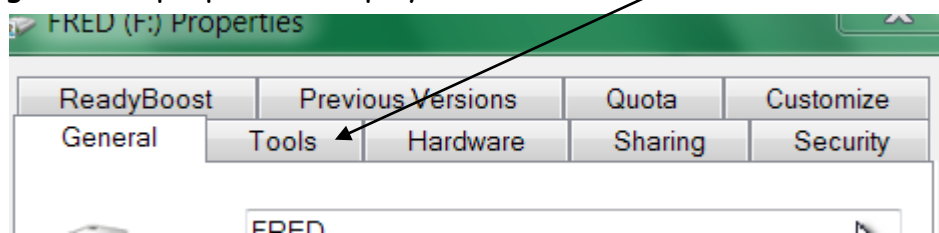
To access this use the Start menu and click on Computer in Windows XP and some versions of Windows 7 My Computer.

Put your flash drive into the USB port and wait for it to be recognized. Right-click on its icon in the Computer window and click on the Properties option.



Right Click
Then select Properties

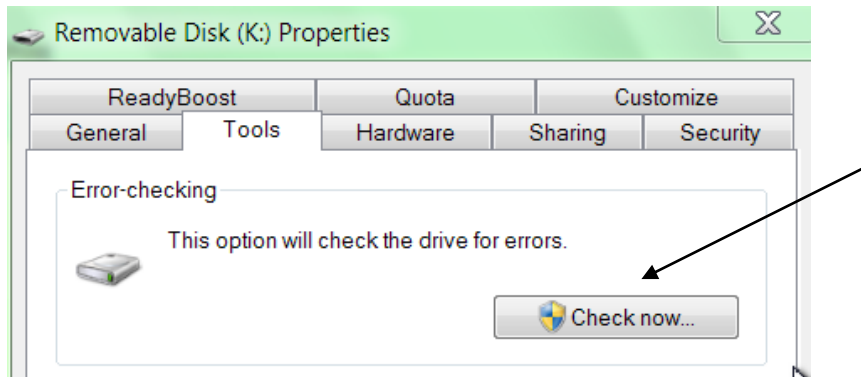
When the dialog box for properties displays click on the Tools Tab.



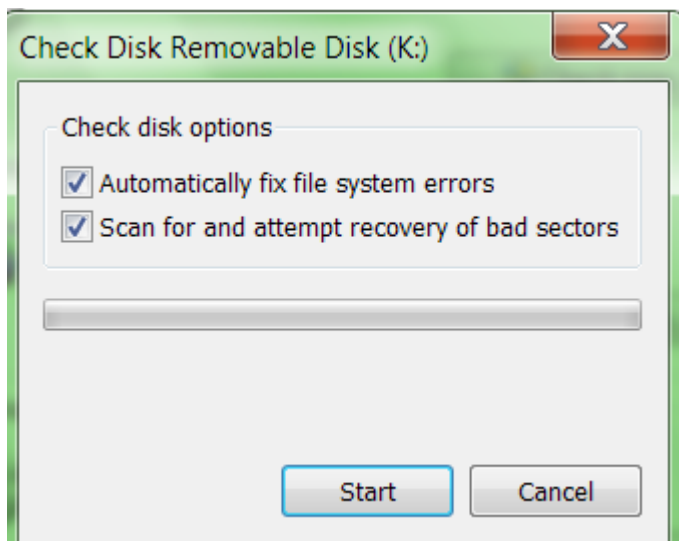
The first set of options is for Error Checking for Drive errors.

Select Check Now

Under Error-checking, click the Check now button (you will need administrator rights to access this application under Windows Vista and 7) if this is your computer you should already have these rights...



This will open the check disk application of the flash drive. Make sure you tick both of the boxes. This fixes what errors it can and also scans for bad sectors on the flash drive.



If the check disk utility finds any errors or bad sectors on your flash drive, then there are certain things you can do. I would treat the drive with caution and would be wary of writing new files to it. I would also be tempted to replace that particular flash drive as soon as possible with a new one. Copy any data from it to your computer's hard drive or to another flash drive.

SeniorNet Porirua runs regular workshops on using flash drives and you would be well advised to take one as they are not just another disk drive. There are certain methods and procedures needed with these drives compared to a CD Rom or floppy disk drive.

Myths and Legends

In all walks of life we find certain myths prevail and no matter what people do or say the public are taken in by these myths - I might add on a regular basis.

The Indian Rope Trick

One that is abounding at the moment is the one where an operator working in a remote city from New Zealand like New Delhi or some other remote place will phone you up and tell you that he works for Microsoft. He has been scanning your computer with some special software and has found several errors on it, which he can fix for you at a reasonable cost. The reasonable cost in this case is about \$100 - \$350 depending what he thinks he can sting you for. If you agree he will ask you to let him have control of your computer, which is quite possible under any windows version from XP onwards.

He may load some special software onto the machine, which does nothing at all for your safety on the Internet or in the way of fixing errors. Because he has loaded this he will tell you that it was necessary and this software carries an extra cost. Now your bill is at least \$200.

So what's the myth?

Well, firstly Microsoft is not in the least bit interested in your PC or any errors that it may have on it.

Secondly they do not employ people in remote places such as India or anywhere in America to fix any errors. Microsoft has a very good system that applies to any software updates that has to be done to their Software on your system.

When you register your system they know who you are but when you switch on to the Internet if you have update automatically set in your system, then Microsoft do not scan your system; in fact you scan their update files and if any apply to you they are downloaded and installed.

These scammers get very clever with their methods they assure that they are bona fide callers (they are usually doing it through a cheap Skype connection by the way) and they get you to access a file called Windows Event Viewer. This will normally show up some kind of error as can be seen below. This is nothing to worry about but for the unsuspecting it can be used as bait to get you to believe what they are saying.

What action should you take? One is to tell them nicely to go away with phrases such as "Bugger off!" another ploy is to tell them you have sold your PC and now own an Apple, or do what some people are doing that I know and telling the caller not to bother as they are running Linux, which is an opposition operating system to Windows.

So what's the Indian rope trick? Basically if you fall for it you are left holding a very expensive basket with nothing in it. The guy that you thought was on the

rope has disappeared in the normal rope trick fashion, and you're left wondering how it was done and more particularly how you fell for it so easily.

The screenshot shows the Windows Event Viewer interface. At the top, it says "Event Viewer (Local)" and "Overview and Summary" with a timestamp "Last refreshed: 2/08/2011 15:23:42". Below this is an "Overview" section with a warning icon and text: "To view events that have occurred on your computer, select the appropriate source, log or custom view node in the console tree. The Administrative Events custom view contains all the administrative events, regardless of source. An aggregate view of all the logs is shown below." Below the overview is a "Summary of Administrative Events" table.

Event Type	Event I...	Source	Log	Last hour	24 hours	7 days
Critical	-	-	-	0	0	0
⊞ Error	-	-	-	2	6	45
⊞ Warning	-	-	-	2	4	37
⊞ Information	-	-	-	123	385	3,132
⊞ Audit Succ...	-	-	-	29	68	584
⊞ Audit Failu...	-	-	-	0	8	60

Can Unplugging a Flash Drive Damage It?

The answer to this is a two barrel shotgun, fire one barrel and the answer is no. Fire the other barrel and the answer is yes.

There is a little icon on the Task Bar just to the left of the clock and normally you will click this and then click the flash drive you wish to unplug and wait for the, "It's safe to remove hardware message."

What about if you don't use this icon or forget too and just pull the flash drive out? This may not worry the drive or data on it depending on its state at the time of removal. If there is no write activity taking place then it'll be fine. If however, you unplug it during a write sequence then the data for that file will either be lost or corrupted in some way.

So how do you ascertain if the drive is not being written to? Possibly if it's not been in use in the last 10 minutes or so or if you have only read from the drive since it was plugged in. Else you play safe and only remove the drive by using the icon or when the machine has closed down completely. There is no tell-tale sign on the drive to tell you what state it is in at the present moment.

Does Using The On/Off Switch To Turn Off PC Damage It?

Sorry, but this does not damage the PC in any way whatsoever. I know there are a lot of people that tell that it does. In fact in Windows Microsoft has an option on the power set-up that allows you to use the On/Off to switch off. What happens when you switch off in this way is that programs do not close down properly and if they are saving data at that time then the data will be corrupted. On the other hand if everything has been saved it will make no difference to the computer.

Sleep Mode is Good For The Environment

It's about as good for the environment as leaving on a light in a room. Sleep mode doesn't draw much power but it will use some all the while the computer sleeps. It's like saying if you fall asleep for two or three weeks you won't need any sustenance. Sleep mode with a computer is still drawing power and therefore cannot be said to be good for the environment - in other words it's a myth! Incidentally while we are talking about sleep mode I see many people when they have finished with the laptop just shut the lid under the misapprehension that the computer is switched off, it's not it is put into sleep mode and is using up that precious battery power.

Empty The Recycle Bin For Safety

Right or wrong a lot of people when selling an old computer put everything into the rubbish bin and then empty it. Now they kid themselves that everything to do with their stocks and shares and the bank account transactions since they won the Lotto that the family doesn't yet know about has gone. It's not and with the right software and/or knowledge it can be restored in a few seconds. When you empty the rubbish bin all you do is free up the space on disk that those files were taking up. They can no longer be restored from the rubbish bin by Windows because as far as it's concerned the space is empty and can be used if and when required. If you are getting rid of an old computer then you need some good software to delete the files, the program called Eraser, found at <http://eraser.heidi.ie> is an excellent program to accomplish this and what's more it's free!

Airport X-Ray Machines Damage Your Photos

I've heard this remark so often that I'm almost to the point where I would believe it - but I don't and never have done. It might have caused some fogging

of negatives on film when that kind of photography was in use. Anyone that still uses this kind of camera should bear this in mind but if you're using a digital camera then an x-ray machine will not make any difference to your pictures. Oh yes but what about those magnetic hand scanners that they use in the security at airports? Unlike floppy disks and HDDs, flash storage, which is what digital cameras are do not rely on any form of magnetism. So if you are using a digital camera then you have no worries. If you have a film camera it might be prudent not to put it through an x-ray machine with unexposed film in it.

Megapixels More Means Better

Remember Bennie Hill? He used to say, "What a load of ol' rubbish!" Well there you have it with camera and megapixels. Providing your camera has about 6 or more then you have ample capacity and bigger and more megapixels doesn't mean better. Personally mine is only 3.2 and I have taken many excellent pictures with it. What really measures a camera for quality pictures is the lens that it has or, in some cases lenses. This is why SLR cameras are so much dearer than the point and shoot type, because of the quality of the lens not the megapixels. My brother, a professional photographer for many years always says "It's the person behind the camera that makes good pictures not the camera." I remember a youngsters he took some excellent photos of the aftermath of the bombing in London with a borrowed Box Brownie. In those days, films were hard to get, so it wasn't a good idea to waste them on bad subjects or badly taken pictures. Try one of our Digital Camera courses or workshops or get yourself into the camera group and learn more from people who are into photography and computer picture programs in a big way.

What Printer Do You Advise

A question often asked is, "What printer do you suggest I use?" Something I never do is to advise people on what printer or, come to that, any other type of hardware to use. We all have our own preferences and some people swear by one manufacturer while others will tell them that they are rubbish compared to another. I worked at New Zealand Lamp Manufacturers for many years and there Philips, Mazda, GEC (Osram) and other types were made, the difference between them was the stamp on the end of a tube lamp and the bulb on an incandescent lamp. Yet I still hear people arguing over which bulbs are the best according to the manufacturer.

The first printer I ever bought was an Epson dot matrix FX80. Most printers used on PCs in those days were dot matrix - there just wasn't anything else available. As things progressed, ink jet printers and bubble jet printers came

along. The first ink jet I purchased was an Epson mono printer that cost about \$600. The next one I bought was the first day Noel Leeming opened their store in Tasman Street up near where the old Milk Depot used to be. This one was an Epson desk jet 400 colour printer. I still have it and it's still a great little work-horse. From memory it cost me something like \$300. The genuine Epson cartridge for this is about \$40 colour and \$25 Black. But 4 compatible cartridges 2 Black and 2 colour are available, at the time of writing, for \$29 plus package and post of around \$5.

When buying a printer cartridge replacement costs is where you need to be careful, I bought a Cannon printer for \$78; when the cartridges ran out a full set cost about \$109 - why not get compatible ones? The manufacturer has made the cartridges hook up to the printer with electrical connections installed on the cartridge. Compatible cartridges are just not available for this printer. I threw the printer out and bought an Epson TX550 for just over \$100 and can purchase cartridges at a reasonable cost. It's also quite an economic printer on cartridges. So when looking for a printer don't be fooled by the initial printer cost - find out how many and what price the cartridges are first. A good place to start for compatible cartridges is: <http://inksmart.co.nz/> these people sell all types of compatible ink cartridges. Before buying a printer search their site for the cost of replacement inks, you could save yourself a lot of money.

Can Compatible Ink Cartridges Ruin My Printer?

I don't know about your printer I can only tell you my own experiences with them. First let's get the idea of compatibles out of the way. Compatible ink cartridges are exactly that- they are not genuine printer manufacturer cartridges. So are they as good as the genuine ones? When I used to purchase tires for my car I didn't necessarily stick to the tires originally placed on the car, as long as I stuck to the correct type Radial etc I was happy.

People moan about the cost of petrol and the cost of a cup of coffee, but at least with coffee you get 250 mls for about \$5 that make coffee about \$20 per litre. With printer ink you get about 30 mls for a cost of between \$30 - \$90 each. Disregarding the cost of the plastic cartridge (about \$5 should cover it) then ink becomes between \$25 and \$85 for 30 mls. Giving ink cartridge makers the benefit of the doubt and assume cartridges hold 50 mls, this means that you pay between \$25 and \$85 per 50 mls or between \$500 and \$1700 per litre of ink. Don't waste it printing out stuff you don't need it is not El Cheapo. That's the basic reason for using cheaper compatible ink.

Yes but do compatible inks ruin the printer? When I bought my Epson 400 the literature supplied with it told me not to use any other ink than Epson genuine cartridges. While the printer was under warranty I stuck to these instructions.

I then moved to cheaper inks and have even refilled cartridges myself. I have yet to have any problems with it and the printer is between 12 and 15 years old, so I've certainly had my \$300 worth out of it. What you decide to do about using compatible cartridges is your choice I can only give you my experiences I will not take on advising you what choice you should make. I have read in several different magazines that compatible inks in printers doesn't matter one iota and no printers they tested over a period of months was ever ruined by them.