# Magazine

Multibooting

How to Open



Hardware Database

Kodak MD853 Review

Rsync the Repos

Open WiFi



Papawoob



Welcome back everyone to our latest issue of PCLinuxOS Magazine. This month we have many more interesting articles for your perusal. We have one for all of us distro junkies who have ran out of room on their first (maybe only ) Harddrive and have decided to add a second one. Do you have to deal with those new Microsoft Office 2007 .docx files? We have a howto on setting up Open Office to read and write to them. We also have an explanation/howto on using that mysterious

application called ndiswrapper.

You will also find a review of a very nice digital camera (Christmas present?) that "just works" with PCLinuxOS and an opinion piece on the Open Wifi debate. Still have not gotten a PCLOS case sticker for your tower or laptop? Now is the time to show your pride and get one, and help support Tex and the Gang in the process. We still need more submissions to the Hardware Database as every new one benefits the entire community by allowing them to search the database and see what hardware works and what does not.

Last but not least, I am calling out to the community to let us know what articles you would like to see in the upcoming issues and even better would be if you know a little trick for this or that, or have a favorite application, write something up and submit it to me at: papawoob@pclosmag.com and I will get it published.

I have kept you to long from enjoying the rest of this issue so Read On!!

Papawoob

### Magazine

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Papawoob

#### Papawoob,

Let me take this time to thank you personally for the magazine. I look forward to the articles, reviews and letters sent in by users. I've been using Linux pretty much since 2000 and started with Slackware 8.0, I think. I switched to PCLinuxOS 2007 a few months ago, and it is now my main machine running as a print and file server for my LAN. I also use it for a desktop. I've experimented with quite a few distros, and like others have found PCLinuxOS to be an excellent Linux system. I've installed PCLinuxOS on several friends/customers machines as a dual boot, all with great success, and even though many folks are not technically savvy, by and large, people seem to adapt just fine once they are shown what to do, as is true in many things.

I think Linux is great!! I originally was introduced to it back in 1993 when a friend (software engineer) was experimenting with Coherent and Minix, then came Slackware 3.0, I think. I didn't know what to make of them, I was into MS DOS pretty much, but when the bug hit me to find out what "Unix" was like, Linux was the perfect fit. To find out what "Unix" was like, was my whole focus and when I found that it was open enough to let me experiment and actually do things and learn, I said to myself, "WOW"!!

I hate that many of the "Linux" issues are now about being against Microsoft. Seems like some people are so totally absorbed in being "anti" that they lose site of the real focus on what "they" can "do" with Linux, the focus in the "Unix" philosophy and learning in general. Don't get me wrong, I don't care for monopolies and the IP/DRM issues, but those issues have to do with larger things than any one company's rule or policy. As my software engineer friend (now retired) put it "the world is application driven" .... and another phrase was "what do you want to do with it" (the computer, that is), he is a true engineer at heart, and in my opinion, engineers, as a whole, have a much better approach in understanding how things work than non engineers. Perhaps this betrays the true character of the subtleties of Linux adoption, that is, the fact that Unix was a system written "by" engineers "for" engineers. Of course I'm all for consumer adoption and Linux has come a long way in that regard.

I think one real issue is that people, in general, face the difference between a non engineer and an engineers world and are continually wrestling with "understanding" how things work. This has a much larger affect than just on the computer world. Each set of problems people and corporations deal with have their consequences .... with regard to the computer world, when things are made into turnkey machines for "consumers" you sacrifice the

understanding of how it works. There is nothing wrong with that approach, but the consequences produce a dumbed down approach and a set of people who expect this, some folks don't want to understand how things work ... so goes the Microsoft product world as well as many consumables we all purchase. The benefit from such an approach is that you don't have to know much and even a 5 year old can work the system. But when the consumer/non-engineer steps out of this "turn key" approach (something a 5 year old is unable to do) and has to begin to "understand" how things work ... there lies the frustration. These are learning issues in general and I fault our public educational system for that. There are people who "want" to learn and others who don't. I think you can have a system for both, especially in the "Linux" development world.

With that I'll sign off now. I didn't mean for this to turn into a lengthy email but I did want to give you a few thoughts from yet another happy Linux user. Sure do appreciate you and the team at the magazine as well as Texstar and the gang for a great distribution.

Sincerely, Tom Nielsen

Thanks for all the compliments, it makes our efforts seem worthwhile.

#### Papawoob

Hello there and thank you for making the best version of Linux to date! PCLinuxOS is exactly what the doctor ordered for me.

The REAL purpose of this letter though is to ask you if a Playstation 3 version of PC Linux is going to be made. I have tried others such as Ubuntu 7.10 and Yellow Dog Linux and they do not work.

Thank You for your time and patience,

Adam (Digikid) McDougall

We all appreciate your enthusiastic endorsement. At the present time there are no plans to produce a version that would run on a Playstation 3. You could go to mypclinuxos and suggest it as a project. Our magazine got it's start there as have many other fine projects. Give it a shot!

Papawook	)
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Just wanted to say thanks to Papawoob and the staff for another excellent issue. I look forward each month to the next publication.

Regards, JonC

Hi,

I'm a recent migrant to the Linux world and my first stoppage was Ubuntu, and then a bunch of other distros till I landed on the doorstep of PCLOS, and believe me, ever since I have not even thought about moving to any other distro.

Then I came across PCLOS' website and eventually your magazine's website. I was really thrilled to see the amount of material available for hardcore windows users like me. It made it so much easier to migrate to Linux. I decided to take this migration to the next level.

I am the manager of the IT division of my company which is in the Multimedia business. I have decided to migrate about 90% of the PCs in the corporation from Windows to PCLOS. I was wondering if there is an article that could help me in this migration process. Furthermore, I was wondering if you can advise me on how can we, as a corporation, support the PCLOS team in developing future versions and keep the flame burning. I'd be really grateful if you can hook me up with the concerned person(s)/team so that I can put my ideas in front of them.

Thanks and keep up the good work.

Regards,

Paramjeet S. Bhambra (PJ) Manager - ICT Division Royal Media Services Ltd.

Thank you for the glowing endorsement of both the Magazine and PCLinuxOS 2007. We have not written any articles that would encompass the scope of your project. We do have a project at mypclinuxos.com that is an business edition of PCLinuxOS. Their website can be found here:

http://www.pclosbe.org/mwiki/index.php?title=Main\_Page

The leader of this project is BigBearOmaha. Here is the link to the mypclinuxos.com forums where you can go to the appropriate forum and ask as many questions or, give suggestions as you need:

http://www.mypclinuxos.com/forum/index.php

I will also forward your letter to BigBearOmaha so as to setup a direct line of communication for you.

Papawoob		

Hello, Papawoob et al.,

I just wanted to take a few minutes to write and let you and everyone else who helps to produce the magazine know that I appreciate your work. The magazine is nicely put together, and as a new PCLOS user, it's content is a great help to me. My former primary distro was Xandros; one of the reasons I selected it was that it came with a printed user's manual (written by Xandros) and a commercially published book on it. (Rickford Grant's "Linux Made Easy," published by No Starch Press) was available as well. (Yes, I am an old fogey who likes printed material when learning something new).

When I first began using PCLOS, I was a bit concerned that I would lack the printed safety net I had with Xandros. PCLOS Magazine has helped fill that gap and fortunately, almost everything has "just worked" with minimal intervention on my part. Although PCLOS might not have the buzz or the financial backing that Ubuntu does, I think it's pretty amazing and am grateful that I decided to try it.

I am sure that you put much time and effort into creating the magazine. Even if you don't get much fan mail, I'm willing to bet that many PCLOS users find the magazine as useful as I do.

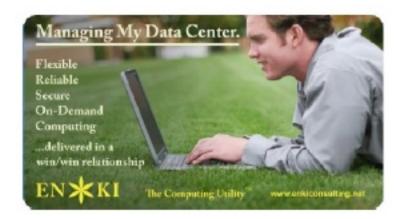
Thanks again for your hard work. With best wishes,

**David Pardue** 

Thanks for your comments David! The Staff and myself do put a lot of effort into bringing to the users what we think they can use. Comments like yours are what makes us feel it is worthwhile.

Thanks again,

Papawoob







Rzeczpospolita Polska



Gary L. Ratliff Sr.

Here multi booting is used loosely. The PET would boot into BASIC or the tape could be used to force it into the mlm for 6502. Later versions had a built in machine language monitor. The SuperPET had 6502 mode and 6809 mode. It also had a suite of five different computer languages from Waterloo. My Atari 1040 would run 68000 code and could use PC Ditto to emulate an MS DOS machine. My first Windows machine came with Windows 95 and a gemulator to run software for the Atari. Even an old machine with 8 inch floppies had MSDOS 1.0 and another for CP/M 86.

As all of my computers since my first purchase of a Commodore PET in 1978 have been able to use multi booting, I was very much interested in the article by Clare Oldie which appeared in the second issue of PCLinuxOS Magazine. While that article concentrated on using a single PATA drive for installing additional Linux distros this will expand to using a second drive for the purpose of installing and booting many versions of Linux.

The hardware I am using is the following: Dell Dimension 6100 which has 128 megs of memory, one DVD ROM drive and another drive which burns CDs. This also has four USB ports. Additionally I have purchased a 320 gig MyBook External hard drive and a USB card reader which reads SD cards. These are the type which are used in several versions of digital cameras. This system will be used to obtain and burn the various flavors of Linux which we will install. This system came with Windows ME and had PCLinuxOS 2007 installed once it was set up for multi booting. Even with only 128 megs of memory on this machine PCLinuxOS functions very well. Most modern Linux CDs seem not to want to install on any system which doesn't have at least 256 megs of ram. The second system to which many Linux distros will be installed is an HP a1253w. This has been enhanced to have 2 gigs of memory, as well as a more robust video card: an Nvidia FX 5500 3D Fuzion was installed and the onboard ATI card disabled. The 100 gig hard drive was partitioned to use 40 gigs for Linux and PCLinuxOS 2007 was installed on it.



A Picture of items used in this project: Top Left MYBOOK USB 320 gig portable HDD.

A USB Card Reader even works with older 1.1 USB ports.

An ample supply of blank CDs enables rapid burning of downloaded iso images.

The first step will be to select and install an additional hard drive. To obtain the best price you may wish to check out the ads from the main computer and office supply stores in the Sunday newspaper. The time to buy is when you notice such items as all hard drives 25% off. I selected a 320 gig internal drive. To install you will want to load the install CD which comes with your new drive. Most will have videos and other instructions which will make installing the drive very easy. Mine even analyzed the system and prepared a detailed guide for my exact hardware. However, it is important to ensure that the jumpers on the drive are set correctly. The proper setup for most systems will be cable select. Then the location of the cable from the motherboard will determine if this is the master or the slave. If the jumpers are not set correctly you will immediately know as neither of your drives will function until the settings allow them to work.

Having installed the new drive you will want to format it. As almost all systems you purchase will have Windows pre-installed, we will first format the drive for use with Windows. Here, as the Windows XP Media Center Edition (which came with the HP a1253w) uses NTFS, the entire new drive is formatted to NTFS using the install CD that came with the new drive. Next, you will want to follow the advice in the previous article and create several 10 gig partitions to use for the Linux installs. Place the PCLinuxOS CD into the drive and start the install process. Run this to the partitioner and here select the Manual option. This will launch GParted and you will then break the 320 gig NTFS partition into several 10 gig partitions. These should all be made into ext3 types. However, you will first want to create a Linux swap partition. The recommendation is to have a swap partition which is two times the memory you have installed.

Next, where to find the Linux distros to install? The best idea is to have a broadband Internet connection. However, much of my collection of CDs and DVDs are from regular purchases of Linux magazines. Linux Format, Linux User and Developer, and Linux Pro Magazine each come with an install CD or DVD containing at least one, and sometimes as many as five new distros. They will usually be the current and most popular distributions. One may open Firefox in PCLinuxOS and use the Google search tool to look for Live Linux CDs. Here you will find any type of live CD, from a small system to a special distro for mastering lisp. Or you may search for Distrowatch and use the links provided. This also lists many interesting possibilities including a new distro to prepare a Linux user for the Linux Administrators' Exam. Clicking on one of the links will take you to the download mirror site. Select the save option and the image will soon appear on your desktop.

Firefox will report the status of the download. This should take 15 minutes to an half hour for the usual 650 to 700 meg distro size. (For a real surprise try downloading the newest distro on its release date. My attempt to get Gutsy Gibbon on October 18, 2007 revealed that I was downloading at the astounding rate of 16 Kbps whereas my usual rate is near 350 to 400!! I soon decided to just wait a couple of days.)

Next, having obtained a new distro in ISO format you will need to burn this to a CD. Placing a blank CD into the CD reader will create a window asking what you wish to do. Here you will need to select "create new data project." This will open up K3b, there will be an icon of the newly downloaded file on the desktop. Just drag and drop this into the K3b window. Another window will appear informing you that this image may be burned directly from the CD image on your desktop. So select this and the CD will begin burning. A window will appear at the top of the screen. Also you will want to click the verify data box on the K3b window to insure that your new CD is correct.

Click the start box to begin burning the CD. The CD will begin to burn at the maximum speed allowed by your burner. (Note: you can also choose the burn speed prior to starting the burn. It is recommended that you choose a lower burn speed as it will insure a better burn. 8x-12x is a good choice.)

Once the CD has been burned we are ready to archive the file. Go to "My Computer" on your desktop and click this. Then go to "Storage Media" and click this; now click on the MYBOOK icon. Now exit from the windows created. You will now see a MyBook icon on your desktop. Drag the icon for the downloaded file to the MyBook icon and select the "move here" item on the dropdown menu which appears. A progress window will appear showing the file now being transferred from the desktop to the MYBOOK drive. Once this is complete the file icon will vanish from your desktop.

Using this method you will soon have a collection of CD images which you may use to install several flavors of Linux to your target machine. Make sure that this machine is set up to boot from the CD as the first option. This is obtained by pressing the setup key on the first splash screen you see after you start the machine. This item is usually found on the advanced options of the setup menu.

Open the CD drive and pop in a CD with the distro you wish to install. If this was a live CD, the system will load up and you will instantly know that all your hardware is usable with this version of Linux. Now select the install option and in each case you will want to select the manual partition option. Use a note pad to write down which partition you use for each install. As most modern systems have a set of slots on the front for reading cards, we will test the new install and save the file found in: /boot/grub/menu.lst to the SD card. If you do not have a card reader then a USB stick will work also. You will want to re-name this to indicate the distro it came from. An example command would be: cp /boot/grub/menu.lst disk/ubuntumenu.lst. An alternative would be to open GEdit in a distro which uses Gnome or open KWrite in one using KDE, as root of course. Then you would request an edit of the file /boot/grub/menu.lst and then save it to the SD card which will usually appear on the desktop.

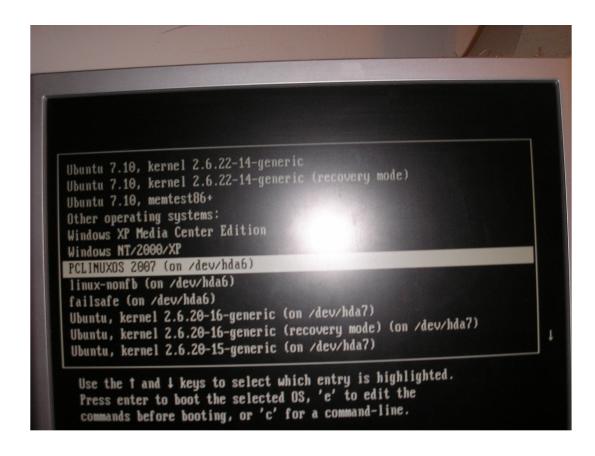


Now having installed one new distro you will proceed to install other distros and you will allow each to simply rewrite the MBR. The distros will either 1) Setup the process for booting windows and themselves, 2) Change the boot loader to Lilo (The distros based on Slackware seem to do this. 3) Offer to find the other operating systems and set up a menu. Ist file which will recognize all the distros you have currently installed. Here you will note which of the distros you have which fall into the third category. Once you have installed all the distros you want to, you will simply re-install a distro which recognizes the other Linuxes you have installed and let it take charge of the grub menu. Once this is done you will just edit the resulting /boot/grub/menu.lst file to correct the systems which were not correctly recognized.

Often the system will be identified as Linux on hdd12 while you will want to edit this line to read: Slackware 12.0 on hdd12. You will soon have a properly edited menu.lst file with all your systems correctly named and all bootable. One vital thing to remember while installing these systems is to use the same password for root and the same password for the user. Otherwise you will need to make extensive notes as to the set of passwords used and

this will leave the notebook with all the notes of your passwords laying about for others to find. Also, a reminder to select only the manual partition option when installing each new system. For example, on the new Yoper distro, the manual partition option is not offered. At this point you will need to cancel the install and go on to the next distro. By default the systems will grab the entire drive and wipe out the system. You really don't want this to happen, so be extra careful.

With your newly installed hard drive you should also have enough partitions free that you may wish to try virtualization. In your selection of distros you will want to try some of each flavor: Debian, Red-Hat Fedora, Suse Novell, Gentoo, and Slackware. By trying these you will gain a broader understanding of Linux and you will also come to appreciate the power and simplicity of PCLinuxOS. Then if you find features on some of the other distros you can suggest that they be incorporated into the distro.



There are now several flavors of PCLinuxOS and each serves a different need. The distro is improving all the time. If you follow the list published at Distrowatch you will observe that PCLinuxOS has had the top spot for several months and the fact that the developers listen to suggestions for improvement is one of the main things keeping them at the top of the list.

Suggested reading: As in the original article it would benefit the reader to read: http://www.pclinuxonline.com/wiki/BootloaderFAQ

Searching google for multibooting also yields many items of interest.

#### **Attention**

Have you ever gotten tired of looking at those "Designed for Microsoft Windows" stickers on your PC or laptop when you know it is "Powered by PCLinuxOS?" If you are like many other PCLinuxOS users and myself, you can now do something about it. Thanks to the efforts of Igross1949, and Gryphen (graphics), you can now order yourself as many as you need to replace them, and every cent of profit goes to Tex & the Ripper Gang to help fund the continuing development of our beloved OS. You can see what they look like to the right.

You can order these by e-mailing Igross1949 at: Igross1949@yahoo.com or Igross1949@powerc.net. After you have placed your order he will send you a billing statement through PayPal and you can pay with Credit or Debit Card, or Checking Account. You don't have to have a PayPal account to use it. They can be purchased for \$4.00 US and that includes shipping anywhere in the world. So let's get with it and order yours today!



#### From the Forums

#### From the thread:

http://www.pclinuxos.com/index.php?option=com\_smf&Itemid=99999998topic=33841.0

If you don't mind getting your hands a little dirty, I'm going to show you how to "fix" OpenOffice so you can open, edit and create .docx files.

First things first. Make sure you have updated OOo, then go get the odf-converter rpm from

http://download.novell.com/sendredirect?target=%2Ffree%2FESrjfdE4U58~%2Fodf-converter-1.0.0-5.i586.rpm&buildid=ESrjfdE4U58~&fileid=pVPd0sGd1L4~&mirror=AkamaiHost

You also need software to get into the rpm. I prefer file-roller (aka Archive Manager), so in Synaptic, mark and install file-roller.

Right click on the odf-converter rpm -->Open With --> Archive Manager.

Navigate to and extract /usr/lib/ooo-2.0 from inside the rpm to your desktop.

You should now have a folder named "ooo-2.0" on your Desktop. There are 3 files buried in this folder that we want.

The first one is located in /ooo-2.0/program, named OdfConverter. In Konsole, as root type:

cp /home/YourUsername/Desktop/ooo-2.0/program/OdfConverter /usr/lib/ooo-2.3/program

Second, there is a file named "MOOXFilter\_cpp.xcu" located in /ooo-2.0/share/registry/modules/org/openoffice/TypeDetection/Filter.

Once again, as root;

type:

cp /home/YourUsername/Desktop/ooo-

- 2.0/share/registry/modules/org/openoffice/TypeDetection/Filter/MOOXFilter\_cpp.xcu /usr/lib/ooo-
- 2.3/share/registry/modules/org/openoffice/TypeDetection/Filter

Lastly, the file named "MOOXTypeDetection.xcu" located in /ooo-

2.0/share/registry/modules/org/openoffice/TypeDetection/Types.

As root again;

type:

cp /home/YourUsername/Desktop/ooo-

- 2.0/share/registry/modules/org/openoffice/TypeDetection/Types/MOOXTypeDetection.xcu /usr/lib/ooo-
- 2.3/share/registry/modules/org/openoffice/TypeDetection/Types

(Re)Start OpenOffice and try to open or create .docx file. It works!

Notes: This will have to be done each time OOo updates. This solution is working properly with small, basic documents with few pages but bigger files won't work.

The absolute latest Writer 2.3.0.4.1-2, with updates (not yet available in the PCLinuxOS Repositories) opens .docx...AND, you can interact with it, writing to it etc., but you CANNOT save as .docx. The open function only works from within Writer. You cannot simply click on a file and have Writer open it. When you open a .docx file, save it in an Office XP/2000/97 format (the old and loved by all .doc format) and you are good to go!



From the Forums; edited by Joble

KC

KCC (KDE Control Panel)

X

PCC (PCLinuxOS Control Panel)

Synaptic Package Manager

This article is only about getting wireless working, it does not cover talking to your router or encryption.

A little about me: I didn't author any of this information. I have only been using PCLinuxOS for about 4 Months. It took a lot of research to get my wireless working, pieces of information gathered from many different forum searches. I gathered all the information I could and put out a call to help, which was answered in force in the Forum. This article is a tribute to the helpful nature of the PCLinuxOS Community.

If you are buying a new wireless card, or just want to see if there is a Linux driver for your chipset, check the hardware lists. PCLinuxOS List:

http://pclinuxoshwdb.com/index.php?option=com\_jreviews&task=listcategory&section=4&cat=20&dir=1&Itemid=63

The most complete wireless hardware list I have seen so far is:

http://linux-wless.passys.nl/

I can't speak for it's accuracy, I looked up my card and the results are pretty accurate, giving a yellow rating, which is about right in my opinion. The link details the bcm43xx Linux driver, which does not work for this card:

802.11g F5D7011 man: 1799 dev: 7011 Cardbus Broadcom Bcm43xx yellow

http://bcm43xx.berlios.de/

These instructions will work for a majority of situations. If you really want to be sure, before you do these steps, you can skip down to 3: Determining Your Chipset and search for your chipset in the PCLinuxOS Forum:

http://www.pclinuxos.com/index.php?option=com\_smf&Itemid=58

If there is an answer specific to your chipset, it has probably already been discussed. The search bar is in the upper right corner.

1: Troubleshooting Wireless Issues

1a: If you dual boot with windows, make sure you have exited windows completely. Hibernating out of windows does unpredictable things to your system. For me, it makes my wireless unusable in PCLinuxOS, for others it doesn't.

1b: Make sure your wireless device is plugged in at boot, if it has a switch, make sure it is on or else there's little chance it will be detected and show up in your hardware list, plus if it wasn't, then the default driver might just work (problem solved).

1c: You cannot use a wired and wireless connection at the same time. At some point you're going to have to unplug that wire and fly solo. If that works (problem solved).

1d: Driver issues. If I addressed this I could fill a book, this is why you really should search the forum for your chipset before continuing these instructions.

Quote from: travisn000

(1) Before jumping right into ndiswrapper, it might be worth checking hardware compatibility lists / Linux driver lists for the chipset being used. If I had done this, I probably could have got away with simply removing/blacklisting the incorrect driver, loading the correct Linux driver, and saving the configuration.

If you search and don't find anything, it means one of three things, 1 the default driver works, 2 ndiswrapper works, 3 you're the only one who has that and you will have to write instructions for the rest of us. In any case, if a

search doesn't reveal anything significant, then continuing with these instructions is your best course of action.

#### 2: Finding your drivers

If you get this far without a resolution, then the default PCLinuxOS driver is not working for you. This section covers the use of NDISWRAPPER. Wherever drivers are mentioned, I am referring to Windows XP drivers.

2a: If your wireless card came with a CD, your drivers are on it, mine were bcmwl5.inf and bcmwl5.sys, you need both. When setting up ndiswrapper, point it to the .inf file on the CD. If you're anything like me, it won't be that easy.

If you find your drivers on the CD, go further down to the bold instructions for PCC. Otherwise, continue reading.

2b: In WindowsXP:

Start -> Control Panel -> System -> Hardware (tab) -> Device Manager

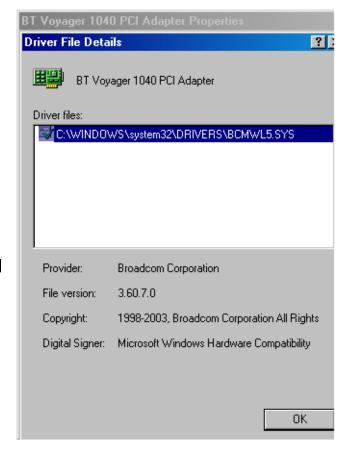
Hit the "+" at Network adapters, and find the wireless adapter right click on your adapter, select Properties Select the Driver tab Select Driver Details

Open My Computer and search for the filename from your driver details, in this case search for bcmwl5.\*

Copy all listed files to c:\wireless so you can find them easily. Then log off and exit windows, hibernating out of your windows session could make your windows partition inaccessible to PCLinuxOS until you go back in and exit normally.

If you find your windows drivers, then go further down to the bold instructions for PCC. Otherwise, continue reading.

3: Finding your drivers continued (Determining your chipset)



Depends on the chipset, you won't know the drivers until you know the chipset. Others here can tell you how to do that, but only you can find it. As far as I know, we don't make house calls.

PCC->hardware->Look at and configure the hardware. Scroll down the detected hardware list until you find your card, Mine says "BCM4318 [AirForce One 54g] 802.11g Wireless LAN Controller" and it's listed under "Ethernetcard". BCM doesn't stand for Belkin, it stands for Broadcom, and BCM4318 is my chipset. It could also show up in "network adapters", or "other /unknown", and I read one case where it showed up in scanners. If you click on it, you can see what "Module" is loaded. When visiting the Forum with a problem, you may be asked to provide that information.

If it is not a Broadcom chipset, it's going to take some research on your part to locate the correct driver. Search your chipset in the forums, chances are someone else had the same problem, if that fails, search your chipset on Google. Yeah, try it, search for bcm4318 Linux on Google and see how many others have had the same problem.

If it is a BCM4318 or any Broadcom chipset, you can try the ndiswrapper drivers in Synaptic, bcmwl5 is one and bcmwl5a is the other, one of them should work, just get them (one at a time, try one, then the other) from Synaptic. Look for the .inf file in a subdirectory of /etc/ndiswrapper/ and continue with these instructions.

#### 4: Instructions for PCC

Once you find your drivers (.inf, .sys, and optionally .cat, .bin) copy them to a Linux directory where you can point ndiswrapper to find them.

PCC->Network->Set up a new network interface->wireless

Follow the on screen prompts for ndiswrapper using the .inf file.

When you see the message below, make note of the driver, this is the one that needs to be blacklisted during the last step. In this case it was bcm43xx.

#### Quote

I run PCC, go into the hardware setup, click on the Wireless interface, and change it from the Broadcomm Driver to the Windows ndiswrapper driver. (It opens a window that says, "Warning: The selected device has already been

configured with the bcm43xx driver. Do you really want to use a ndiswrapper driver?)

Click Yes.

This gives an error message "Unable to find the ndiswrapper interface"

Open a Terminal session by left clicking on the terminal icon in the Panel or by:

Main Menu > System > Terminals > Konsole

Type su, enter your password and then hit Enter.

type "rmmod (driver from the message)" and Enter. (without the quotes)

this releases the default driver allowing ndiswrapper to use the adapter.

Go back to the Control Centre and click OK on the error message and finish the configuration menu.

Open a Terminal session, type su, enter your password (or go to your previous terminal, if it's still open).

Then type "ndiswrapper -ma" (without the quotes)

this will make ndiswrapper the default driver when you reboot your machine.

At this point your wireless device should be on, lights, if there are any, should be visible. You're almost finished.

#### 5: Blacklist

Then, after setting up ndiswrapper you need to add:
"blacklist bcm43xx" or whatever the default driver was that wasn't working
to etc/modprobe.d/blacklist to prevent this module being loaded every time you boot.

Open Menu -> System -> File Tools -> File Manager - Super User Mode (enter your root password) navigate to /etc/modprobe.d/ right click on blacklist and open with KWrite add "blacklist bcm43xx" to the bottom of the list and reboot. If ndiswrapper is set up correctly your wireless should

start.

You may still have to go into PCC->Network->Wireless and actually connect to your network.

If after this your wireless device still isn't flashing/beeping/or bouncing around your desk as it should, then open a terminal window and type: ndiswrapper -I (lowercase L)

If running this shows "alternate drivers" (the drivers Linux tried loading before you ran ndiswrapper), these are the ones that need to be blacklisted. Note that I ran this command and it showed the driver that I already blacklisted. You need only worry about any additional drivers you have not already blacklisted. Add them to the blacklist file and reboot the computer.

#### 6: Wireless & Network Tools

For a Wireless only network my favorite is KWiFiManager which shows a signal strength applet in the taskbar. It can be downloaded via the Synaptic package manager.

For multiple networks, I like Knemo, which will put a separate icon in the taskbar for each network and show you which one is active, and it can be used with KWiFiManager. This one is good for trouble shooting conflicting networks. It can be downloaded via the Synaptic package manager.

The default network manager is NetApplet which is also very capable, if it meets your needs you can load it from:

Main Menu->System->Monitoring->NetApplet

#### 7: Updating Your Kernel

If you use ndiswrapper, and update your kernel, make sure you also update ndiswrapper if it is available.

Quote from: Cobbydaler ndiswrapper should pull in the dkms-ndiswrapper package when installed from Synaptic.

Then when you install a new kernel, make sure the dkms service is set to start at boot in PCC --> System --> Enable or disable the system services.

ndiswrapper will then be rebuilt against the new kernel on boot...

#### 8: Getting More Help

If these instructions do not work for you and you need specialized assistance then you can ask for help in the Forum:

http://www.pclinuxos.com/index.php?option=com\_smf&Itemid=26&board=26.0

Please search the Forum for your chipset first, and list the results of these root terminal commands when posting wireless questions:

Ispci -v ifconfig iwconfig

See you at the Forum!

jmiahman

Hello all,

On behalf of the crew at PCLinuxOS Hardware Database we would like to say thank you for all of your submissions and support of the Hardware Database. Currently we have 250 hardware submissions that allow users of PCLinuxOS to view and rate their working or non working hardware. When I think about it, that's really a lot of hardware. So thank you. We still need your help though and you may be aware there is a lot of hardware out there and I know a lot of you have it working. I have created a FAQ (that can be found in the FAQs tab at the top of the page) on how to navigate the site if there's any confusion and a short explanation of the "User Menu". I'm planning on creating a FAQ and a PDF that goes more into detail about hardware submissions. Really what is needed is: (items in bold match the fields on the submission form)

Item title: A title to the entry

**PCLinuxOS Version:** What PCLinuxOS distribution it's been tested on. I was allowing .93a submissions but now it's EOL (end of life) so now I've included TinyMe and Sam so they don't feel left out.

**Item Summary:** A short description of the product in a few lines.

**Item description:** An in depth description with Specifications, etc..

**Images:** An image of the product.

**Meta Description:** This is a short, few word description for search purposes.

**Meta Keywords:** This is for searches also, these will be keywords that will bring up this hardware in a search.

**Review Title:** A title for a short review.

**Ratings:** Rate how well the hardware works with PCLinuxOS, not based on how well you like the hardware, or hardware deficiencies outside of the realm of PCLinuxOS. Rating system follows:

- 1. Does not work at all
- 2. May work but is not effective, fast enough, etc.. to be acceptable.
- 3. Works, but is maybe slower than usual, or has small to minor discrepancies.
- 4. Works well, but not "out of the box." May take some major steps to get working or not all features may work.
- 5. Works either "out of the box" or near enough (maybe, simply copying a firmware file) but every feature works as should.

**Review Comments:** This is the special place where you can tell the rest of the users your experience with how well the hardware worked/didn't work with PCLinuxOS. You can even brag about how great PCLinuxOS is if you feel like it.

Once you've submitted the hardware, it goes into a queue. I look it over, fill in any missing specifications, pictures, and tidy things up a bit. Your entry doesn't have to be perfect as long as I get a part number or a descriptive enough title I can easily google your device and fill in the blanks as needed. If you like the challenge of being a perfectionist, most of the specifications I find come from the manufacturer, cnet, dealtime, amazon, newegg, and a few other sites. I format the tables so they look nice and that is how things work. If you're a Linux guru and know how to get hardware IDs through Ispci, Isub etc.. that information is very much appreciated and will be placed after specifications in the entry when supplied.

I can't stress this enough though, we need you to do submissions. The more submissions the more successful the site can be and the more useful it will be to other users. I have big plans for this site and hardware submissions in the future. Please help make it a worth while venture and submit your hardware.

Please do your submissions at http://PCLinuxOSHWDB.com If you have problems getting to the Add Hardware Form read the FAQ on site navigation and make sure you're logged in with your Hardware Database account.

Thank you all

## Use Cron For Rsyncing the Repository

Loyed

I guess the first question that would come to mind is why would anyone want a local copy of the PCLOS repository? It's actually a simple reason for me. You see I have four computers in the house that are currently running PCLOS with a possible two more on the way. There are other reasons of course that one might want to copy the repositories. Such as when doing testing, or remastering. Basically any time where you might have to access multiple files (or multiple copies of the same file) from the repositories frequently.

So it occurred to me one day while I was updating the three main computers, why should I take up my time downloading from the repository a copy of each updated file that I needed for each computer? By this time I had heard of other people having local area repositories, so I decided that would be a great idea. It all starts out with a lovely little command called rsync, and of course a search through the forums to find out how others use it. My search through the forums didn't yield much, but I found the rsync command that Ikerekes uses, so I felt I had a good base at least. The original command that Ikerekes posted was "rsync -av -P --stats --delete -- exclude=SRPM\* ftp.heanet.ie::pub/pclinuxos/apt/pclinuxos/2007/ /mnt/hd/texstar/pclinuxos/apt/pclinuxos/2007/" Unfortunately that was using heanet which is on the other side of the world from me, and wouldn't work well for what I had planned to do at night before bed (about the time people in that area would be waking up and going to work).

Before we go much further, let's look at what all those options on the rsync command do. First we have the "-av" which sets the rsync command to (a)rchive and (v)erbose. Archive meaning that it will update what has changed since the last copy has occurred, and verbose meaning that it will tell you everything that is going on (which is great if you want to create a log in case of an error). Next you have "-P" (yes, that's a capital P) which tells rsync to keep any partially transferred files. That way should the transfer get interrupted, it won't have to download that whole file again. Then we have the "--stats" option which will tell you how quickly a file is being transferred as well as how long it takes. My favorite part, and the next one, is the "--delete" option. This tells rsync that if a file no longer exists in the online repository, then to delete it in the local copy. That way you don't have a bunch of dead files just lying about taking up disc space. Last is the "--exclude=" option, which tells rsync to just skip over

anything that the exclude is equal to. In this case SRPM\*. The last two bits are of course the source and destination. The source you will have to change to fit the repository that you want to use, and the destination will be a local folder that you want it all copied to.

The difficult part is when you try to figure out how to select the source. If you compare Ikerekes source to the address in the Synaptic, then you would think that you just need to copy the address and put the double colon between the host name and the rest of the source address. Unfortunately, it's not that easy. It's actually a matter of host address followed by the double colons, then the distribution. So when I went with the Indiana university repository it was "spout.ussg.indiana.edu::pclinuxos/pclinuxos/apt/pclinuxos/2007" whereas the actual path is "http://spout.ussg.indiana.edu/linux/pclinuxos/pclinuxos/apt/" It took some playing around for me to finally get the right combination, but knowing how it works (or just using one of the two sources presented here) it should go faster for you.

So we have rsync set up, don't you think it would be great to have your local repository update itself every night while you sleep? Thanks to Intoit for pointing me towards cron. It's a wonderful little daemon that allows you to schedule a command to run at a given time and frequency. The part that we will use is crontab. This is the command that allows a user to view and edit their crontab file. There are two main functions that you will want to use for crontab. The first is crontab -e which allows you to edit the cron file and schedule an event to occur. To properly use this function it also helps to know how to use vi. The main commands you will need for vi (that is if you're like me and use it so rarely that you cannot remember them) are: i for insert, esc to go back to command mode, ":w" to write the file to disc, and ":q" to quit. Once you have entered crontab -e in root you will be put into vi. The only thing that will be entered in thus far is "min(0-59) hours(0-23) day(1-31) month(1-12) dow(0-7) command" commented out as an example of how to set it up. The first two (min and hours) is the time of day. The next two (day and month) allows you to set a specific day and month of a year (or day of the month). Last is dow which stands for "day of the week." If you are going to update every day, then all you will need to worry about is the min and hours section. So, if you want to schedule it to run at midnight every night, then you would enter "0 0 \* \* \* command" Or if you would prefer to have it run every Tuesday at 3 in the morning it would be "0 3 \* \* 1 command" The next option you will want to use is the crontab -I. That will list any cron jobs that the user is currently set up to run. That way you can verify that your job is indeed set up to run.

Now that we have a local copy of the repository, it's time to set up things so that we can use it. First open

Synaptic, then go to settings->repository. Then click new to start setting up a new repository to draw from. Under url, you will put file:/, then the path to the folder you put the repository into. For distribution, it would be pclinuxos given the command from Ikerekes, but the command that I ended up using makes me use 2007 instead. To find out which one you have to use, just go to where you downloaded the repository and check which folder is downloaded. If the first folder is pclinuxos, then use that, if it's 2007, than use 2007. Last is the sections. You will need "main extra nonfree kde." You may add in any other section that you would like (such as testing).

If you are going to share this repository with other computers on your network, I would suggest a Network File System (NFS) share. They can actually be quite easy to set up. First, on the computer with the repository, go to the PCLinuxOS Control Center (PCC) (configure your computer) then mount points, and manage NFS shares. If you don't have NFS set up already, then it will take a while to install the necessary packages. Then you just add the folder that your repository is saved to as a share. Next you have to set it up on the client computers. Return to PCC, mount points, then set NFS mount points. Once again, if you haven't used it, you will have to wait for the packages to install. Then you have to select the server and the share that you will want to mount. From there you next set up a mount point for the share (where the share will reside within your directory system). One option you might want to keep in mind while setting it up, is user under advanced options. That way you can mount the share before you go into Synaptic to install anything.

Last, you might want to go to any computer that will be updating via this same shared repository, and set them to update every morning (sometime after the repository is done refreshing). That way you don't even have to go to Synaptic to get your updates every day. You will need to do two commands for this though. First you have to aptget update, to get the new file list for the repository, then apt-get upgrade -y to upgrade any files that are marked for upgrade. So, have fun with your very own local repository.



#### Tim Robinson

Why a camera review in a Linux magazine? Because Linux has arrived at the desktop. It is not necessary any longer to switch over to some other operating system in order to use specialized multimedia devices such as digital cameras. As you will see below, in PCLinuxOS, digital cameras "just work."

Many years ago, I fell in love with photography. I was young, in the U.S. Army, and there was this photo shop where I could process film (black & white), and make all the enlargements I wanted to at no cost. Wow!

Money was tight then, and my first camera wasn't much, just a simple range finder 35mm. Later, as I became more capable and became more entranced with the picture making process, I earned enough taking portraits of GIs for them to send home to their girls, that I wound up with a couple of quality cameras – a Contarex (Zeiss' best ever), and a Leica M-3.





When I came home and began to raise a family, the hobby waned, especially as I had to then pay for all those chemicals, paper, enlargers, etc. Later, after I became single again, I set up a darkroom in my closet and began taking pictures again. Then the digital revolution began. I still have my Contarex, though the Leica was traded to another GI for a lens for the Contarex. After 45 years, it still works perfectly, shutter speeds are still dead on and now it's a collectible. But in the interim, I got older too.

I developed cataracts as a side effect of long term diabetes, and neuropathy in hands and feet that makes holding anything steady a serious challenge. Money always in short supply, I first invested in an Aiptek Pencam with 16MB of dynamic RAM. It had auto exposure and took "high resolution (640x480) pictures – a maximum of eight before I had to empty it out.

About two years ago, I purchased on clearance an Aiptek 1.3 Mega that offered native 1280x1024 resolution and was happy for a while. Same concept, dynamic RAM and limited quantities of that. It could hold about 40 pictures, but if I bumped the camera inadvertently, the battery could lose contact, the RAM emptied, and all the pictures I had not downloaded were lost. Of course, battery life was also a problem. When I came home from a picture taking day, I had to immediately download the pictures to my computer and then remove the batteries, as the batteries would only last about two weeks, keeping the RAM active.



Speaking of downloading, that was painful. It took approximately 30 minutes for PCLOS via Digicam to download 20 pictures! Never figured out why, I just figured that was the way of it. And of course, even though the images looked good on my screen, I knew in my heart that the resolution simply wasn't good enough to satisfy me even for small prints, let alone anything as large as 8x10.

Yesterday, all that changed. I found the Kodak MD 853 on sale at a local superstore at a very good price and invested in it. I also purchased a 1GB SD memory chip and a USB stick housing for it. I think digital photography has finally arrived for me. Here are the basic specs for the camera:

Ultra Compact Digital Camera Compatible with Secure Digital Memory Card, MultiMediaCard (M), Secure Digital High Capacity Card

Includes Battery Charger (via USB cable)

8.2MP

2.5" LCD Screen Features Indoor/Outdoor Display for Sharper Images, Image Rotate

3x Optical Zoom for Snapshots and Vacation Photos; 5x Digital Zoom for Minor Cropping

Shooting Modes: Easy Mode, LCD Gridlines, Image Stabilization, Continuous Shooting (Burst), Infinity; 16MB Internal Memory Storage Capacity

It's a nice looking unit, with well thought out control layout. I was bit overwhelmed by the number of functions, but after reading through the short manual provided, they all made sense, and I knew enough to begin using the camera.

The first thing that impressed me was the auto-focus capability. For many years, I've had trouble focusing my



cameras, since my eyes no longer adjust for distance (the cataract surgery implanted two plastic lenses in my eyes), and my glasses aren't custom focused for my film cameras, that's a real problem. The camera auto focuses as you move it, watching the image on the view screen on the rear. When ready to take a picture, one presses the shutter button halfway and that causes the auto focus and exposure to "lock." Further depressing the button takes the picture.

An aside here: when looking at cameras, I noted that some had excessively long shutter delays – one was published as 1.3 seconds! That completely eliminates using such a camera for anything requiring a quick shutter finger. The MD853 has almost no delay when the shutter button is depressed, though I was unable to find the exact delay on the Kodak site.

Then I found the image stabilization feature. Wow! Somehow, the software in the camera can overcome my instability and produce sharp, unblurred images. I have no concept how that is done, but I have to say it works as advertised. Every image is clear, something I could no longer be sure of with my film cameras. Most of my film images, when converted either to final prints or computer images, look like they were taken with cheap, throwaway cameras, by amateurs who don't know you have to hold still while taking a picture. I had become very discouraged over the past few years.

Today, I took my little dog and went to the mountains near Denver to shoot pictures. I experimented with the 3x optical and (total) 5x zoom via software. My feeling? Stick with only the optical zoom. Once software begins interpolating pixels for non-multiple zoom ratios, image quality degrades slightly. For small prints, the degradation

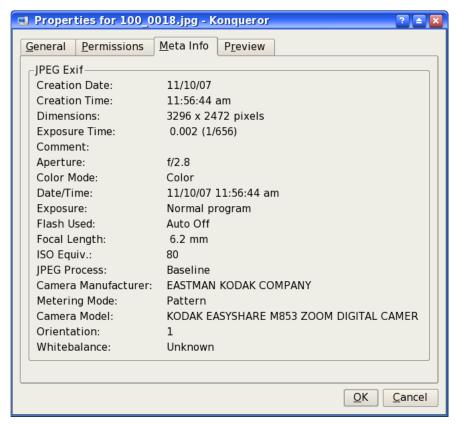
wouldn't be noticeable. For enlargements of 8x10 or greater, it would.

The camera has a number of color shooting modes, which must be selected when turned on. So far I haven't found how to change the default. They are: Normal Color, Low Color, High Color, Black & White, and Sepia. The three color modes are exactly what they indicate – they determine the saturation of the color in the image. I found "Normal Color" to be quite acceptable for most shooting. The High Color setting gives images a slightly Kodachrome look a la National Geographic Magazine. Brilliant colors, but a bit over the top for my taste. YMMV. The Low Color setting yielded results similar to those I had achieved with my previous, Aiptek, cameras – not bad, just not brilliant.

The Black & White setting is nice to have for those images that look better that way, but it lacks the "snap" that one can attain with old fashioned B&W film. The Sepia setting was disappointing; the color and saturation are a bit too red and intense, lacking the subtle tones available in a conventional B&W image that has been toned in Sepia.

Of course, I had to try out the video recording capability. I hand held the camera, set the zoom to 3x, the optical zoom maximum, and recorded 15 seconds of a television program, directly off-screen. The results were surprising. Either the image stabilization feature works on the video setting, or I was steadier than I thought I was. The image records at 640x480 resolution. Sound was OK, but nothing to rave about. If I went to a party, I could use my camera to record the boss making a fool of himself and maybe get that raise I need.

This camera has an 8.2 megapixel sensor. Internally, the images are sensed and recorded at 3296 x 2472 pixel resolution. See screenshot below:



This results in a typical file size of 1 to 1.2MB. Since I have a 1GB SD card, that translates into about 750 pictures before having to download from the camera. Whew! How long a trip would that take? Why only about 750 pictures? There is some overhead involved in the file system on the SD card and the camera's own database. When empty, the 1GB SD card has about 970MB available for use.

OK, I guess it's time for some pictures to show off my new toy. Of necessity, the images in the PCLOS Magazine, whether PDF version, or the online HTML version, must be cut back to lower resolutions that what I got. I hope the staff can set a couple of these on their server at full resolution for you to check out. The level of detail is amazing. Kodak claims this image size can be blown up to 30 x 20 inches. That would result in a "dot spacing" of about 100 dots per inch, about what most magazines use when producing offset images.

Herewith a couple of my best from today:







(Note the bird in the image above.)

I mentioned my miserable experience downloading pictures from my previous digital camera. That problem does not exist now. the 38 pictures I took today loaded from the MD853 in about 30 seconds, though I didn't time it. I also took the SD chip out of the camera and tried it in the USB carrier. PCLOS instantly mounted the stick and opened it for me to look at. Access time is just a hair slower than directly from hard drive, but not by much. This means I can completely skip the use of DigiKam if I wish. DigiKam is a fine program that organizes and manages the access to pictures taken with a digital camera, but in some respects, it holds my hand a bit more than I like. It insists on organizing things into directories it manages and tracks with its own database. If I make a change to anything in those directories outside of DigiKam, it complains. Other than that, though, DigiKam works perfectly, recognizes my camera and downloads quickly.

In conclusion, I have little to say that is not going to involve superlatives, except... Doggone it, twice today, I forgot what I was doing and tried to look through the (nonexistent) viewfinder. In my opinion, since everything is handled so well by the software and overall quality of the camera, some of us old timers would find it a little easier to use if it had a simple framing viewfinder in addition to the nice viewscreen on the back.

Psssstt! This would make a VERY nice Christmas gift for someone special.



#### Rodney Adkins

#### From the forum post:

http://www.pclinuxos.com/index.php?option=com\_smf&Itemid=58&topic=32014.0

"Last few weeks I have read of cases where people are being charged with using someone's open wifi connection. Apparently in some parts of the world that is against some computer data act for some reason.

Personally, my belief is if you are out and about and find a hot spot I cannot see what harm you are really doing, now I am not advocating the use of open wifi's.

It just seems to make sense to me that if someone runs a wireless network without taking the time to lock it down, then they are the ones that are allowing everyone to use their wifi. To put it in context if it is against the law to get onto an open wifi then it should be against the law to run an open wifi."

The vast majority on the forum where against anyone using an open wifi to log onto the internet. They advocated that it was stealing, plain and simple. Most said I would be stealing bandwidth.

Only a very few dared to come to my aid and side on this issue and they were a brave lot indeed (even though vastly outnumbered). I never knew we had so many honest and upstanding citizens on the forums. It is nice to see that so many would take their laptop and go to out of their way to find a "legal" hotspot.

I left the forum that day feeling like a crook as I would not think twice of logging on to an open wifi if I ever had the need. I have thought about this issue since I put the topic on the forum and have now changed my mind drastically. No, no, no! I have not seen the light, I mean about not advocating the use of open wifi's .

If someone has an open wifi, is it really stealing bandwidth if that person has left it open. How can you tell that the owner did not have full intentions of sharing his wifi connection?

Personally from a Linux forum, where the concept of sharing is a given, share code, improve code, pass on code, that is all sharing, I found the majority stand on this issue puzzling.

What a nice world this would be if we shared our signal for internet access.

I know the arguments about the downloading of illegal material, your internet access being used for illegal activities and the list could go on for ever more.

I have news for you who believe this, your internet access even if you are wired directly can be compromised. There has to be a chance of it otherwise why are people so paranoid of running as root? It is not just that you can wreck your own system, is it?

In Canada, the Federal Court of Appeals, dismissed a case brought by the Canadian equivalent of the RIAA because they could not prove that the person whose IP was used to download music was actually the person who downloaded the music. In this case at least, having a open wifi was a blessing. Also having a judge who understood helped too.

I believe it is high time the router manufactures of the world made it really easy for the average user to set up a router so one area of the router would get full access and the part that is open would be limited to so much bandwidth.

The idea of using someone's signal because they may not know how to set up a router is ludicrous.

If I start up my laptop and my neighbour has an open wifi, there is nothing stopping the laptop from grabbing that signal. Now I still don't see what is wrong with using that signal because that signal has invaded my personal space. The laptop was manufactured to grab the best signal, it is doing what it was programmed to do.

I as an average user am doing what I usually do. Turn on my laptop and by golly I am on the net.

Do that in some countries and you are going to be charged under the Data Protection Act of that country.

This is an absurd situation, a average computer user, buys a product that is legally sold, uses it the way the government allows it to be manufactured, then the government police forces can charge you for breaking the law because you used your laptop in the way it was programmed.

What makes this situation worse is that I could be sitting in my own home using my own computer, not realizing that I was using someone else's signal and get charged for it.

As far as I am concerned the law is being used in a way it was never intended, and to stop these bogus charges against ordinary law abiding citizens, I say, open up all wifi and share.

For those of you that think that using someone else's bandwidth is stealing, I suggest that you not read the articles on using Scroogle.

Oh, you use Scroogle already, the little search app that lets you scrape out all of Google's advertising and cookies and use their search engine.

Don't you consider that stealing from Google? After all you are using their search engine without the company having a chance to generate a revenue stream.

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