PCLinuxOS MAGAZINE

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Cover courtesy of Gryphen

From the Chief Editor's Desk

Here we are with the July 2007 issue already. PCLinuxOS 2007 has gone final and our forum has grown phenomenally in the last few weeks. Though there seem to still be a few rough edges, the response from the community has been overwhelmingly positive. Tex and the Rippers are still busy as can be providing updated versions of applications for the repositories, and there is word of a "kitchen sink" DVD version, as well as a MiniMe version to be released soon.

Here at the PCLOS Magazine we've been busy, too. In this issue you'll note we continue our series of the KDE User's Guide. There are a number of interesting how-to articles, and our latest staff addition, Ms. Squishy has written an insightful article explaining what all those directories are that newcomers have trouble understanding. And we're rerunning Merlin's article on how to contribute. Everyone who uses PCLinuxOS can contribute something, whether it be money to Tex or an article for the magazine, help with one of the other projects (visit mypclinuxos.com) or as a packager/developer.

Happy reading. See you next month.

Tim Robinson

PCLinuxOS 2007 FINAL Released

Written by Texstar, Sunday, 20 May 2007

Texstar and the Ripper Gang are pleased to announce the final release of PCLinuxOS 2007. Featuring kernel 2.6.18.8, KDE 3.5.6, Open Office 2.2.0, Firefox 2.0.0.3, Thunderbird 2.0, Frostwire, Ktorrent, Amarok, Flash, Java JRE, Beryl 3D and much much more. Almost 2 gigs of software compressed on a single self bootable livecd that can be installed to your hard drive provided it is compatible with your system and you like the distribution. Over 5000+ additional packages available after hard drive install through our Synaptic Software Manager. Please note PCLinuxOS does not ship with Win32codes or DVD decryption software. Proprietary Nvidia and ATI drivers available after hard drive install.

In addition we'd like to give out a special thanks to the PCLinuxOS community who stepped up last month to help us out and kept us going. Thank you for all your support and we'll keep working hard to bring you a good Linux distribution you can be proud of. We also want to thank Enki Consulting for providing hosting for our website and ibiblio.org for hosting our distribution.

Letters to the Editor

Dear editor, first of all I'd love to congratulate you on your amazing distro - It beats most commercial distros by quite a large distance. Secondly I'd like to thank you for this magazine, as it has helped me understand many things about Linux.

I am a 3rd year student at my high school, and I recently had a solo-talk (basically a presentation) on Linux in front of the class. By the end of my solo-talk I gave out copies of PCLOS TR3 which everyone in my class took home with glee. I also gave them instructions on how to start up the disk and install. My class has 20 pupils, 19 of which own a computer. A couple of weeks ago I asked how many people had tried PCLOS out and 18 out of that 19 raised their hand. I asked how many people used it weekly and I am proud to say that only 1 person put his hand down. That means out of 19 people who have computers in my class, 17 use PCLOS weekly. Is that success or what?

I was thrilled to see my English teacher ask how to install PCLOS over his windows XP install. I think Linux will be a big hit in years to come. A lot of my friends hated Windows Vista so much they reverted back to XP... While there is a need for an alternative, the Linux community has a chance to go main stream. First things first though, we need to get rid of jargon and make Linux more friendly. When I say friendly I do not mean so that the average newbie will understand. We must remember that newbie knew how to search Google. He/she also knew how to post on a forum. Many people I know don't even know what a forum is. I also know many people who just use their OS for Runescape. Linux must stay powerful, but become beginner OS friendly. - John

Thanks John for your kind words. I wish I could take credit for PCLOS, but of course, that honor belongs to TexStar and the Ripper gang. My staff of volunteers on the magazine work hard all month looking for articles that are clear and simple enough for the complete newbie to understand and derive something valuable from, as well as articles for the more technically savvy.

I'd like to extend an offer to publish your story, if you would care to flesh it out a bit. It's always great to hear about such successes. Doesn't need to be very long - 1 or two pages would be great. Use most any editor/word processor you wish and send to me at trobins2006@google.com

Don't worry about spelling or grammar too much. You seem to have that aspect firmly in hand. Looking forward to hearing more from you.

Dear PCLinuxOS, perhaps you can find someone who can write an End-Users Guide to Beryl. I find there are hundreds of variables and totally unknown features of Beryl. I can not get any of my screens to look like the ones in the sparse Beryl
documentation such as this: http://www.desktoplinux.com/files/misc/beryl-cube.jpg

Thanks for any help you can get an author to write. - Ken

Thanks Ken. You're right, Beryl is a huge application with enough variables to choke a horse. I've already put out some feelers for exactly what you have asked for. In the meantime, please feel free, as you solve little problems, to document them as tips and submit them here to me at trobins2006@gmail.com. We'd be happy to have anything you generate.

Review: PCLinuxOS 2007

by Steve Lake

A lot of the greatest hype in the Linux world has been around Ubuntu and its derivatives, namely Kubuntu, Edubuntu and the like. However, there's yet another contender in the Linux world that has been making a lot of noise and is worth a good hard look. Enter PCLinuxOS. A beautiful, out-of-the-box Linux distribution that's familiar, yet refreshingly different. Being a fan of Linux, and curious about all the hype that surrounded this new Linux version, I decided to give it a try. I was expecting to find the same kind of geekish, fanboyistic Linux distribution that might be good for people who really know their way around Linux, and maybe even the intermediate user, but definitely not a distribution that was ready for the new user in any way. To say I was quite pleasantly surprised to encounter just the opposite is to make the understatement of the century. Or at least the understatement of the month. Now as life would have it, no live CD is without a few complaints, but this one seems to be as such for the most part. The only part I had a complaint about was the boot time of the live CD. That's simply because of how thorough the live CD is while booting. A-plus as far as I'm concerned.

When you first power on your system, you are greeted by a simple, 8 option welcome menu. The options are:

    LiveCD (pretty self explanatory)
    VideoSafeModeFBDev (developers' safe mode)
    VideoSafeModeVesa (generic safe mode, video only)
    Safe Boot (generic safe mode, entire system)
    Console (self explanatory)
    Copy2Ram (Run the PCLinuxOS live CD from RAM rather than the CD)
    MediaCheck (test all your devices, including your HD)
    Memtest (test your memory)

Yes, it actually has memtest in there. A live, bootable, ready to use copy of Memtest+ 1.65 that you can use anytime you need to in order to test your memory. That's one of several things that surprised and delighted me. The MediaCheck option was interesting too in that it did a complete check of my hardware. The test machine failed out on the hard drive, but that's not too surprising since it's an IBM DeskStar, hence why it's in my test station and not in a live system. So a failure there on a highly thorough test is not surprising. This menu screen also gives you, at the bottom, a choice of other languages, other boot options, or it can provide you with some

simple help. Now that I had gotten this far, I decided to boot the live CD and give it a spin.

Once you tell the live CD to boot, go grab yourself something to drink because it's going to take a bit to load. As I said before, that's not all that bad a thing because while it does take a while to load in comparison to other live CD distributions like Knoppix, it's also a lot more thorough and does a lot of research and homework on your system before completely loading everything so that it's certain it has the best drivers for your computer. If you're in a hurry, don't use this as a live CD. If you're not, then by all means I recommend this one over any of the others. Once the live CD had loaded, I was greeted by a series of menus that asked what kind of keyboard I used, what time zone I was in, how it should do the date, clock and time zone settings, the type of network connection I had (it included, to my amazement, Ethernet, satellite (dvb), cable modem, DSL, ISDN, wireless, GPRS/3G, Bluetooth dialup networking, and the good, old-fashioned analog dialup modem as networking options), what standard the connection used, manual or dynamic IP allocation (DHCP), DNS and hostname configuration, if I wanted to start the connection at boot time, or manage it manually for each user, and if I wanted to start it now. That may seem like a lot of steps to get into a simple live cd, but the attention to detail is a good thing and quite commendable. Better too much attention to detail than not enough.

Once the last stage of booting was completed, I was greeted with a very nice looking, and rather simple login screen. Most live CDs won't ask you to login simply because it's assumed that you're only evaluating Linux or using the CD for testing and don't want to be bothered with security. PCLinuxOS doesn't do that since it uses the KVM session manager instead of a raw version of KDE or Gnome, so you have to login no matter what. To get you started you're greeted by the login screen and given the choice of two existing users, Guest and Root. And lest you panic at this point not knowing what the passwords are, the PCLinuxOS guys thought of this in advance and very conveniently provided you with the login info at the top left of your screen.

Sure, that doesn't necessarily lend itself to good security, but then again, this is a live CD, so security is not that important on the user interface. Security will only become important after you install the OS to your hard drive. At that point security becomes important and what is glossed over or ignored on the live CD is paid close attention to on the live install. But

anyways, back to the install. In this window you're also given two menued option buttons at the lower left of your screen (similar to the three mentioned before in the previous screen) that allow you to choose between two different default window managers, KDE and drak3d (similar to KDE, but with a lot of 3d eye candy), and several system options such as switching users, shutting down the machine and more.

Logging in as guest allows you to evaluate the system as a visitor, or logging in as root allows you to do much more in-depth tinkering and testing of the live CD environment and even install PCLinuxOS. In this environment you will find that you are able to very easily look around PCLinuxOS and get a complete feel for what it offers, its uses, and much more. Also, the live CD environment effectively allows you to test out the entire OS before installing it to root out any problems with your hardware at the very beginning. My test system is a slightly older setup, but still very usable and solid. Here's the hardware I was using on my test machine.

    AthlonXP 2500
    2gb RAM PC2700
    60gb HD
    GF3 ti220
    Asus A7V8X-X
    Plextor 8x CDR
    Generic DVD-ROM
    Onboard sound

On initial testing, the system was amazingly stable and had none of the issues I typically find with live CDs. Everything looked beautiful and ran fast, despite running from a live CD. So, seeing everything was fine, I decided to take the plunge. Upon clicking on the "Install PCLinuxOS" icon on the desktop I was greeted by a wizard that very quickly and painlessly walked me through the formatting and installation of the OS. Installation took me a half dozen clicks and about 15 minutes to complete using the built in Draklive installer. Once it completed it asked me a series of basic questions including setting the root password and any users I wanted to create. I could even go into the advanced mode and choose which shell and user/group ID I wanted the person to be a part of. At this point everything was completed and I rebooted my computer.

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Once the computer rebooted I was greeted by a 3 option boot menu. The options where:

Linux (i.e., PCLinuxOS)
Linux-nonfb (same as Linux, but without the framebuffer; i.e., a type of graphical safe mode)
Linux-Safe settings (i.e., Linux safe mode)

I of course jumped straight into the Linux option because I wanted to experience the full glory of this new OS. I must say up to this point that the PCLinuxOS team's motto of "Radically simple" really does apply here. So far my install has been completely painless. For a new user coming into this OS, I think it's pretty much a cut and dried matchup. But for the more seasoned Linux user, they may find a few things in here that don't quite match up to their personal tastes. I for one tend to be a bit of a UI purist. I like my KDE unaltered and my OS clean. These are more personal tastes and don't really affect the actual OS. But depending on how you view what your default user environment should be, that may be a make or break for you. PCLinuxOS tries to balance both worlds as much

as it can and where it fails in some areas, it excels in others. But in the end, even though each person's experiences tend to be different, they're all typically good.

Take, for example, the control center. The PCLinuxOS guys did something that really impressed me. Makes me almost wish the other Linux distributors did something like this. They essentially give you two control panels. PCC, which is their own custom control center for hardware, system and driver management, and Kcontrol, which is the built in KDE control center. If you load Kcontrol, you'll find to your great joy that you are presented with a completed unaltered, and unadulterated copy of the control center that gives you full and total control over your KDE environment. If you load PCC, you find yourself in a simplified, but powerful control panel that allows you to direct control of boot management, hardware. networking, security and more. So if you're a purist like me and prefer to do things the old school way with Kcontrol

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and the console, you're all good to go. If you prefer to have the OS hold your hand, then PCC is right for you. In short, it satisfies both camps. There are a few little things though that I didn't like (again, this is personal preference and not so much a system bug) in the interface such as the way Konqueror windows are setup by default and how icon handling in the Konqueror windows works, but if those few little UI quirks are the worst that's wrong with this version of Linux, then I say that it's perfect.

Another thing I noticed -- and this is a good thing -- is how fast the OS was. Sure, this is Linux, sure, it's using KDE 3.5.6 on KDM, but for some reason the entire computer was moving and operating much faster and much smoother than anything else I've played with, including Ubuntu. That surprised me. I don't know what they did to improve this, but they did something. Either way it's very noticeable. I'm not saying that to switch to PCLinuxOS 2007 is going to upgrade you from a jalopy to a trans-am performance wise, but you'll certainly feel that way.

The next thing to do was to test out how easy program installation is. I quickly found the Synaptic package manager in the main menu, found XMMS, my favorite music player program, and within a few seconds it was installed and ready to use, no questions asked. The only glitch I ran into was with the onboard sound on my computer. I apparently had some ALSA based driver that needed to be configured in XMMS before I could use it. But that was really the only problem I had. Once that was taken care of, XMMS ran without a flaw. Other programs installed with ease and operated without flaw as well. Next I tried network access. I simply opened Konqueror and within minutes I was on my Samba server grabbing and exchanging files no questions asked.

Multimedia support was also very good. Surprisingly good, given all the restrictions on multimedia codecs and the like these days. I decided to see what DVD support came native with it. So I popped in a DVD and Konqueror saw it right away and asked me what I wanted to do with it. Sadly, the only two options were to do nothing or open it in a Konqueror window. Also, DVD playing didn't work out of the box. I had to do some hoop jumping to get that working. Again, we have the great media overlords at the MPAA to thank for that bit of pain and suffering. As for regular video playing of AVIs, well, that went off without a hitch. So, aside from the small hiccups with XMMS and the DVD playback, the rest of the multimedia testing went off without a hitch.

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I then decided to go take a trip through the Kmenu. Even though it's got a
new icon and a slightly altered look, it's still the Kmenu. The breakdown is
pretty typical of the Kmenu with its three basic sections, which are "Most
used applications", "All applications", and "Actions". But the similarities to
the default Kmenu stop right there. The menu here is broken down into
five basic sections which then break everything else down into well
organized and simplified groups and sections and only contain those KDE
and 3rd party open source apps that apparently the developers felt that
you'd need. For example, there's no Kmail, but there is Thunderbird.
Firefox is also included as is Kwrite, but Kate and Kedit are not.
Interestingly enough, even though the PCLinuxOS team left out a lot of
good applications from the Kmenu, they are still easily accessible through
the Synaptic package manager and can be added if you like. So if you
really, really need to have Kmail for example, or Kedit, they can easily be
installed. One advantage of this is if you're a person who hates bloat of any
kind, you'll love this as only the most essential apps were left in the menu.

But despite this, the interface is fresh, well constructed and easy to use,
but still very much a KDE front end. If you use the other window manager
included with PCLinuxOS, you'll find the same clean bloat free
environment as you do under KDE. If I was to compare it to the most
popular existing distribution out there, in this case, Ubuntu, I'd have to
say that it beats Ubuntu and all its derivatives hands down. Actually, I'd
go so far as to say it drags Ubuntu into a dark alley and beats it black and
bloody. This is because, while Ubuntu tries to simplify things for the end
user, it goes too far and ends up destroying everything it worked so hard to
achieve. PCLinuxOS does in fact dumb things down for the user, but only
where it needs to, when it needs to while keeping things clean and pure
for those who don't want things dumbed down for them. And it does all
this while keeping it simple, stable and easy to use. So is that all there is
with this OS? Not really. One very important thing with any Linux
distribution of late is how a distribution handles games.

Needless to say, the games support was odd. If you installed a game via
Synaptic, operation and gameplay were flawless. But install it from source
or external package, and nothing worked. Most of the time the package
wouldn't even install, or if it did, things were flaky at best. Not sure what's
up with that, but considering most major Linux games are available via
Synaptic anyways, this is really a non-issue. Although I think that having
a much better interface for installing 3rd party games that aren't part of

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the Synaptic installer repository would be a big plus.

Now, moving on from all that is great about PCLinuxOS 2007, let's look at a few things that aren't so great. Thinking from an experienced user's perspective in regards to the general interface, I know that a lot of new users to Linux who are going to do the one thing that is every system admin's nightmare. They're going to press the "magic red button".

What do I mean by this? The "magic red button" is usually a reference to anything that a user can click, touch, or press that brings whatever it's connected to down in flames. In the case of PCLinuxOS, that "magic red button" is the icon that is left on the desktop after installation, labeled "Install PCLinuxOS". This is the same button that was seen on the live CD that connects to the same program that automatically installed the OS via a brief user wizard. If a user clicks on that, and you know a good number of them will, they'll likely, out of pure human curiosity, click on it and follow through with the wizard. This will of course fail, resulting in a completely trashed install. It's not a matter of "if" it will happen, but rather "when". As a friend of mine once told me, "Give a user a length of rope and before you know it, they'll hang themselves." If that icon is the "rope", the rest isn't far behind.

While PCLinuxOS does still have a bit of growing to do, out of all the Linux distributions out there, I'd easily rate this one as the best in every way because of all that it does, how easy it is to use, how ready it is to use out of the box, and most especially in the area of appeasing both camps, the new user and the experienced user. If you haven't tried out this Linux version, you really should. I easily give it two thumbs up. And I mean way up.

How to Contribute

by Merlin Whitewolf

Contributing is a big part of the FOSS community. Developers contribute their time and efforts to the community to develop applications and/or an OS. The reasons they do so may vary, but the result of their efforts is a direct presentation to the community. Without them, we, as users, would not be here. We would not be using PCLinuxOS or any other FOSS system or software.

It is important that we contribute also. We should not allow ourselves to be just users, but rather we should become full members of the community by our contributions. There is no lower limit on contributing. Everyone can contribute something.

Here are a few suggestions:

Donate money - There are always financial needs connected with any software or system development. Contribute what you are financially able to give. Start with the OS you are using. If you have more financial resources available, contribute to the developers of your favorite or most used applications.

http://www.pclinuxos.com

This is the method by which further development is made possible and newer hardware becomes usable with this and other GNU/Linux OSes.

Contribute your talents - If you have the knowledge to add to the efforts that go into developing PCLinuxOS, volunteer to work with the ripper gang. If you can contribute to the development of this OS or any open source project by adding to the code of a program or writing an interface to a command line program, you will have given a contribution to the community.

Join a Project - Visit http://www.mypclinuxos.com/ and see what projects are being developed. There are many projects that contribute to the community that are hosted there. The magazine project, the beautification project and others welcome contributors. If you have no major skills, volunteer to be a tester. If you lack enough knowledge to be an effective tester, give encouragement. Everyone has something to give.

How to Contribute

Active Community Participation - A) If you know, or think you know the answer to a new user's problem, respond to their question. If the answer they need has been posted previously, respond with a link to that thread and a sentence or phrase like, "I believe this may help."

B) The forum has a search feature, but don't assume that everyone knows how to use a search engine to its fullest extent. Assisting someone with searching for an answer and in the process giving them the search terms you've used will contribute to their knowledge. In turn, they will have the knowledge needed to pass on these solutions at a later time to another new member of the community.

Encouraging others in their attempts at learning something new or giving them the knowledge to continue has its value. Many times the simple act of encouraging someone to continue in their search for knowledge is the greatest contribution that can be made.

C) Welcome new users. A simple "Hello, nice to meet you" can be very important. It lets new members know that they are noticed and are not lost in a crowd of strangers. No one should ever feel invisible. Whether they are knowledgeable and able to make an immediate contribution or an absolute beginner, every new member should know that they are welcome.

D) Be kind. Be patient. A little kindness goes a long way. So, too, does impatience and cruelty. Being kind and patient contributes much more to the community, both now and in the future. It brings a much greater chance of continuing to have a community of users, rather than a list of users.

E) Help to seed PCLinuxOS. http://linuxtracker.org/torrents-details.php?id=4143 Keep the number of seeders up by joining the torrent.

These are my ideas about contributing, in particular about contributing to the PCLinuxOS community. In my opinion, these may be applied anywhere, but as a wise man once told me, "You always start where you are."

This guide has been modified by Papawoob to reflect the Linux distribution of PCLinuxOS 2007.

Chapter 5: Using the Printer and Scanner

While the holy grail of office computing may well be the paperless office, for many users, it is often desirable and indeed sometimes necessary to be able to put on hard copy the information available on the computer. The printer allows you to do that. The printer is essentially an output device with which you are able to output text and graphics onto paper from digital data stored on the computer. To complement this, the scanner is an input device with which you can transfer text and graphics from paper to the computer and store it in the form of digital data which can then be further manipulated by other software applications.

The Printer

Printer Setup and Configuration

If you have a printer attached to your system you will need to configure and set it up before you can use it properly.

Note:
To enable the system to detect your printer properly, you should turn on the printer before trying to configure it.

When you want to install a new printer, click on the PCLinuxOS Control Center (PCC) button located in your Panel. You will then need to enter the root password since you are now attempting to set and change some system parameters and configuration files. Choose the Hardware tab and then select: Setup the printer(s), the print job queues,... This will bring up a window that looks like this:
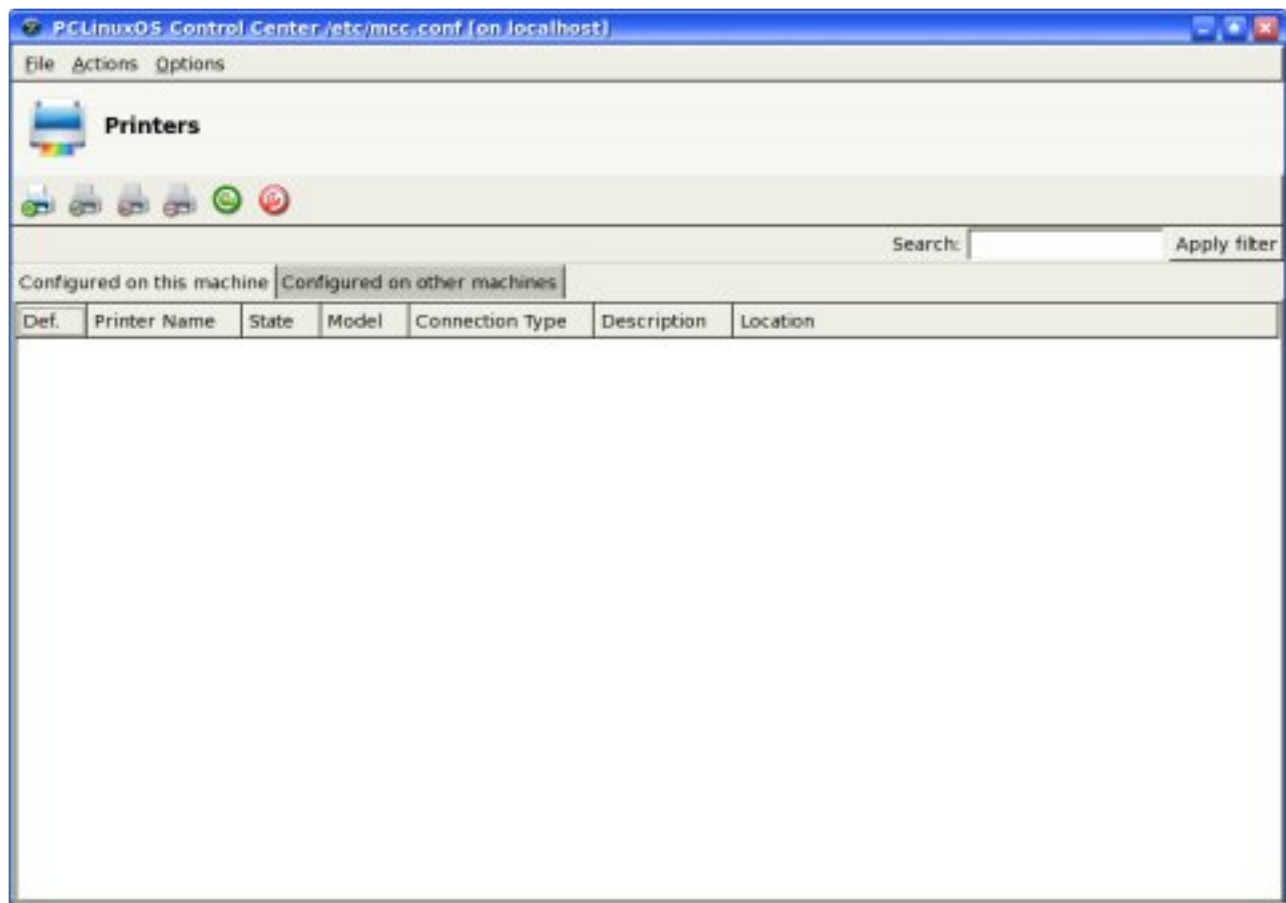
Fig. Printer Config Screen

If all goes well you will see your printer listed in this screen. If so, you will need to click once on your printer to highlight it and choose the Edit selected printer icon. Choose Make Default and click on Do It. You are now ready to print. If this does not happen then while at the printer configuration screen shown above click on the Add a new printer to the system icon to add and configure a new printer. A new window will be

opened that looks like this:

Fig. Add New Printer

This screen will explain your options for having the printer wizard auto detect any computers that are attached to your computer, or attached to another computer on your network. There is also an option to auto detect a printer attached to a computer running Microsoft Windows. Click on the Next button and the auto detection will be run. When it is finished you will be presented with a window that looks like the figure on the next page:

KDE User Guide, Chapter 5

Add a new printer

Add a new printer

The following printer was auto-detected. The configuration of the printer will work fully automatically. If your printer was not correctly detected or if you prefer a customized printer configuration, turn on "Manual configuration".

⊙ Printer on parallel port #0
☐ Manual configuration

Cancel   Previous   Next

Fig. Detected Printers

By clicking Next, the detected printer will automatically be configured for you. You also have the option to configure your printer manually yourself, but this option should be used only if you know all the specifics necessary or if your printer was not found during the auto detection process.

If you choose manual configuration and click Next a new window will appear. Select the manufacturer of your printer, and then scroll down to find your specific printer. When you click Next, you will be taken to a screen that will show you the default settings for the selected printer. Clicking Next again will allow you to name your printer or you can go with the default name. Click Next one more time and you will be asked if you want to make this printer the default printer for your system. Choose Yes or No and click Next again.

You will now see a window where you can print either a text or photo test page. Go ahead and try one or the other or both and see if your printer is configured correctly. After your test page has printed and you are happy

that your printer works correctly, click Next one last time. This will bring up a congratulation page that tells you that your printer is configured correctly. Click Finish and you are ready to print.

Managing Print Jobs

When you send something for printing from your application, the data to be printed is stored in the print spooler area and a print job is added to the print spooler queue. In this way many printing jobs can be carried out without waiting for the printer to finish printing a job first before accepting another printing job. The Print Manager is used for managing the print jobs associated with a given printer. The Print Manager can be found by going to Menu > System > Configuration > KDE > Peripherals > Printers.
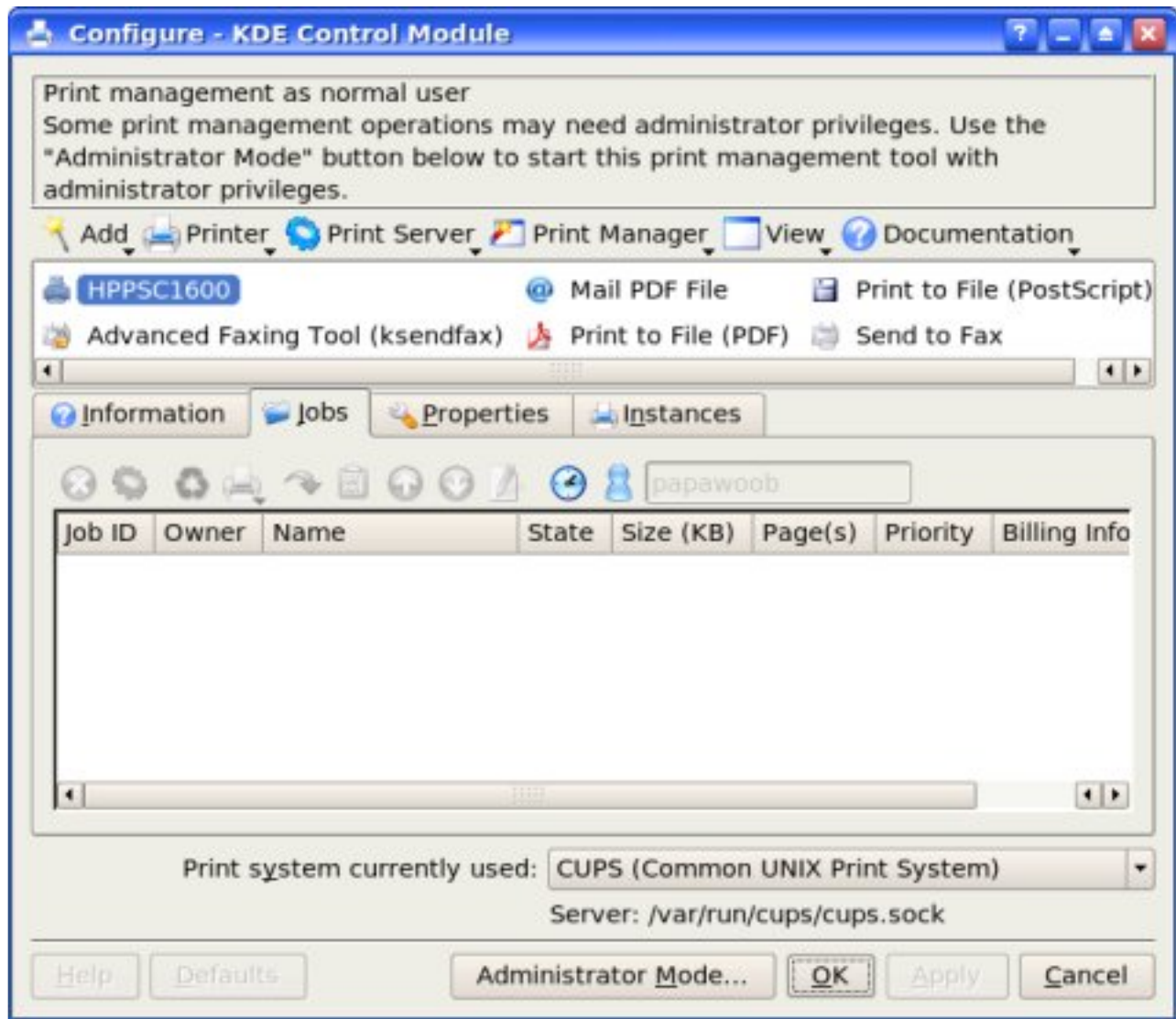
Fig. Print Jobs

The Print Manager can be utilized to check on the status of the printing jobs that you have submitted to the printer and to cancel jobs still in the queue if you need to. To do this, launch the Print Manager and then click on the Jobs tab. A list of current print jobs in the queue is displayed. To cancel a print job, highlight the job in question and then left click on the Remove button on the menu bar on top.

Using the Printer

Normal usage of the printer from an application is straightforward. Select the printing function from your application and a print job is then automatically submitted to the printer queue.

The Scanner

The scanner is a device which allows you to convert analog graphics e.g. a photograph or a printed page into digital format where it can be stored on the computer and further manipulated by appropriate software. Flat-bed scanners for personal use are quite common nowadays.

Most scanners connect to the computer using the USB, SCSI or parallel ports. To use the scanner, suitable software to control and drive it is required. The SANE backend drivers may be used to drive the scanner hardware while the XSane GUI front-end acts as the end-user interface. To check whether the scanner you have can be used, the SANE website at http://www.sane-project.org should be consulted.

Using the Scanner

You can start the scanning software on the Desktop, from the Main Menu,

Main Menu > Multimedia > Graphics > Kooka

This will invoke the Kooka program; the main window in Kooka consists of three frames. At the top, see both icon and menu panels. Use the mouse to enlarge or reduce the windows as needed.
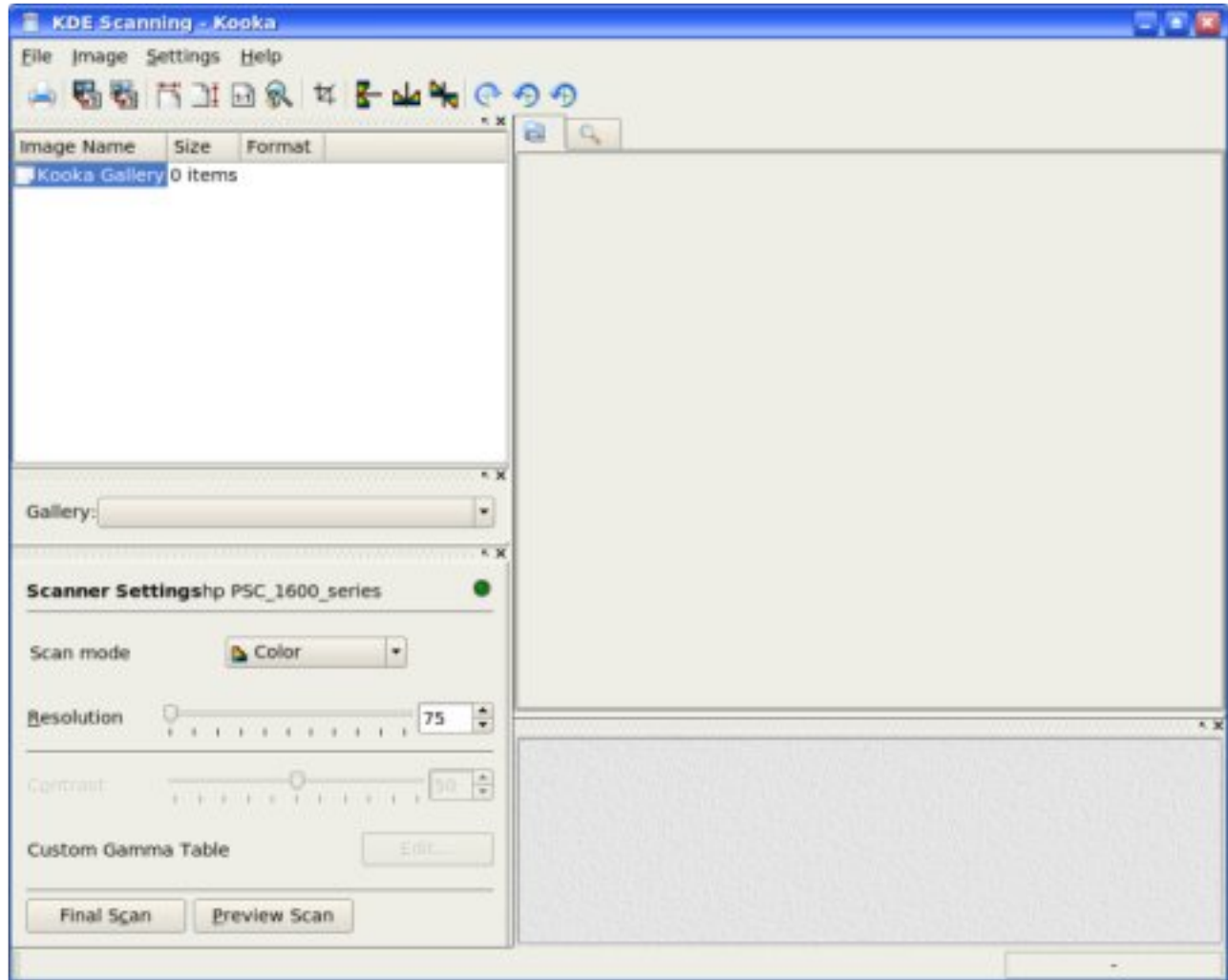
Fig. Kooka Main Window

The navigation window consists of two tabs, which allow you to switch between the Preview and the integrated file browser called the Gallery. The working folder is displayed in the lower part of the window along with the folder where the scan will be saved.

Make your scanner-dependent settings, which are dependent on the scanner you have connected, in the lower left window. Usually, these are settings for resolution, brightness and contrast, scanning mode (e.g., color, gray, or binary), and for gamma values. Configure your settings here first.

Preview

Before the actual scanning of an image takes place, the preview operation

is usually carried out to preview the scanned image. To perform the preview, place the image to be scanned into the scanner and initiate the preview scan with Preview. If the Preview tab in the upper window is selected, see the results there.

Select the various formats in the preview image itself to define the final dimensions. The User setting is recommended for this, so you select the area to scan in the preview display with the mouse.
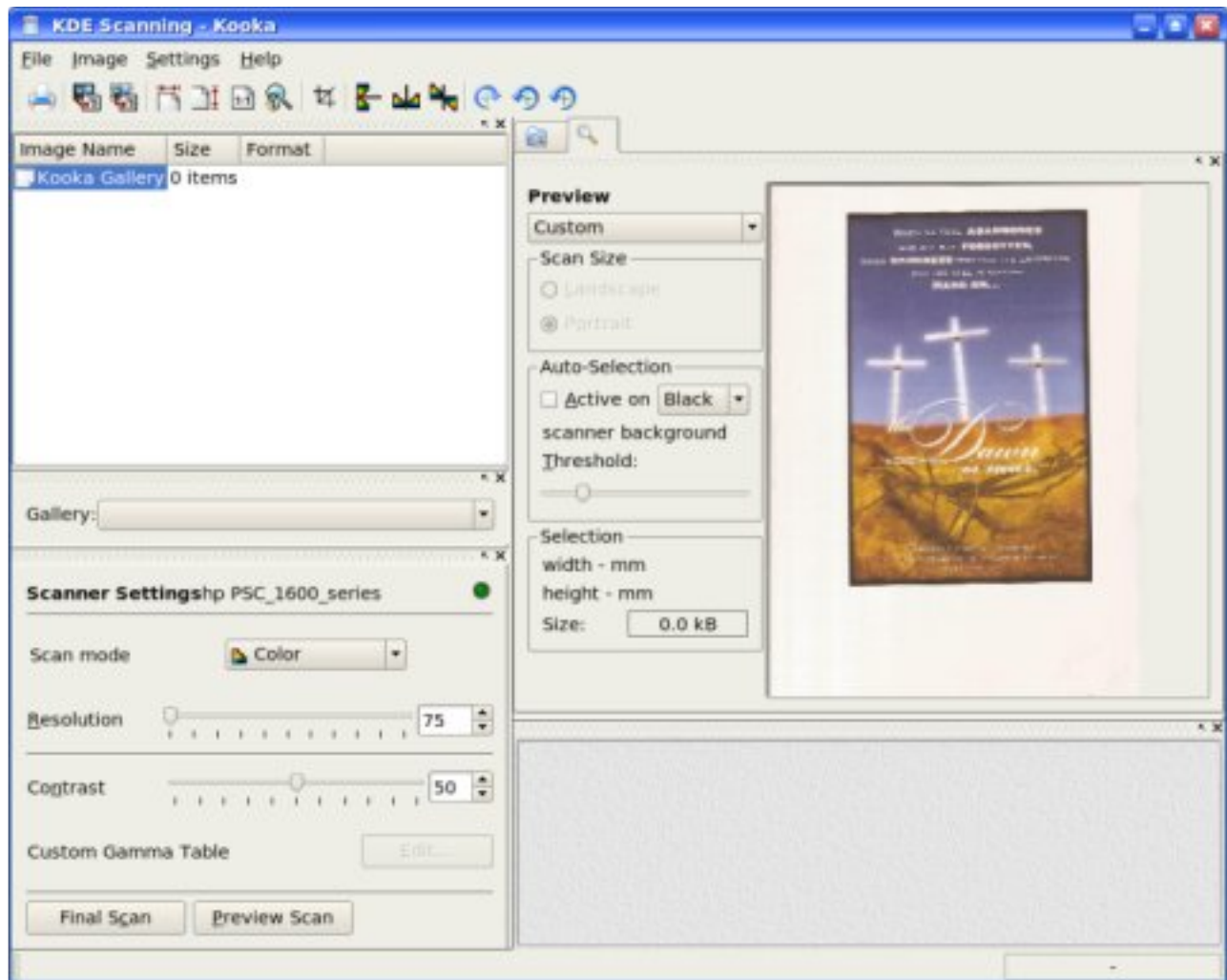

Fig. Preview Window

As the scanner will scan its entire scanner bed by default, if you are scanning an image which occupies only a part of the bed you will want to select only the area which holds the image to be scanned. This can be done from the Preview window in several ways. One way is to manually

select the scan area frame by pressing and holding the left mouse button to define one edge, moving the mouse so that the area to scan is completely inside the frame (which is marked by a dashed white line) and then releasing the mouse button. Another way is to select the Autoraise button and then clicking on the image to be scanned. A frame is created to mark the scan area. The mouse may be used to adjust the scan area if it is not fully correct.

Scan

After the appropriate scan area has been chosen in the Preview window, the image can be adjusted and/or enhanced for color correction, contrast, and brightness. The gamma value, brightness and contrast can be adjusted manually in the scan window before performing the scan.

After a satisfactory image is seen in the preview window, perform the actual scan by clicking on the Final Scan button. The scan will be performed and the scanned image displayed in the Viewer window.

Save

The method for saving an image is somewhat different in Kooka than in many other applications. Click the Gallery tab to open a small file browser. This is the folder ~/.kde/share/apps/ScanImages/ In the lower portion of the window, your current subfolder in the gallery is shown. This is where all scanned images are first saved as files. When starting Kooka for the first time, you will only see the ScanImages. Create subfolders by right clicking this folder. The selected folder, highlighted in blue, is the first save location of the scanned images. The scans are labeled in ascending numerical order as in kscan_0001 and kscan_0002.

To save an image permanently, left click the name. Next, give a new name and the appropriate ending for the image format chosen when scanning. If you enter a different extension, you will get a message that it does not correspond to the scanned format. Although you can still save the image under this name, it will retain its original format. At present, on-the-fly conversion is not offered.

If you do not want to use this method of managing your images in ~/.kde/share/apps/ScanImages/, you can, of course, save them to another location. To do this, right click the image name and select Save. Choose

any path here. In addition, close or permanently delete images here.

Help

More detailed information on how to use the scanner software as well as changing the default configuration can be obtained by clicking on the Main Menu and then on More Applications, Documentation, and then KDE Help Center. After the KDE Help Center opens choose KDE User Manual and scroll down to III. KDE Components > 6. The Base KDE Applications > Graphics and then scroll down to Kooka.

Exercises

1.Perform a scan of an entire photograph containing several people or objects.
2.Using the same photograph as for the previous exercise, this time perform the scan for only the image of one person or object.

This guide has been modified by Papawoob to reflect the Linux distribution of PCLinuxOS 2007.

Chapter 6: Accessing the Internet

The Internet has revolutionized information usage and dissemination. It has made the global village a reality whereby almost anyone, anywhere in the world, is reachable if the person has an Internet connection. The most common way to get Internet connectivity is by using the PC, be it at home, in the place of work, the community hall, or even a cybercafe.

In this chapter we shall examine some of the more common methods in which a PC can gain access to the Internet.

The Internet Service Provider (ISP)

For a personal or home user, before you can access the Internet you will need to sign up with an Internet Service Provider (ISP). The ISP usually has a network which is connected to the Internet by a permanent telecommunication link, i.e., one can view the ISP's network as part of the Internet. The ISP provides the necessary networking infrastructure to enable you to connect to its network. Thus, once your PC successfully

connects to the ISP's network, it can then access the resources and services provided by other computers on the Internet.

The Internet can be accessed from your system using a variety of methods, depending on the type of access methods supported by the ISP you sign up with and the type of networking devices you have installed in your system. Currently the most common methods of connectivity by a home or personal user to an ISP are:

dial-up
DSL or Cable Internet

Dial-up Connectivity

The simplest way to access the Internet is to use a dial-up telephone line connection. Almost all ISPs provide dial-up access connectivity to the Internet using the existing telephone line in the home or office. To do this you will need the availability of a telecommunication device called a "modem." Most modern PCs come with a built-in dial-up modem card or if it does not, you can purchase one and install it or purchase an external dial-up modem and use the serial port available on your PC for connection.

Before you can dial up to your ISP and access the Internet, you have to configure your system to recognize the modem and then dial the correct number to your ISP. You will need to have at hand the following information needed for the modem configuration:

- telephone number to dial to the ISP for the Internet access
- Internet access login name and password provided by the ISP

Modem Configuration

To configure your modem for Internet access, start KPPP from the Main Menu:

Main Menu > Internet > Remote Access > KPPP

KPPP

Connect to:

Login ID:

Password:

☐ Show log window

Quit   Configure...   Help ▾   Connect
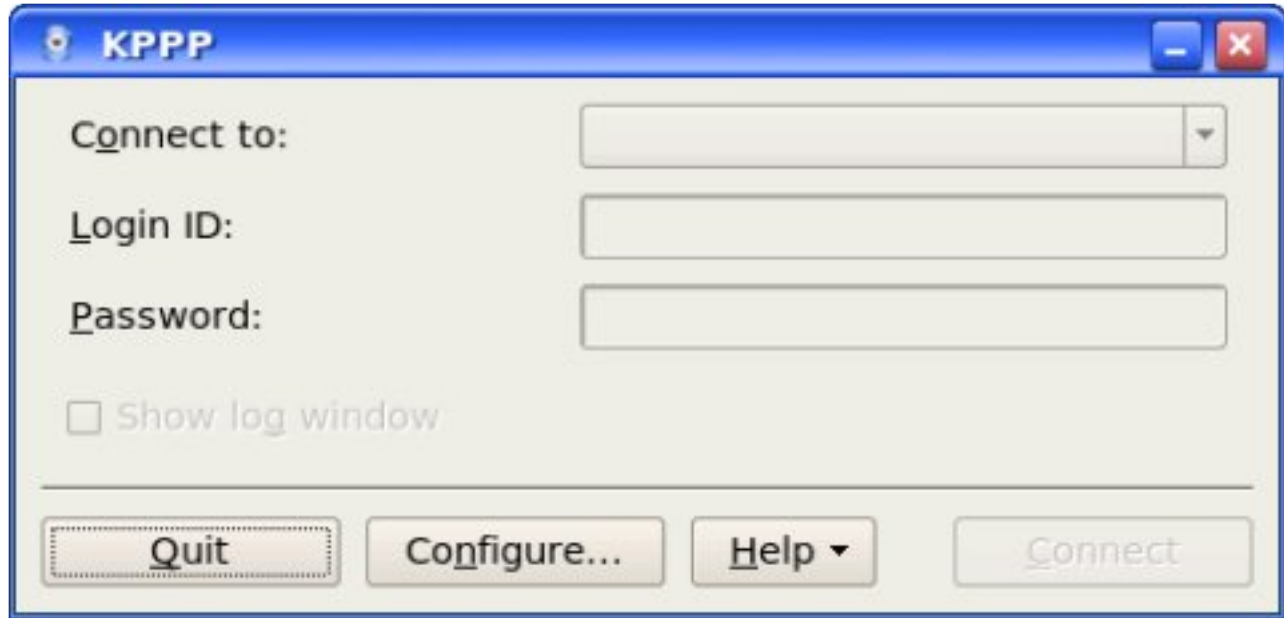
Fig. KPPP Internet Dial-up Tool

1.Select the Configure button. Click on the New button.
2.You'll be prompted to Create a New Account. You could try the Wizard to set up your system, but if you live in the United States, the wizard will not find any ISP's. You'll need to use Manual Setup, but that's not difficult.
3.The Add button will prompt you to enter the phone number of the ISP (Internet Provider). If you need to use an area code and/or a dialing prefix to reach the ISP, you should enter them in the box provided, otherwise just enter the telephone number.
4.Enter the name you want this connection to be known by, usually the name of the ISP is used (this is is just a nickname provided by you so that you can recognize this connection). Enter the login name and the password in the boxes provided.

The PCLinuxOS Hardware Database

New Account - KPPP

| Dial | IP | Gateway | DNS | Login Script | Execute | Account ◂ ▸ |

Connection name: [   ]

Phone number:
[   ]   Add...
                         Remove

                         ⬆
                         ⬇

Authentication: PAP/CHAP ▾

☒ Store password

Callback type: None ▾

Callback number: [   ]
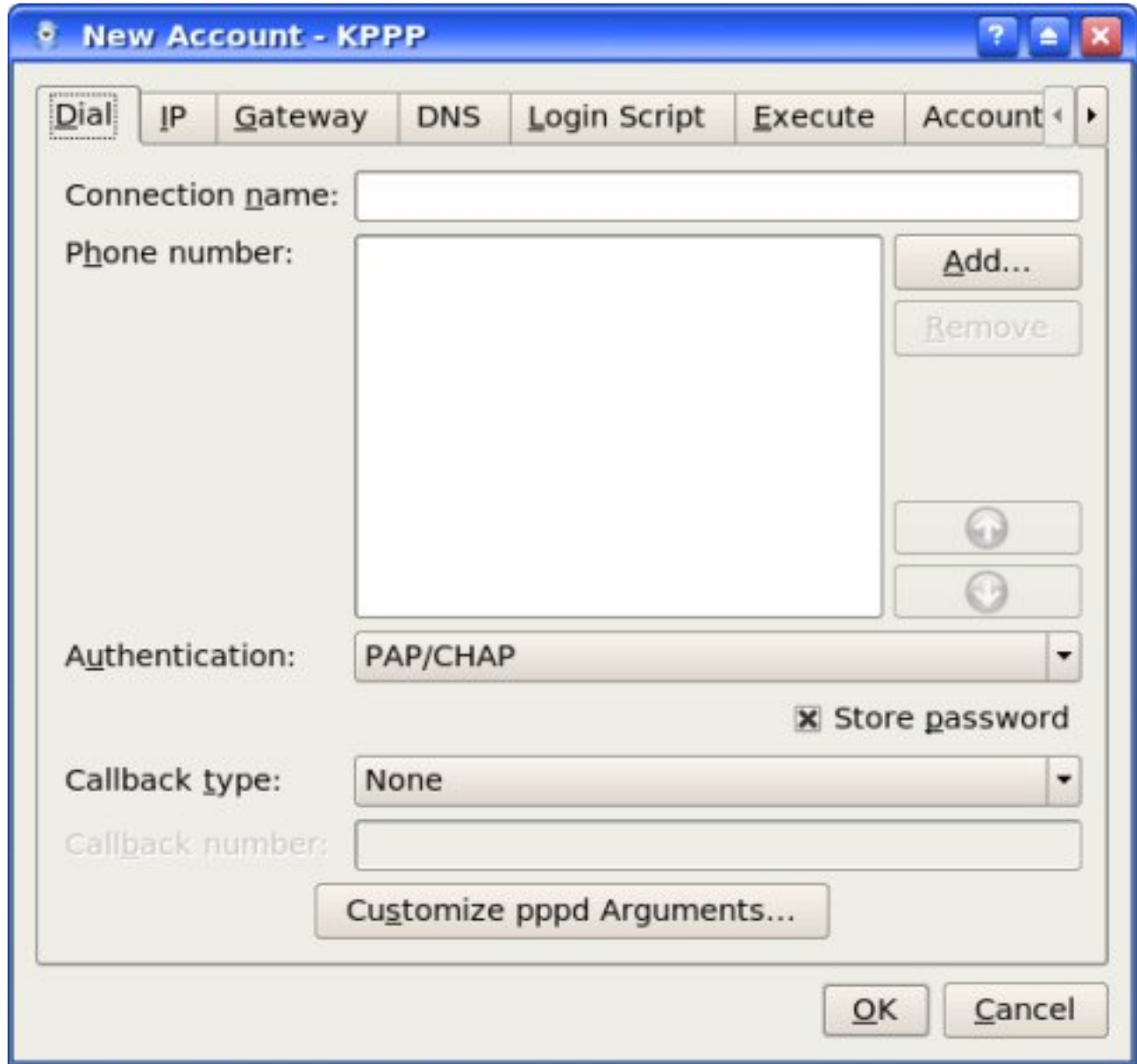
Customize pppd Arguments...

OK   Cancel

Fig. Filling in the ISP Provider Information

5.Don't worry about the IP Settings tab. Most ISP's assign IP addresses automatically (Dynamic IP). If not, you'll need to contact your ISP, and get the information from them. Then, just enter your IP address and related information by selecting the Static IP address button.

New Account - KPPP

| Dial | IP | Gateway | DNS | Login Script | Execute | Account |

Configuration

○ Dynamic IP address

● Static IP address

IP address: [   ]

Subnet mask: [   ]

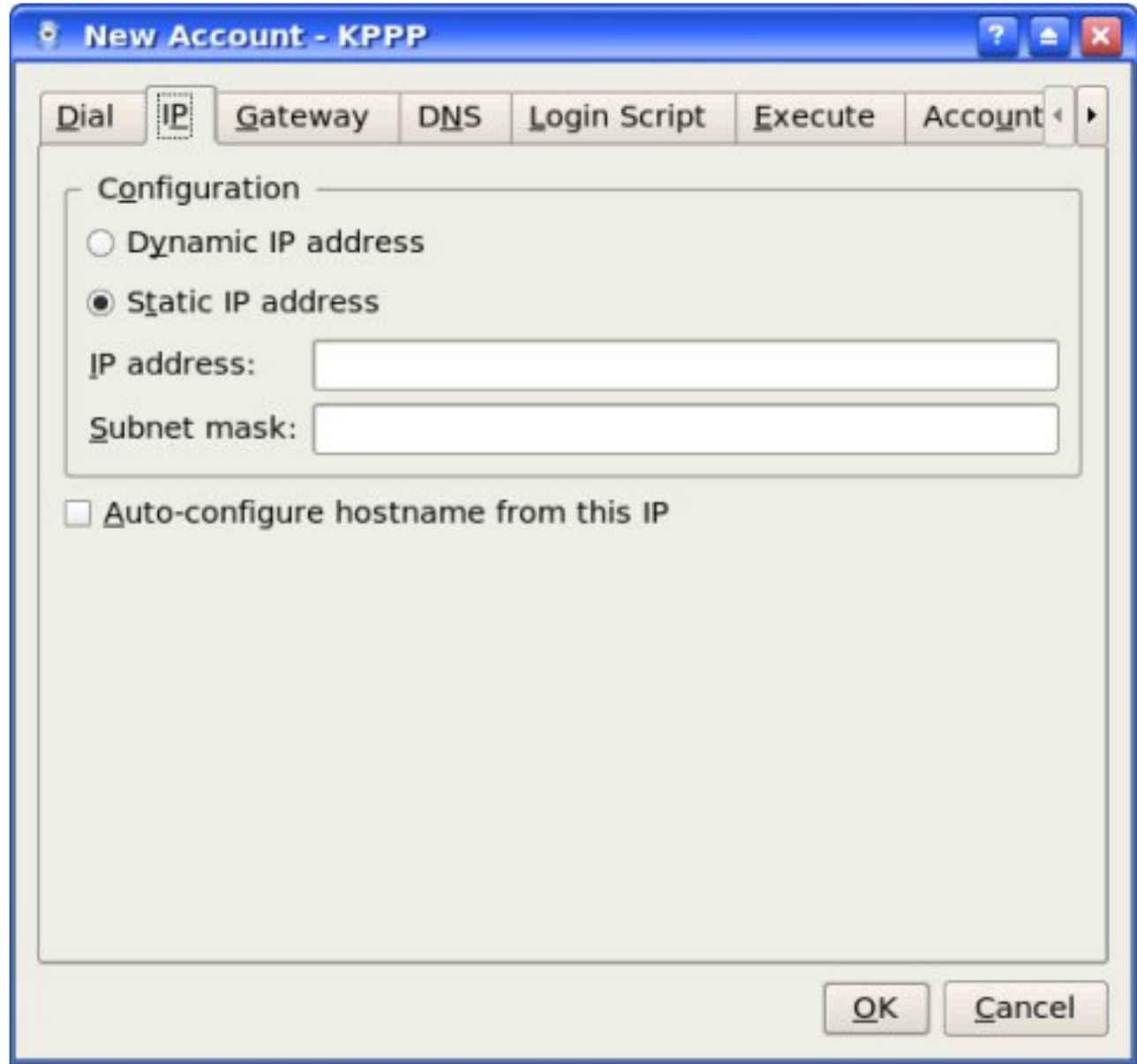☐ Auto-configure hostname from this IP

[OK] [Cancel]

Fig. Filling in the IP Settings

6.Click on OK to accept and end the set up.
7.The KPPP Configuration window will pop up; click on OK to exit from it.

Activating the Modem

To test your modem and Internet connectivity, select the KPPP tool from the Main Menu:

KDE User Guide, Chapter 6

Main Menu > Internet > Remote Access > KPPP

Select the profile you have set up (remember the ISP nickname you used in the set up above?) by clicking on it and then click on the "Connect" button. The modem will start to dial and connect to the ISP and after awhile, upon successful login, the KPPP window will tell you that you are now connected to the Internet. You can now perform the web browsing and other services discussed in the Next few chapters.

To disconnect from the Internet bring up the Network Devices Control window and select the profile which was activated above and click on the "Disconnect" button. You will be disconnected from the Internet. You can then quit the KPPP program.

Troubleshooting

If, for some reason, you do not hear any connection noises, then perhaps your modem was not detected and set up. You'll need to use the Modem tab, and click the New button to make some changes.

To find out if your modem is automatically detected, click on the Query Modem button, and look for a series of little bars and indications that something is happening. If you don't see them, then your modem is probably not detected. That probably means that your modem is actually a Winmodem, which doesn't always work well with Linux (they are designed to only work with MS Windows).

If your modem is a Winmodem, then your best option is to purchase an external serial modem

Fig. Adding a New Modem

and attach it to an open serial port on the back of your computer. After you have done this repeat the Troubleshooting steps above.

Exercises

1.Perform an Internet dial-up connection using the modem on the system
2.Determine that you have Internet connectivity by accessing some well known websites
3.Disconnect from the Internet

DSL / Cable Internet Connectivity

The dial-up Internet connection discussed above provides ready and easy access for places which have telephone infrastructure in place. However, it has the disadvantage that the maximum data transmission speed which normal dial-up technology can provide is about 56 Kbits per second. While this speed may be adequate for email text transmission and web browsing of non-multimedia intensive web content, it is not practical for multimedia access. For heavy multimedia content access using the Internet, a high speed link is required. For the personal or home user, broadband xDSL technologies make this possible.

DSL is an acronym used for the family of DSL (Digital Subscriber Line) technologies which enable high speed data transmission through telephone lines. There are different types of DSL and they include, ADSL, SDSL, IDSL. Collectively these are known as DSL. ADSL (Asynchronous Digital Subscriber Line) is commonly used for the home.

ADSL / Cable Internet Configuration

There are two main types of DSL configuration in use and most ISPs use either one of these:

DHCP over Ethernet
PPoE over Ethernet

Usually if you have to use a login id and password for your broadband DSL connection then you should be using the PPoE configuration.

DHCP over Ethernet

Linux has been called "The Broadband OS" because it is very good at detecting and using Ethernet as it's main networking capability. The Quick Start way to set up both DSL and Cable Internet is to plug the Ethernet cable (which looks like a phone cable, but with 5 strands of wire instead of 3) into your modem's Ethernet port, and the other end of the cable into your computer's Ethernet port.

Most modern day flavors of Linux will autodetect an active Ethernet connection, and assign it to the device name eth0, eth1, and so on. If there is more than one Ethernet interface for your computer, the "ethX" numbers will increase.

For this configuration, what is needed is just to obtain the IP configuration parameters using DHCP (Dynamic Host Configuration Protocol). To set up your DSL connection click on your PCLinuxOS Control Center (PCC) icon in your panel and enter your Root password. Next, choose the Network & Internet tab and then choose ¨Setup a new network interface (LAN, ISDN, ADSL,...).¨ You will then see a screen like the one below:
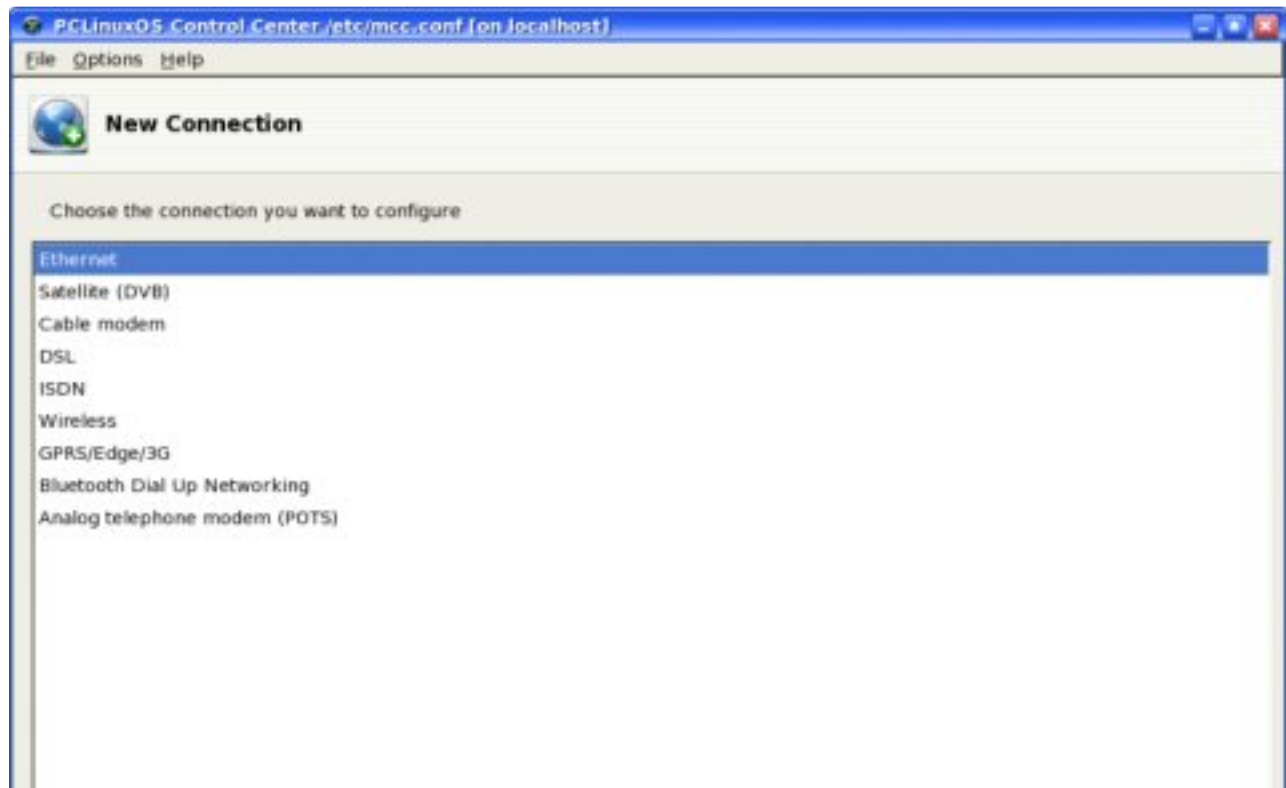
Fig. New Connection

1.Select Ethernet connection in the select device type screen and click on the Next button. A screen showing the detected Ethernet card(s) on your system is displayed as seen below:
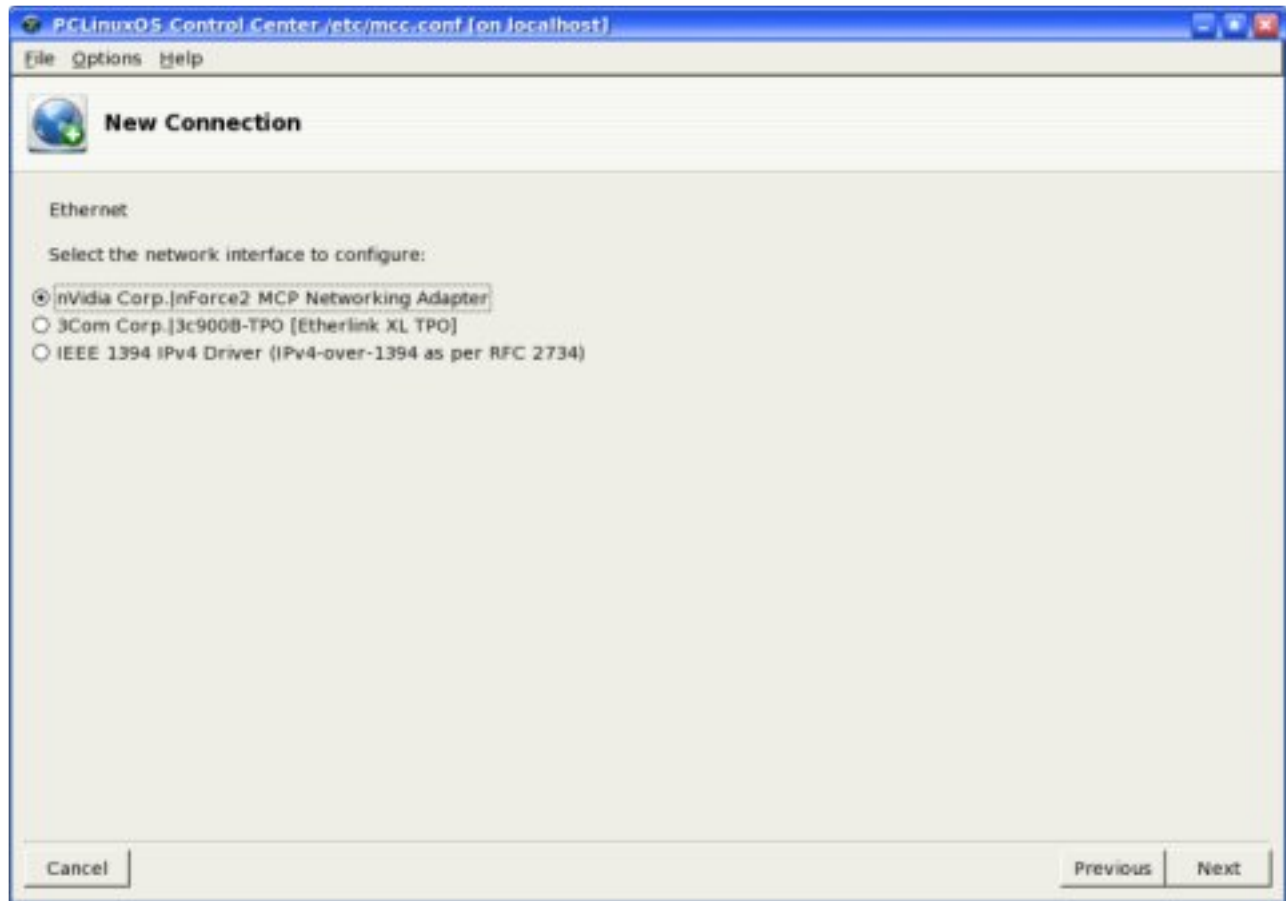

Fig. Select Ethernet Device Screen

2.Select the correct Ethernet network interface. (You usually have only one Ethernet card installed on the system.) Click on the Next button.

3.The default is to select your IP automatically. You should accept this and all the defaults on the next few pages.
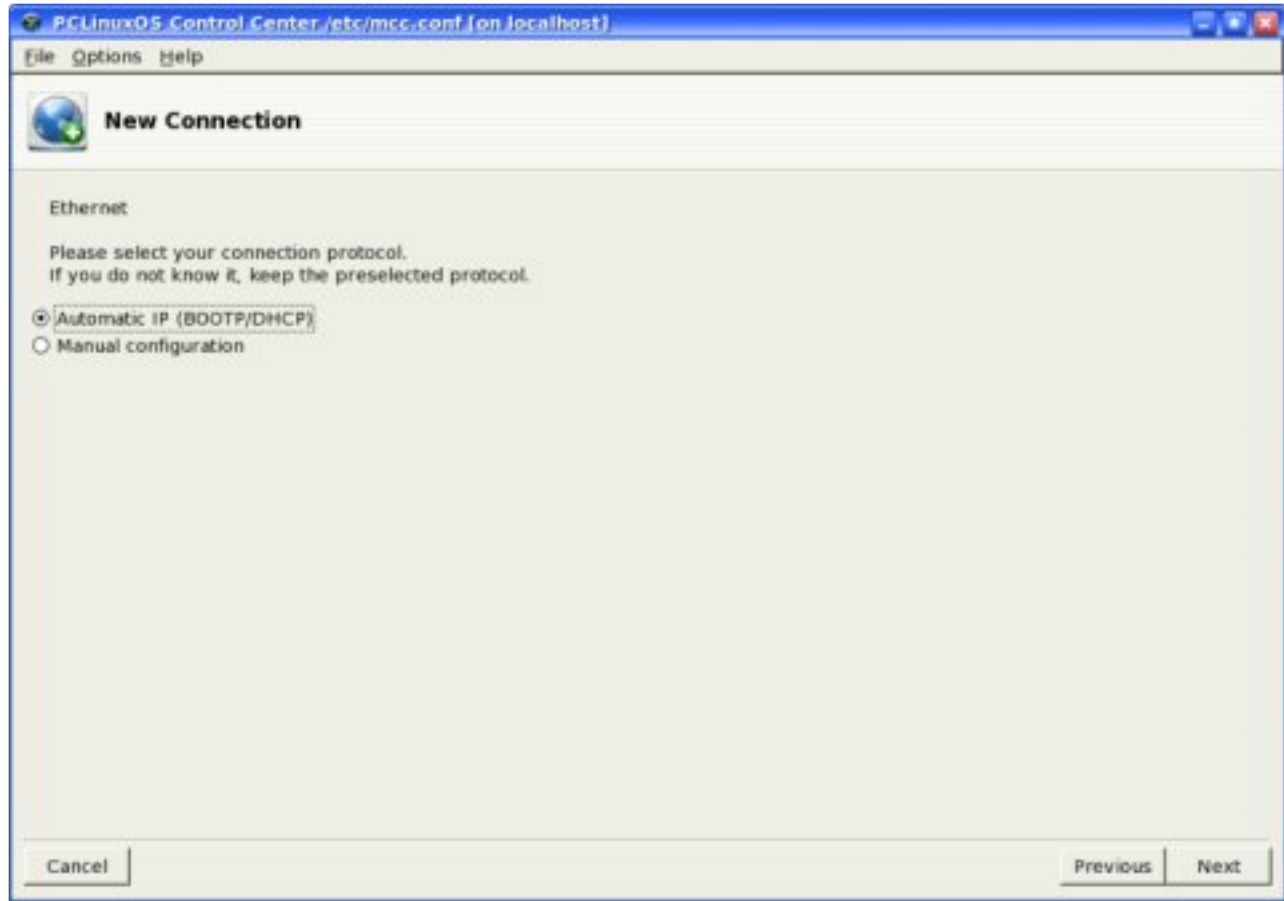
Fig. Configure Network Settings Screen

4.When you reach a page that looks like the one below check the box next to Allow users to manage this connection. Click next and you will see a window that will ask if you want to start the connection now. Choose yes, click next, and you will see a congratulations window. Click on Finish to accept and end the set up. That's it!

PPoE over Ethernet

For PPoE over Ethernet, start up the PCC as described in the previous section and select ADSL and click next.

1.Select your Ethernet device in the select device type screen and click on the Next button. A screen showing the DSL configuration will be displayed.

2.The Ethernet device type will have been selected automatically (this is usually eth0 unless you have more than one Ethernet card) and entered

in the box for you. If this is incorrect select the correct Ethernet device. Click Next and choose your connection as seen below:
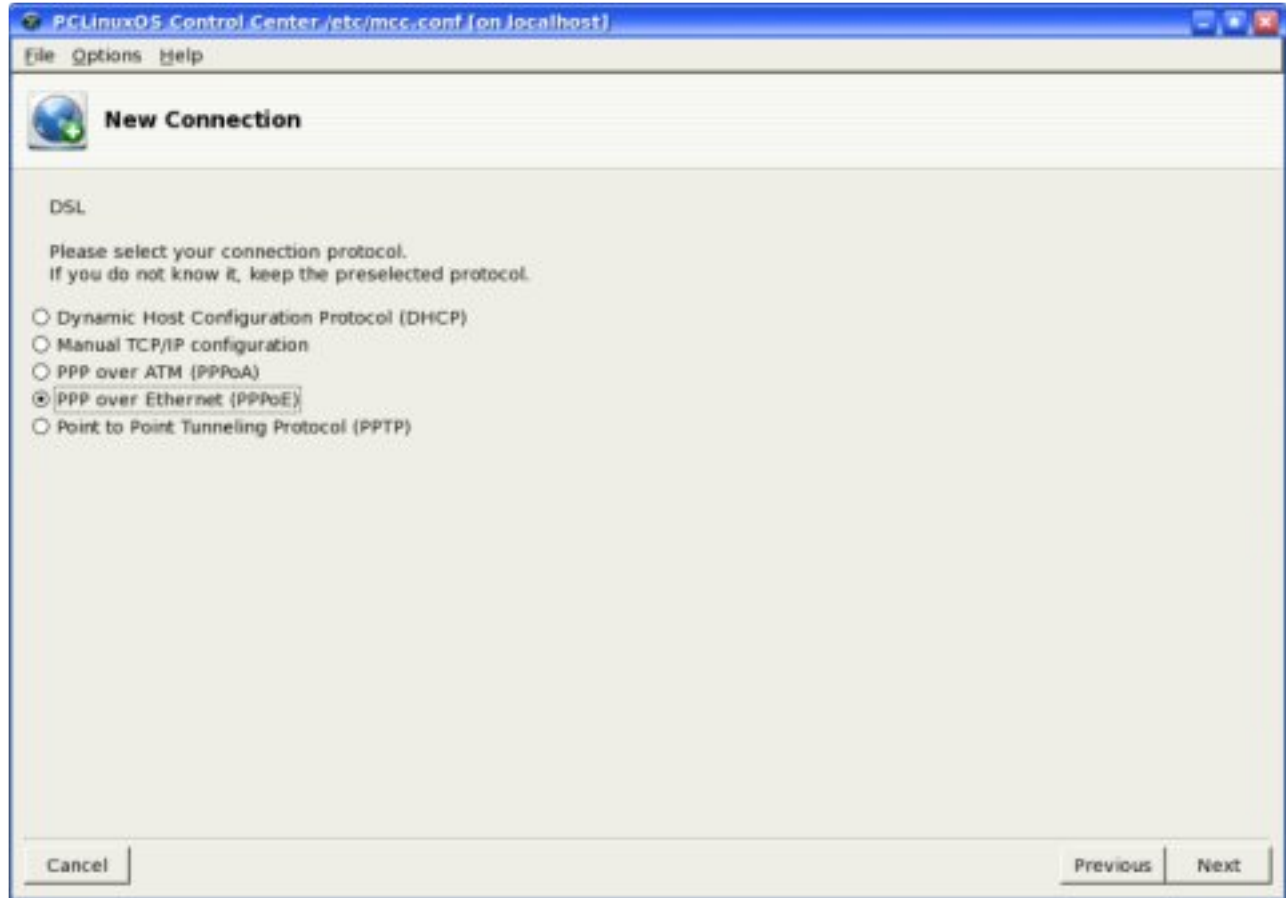
Fig. connection protocol

3.Clicking next will bring up a window where you can enter the login name and password provided to you by the ISP. Click on the Next button.

4.On the next window check the box next both ¨Allow users to manage the connection¨ and ¨Start the connection at boot¨ and click Next.

5.Click next and you will see a window that will ask if you want to start the connection now. Choose yes, click next, and you will see a congratulations window. Click on Finish to accept and end the set up.

Activating the ADSL Link

To test your ADSL link and Internet connectivity, click on your PCLinuxOS Control Center (PCC) icon in your panel and enter your Root

password. Next, choose the Network & Internet tab and then choose Monitor network connections from the screen below:
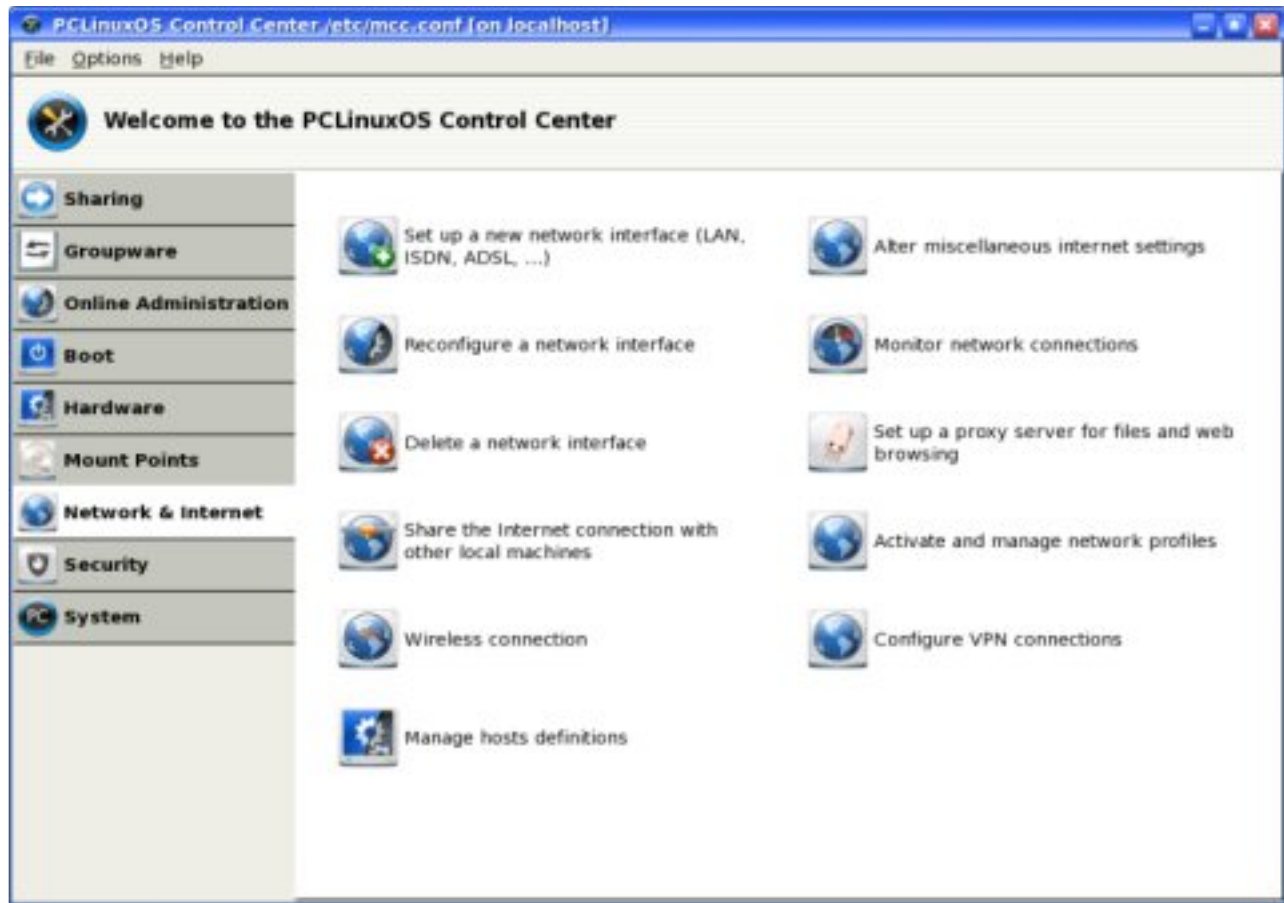
Fig. Network and Internet

If you are using DHCP over Ethernet, select the Ethernet device name (usually this is eth0) you have used in the configuration set up by clicking on it and then click on the "Connect" button.

If you are using PPoE over Ethernet, select the ISP name you used in the configuration set up by clicking on it and then click on the "Connect" button.

The link will be established after a few seconds and the status of the profile in the Monitor network connections screen will change to "Connected" from "Not Connected." You are now connected to the Internet.

Ode to the Gang

Texstar, oh Texstar
You've brought us so far
From your first distro
To the best distro! By far
The Ripper Gang
Gives us a bang
And tells us
It's nothing but a Thang!
Keep up the good work
You can really make it perk
From all of us here
Awaiting your next piece of work.

Restarting a Frozen X-Windows

by allikat, newmikey, wayne1932, and lwolfers

X froze recently, and I had to restart it. Things were frozen up so bad it took 5 minutes to swap to a text console.

To get a text console, press [ctrl][alt][F2],
- Log in as root
- type `top`
- press K (for kill)
- enter the task number for X, which is in the list on the screen.
- Confirm with a Y
- X will then shut down, and on default settings, will restart to your login screen.

OR:

To get a text console, press [ctrl][alt][F2],
- Log in as root
- Type `INIT 3`
- X will shut down. Wait a couple of seconds
- Type `INIT 5`
- X will restart to your login screen.

OR: Wanna get there quick? **[Ctrl]+[Alt]+[Backspace]**

Configuring Linksys Wireless PCMCIA Card

By Scotty Dog (with addition by MeeMaw)

*[**Editor's note:** In this article, there are references to how things work when running Test Release versions of PCLinuxOS 2007. Tex and the Developers have repeatedly warned that once Final became available, users should switch to that version and not continue to run the Test Releases. Be advised that while the information herein may work for you, if you are running a Test Release of PCLOS 2007, you may not receive much support on the main forum if you have problems.]*

This article is based on my experience configuring and using the Linksys WPC54g PCMCIA wireless LAN card with PCLinuxOS. The tiacx111 instructions were developed with .93 (aka Big Daddy) but have worked the same with every version since then; 2007 TR2, TR3, TR4 and Final. MeeMaw has added her directions for the Linksys WMP54g card, which has a RaLink chipset.

First of all, there are several versions and chipset variations for the WPC54G wireless card. Mine is a ver. 2, and uses the acx111 chipset, but older versions used the acx110 chipset. There are still others with RaLink chipsets, and the latest, based on the most recent drivers available from Linksys.com, seem to have Broadcom bcm94306 chipsets.

OK, to begin let's find out what your chipset is. Open up a terminal window and log in as root (su, then enter the root password). At the command prompt, type:

```
localhost$ lspci
```

This will return a detailed list of your PCI chipset information, including your wireless LAN card. Here is a segment of mine that shows the 100Base-T adapter and the wireless card, among other things...

```
02:01.0 Ethernet controller: Broadcom
Corporation BCM4401 100Base-T (rev 01)
02:04.0 CardBus bridge: Texas Instruments
PCI1510 PC card Cardbus Controller
03:00.0 Network controller: Texas Instruments
ACX 111 54Mbps Wireless Interface
```

Note that the last line says "Network controller", the chipset information, and "Wireless Interface". The "Ethernet controller" two lines above that

Configuring Linksys Wireless PCMCIA Card

is the internal wired NIC. Note that it says "Broadcom Corporation BCM4401" and the wireless card, a Linksys, says "Texas Instruments ACX 111." These are the actual chipsets in the cards themselves. My tiacx111 chipset has a native Linux driver, so it is pretty straight forward from here.

TIACX111 Setup

I'll start here since this is what I had to do. First of all, there is a lot of old information around the web about having to download and un-tar a driver package from somewhere. This is not necessary in PCLinuxOS, as I discovered.

1. First, when you boot the live CD, and it goes through the keyboard and time setup, etc., cancel out of the network setup altogether and go on to the install.

2. As soon as you have run the install from the live CD, and before you reboot (if you do reboot, just be sure to log back in as root for this), look in /lib/firmware/acx and you will see several directories with acx 110 and 111 drivers. Mine is the very last one, so open that directory, select all of the tiacx111 files present, and copy them down to /lib/firmware.

3. Now reboot, and open up the PCLinuxOS Control Center (PCC). Click on the Networking section in the left hand window, and select Wireless in the right side.

4. PCLinuxOS should now automatically detect your tiacx111-based wireless card, and allow you to configure it normally. In my case, my Linksys router appeared immediately, and I highlighted it and clicked 'Connect.' As I recall, in .93 I had to click 'Refresh' to see it show up. This may depend on your router as well as other factors.

Broadcom BCM94306 chipset

My Linksys card does not have this chipset, but the PCI card in my desktop does, and setting it up was a lot different with TR4 vs. .93 or TR2. There seemed to be a lot of different experiences by different people with this chipset and either ndiswrapper or the new bcm43xx Linux driver. This may depend on the manufacturer of the card as opposed to the chipset, but I don't know for sure. In my desktop, I don't have a

Configuring Linksys Wireless PCMCIA Card

Windows partition for PCC to fetch the drivers from, so beginning with TR2, I had to manually copy the drivers to my /lib/firmware directory and set it up in PCC. Note: Copying the drivers to your hard drive is important. For whatever reason, I could not just load them straight from the CD.

With TR4, the 4306 driver is apparently blacklisted for some kind of conflict. PCC wants to default me to the new bcm43xx driver, and many people seem to have good results with this. In fact, every time I post a comment in the forums about manually configuring ndiswrapper, someone comments back that either I should be able to configure it in PCC, and yes, I should, or that I should use the bcm43xx Linux driver. Neither of these have worked for me, but your mileage may vary. Every time I have tried to set up ndiswrapper for the 4306 chipset in PCC in TR4, it defaulted back to the bcm43xx driver, and I cannot get any connection with my hub when this driver is loaded. Here is what I had to do...

1. Copy the bcmwl5.inf and bcmwl5.sys files from your driver CD to /lib/firmware. (Both need to be present according to some posters). If you want to use the graphical file manager for this, make sure you either log in as root to begin with, or use the Krusader or Kongueror in superuser mode as the file manager.

2. Open a terminal window, log in as root and enter `cd /lib/firmware`.

3. Type "`ndiswrapper -i bcmwl5.inf`" without the quotes. This associates the bcm driver with ndiswrapper.

4. Type "`ndiswrapper -l`" (to confirm that it is installed)

5. Type "`modprobe ndiswrapper`" (to load ndiswrapper with the bcm driver into the kernel)

Mine came right up after that, and works like a charm. You may need to type "`dhclient wlan0`" (or whatever your card ID is), to get an IP address from your DHCP server or router. If you run "`ifconfig`" it will report to you all the details on your connection, and whether or not you have an IP assigned.

Configuring Linksys Wireless PCMCIA Card

I see a lot of people in the forum saying that you just have to set it up in PCC, but a few other people like me have found that this does not work for them all of the time with this chipset. The new bcm43xx driver seems to be included in the latest kernel, and is still under development.

According to the project website, http://bcm43xx.berlios.de/, as of 5-17-07 the current version lacks WEP support, for instance. If this works for you and you don't need the missing features, then great; it would help to support the hard work of the folks developing this driver to use it and provide feedback. They have to reverse engineer this driver, as Broadcom will not share the hardware specs with other developers. However, the ndiswrapper solution is very robust and includes all of the Windows driver features. It has been working well for many people for a long time.

Good luck and happy networking.

Scot Echols, aka Scotty Dog

Scotty Dog admitted in a forum post that he never had a wireless card with a RaLink chipset, but I do. Also, my card is a Linksys WMP54g. The method Scotty outlines to find the chipset is the same no matter what version of Linux you are running. On Big Daddy, I had to configure the wireless connection in the terminal, since for some reason PCC wasn't saving my settings. However, in TR4 and Final, I skipped the setup on live CD boot or HD install, and when I got to my desktop, I went into PCC. In my case, I had a wireless connection, RaLink rt2561/rt61, that I could choose, but when I clicked on it, I got a message that no wireless networks were detected. At that point I clicked on the box where that choice was displayed and noticed that another choice, ra0, was now present. I highlighted that one, and then went into the configuration and put in my ESSID and WEP key, then clicked refresh. I was connected! I also made sure to check the "start at boot" option, but it didn't actually work for me until I modified my /etc/modprobe.preload file by placing "rt61" into the file. I haven't had any problems since.

MeeMaw

What Do All Those Directories Do?

by Heather/Squishy

Summer has finally arrived at my doorstep and I couldn't be happier... except for the fact that this also brings hay fever. I just can't win. Oh well, I'm sure others who start to use Linux (and even some old-timers) feel the same way when confronted with the myriad directory structure that Linux uses.

I mean come on, who memorizes what goes into the /usr folder? Or who can remember that if you have media devices they always get mounted to media:// or /mnt? Then again, I think I just answered my own question haven't I? Well let this be a warning to anyone reading this that this is what you get after using Linux for a while: you become a silly old maid who has nothing better to do than to memorize useless bits of information about directory structures, media file descriptors and other bits 'n' bobs we could do without in our grey matter space.

Now, in the interest of educating the wanna-be geeks (and geekettes, if that is even a word), I'm going to introduce you to some of these directories and their functions. I'm going to paste a lot of the information I have acquired from a document I found here: http://www.pathname.com/fhs/. I downloaded their latest PDF file and perused it for my cut 'n' paste episode. If you're a serious wanna-be you'll download and read their useful (if very, very dry) PDF too. Bonus points go to those who can memorize at least half of the 52 pages available.

If you're not a developer, don't worry about trying to understand or memorize all the files that go into the folders we're going to cover in this article. Where I feel its appropriate to do so, I will point out the folders a normal user should pay attention to as we go along. I will skim over some directories and just paste what is necessary to understand its contents in those instances, as some of this information is only useful to a very small portion of the audience of my column. (To that small portion: If you want to go into more detail about these areas of the filesystem, I do strongly recommend the FHS PDF file. Even though it's not written very well, it covers a lot of stuff I can't get into in my monthly column.)

What Do All Those Directories Do?
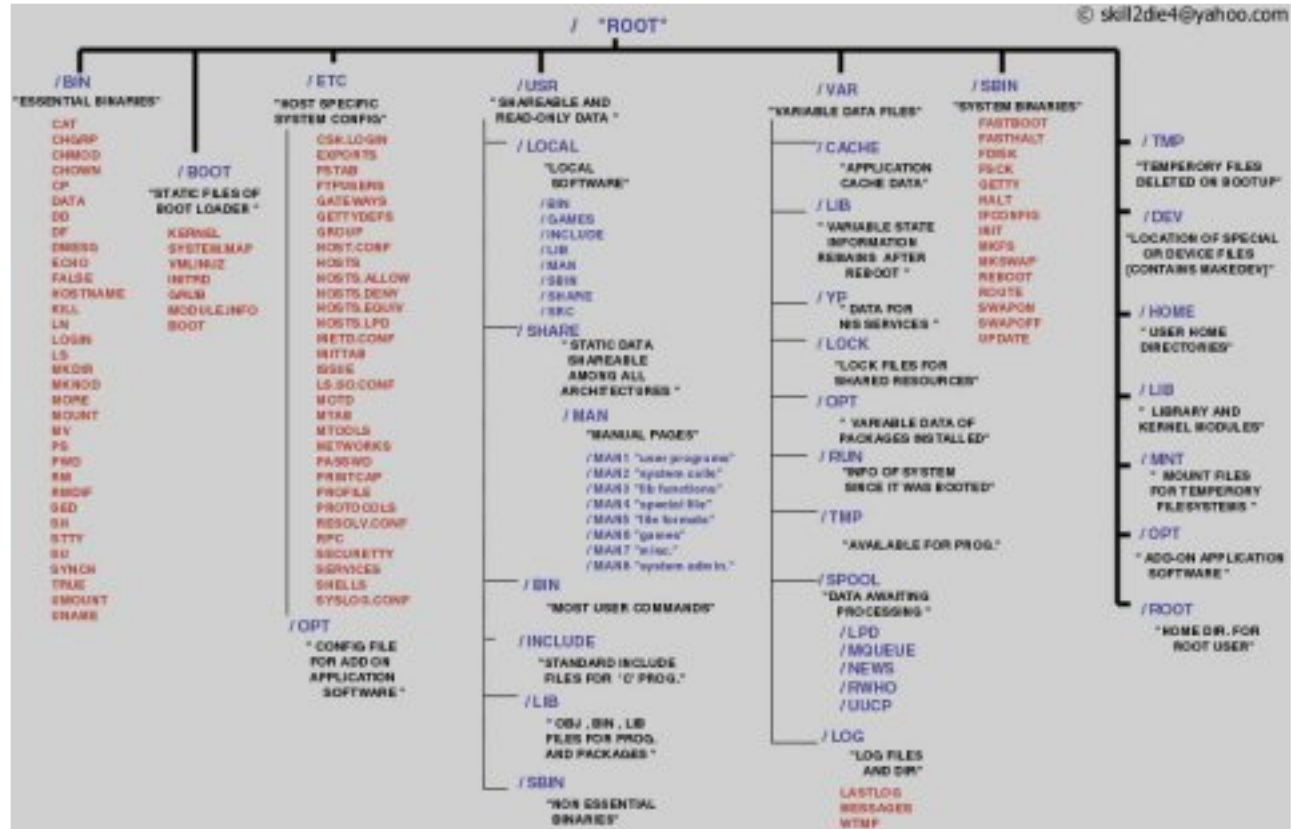
Now we have a bit of background, let's start with the / (root) folder. We will get to the /root folder at the end of this article, which is separate from the aforementioned / folder. According to the FHS handbook this is what / should contain -

"The contents of the root filesystem must be adequate to boot, restore, recover, and/or repair the system … To enable recovery and/or repair of a system, those utilities needed by an experienced maintainer to diagnose and reconstruct a damaged system must be present on the root file system."

In English this means that the / folder itself, by convention, has to be able to store a properly constructed mini-OS, and the tools to fix things in case of borkage. (Yes borkage is a real word… somewhere… in some language… it just means breakage beyond possible repair, at least in my lexicon.)

On to /bin. This directory is important to anyone who has ever had a system that is unbootable or is in need of serious repair requiring you to go into single-user mode. As outlined below, you can see where the tools

What Do All Those Directories Do?

needed to repair your borked computer reside -

"/bin contains commands that may be used by both the system administrator and by users, but which are required when no other file systems are mounted (e.g. in single user mode). It may also contain commands which are used indirectly by scripts."

On a related note, there are some other directories that you likely will encounter if you administer your own system. These are /sbin, /usr/sbin, and /usr/local/sbin. Their contents and purposes are described as -

"Utilities used for system administration (and other root-only commands) are stored in /sbin, /usr/sbin, and /usr/local/sbin. /sbin contains binaries essential for booting, restoring, recovering, and/or repairing the system in addition to the binaries in /bin. Programs executed after /usr is known to be mounted (when there are no problems) are generally placed into /usr/sbin. Locally-installed system administration programs should be placed into /usr/local/sbin."

At this point we have covered what are, to most users, the five directories they will encounter most often in any Linux distribution. However there are many more that are equally important.

This next directory, /boot, is not used as a separate partition much anymore. However some old time users still prefer a separate /boot partition on their system. This is sometimes the case if you wish to, for example, triple boot Fedora, Mandriva and PCLOS but want to keep all of their boot files in one directory separated into sub-directories within the /boot folder itself. According to the FHS this is what /boot should have in it -

"This directory contains everything required for the boot process except configuration files not needed at boot time and the map installer. Thus /boot stores data that is used before the kernel begins executing user-mode programs."

The /dev folder is a weird directory most users will never need to touch where your devices, like printers, usually reside -

"The /dev directory is the location of special or device files."

What Do All Those Directories Do?

Now we get to the /etc folder. This is a very special folder where a system's configuration files should reside. If you have ever needed to hand edit a samba.conf file or your network interfaces file, likely it is in a sub-directory of the /etc directory. This is the FSH definition -

"/etc: Host-specific system configuration. The /etc hierarchy contains configuration files. A "configuration file" is a local file used to control the operation of a program; it must be static and cannot be an executable binary."

You may encounter, in other distros, an /etc/opt and/or an /opt folder, which is supposed to contain "...configuration files for add-on application software package [sic]". As this folder doesn't exist and is unnecessary on most distros today, I won't go into it further.

It is a fairly rare occurrence that a user will need to access the /lib directory, but I'm including it here just so you might know what exactly it contains. Shared libraries are very much like dll files in a Windows system. From the handbook -

"The /lib directory contains those shared library images [and kernel modules -H/S] needed to boot the system and run the commands in the root file system, I.E. by binaries in /bin and /sbin."

On your PCLOS system, if you open the "Storage Devices" folder on your KDE desktop, you'll be brought to a folder that lists all your hard drives' partitions and removable media. The directory this all resides under is called /media. This folder is not, that I know of, in common use yet on other distros but I find it very convenient and much easier for nublets to understand as opposed to the old /mnt folders. Our guide says -

"This directory contains subdirectories which are used as mount points for removable media such as floppy disks, cdroms and zip disks."

Another very large directory that every Linux distro out there has is called /usr. It has a boatload of subdirectories such as /usr/bin, /usr/lib, /usr/local, /usr/share, /usr/local/share, /usr/sbin, /usr/share/man, /usr/src. I will not quote the dialogue for all of these folders, but I will quote the information, for both /usr itself and /usr/share/man, below -

"/usr is the second major section of the file system. /usr is shareable, read-

What Do All Those Directories Do?

only data. That means that /usr should be shareable between various FHS-compliant hosts and must not be written to. Any information that is host-specific or varies with time is stored elsewhere."

And on /usr/share/man -

"This section details the organization for manual pages throughout the system, including /usr/share/man. … The primary <man dir> of the system is /usr/share/man. /usr/share/man contains manual information for commands and data under the / and /usr file systems.
Manual pages are stored in <man dir>/<locale>/man<section>/<arch>."

As a special note to users of distros other than PCLOS: On some recent distros, the dev teams have been superceding the ancient manual pages with the newer, and presumably easier to write, info pages. These "new" man pages are often more up to date and reliable and are accessed using the – info <insert query here> - syntax. The Debian distribution is a good example of this particular quirk in Linux's evolution. Info pages are located within /usr/share/info.

The /var directory is another special directory that users will rarely access. It is called /var because it is the folder on a system that will contain the most non-static (variable, hence its name) sets of files. Normal subdirectories and files are listed below -

"/var contains variable data files. This includes spool directories and files, administrative and logging data … [as well as] transient and temporary files. … [Often contains] var/log, /var/lock, /var/run, /var/mail, /var/cache/man, /var/cache/fonts, and /var/spool/news."

The last two directories we're going to look at are fairly straightforward and will likely be accessed by most users at some point in their Linux journeys. These are the /root and /home directories. In the case of the /home directory, it will be used everyday.

The / and /root folders often have caused great confusion amongst the nublets I have encountered in Linux communities. (I include myself in that last remark, just so you know I'm not perfect either.) To stem the tide of confusion I'll quote the handbook about the /root folder so you can see how it is used -

"/root: Home directory for the root user (optional) The root account's

What Do All Those Directories Do?

home directory may be determined by developer or local preference, but this is the recommended default location."

As you can see, /root is just a glorified Home directory for the administrator of a system (usually yourself). I've found this folder is included on all of the current distributions I have used, with the exception of the micro/single purpose distros, i.e., Smoothwall (firewall distro).

This segues nicely into our final folder, the ubiquitous /home folder found on all proper Linux distributions today. I don't think I need to quote the manual for this one, so I won't bother. Suffice it to say, this is your own special directory. You can do anything you want with it and put anything you want into it without fear of it borking your system or harming other users' files on your computer. The conventional path to your /home folder is /home/your_name_here, minus the underscores (unless you really like underscores, in which case go ahead and use a few...throw in some dashes too while you're at it.) When creating your username for your system, keep in mind to never use symbolic characters if possible as some have special meaning to the Linux kernel. The exception to this is if you are using a language other than English and require characters with accents, these are perfectly fine.

Wow, if you read to the end of this column, pat yourself on the back! You now know what some of those funny folders do on your computer and how to access what is inside most of them. I hope you also have learned where to put your games and other programs you might install, or how to access your shiny new programs' manual pages and configuration files.

As always, if you have any feedback or want to ask me any questions, please email the magazine at trobins2006@gmail.com. I'll try to address any feedback that is directed to me in future columns where possible and within the space constraints of this magazine.

Until then, enjoy your summer and don't be afraid to mess with your Linux system. If something does get messed up though, just remember this: Borkage happens, time to test my remastered backup! (You did make a remastered backup didn't you?)

Windows-style Dialogs on FF and TB

by Loungefly

This is an updated tweak to a tip I posted several months ago for getting a Windows-like file dialog when opening and saving files in Firefox and Thunderbird.

One thing that has always annoyed me about Firefox in KDE is the Gnome file picker that is used by default. I mean, if I really wanted the Gnome file dialog I'd be using Gnome. With this tweak you'll get something that more closely resembles the standard KDE file dialog (although I'd probably consider it more Windows-ish).

Previously, to accomplish this required much more fiddling, mainly editing a .js file in the components directory of usr/lib/mozilla/... and then resetting the registry, and restarting to see the changes. The only problem with this was that these changes would be reversed whenever an update to Firefox/Thunderbird was installed.

The old way is no longer necessary and now this tweak can be applied by changing one setting in "about: config." The changes will stick regardless of an upgrade. It is much simpler and no 'dirty' hacks are involved.

Ready? Set? Go! .....

In Firefox

1. Type `about:config` in the address bar.
2. Look for the entry `ui.allow_platform_file_picker`, either by scrolling or entering it in the filter search box.
3. Select it and simply double click to change it's value from true to `false`.

In Thunderbird

From the menu go to Edit>Preferences>Advanced, and in the 'General' tab select 'Config Editor' near the bottom. You'll then see a config screen that's similar to about:config in Firefox. Find `ui.allow_platform_file_picker` as mentioned above and change the value to `false`.
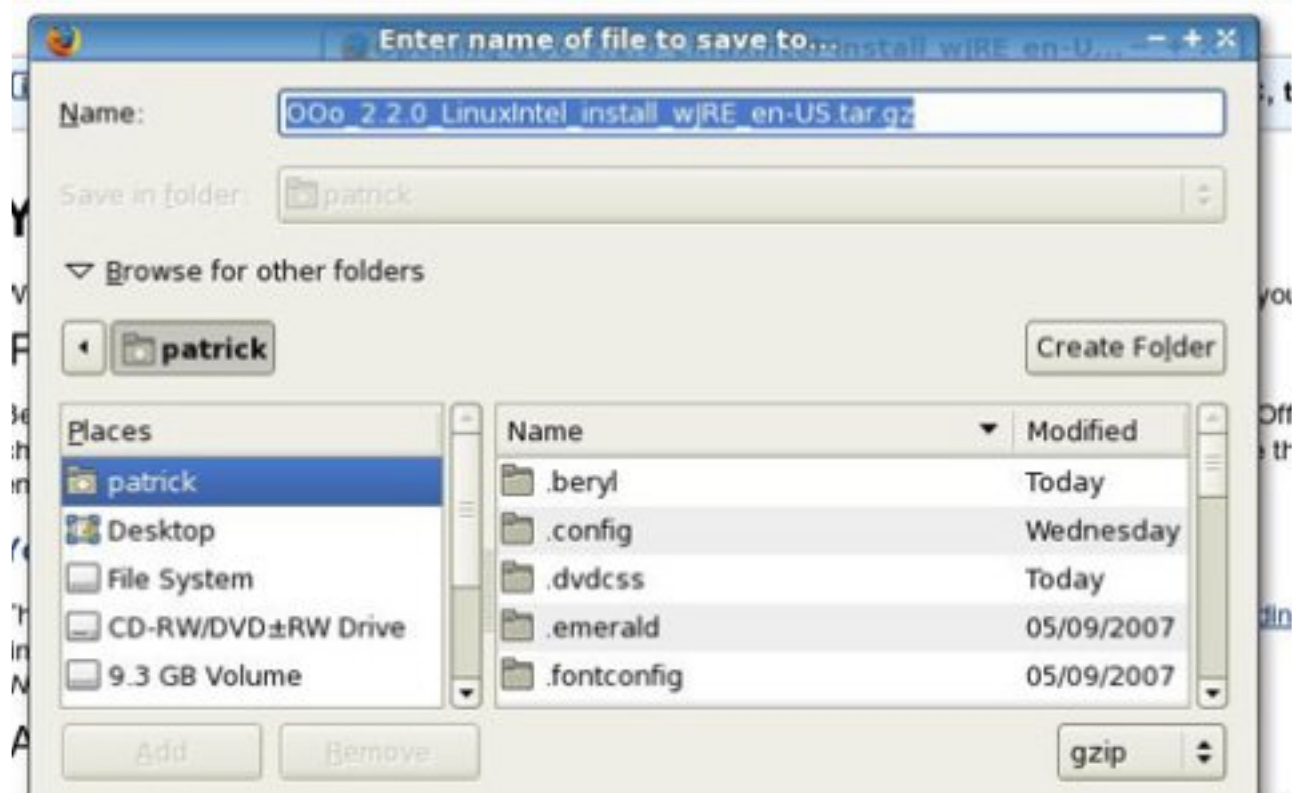
That's it!

Windows-style Dialogs on FF and TB

Now when you go to open or save a file in Firefox and/or Thunderbird, you'll get a dialog box like the one in the 'After' picture below. No restarting required, of course.
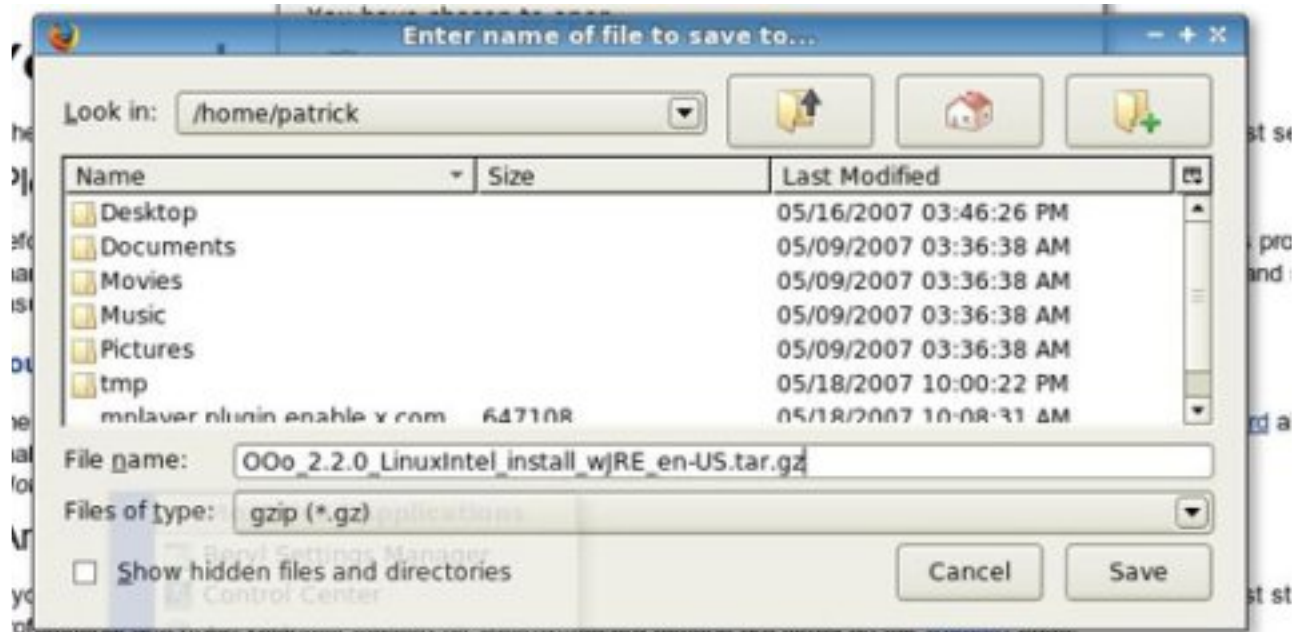
Before (top) and After (bottom)

# Opening Files in OOo with Accented Characters

by Ol' Lo

After setting the KDE character set so that Konqueror correctly displays file names containing accented vowels, one can open such a file in OO only by selecting it for opening in Konqueror. In other words, with OO Writer (for instance) running, if you try to use the menu to open the file holístico_definición (the first i and the last o are accented), you will get the error message "hol%EDstico_definici%F3n does not exist." The File Open dialog box displays the file correctly, but OO can't open it. Similar things happen when using the "Save As" dialog box to save a file with a name containing accented vowels.

The solution is to start a OO program (I used OO Writer) and choose "Options" from the (Tools) menu.

In the list at the left, expand the OpenOffice.org group and select "General."

Opening Files in OOo with Accented Characters
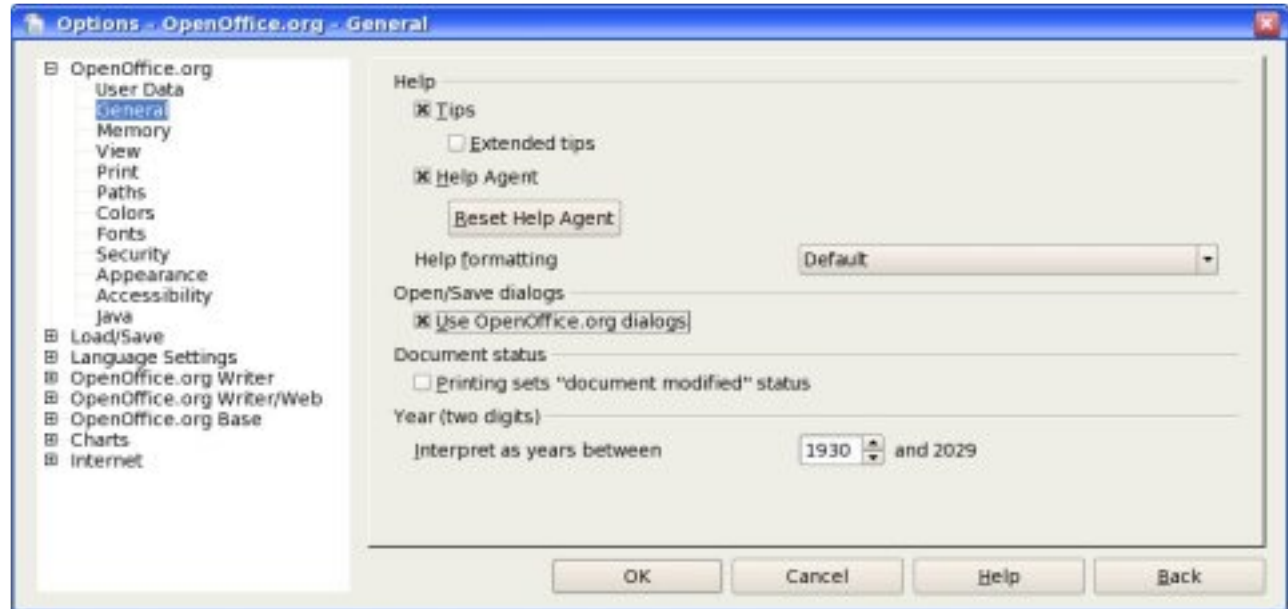
In the options which appear to the right, check the box called "Use OpenOffice.org dialogs" then click the OK button at the bottom. Thereafter you will be using different dialog boxes for "Open File" and "Save As", and these dialogs will function correctly. The KDE dialogs are fine as long as your filenames (and directories) have no accented vowels and such characters.

I posted this problem to the forum when I was using TR3 but never saw any response. Only after installing the final release did I stumble on the solution. Hope somebody is helped this way.

Our grateful appreciation to MyPCLinuxOS.com
and Devnet for making this project possible.

We've Come Full Circle

by Neptune

Ecclesiastes 1 : 9-10 The thing that hath been, it is that which shall be; and that which is done is that which shall be done: and there is no new thing under the sun. Is there any thing whereof it may be said, See, this is new? It hath been already of old time, which was before us.

When I was young, Big Iron ruled the Earth. We didn't call it Big Iron - there was no "Little Iron". We just called them computers, and computers were huge, stunningly expensive, and required teams of experts just to keep them running. They were fabulous monsters, cabinet after cabinet full of vacuum tubes and panels strung with the intricate spiderweb of wiring threaded through tiny ferrite beads for memory. But even then, lurking, like the first proto-mammals scurrying under the feet of the tyrannosaurs, there were signs of things to come.

The first sign was the teletype, or TTY. They were utterly stupid, although we did find them useful for printing ascii-art pinups of Marilyn Monroe. Editing on these early TTYs was beyond masochistic. It ranged from "excruciating" to "I think I'll just nip off and shoot myself". Those were replaced by CRT's, or "glass titties" – glass, referring to the video tube, and titty standing for TTY. The first CRT terminals were dumb beasts, but they got smarter. I remember an early Raytheon terminal, one of the first with an actual processor. The processor was not a single chip, it took up two circuit boards. But it vastly enhanced the editing capabilities.

Enhanced capabilities or not, we were still married to the mainframe. If the mainframe was down, nobody worked. All of your documents, all of your programs, all of your files were on the mainframe. But things were about to change.

Silicon had been steadily replacing vacuum tubes and ferrite memory. The first micro controllers were evolving into legitimate CPUs. The likes of Radio Shack, Commodore and Apple were putting out machines that the Big Iron clergy regarded as little more than toys. But they made inroads into the mainframe sanctuaries as terminal emulator software let them replace and further enhance the old terminals, even as they became legitimate standalone computing platforms.

Eventually, we were freed. No longer dependent on the vagaries of a

We've Come Full Circle

central mainframe, it was possible for us to work on a machine sitting on your desk with no dependence on the main brain. If your PC died, you could walk your floppy over to a neighbor's cubicle and pick up where you left off. We no longer had to depend on the priesthood of the big machine in the basement to get work done. We had broken the shackles.

But a funny thing happened. As machines got faster, with more memory, and more storage, they also got connected. Sun Microsystems famously advertised, "The Network is the Computer." And they were right. When management got the first of the shiny new Sun Ultras, I had no problem running anything too strenuous for my old Sparc-10 on their machines.

Somewhere along there, the Internet crept in. Advances in networking made true machine clustering a reality. Distributed processing spread across the world, with projects like SETI at home, and the Protein Folding at home efforts. The WWW went from simple html document display to advanced interactive protocols and permitted companies like Google to put entire office applications on-line.

So now, we have come full circle. Ecclesiastes was right, and there is no new thing under the sun. We are again about to become dependent on a single remote source to do our work.

Or not.

PCs are getting faster, bigger and cheaper, with no real end in sight. Most of us have more computing horsepower on our desk than NASA used to put men on the moon. If we can't afford, or just don't want Windows applications, we have excellent options in Linux. We have choices, and the new crop of Internet applications is just one more choice.

For some, it's the only choice. I am a bastard. After too much time, trouble and money enabling an in-law's drug choices, I made him homeless. He's now working his way out of rehab, but for now, the on-line applications have let him work on his resume, maintain contact lists, and communicate with potential employers from any public PC. That's not a bad thing. And when he gets back on his feet again, he can afford his own PC - and keep his own work on it, instead of depending on Google. Options he wouldn't have had a few years ago.

Firefox's Quick Tips

Changing Firefox's Default Font

If you find the default font size in Firefox either too small or too large, here is a quick fix.

Go to Edit, Preferences, and then click on the Content tab. Now go to Fonts & Colors. Adjust the Default font and the Size to your liking. Click the "Advanced" button to set a Minimum Font size. Happy Surfing!

Changing "Never for this site"

Q. How do I make Konqueror remember a password for a website which is set to "never for this site"?

A. You will need to edit this file:

    ~/.kde/share/apps/khtml/formcompletions

in section:

    [NonPasswordStorableSites]

in variable:

    Sites=

What you need to do is to remove the correct entry from the comma separated list of sites in the ~/.kde/share/apps/khtml/formcompletions file. This works in .92, .93, 2007-TR1, 2, 3, 4, and Final. Next, you will need to close Konqueror to make the change stick. Surf Away!

Adding Media Players for Storage Media

*From the PCLOS Wiki (courtesy of Davecs)*

The first thing you need to do is run the KDE Control Centre. From the "PC Menu" you select System > Configuration > Control Centre. Once it is running, you select Peripherals > Storage Media. You will see something like this:
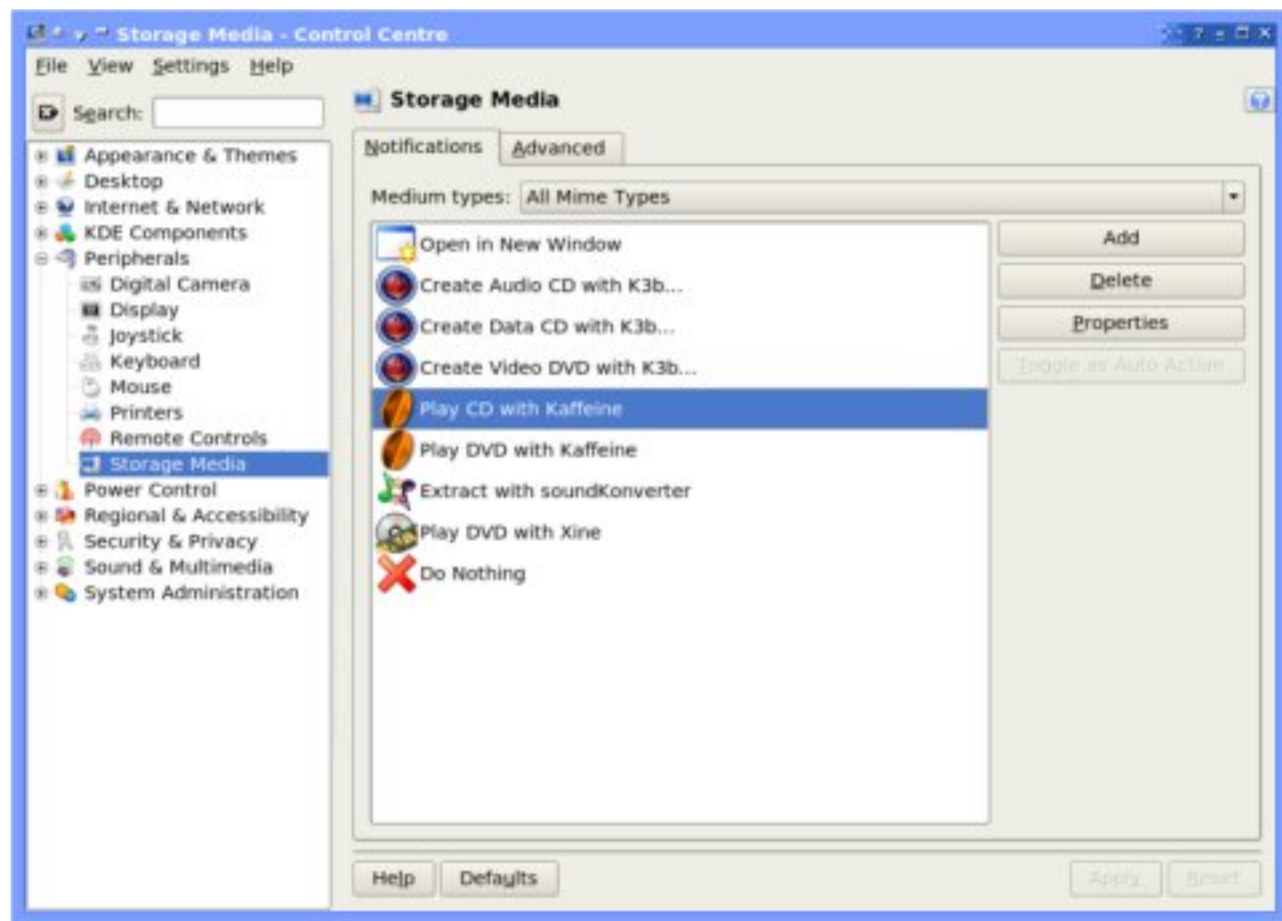
When I first did this, I did not see the entries for Kaffeine. What I will demonstrate is how I added Kaffeine in order to play Video DVDs.

The first thing you need to do is to select the media type you want. You click on the pull-down menu that reads "All Mime Types" and in my case, I selected "DVD Video Disk".

Adding Media Players for Storage Media
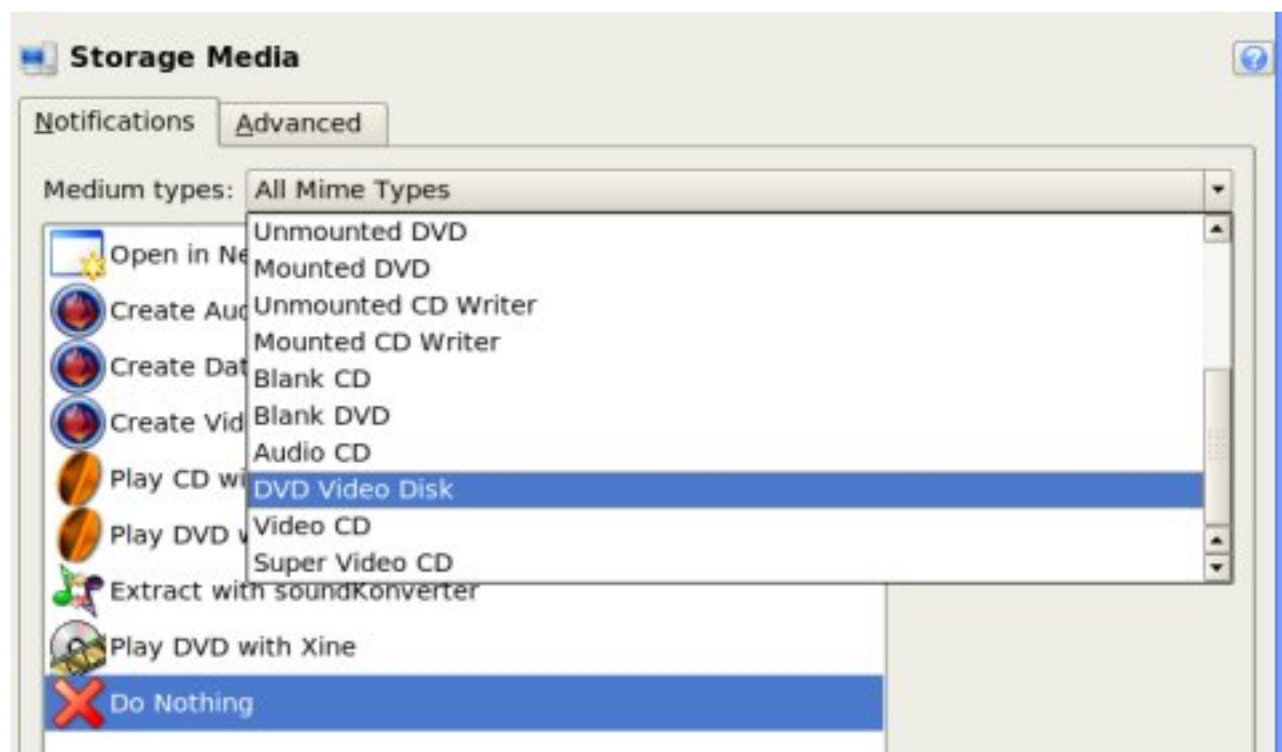
You now see the available entries for the type of media chosen, in my case Video DVDs. The one I wanted was not there, so I had to click on "Add". This brings up a dialogue box similar to the figure on the next page:

Adding Media Players for Storage Media
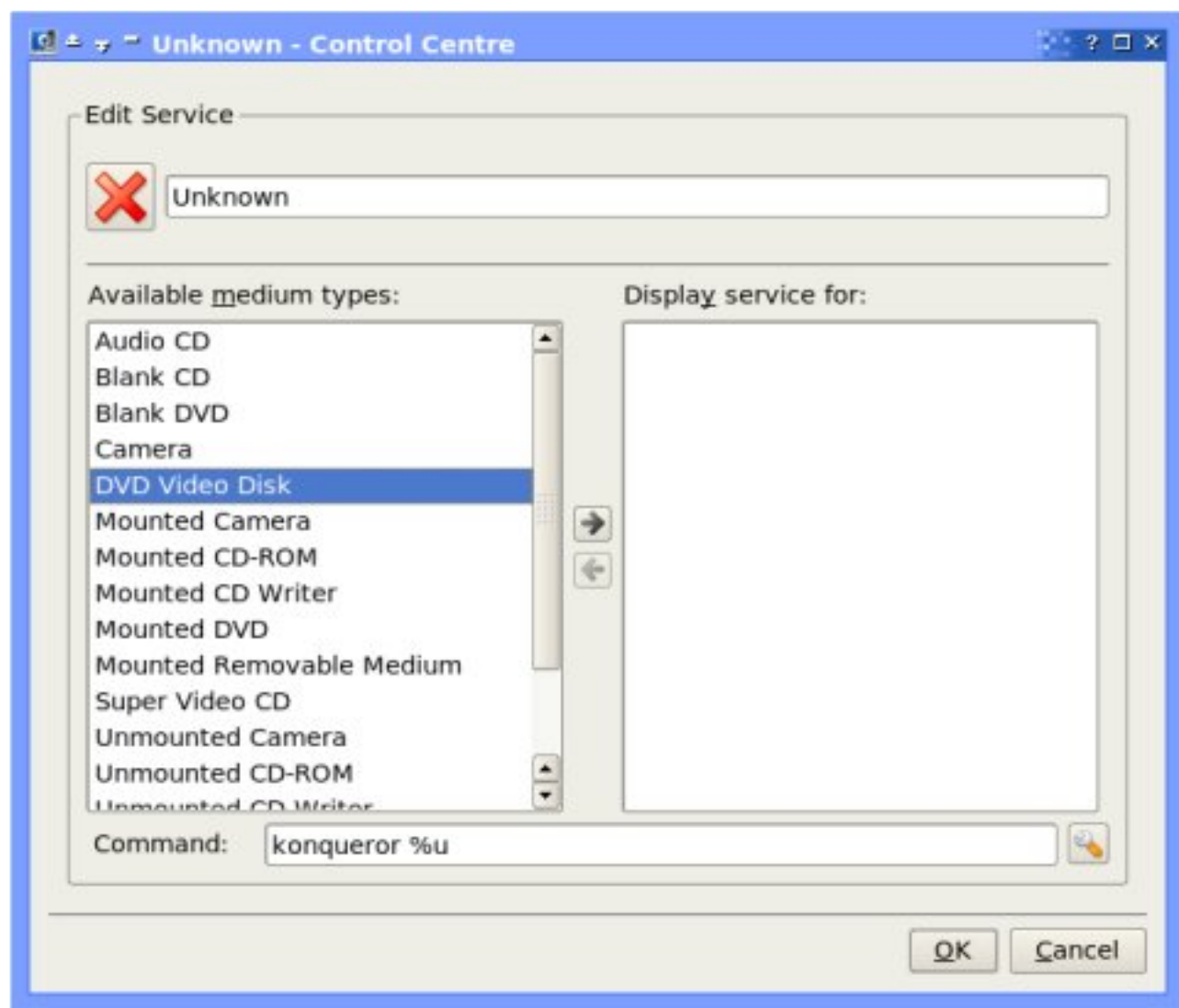
Notice that I highlighted DVD Video Disk again, then I had to click the little arrow pointing to the right in the area between the two lists. The next thing to do is to click on the "Spanner" / "Wrench" button just above the "Cancel" button.

Adding Media Players for Storage Media

Then you have to find the program you want. It will be in much the same place as it is on the PC Menu, and you open up submenus by clicking on the little plus signs. As you can see, I found Kaffeine in the list. Once you have the program you want to use highlighted, click "OK".

Going back to the previous dialogue, you will notice at the top left that the icon changes to the Kaffeine icon, and where the text box next to it says "Unknown", change it to what you want it to read. In my case I changed it to "Play DVD with Kaffeine", before clicking on "OK".

When you get back to the original Control Centre program, you will see a button marked "Toggle as Auto Action". If you want one of these things to happen automatically when you plug in your media or put in your DVD/CD, you need to highlight it, and use this button to mark it as the Auto Action default. If you would rather see a dialogue box when you plug something in, then highlight the one that is already marked, and click this button to unmark it.

Finally, just click on Apply and you're done!

Get Email Addresses Right

A lesson to be learned from typing the wrong e-mail address
Lifted from the PCLOS main forum

A Minneapolis couple decided to go to Florida to thaw out during a particularly icy winter.

They planned to stay at the same hotel where they spent their honeymoon 20 years earlier.

Because of hectic schedules, it was difficult to coordinate their travel schedules. So, the husband left Minnesota and flew to Florida on Thursday, with his wife flying down the following day.

The husband checked into the hotel. There was a computer in his room, so he decided to send an e-mail to his wife. However, he accidentally left out one letter in her e-mail address, and without realizing his error, sent the e-mail.

Meanwhile, somewhere in Houston, a widow had just returned home from her husband's funeral. He was a minister who was called home to glory following a heart attack.

The widow decided to check her e-mail expecting messages from relatives and friends. After reading the first message, she screamed and fainted.

The widow's son rushed into the room, found his mother on the floor, and saw the computer screen which read:

To: My Loving Wife
Subject: I've Arrived
Date: October 16, 2004

I know you're surprised to hear from me. They have computers here now and you are allowed to send E-mails to your loved ones. I've just arrived and have been checked in. I see that everything has been prepared for your arrival tomorrow.
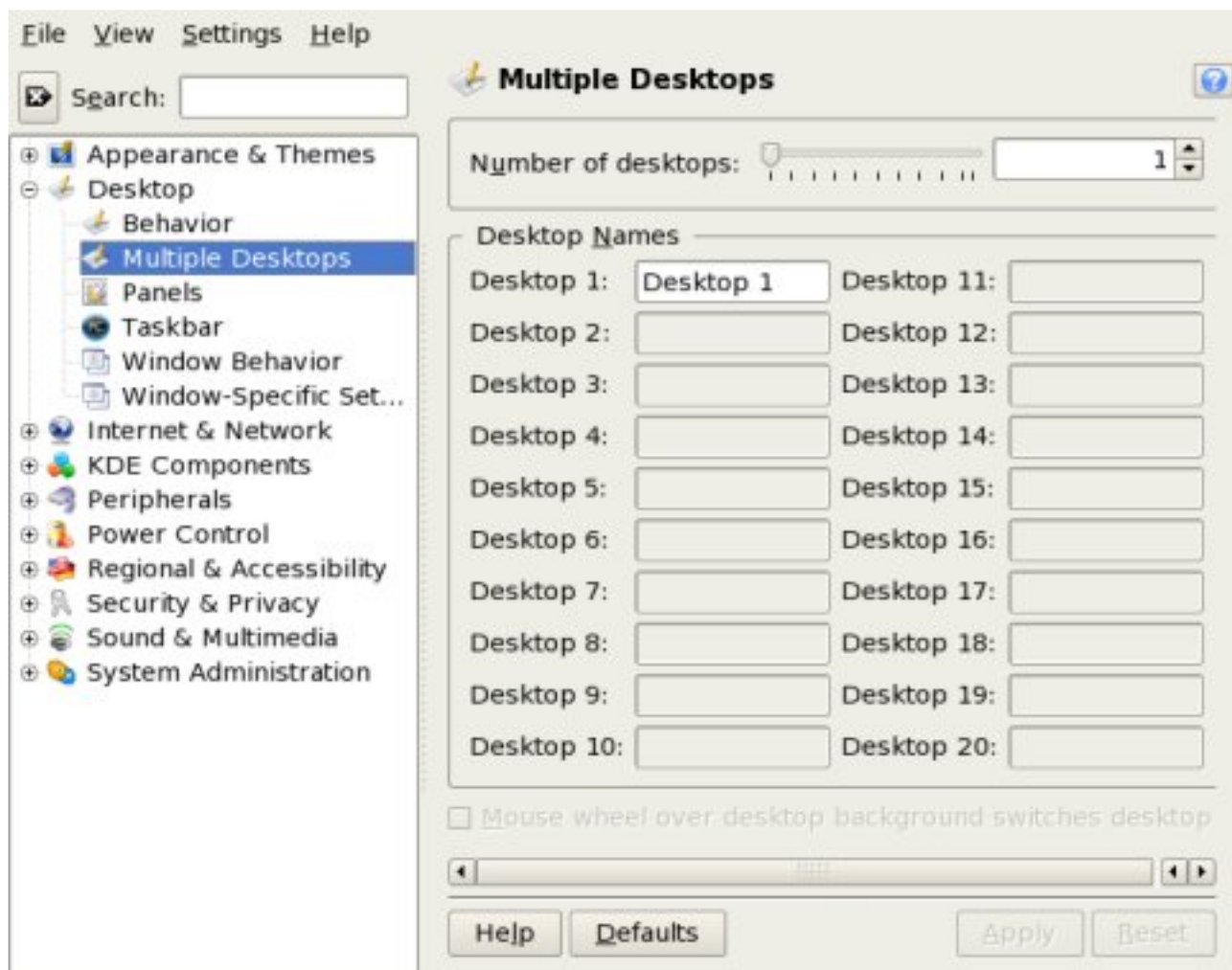
Looking forward to seeing you then!
Hope your journey is as uneventful as mine was.
PS. Sure is hot down here!!

Too Many Desktops

Q. Have you found that you suddenly have two or four times as many virtual desktops as you had without 3D enabled?

A. Go to the Start menu, System, Configuration, and click on Control Center. This will open up the KDE Control Center. Choose Desktop and then Multiple Desktops.

Use the slider to adjust the number of desktops to 1. Problem solved.

File   View   Settings   Help

Search:

- Appearance & Themes
- Desktop
  - Behavior
  - Multiple Desktops
  - Panels
  - Taskbar
  - Window Behavior
  - Window-Specific Set...
- Internet & Network
- KDE Components
- Peripherals
- Power Control
- Regional & Accessibility
- Security & Privacy
- Sound & Multimedia
- System Administration

Multiple Desktops

Number of desktops: 1

Desktop Names

Desktop 1:	Desktop 1	Desktop 11:	
Desktop 2:		Desktop 12:	
Desktop 3:		Desktop 13:	
Desktop 4:		Desktop 14:	
Desktop 5:		Desktop 15:	
Desktop 6:		Desktop 16:	
Desktop 7:		Desktop 17:	
Desktop 8:		Desktop 18:	
Desktop 9:		Desktop 19:	
Desktop 10:		Desktop 20:	

☐ Mouse wheel over desktop background switches desktop

Help   Defaults   Apply   Reset

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