

# The **NEW** PCLinuxOS Magazine

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Halloween  
edition



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# Welcome From The Editor

by Paul Arnote (parnote)

WOW! What a month it has been! Where do I start?

First, KDE 4.3.1, although still being refined by Texstar and the Packaging Crew, has made its way to PCLinuxOS users' desktops. As expected, Texstar's touch can be felt, as it feels very solid. Despite the warning that it's not intended for everyday use, I have experienced no problems running it on my test box. KDE 4.3.2 is reported to be close to finished.

Second, Sproggy has released Phoenix, the PCLinuxOS XFCE remaster. If you haven't had a chance to check it out, you owe it to yourself to give it at least a trial run from the Live CD. Not only is it lightweight, but it's also fast and attractive.

Third, the PCLinuxOS "toolchain" – the gcc compiler and libgcc – have been upgraded by Texstar, from version 4.1.x to 4.4.1. This now allows PCLinuxOS to offer later kernels, and to compile newer versions of programs.

Fourth, and speaking of kernels, a new kernel was recently released, version 2.6.27.31.tex5. Installation was easy (via Synaptic), and it seems to run noticeably faster on my laptop.



Meanwhile, this month the PCLinuxOS Magazine brings you lots of new articles. First, we have **reviews of Phoenix and KDE 4.3.1**. Patrick Hornecker continues his "Through The Lens" series, with **Gimp Basics**, as well as giving us a David Letterman-style **top seven reasons to choose PCLinuxOS over Windows 7**. Two new columns premiere this month, **Game Zone** and **Gadgets & Gear**. Linuxera reviews "Second Life" for the Game Zone, while I review the SanDisk SansaClip MP3 player for Gadgets & Gear. Georgetoon returns with another installment of **Double Take**, along with a Gimp tip. Ms\_meme regales us with another round of **Forum Foibles** and **ms\_meme's Nook**. She also gives us a special gift, with her **birthday wishes for PCLinuxOS**, while I pen a special article about the **6th Birthday of PCLinuxOS**. October also marks **Breast Cancer Awareness Month**. Meemaw walks us through using XSane with your flatbed scanner, in **Scanner Saga**. Critter starts a series on the command line interface, with his **CLI Introduction** article this month.

We visit the **Gutsy Geeks**, the only radio talk show in the United States devoted exclusively to Linux and open source software. Musonio brings us another installment of Scripts-R-Us, with his article on **how to create a GUI with GTKDialog**. Meemaw also "demystifies" the System menu, by providing a brief description of the sometimes-scary-items under the KMenu's System entry in her **System Secrets** article. We get to go "**Behind The Scenes**" again, this month with Joble, in his own words. Eronstuc explores Dylan, in his continuing series of articles examining various computer languages, in **Computer Languages From A to Z**. We also have a couple of **testimonials** this month, from Catilley and pullapint. Stricktoo brings us another **Flashback** article, and his **five favorite Firefox add-ons/extensions**. Athaki **updates his Acer Aspire One** article from last month, since he has updated his netbook to run KDE 4.3.1. Galen Seaman was fortunate to be able to attend **LinuxCon** in Portland, Oregon, and he gives a first hand report of his attendance to readers of the PCLinuxOS Magazine. And, once again, **Timeth** has blessed us with another of his original artwork creations to use as the cover for the October issue of the PCLinuxOS Magazine.

There is more yet to come. Sprogy is reported to be working on an e17 Enlightenment remaster. As I mentioned earlier, KDE 4.3.2 is literally right around the corner. And there are other projects in the works.

I'd like to extend special thanks to Texstar, as well as the Packaging Crew, for their continuing hard work that has enabled PCLinuxOS to continue to evolve as one of the best (if not the best) Linux desktop system out there. I'd also like to extend a warm thanks to the PCLinuxOS community, for being so gracious and welcoming to new users, and for being so helpful in assisting to solve other user's problems in the PCLinuxOS Forum. All of this, combined, is what makes PCLinuxOS the quality Linux distro that it is.

**Paul Arnote [parnote]**  
**PCLinuxOS Magazine Chief Editor**

**ERRATA:** David Lally was mistakenly referred to as David Lilly in the Samba article in the September issue. We regret the error.

## Reach Us On The Web

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**PCLinuxOS Magazine Forum:**

<http://pclosmag.com/forum/index.php>

**Main PCLinuxOS Forum:**

<http://www.pclinuxos.com/forum/index.php?board=34.0>

**MyPCLinuxOS Forum:**

<http://mypclinuxos.com/forum/index.php?board=157.0>



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# PCLinuxOS: 6 Years Old

## Introduction by Paul Arnote (parnote)

No matter how you slice it — 10 elephant years, 20 horse years, 33.3 cat/dog years — PCLinuxOS is celebrating its 6th birthday (in human years) on October 24, 2009.

Of course, all PCLinuxOS users owe a great deal of gratitude to a man named Bill Reynolds, a.k.a. Texstar, who branched out on his own to start a new Linux distro, called PCLinuxOS. Over the years, users have come and gone, and PCLinuxOS has evolved into the stable Linux platform that it is today. And, as the birthday draws nigh, PCLinuxOS continues to evolve, with the recent additions of LXDE and XFCE remasters, two Gnome versions (PCLinuxOS Gnome and Zen Mini), a slim KDE version (Minime 09), KDE 4.3.x emerging as the dominant KDE desktop (since official support for KDE 3.5.x is slated to end very soon), and an Enlightenment remaster in the works. PCLinuxOS is definitely alive and well.

As most of you already know, PCLinuxOS has garnered a strong following, and has a reputation of "everything working right out of the box." Although the "official" slogan for PCLinuxOS is "Radically Simple," many have referred to it as "The Distro Hopper Stopper," since many users' search for a Linux distro that works with all their hardware ends with their installation of PCLinuxOS. The PCLinuxOS Forum is very active, and has a reputation of being one of the friendliest Linux forums around. PCLinuxOS also routinely ranks among the top ten Linux distributions on DistroWatch.

To celebrate the 6th birthday of PCLinuxOS, it's probably best to let its founder, Texstar, lay it all out for you, in his own words.

## PCLinuxOS - A little walk down history lane

### by Texstar

In the summer of 2003, I became interested in LiveCD technology after looking at Knoppix and a fresh distribution from a fellow named Warren, called Mepis. I was interested in helping Warren with Mepis at the time, but I had no clue how to build Deb files. Coming from 5 years of packaging rpms and not really wanting to learn a new packaging system, I happened to come across a South African fellow by the name of Jaco Greef. He was developing a

script called mklivecd and porting it to Mandrake Linux. I, along with Buchanan Milne (Mandrake contributor) and a few others, began working with Jaco to help debug the scripts. I got an idea to make a LiveCD based on Mandrake Linux 9.2, along with all my customizations, just for fun. I had previously provided an unofficial 3rd party repository for the users of Mandrake for many years, but had since parted ways. Since Mandrake was a trademarked name, myself and others decided to name the livecd after our news site and forum pclinonline, thus PCLinuxOS.

Preview .3 was my first attempt to make a LiveCD. I initially distributed it to about 20 people to get their reaction and feedback. Everyone who tested it loved the LiveCD, but there was one thing missing. There wasn't a way to install the thing to the hard drive! srlinuxx from tuxmachines.org came up with a novel way to copy the LiveCD to the hard drive, and posted it on our forums. Jaco utilized this information, along with inspiration from the Mepis installer, and wrote a pyqt script to make the LiveCD installable; thus the birth of a new distribution.

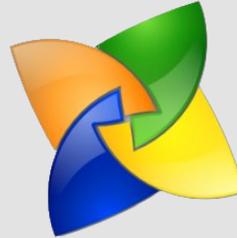


On October 24, 2003, PCLinuxOS Preview .4 was released as a fork of Linux Mandrake (Mandriva) 9.2, utilizing

mklivecd scripts from Jaco Greef, a multimedia kernel from Thomas Buckland (2.4.22-tmb) and a customized KDE (3.1.4-tex). Preview .5 through .93 were built upon on previous PCLinuxOS releases. After 3 years of updating one release from the other using the same gcc and glibc core library, we found too many programs would no longer compile or work properly against this aging code base.

In November 2006, we utilized a one time source code snapshot from our friends at Mandriva to pull in an updated glibc/gcc core

and associated libraries. We spent the following 6 months rebuilding, debugging, customizing, patching and updating our new code base. We pulled in stuff from our old code base, and utilized patches/code from Fedora, Gentoo and Debian, just to name a few. This is why you will never see me distro bashing, as it would be hypocritical to do such a thing since we are still dependent in many areas on other distros development processes due to our limited, but hard working, volunteer development team.



On May 20th, 2007 we felt we had reached a pretty stable base and released PCLinuxOS 2007, utilizing our own kernel from

Oclient1, KDE built by MDE developer Ze, updated mklivecd scripts from IKerekes & Ejtr, a heavily patched Control Center, graphics from the PCLinuxOS beautification team and many application updates from Thac and Neverstopdreaming. Development continues as work is being done for a Minime release and an international DVD. A future release of PCLinuxOS will feature an updated kernel, KDE 4, fresh Xorg server and all the latest applications. All in all, it has been a great ride and we have made many friends along the way. Some have gone on to other distributions and many are still here from our first release. As I've always said, we're just enjoying Linux technology and sharing it with friends who might like it too. We hope you have enjoyed the ride as well.



Halloween has origins in the ancient Celtic festival known as Samhain [pronounced: sah- wen]. The festival of Samhain is a celebration of the end of the harvest season in Gaelic culture, and is sometimes regarded as the "Celtic New Year". Traditionally, the festival was a time used by the ancient Celtic pagans to take stock of supplies and slaughter livestock for winter stores. The ancient Celts believed that on October 31st, now known as Halloween, the boundary between the living and the deceased dissolved, and the dead become dangerous for the living by causing problems such as sickness or damaged crops. The festivals would frequently involve bonfires, into which the bones of slaughtered livestock were thrown. Costumes and masks being worn at Halloween goes back to the Celtic traditions of attempting to copy the evil spirits or placate them, in Scotland for instance where the dead were impersonated by young men with masked, veiled or blackened faces, dressed in white.

### Origin of name

The term Halloween, originally spelled Hallowe'en, is shortened from All Hallows' Even ("All Hallows' Eve") [eve is an abbreviation of even, an older word for evening. Halloween gets -een as a result of syncopation of even to e'en], from the Old English term eallra hālgena fen meaning "all saints' evening", as it is the eve of "All Hallows' Day", which is now also known as All Saints' Day. It was a day of religious festivities in various northern European pagan traditions, until Popes Gregory III and Gregory IV moved the old Christian feast of All Saints' Day from May 13 (which had itself been the date of a pagan holiday, the Feast of the Lemures) to November 1. In the 9th century, the Church measured the day as starting at sunset, in accordance with the Florentine calendar. Although All Saints' Day is now considered to occur one day after Halloween, the two holidays were, at that time, celebrated on the same day. — Source: Wikipedia

# Happy Birthday, PCLinuxOS!!!

by ms\_meme

Happy Birthday PCLOS  
Thanks to Tex for this box of joy  
There's no cost for PCLOS  
Open source- go get it- oh boy!

It is the best it's known far and wide  
Got something else well put it aside  
We want PCLOS or we're using none  
Get it, Got it, Good, what fun!

We've been having a sweet time  
Booting PCLOS everyday  
Haven't spent on it one dime  
But you can give through PayPal anyway

You can be sure you'll have no strife  
It will last you the rest of your life  
We want PCLOS or we're using none  
Get it, Got it, Good, what fun!



OGG



MP3



# Top Seven Reasons To Choose PCLinuxOS over Windows 7

by Patrick G Horneker

With Windows 7 to be released on October 22nd, we really need to push the idea that consumers should choose PCLinuxOS over Windows 7. Microsoft started its television advertising campaign using, of all things, **a seven year old child** as a spokesperson. The selling point in the ad was "I am a PC", and the words "more happy" were actually used in the advertisement to promote Windows 7, as well as selected quotes supposedly from the major computer media companies. especially when ZDNet, not two weeks ago, said that the Linux desktop was ready for the mass market.

The screenshots from Andrew Huff's article comparing Windows 7 to KDE 4 are solid evidence that much of the KDE4 desktop has become part of the Windows 7 desktop.

With this in mind, I shall present the top seven reasons why consumers should replace Windows with PCLinuxOS, instead of upgrading to Windows 7.

## — Seven —

Windows 7 requires 1GB of RAM, with 2GB recommended for performance. PCLinuxOS requires 128MB for Phoenix, LXDE, and some variants, while 256MB is the requirement for the KDE3 and GNOME variants of PCLinuxOS. 512MB is the minimum for the KDE4 desktop.

## — Six —

PCLinuxOS is like 7-up when it comes to viruses, trojan horses, spyware, malware, and other malicious software: Never had it, never will.

## — Five —

PCLinuxOS is available as an installable LiveCD that can also be booted off from a USB flash drive, or a memory card for that matter. There is no live version (not even a demo) of Windows 7 to try out.

## — Four —

PCLinuxOS is easy to install and administer. In fact, it is so easy, even the seven year old child who does the advertisements for Windows 7 can administer PCLinuxOS.

## — Three —

Hewlett-Packard All-in-one devices work out of the box with PCLinuxOS. Even with Windows XP, extra software is needed to get these printers working.

## — Two —

Wireless networking is made easy with PCLinuxOS, especially if you have a Atheros chipset built into your laptop. Simply run drakroam and you are set for secure wireless freedom.

...and the number one reason for installing PCLinuxOS over Windows 7

## — One —

Consumers will get the best desktop made by the best people on earth!



# Phoenix 2009.4: PCLinuxOS XFCE Remaster Released

by Paul Arnote (parnote)

As with all the versions of PCLinuxOS, you will find familiarity with the presence of the PCLinuxOS Control Center and Synaptic. Also installed, by default, is the Firefox 3.5 web browser, and Thunderbird is available for your email duties.

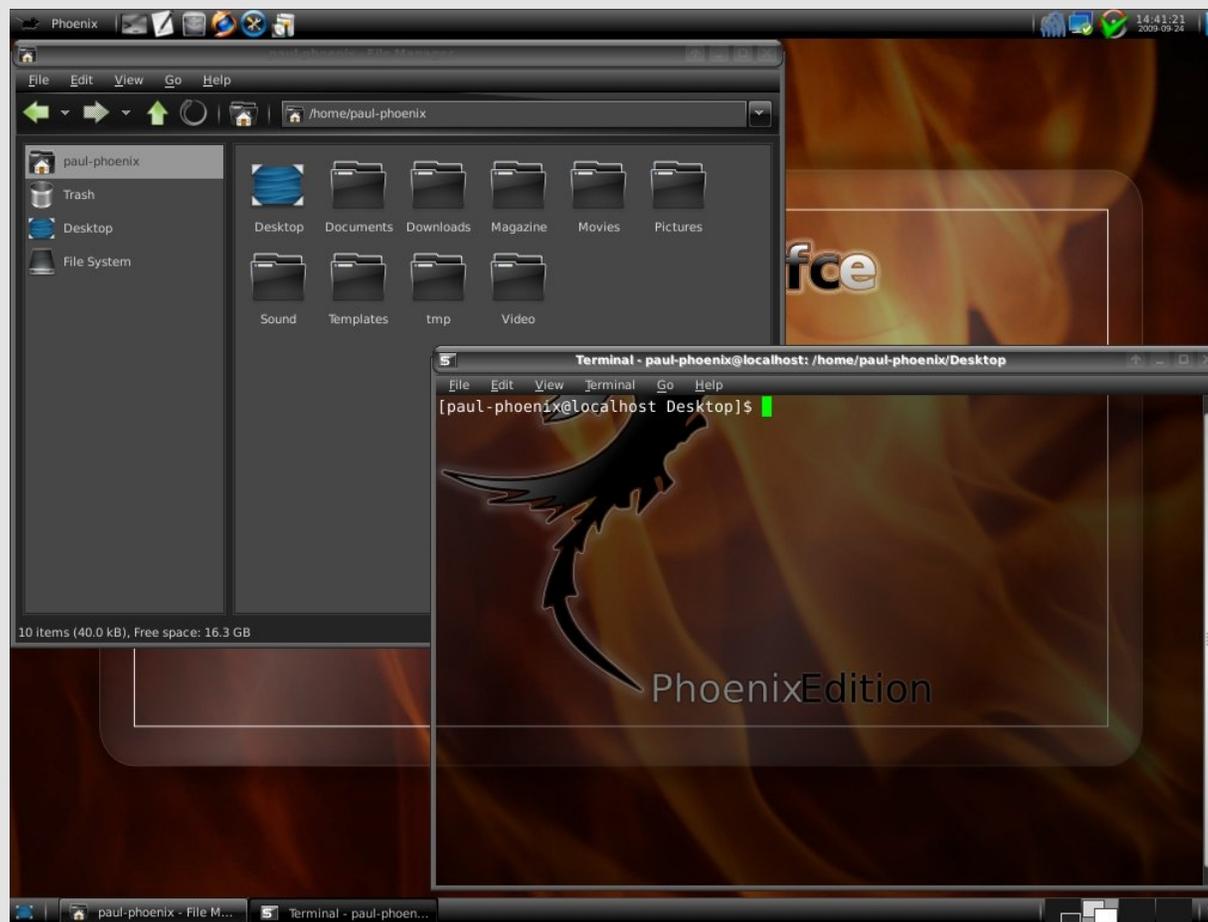
GIMP takes care of most of your graphics needs, and there is a screen shot utility. Image Viewer provides a fast, easy way to quickly view graphics on your system.

Sound file playback is handled by Listen Music Player, and I was quite pleasantly surprised by the capabilities of this player that I had never tried. There is the Sound Recorder application, as well. A sound mixer application gives you full access to your sound card settings, while Totem Movie Player takes care of your video playback needs.

File manager duties are handled by Thunar. Navigation is easy, and Thunar has all the functionality one could hope for in

a file manager. Thunar is designed to have a small memory footprint, and is extensible through plug-ins.

Mousepad, the default text editor for XFCE, is present to handle your text editing needs. Orage, an enhanced calendar program for XFCE, is also present, handling your calendar reminders. Orage has user-defined alarms, and even incorporates a to-do list to help keep you organized.



Phoenix, the PCLinuxOS XFCE remaster, was released on September 14, 2009, by Sroggy, who made and packaged the remaster as part of a community project on MyPCLinuxOS.com. And this is not your normal XFCE release, that looks like Windows 98. This XFCE remaster is attractive, styled in a classy, dark theme. Although the XFCE desktop environment is a light weight desktop, Phoenix is a heavy weight contender. Phoenix utilizes the latest stable version of XFCE, with version 4.6.1, and runs the latest stable kernel, 2.6.26.8.tex3.



XFCE uses the same GTK+ 2 toolkit used by Gnome, and users familiar with Gnome will find themselves right at home. The XFWM window manager is used, however, in place of the full Gnome window manager. Yet, KDE users will have little difficulty in making themselves right at home.

Similar to the KDE Control Center, all the settings for the XFCE desktop environment are handled by the XFCE Settings Manager.

You can, of course, add most any of the programs from the PCLinuxOS repository, using Synaptic. OpenOffice installs easily via the GetOpenOffice utility (in the Utilities folder on the desktop), and runs effortlessly.

On my computer that I have set up as a test box (AMD Athlon XP 3000+, 1.5 GB Memory, NVidia FX 5200 video card), Phoenix runs fast and smooth. But the real treat comes in running the XFCE desktop environment on older, more modest hardware. Installed on my seven year old IBM Thinkpad T23 (Pentium III, 1130 MHz, 512 MB RAM), Phoenix is fast and responsive, breathing new life into

this older laptop of mine. Phoenix is capable of running on a Pentium II with as little as 128 MB of memory, although performance will be improved with more memory and a faster processor.

## So Why "Phoenix?"

from the website (<http://cozmodesigns.co.uk/phoenix/>):

*"The Phoenix is a mythical bird with a colourful plumage and a tail of gold and scarlet (or purple, blue, and green according to some legends). It has a 500 to 1,000 year life-cycle, near the end of which it builds itself a nest of myrrh twigs that then ignites; both nest and bird burn fiercely and are reduced to ashes, from which a new, young Phoenix or Phoenix egg arises, reborn anew to live again. The new Phoenix is destined to live as long as its old self. In some stories, the new Phoenix embalms the ashes of its old self in an egg made of myrrh and deposits it in the Egyptian city of Heliopolis (sun city in Greek).*

*Our Phoenix, like that throughout history, is here to live as long a life as it's predecessor. She will flourish and grow and create anew for all her users in the future."*

So, just as the mythical Phoenix rose from the ashes, so has PCLinuxOS Phoenix 2009.4 risen from the ashes to become the official PCLinuxOS XFCE offering.

## Summary

Phoenix presents users another choice for a fast, light weight desktop, joining PCLXDE as a choice for a version of PCLinuxOS that will run on more modest hardware. It's lean, and it's fast, but it also has all the muscle and stability you have come to expect from PCLinuxOS and Texstar. Sproggy has continued that reputation with this release of Phoenix - the PCLinuxOS XFCE Remaster.

# DOUBLE TAKE



By Mark Szorady

Find at Least Seven Differences Between Cartoons!



Answers on Page 20

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-Mark Szorady is a nationally syndicated cartoonist. His work is distributed by [georgetoon.com](http://georgetoon.com). Email Mark at [georgetoon@gmail.com](mailto:georgetoon@gmail.com).

## Mark's Quick Gimp Tip

Last month, I uploaded a file comprised of multiple layers. It was a "hands on" way of showing Gimp beginners exactly how working with layers is accomplished. I hope you had a chance to grab the image off the georgetoon server. If not, here's a second chance. Simply get the file at: [http://www.georgetoon.com/Gimp\\_Tip/September](http://www.georgetoon.com/Gimp_Tip/September). I wanted to mention one other thing about that file. When you look at all the layers, you can understand how I dropped the jet in. It was either a piece of clip art or something I extracted from another photo. But, how did I create the clouds? Were they somehow extracted from another photo, as well? Not at all. Those clouds were created by Gimp simply by selecting a brush shape. The Gimp community is populated by many talented Gimp users who are creating brushes, plug-ins, effects, etc. All you need to do is fire up Google and do a search! I found those cloud brushes at [Deviant Art's Project Gimp](#). Simply download the file, extract, and plug into your bushes folder at `/.gimp/brushes`. When you start Gimp, all the cloud brushes come up! You can then vary the size, opacity, softness, etc. Have fun!



# Gutsy Geeks Speak Linux



*Michael Cady*



*Richard Sherman, aka Mr. Modem*



*Nick Coons*

by **Paul Arnote (parnote)**

Out there, in the middle of the Sonora Desert, a beacon blasts out truth and testimony to everything that is good with Linux. Three brave souls dare to venture against the "mainstream" of society, swimming upstream against what is popular in the currents of modern computing. They dare to be different in a world that is dominated by Microsoft and Apple. They want you to – at the very least – give Linux a try. And their message can be heard every Saturday afternoon, as they hit the airwaves with yet another round of reasons Linux is a better choice.

These guys are **The Gutsy Geeks**. Every Saturday afternoon, their voices are lifted into the heavens, soaring above the Sonora Desert, delivering the message about open source software, and Linux. Their show can be heard on News/Talk KFNX 1100 AM in Phoenix, AZ, from 2 p.m. to 3 p.m. (Mountain Time, or -7 GMT). Their computer talk show is the **ONLY** show in the United States that deals exclusively with Linux and open source software.

Started in 2001 as the PC Talk computer talk show, they made the switch to covering the open source and Linux communities exclusively in January, 2008. In a news release from November 28, 2007, show co-host Michael Cady says:

"BIG NEWS - PC Chat, which has been on the air for over 6-years now, will be changing it's name to Gutsy Geeks (gutsygeeks.com) in Jan08. Our format will be switching over to exclusively Linux and Open Source based content.

The new focus of the show will be to inform users of the advantages of switching to the Linux operating system, and once they have converted, how to use it to its fullest potential.

I am looking forward to the changes. We have new sponsors coming on-board and tons of fresh content. We will be reviewing Linux products, software, books, websites and companies involved in Linux or Open Source projects.

I want to thank all you loyal listeners for putting up with us over the years, and I sincerely feel that this upgrade will be better for all of us!

- Michael"

And switch they did. They made the on-air announcement the very next show, airing December 1, 2007. Some excerpts from that show:

**Michael Cady:** Open source is a philosophy. It's what governs Linux, the operating system, which is a replacement for Windows or Apple's OS-X. This is not a program you install in Windows, or install in Apple. It is an entire system that runs your computer, called Linux. It's actually pretty closely related to Apple, if you look at its core programming. The point is, this is an alternative, and it's governed by something called open source, rather than proprietary software, and the vast majority of applications that you run in Linux ... thousands upon thousands of them ... are all open source applications, which also give you the same immunity from legal ramifications, and the cost.

**Mr. Modem:** That you can't beat.

**Michael Cady:** C'mon. If you want a new program for editing video, then you just click in your package manager in Linux and download it. You don't drive to the store and buy anything, just to find out you don't like it.

**Mr. Modem:** I think that the concept that a lot of people just can't quite grasp, because it seems like there's something wrong ...

**Michael Cady:** ... because it's free?

**Mr. Modem:** ... it's free. Like, what's the hook? Something's going to get me, and there's got to be something somewhere.

**Michael Cady:** Let me explain that, because it's not free. It's free to the masses. Trust me, there are programmers out there being paid TONS of money by all kinds of companies, governments, schools,



organizations, who have a vested interest in open source software. They are being paid. They are being paid big bucks to develop this software. They are just not being paid by you. They are being paid by somebody else, that's all. It's just a different business model. They make money a whole different way in Linux and open source than they make money at Microsoft and Apple. But they are still making money, and everybody is still happy.

...

Most people in Linux go by something called FOSS, which is Free and Open Source Software. That's what most advocates of Linux will use, and profess for other people to use, so that you have no legal ramifications for piracy or copyright issues, or nothing like that, and you don't have that price barrier between you and what you want to accomplish. Because, honestly, I don't think a lot of people do things with their computers because they don't want to spend the money for the software.

Say, I've goofed around with this stupid photo editor that came with my digital camera for two years. And it just does not cut it. It just does not do the things I want to do with a photo editor. Well, if I want to step up to something like Photoshop, for example, by Adobe, in Windows, that's an \$800 program. I'm not talking about Photoshop Elements. That's sad. I mean the real Photoshop. That's too much money, and the odds are even if I liked photography a lot, I'm really getting into it, and I might even want to explore it as a career or a part-time thing doing weddings or something, the odds are I'm not going to spend that kind of money to see if I like that software. Now in open source, that constraint is instantly removed. So whether you need an entry level application for a beginner, or a professional tool, they are all free and open source applications.

**Mr. Modem:** And isn't it true too, that with a Linux based app, if you need to uninstall or remove it, it disappears cleanly, as opposed to

...

**Michael Cady:** Yeah, it has to do with the package manager.

**Nick Coons:** Right. When you install an application from the package manager, it keeps a log of every file that it puts on your system, so when it goes to remove it, it knows exactly what to pull out, and it pulls everything out cleanly. So you can go through and try 10 different photo editing programs if you wanted to. Once you find the one you like, you can unistall the other nine, and your system is no worse off for that.

**Michael Cady:** You're right. But you're not going to do that with proprietary software. You're going to go out and buy 10 programs? If you buy one that really stinks, you're still going to use it. What I hear over and over from people, is "I bought that stupid, crap program Norton ... I HATE IT ... IT'S HORRIBLE." But why you running it? "Well, I paid \$79 for it, and I'm going to get my money's worth out of it." How much does it really cost if you are angry every time you use it?

**Mr. Modem:** Right, and Norton's a great example. Then when your license is up at the end of the year, try to get rid of it. Good luck removing it. Oh man, what a nightmare.

**Michael Cady:** Another great example of the package manager in the Linux operating system, versus Windows or Apple, is that the package manager in Linux keeps track of updates for ALL of your software, not just your operating system, and maybe your browser or maybe your office suite. So, using the package manager, every program you install with it, whether it's a game or edutainment tool or whatever you are trying to accomplish, you have 30, 40, 50 programs in your computer, and your updater updates ALL of them. But here's the core difference -- it doesn't just update security flaws and problems, which is usually the only updates you're going to get for Windows, is fixing a known security issue. The updates through your package manager don't just fix things, it offers improvements. So whenever you want to update a program, you can not just say fix a problem with it, but you have the opportunity to actually make it better. Because, in open source, they don't have to wait every two or four years to make you buy a new version to get new features. They can release them to you as they become available. So if you're wishing for this new feature in your photo editor, you don't have to necessarily wait for three or four years for the next version to be sold to you. It may be available in two weeks in an update if enough people want that done. It's easier to learn and

grow with your software, than getting hit over the head with a hammer to have to learn a new application, or a new version of your application every few years, when they change so dramatically all at once.

**Mr. Modem:** Like Office 2007 just did that ...

**Michael Cady:** Oh good luck!

**Mr. Modem:** It's just making people nuts.

**Michael Cady:** It is. So is Internet Explorer 7. Because, they hit you over the head with all these changes, where in open source, you get hit with little changes released over time, so it's easy to slowly grow and adapt and to become a more sophisticated user, a more capable user. The open source philosophy makes so much more sense than proprietary (software). There's always



**GUTSY GEEKS**  
COMPUTER SHOW

exceptions. We're not here to say this is for everybody, but I genuinely believe that the vast majority of the population, in excess of 70 to 80 percent of people, would be better served using open source software, as opposed to the same-ol' same-ol'.

**Mr. Modem:** It's a different model, and it's time for a change.

**Michael Cady:** It is. (continues after a commercial break) And, if you haven't noticed, the show has taken a decidedly open source/Linux slant over the last six months or so, and we're pushing more and more that direction, because our mission as a show, from the beginning, has always been to recommend what we think, honestly, is best for you. So, instead of you having to figure everything out on your own, we will at least give you our opinion on what we think is best. And, we've treaded kind of softly, I think, in

the Linux world. up until recently, because we just didn't feel that it was ready for most people to use because of the interface not being quite as polished and friendly as what you're used to with new versions of Windows and new versions of OS-X. But, we're here to say that that has changed. Here in the last year or two, the progress made on the desktop environment in Linux is tremendous. We think it's time that everyone give it an honest shot. Now we're not trying to turn you into nerds here. We don't want you to be installing operating systems and tweaking device drivers and doing settings.

**Mr. Modem:** Your head would explode.

**Michael Cady:** Yeah. If you don't do that already in Windows or in Mac, then we're not suggesting you become a nerd in Linux all of a sudden. While your computer may have come with Windows on it, most of you would have some difficulty in installing it properly, from scratch, and getting all of your updates and drivers and things put in place the way they are supposed to be, to be sure you have full functionality of your machine. So, if you're going to install Linux, which, by the way, will run on pretty much any PC that Windows will run on, but if you're not really savvy with the technical side of computing, we don't really suggest that you begin that today.



**Mr. Modem:** No, no, no, no.

**Michael Cady:** So have a friend, or an IT person, or a business, help you get started with Linux, and offer you some support to get you headed in the right direction.

**Mr. Modem:** In the weeks and months ahead, we're going to be talking more about the basics and getting started and where to go for help, help resources, and kind of be your one-stop-shop for everything Linux.

**Michael Cady:** Exactly true. We're going to slowly be transitioning over the next month or so, but to start the new year, in '08, the show will transform into, pretty much exclusively, a Linux and open source based program. But the new format is going to be really exciting. I'll go over that with you. We're going to be highlighting on the show here in the future, is, as a guest, which is almost like we've always done and have guests on, but these guests will be from open source and Linux based companies, or at least companies that embed Linux in their products, etc. There will have to be some type of Linux or open source angle to the guest to be on the show.

**Mr. Modem:** And you'll probably be surprised at how widespread Linux really is running behind the scenes.

**Michael Cady:** Oh, man!

**Mr. Modem:** Most people don't know that.

**Michael Cady:** They have no idea that it's already completely in their lives. As well, we'll be doing a product review. Each week, we'll pick a product, whether it's something like a TIVO, or whether it's a peripheral for your PC, or it could be any number of things. It could be a new cell phone. Some physical device, that uses Linux or open source software.

**Mr. Modem:** And, if you're looking for something specific, and you can't find it, or if you're just curious if it exists in the Linux world, just send us an email, and we'll be glad to do the research and find out.

**Michael Cady:** This show is all about being interactive. We thrive off of your feedback. If you have a question, an idea, a concept, a suggestion, just please send it over to us via email, and we will take it very seriously. ... So then, we'll be reviewing a product each week. As well, we'll be reviewing some software.

**Mr. Modem:** We've talked about the thousands and thousands of software programs, and for people that are using Windows, or have been using it for years, if you want to know what the equivalent is, or what if I'm using Quicken, what should I be using if I'm using Linux. And that is the type of information we're going to be bringing to you.

**Michael Cady:** All the pros and cons, because sometimes there are cons to using open source programs. Not just any particular one. It's a good thing that you have a lot of choices in open source, but there's cons in everything else. There's lots of cons to Windows, like getting viruses constantly, maybe. And there's lots of cons to Apple, like paying through the nose for everything, maybe. So there's a down side to everything.

**Mr. Modem:** And we'll be real fair in assessing it. If there's something we don't like, or we think could be better, or that doesn't work well, we'll bring it to you. It's not going to be all "rah-rah" all the time.

**Michael Cady:** No, no, no. We're going to try to give you a balanced view, the best that we can. We obviously are big fans of, and love, open source software, but we know that it's not perfect. And there are some down sides. But those are minuscule in comparison to the down sides from being infected constantly.

**Mr. Modem:** Yeah, that gets old.

**Michael Cady:** And removing spyware, and spending half of the time on your computer trying to fight back, just to use it. So, we'll be reviewing programs for you, and there are so many good programs

out there, but we're going to keep it mostly to the beginner level. We'll also be reviewing web sites, because in open source, there are just a multitude of sites that will help you recommend particular applications, based on what you are familiar with, or what you are trying to accomplish.

**Mr. Modem:** There are a lot of great help sites, where you can turn to to ask questions, on message boards, forums, and that type of thing.

**Michael Cady:** Oh, it's brilliant. And the community, just because of the nature of open source is all about people working together, and because of that, there is this really rich, online community that will help you solve just about any problem you can come up with in Linux or open source. As well, we'll be keeping you up-to-date on events. We'll be focusing on large Linux gatherings around the country, whether they are like Linux World, which is was just about six months ago in San Fransisco, that was a tremendous event. They had the Ohio Linux Fest not that long ago. We'll let you guys



know about the big events, or even local ones throughout the Phoenix area, where we're at. As well, about things like classes and opportunities for you to learn, like a lot of libraries ... schools are now offering Linux, even for beginner classes ... we'll be talking about new books that are out, things that will be relevant to you as a user.

**Mr. Modem:** And new things, new developments. Like if a new version of something comes out, we'll talk about that, and those types of things, just to keep you apprised.

So just who are these computer mavericks?

**Michael Cady** - starting with a Timex Sinclair computer more than 20 years ago, he's been interested in computing ever since. Co-owner of the [RedSeven](#) computer company in the Phoenix area, Michael helped found [KidComputers](#), a charity that recycles older, used computer equipment and donates that equipment to underprivileged kids in the Phoenix area.

**Nick Coons** - known as the resident "geek," Nick learned programming when he was eight years old. His love affair with computing has grown ever since. He is the co-owner and CEO of the RedSeven computer company, with Michael Cady. Nick's computer skills include networking and programming in DOS, Windows, Linux, and Unix.

**Richard Sherman, a.k.a. "Mr. Modem"** - getting his start with computers in 1981, Richard has risen to great heights in the computing world. He writes the nationally syndicated "Ask Mr. Modem" newspaper column, is a featured columnist each month in Smart Computing magazine, publishes an award-winning "Ask Mr. Modem" weekly newsletter that reaches subscribers in 38 countries with a readership of more than three million readers every month, as well as being the author of eight books. He has also written articles that have appeared in The Reader's Digest, Wall St. Journal, USA Today, Money Magazine, the AARP Magazine, and numerous web sites. He even hosts the "Mr. Modem Minute," produced by FOX-TV.

If you feel that you have been missing out on these guys, have no fear. Most of their previous shows are archived on the Internet for you to listen to, or even download, at <http://www.gutsygeeks.com/audio>. All the available shows are in MP3 format, and the archived shows from May 3, 2003 to present are also available in OGG format. Shows prior to the January 13, 2008 show are archived on the web site bearing their former name, PC Chat Show (<http://www.pcchatshow.com/audio/>). You can also listen in live to the show on Saturday afternoons, by going to <http://www.1100kfnx.com/> and clicking on the "Listen Live" link at the top of the radio station's web page.

Truly, these guys are easy and a joy to listen to, and the hour long show is over long before you realize that an hour has passed. Not only that, but they are funny, and offer many insights into the reasons that listeners should be running Linux as their primary operating system. It's also apparent that there is little love loss for Microsoft, Apple, and other vendors of proprietary software. And, if you find these guys informative and entertaining, their guests are a veritable who's who in the open source software and Linux community. One recurring guest on their show is Richard Stallman, founding president of the Free Software Foundation, launcher of the GNU Project, and author of the GNU General Public License.

In a world dominated by proprietary software, it is truly refreshing to hear three voices of reason, championing the use of Linux and open source software.



# Scanner Saga

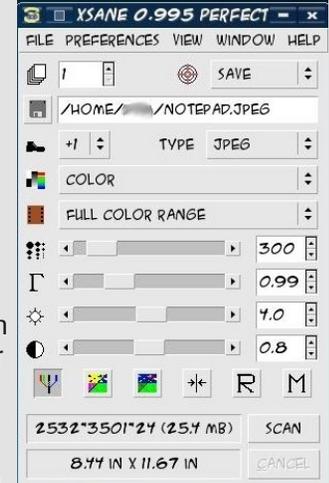
by Meemaw

Scanners are very handy for all of us! Many people scan important papers to save for their records or taxes, etc. If you have just gotten a scanner, you can configure it very easily in PCLinuxOS. The first thing to do is go to **PCC --> Hardware** and click on **Configure Your Scanner**. Most of the time, PCC will have detected the scanner and will give you a message like this:

Your Hewlett-Packard PhotoSmart PhotoScanner has been configured.  
You may now scan documents using "XSane" or "Kooka" from Multimedia/Graphics in the applications menu.

Underneath that is a file line where you can name the file you are saving. Most everything gets saved to your /home folder, unless you change it. You can choose the file type as well (mine says JPEG), and if it is a color picture, the next drop box should say "Color" (although it could say black & white or lineart).

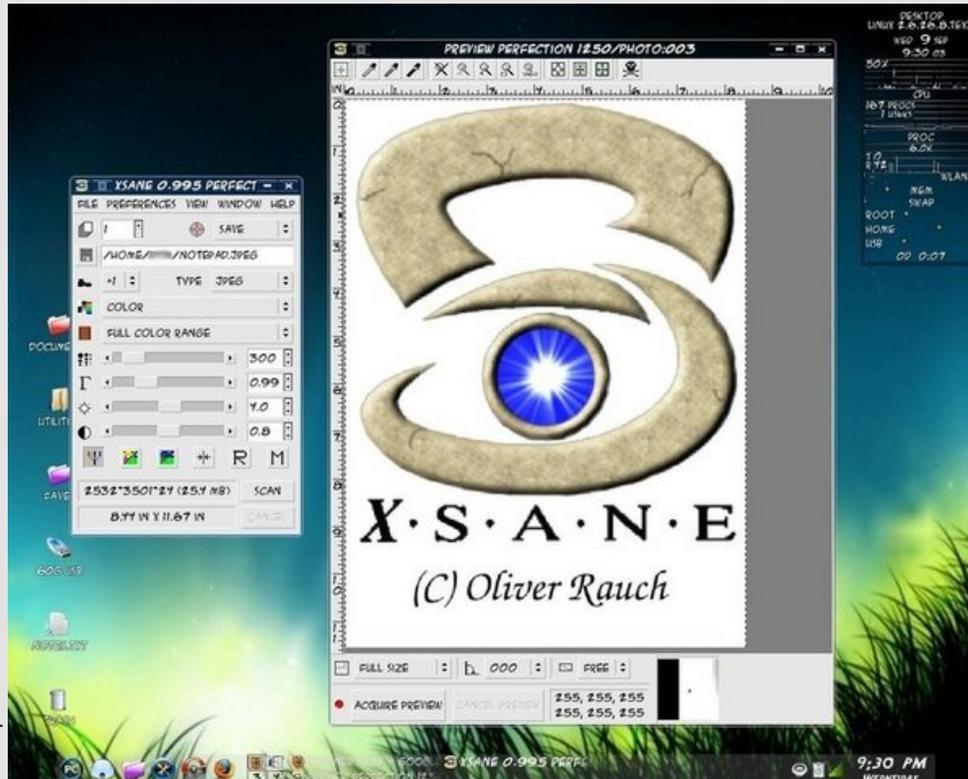
The next setting is the medium selection (changes the way the scanner works for negatives or slides, which are some of the other choices). I have it as full color.



Close PCC. Next, go to **Multimedia--> Graphics --> Xsane**.

The left window is the control panel, and the right one is the preview panel. There are more windows you can use, but these two can get you started.

Place the item you wish to scan in the scanner. I found a little picture I thought was cute, so I'm going to use that. At top left of your control panel is a drop box to use if you want more than one copy of something. At top right, there is a drop box where you can choose what you want to do. It has "Viewer, Save, Copy, Multi-page, Fax and Email." I have it on "Save" because I want to save the picture.



The left window is the control panel, and the right one is the preview panel. There are more windows you can use, but these two can get you started.

On the bottom left corner of the preview window is a button that says "Acquire Preview." Click on it. I generally preview things before I save them, as I have an annoying habit of wrinkling the item or folding down a corner, which messes up the scan.

Mine looked like the box above.

The slide bars in the control panel are for (from top to bottom):

**Resolution** - 300 is the default but you can change to a higher resolution (range is 100 - 600).

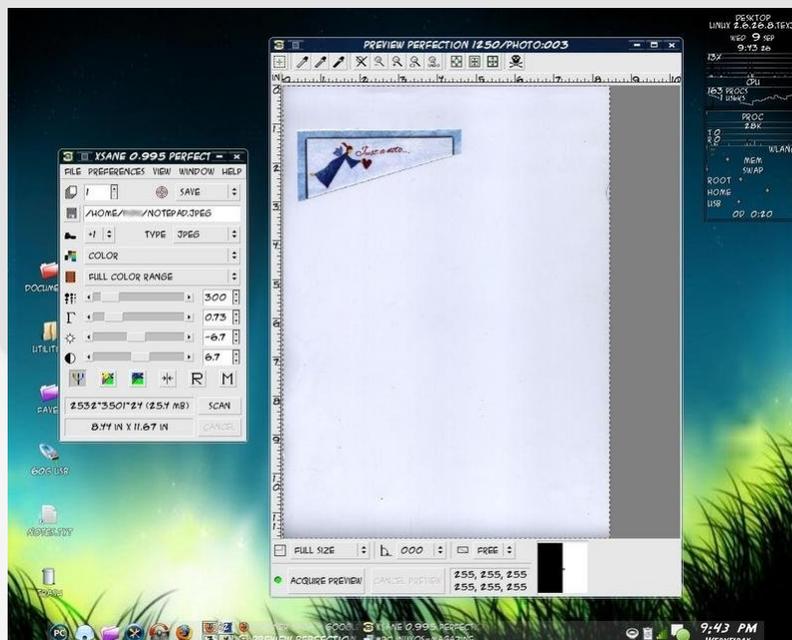
**Gamma** - This is a color correction setting.

**Brightness** - You can use this to lighten or darken a picture, much as you can in Gimp.

**Contrast** - Increases the tonal ranges of a graphic. Usually used in combination with the Brightness control, to help avoid "muddy" looking pictures.

The buttons under the contrast slider will help you save or restore settings.

Notice that there's a small picture and a big scanner bed. The next thing you may want to do is change your scan area, so you use the buttons at the top right side of the preview panel.



From left, the first one is **Autoselect**, which will allow you to use your mouse to select the area to be scanned (like cropping a picture).

Next is **Autoraize**. It works well if you have put more than one item in. You can click on one, and it will be selected & scanned.

Third is **Select Visible Area**, which will select everything on the scanner bed.

The last button deletes the preview scans that are stored, in case you want to start over.

Now if you've gotten a preview, used the slide bars (or numbers or arrows at right) to change settings and selected your scan area, click "Scan" on the control panel. You should see a bar traveling across the bottom, where it should say "Scanning" then "Transferring Image" (which means it's saving). The file should now be in your /home folder. If it is an irregular picture (like mine), you may still have to open it in Gimp and clean it up, but now you have it saved and you can play all you want! I did clean mine up in Gimp, because I wanted ONLY the angel.



There are other settings you can play with to get everything working just as you need it. I copy documents with this program as well, but the first line of the settings panel should be changed to "Copy" and the color setting should be set at "Lineart" if it's only a document.



You can also visit <http://www.xsane.org/doc/sane-xsane-scan-options-doc.html> to get descriptions of additional options.

Another PCLinuxOS user was the inspiration for this article, because the user had not yet configured the scanner in PCC. Imagine going to the "other" OS in your dual-boot, scanning your item, and then coming back to PCLinuxOS. No one should have to put up with that! If PCC recognizes and configures your scanner, you shouldn't have any trouble using it.

Any questions you might have can most likely be answered by our wonderful forum members.

#### Answers to Mark Szorady's Double Take:

(1) Word balloon different; (2) bat missing; (3) Crack in head shorter; (4) Coat lapel missing; (5) Table different; (6) Ghost arm added; (7) Computer monitor higher.



#### The Jack-O'-Lantern As A Symbol

The name jack-o'-lantern can be traced back to the Irish legend of Stingy Jack, a greedy, gambling, hard-drinking old farmer. He tricked the devil into climbing a tree and trapped him by carving a cross into the tree trunk. In revenge, the devil placed a curse on Jack, condemning him to forever wander the earth at night with the only light he had: a candle inside of a hollowed turnip. The carving of pumpkins is associated with Halloween in North America, where pumpkins are both readily available and much larger - making them easier to carve than turnips. Many families that celebrate Halloween carve a pumpkin into a frightening or comical face and place it on their doorstep after dark. The American tradition of carving pumpkins preceded the Great Famine period of Irish immigration and was originally associated with harvest time in general, not becoming specifically associated with Halloween until the mid-to-late 19th century.

The imagery surrounding Halloween is largely an amalgamation of the Halloween season itself, works of Gothic and horror literature, in particular novels Frankenstein and Dracula, and nearly a century of work from American filmmakers and graphic artists, and British Hammer Horror productions, also a rather commercialized take on the dark and mysterious. Halloween imagery tends to involve death, evil, the occult, magic, or mythical monsters. Traditional characters include the Devil, the Grim Reaper, ghosts, ghouls, demons, witches, pumpkin-men, goblins, vampires, werewolves, martians, zombies, mummies, pirates, skeletons, black cats, spiders, bats, owls, crows, and vultures. — *Source: Wikipedia*

# Game Zone: Second Life

by Cindy Solis (Linuxera)

Just to start out this article, I want to say, "I Hate Games!" I never win, they make me a nervous wreck trying, and it's so discouraging. But Second Life has changed all that! I didn't even know it existed, let alone did it cross my mind to look for something like it, but a friend from the #pclinuxos-naughty IRC Channel and PCLinuxOS forums invited me to try. I did, and now I'm hooked!

**Second Life** is a simulator based game run by the folks at Linden Labs. They have done a really nice job with the software, and from what I gather, it has improved dramatically over the last few years. Once you establish an account and download the free SL Viewer, you log in and are immediately transported to the Noob area. (Installation is as easy as downloading the Linux tar.gz file and unpacking it in your home folder. Once you've done that, go into the folder, start a console session, and type `./secondlife` without the quotes. This will bring up the viewer and you enter your chosen name and password and log on).

One of the first steps is creating your own avatar. This will depend on learning a small amount of information that can easily be found in the SL Wiki and Video tutorials. The next stop will be finding your way around. There is a search function on the SL browser that you can type anything into and it will give you results. I'm sure as soon as Moelwyn gets the new PCLinuxOS site set up in the 4freedom



camp, it will be readily found by searching for PCLinuxOS. Another nice thing about SL are the freebie areas. You can go and buy clothes for just about any event you want for \$0 L (Linden Dollars) or you can establish an account and buy Lindens to purchase more extravagant

items. (I bought a piano that really plays Beethoven and Mozart, go figure).

I have also run into kind souls who have given me so many items I've had to clean out my inventory from time to time. Just like a woman, I've got more clothes than I know what to do with (but you never know when a particular outfit will come in handy. «grin»), and I've got everything from Mercedes Benz cars to hovercraft that I can really fly (just don't get in my way when I'm behind the controls.) Here I am riding my horse :)



I have been for a balloon ride over Africa, and been to Spain, England, Scotland, Mexico, and so many other places. There are contests, and competitions based on themes in SL. One of the themes that most interests me are the Medieval themes. I have run into dragons, and various creatures during my travels. You can join groups while you are traveling and even get Landmarks to those locations so you can easily return where you want at any time via TP (teleporting). Here is a snapshot of ElvenMyst, one of

my favorite places to go. The members there are incredibly smart at building and scripting items used in SL. (Note, I'm using my Wolf avatar at the time. I do change from a human to a wolf from time to time but I don't bite, just growl for no reason.) And just for the record, I do have a PCLinuxOS tee shirt I wear when the occasion calls.



out as much as we can. Just remember, I've only been doing this for just over a month and have learned an incredibly large amount of information. Next I will be learning about scripting to control items I build. Join in and Have a lot of fun!!



Just a parting shot. I had been watching the moon set over the ocean from the Indian camp that's on a parcel of mine. Yes, I am sometimes a Native American as well. At the campsite are drums that can be played with native American drum sounds, as well as a

So, why don't you come join us on Second Life and help us increase the presence of the PCLinuxOS group. We will help you



Linux	Minimum Requirements	Recommended
Internet Connection*:	Cable or DSL	Cable or DSL
Operating System:	A reasonably modern 32-bit Linux environment is required. If you are running a 64-bit Linux distribution then you will need its 32-bit compatibility environment installed.	A reasonably modern 32-bit Linux environment is required. If you are running a 64-bit Linux distribution then you will need its 32-bit compatibility environment installed.
Computer Processor:	800 MHz Pentium III or Athlon, or better	1.5 GHz or better
Computer Memory:	512MB or more	1 GB or more
Screen Resolution:	1024x768 pixels	1024x768 pixels or higher
Graphics Card:	NVIDIA GeForce 6600, or better OR ATI Radeon 8500, 9250, or better	NVIDIA Graphics cards 6000 Series: 6600, 6700, 6800 7000 Series: 7600, 7800, 7900 8000 Series: 8500, 8600, 8800 GeForce Go Series: 7600, 7800, 7900

dance circle for the men. Later in the morning I went for a ride. Here's a shot as I was returning to the campsite. On the left you can see a sweat lodge with real steam, and over head an eagle circles, crying out now and then... May the winds be favorable to you.

#### Important Notes

- \* Second Life is not compatible with dial-up internet, satellite internet, and some wireless internet services.
- \*\* Second Life may not run on graphics cards other than the ones listed above. The following cards are NOT compatible with Second Life:
  - \* NVIDIA cards that report as a RIVA TNT or TNT2
  - \* ATI cards that report as RAGE, RAGE PRO, or RADEON 320M, 340M, 345M, or similar model numbers
  - \* Intel chipsets less than a 945 including Intel Extreme
  - \* Cards with the following branding: 3DFX, RIVA, TNT, SiS, S3, S3TC, Savage, Twister, Rage, Kyro, MILENNIA, MATROX

The following cards have not been tested with Second Life, and compatibility is not certain:

- \* NVIDIA cards that report as Quadro
- \* ATI cards that report as RADEON IGP or RADEON XPRESS
- \* ATI cards that report as FireGL
- \* ATI cards that report as FireMV

*Game Zone is a new feature of the PCLinuxOS Magazine. If you have a game you like to run in PCLinuxOS, write up a review for the magazine! Be sure to include screen shots, along with information on how you were able to get the game up and running in PCLinuxOS. Also be sure to include any necessary hardware requirements. This includes Java games, Windows games (running in Wine), old DOS games, NES games, native Linux games ... whatever. We hope to make Game Zone a regular feature of the PCLinuxOS Magazine, but we cannot do it without your submissions. Make your submissions to any of the magazine staff.*  
— Paul Arnote, PCLinuxOS Magazine Chief Editor.



#### Trick-or-treating and guising

Trick-or-treating is a customary celebration for children on Halloween. Children go in costume from house to house, asking for treats such as candy or sometimes money, with the question, "Trick or treat?" The word "trick" refers to a (mostly idle) threat to perform mischief on the homeowners or their property if no treat is given. In some parts of Scotland children still go guising. In this custom the child performs some sort of show, i.e. sings a song or tells a ghost story, in order to earn their treats.

#### Costumes

Halloween costumes are traditionally those of monsters such as ghosts, skeletons, witches, and devils. Costumes are also based on themes other than traditional horror, such as those of characters from television shows, movies, and other pop culture icons.

#### UNICEF

"Trick-or-Treat for UNICEF" has become a common sight during Halloween in North America. Started as a local event in a Philadelphia suburb in 1950 and expanded nationally in 1952, the program involves the distribution of small boxes by schools (or in modern times, corporate sponsors like Hallmark, at their licensed stores) to trick-or-treaters, in which they can solicit small-change donations from the houses they visit. It is estimated that children have collected more than \$119 million (US) for UNICEF since its inception. In 2006, UNICEF discontinued their Halloween collection boxes in parts of the world, citing safety and administrative concerns. — Source: Wikipedia

# A PCLinuxOS User at LinuxCon 2009

by Galen Seaman (gseaman)

It was three beautiful days (September 21 - 23, 2009) in Portland, Oregon. This was my first Linux Conference, and my first time to see any of the people involved in creating my favorite OS. I didn't know what to expect, but I was very excited to attend.



For readers who are not familiar with Portland, I included a couple of pictures to give you a sense of the environment surrounding this event. The group hosting the event was the Linux Foundation, <http://www.linuxfoundation.org/>, located here in Portland and the employer for Linus Torvalds and several of the key kernel hackers.

The event was a series of keynote talks, with other specialized talks in between geared toward developers, business, and operations (networking). The biggest event was the kernel developers roundtable with Linus Torvalds, Jon Corbett, Theodore Z'so, Greg Kroah-Hartman, Chris Wright and James Bottomley. There was also another gathering for developers, happening at the same location that started on Wednesday, called the Linux Plumbers Conference.



*The Marriott Hotel in Portland*



*The Willamette River*



*Downtown Portland, Oregon*

There was a website setup for the event to encourage everyone attending to make contacts with others with similar interests and purpose for attending. Although they billed this event as being for all Linux Users, it appeared that almost everyone attending worked for IBM, Novell, Redhat, Intel, Suse, Canonical or one of the other vendors with booths at the conference. Linux is definitely big business. I don't view this as a problem as long as these businesses don't try to subvert the [GPL License](#), which allows all of this cooperation to work to everyone's advantage.



Regular readers of the PCLinuxOS forums might know that one of my interests is music software. At the roundtable, I had the opportunity to ask the panel about kernel developments and music production. Several of the panelists replied. Linus Torvalds said that sound is the weakest part of the kernel, but that it is not nearly as bad as people posting to Slashdot say that it is. He said that those who say that things were better when Linux used OSS don't know



*Linus Torvalds at LinuxCon 2009*

what they are talking about. Jon Corbet, lwn.net, said that there are issues with PulseAudio which have caused problems for many distributions, and that although this is a userspace program, they were aware of it. He also suggested if anyone has improvements, we (the kernel hackers) are taking patches.

During the roundtable, the panelists talked about how effective and efficient the workflow has become and how many patches are going into the kernel. Linus said that people are sending the patches the way he wants them, so he is happy. This led James Bottomley, the moderator and a kernel developer, to ask Linus about the size of the kernel. Linus responded that the kernel was bloated and that it was not the lean kernel he originally envisioned. At least one blogger has made a big deal out of this comment, but I think this has been sensationalized. My interpretation of this comment is that with all of the amazing flexibility and stability going into the kernel, Linus is aware of the growth and is looking for solutions. This is encouraging.

Being a desktop user, I have noticed less responsiveness in recent kernels and I was glad to hear Jon Corbett acknowledge the

contributions Con Kolivas has made to the kernel scheduler. Con used to work on the scheduler to make it linux more responsive, but quit about two years ago when Linus asked Ingo Molnar to write a completely new scheduler based on some of the ideas of Con's scheduler, but using entirely new code. This scheduler, called CFS (Completely Fair Scheduler), was reasonably better than the previous kernel, but the kernel has regressed again. This situation has prompted Con to start creating patches again. Let's hope this means a more responsive desktop is on the way!

I attended a session given by Cristoph Lameter (pictured at right) who talked about Kernel Regressions and Increasing OS Noise. Mr. Lameter works in the financial industry. He layed out problems and possible solutions to make the kernel more

realtime responsive. This is essentially the same issue as musicians struggle with, but for different reasons. According to Mr. Lameter, many in the financial industry pay Red Hat for proprietary patches to the 2.6.22 kernel because each of the later kernels have regressed in the responsiveness. Traders with the fastest transaction speed make or save a lot of money. Second place loses. The good news from this talk is that Cristoph has written some latency benchmark tools, <http://www.gentwo.org/ll/>, and includes suggestions to minimize latency and OS noise.

Every blog I've seen about this event is focused on some type of controversy, real or imagined. Maybe it is naïve, but I saw this event as emphasizing the collaborative effort of thousands of people to create a set of tools that allows our freedom to grow. Some of those who attended, may have been looking for ways to exploit rather than contribute, but they will fail and Linux and freedom will live on!



# October: Breast Cancer Awareness Month

by Paul Arnote (parnote)

October is Breast Cancer Awareness Month. Started 25 years ago as a week-long event to help fill in the information void among the public about breast cancer, it has since evolved into a month-long event. Also, despite October being dubbed as Breast Cancer Awareness Month, efforts continue throughout the year to increase breast cancer awareness and information.

Next to skin cancer, breast cancer is the most common cancer among women in the United States. An estimated 192,370 cases of invasive breast cancer are predicted to be diagnosed this year, with 40,170 deaths from breast cancer expected. Today, there are an estimated 2.5 million survivors of breast cancer, in the United States alone. Of course, worldwide figures are much higher.

Breast cancer is the second leading cause of death from cancer among women, after lung cancer. And if you thought women were the only ones affected by breast cancer, think again. Although it is much more prevalent among women, men can develop breast cancer, too. In fact, although women are 100 times more likely to develop breast cancer than men, an estimated 1,190 men are expected to be diagnosed with invasive breast cancer this year, alone.

Given its prevalence, chances are exceptionally high that your life has been impacted by breast cancer, either personally, or you know someone who has battled breast cancer, or you know someone who has a loved one who has battled breast cancer.

Treatments for breast cancer can include mastectomy (removal of the breast tissue), radiation therapy, chemotherapy, or any combination of the three. The key, of course, is early detection. That early detection comes about by educating the public on the proper way to do self-breast exams, and through routine mammography screenings for those in higher risk groups. The Susan B. Komen Foundation has PDF files, in many different languages, that allow a user to print out a hanging door tag (similar to the "Do Not Disturb" signs in hotels and motels) that details the steps involved in conducting a proper self-breast exam. These exams should be done at least monthly to be effective. You can

download the English PDF version of the breast exam door tag by visiting

[http://ww5.komen.org/uploadedFiles/Content\\_Binaries/ENGLISH%20-%20Final1.pdf](http://ww5.komen.org/uploadedFiles/Content_Binaries/ENGLISH%20-%20Final1.pdf), or you can obtain your copy in any one of 12 different languages by visiting

<http://ww5.komen.org/Content.aspx?id=8934>. Gone undetected, some breast cancers can spread (metastasize) to other organs in the body, including the lungs, brain, liver, bone, or any number of other organs. This is why early detection is so important. If caught early, it can be treated with a fairly high degree of success and survival rates.

Risk factors for developing breast cancer include, among other things, gender, age, personal history, family history, early menstruation, first pregnancy after the age of 25 or 35, having no children, hormone replacement therapy, and lifestyle choices (diet, activity level, smoking, alcohol intake).

For more information on breast cancer, you can visit

<http://www.nbcam.org/index.cfm> or  
<http://ww5.komen.org/default.aspx>.



by Patrick G. Horneker

This month, I shall cover the basics of the premier photo editing tool for PCLinuxOS, the GIMP. GIMP stands for GNU Image Manipulation Program, and is a Free and Open Source equivalent to Adobe's Photoshop. I consider the GIMP to be the essential software package for digital photography as well as for other graphic work. As the GIMP is a large software package with many features, I shall cover the basics this month.

### If you do not have the GIMP on your PCLinuxOS installation...

Some versions of PCLinuxOS, unfortunately, do not have the GIMP installed by default. The good news is that you can install the GIMP from Synaptic. Then GIMP can be found in the Graphics section. There are several add-on packages to the GIMP, but you only need to select gimp and click on Apply to install the GIMP and its dependencies.

Note, I recommend a fast Internet connection to download this as this is a large download (accounting for the total size of all dependencies).

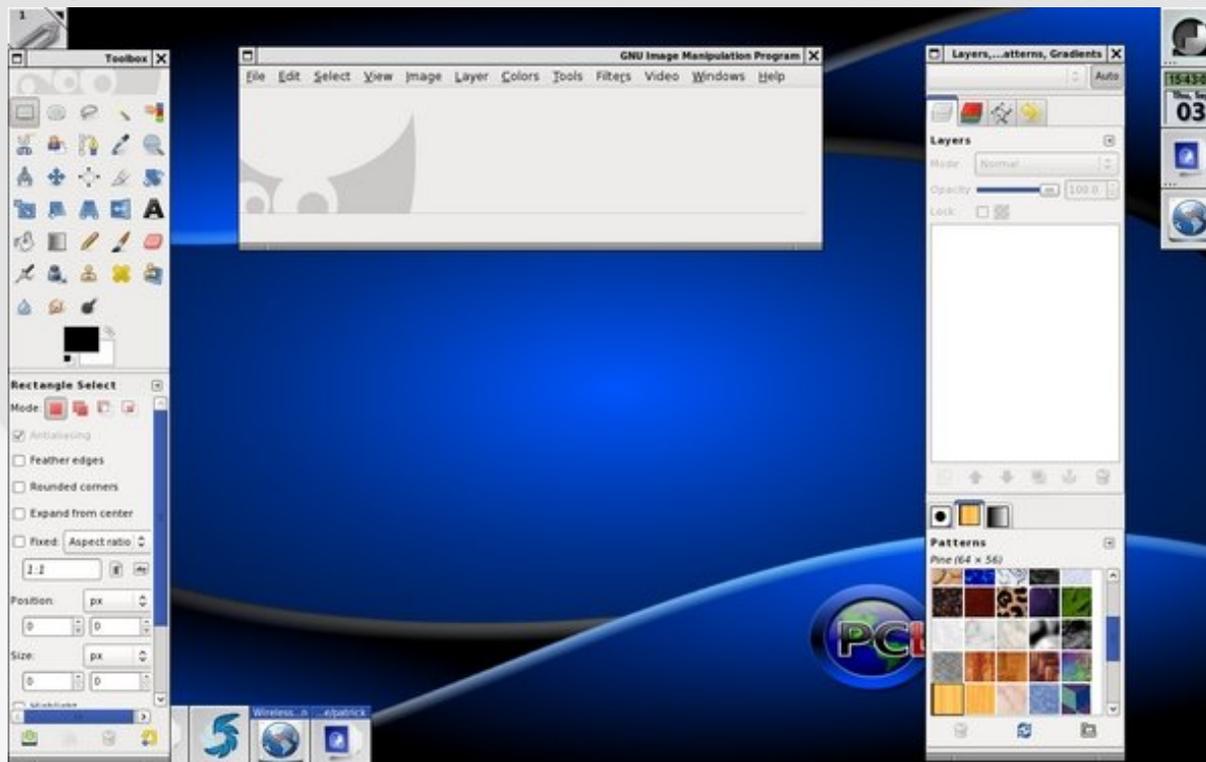
I shall discuss the addon packages in later articles as there are many aspects of the GIMP that need to be covered.

### Launching the GIMP

In PCLinuxOS, the GIMP can be launched from the Multimedia -> Graphics menu of your PCLinuxOS installation. (This works from KDE, KDE4, GNOME, WindowMaker, LXDE, and other window managers and desktop environments that support the PCLinuxOS menu structure). In this example, I have launched the GIMP from WindowMaker (one of my favorite desktop environments).

This is the 2.6.x version of the GIMP. Previous 2.x versions had the menu on the Toolbox window (the left application window), and hence only two windows were needed to display the GIMP. Note that the GIMP is not Adobe Photoshop, though the look and feel may be similar, and the differences between the two are more than just that one is a commercial product.

There is a product called GimpShop that provides the Adobe Photoshop interface that allows those of you who are familiar with Photoshop to use the GIMP with the look and feel you are already familiar with. This is a different software package that is based on the GIMP, but adapted for Photoshop users.



### GIMP supports many file formats

As the GIMP is a fully featured program, we would expect it to support all common graphic image formats.

**XCF:** This is the GIMP's native file format. It is here where the image, and all of its layers, modifications, and any other modifications made to your image are stored. Think of XCF as a complete snapshot of a photograph's state when you are saving it to work on later. Use this format if you want to save the image later, but you are not yet finished with the work. Note: Because XCF saves everything about the image, it tends to take up a lot of space on your disk.

**JPEG:** (.jpg and .jpeg extensions) This is the standard format for photographs, bar none. When saving photographs in JPEG format, you will need to specify the compression factor (85 being the default, which I highly recommend for most images). Of course, the lower the number, the lower the filesize. On the flip side, higher numbers will result in larger image sizes, but the quality of the image improves.

**TIFF:** This is the other standard format for photograph storage. TIFF files tend to be larger than JPEG files, but the quality, especially uncompressed, making TIFF files suitable for printing, especially in high-resolution. TIFF can be compressed, and like JPEG, the larger the compression, the smaller the file size. However, the quality of the image degrades with higher compression.

**BMP:** This is the Windows Bitmap format intended to store graphics intended for computer screens and computer games, and is one of the oldest file formats in existence. This format was intended to be a 8-bit per pixel format, and was not intended to be used for photographs. Yes you can store photographs in this format, but I do not recommend it because of the extremely large file sizes. (In fact, this is one reason why the JPEG format came about.)

**GIF:** This graphic format uses a patented compression algorithm to implement smaller graphic file sizes, and was originally used to exchange graphics on CompuServe (now a part of AOL) back in the 1980s and 1990s. This format was intended for 8-bit per pixel

graphics, and can be used for 24-bit per pixel graphics, though the file sizes tend here to be large, but not as large as TIFF or BMP.

**PNG:** This format was developed as a patent-free alternative to the GIF format. PNG has many of the same characteristics as GIF, but is better suited for 24-bit per pixel graphics, and takes up slightly less space than the TIFF format.

**TARGA:** This format was developed by AT&T (now Agere/Lucent Technologies) as a way of storage and transmission of high-resolution images without compromise to the quality of the image. I like TARGA because of the preservation of image data. However, that preservation comes at a price, in terms of disk storage.

**ICO:** This format allows you to create icons for Windows desktops and anywhere else Windows icons are used.

**EPS, PS:** This format allows importing and exporting of images stored in Encapsulated PostScript format. In fact, the GIMP imports PostScript files as well as output to PostScript. When importing PostScript files, you will need to specify the resolution (in dpi) for the rendering of the PostScript file as a bitmap.

**WMF:** This is another old graphics format. WMF stands for Windows Metafile Format. This was a common graphics format back in the 1990s intended for pre-Internet graphics and productivity applications such as Lotus 1-2-3, and Cosmi Draw. (How many of you remember using those commercial packages?) If you have CD-ROMs containing clip art, chances are they are stored in the WMF format and are ready to use.

The GIMP also imports and exports images stored in the native formats for Photoshop, Paint Shop Pro, and some other commercial applications, making it easier to transition to the GIMP from these commercial packages.

There are many other file formats that are supported by the GIMP, but these are the most common in use today.

**The Toolbox**

In versions 2.0 through 2.4 of the GIMP, the application menu was integrated into the Toolbox. Starting with Version 2.6, the Toolbox is now separated from the application menu, and for good reason. The Toolbox contains a palette of buttons linked to frequently used functions. We will be using these buttons frequently when we edit images (not just photographs, but images that will be used in publications of all types.

**Selecting Within The Image**

In order, the buttons represent selection of rectangle areas, selection of elliptical areas, freehand selection, fuzzy selection based on pixels of similar color, selection by color, selection of recognized shapes, and finally selection of foreground objects.

If you wish to select based on shapes found in the image, the Scissors icon allows the GIMP to find shapes within the image, then select whatever shape the GIMP finds based on where you clicked on the image. The icon to the right of the scissors is used to select foreground objects in an image.

Most of the time, we will be using the rectangular selection tool when selecting large areas.

If you have a Wacom graphics tablet installed, the freehand selection will be most useful to you as it allows the graphics tablet to control the image selection. (Of course, the graphics tablet is also good for other graphic functions for touching up, masking in layers, etc. where precise control of the pointer is needed.)

When selecting portions of an image with the mouse, pressing and holding down the Control key will constrain the mouse movement to multiples of 45 degrees (that is 45, 90, 135, 180, 225, 270, 315 and 360 degree movements).

The icon with the quill allows you to create and edit paths for selection, and some other functions within the GIMP.



**Color Selection**

At the bottom of the toolbox, there is a foreground and background color selector. By default, black is the foreground color and white is the background color. Clicking on the small black and white icon resets the selector to the default black and white.

Double clicking on either of these boxes allows you to manually select a color to use as either a foreground or background color.

More to Come...

This is the first of a series of articles on the GIMP itself. As there are many features for digital photographers, it is necessary to divide coverage of the GIMP into a series of articles.

Next time, I shall cover the basics of image layers, masks, and color manipulation.



# System Secrets

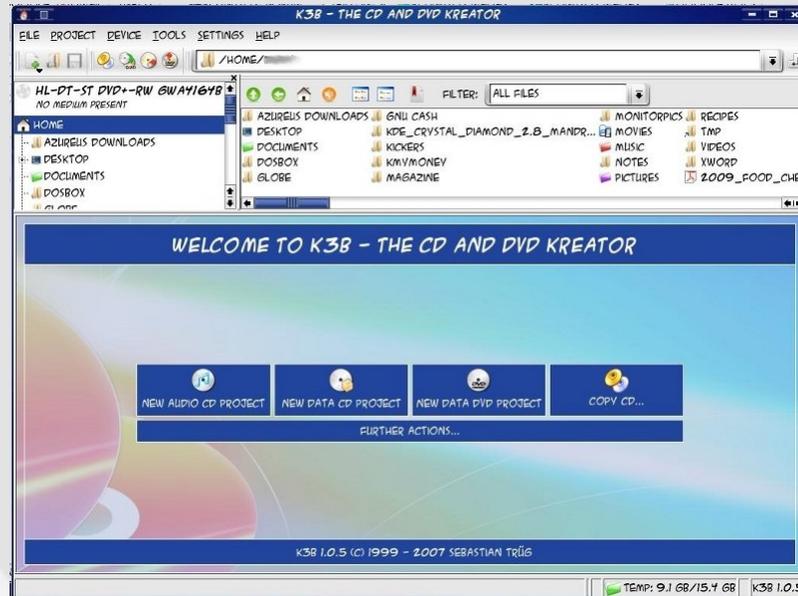
by Meemaw

So, I've just installed PCLinuxOS and I'm poking around in the menu to see what's here. ("Hmmm... System... sounds like all the configuration utilities.....") That's right! Let's take a tour of System and see what's there.

## Archiving

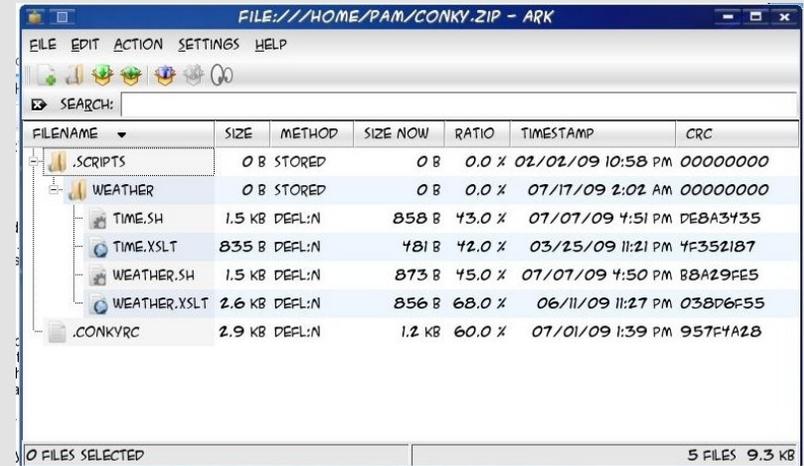
### \*\*\*CD Burning

-- **K3b** is the disk-burning program. Depending on your hardware, you can do most any burning job with this one program.



### \*\*\*Compression

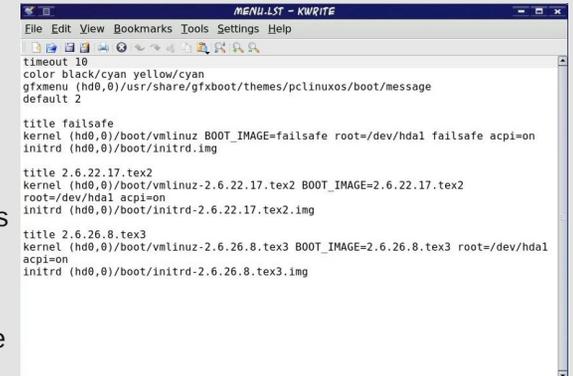
-- **ArK** is the compression program. It's used to compress larger files into smaller ones, or if you have a group of files, you can compress them into a single .gz, tar, .bz2, zip or rar file. If you download a compressed file, this program extracts it/them for you. You will get a window asking for your desired location to store the extracted file(s).



## Configuration

### \*\*\*Boot and Init

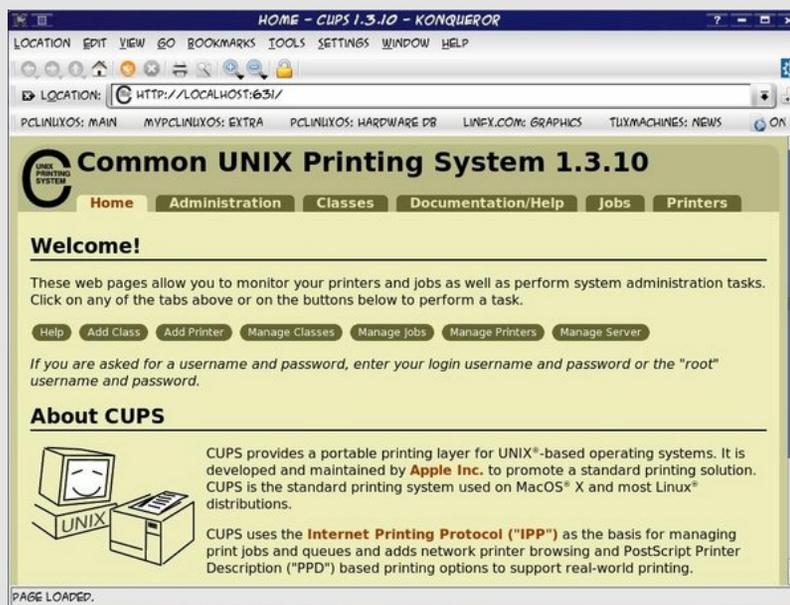
-- **Redo MBR** opens your Master Boot Record in Kwrite or other editor, which allows you to make changes. **BE CAREFUL!!!!** Mistakes can make your machine unbootable.



### \*\*\*Hardware

-- **KFloppy** - You can use this to format a floppy disk if you are still using them.

-- **Cups** - This opens Konqueror with the system printer address and lets you put in information to configure CUPS for your printer.



-- **KRandRTray** puts an icon in your tray which, when right-clicked, gives you options for resizing and/or rotating your screen.



-- **Synaptics Touchpad** - makes it easier for users to set up their laptop's touchpad.

-- **Video Install Tool** - A utility to assist with the installation of ATI and NVidia video.

\*\*\***Networking** – **Network Center** asks for your root password and is a shortcut to the Network Center in PCC.

### \*\*\*Other

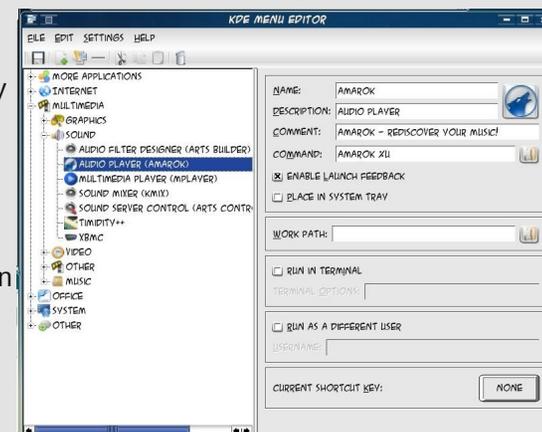
-- **User Administration** lets you manage the users on your system.

-- **Encryption Tool** allows you to set up your paired keys for PGP encryption of your files and emails.



-- **KDE LIRC Server** assists users in setting up infrared remote services, if your computer has an infrared port.

-- **Menu Updating Tool** scans for programs which may not be in your menu and creates menu entries for them.



-- **KWallet** is a program that you can use to save your passwords on your system. You will need to set up a password for KWallet, but then when you open something that requires a password it has saved, the wallet will open (after you enter your password) and the program will proceed.

### \*\*\*Packaging



-- **Package Manager (Synaptic)** - This is the menu location for Synaptic. (some people might remove the icon from their desktop.)

-- **KPackage** (if installed) will appear here, assisting users in managing packages that you may have installed from "outside" sources.

-- **Update-Notifier** will appear here, after it is installed, and is where users will have to go to start Update-Notifier for the first time.

### \*\*\*Printing

-- **Lexmark Headalign, Lexmark Headclean, Lexmark HideCartridges, Lexmark ShowCartridges**, as you might expect, are special programs to deal with "duties" you may need to perform on your Lexmark printer.

-- **HP Printer Management** - You can configure extra features for your HP printer using this tool. While the printer works just fine without it, some people may miss their ink level indicator, which can be configured here. Start it from here and an icon can be placed in your system tray.

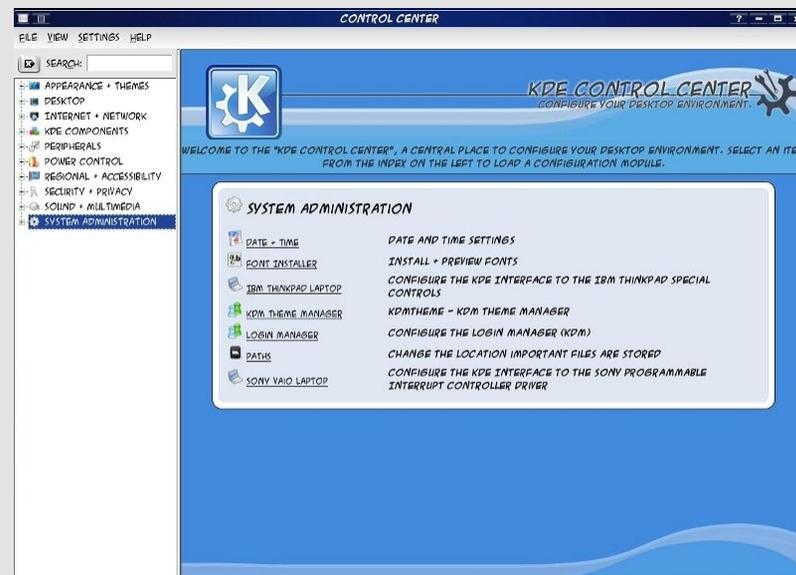
-- **XPP** (X Printing Panel)

-- **Z42 Tool for Lexmark Maintenance** provides a GUI environment for performing maintenance tasks for the Lexmark Z42 printer.

\*\*\***Configure Your Computer** (PCC) - Some people might remove the PCC icon from their desktop as well, so this is where you find it. We reviewed PCC in our May issue



\*\*\***KDE Control Center** - This is not the same as PCC (PCLinuxOS Control Center) While it appears to have the same things that PCC has, it really doesn't.. This is actually where you change your desktop theme, icons, color scheme, splash screen, etc. In addition, you can configure how KDE acts (file associations, system services, Konqueror's configuration and more), keyboard and mouse settings, storage media, keyboard shortcuts and regional settings. If you decide to use KDE Wallet, you can configure it here. If you want to change the picture or password for your own user account, you can do it here. (Root has to use the



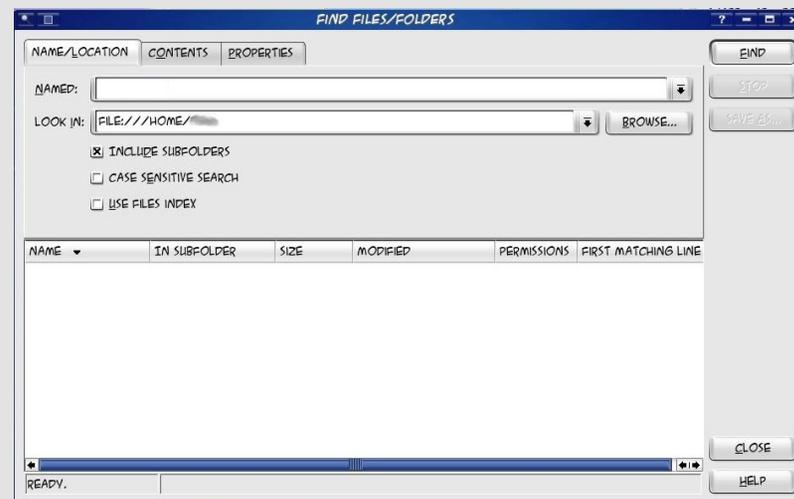
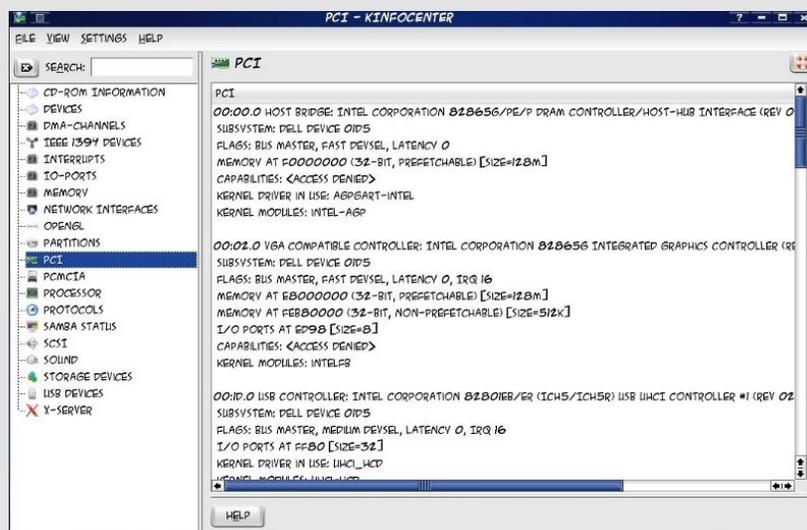
command line or PCC.) You can configure the sound system and any notification sounds from here. You can also install fonts and your login theme, and configure your date & time. (Several screens have a button that says "Administrator Mode" - if the task you want to perform is "greyed out", root permission is still required.)

\*\*\***KInfoCenter** - This is a separate window which shows information about your computer - ports, hardware, connections, etc. It shows the data a little bit differently than PCC, showing all items of the same kind in one window rather than each one separately (when you click on PCI, you get a list of all of them rather than only one at a time.)

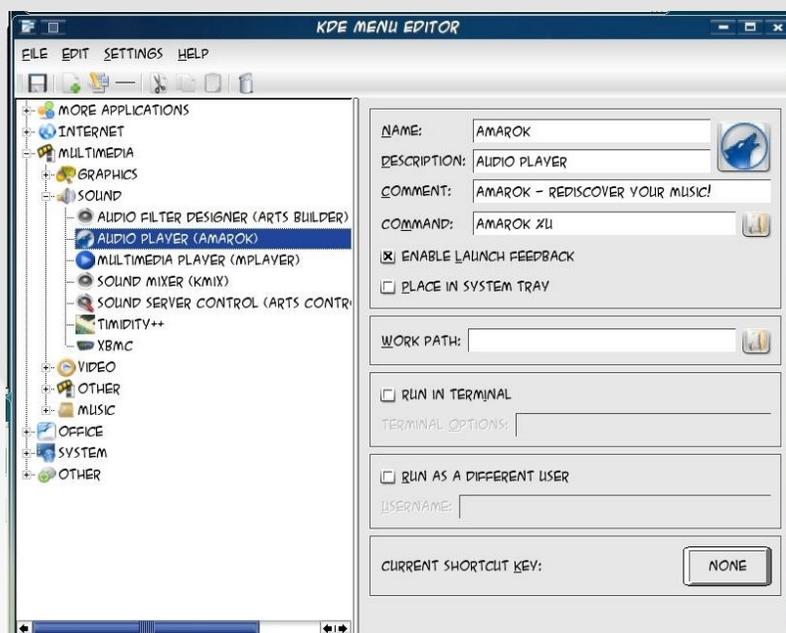
\*\*\***Menu Editor** - You can add or delete menu items , rearrange your menu or even make a customized menu for yourself.

### File Tools

\*\*\***Find Files/Folders** Clicking on this brings up a window with a search function. if you are looking for a particular file or folder, you



can type the name into the search line and click on "Search"



\*\*\***File Manager, Super User Mode** will open Konqueror in root mode. This can be used to work on or move files that the ordinary user is not allowed to access. BE CAREFUL!!!! Altering system files can damage your system. (I've used it a couple of times to add files for different panel designs to the system folder in which they are kept. You don't have access to that folder except in root mode.)

If you have them installed,

\*\*\***Krusader - File Manager and Krusader - root mode - File Manager** represent file manager alternatives to Konqueror.

\*\*\***SearchMonkey** is a desktop search tool, to help with file searches on a user's system.

## Monitoring

\*\*\***KsysGuard** is the program which shows what processes are running on your computer. If a process is hogging your resources, this is one place you can kill it.

\*\*\***SuperKaramba** - I think most everyone has used superkaramba widgets at one time or another. KDE-Look.org has loads of widgets which will do much of the monitoring on your computer.... Some are only system monitors, but some also have amaroK controls, or even a weather widget.

\*\*\***Epson Inkjet Monitor** allows users to monitor their Epson Inkjet printers, if they have them attached.



\*\*\***gKrellm** is another system monitor that can sit on your desktop. You can configure it to show what you want (kernel, internet connection, disk space, cpu usage, even uptime. Synaptic has a separate package of themes for gkrellm, and you can configure it to be transparent using those themes - I think this one is called "Glass" on my dark blue wallpaper.)

\*\*\***NetApplet** can be configured to show whatever network connection you have, and put an icon in your tray so you know what's going on.

\*\*\***KjobViewer** monitors your print jobs.

\*\*\***KwikDisk** places an icon in your kicker tray that allows quick access to the mounted drives on your computer.

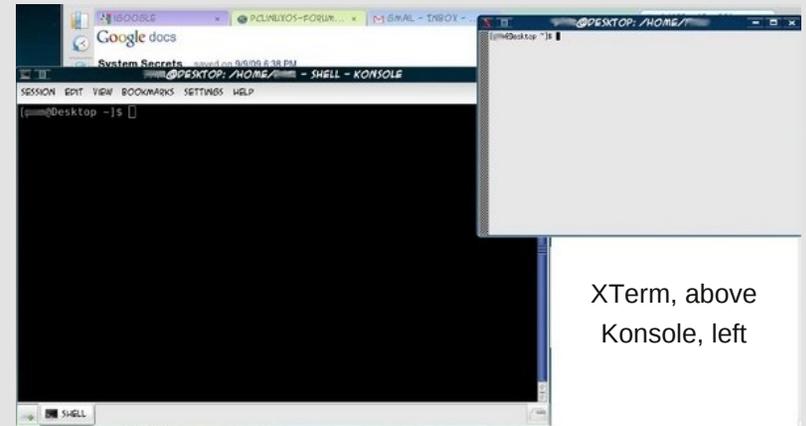
ICC	DEVICE	TYPE	SIZE	MOUNT POINT	FREE	FULL %	USAGE
	/DEV/FD0	AUTO	N/A	/MEDIA/FLOPPY	0 B	N/A	
	/DEV/HDA1	EXT3	15.4 GB	/	9.1 GB	40.5%	<div style="width: 40.5%;"></div>
	/DEV/HDA6	EXT2	21.1 GB	/HOME	7.2 GB	66.1%	<div style="width: 66.1%;"></div>
	/DEV/HDC	AUTO	N/A	/MEDIA/HDC	0 B	N/A	
	/DEV/SDA1	VFAT	55.9 GB	/MEDIA/SDA1	36.3 GB	35.1%	<div style="width: 35.1%;"></div>

\*\*\***KdiskFree** shows all your disk usage. The chart shows each drive/partition along with file type, size, mount point, amount of free space and percent of free space. It also has a graph of the usage.

## Terminals

\*\*\***Konsole** is probably the terminal most people use (if they use the command line) and all/most new installs have an icon for the terminal on the panel. You can find out lots of information about your system while in terminal, but the majority of changes you make will need root permission. You can open Konsole, then type 'su root' (without the quotes) to go to root. You will be asked for your root password.

\*\*\***Konsole, Super User Mode** - You can always open this version of Konsole. Since it is starting in Super User Mode, you will be asked for your password right away. This is a little faster, but either version of Konsole works well.



\*\*\***XTerm** has a smaller terminal window (Well, it did when I opened it, but I'm sure you can configure it to be any size and color you want.) It's used the same way as Konsole.

### Sun Java 6U15

\*\*\***Control Panel** allows users to control some of Java's behavior on PCLinuxOS.

\*\*\***Policy Tool** allows users to set system policies for Java applications.

\*\*\***Web Start** gives access to Java's web cache, and opens the Java Control Panel.

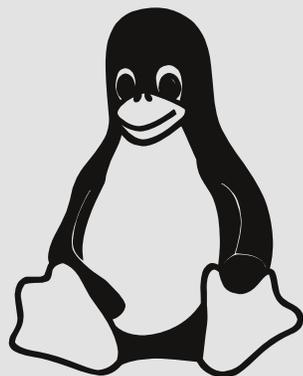
### Make LiveCD

Many people are experimenting with making their own mix of PCLOS programs. Using this will allow you to package it yourself and make it a bootable .iso.

### Make LiveUSB

This will also let you "roll your own" as they say. Both MakeLiveCD and MakeLiveUSB are also very good methods for backing up your already-tweaked system. If you can quit experimenting long enough to make a live cd or usb, then you'll have it stored in case you mess up your install. We're seeing a few really good versions of PCLOS from some of our creative users!

So there you have it. Hopefully, this short tour has helped "demystify" the contents of the System menu in PCLinuxOS. You never know what you might find, once you go exploring.



# Testimonial

by Charles A. Tilley

For months now, I have been interested in Linux. I've been a XP Pro user for a long time. The first Linux distro I tried was Ubuntu , but it was installed through Wubi and the performance wasn't good. As a newbie, I had a lot of trouble with everything, except browsing and emailing. I downloaded and tried my very best to install Firefox 3.5 and the driver for my Dell 720 inkjet printer. But I failed to catch on to the OS.

Anyway, that laptop went down due to hard drive problems. Now I'm back at square one. At first, I was very interested in Freespire, and got the CD only to find out the distro is dead. I found out this by trying to join a forum to get help. I couldn't join because it was dead as well. On another forum, I asked about a distro for newbies and PCLinuxOS-2009 was suggested to me, as well as Xandros. I would like to give PCLinuxOS a shot, because of the strong support that I heard is there. But I need to confirm, is this distro really for a newbie? I hope so, because I'm tired of being told what I can and can't do with Windows. I couldn't even use the backup of my deceased laptop on this one after I paid \$160 for the license. That's just not right, and I'm tired of it.

I downloaded PCLinuxOS-2009-2 (a 690MB ISO) and copied it to CD. I'm supposed to get some partitioning and recovery tools on CD early next week. Please advise me if this is or may be the right choice for me.

Thank you all for your time, I know my words may sound confusing, but I'm doing the best I can. Also, to let everyone know that I'm serious, I bought a second laptop just to learn Linux. I'm looking forward to joining the Linux family!

# Forum Foibles

## **An Interview with Neal Brooks** by ms\_meme

*Neal Brooks was recently interviewed in the September issue of the magazine. I also had the opportunity to speak in depth with Neal and am happy to share with you replies in his own words from the forum of course.*

**I am pleased that you are giving me this interview.**  
Yep! You're brave!

**There are just a few questions that were not answered in your previous interview.**  
Questions are a great way to gain knowledge. You'll never know the answer till the question has been asked.

**Just share with us anything that you would like.**  
Okay. You can have some cheese. But stay away from my coffee.

**Would you give us your honest opinion of Texstar?**  
Stupidity is alive and well on planet earth.

**Well, we are all aware of Texstar's assets, but tell us how you really feel. After all Tex has had some terrific ideas.**  
Very curious results. Very curious indeed.

**I am sure like most of us you look up to Tex as a mentor and outstanding developer for Linux operating systems.**  
Of course not! Why would I ever think that? Sheesh!

**How do you account for his new releases?**  
All that brain bloat's got to be released sometime.

**If you could give Texstar one bit of advice what would it be?**

Next time use hammer and nails.

**Yes, of course. But aren't you impressed with 2009?**  
Where can I get one of those.

**Oh, Neal. You're just teasing me. I do want this interview to be serious.**  
Seriously now, who would take you seriously?

**Neal, there are many in the forum who think I have been an outstanding contributor to the forum.**  
Thank you. Your willingness to share your knowledge has been a blessing and an inspiration to far too many to name.

**And I intend to fix that. I want to know those names!!!!**  
Yep! Yep! Yep! Hurry! Hurry! Hurry! Fix it! Fix it! Fix it!

**You work with other distinguished members of the PCLinuxOS team. What is your evaluation of their contributions?**  
I'll have another perusal of their documentation, but I better put on more coffee first. I'll probably need it.

**I will be interviewing others about their ideas too.**  
I'd like to be in on that, if you don't mind. I know next to nothing, but I'll provide feedback or anything else I can.

**I know they will heartily agree with that opinion of yourself. Let's move on to the part you play in making PCLinuxOS the best distro. What are you working on at the present?**

I've no further ideas at present. Maybe something will come up later.

**Perhaps you are just in a little slump?**

Happens to us.

**Could you elaborate?**

I should have been more specific. Just a thought - I'm no expert by any means.

**Yes, that opinion is wide spread too.**

It's nothing to be concerned over.

**But doesn't it concern you that others are depending on you for innovation?**

At this point, I'm at a loss for ideas. Oops! I guess I was wrong. Hmm..... I'll need to do some checking and get back to you.

**Have you ever thought about retiring?**

I'd love to!!! But funds are chronically low. Retirement doesn't come with all the extras.

**It is understandable that your every package doesn't always go as planned. Do you worry about that?**

If you like that kind of "Oh, no! It's broken again!" excitement, sure. Personally, I find other things more exciting.

**What do you really find exciting, Neal? Tell us about the real you. What is your passion?**

I love cats.

**Hmm. Exciting indeed! We are all waiting and wondering about the future of PCLinuxOS. What is your perspective for the coming year?**

I have a crystal ball. It doesn't give an answer to that question. Got another?

**Neal, do you think I might have a future with PCLinuxOS?**

Hmm..... what were we talking about? I think I dozed off; I can't be sure of course, but I think so.

**Which of my many talents do you feel would be useful to PCLinuxOS?**

Hmm..... gotta stretch my brain on this.

**Perhaps I should wait until I am more seasoned. IMO, this would be the better way to go.**

**Thank you for this interview, Neal. I hope you enjoyed it too.**

We aim to please. I hope you get it sorted out.

**I hope it didn't tire you out too much.**

I drank all the coffee. I had a powerful thirst.

**Neal, leave us with some final words or thoughts. What is your philosophy of life.**

Nothing starts off a day like PCLinuxOS and a fresh cup of coffee.

# A User's KDE 4.3 Experience on PCLinuxOS

by **The-One-Who-Uses-It**

PCLinuxOS is one of the easiest Linux distributions to install. It is adapted for new users migrating from Windows and allay them of their fears of Linux. It is also used by both seasoned and veteran Linux users. A platoon of community users have risen to the ranks of packagers and developers, wireless and networking gurus, the artists and desktop-decorators, the testers and ISO remaster masters, etc. PCLinuxOS is more than just a Linux distribution. For many, it is a way of life.

As technology sets its pace towards development and the operating system future, PCLinuxOS is right on the heels of big names in Linux. Although PCLinuxOS wasn't on the KDE 4 summit, when Mandriva, Fedora, [add other Linux distros who shipped KDE 4 early in its development] shipped theirs, main developer, Texstar was the smarter for his wait-and-see strategy. It paid off (at least in terms of the stability of the version) and pleased a multitude of PCLinuxOS users who had now upgraded, short stories and posts of which are abundant in the forum.

KDE 4.3.1 on PCLinuxOS still has its kinks and potholes, but a wise PCLinuxOS user's words comes into mind - "No operating system is perfect." The PCLinuxOS repository still lacks several KDE 4 applications that were available on KDE 3.5.x, but IPCLinuxOS users are assured that these upgrades will be packaged and distributed sooner rather than later. The PCLinuxOS Support Forum has a thread (and hopefully a separate section) for KDE 4.

This article is about my personal experiences using KDE 4.3.x during the last couple of months. And I should add that it was rather radically simple and satisfying. It was comparable to watching my best friend's son learning to turn over and crawl, walk, run, jump, swim, etc. Certainly, I ran into kernel panics and hanged reboots, and had reinstalled several times. But those initial testings were done on VirtualBox, so nothing was really lost. Back then KDE 4, was still a hard conversion. Leave it to the PCLinuxOS developers to come up with the ingenious **task-kde4** that ensures an error-free transition to the latest DE version.

For the benefit of this review, I recreated my current installation using VirtualBox, so I might be able to include snapshots of the default images for easy references. Typically, any PCLinuxOS install would do but I opted for the best and sensible choice, Minime09. This way, the recreation is minimal.

There are a few important things to bear in mind. Backup your most vital and important files. I am in the habit of saving to a removable hard disk and making remasters. Apart from the visible folders, you might want to take a look at the hidden files which contain your Firefox bookmarks and addons, newsfeeds, received and sent emails, 3D effects settings, etc. The PCLinuxOS Support Forum and #pclinuxos-support on Freenode are only a click away for users to find help with issues and queries.

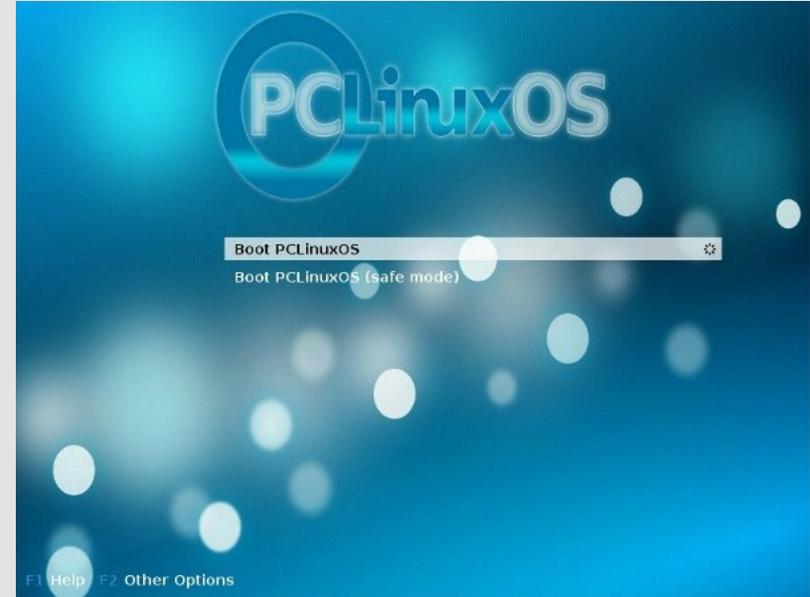


*A fresh install of PCLinuxOS Minime 09*

I had a clean install ... well not exactly. As root I cleaned up all the /home partition of all hidden dot files but left my humongous music, photos and video collections intact. On installing Minime09, I only

reformatted the root partition. It took me a bit of work to get some of my old configuration that I had backed up back in place, but they're back. I know this may sound a bit foolish but I did get a fresh KDE 4.3.1 to look like my old KDE 3.5.10 setup, leaving the KDE 4 touch and feel to it. It seem to be faster, responsive, stylish and more importantly, stable than the previous. Why did I want to set it up to look like KDE 3.5.10? Well, if you are curious, you'll just have to post the question in the Sandbox in the PCLinuxOS Forum.

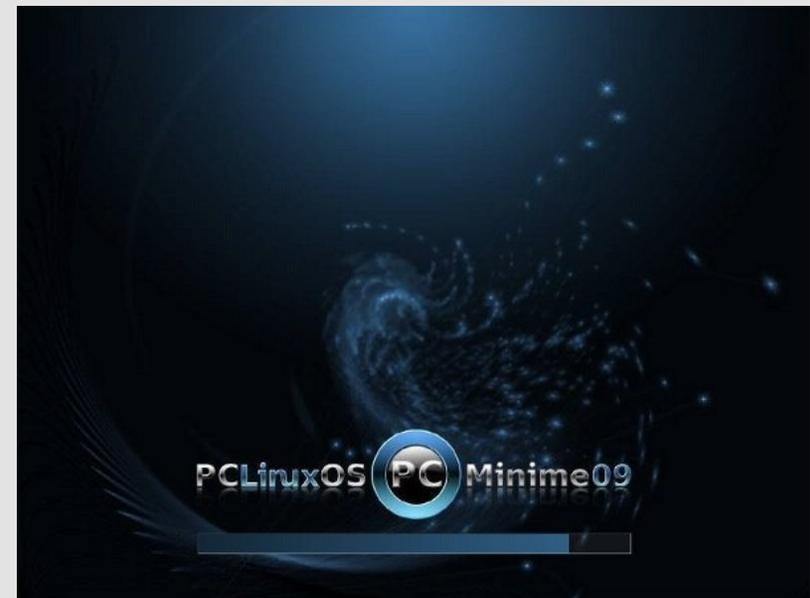
In addition, I have modified the GRUB background and splash, together with the KDM login manager and KSplash, to match the KDE 4's Air theme. The components and configurations are available, but since I am not a packager, I have not made it available to anyone who might like to use them. However, if you are interested, you may make the request on the PCLinuxOS Magazine forum.



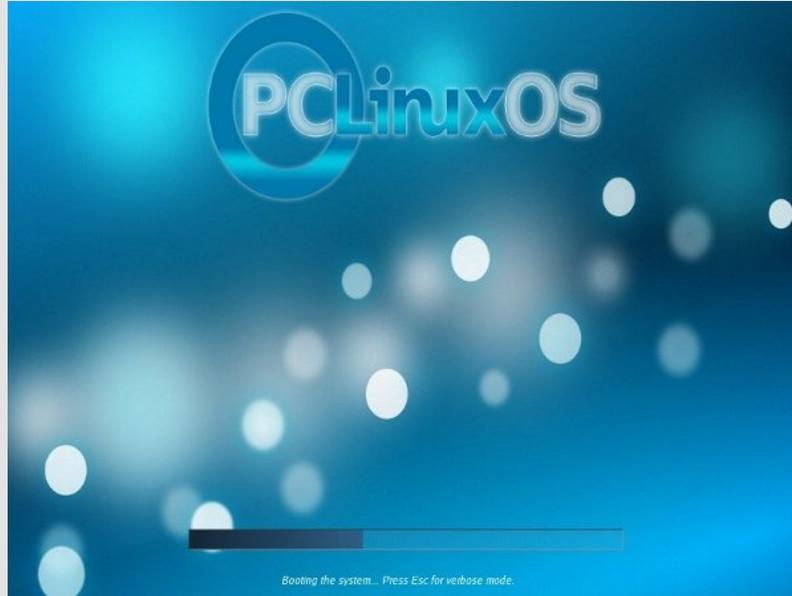
Modified PCLinuxOS KDE 4 Grub Menu



Minime 09 Grub



Minime 09 Splash Screen



*Modified PCLinuxOS KDE 4 GRUB Splash*

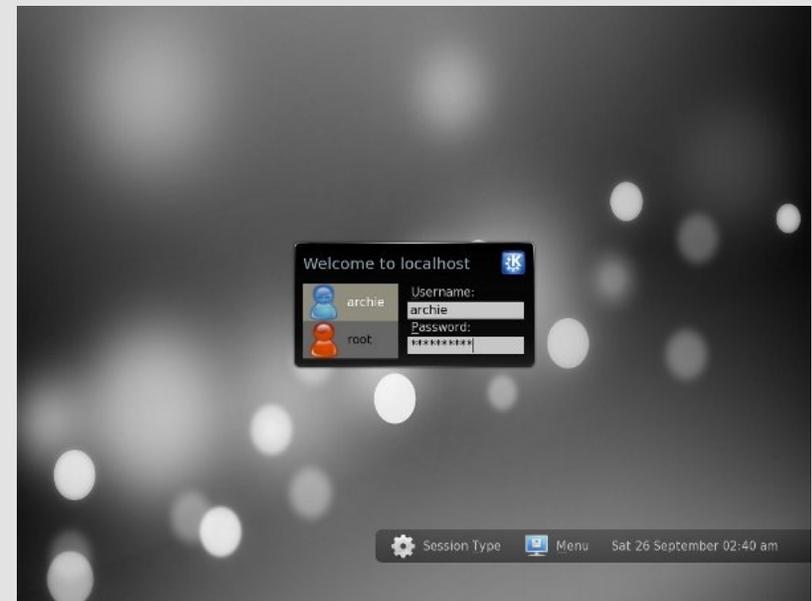


*Login Manager for Minime 09*

Like I mentioned, there are still a shortfall of task-specific applications, but overall, KDE 4.3.1 is a useable DE. Obviously, we won't have the same preferences so I will not mention my preferred applications, like Firefox, KMail, KVir, GIMP, Inkscape, Amarok, Kino, VLC, etc. Instead, I'll comment on the essential system applications and their interactions with KDE 4.3.1 in general.

There was a time, long ago, when I wondered which was most important of the GUIs - Synaptic or the PCLinuxOS Control Center. Yeah, there'll be those who'd say they're rip-offs, but that point is moot. For me, they're neither or both. Linux, at time, almost forgotten about apt-get and drakconf. These days, the icons that launch specific tasks are advances in the right direction. Most won't have to worry about the CLI, focusing instead on getting the job done. Still, the command line is the vital nerve to the kernel heart.

Synaptic on KDE 4.3.1 is pretty much the same whether you run it on KDE 3.5.10, GNOME, XFCE, LXDE or E17. It's selecting the applications you'd want to upgrade, install or reKDE Splash for Minmove. The PCLinuxOS Control Center is the same as well.



*Default KDE 4.3.1 Login Screen*



*Modified Login Manager for KDE 4.3.1*



*KDE Splash Screen for KDE 4.3.1*



*KDE Splash Screen for Minime 09*



*Modified KDE Splash for KDE 4.3.1*

One thing that was actually different is the KDE Control Center. The tree layout is different, and the sections (though logical) needed some time to get familiar with. One minor issue I have is with displaying Xinerama. For whatever reason, I cannot seem to get a 2560x800 wallpaper across the two monitors. Eventually, I may ask the more knowledgeable community members in the support forum for any input and solution. So for now, I am content with the single laptop display.

I use a combination of Plasmoids and Superkarambas, which works out really well for me. I am too selective for my own good. Apart from the common layout of the taskbar, I have replaced a couple of widgets (such as the Plasmoid Smooth-Tasks) and am running a home-brewed system monitor widget. I also use a combination of KDE native 3D effects and Compiz. I must admit that transparencies are better on KDE 4.3.1 than in 3.5.10. And to top it all off, I launch applications via Cairo-Dock using the Neon theme, adding my own personal touch on the icons.



Default Desktop for KDE 4.3.1



Default Desktop for Minime 09



My KDE 4.3.1 Desktop

So those were the few good things (and bad). On my wishlist are a fix to the Menu Editor that can't seem to run (D-bus related issues, possibly), and a few more applications I've been waiting to get packaged (like a KDE-native dictionary application, although I'm sure I still have to try out Kding), and better functionalities for Plasma.

One thing I am sure of though. I have ventured to the path of KDE 4.3.x, and I know I will continue to use it. Will I still use KDE 3.5.10? If I have to, as I won't mind spinning with an old friend.



**Games and other activities**

There are several games traditionally associated with Halloween parties. One common game is dunking or apple bobbing, in which apples float in a tub or a large basin of water the participants must use their teeth to remove an apple from the basin. A variant of dunking involves kneeling on a chair, holding a fork between the teeth and trying to drop the fork into an apple. Another common game involves hanging up treacle or syrup-coated scones by strings; these must be eaten without using hands while they remain attached to the string, an activity that inevitably leads to a very sticky face.

Some games traditionally played at Halloween are forms of divination. In Puicíní (pronounced "poocheeny"), a game played in Ireland, a blindfolded person is seated in front of a table on which several saucers are placed. The saucers are shuffled, and the seated person then chooses one by touch; the contents of the saucer determine the person's life during the following year. In 19th-century Ireland, young women placed slugs in saucers sprinkled with flour. A traditional Irish and Scottish form of divining one's future spouse is to carve an apple in one long strip, then toss the peel over one's shoulder. The peel is believed to land in the shape of the first letter of the future spouse's name. This custom has survived among Irish and Scottish immigrants in the rural United States.

Unmarried women were frequently told that if they sat in a darkened room and gazed into a mirror on Halloween night, the face of their future husband would appear in the mirror. However, if they were destined to die before marriage, a skull would appear. The custom was widespread enough to be commemorated on greeting cards from the late 19th and early 20th centuries. — *Source: Wikipedia*

# Acer Aspire One Update



by Andrew Huff

Last month, I wrote an article detailing my experiences with PCLinuxOS 2009.2 on my Acer Aspire One. This month I got a little adventurous and installed KDE 4.3.1 via PCLinuxOS Minime 2009 (as Texstar says in the forum post, Installing KDE 4.) KDE 4 on the Acer Aspire One boots up to a usable desktop, by my "scientific" analysis (using a stopwatch), in ~ 2 minutes (1:57 to be exact).

As to be expected (and as I said in last months article), screen real estate is essential. Many applications are optimized for 1024x768

screens, so there are times where many window functions are hidden below the kicker panel. Luckily, holding down the "Alt" key (while clicking on the window and dragging the window beyond the screen boundaries) solves this problem quite nicely. With desktop effects enabled, performance is somewhat sluggish, but it isn't always noticeable or as bad with an Intel graphics chip as my desktop's NVidia chip. (Disclaimer: Personal experience, YMMV.)

As an added bonus, the left hand side SD slot labeled "Storage Expansion," works out of the box and is hot pluggable.

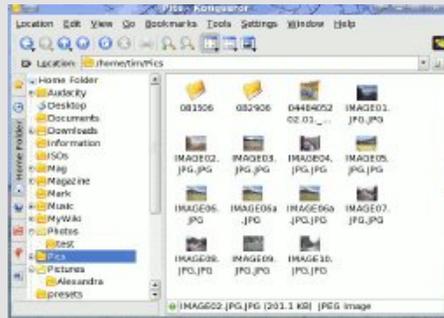
# Flashback

## Creating Thumbnail Galleries of Your Pictures

by Tim Robinson, in the December 2006 issue  
 updated by Andrew Strick (Stricktoo)

I take pictures with my digital camera every time I get a chance to head into the mountains around Denver, CO. Like most people, I fail to organize the pictures when I download them and they just accumulate in the date-coded folders on my computer. That worked fine for a while, but I needed something to make it easier to locate a favorite from among the many I had accumulated. I was tired of searching through individual folders, and thought there might be an easier and less time consuming way to do this.

Here's how my pictures used to display when browsing in Konqueror:



As you can see there were some pictures in the main folder and other folders contained more of my pictures. So I went searching on the main PCLinuxOS forum and found a post from "houstoncarl" and an answer from Sal that showed me how to achieve it. SO here it is:

Open Konqueror as a file manager (not a web browser) and go to the Tools menu and select "Create Image Gallery". A dialog box opens:

Here you can select "Show image file name" and "Show Image file size." I then chose 5 image per row, but you can change that as you wish. Next click on the "Folders" icon on the left portion of the box.



I elected to Recurse subfolders as there were several such folders in my main folder. That avoided having to perform this procedure on each folder separately. Next click on the "Thumbnails" icon beneath the "Folders" icon:



I stayed with the default values shown. Now click on the "Create" button and let the function run. Depending on how many pictures and subfolders there are, this may take some time. When it completes, refresh the view and you will see that you now have a Thumbs folder and a new file "Images.html."

To see your new gallery open images.html with your browser. I used Firefox, and this what it looked like:

Now you have a very professional looking thumbnail gallery. Note that there are links already there to any subfolders that existed in the main folder. Click on them and you will see a similar thumbnail display for the pictures in that subfolder. Clicking on any of the thumbnails will open the full size picture. The "back" button will return you to the thumbnail view.



Do you have a whole slew of baby pictures you'd like to give to Grandma and Grandpa? Try this, then burn the top level folder and other folders therein to a CD. Instruct Grandma and Grandpa how to open the "images.html" file on their computer. The Grandparents will love this as a holiday or birthday gift (or just because...).

# Gadgets & Gear: SanDisk Sansa Clip

by Paul Arnote (parnote)

I recently received a SanDisk Sansa Clip audio player as a gift. Sometimes, as anyone who has been around Linux for a while knows, it's a real hit-and-miss proposition on getting your new gadgets to work with, and interface with, Linux. With the SanDisk Sansa Clip, interfacing with PCLinuxOS is as easy as plug-n-play.



The SanDisk Sansa Clip comes in four different memory sizes – 1 GB, 2 GB, 4 GB, and 8 GB. My Sansa Clip is the 4 GB model. It also comes in five different colors – red, blue, black, pink, and silver. My Sansa Clip is black. My wife has a red 2 GB Sansa Clip that she received as a raffle prize, and is what prompted me to want one, too.

I do have other portable audio players (calling them MP3 players isn't entirely accurate, especially with the Sansa Clip). I have a couple of 2 GB Raven audio players, as well as a RCA audio player that takes standard SD memory cards (up to 2 GB). They all interface with PCLinuxOS in pretty much the same way, but the Sansa Clip has some features that make it stand head-and-shoulders above the rest.

Interfacing the Sansa Clip is as easy as plugging in the USB cord from the unit to your computer. PCLinuxOS will see the Sansa Clip as a USB drive, and allow you to open up a Konqueror window. Once you open Konqueror to display the contents of the Sansa Clip, you only need to drag files from your audio file collection into the Sansa Clip window to load files onto the device. It's really that easy. The 4 GB memory should allow you to load approximately 1,000 4 minute MP3 files recorded at 128 kbps. This translates into

4,000 minutes, or 66.7 hours, of playback. Of course, not all MP3 files encode the same, so you are unlikely to be able to load in the 1,000 4 minute MP3 files that is "theoretically" possible, since one minute of MP3 audio encoded at 128 kbps should "average" 1 MB in size.

One of the most outstanding features of the Sansa Clip is its support for playback of the open source formats OGG and FLAC. In fact, the playback of these open source formats is transparent, and works just as well as playback of MP3 files. Most any new Sansa Clip bought today should have full support for OGG and FLAC files. If you are buying a used one, make sure that it has firmware version 01.01.30 (or higher) to insure full compatibility to play back OGG and FLAC files. The Sansa Clip will also play WMA files.

Another great feature of the Sansa Clip is its extremely small size. Weighing in at only 0.92 oz. (28 gr), it measures 2.17 inches (5.51 cm) tall, 1.35 inches (3.43 cm) wide, and 0.65 inches (1.65 cm) thick. Despite its small size, the Sansa Clip produces some big sound.

With its built-in rechargeable lithium-ion battery, the Sansa Clip will deliver up to 15 hours of continuous playback. The On/Off switch and the mini-USB plug are on the right side of the unit, and the volume switch and a 3.5 mm headphone jack occupy the left side of the unit. The front of the unit sports a 1 inch (2.54 cm) LCD multicolor display in a landscape orientation. Just below the display, on the right, is the "Home" button, which instantly returns you to the top level menu with one simple touch. At the bottom of the front side of the unit is a four position toggle switch to control the playback of files. The back of the unit features the clip, which allows you to clip the device to your pocket, collar, belt, bag strap, etc.

The Sansa Clip would be a great gadget, even if the features stopped there. But wait — there's more! The Sansa Clip also has an FM receiver built into it, with 20 user-defined presets to allow you to save your favorite FM radio stations. Additionally, the Sansa

Clip has a built-in microphone that will allow you to record personal notes throughout the day, or even record that meeting that you have to attend (presumably, so you can make sure you don't miss anything important). Recorded notes are recorded in \*.wav format.



The Sansa Clip goes even one step further, allowing you to also make recordings from the built-in FM receiver.

The Sansa Clip has a "big brother," called the Sansa Clip+. The primary difference is that the Sansa Clip+ has a microSD card slot, which enables you to insert up to a 16 GB microSD memory card to further expand the device's memory. Some of the controls have been rearranged on the Sansa Clip+ to accommodate the microSD memory card slot. Another, larger, variant is the Sansa Fuze, which has the MicroSDHC slot as standard. You can display pictures on it as well as video clips, though getting the latter into the correct format in Linux is a problem. Both the Clip and the Fuze have the same excellent sound quality, and it's worth paying extra for some hi-fidelity headphones.

Sansa Clip	Specifications
Memory	1 GB, 2 GB, 4 GB, 8 GB
Colors	Blue, Red, Black, Silver, Pink
Playback	MP3, OGG, FLAC, WMA, WAV
FM Tuner	Yes — 20 user-defined presets
Recording	Built-In Microphone, FM Tuner
Interface	Mini-USB 2.0 (USB 1.1 Compatible)
Suggested Retail Price	\$79.99 (U.S.) (4 GB Model)
Street Price	Under \$50 (U.S.) (4 GB Model)

The Sansa Clip is very affordable, especially considering all its features. While it has a list price of \$79.99 (U.S.), it can routinely be found for under \$50 (U.S.). A quick search on the web will help you find the lowest price. In the United Kingdom, it can be got for around £30 for the 2Gb model.

Gadgets & Gear is a new section of the PCLinuxOS Magazine. Do you have a gadget, or a piece of gear, that you have successfully used with PCLinuxOS? Let the magazine staff know — or better yet, write it up yourself and submit your article to one of the magazine staff members! Simply post a message on the PCLinuxOS Forum (<http://www.pclinuxos.com/forum>), or the PCLinuxOS Magazine Forum (<http://pclosmag.com/forum>). Be sure to include a step-by-step account of what you had to do to get your gadget or gear running with PCLinuxOS. We welcome your submissions!



# Computer Languages A to Z: Dylan

by Gary L. Ratliff, Sr. (eronstuc)

In 1992, Apple Computers had a group of engineers working in Cambridge whose main task was to develop a new language for use on the Apple Newton PDA. The name of the language was Dylan (pronounced dill-un), and its meaning was dynamic language. Originally, the syntax of the language was based on Lisp. However, over time the infix notation of more conventional languages was adopted. The language project was abandoned by Apple in 1995 and the only useful feature was that a system of this language will function on a Macintosh on the 68k older operating system.

The language was also worked on at Carnegie Mellon University and Harlequin, as they inherited the abandoned code. Later, when the Harlequin firm ceased to want the project, the code rights were acquired by the engineers working on the project. Soon, both of these projects became open source. A version is available for X-86 Linux from <http://opendylan.org/downloading.phtml>. From here, click the link to download 1.0 beta 5, and then request the file: `opendylan-1.0beta5-x86-linux.tar.bz2`. At this same setup, you will see an exe version for Windows and another tar.bz2 file for the 64

bit Linux architecture. The program should appear on your desktop shortly.

## Setting up to use the system

Now the package must be uncompressed and then extracted from the tarball. Some of these steps may be done by root, and some must be done by the user. Therefore, the steps performed by root will have # while those which must be done by the user will be indicated by \$.

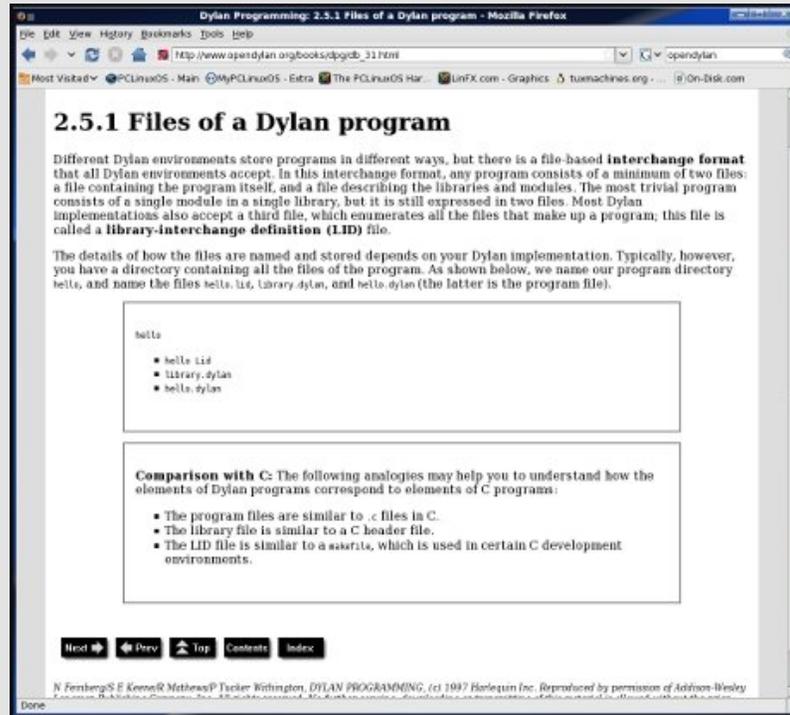
```
$ bunzip2 opendylan-1.0beta5-x86.linux.tar.bz2
$ su
<enter root password>
# mv opendylan-1.0beta5-x86.linux.tar /usr/local/

# cd /usr/local
# tar -xvf opendylan-1.0beta5-x86.linux.tar
# cd /home/<username>
# exit
$ export PATH=/usr/local/opendylan-1.0beta5/bin:$PATH
$ opendylan -build hello-world
cd Open-Dylan/bin
./hello-world
```

Your screen should now contain the the text message: "Hello there!" The process was to unzip the archive and become root to have it placed into the default location: `/user/local/opendylan...` From this location the programs may be constructed, and all the proper libraries and functions found by the language system. Now you return and become the normal user. Then you set it so that the path to the Dylan compiler is established. Now here you may wish to issue a history command and note what the number of the command to export the environment is, as this will not be kept on a permanent basis. On my main system, the history shows this to be 171. So if issuing the command: "Echo \$PATH shows that you are



not attached to the compiler, a simple !171 will restore the path for you.



When the compiler is set up, issuing the `-build` command will compile the system for you. I saved the compiler output into a text file and this runs just over 38k. It seems that every one's first program in a new language is the hello world app. Last month we discussed the C/C++ languages. These would be compiled with

```
gcc -o hello helloworld.c
g++ -o hello helloworld.cpp
```

These would compile the respective C or C++ versions of the hello world programs which are given below:

**c version**

```
#include «stdio.h»

int main()

{
printf("Hello World\n");

return(0);
}
```

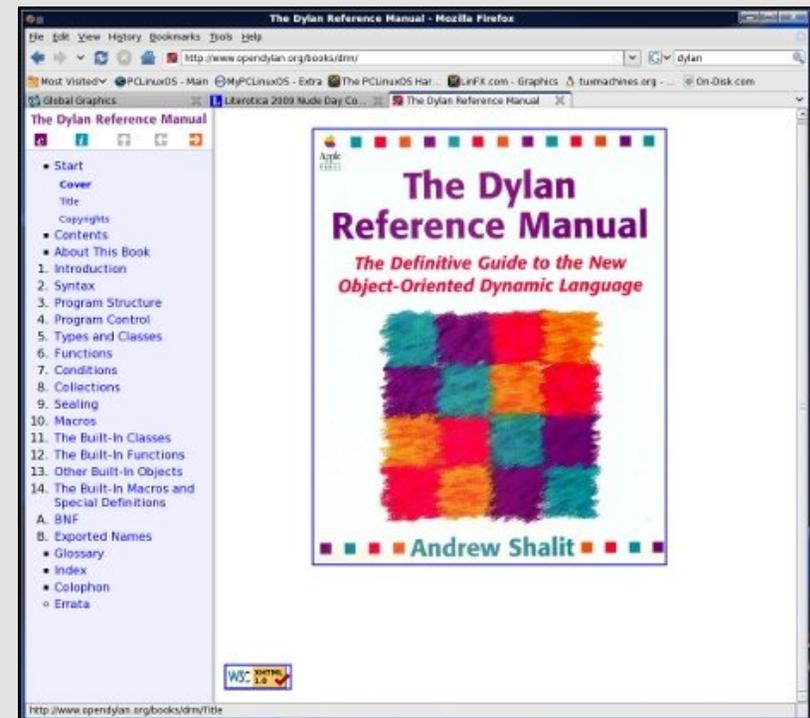
**c++ version**

```
#include «iostream»
using namespace std;
int main(int argc, char
a*arg[v])

{
cout « « "Hello World"
« « endl;

return(0);
}
```

Now to compare the amount of memory taken by the compiled applications: The C language program required 6751 bytes; the C++ program required 8368 bytes; and the Dylan application took 9870 bytes.



## Learning to Use Dylan

The site mentioned for obtaining the 1.0beta5 release of Dylan will also be able to allow you to find several books for you to read to learn the features of the Dylan language. There is a reference manual for the language, and also a tutorial on using the language. They are on the website and they are navigated much in the same way as the text of APL: An Interactive Approach. The applications which may be built are found in the `/usr/local/opendylan.../source/app` directory. Under this, you will find a directory for `hello-world`, `dylan-playground`, `djam`, and several other systems. By examining the files, you will see how a Dylan system is setup. Unfortunately, the `gtk+-2.0` program does not seem to be in the repository for PCLinuxOS at the present. And most of the applications will want a GUI interface. The material suggests that the DUIM system has been implemented for Windows. However, when the exe version was downloaded and installed on my Windows XP system, which required 389 MB for a full installation, not a single app could function. All reported a missing "tr" program. From reading the material, it seems as if a DUIM for the Linux version is under development. I know that there is GNOME version of PCLinuxOS, but I do not have this installed on my system.

The goals envisioned by Apple for this new language were noble. There is still some effort by `opendylan.org` to create a fully functional system, but for now it is not able to be of much use.



### Foods

Because the holiday comes in the wake of the annual apple harvest, candy apples (also known as toffee), caramel or taffy apples are a common Halloween treat made by rolling whole apples in a sticky sugar syrup, sometimes followed by rolling them in nuts.

At one time, candy apples were commonly given to children, but the practice rapidly waned in the wake of widespread rumors that some individuals were embedding items like pins and razor blades in the apples. While there is evidence of such incidents, they are quite rare and have never resulted in serious injury. Nonetheless, many parents assumed that such heinous practices were rampant. At the peak of the hysteria, some hospitals offered free x-rays of children's Halloween hauls in order to find evidence of tampering. Virtually all of the few known candy poisoning incidents involved parents who poisoned their own children's candy, and there have been occasional reports of children putting needles in their own (and other children's) candy in need of a bit of attention.

One custom that persists in modern-day Ireland is the baking (or more often nowadays, the purchase) of a barmbrack (Irish "báirín breac"), which is a light fruitcake, into which a plain ring, a coin and other charms are placed before baking. It is said that those who get a ring will find their true love in the ensuing year. This is similar to the tradition of king cake at the festival of Epiphany.

Other foods associated with the holiday: Candy corn, Colcannon (Ireland), Bonfire toffee (in the UK), Toffee Apple (Australia when celebrated, England, Wales and Scotland, instead of "Candy Apples"), Apple cider, Roasted sweet corn, Popcorn, Roasted pumpkin seeds, Pumpkin pie and bread. — *Source: Wikipedia*

# Creating a GUI with GTKDialog

by Macedonio Fernandez (musionio)

Last month Leiche provided a bash/Zenity script (now in the repositories) to act as a GUI to several useful command line applications and commands. I had a few hours to spare and play around trying to decorate the script with GTKDIALOG, and the result was the following:



After more playing around:



GTKDIALOG is similar to ZENITY or KDIALOG, but it is extremely customizable and allows you to arrange the different widgets (buttons, labels, menus, lists, etc.) in infinite combinations.

The use I put it to in the script is absolutely basic. I have only used it to decorate a bash script, with no further features than pushing buttons. Since the possibilities are endless, I will only comment on the alternatives that are actually used in the script. (Further Links are provided below).

The script only aims at providing a handy access to system files that I usually need to read/edit and to command line utilities that I am too lazy to write in a terminal. Since I have chosen Leiche's commands and a few other things I personally find useful, it is the result of personal taste.

The question is, precisely, building it according to one's preferences. It is mostly a question of trial and error, but also a question of being orderly; I guess that the key, for beginners like me, lies in keeping a correct disposition of the tabs (or indentations), which allows to see clearly where each section begins and ends and to check whether there are any unclosed tags.

Buttons, frames and menus can be rearranged as you like, and the only thing you need to understand is how to define the ACTION fields.

To present an example, let's take a look at the lower section of the GUI:

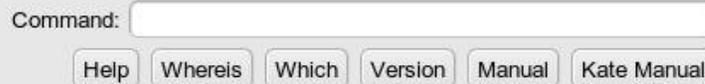
Structure: a Frame (the line on top; with no label) that contains an Horizontal box that contains three items (button, text, button).



Hence:

```
<frame>
  <hbox>
    <button></button>
    <text></text>
    <button></button>
  </hbox>
</frame>
```

**Commands Information**



Structure: a Frame (the line on top) with a Label (Commands Information) that contains two Horizontal boxes (the first of them contains a TEXT and an ENTRY field; the second one contains 6 buttons).

Hence:

```
<frame Label>
  <hbox>
    <text><label></label></text>
    <entry><variable></variable></entry>
  </hbox>
  <hbox>
    <button></button> (x6)
  </hbox>
</frame>
```

**GTKDIALOGS**

Gtkdialogs are like functions: they have to be built before you can actually execute them. That is why, in our script, it takes the following form:

```

export MAIN_DIALOG='
    <window>
        <vbox>
            .....
        </vbox>
    </window>
'

gtkdialog --program=MAIN_DIALOG

```

It is only this last line that actually executes the dialog. If it were not present, the script would do absolutely nothing.

## TAGS

GTKDIALOG is, according to the project's home page, “a small utility for fast and easy GUI building. It can be used to create dialog boxes for almost any interpreted and compiled programs which is a very attractive feature since the developer does not have to learn various GUI languages for the miscellaneous programming languages”.

GTKdialogs are written in an XML-like language: every widget is inserted through tags that need its closing pair. If it is not found, or if it not properly placed, the script cannot be executed.

Tags are nested as in the following example:

```

<window>
<vbox>

<button><label>Kate</label><action>kate</action><
/button>

</vbox>
</window>

```

(Actually, the window and vbox tags are idle in this example, since they contain only one element.)

The real action takes place, in our script, only inside the buttons area; hboxes, vboxes, frames and menus only provide containers for those buttons. How do we specify what action should take place when we click on an icon? We simply write the command we want to execute inside the ACTION tag. Since this is a bash script, we just use the commands we would use in a bash script with a few slight modifications that will be noted later.

The main widgets we will use in the script are the following:

## WINDOW

The window tag, which is not always necessary, allows you to specify some global attributes, such as the size of the window, if it is resizable or not, if it must skip the taskbar, etc. Some useful options:

```

window_position="x"
width_request="x"
height_request="x"
title="_"
(default is "gtk-dialog")
maximize_initially="true"           (default
is false)
skip_taskbar_hint="true"           (default
is false)

```

## VBOX and HBOX

A vbox (vertical box) and and hbox (horizontal box) which can hold buttons, menus, text, lists, etc., or even other vboxes and hboxes, as we will see in the example.

HBoxes admit two main properties:

```
homogeneous="true"
```

States if the other widgets inside the box are distributed evenly (Default is no, which piles up all the widgets on the right of the hbox).

```
spacing="x"
```

Specifies the spacing between icons.

Both options have to be specified inside the first tag:

```
<hbox homogeneous="true">
</hbox>
```

or:

```
<hbox spacing="20">
</hbox>
```

or:

```
<hbox homogeneous="true"
spacing="20">
</hbox>
```

## FRAMES

Frames are useful for grouping together several widgets. The label must be stated inside the first tag. If no label is provided, a simple line is drawn.

## MENUS

The simplest form of a Menu has the following structure:

```
<menubar>
<menu>
  <menuitem>
    <label></label>
```

```
    <action></action>
  </menuitem>
</label></label>
</menu>
</menubar>
```

As is obvious, you can insert as menuitems as you wish, provided you place them correctly.

As in the script, you can also decorate a Menu by creating an horizontal box that contains both the image and the menu:

```
<hbox>

  <pixmap>
    <input file>path_to_file</input>
  </pixmap>

  <menubar>
  <menu>
    <menuitem>
      <label></label>
      <action></action>
    </menuitem>
  <label></label>
  </menu>
  </menubar>

</hbox>
```

## ENTRY

Entries are fields that give the user the possibility on providing an input.

In the case of the Kernel Messages and Commands Information,

the value of the entry is assigned to a variable, which is then "processed" by the ACTION defined by the button we choose to press.

**BUTTON**

There are two main types of buttons:

- 1) predefined buttons
- 2) custom buttons: text and image buttons; text only buttons; image only buttons

Predefined buttons:

```
<button help></button>
<button yes></button>
<button no></button>
<button ok></button>
<button cancel></button>
```

(see <http://xpt.sourceforge.net/techdocs/language/gtkdialog/gtkde02-GtkdialogExamples/single/> for screenshots of predefined buttons).

Custom text only button

```
<button><label>Kate
editor</label><action>kate</action></button>
```



Custom image only button

```
<button><input
file>/usr/share/pixmaps/VBox.png</input><action>k
```

```
ate</action></button>
```



Custom text and image button

```
<button><input
file>/usr/share/pixmaps/VBox.png</input><label>Virtual
Box</label><action>kate</action></button>
```



As I said before, this is an extremely basic example of GTKDIALOG. Other interesting alternatives are notebooks, radiolists, fully customizable text dialogs, among others. (See the links below for instructions on how to use them).

A few things concerning syntax

1. Since the syntax and structure of bash scripts have been covered (concerning their basic elements) in previous issues and excellent tutorials on bash scripts can be found on the web, I will only comment on a few things about the script.
2. As you can see, we have defined a bunch of variables at the beginning of the script. This has two advantages: i) it allows us to write only the name of the variable inside the gtkdialog, and avoid writing the whole path. ii) If we decide to change the file to be shown through the GUI, we just modify the definition of the variable.

3. One extremely important detail about gtkdialog is that expanded variables sometimes have to be protected, depending on the command string, with single quotes; otherwise, they are not recognized as such.

In a regular bash script, for example, you would have the following:

```
VAR1= ~/.kde/share
VAR2="I'm not a big fan of
PCLinuxOS. I just can't live without it"

echo $VAR1
echo "$VAR2"
```

Inside the GTKDIALOG, this may have to be turned into:

```
echo '$VAR1'
echo '"$VAR2"'
```

4. A couple of lines from the script are worth considering:

```
kdesu "dmidcode | head -15 | zenity --text-info
--width=700 --height=500 --title \"BIOS
information\""
```

Three things must be considered in this line:

- i) The string of commands to be run as root (i.e., after kdesu) must be grouped together or protected by double quotes.
- ii) There is a double piping: dmidcode produces an output, which is piped to head. What does head do? It outputs only the first lines of the input (in this case, the 15 first lines). This last output is then passed on to a zenity window.
- iii) The double quotes inside the string that we pass to kdesu must be preceded by a backslash, which is not the case with other commands we have used, such as the zenity text-info dialogs.

```
KeyRPM=(`zenity --entry --text "Enter search
word:"`); rpm -qa | grep "$KeyRPM" | zenity --
text-info --width=900 --height=600 --title
"$KeyRPM in installed RPMS" &
```

- i) The variable is defined inside the action tag itself and expanded in the same line (though linked by a semi-colon).
- ii) grep "filters" the output of rpm -qa on the basis of the value of the variable.
- iii) The final "&" states that the process will run in the background. This allows you to continue using the main dialog window even if you haven't closed the window launched by the commands that precede that symbol.

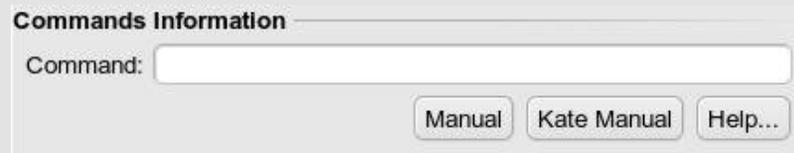
**Extra tips**

- i) You can group together with { } any number of commands before sending their output to a Zenity text dialog.

For instance, the section on Command Information, which looks like this:



can be turned into the following:



The "Help..." button groups together the rest of the commands (except for manual):

```
<action>{ echo "WHATIS" && whatis $VAR1 && echo
"WHEREIS" && whereis $VAR1 && echo "WHICH" &&
which $VAR1 && echo "VERSION" && $VAR1 --version
&& echo "HELP" && $VAR1 --help ; } | zenity --
text-info --width=600 --height=600 --title
$"Help..." &&/action>
```

ii) You can turn the main window into a notebook, with as many label as you want:



All you need to do is define the notebook in the first line of the GTKDIALOG, and create a VBox for each label:

```
<notebook labels="System|System Files|Notebook">
  <vbox>
  </vbox>
  <vbox>
  </vbox>
  <vbox>
  </vbox>
</notebook>
```

#### Further Links

<http://linux.pte.hu/~pipas/gtkdialog/> (Official Homepage)  
<http://library.gnome.org/devel/gtk/unstable/GtkDialog.html>  
<http://www.pygtk.org/docs/pygtk/>  
<http://xpt.sourceforge.net/techdocs/language/gtkdialog/gtkde02-GtkdialogExamples/single/> (Provides a long list of examples -with snapshots- of what can be done with GTKDIALOG)

<http://forum.goblinx.com.br/viewtopic.php?p=3418#3418>  
<http://hizoka.funcenter.fr/linux/gtkdialog.pdf> (Good tutorial in French)

#### My Script

```
#!/bin/bash
Encoding=UTF-8
```

```
FILE1=/etc/X11/xorg.conf
FILE2=/etc/fstab
FILE3=/boot/grub/menu.lst
FILE4=/etc/apt/sources.list
FILE5=/etc/conky/conky.conf
FILE6=/etc/rc.local
FILE7=/etc/sudoers
FILE8=~/.bashrc
FILE9=/root/.bashrc
export MAIN_DIALOG='
<window window_position="1" title="System Tools">
```

```
  <vbox>
    <hbox homogeneous="True">
      <frame>
        <hbox homogeneous="True">
          <hbox>
            <button>
              <input
file>'$HOME'/.kde/share/icons/ananke/konsole_60.png</input>
              <action>konsole &&/action>
            </button>
          </hbox>

          <vbox homogeneous="True">
            <button>
              <label>TOP</label>
              <action>konsole -e top
&&/action>
            </button>

            <button>
              <input
file>'$HOME'/.kde/share/icons/ananke/root.png</input>
```

```

        <action>kdesu "konsole -e top"
</action>
    </button>
</vbox>
</hbox>
</frame>

<vbox>
  <frame Kernel messages>

    <button>
      <label>View messages</label>
      <action>dmesg | zenity --text-info
--width=700 --height=500 --title $"View kernel
messages" &</action>
    </button>

<entry><variable>VAR2</variable></entry>

    <hbox>
      <button>
        <label>search</label>
        <input
file>'$HOME'/.kde/share/icons/ananke/search.png</input>
        <action>dmesg | grep $VAR2 |
zenity --text-info --width=700 --height=500 --title
$" "$VAR2 in kernel messages" &</action>
      </button>

      <button>
        <label>search & save</label>
        <input
file>'$HOME'/.kde/share/icons/ananke/save.png</input>
        <action>dmesg | grep $VAR2 >
'$HOME'/dmesg_output_$VAR2.txt &</action>
        <action>kate
'$HOME'/dmesg_output_$VAR2.txt</action>
      </button>
    </hbox>
  </frame>
</vbox>
</hbox>

<frame Commands Information>
<hbox>

```

```

    <text> <label>Command:</label> </text>
    <entry><variable>VAR1</variable></entry>
</hbox>
<hbox>
  <button>
    <label>Help</label>
    <action>$VAR1 --help | zenity --text-
info --width=600 --height=600 --title $"Help"
&</action>
  </button>

  <button>
    <label>Whereis</label>
    <action>whereis $VAR1 | zenity --text-
info --width=400 --height=20 --title $"Whereis"
&</action>
  </button>

  <button>
    <label>Which</label>
    <action>which $VAR1 | zenity --text-
info --width=200 --height=200 --title $"Version"
&</action>
  </button>

  <button>
    <label>Version</label>
    <action>$VAR1 --version | zenity --
text-info --width=200 --height=200 --title $"Version"
&</action>
  </button>

  <button>
    <label>Manual</label>
    <action>man $VAR1 | zenity --text-info
--width=400 --height=500 --title $"Manual" &</action>
  </button>

  <button>
    <label>Kate Manual</label>
    <action>man $VAR1
>>'$HOME'/tmp/temp_man.txt</action>
    <action>kate

```



```

kernel</label>
    <action>uname -a | zenity
--text-info --width=900 --height=20 --title $"Current
running kernel" &</action>
    </menuitem>

    <menuitem>
    <label>KDE Version</label>
    <action>kde-config --
version | grep KDE | zenity --text-info --width=60 --
title $"KDE Version" &</action>
    </menuitem>

    <menuitem>
    <label>Show Path</label>
    <action>echo '$PATH' |
zenity --text-info --width=900 --height=10 --title
$"PATH" &</action>
    </menuitem>
<label>System Information</label>
</menu>
</menubar>
</hbox>

<hbox>
<pixmap>
<input
file>'$HOME'/.kde/share/icons/ananke/rpm.png</input>
</pixmap>

<menubar>
<menu>
<menuitem>
<label>View Installed
Applications</label>
    <action>rpm -qa | sort |
zenity --text-info --width=900 --height=600 --title
$"Installed RPMS" &</action>
    </menuitem>

    <menuitem>
    <label>Open list of
Installed Applications</label>
    <action>zenity --info --
text "I will open a list of the installed RPMs in a
temporary text file. \nIf you want to keep it, save it
in a different location, since the temporary file will

```

```

be removed."</action>
    <action>rpm -qa | sort >>
'$HOME'/tmp/installed_rpms.txt</action>
    <action>kate
'$HOME'/tmp/installed_rpms.txt</action>
    </menuitem>

    <menuitem>
    <label>Search in list of
installed Applications</label>
    <action>KeyRPM=(`zenity --
entry --text "Enter search word:"`); rpm -qa | grep
"$KeyRPM" | zenity --text-info --width=900 --
height=600 --title $" "$KeyRPM" in installed RPMS"
&</action>
    </menuitem>

    <label>Installed
Applications</label>
</menu>
</menubar>
</hbox>

<hbox>
<pixmap>
<input
file>'$HOME'/.kde/share/icons/ananke/devices.png</input
>
</pixmap>

<menubar>
<menu>
<menuitem>
<label>Hard drive
partitions</label>
    <action>kdesu "fdisk -l |
zenity --text-info --width=700 --height=500 --title
$"Hard drive partitions" &</action>
    </menuitem>

    <menuitem>
    <label>Hard drive
UUID</label>
    <action>blkid | zenity --

```

```

text-info --width=700 --height=500 --title $"Hard
Drive UUID" &</action>
</menuitem>
</menuitem>
<menuitem>
<label>Current mount
points</label>
<action>mount | zenity --
text-info --width=700 --height=500 --title $"Current
mount points" & </action>
</menuitem>
<menuitem>
<label>Available disk
space</label>
<action>df -h | zenity --
text-info --width=700 --height=500 --title $"Available
disk space" &</action>
</menuitem>
<menuitem>
<label>Connected USB
devices</label>
<action>lsusb | zenity --
text-info --width=700 --height=500 --title $"Connected
USB devices" &</action>
</menuitem>
<label>Devices</label>
</menu>
</menubar>
</hbox>
<hbox>
<pixmap>
<input
file>'$HOME'/.kde/share/icons/ananke/x.png</input>
</pixmap>
<menubar>
<menu>
<menuitem>
<label>X-Server
information</label>
<action>xdpinfo | zenity
--text-info --width=700 --height=500 --title

```

```

$"Information about the X-server" &</action>
</menuitem>
<menuitem>
<label>GLX/OpenGL
Information</label>
<action>glxinfo | zenity --
text-info --width=700 --height=500 --title
$"Information about glx and opengl" & </action>
</menuitem>
<label>X-Server</label>
</menu>
</menubar>
</hbox>
<hbox>
<pixmap>
<input
file>'$HOME'/.kde/share/icons/ananke/groups.png</input>
</pixmap>
<menubar>
<menu>
<menuitem>
<label>Group
memberships</label>
<action>groups | zenity --
text-info --width=700 --height=100 --title $"View
group memberships" &</action>
</menuitem>
<menuitem>
<label>Groups</label>
<action>cat /etc/group |
zenity --text-info --width=700 --height=500 --title
$"View Groups" &</action>
</menuitem>
<label>Groups</label>
</menu>
</menubar>
</hbox>
<button>

```

```

        <label>Loaded modules</label>
        <action>lsmod | zenity --text-info
--width=700 --height=500 --title "$View loaded modules"
&</action>
    </button>

    <button>
        <label>Services</label>
        <action>chkconfig --list | zenity
--text-info --width=900 --height=600 --title "$View
Services" &</action>
    </button>

</vbox>
</frame>
</hbox>

<hbox>
    <frame System Files>
        <hbox>

<button><label>"$FILE1"</label><action>zenity --
title="$FILE1" --text-info --width 500 --height 400
--filename="$FILE1" &</action></button>
        <button><input
file>'$HOME'/.kde/share/icons/ananke/root.png</input><a
ction>kdesu "kate '$FILE1'" &</action></button>
        </hbox>

    </hbox>

<button><label>"$FILE2"</label><action>zenity --
title="$FILE2" --text-info --width 500 --height 400
--filename="$FILE2" &</action></button>
        <button><input
file>'$HOME'/.kde/share/icons/ananke/root.png</input><a
ction>kdesu "kate '$FILE2'" &</action></button>
        </hbox>

    </hbox>

<button><label>"$FILE3"</label><action>zenity --
title="$FILE3" --text-info --width 500 --height 400
--filename="$FILE3" &</action></button>
        <button><input
file>'$HOME'/.kde/share/icons/ananke/root.png</input><a
ction>kdesu "kate '$FILE3'" &</action></button>
        </hbox>

```

```

    <hbox>

<button><label>"$FILE4"</label><action>zenity --
title="$FILE4" --text-info --width 500 --height 400
--filename="$FILE4" &</action></button>
        <button><input
file>'$HOME'/.kde/share/icons/ananke/root.png</input><a
ction>kdesu "kate '$FILE4'" &</action></button>
        </hbox>
</frame>

<frame>
    <hbox>

<button><label>"$FILE5"</label><action>zenity --
title="$FILE5" --text-info --width 500 --height 400
--filename="$FILE5" &</action></button>
        <button><input
file>'$HOME'/.kde/share/icons/ananke/root.png</input><a
ction>kdesu "kate '$FILE5'" &</action></button>
        </hbox>

    <hbox>

<button><label>"$FILE6"</label><action>zenity --
title="$FILE6" --text-info --width 500 --height 400
--filename="$FILE6" &</action></button>
        <button><input
file>'$HOME'/.kde/share/icons/ananke/root.png</input><a
ction>kdesu "kate '$FILE6'" &</action></button>
        </hbox>

    <hbox>
        <button>
            <label>"$FILE7"</label>
            <action>kdesu "zenity --
title="$FILE7" --text-info --width 500 --height 400
--filename="$FILE7" &</action>
        </button>

        <button>
            <input
file>'$HOME'/.kde/share/icons/ananke/root.png</input>
            <action>kdesu "kate '$FILE7'"

```

```
&</action>
        </button>
    </hbox>
    <hbox>
        <button>
            <label>'"$FILE8"'</label>
            <action>kate '"$FILE8"'
&</action>
        </button>
        <button>
            <input
file>'$HOME'/.kde/share/icons/ananke/root.png</input>
            <action>kdesu "kate '"$FILE9'"
&</action>
        </button>
    </hbox>
</frame>
</hbox>
<frame>
<hbox homogeneous="True">
    <button>
        <input
file>'$HOME'/.kde/share/icons/ananke/info.png</input>
        <action>zenity --question --text "To be
able to perform all the operations, the following apps
must be installed: \n\nndmidecode lm_sensors lshw
mesa-demos xdpinfo \n\nDo you want to install them
if they are not already installed?"; if [ "$?" = 0 ];
then kdesu "konsole --noclose -e apt-get install mesa-
demos xdpinfo lm_sensors dmidecode lshw"; fi</action>
    </button>
    <text use-markup="true"><label><span
color=''"blue"' font-family=''"purisa"'
weight=''"bold"' size=''"large"'><small>System
Tools</small></span></label></text>
    <button>
        <input
file>'$HOME'/.kde/share/icons/ananke/exit.png</input>
        <action type="exit">exit 0</action>
    </button>
```

```
</hbox>
</frame>
</vbox>
</window>
'
gtkdialog --program=MAIN_DIALOG
```



### Origin of Trick-Or-Treating

The practice of dressing up in costumes and begging door to door for treats on holidays dates back to the Middle Ages and includes Christmas wassailing. Trick-or-treating resembles the late medieval practice of souling, when poor folk would go door to door on Halloween (November 1), receiving food in return for prayers for the dead on All Souls Day (November 2). It originated in Ireland and Britain. although similar practices for the souls of the dead were found as far south as Italy. Shakespeare mentions the practice in his comedy The Two Gentlemen of Verona (1593), when Speed accuses his master of "puling [whimpering or whining] like a beggar at Halloween." The custom of wearing costumes and masks at Halloween goes back to Celtic traditions of attempting to copy the evil spirits or placate them, In Scotland for instance where the dead were impersonated by young men with masked, veiled or blackened faces, dressed in white.

### Around the world

With its roots in Celtic cultures, Halloween is not celebrated in all countries and regions of the world, and among those that do the traditions and importance of the celebration vary significantly. Celebration in the United States has had a significant impact on how the holiday is observed in other nations. — *Source: Wikipedia*

# ms\_meme's nook



## Let's Do It Let's Get Linux



Nerds do it squares do it  
Even ladies with gray hairs do it  
Let's do it Let's get Linux

In Ireland **JohnBoy** does it  
Even **MeeMaw** so coy does it  
Let's do it Let's get Linux

**Archie** in China does it  
Not to mention **JayDot**  
**Joble** in Montana does it  
They think it's really hot

**Old Polack** so mundane does it  
Even **Neal** who's insane does it  
Let's do it Let's get Linux

Snobs with decorum do it  
Moderators of the forum do it  
Let's do it Let's get Linux

**Hounddog** without paws does  
**Kori** for a good cause does it  
Let's do it Let's get Linux

**Texstar** so renown does it  
Not to mention **Parnote**  
**Ms\_meme** whose been around does it  
And from her I quote

Funny **Georgetoon** I assume does it  
**Weric** in the privacy of his room does it  
Let's do it Let's get Linux



# Command Line Interface Intro

by Peter Kelly (critter)

## So what is this CLI thing anyway?

These tutorials are based on a basic, fully updated installation of PCLinuxOS 2009.2 using the KDE 3.5 desktop. There may be minor differences between different installations and desktop environments but the fundamental concepts are similar.

Most people who are new to Linux are often confused when seeking help and are told:

“In a terminal type...” or “This can be done using the CLI...”.

Terminal? CLI? Console? What does it mean? Well in this context the three terms can be used interchangeably. CLI is short for command line interface and is another way of interacting with your computer, as opposed to the usual GUI or graphical user interface found in desktop environments like KDE or Windows. So why bother? Well for the most part, you don't have to bother. The GUI will do almost everything that anybody could possibly need on a day to day basis. The keyword here though is almost. There are times when you need to do something that there is no button to click or menu item to select to perform it.

Anything you do in a GUI can be done using the CLI, plus a whole lot more. The down side is that you have to learn what commands to type. Not all commands, there are after all hundreds of them, but a basic working knowledge of a few dozen of the more popular ones will make you a proficient CLI user.

## Getting started

Want to dip a toe in the water? Follow me.

Open PCLinuxOS control center



Under the System heading click “Manage users on system” and create a new user, call it whatever you like - my user is called jane - log out and then log in as the new user. Now, if we manage to screw up, delete the user and re-create it. No damage done, your account is safe.

Click the menu button and under System>Terminals select Konsole – Terminal Program. You could select anything under that menu but this is the most suitable for what I have in mind.

A window opens with a black background and something like this:

```
[jane@home ~]$ █
```

This is called the prompt, because it is prompting you to type something. It is also giving some information: The current user is jane who is at a

computer with the “hostname” home (If you haven't changed the hostname of your computer your prompt will say localhost). The ~ character (called tilde) is shorthand for “my home directory” which is where jane is in the filesystem. The \$ denotes jane is an ordinary user not the super-user root, whose prompt usually ends with a hash #. This is the default in PCLinuxOS but can be changed to include almost anything you want, for example, some people like to have the current date in the prompt.

## Looking around

So the prompt tells us that jane is in her home directory. Let's change that.

Type the following and press enter: `cd /usr/bin` Make sure that you use only lower case letters, as Linux is case-sensitive.

The prompt now looks like this:

```
[jane@home bin]$ █
```

The command `cd` means change directory and the `/usr/bin` part is telling the command which directory to change to. But the directory shown in the prompt says `bin` not `/usr/bin` and there are lots of directories named `bin` in the Linux file system.

It is very important that we know exactly where we are if we are going to start mucking about with things – no nice graphics here. To check, type in the command `pwd`, short for “print working directory”, and press enter.

```
[jane@home bin]$ pwd
/usr/bin
[jane@home bin]$ █
```

This confirms where we are and supplies a new prompt ready for you to type the next command.

Let's go back, type `cd` and press enter (you know to press enter by now) Typing the command `cd` on its own is a quick way of getting home from anywhere in the file system.

Nothing very impressive so far, and I said that you can do anything in here just like in a GUI. You can.

Type `firefox`. See, you still have access to all of your graphical applications while you are running a terminal in KDE. But now you can't type anything on the command line so close `firefox` and you get the use of the command line again in your terminal (or console if you prefer). I'll show you later how to run a command and still have access to the command line.

Let's have a look around in this directory.

Type `ls` (it means list directory contents, in this example the contents of jane's home directory)

```
[jane@home ~]$ ls
Desktop/ Documents/ Movies/ Music/ Pictures/ tmp@
[jane@home ~]$ █
```

This is a very brief and not very informative listing of the directory contents. If we want more information, then we can use a modified version of the `ls` command. For example, type `ls -l` (notice the space). Now type `ls -a`. See the difference? The `-a` and `-l` are known as options, and most Linux commands accept a host of options.

The `-a` (all files) gives you fewer details but more files. By default any file that begins with a period is hidden, this is nothing to do with security but merely a convenience to reduce clutter. The `-l` option means provide a long listing. You can even combine options to get the results that you want.

Try `ls -al`.

How do you remember these options? You don't have to. For almost any command, typing the name of the command followed by `--help` will show you what is available. In practice you will use only a few of the available options.

Type `ls --help`.

That went past too quickly to read so we need to slow it down.

Type `ls --help | less`

The `less` command shows less information in one go. (The `|` is the vertical bar character above the backslash character. At least that's where it is on my keyboard) I'll explain later what this is all about. You can press enter or the space-bar for a new page and the page up / page down keys work. Press 'q' to get out.

To summarize then, Linux commands take the following general form: `{cmd} {options} {argument}`

\* `cmd` is the name of the command e.g. `ls`

\* options such as `-a` or `-al` are ways of modifying the output or result of the command and are usually prefixed with one or more dashes.

\* argument is information that you supply to the command, such as a directory to go to like `/home`.

Armed with the preceding information you are ready to go exploring.

Logged in as a normal user you, can do no system damage with the following commands, which merely display information or move your current position within the filesystem. Some of the information displayed may look a bit cryptic at the moment, but I will explain it all when we have been through a few more commands

```
ls
cd
pwd
free          display memory usage
```

df        display disk usage  
date     print the time and date to screen  
cal      print a calendar on the screen

### Making changes

This is where we have to be a little more careful, as we will be making changes to files and directories and deleting some. But that is why we created this dummy account. (You did that, right?)

cd enter puts us back in the home directory from wherever we were in the file system.

Create a new directory named mydir1 with the command mkdir mydir1. Check that it has been created with the ls command.

Now let's create a new file. One way to do this is to use the command touch.

```
touch myfile1
```

This isn't what touch was designed for but is what it is used for mostly these days. ls will show the new file but it isn't in our new directory so let's move it.

```
mv myfile1 mydir1
```

```
ls                                    The file has gone.
ls mydir1                            There it is in our new directory so move to
our new directory
cd mydir1
file myfile1 shows the file type to be empty
```

```
[jane@home mydir1]$ file myfile1
myfile1: empty
[jane@home mydir1]$ █
```

Remember the vertical bar character that we used with the less command? It took the output from the ls -help command and fed it to the less command so that we could read it in our own time. The > (greater than) character can be used in a 'similar' way.

```
ls -l/    will give a listing of the root of the file system.
ls -l/ > myfile1
```

Here the output is captured before it is printed to screen and then stuffed into our file. This is part of something called redirection, which we will go into in more depth in a later episode.

file myfile1 now shows the file to be of type 'ASCII text'. To look at the contents we can use the command cat (short for concatenate).

```
cat myfile1
```

```
[jane@home mydir1]$ cat myfile1
total 88
drwxr-xr-x  2 root root  4096 Jun 29 16:18 bin/
drwxr-xr-x  3 root root  4096 Sep  5 10:01 boot/
drwxrwxrwt 12 root root  4200 Sep  6 04:02 dev/
drwxr-xr-x 114 root root 12288 Sep  5 12:20 etc/
drwxr-xr-x  5 root root  4096 Sep  5 12:20 home/
drwxr-xr-x  2 root root  4096 Sep  4 14:15 initrd/
drwxr-xr-x 17 root root  4096 Sep  4 14:02 lib/
drwx----- 2 root root 16384 Sep  4 13:40 lost+found/
drwxr-xr-x  2 root root  4096 Sep  5 12:20 media/
drwxr-xr-x  3 root root  4096 Sep  4 13:57 mnt/
drwxr-xr-x  5 root root  4096 Jun 29 01:32 opt/
dr-xr-xr-x 111 root root    0 Sep  5 05:00 proc/
drwxr-x--  34 root root  4096 Sep  6 13:11 root/
drwxr-xr-x  2 root root 12288 Sep  4 14:04 sbin/
drwxr-xr-x 11 root root    0 Sep  5 05:00 sys/
drwxrwxrwt 15 root root  4096 Sep  6 13:19 tmp/
drwxr-xr-x 13 root root  4096 Jul 14 00:24 usr/
drwxr-xr-x 15 root root  4096 Sep  4 08:37 var/
[jane@home mydir1]$ █
```

### I hate typing in long commands

So do most people. You may have noticed that Linux commands tend to be short (e.g. ls, cat, df, cd, rm). Linux has its' roots in Unix, an operating system dating back 40 years, to the days when there was no graphical interface and all work had to be done on the command line. Over the years people have developed many ways to reduce the amount of typing and speed up regularly performed tasks, as you will discover.

When you run a terminal session, such as Konsole, under Linux (notice how the terms terminal, console and CLI are blending

together), you are actually running an application known as a shell. The shell takes what you type and interprets it into something that the computer can work with. There are lots of shell programs available for Unix/Linux. The original shell was known as the Thompson shell or sh on the command line. This was developed by Stephen Bourne to include many more features but was still known as sh. The most popular shell today is called 'bash' (bourne again shell). The default shell in PCLinuxOS is bash.

You can check this by typing `echo $SHELL` on the command line.

Bash is a very powerful program that can save you no end of typing.

Press the up arrow a few times and you will see the last few commands that you typed at the prompt ready to be edited or executed. The down arrow takes you back down. Type `history` and you get a numbered list of all the commands that you have used in this session

type `!` (The number) enter e.g. `!38` and that command is echoed to the screen and then executed.

Another time saver is a feature known as 'command line completion'. It works like this:

type `hi` press the tab key.

You get prompted with a list of all the commands you can execute that begin with the letters "hi" .

Press the 's' key and tab and the command line completes the command history waiting for you to add any options or arguments then enter to execute the command. This not only saves on typing but serves as a reference when you can't quite remember the command and cuts down on typing errors.

If you are part way through typing a command and notice a spelling mistake, you can use the following key combinations to get to it:

`ctrl + a` takes you to the beginning of the line  
`ctrl + e` takes you to the end of the line  
`alt + b` takes you to back a word

`alt + f` takes you forward a word

There are more, but these few are easy to remember and are usually sufficient.

If you have previously typed a long command and don't want to have to re-type it, then `ctrl-r` starts a reverse search – just start typing the command and as you type, the shell will match what you type to the most relevant previous command. When you have an exact match just press enter.

Type a letter, any letter e.g. 'a' then press tab and return.

```
[jane@home mydir1]$ a
Display all 134 possibilities? (y or n)
```

Answer 'y' and press return.

That gives you some idea of the number of commands we have to play with (almost 2000 in a basic installation of PCLinuxOS 2009.2).

Don't worry. You will only ever need a very small number of these commands but, if you need to do something, then there is a command or set of commands that will do it for you.

So you've dipped a toe in the water, how does it feel? Hopefully not too bad, because next time we are going to wade in waist deep, doing some things with root permissions. That is where the command line comes in to its own.



# My Five Favorite Firefox Extensions

by Andrew Strick (Stricktoo)

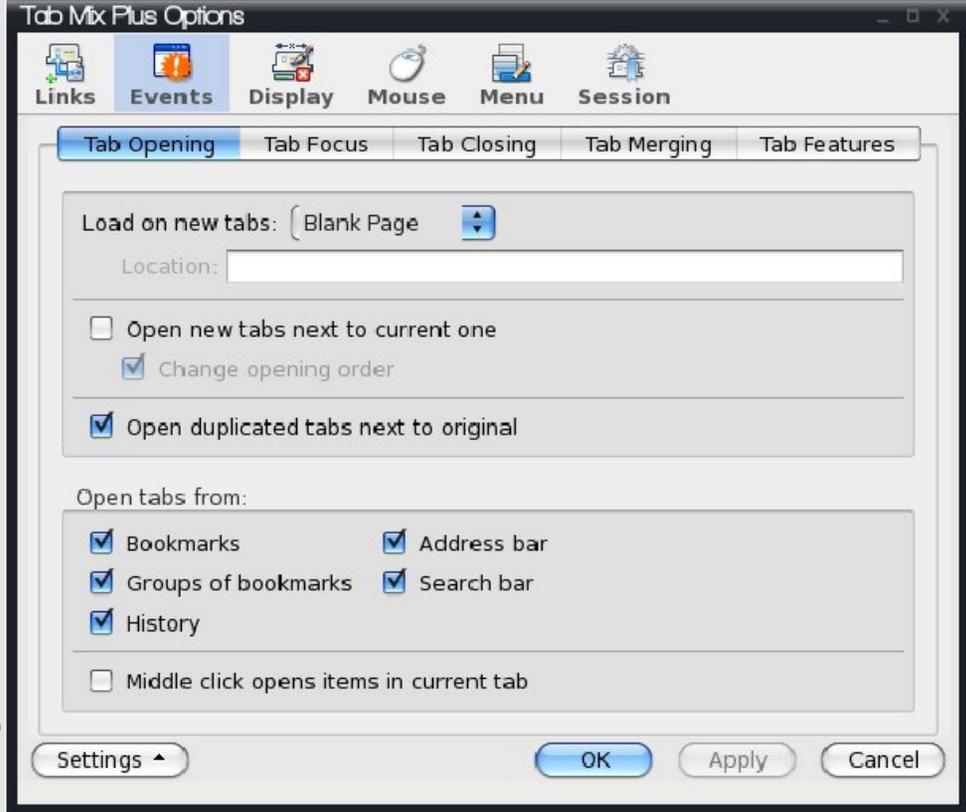
One caveat before I begin: the title of this article includes the word "My" for a reason. I have not tried every single Firefox extension, and thus this is not an exhaustive list. Even if I had tried out every extension, those that meet my needs will obviously not meet everybody's. My intention is simply to highlight the extensions that I get the most use out of.

Now, on to the main event.

## 1. Tab Mix Plus

I'm one of those people who keeps their mail open in one tab, the various PCLinuxOS forums open in another group of tabs, and my most frequently visited sites in yet a third tab. Consequently I need more tab management options than the limited set that Firefox provides by default. This is where Tab Mix Plus comes in. Tab Mix Plus gives you tons of options for wrangling your tabs into place. You can control, for example, what should happen when you have more tabs than room on the tab bar - should Firefox wrap the tabs onto multiple lines, or maintain one continuous line of tabs with scroll arrows?

Get it: <https://addons.mozilla.org/en-US/firefox/addon/1122>



## 2. XMarks (formerly FoxMarks)

XMarks is one of my absolute cannot-live-without extensions: a bookmark synchronizer. It's actually a fairly simple function, but one that still saves me tons of headaches. Instead of carrying around a flash drive full of bookmarks, or laboriously exporting/importing bookmark files to keep my desktop and laptop - and their various operating systems - on the same page, I just let XMarks handle it. As an added bonus, XMarks is also available for Internet Explorer (and Safari) so you can even keep your office system synced even if you're stuck with another operating system.

You can also log into the XMarks site, and access your bookmarks from virtually any computer with Internet access. Go to <http://www.xmarks.com>, select "Log In," enter your log-in information, then select "My Bookmarks" from the selections at the top of the screen. You will then be taken to an online list of all of your bookmarks that you have synced with XMarks.

XMarks also includes a secure password synchronizing tool, but as I haven't used it I can't attest to its quality.

Get it: <https://addons.mozilla.org/en-US/firefox/addon/2410>

## 3. Adblock Plus

As the name suggests, Adblock stops ads - including pop-ups and

banners - from appearing. This not only makes your browsing experience cleaner, it also prevents an errant click from landing you in a less-than-desirable internet location.

Get it: <https://addons.mozilla.org/en-US/firefox/addon/1865>

#### 4. NoScript

NoScript is a nifty little add-on that prevents "JavaScript, Java and other executable content" from running automatically. Instead, a small banner pops up at the bottom of the browser window, notifying you of blocked content. You're then given the option to



allow, temporarily allow (for that session) or forbid individual scripts from loading. It's a bit annoying at first, but the benefits greatly outweigh the costs. And it's not so bad once you've hit all of your favorite sites and gotten the permissions sorted out.

Get it: <https://addons.mozilla.org/en-US/firefox/addon/722>

#### 5. FoxyTunes

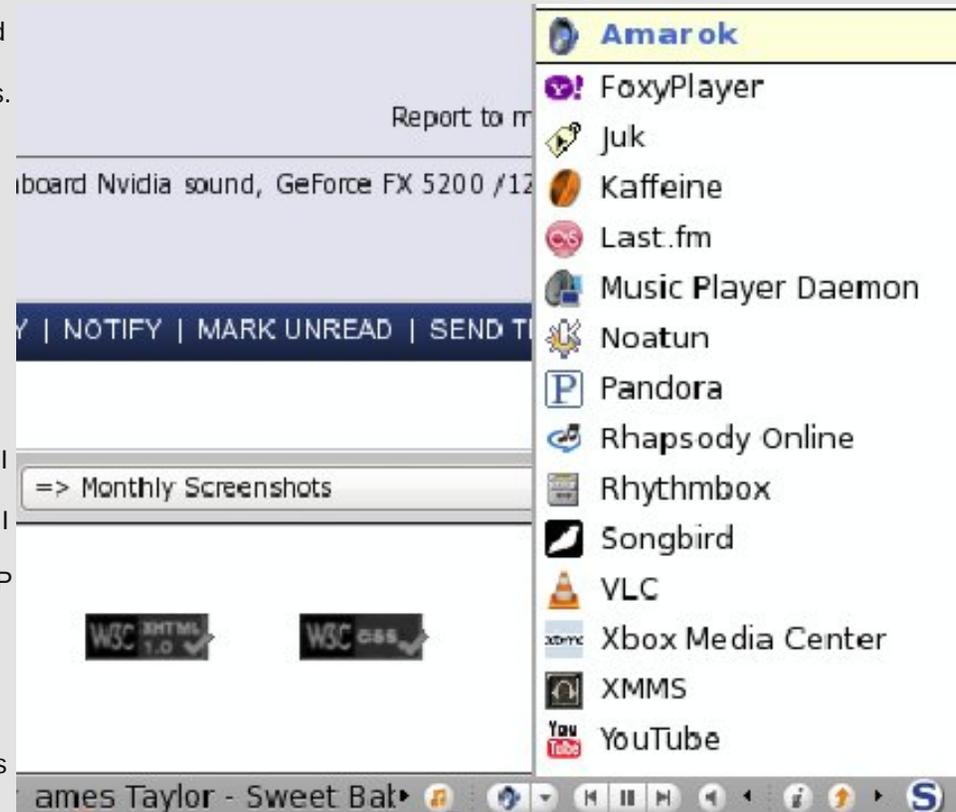
FoxyTunes allows you to control your various music players from a small widget in the Firefox statusbar. Now, you're probably thinking "why do I need that when my music application of choice has handy shortcut controls?" The answer is that I just happen to prefer it over the shortcuts. Also, since version 3.5 Firefox has usurped Ctrl+Shift+P and you may find yourself launching the ubiquitous "porn mode" (i.e. private browsing) instead of pausing Amarok.

FoxyTunes works with the more common media players, including iTunes and Windows Media player, as well as flash-based music sites such as Pandora and YouTube. FoxyTunes also supports several open source applications, like Amarok, Rhythmbox, Kaffeine and VLC. FoxyTunes does a fairly decent job

of detecting the application that you have running, though if you have more than one going (e.g. Pandora and YouTube) you may have to select the one you want from FoxyTunes' drop-down menu.

Get it: <https://addons.mozilla.org/en-US/firefox/addon/219>

Well, that about wraps it up. There are a few more extensions that I use on a regular basis, but these are the five that I generally can't do without. Enjoy!



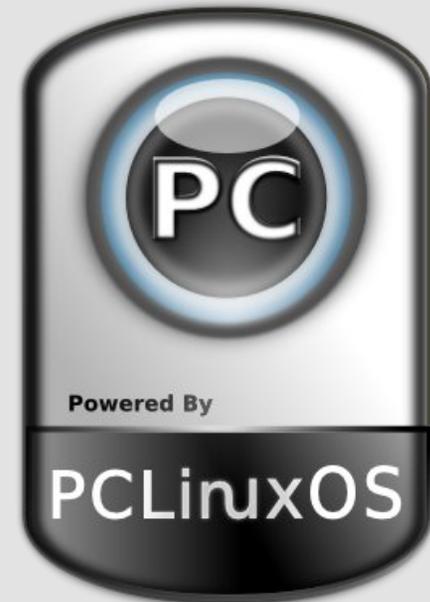
# Testimonials

## Pullapint's Welcome Another Couple of Reasons to Love PCLinuxOS

I'm not new to PCLinuxOS, just "newish" to the forums. I've been using PCLinuxOS from .94 to 2009.2 and have loaded it on several laptops: Dell Latitudes, an Acer TravelMate and a couple of Gateways. I've also loaded it on a HP Pavilion, Gateway E4100 and a Dell Precision 360 all desktops. All have accepted PCLinuxOS without fault.

I recently had to upgrade my wireless card on my Dell laptop. Newegg had a pretty good deal on a Belkin N1 wireless card. While attempting to install it, I thought I had run into my first issue with PCLinuxOS. Even though Synaptic said the drivers were installed, I couldn't get it to work. So I tried ndiswrapper, put the cd in the drive, drilled down to the .inf and .sys file I wanted, and a couple of minutes later I was online. Also for the last few months, I've been trying to turn a PC into a HTPC (Home Theater PC). My equipment is older, has no HDMI output, and my TV is a standard definition 25". It's what I have to work with right now. I tried XBMC, MythTV, Moovida and Geebox and only Geebox set my resolution correctly and was definitely the easiest to set up. It never occurred to me to try and put PCLinuxOS on the HTPC, and now I feel kinda dumb for not trying it earlier. It worked the first time, so I add Gateway E4300 to the mix. Now I have movies and music on my network through XBMC. I can even get on the internet to watch Hulu and listen to Pandora.

Sometimes I get so frustrated with people, mostly Windows fanboys and people that haven't tried PCLinuxOS, when they say Linux will never be mainstream or good enough for the masses. I have had an overwhelmingly positive experience due to Tex and the PCLinuxOS team. Thank you Tex, developers and everyone who watches over the forums to give help where it's needed.



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