## The PCLinxOS magazine

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Windows Migration:
Live Session & Installation

Windows Migration: Keeping Your System
Up To Date & Installing Software

Nexus 7 To PCLinuxOS Connection Guide

Just The Fax Ma'am ... And It Works In Linux!

Graphic Tutorials: Gimp, Part 7

Game Zone: Zombie Driver HD

And much more inside!

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### The **PCLinuxOS** magazine

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## Welcome From The Chief Editor

Well ... if you're reading this, we made it! Nope. The poles didn't shift. The planetary alignment didn't rip the earth apart or rip it from its orbit. The predicted apocalypse seemed to pass us by. PHEW! Did we perhaps dodge another bullet? I hardly think so.

Many other predictions have been made throughout history, foretelling the "end of days" for mankind and for our home among the cosmos. They have, as we know, all come and gone with barely a notice. The return of Halley's Comet every 72 years brings out a flurry of doomsayers. Even the appearance of the Hale-Bopp comet in early 1997 brought about the infamous Heaven's Gate cult. They believed an alien spaceship was hidden in the bright tail of the comet, which was to serve as their "escape vehicle" before the earth was "recycled" (wiped clean, renewed, refurbished and rejuvenated). In order to gain passage on the spaceship, they were convinced that they had to commit suicide and ascend to a higher plane. Police found the dead bodies of 39 members of the cult.

Then the last "big apocalypse" was Y2K. Now, enter 2012 and the Mayan calendar. According to the TGDaily website, amateur followers of the Mayan "long count" calendar claim that the completion of a time cycle known as Baktun 13 heralds the end of the world as we know it. However, the Mayans also believe that the Baktun 14 cycle will begin immediately after the conclusion of Baktun 13. Whatever.

Personally, I believe that they simply didn't continue their "long count" calendar past 2012 for two reasons. First, the Mayans themselves may have either believed that they themselves wouldn't be around, or that someone else would pick up their work and continue it. Secondly, I'm sure at some point, someone had to think "after 3000 years (or so)



of this calendar, certainly someone in the 21st century will be able to recognize a pattern here and just repeat."

My favorite take on the "end" of the Mayan "long count" calendar is this cartoon. It's quite conceivable to me that this scenario could, very well, be the entire reason that the Mayan "long count" calendar ends when it does. My co-workers all get a chuckle, because I have a copy of this cartoon fastened to the outside of the door of my locker at the hospital.

So, have we dodged another apocalyptic bullet? Perhaps, but we remain staring down the barrel of a gun – at point blank range. I firmly believe that we – the human race – will be the ultimate undoing of our own kind, and of this planet. We treat one another and our planet as if they are all as disposable as a hot dog wrapper tossed to the ground. Overall, it seems that mankind gets dumber and dumber with every passing increment of time (go ahead and choose your own increment – second, minute, hour, day, week, month, year, decade, etc.). It's not just individuals, either. It's a collective problem. As a race, and in whatever small groups we form, human beings seem to be less and less capable of making good, sound decisions. Perhaps the information overload that the information age delivered us has, in fact, made us dumber. Maybe because we are so overwhelmed by the enormous amount of available information, we are unable to separate the wheat from the chaff. Maybe we can no longer discern what is important from what is unimportant, or what's right from what's wrong.

So, in a sense, we haven't dodged anything, and certainly no bullet. The bullet is still in the gun, and the gun is still pointed squarely at us. The "Great Doomsday of 2012" will simply become yet another footnote in a long list of apocalyptic events that were supposed to see the end of life as we know it. If nothing else, it gave us something else to focus on, other than our own shortcomings as a species. Sadly, it may have even prevented us from addressing those shortcomings. I only hope that we can (somehow) divert our attention back to fixing our shortcomings.

Until next month, I bid you peace, happiness, serenity and prosperity. Oh, and Happy New Year!

#### by agmg (Antonis Komis)

In a previous article, you have learned how to download, verify and create a CD, DVD or a USB with PCLinuxOS. In this article, you will use this medium to install PCLinuxOS to your hard disk, either by creating a dual boot system (thus, keeping your existing Windows installation), or by completely wiping your disk and installing only PCLinuxOS to it. But before doing that, how would you like to try the new operating system without making any changes to your computer? Sounds interesting? Keep on reading.

LiveCD

A LiveCD is a complete, bootable operating system that runs in the computer's memory (RAM) without the need of a hard disk drive. Although this term is used to describe all types of "live" operating systems, the medium is not limited to a CD. You can have a LiveCD running from a DVD, a USB flash drive, an external hard disk or even a flash card, as long as your computer supports it. The main purpose of a LiveCD is to allow you to experience and evaluate an operating system before installing it, but can also be used to repair corrupted or infected Windows installations, backup files from a dying system and much more. A normal Windows CD or DVD can't offer you these possibilities.

In this section of the article we will cover just the basics: boot from a PCLinuxOS LiveCD to a complete desktop, connect to the internet, install a couple of programs and experience it before deciding whether or not to install it.

NOTE: The screenshots were taken from a

PCLinuxOS KDE 2012.08 LiveCD but they apply to every version of PCLinuxOS.

One thing you should keep in mind is that a normal LiveCD can't save files or customizations you make during the live session. Once you reboot your computer, everything will return to its previous state. There is an option to create a LiveCD that can save files and remember your preferences. It is called "persistence." We will discuss this option later in this article. For now, insert your LiveCD medium to your computer, reboot, and be sure to select that medium as your boot device. You will see a screen similar to this:



The LiveCD option will be selected (highlighted) by default. Before booting, if you wish to change the language to one other than American English, press F2 and select a language. If you wish to change the screen resolution from 800x600 to another, press F3. If you have changed any options, select the LiveCD option and press ENTER. Otherwise, simply

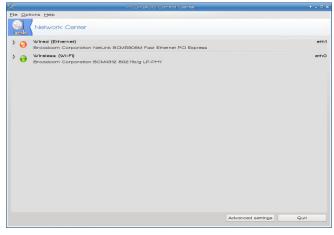
wait for the live session to load. It may take some time because the whole operating system is loading to the computer memory. The procedure also depends on the read speed of the CD/DVD/USB. Once done, select your keyboard layout and you will be presented with the PCLinuxOS desktop.



The default KDE LiveCD desktop

One of the first things you might want to configure in your live session is your internet connection. This will allow you to surf, check your emails, watch online videos and install new programs through PCLinuxOS' package management software, Synaptic. In the lower right corner of the desktop, you can see the notification area showing the status of your network connections, system volume, removable devices and other notifications. If you are using an ethernet connection to access the internet, then it will most probably have already been automatically configured. If you have a green check mark, then you're good to go. If you see a red X mark, it means that your network connection isn't configured properly.

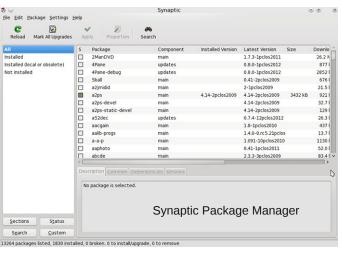
If you are using an ethernet connection and still see a red X mark, the best thing to do is visit the official PCLinuxOS forum (<a href="www.pclinuxos.com/forum">www.pclinuxos.com/forum</a>) to get more help. If the connection is wireless, then you need to enter your wireless network security key before you can access the internet. To do that, left click on the Network Manager to view your network connections.



By pressing "Configure" you can view your connection's settings and set a security key if your connection needs one. If you can't see any network connections in this window, then your network adapter may not be configured properly. (Again, visit the forum for more help).

If you like, you can have a look at PCLinuxOS' package management program, Synaptic. You can find it in the taskbar or in the menu under Software Center. Synaptic is the proper way to install and remove programs and keep your system up-to-date (center, top).

Click "Reload" to refresh the package list and then "Mark All Upgrades" to update your live session. Feel free to explore the available choices, install some programs and get familiar with software



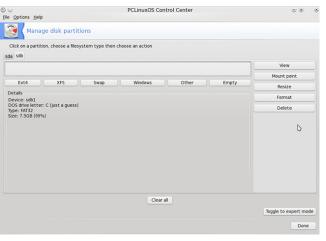
management. Don't be afraid. If something goes wrong, you can always start a fresh live session. Nothing will be changed on your computer and no one will get hurt.

Last but not least, you can use your current live session to create a new LiveCD on a USB flash drive or hard disk using a program designed specifically for PCLinuxOS, the PCLinuxOS LiveUSB Creator. You can find it in the programs menu under More Applications -> Configuration. This tool will also allow you to create a Live USB with persistence which will save your files and preferences even after a reboot, provided there is enough disk space on the drive. This way you can have a live system on which you can install the programs you prefer, keep it updated and use it on any computer you want. Practically a whole operating system in your pocket!

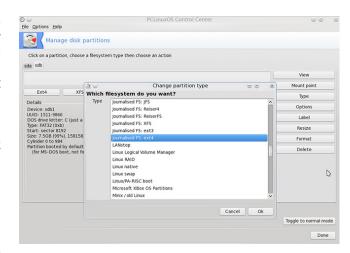
## Creating a LiveUSB with persistence (quick guide)

- **1**. While in the live session, insert a USB drive. Ignore the Device Manager pop-up.
- **2**. Navigate to More Applications -> Configuration -> Configure Your Computer (or press the corresponding icon in the panel).

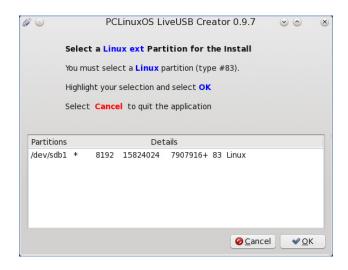
- **3**. Navigate to Local Disks -> Manage Disk Partitions.
- 4. Select your USB drive from the tabs.



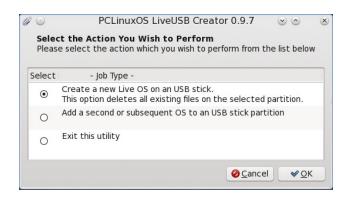
- **5**. Press "Toggle to expert mode".
- **6.** Select "Type". From the window that pops up select an ext filesystem (most commonly ext4 or ext3).



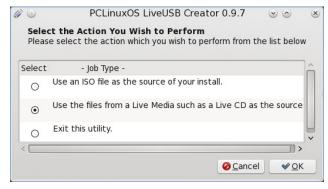
- **7**. Back in the main window, press "Format" to format the drive with the new filesystem.
- **8.** When formatting is finished, press "Done", remove the drive and close all windows.
- **9**. Again, navigate to More Applications -> Configuration -> PCLinuxOS LiveUSB Creator.
- **10**. After the welcome screen, you will be asked if you want to run the script as root. Select "Yes" and type the root password of the live session, which is "root".
- **11**. Plug in your USB drive when prompted.
- **12**. The script will scan the drive and present a window with information about the partitions that are currently on the disk.



- 13. Select the desired partition and press "OK".
- **14**. The next window will ask you whether you want to create a new Live OS on the USB drive or add a second or subsequent OS to it (if there is already one or more OS). This is the first time we use this tool so select the first option.



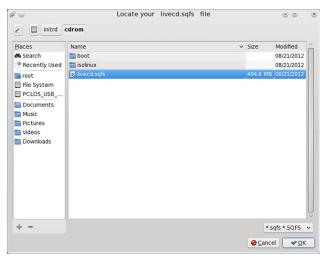
**15**. In the next window select the second option to use the files of the Live CD or USB from which the live session is running.



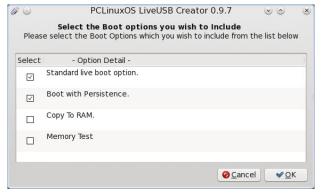
16. Give a name for your LiveUSB and press "OK".



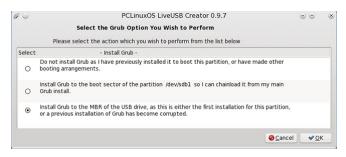
17. The script will then ask you to locate the file livecd.sqfs. From the window that pops up, select "File System" (from the "Places" pane on the left) then navigate to initrd -> cdrom and select the file livecd.sqfs.



- 18. Confirm your selection and let the script finish.
- 19. In the next confirmation window you will be asked about the Boot options. The "Standard live boot option" will be selected by default. To enable persistence you have to select also "Boot with Persistence". The option "Copy to RAM" will load the whole operating system (making it faster provided you have enough RAM available) while the option "Memory Test" will add an entry for memtest (memory testing program) in the boot menu.



**20**. The final screen is about the GRUB options. If this is the first installation to the USB drive, select Install Grub to the MBR. If you are managing your own bootloader, select one of the other two options, depending on your preference.



Congratulations! You now have a PCLinuxOS LiveUSB with persistence enabled.



When you feel ready and have decided to install PCLinuxOS on your hard disk proceed to the next section of this article.

#### Installation

Before proceeding with the installation, you must decide if you want to keep your existing Windows installation, or whether to completely wipe the disk and only have PCLinuxOS installed on it. The first scenario is known as "dual boot," and will allow you

to select during boot which operating system you want to use. This is the most common scenario for users who are making their first steps in the Linux world because it gives the ability to explore Linux and come back to Windows anytime you feel like or need to. This is the scenario we are going to cover in this article. If you are planning to completely remove Windows from your disk, you can go straight to "Step-by-step installation".

#### Preparing your hard disk

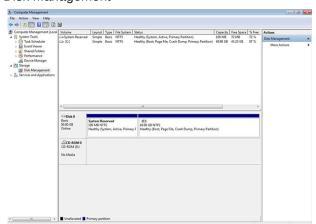
We will use a Windows 7 installation as an example for the illustrations. The Disk Management software can also be found in Windows XP and Windows Vista. You can also use third-party partitioning software for this job. A very nice program which has a free version for home use (and I personally recommend) is <u>EASEUS Partition Master Home Edition</u>

For Windows XP:

Navigate to Control Panel -> Performance and Maintenance -> Administrative Tools -> Computer Management -> Disk Management

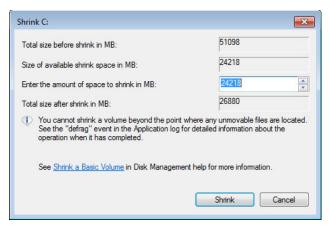
For Windows Vista/7

Navigate to Control Panel -> System and Security -> Administrative Tools -> Computer Management -> Disk Management



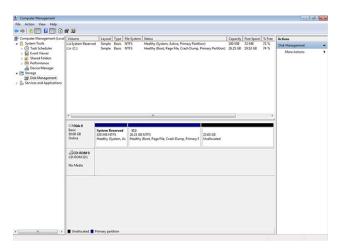
Because the FAT32 and NTFS file systems are so prone to fragmentation, it's strongly recommended that you defragment your Windows drive before proceeding. Some recommend running the defrag program three (3) times, consecutively. This will help insure that you don't experience any data loss with your Windows files.

In this window you can see all the disks and their partitions. In the example, we have a 50 GB hard disk containing 2 partitions: the first one has a size of 100MB (System Reserved) and is always created during Windows 7 setup for system use. This partition has to be intact to ensure the flawless operation of Windows. The second one (C:) has 49.90GB size and is the main partition where Windows and programs are installed. We will reduce the size of this partition and make space to install PCLinuxOS. Select this partition, right click on it and select "Shrink". You will get to the next screen.



This window shows the total size of your partition and the size of the available shrink space. There is no magic recipe about how much space you should spare for your PCLinuxOS installation. It depends on the size of your disk and the files on it (which in turn defines the available shrink space) and how you are planning to use Linux (more programs and files, mean more space). In general, Linux uses much less space than Windows and separates installation files and applications (root partition or /) from users

files (home partition or /home). In this example, I will use all the available space (around 25GB) with a plan to devote 8GB for the root partition (installation and applications), 2GB for /swap (virtual memory) and the rest for /home (for personal and configuration files). Select the desired size and press "Shrink".



Now there is one more partition in your hard disk that reads "Unallocated." This means that it hasn't been formatted with a file system yet, so it's just unused space (that's why there is no drive letter for it). We are done here. It is time to go back to our Live CD/DVD/USB and install PCLinuxOS. Don't worry, it's as easy as 1,2,3!

#### Step by step installation

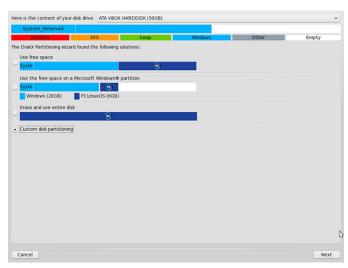
Before rebooting, ensure that you have inserted your Live CD/DVD/USB and your computer is set to boot from it. When the boot menu appears, select "Install PCLinuxOS" to begin the installation wizard. Of course, you can start a live session as discussed in the beginning of this article and then proceed with the installation by clicking on the "Install PCLinuxOS" icon on your desktop. I suggest you select the US Keyboard for the installation (you can change it later and add new layouts very easily).

NOTE: The screenshots were taken from a PCLinuxOS KDE 2012.08 installation but the wizard works in the same way for every version of PCLinuxOS.

The first screen you will see will look like this:



Press "Next" to get to the next screen:



This screen is similar to the one in Windows Disk Management. It shows all the available disks and their partitions and presents the installation options. I will explain each one of them:

#### Use free space

This option will use the partition we created earlier and will create 3 new partitions: one for root (/), one for swap (/swap) and one for home (/home), depending on your partition's size and your computer's available memory (RAM). This option is recommended if you are not very familiar with partitioning.

## Use the free space on a Microsoft Windows partition

This option is used to create a partition in the free space of an existing Windows partition. We won't use this option as we have already prepared a partition for our PCLinuxOS installation.

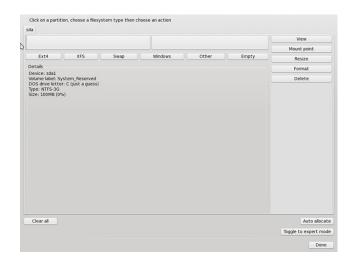
#### Erase and use entire disk

Self-explanatory. Windows will be deleted from the disk and all free space will be used by PCLinuxOS.

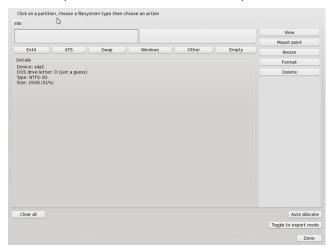
#### **Custom disk partitioning**

This option is the most advanced and gives you absolute control over the partitioning procedure. We will have a more thorough look at this option right away.

In this screen (next page, top left) we can see all the partitions we have previously created. If you click in each partition, you will get detailed information about that partition. The first partition on the left is the Windows system partition (100 MB). It is showing as a thin line because its size is very small compared to the other two.

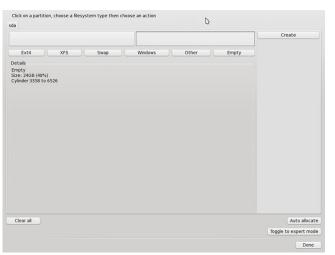


#### The next partition is the main Windows partition.



The last partition is the one we created for PCLinuxOS and this is the one we will work on (center top).

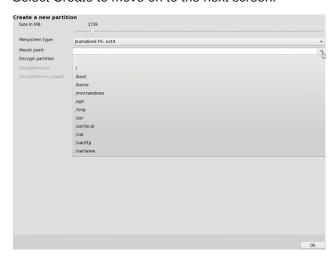
You can see that this partition is empty and its size is 24 GB. If we click on Auto Allocate, the setup wizard will automatically create the partitions in a way similar to the option "Use free space" in the previous screen.



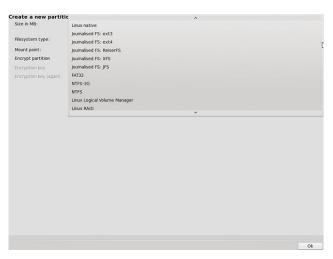
**CAUTION**: selecting this option and then pressing "Done" can't be reverted.

EXTREME CAUTION: If you click on "Clear all" all the partitions will be removed and all data on the disk will be lost!

Select Create to move on to the next screen.



In this screen you have the option to set the size of your Linux partition, its filesystem type and its mount point. You can also set disk encryption if you need to (top right).



If you decide to manually set your partitions, you should do a further reading about the Linux filesystem and the definition of a mount point to fully understand what you are doing. Some links that might help:

Linux Filesystem explained: <a href="http://www.freeos.com/node/36">http://www.freeos.com/node/36</a>

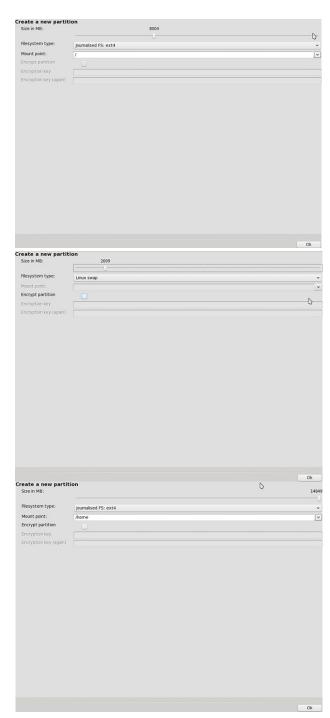
Linux Mount Point: <a href="http://www.linfo.org/mount\_point.html">http://www.linfo.org/mount\_point.html</a>

Types of Linux filesystems: <a href="http://www.kernel.org/doc/man-pages/online/pages/man5/filesystems.5.html">http://www.kernel.org/doc/man-pages/online/pages/man5/filesystems.5.html</a>

For the purpose of this article I will create three partitions to use as mount points for root (/), swap (/swap) and home (/home)... (next page, left)

This is how our partitions will look in the end (next page, center):

If you are not satisfied with the partitioning result, you can delete the partitions and create new ones or resize them according to your needs. Just remember to always select the partition you have created for this purpose and don't make any changes to the Windows partitions.





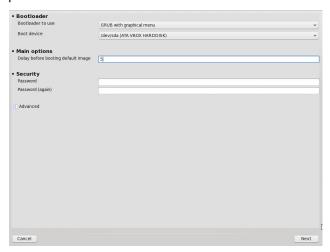
When you are ready to proceed, click "Done".



You will see a warning that the partitions are going to be formatted. Installation will begin when you click "Next".



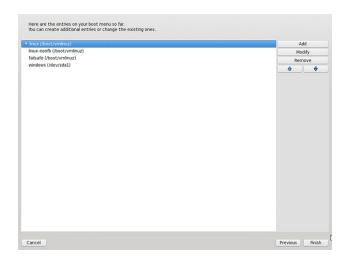
At this point, the installation wizard is copying files to your computer. When it finishes, you will be presented with the next screen:



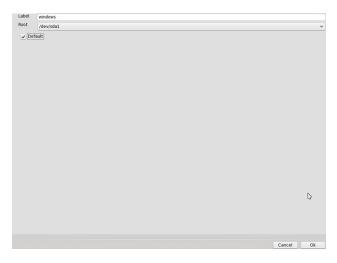
In this screen you can select the bootloader to use for your new installation, the device (partition) where is will be installed, the time it will show before booting the default option and whether or not you want to secure it with a password.

A bootloader is a piece of code that runs before the operating system(s), and gives you the ability to boot other operating systems too. The default bootloader for PCLinuxOS is GRUB and replaces the Windows bootloader in a dual-boot scenario (Windows bootloader doesn't allow other operating systems to be booted from it). By default, GRUB is installed on the MBR (Master Boot Record) of the disk but if you have multiple installations on different partitions, you may need to modify this setting. You can also select to secure your bootloader with a password to prevent users from entering single user mode or changing settings at boot time.

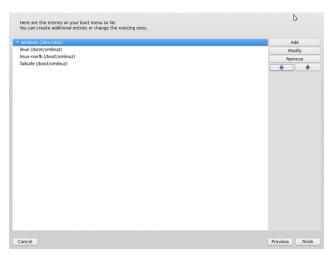
I have used the default options in this installation. Only thing I have tweaked is the GRUB delay before booting the default image, from 10 to 5 (boot menu will appear for 5 seconds on the screen instead of 10). (next page, top left)



In the next screen you will review the entries of your boot menu so far. You can add, modify or remove any one of them. For example, you may want to use Windows as the default boot operating system. Select the entry named "windows" and click "Modify". Check the box that reads "Default".



You could also put Windows first in the boot menu if you want to. Again, select the entry and change its position with the up and down arrows (center top).



The other three entries are standard in every installation of PCLinuxOS:

#### linux (/boot/vmlinuz)

This is the default boot option for PCLinuxOS. It will appear as "Boot PCLinuxOS".

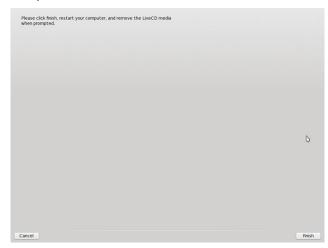
#### failsafe(/boot/vmlinuz)

This entry is similar to Windows Safe Mode (but much more powerful). It can be used in case an update or a configuration change causes an error which prevents your system from starting properly. It boots into a very minimal environment (only the shell, with no system services, external drivers or desktop loaded) and helps diagnose and repair the problem which is causing the problem. It will appear as "Boot PCLinuxOS (safe mode)".

#### linux-nonfb(/boot/vmlinuz)

This entry is for booting the system without using the Framebuffer driver. Framebuffer mode utilizes the vesa capabilities of your video card for displaying graphics. This option is used for troubleshooting problems related to that mode. The Graphical Boot Menu (GRUB) is displayed in your screen using the Framebuffer driver. So, if you are seeing GRUB, there is no reason to worry! This entry won't appear in your boot menu (you can hit Escape to go to "text" mode and see all 3 options).

When you click "Finish", the setup wizard will prompt you to remove the LiveCD media and reboot your computer.

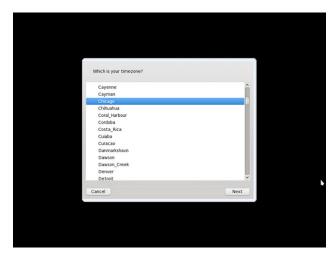


Setup has practically finished. PCLinuxOS is installed on your computer. Just a few more configuration steps and we're done.

When the computer reboots, you will see the boot menu we discussed previously. If you have modified the entry for Windows and have set it first and default, you will have a boot menu similar to the following:



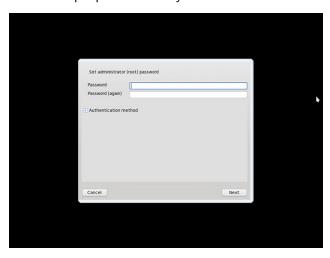
Select "Boot PCLinuxOS". When the operating system finishes loading, you will be prompted to select your timezone and adjust your date, clock and timezone settings:



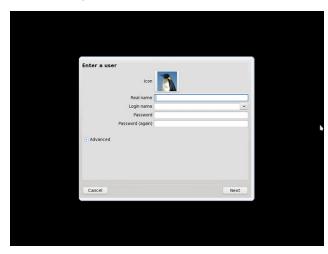


Next step is to create the root account and set a password for it. Root account is a special user account used for system administration (similar to Windows Administrator). Root (or superuser) is the user who has all rights or permissions (to all files and programs) in all modes (single- or multi-user). You will need root access in many occasions like

when you install new software, update your system, modify system settings etc. It is recommended to have a unique password for your root account.



The final step is the user creation screen.



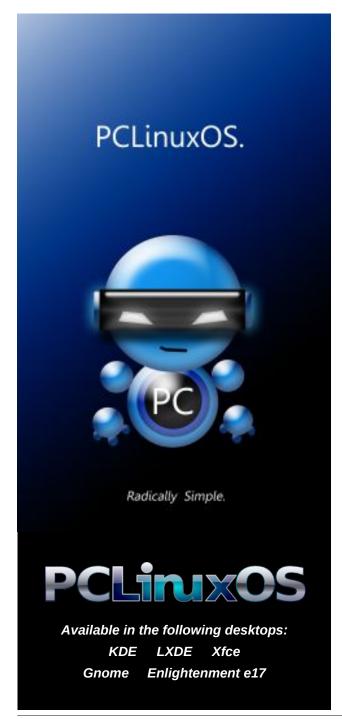
Fill in your details, set a strong password (it is recommended to have a different password from the root account) and continue to the login screen. You can add more users later by going to More Applications -> Configure Your Computer -> System -> Manage users on the system (top right).



The first thing you must do after login is run a full system update (a reminder will appear the first time you login). Once you do that, you are free to explore the new and amazing world of PCLinuxOS! Welcome!











## Screenshot Showcase



#### by Paul Arnote (parnote)

I, like many other Linux users, am a former Windows user. There are very few Linux users who didn't take this path to Linux. Under Linux, I had to learn some new ways of doing things. Well, alright ... they weren't exactly "new," but they were definitely "new" to me. One of those things was installing software and how to keep my system up-to-date.

#### The Windows Way

One thing that you will find that is different under Linux is how you install software. Using the Windows way to install software, you would either insert a CD or DVD containing your software or download the software from the Internet. You would then proceed to install that software from either your CD/DVD, or from the installer that you downloaded from the Internet. When the process is through, you (hopefully) have your new software application installed – and hopefully, it works and nothing else was installed along with it.

Unfortunately for most people, this method of installing software under Windows is fraught with problems. First, there is the security aspect. Any one of the CD/DVDs or any one of the downloaded installers can easily introduce viruses, malware, crapware, or spyware to your computer.

Secondly, installing one software package could cause some other installed software applications to suddenly stop working. This occurs when key system files and libraries are changed for one application, but the other installed software applications are reliant on an older version. In the

Windows world, I've often heard this referred to as "DLL-Hell."



Third, since the installers are closed to prying eyes (in a feeble attempt to "keep the installer secure") and you really have no idea of what you are installing, it's easy (and unfortunately common) for software vendors in the Windows world to make agreements to include additional software (often from nefarious sources that you wouldn't download from, anyway) that is automatically installed on your computer. This is usually software that you either don't want or didn't ask to be installed. These are often things like unnecessary and unwanted browser toolbars, some of which may literally hijack your web browser, and some of which may be next to impossible to remove completely.

Windows updates are handled in a similar fashion. I know that most Windows users I've met (and I know a LOT of them) dread Tuesdays. Even I dreaded Tuesdays when I was a Windows user. Why Tuesdays? Because that is the day of the week that Microsoft pushes out Windows updates. Even in the tech journals, it's referred to as either "Microsoft Patch Tuesdays" or "Update Tuesdays."

Now raise your hands – how many people reading this article have done one of the things in the following list?

- 1. Allowed your computer to automatically apply Windows updates and came back to your computer where something wasn't working correctly, due to an improperly applied patch.
- 2. Blindly (and manually) applied all patches from Microsoft, without knowing what patches were being applied.
- 3. Manually verify each and every patch before applying it (requires selecting either the advanced or custom option, depending on how they are wording it that week), and selected which of the patches to apply, and which of the patches to permanently ignore.
- 4. Turn off automatic updates, permanently.

If I had a \$5 bill for every time Microsoft released a bad patch and had to roll that patch back to a previous version (provided your computer still worked), I'd be a rich man. Unfortunately, Microsoft doesn't pay us for such inconveniences and wastes of our time.

#### The PCLinuxOS Way

Even though it may seem foreign at first, Linux does things differently. Having experienced both the Windows way of doing things and the Linux way of doing things, I can tell you from first hand experience that the Linux way is much better – and a much more secure way of doing software updates and installations. Just as Linux itself is distributed freely, the vast majority of software applications, libraries and drivers are also available for free.

Under PCLinuxOS, as with nearly every other Linux distro, software and updates are handled and controlled from a central software repository. What is a repository? A repository is a collection of software applications, support libraries and drivers. Special care has been taken to insure that everything works on as wide of a variety of systems as possible, without breaking other applications in the process. In the rare but occasional event that two software packages are incompatible with one another, the user is given a choice to either uninstall the previously installed software package, or to abort the installation of the new software package. Essentially, almost every application and library in the PCLinuxOS repository has been custom built to PCLinuxOS specifications (to insure that your computer remains stable), and has been custom built to insure that all of the applications work seamlessly together.

Furthermore, the PCLinuxOS way (and not the way of every Linux distro, by the way) is to NOT – *never*, *ever* – install software that from outside of the official repos. Installing from outside the official PCLinuxOS repository can be a dicey proposition, even for seasoned Linux users. Great amounts of time and care have been invested to make sure that everything in the official PCLinuxOS repository works well with everything else. This helps keep your system stable over the long haul.

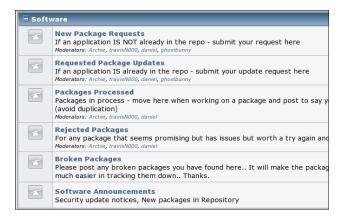
That stability comes in the form of making sure that when you install one software application, it doesn't

break other installed software packages. Once you've installed from outside of the official repository, you render your PCLinuxOS installation as ineligible for support on the forum. Why? Doesn't this seem harsh?

Not really. Once you've installed packages that are from outside sources, there is no way for the PCLinuxOS developers or other PCLinuxOS users (upon whom you are relying for support and assistance, via the forum) to know all the changes that were made to your system. They don't know what additional files were added to your system that might be conflicting with the approved PCLinuxOS libraries and software. They don't know what vital libraries and software packages were replaced by newer or different versions that aren't 100% compatible with the software and libraries installed on your system. Basically, because no one knows what changes have occurred to your system, it makes it next to impossible to track down exactly where the problem lies. Only when software packages have been custom built and made for PCLinuxOS by the PCLinuxOS developers can we fully know and understand what changes are made to your system when they are installed.

Currently, there are over 13,300 individual software packages available for installation in the official PCLinuxOS repositories. Each of those software packages have been vigorously tested to insure that everything works together as it should. There are also (currently, at the time I'm writing this article) around 150 additional software packages in a special testing section of the repositories that advanced PCLinuxOS users who have signed up as testers can test, before it is released to the general PCLinuxOS users. The number of software packages in testing is likely to vary from time to time. sometimes widely, depending on what it is that the PCLinuxOS developers are currently working on and testing. Only "advanced users" who really know what they are doing should ever install applications from testing, and never on an installation that you rely on for your everyday computing needs.

So what happens when there's a software application you need, but it's not in the official PCLinuxOS repositories? Fortunately, there is a special section of the PCLinuxOS forum, called "New Package Requests." Once you have 10 posts in the PCLinuxOS forum, this special section of the PCLinuxOS forum will be opened up to you. Until then, it will remain hidden from your view.



After you've read the guidelines for making a package request, post your request in the appropriate board. Now, just sit back and wait. Other PCLinuxOS community members will come along and give your request a "+1" if they agree that it needs to be added to the PCLinuxOS repositories. Discussion of suggested packages is NOT allowed; that's something that better fits into the realm of discussions that exist in the Software Discussions section of the forum. Don't take offense if someone doesn't agree with you about a software package being added to the PCLinuxOS repositories. This is a community, and not all members of a community necessarily agree on all things (just like in real life). Sometimes, one of the PCLinuxOS packagers will see the request before anyone has responded to it, will build it into an RPM package file, and send it upstream to the repository maintainer (currently, Neal Brooks, a.k.a. Neal ManBear).

The repository maintainer – who also happens to be the lead developer – has the responsibility of

deciding what section of the repository that software packages are sent to, as well as making sure that it is packaged properly. If the software package doesn't impact other applications and libraries, it will sometimes go straight to the repos. Otherwise (and this happens with most new packages), it will go to the testers to make sure that it works as it should, and that it doesn't have any unintended bad effects or bugs. Then, once sufficient time and testing has elapsed, and once there is a high level of certainty that the new package works as it should, without breaking other applications in the repository, the new package is released for general, everyday PCLinuxOS users to download and use.

#### **How To Update Your System**

PCLinuxOS, like most every other Linux distribution, uses a package manager to not only install applications, but to also update your system. PCLinuxOS uses Synaptic as its package manager. Synaptic is a graphical front end to the apt-get command on the command line (insulating you from the command line). Unless you are well versed in the Linux command line, as well as PCLinuxOS's use of the apt-get command set, it's best to simply stick with using Synaptic.

(Editor's Note: In the following screenshots of Synaptic "in action," only the contents of the windows are being displayed. The window title bar and frame have been cropped out. This is because, regardless of which desktop environment, icon theme, or window decorations you are using, Synaptic will appear essentially the same.)



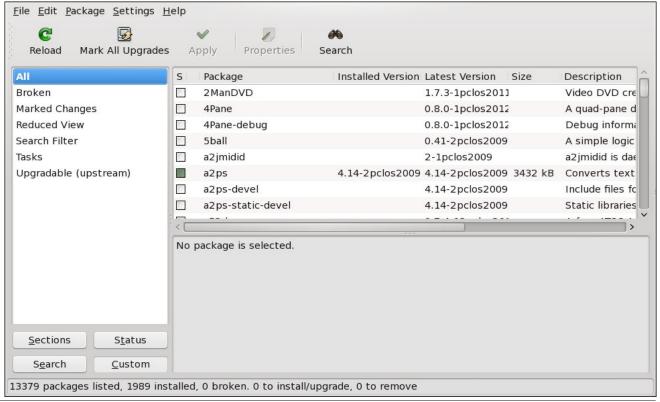
When you first launch Synaptic, you will need to provide the root user's password. This helps provide another layer of security. Since all software additions from Synaptic are available to all users on the system, this prevents regular users from making system-wide changes unless they know the root user's password.

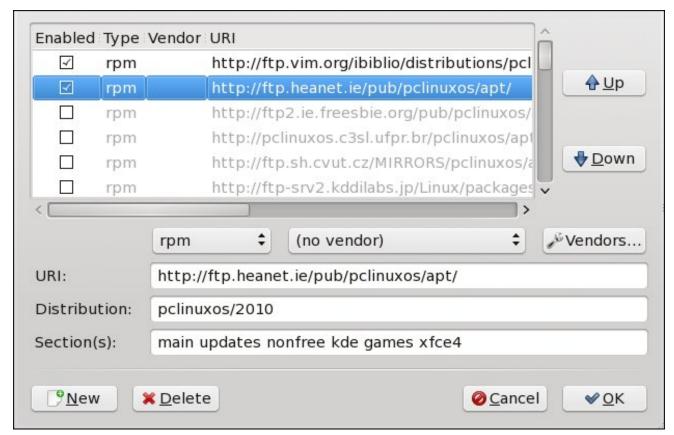
After successfully entering the root user's password, Synaptic will launch. You will see something quite similar to what is pictured below. In fact, one of your very first actions after installing PCLinuxOS should be to run Synaptic and apply any and all updates available for your system. This will help not only keep your system running at its peak, but it will also insure that you have the latest versions of all installed software. Having the latest versions of your software helps eliminate security vulnerabilities and makes sure that the software you are running has

the latest "fixes" for any problems that might have previously existed.

You should choose the PCLinuxOS repository mirror that is either closest to you, or the one that offers you the best performance (typically, only discernable by trying it out). Also, you should only ever choose ONE repository to use. Never choose multiple repository mirrors (with one minor exception). Why? Because different mirrors sync at different times from the PCLinuxOS master repository (at ibiblio.org), and you will end up with conflicting packages available. Those conflicts could include dependency conflicts (the other applications and libraries that the application depends on to work).

Also, you should avoid choosing the main repository at ibiblio.org. That is the "master" repository, and all of the other repository mirrors are synced from it. If





you – and 50 other users – are using it as their main repository from which to apply routine updates, your consumption of bandwidth may delay and slow down of the syncing of the repository mirrors.

Notice that I did say that there was one minor exception. In addition to a "regular" PCLinuxOS repository mirror, it is perfectly fine to also simultaneously enable the special "megagames" repository. Due to their size, many of the larger games available under PCLinuxOS are kept and maintained in their own special repository. This helps preserve bandwidth for other users who may not be into "gaming," preventing the other repository mirrors from being bogged down by others downloading the large game files.

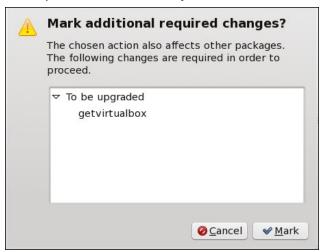
# Downloading package information The repositories will be checked for new, remupgraded software packages. Downloading file 14 of 14 Download rate: unknown Show progress of single files

When you first open Synaptic (and every time after changing your repository mirror), you should click on the "Reload" button (far left) on the Synaptic toolbar. You will see a window similar to the one displayed above. This insures that you have the most up to

date list of available software packages available. Because PCLinuxOS is what's known as a "rolling release," software updates are made available just as soon as they are packaged and have passed the testing procedure. On other Linux distros, the software updates are sometimes "held back" until the next scheduled release cycle.

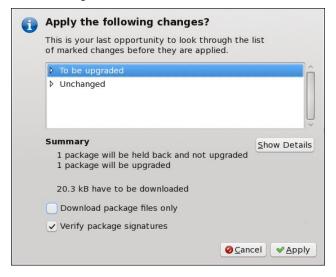
As long as you regularly update your PCLinuxOS system, you will always have the most current and up to date version, and you will avoid having to reinstall every time a new PCLinuxOS Live CD is released. How often should you "regularly" update? Some recommend once a week. Others recommend once every two weeks. Minimally, you shouldn't go more than a month without checking for updates.

The longer you wait before checking for updates, the more packages will have been updated. The more packages there are to update, the longer it will take to download and apply those updates. Conversely, if you you update every week, the number of available updates will be smaller, and the time involved in downloading and installing those updates will also be shorter. Plus, you will always have one of the most up to date PCLinuxOS systems around.



Next, you should click on the "Mark All Updates" button (second from the left) on the Synaptic toolbar.

You will see a window similar to the one above. Synaptic will list the applications installed on your system that have newer versions. At this point, just click on the "Mark" button at the lower right of the above dialog box.

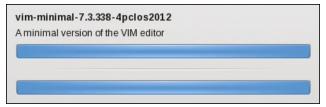


Now, click on the "Apply" button on the Synaptic toolbar (third from the left). You will see another dialog box (above) appear, asking you to confirm your choices. Simply click on the "Apply" button in the lower right corner of the dialog box to start the update process.



You should now see a dialog box similar to the one above, displaying a progress bar of the progress for

the downloading of the updated files. If you wish, you can watch the progress of individual files download by clicking on the small triangle pointer next to "Show progress of single files."



Once all the files have been downloaded, Synaptic will automatically install all of your downloaded updates. A dialog box similar to the one shown above should appear. The top progress bar represents the progress for the specified file, while the bottom progress bar represents the overall progress for installation of all of the downloaded updates. When both progress bars have extended the full width across the window (as above), and all updates have been installed, the dialog box will close itself. You will then be returned to the original Synaptic window.

Voila! Your PCLinuxOS installation is now fully up-to-date.

#### **Installing "Other" Applications**

Once you have your freshly installed PCLinuxOS fully updated, it's now time to check out what other applications exist that you may want to use. Granted, most PCLinuxOS versions come with a fully complete set of "other" applications ready for you to use. Yet given the varied and individual needs of any set of computer users, there's no way to anticipate what every user will want or need. So, PCLinuxOS comes with a wide assortment of the most popular applications pre-installed, which helps users get up and running right out of the blocks.

Certainly, there will be software applications that you will want to install, and you will certainly have different desires and needs than other users.

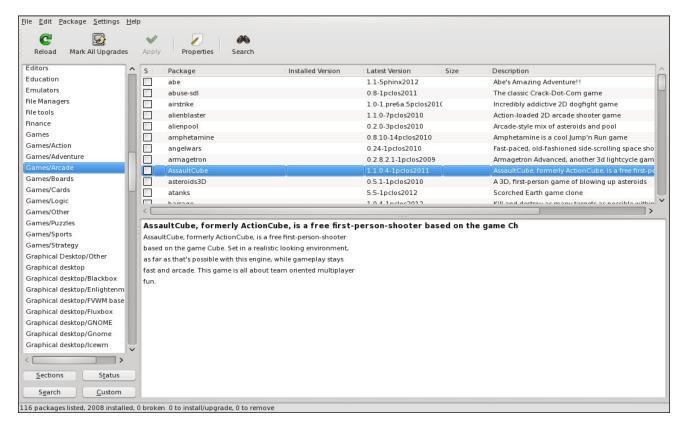
Thankfully, you can choose to install from over 13,000 software packages that are in the PCLinuxOS repository. Just like PCLinuxOS, all of the software titles in the PCLinuxOS repository are also free, open source software.

I can assure you that you can find applications to perform nearly any task you might be able to imagine, right in the PCLinuxOS repository. One user may prefer to use Amarok (a music playing application for KDE), while another may have a preference for Clementine or DeaDBeeF (two other music playing applications). Yes, they are all in the PCLinuxOS repository, and all are awaiting your installation, if you choose.

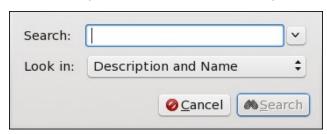
If you are brand new to Linux, I recommend taking a little time to browse through the PCLinuxOS repository to see what all might be available. Don't worry – nothing is installed until you apply your changes (exactly as we did when we performed updates in the last section of the article).

If you click on the "Sections" button in the lower left corner of the main Synaptic window, you will see the left pane of the Synaptic window list a myriad of categories, or sections, for the available software packages. Select a section that interests you, then click on one of the software packages listed in the top right window. When you do, a brief description of the software package appears in the window at the bottom right of the main Synaptic window.

If you want to install that software package, right click on the package name and choose "Mark for Installation" from the context menu that pops up. Repeat this procedure for each software package you want to install. If you accidentally select a package that you don't want – or if you change your mind about installing it – simply right click on it again, but this time choose "Unmark" from the context menu. The software package will be removed from the list of items to download and install.



When you have finished selecting the software packages you want to install, click on the "Apply" button on the Synaptic toolbar (third icon from the left), and click on the "Apply" button in the dialog box that pops up. Sit back and wait while Synaptic downloads and installs your chosen software packages. The procedure is exactly the same as what was described in the earlier section of the article, when we applied the updates to our system. Sometimes, you have an idea of what you are



wanting to install. Instead of trying to find it in the list of over 13,000 software packages, you can search through Synaptic's list to find the application you want to install. Simply select the "Search" button on the Synaptic toolbar, and type in some identifying information (name, genre, etc.) for the software you are wanting to install, followed by clicking on the "Search" button in the lower right hand corner of the search dialog box. Synaptic will then list all of the software packages that meet your search criteria. Don't worry if your search results don't immediately net results. Just change your search criteria a little bit. Sometimes, the packager used different terminology or language in either the name or description. Select the software package(s) that you want to install, and proceed as described earlier for marking them for installation and applying those software packages to your PCLinuxOS installation.

Occasionally, you will receive a dialog box with extra information after the installation of a software package, or after applying updates. If that information is labeled as a "Warning," simply note what the message is and move on. The vast majority of the time, those "Warnings" are to let you know what additional actions were taken to install a software package, and can be safely ignored.

However, if the information is labeled as an "Error," take special notice of what the error message says. Often times, it occurs because all of the packages you marked for installation can't be downloaded and installed from the selected mirror (maybe the mirror's server was updating from ibiblio.org and was unreachable). If Synaptic ever pops up a dialog box asking if you want to continue ignoring those software packages that could not be downloaded, always select NO! If you select "Yes," Synaptic will continue to ignore those packages (and any subsequent updates) forever. It will, simply, do as you tell it to do. Simply wait a few minutes (10 or 15 minutes should do), and click on the "Apply" button again to finish the download and installation of your updates or software package installations.

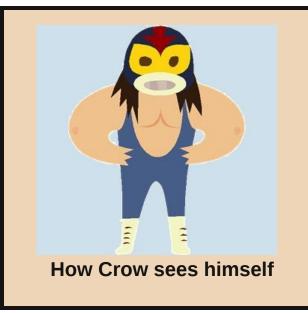
#### **Summary**

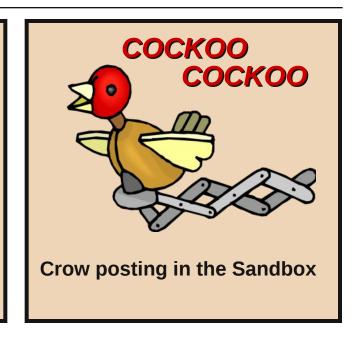
Overall, you should find it fairly easy to keep your system up-to-date. You should also find it very easy to install software. One thing that is nice about PCLinuxOS – and Linux, in general – is that you can install whatever software you need, without breaking your bank. Remember that if a software application isn't available in the PCLinuxOS repository, you can make a suggestion to add it in the PCLinuxOS forum. Just be sure that a Linux version of the software exists, and that it can be freely distributed.

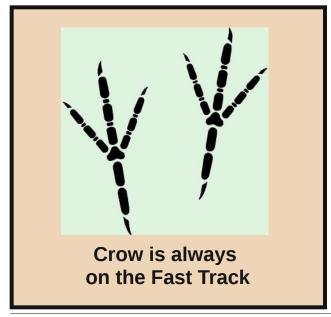
With this, you've just took another big step down your Linux path, and on your path to greater freedom from closed source, proprietary, costly software. We think you will like what you find here.

## Fearless Foibler: Crow

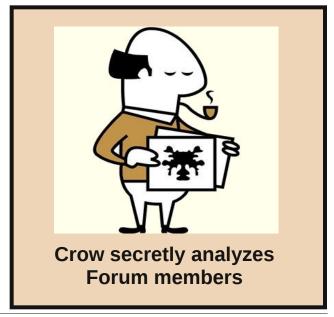












## Mark's Quick Gimp Tip & Double Take

## Mark's Quick Gimp Tip

As a cartoonist, I sometimes

wish I had drawn some element of a cartoon a bit differently. In order to make that change, it means pulling out a new piece of paper, redrawing the entire cartoon, drawing that one element slightly different, re-scanning, and digitally saving this result. Or, I can just use Gimp. For instance, let's say I wanted the sail in this cartoon to be a bit more "cartoony." Well, rather than redraw the entire toon, I can simply use Gimp's Cage Transform Tool. The tool is great for making changes to perspective errors in photos, but can also be used for just about anything. Select the

Cage Transform Tool (the icon is a grid with dots), then draw around the area you wish to transform. The more selection points you create, the more you'll be able to refine the shape. Then, move those points and let Cage Transform do the rest. When you're satisfied with the result, hit the return key to accept the changes.









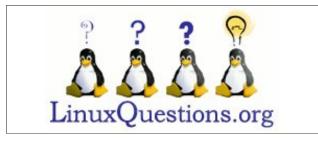
Find at Least Seven Differences Between Cartoons!



©2013 by Mark Szorady. Distributed by georgetoon.com

**Answers on Page 27** 

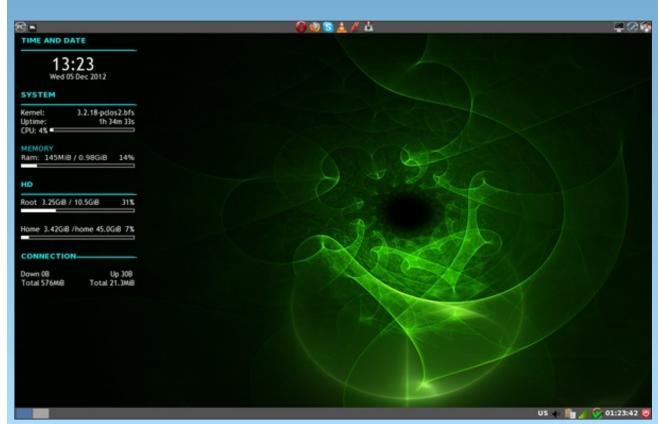








## Screenshot Showcase



Posted by Jokerface, December 5, 2012, running LXDE.

## Installing & Using Mailfilter

#### by YouCanToo (David Moore)

#### What is Mailfilter?

Mailfilter is a program that filters your incoming email to help remove spam. Mailfilter is a very flexible utility for UNIX (-like) operating systems to get rid of unwanted email messages, before having to go through the trouble of downloading them to the local computer. It offers support for one or many POP3 accounts, and is especially useful for dialup connections via modem, ISDN, etc.

#### Who needs Mailfilter?

You do. With Mailfilter you can define your own filters (rules) to determine which emails should be delivered and which are considered waste. Rules are regular expressions, so you can make use of familiar options from other mail delivery programs, such as e.g. procmail. If you do not get your mail from a POP3-Server, you don't need Mailfilter.

#### How do I install Mailfilter?

Open the Synaptic package manager, do a search for mailfilter, mark it for installation, and click apply to install it.

#### **How do I configure Mailfilter?**

There are a couple of files that will need to be created in your home directory.

1. The first file is the mailfilter log file. To create the mailfilter log file open a console window and type in the following command:

### [dwmoar@laptop ~]\$ touch mailfilterlog cpress return/enter>

An alternative to using the command line is to use your favorite text editor and create a blank file. Save the file to your home directory.

Now we need to change permission of the newly created file. Type in:

An alternative to using the command line is to open Dolphin and locate your newly made file. Right click on the mailfilterlog file and choose properties --> Permissions --> Advanced Permissions. Make sure the following are marked.

	Read	Write	Execute
User	x	x	X
Group	x	x	
Others	x	x	

2. Now we need the .mailfilterrc file. Here is a basic copy of the .mailfilterrc file to use. NOTE: This file has the "TEST" flag set to true (on). The "TEST" allows you to test your filters without deleting your email should a filter be misbehaving. Think of it as a safety net while trying out your filters.

This file needs to be placed in your home directory. Save this file as ".mailfilterrc." **NOTE** the dot before mailfilterrc. This is a hidden file and is required for mailfilter to operate. Once you have saved this file, you will need to edit it.

In your favorite text editor, open the .mailfilterrc file.

For our example, We are using nano in a console window.

#### [dwmoar@laptop ~]\$ nano .mailfilterrc

The minimum editing needed to get Mailfilter to operate is the information for the email server, username and password. Find the following lines in your .mailfilterrc file

```
SERVER = "Your email server" <--
usually starts with pop.domainname or
mail.domainname
```

```
USER = "Your email username"

PASS = "Your email password"
```

PROTOCOL = "pop3" PORT = 110

**Warning! DO NOT** change the order of the entries. If you do, Mailfilter will not run.

Once you have changed the above to reflect your information, save the .mailfilterrc file. At this point, Mailfilter has enough information to run. Let's give it a spin. Open a console window and type in the following. Don't worry ... we are in a testing mode and this **WILL NOT** change or remove any of your emails.

[youcantoo@laptop ~]\$ mailfilter
cpress return/enter>

You should see something like this:

[youcantoo@laptop ~]\$ mailfilter mailfilter: 0.8.2 querying <my email address> on Sun May 29 23:29:50 2011. mailfilter: Examining 7 message(s).

mailfilter: Pass: Dianne

<forgivn@xxxnet.net>: Re: changed to
motorcycle fixed yet, Sun, 29 May 2011

#### **Installing & Using Mailfilter**

22:47:23 -0500 [Score: 0]. mailfilter: Pass: Dianne <forgivn@xxxnet.net>: Re: a cute little game to play, Sun, 29 May 2011 22:53:32 -0500 [Score: 0]. mailfilter: Pass: diannek <forgivn@xxxnet.net>: [Recipies ~VIA~ the Web!] New Recipe Submitted!, Sun, 29 May 2011 21:37:48 -0700 [Score: 0]. mailfilter: Pass: "Kitchen Krafts" <newsletter@kitxxxkrafts.com>: Savings celebration for Memorial Day!, Mon, 30 May 2011 00:10:00 -0400 [Score: 0]. mailfilter: Pass: diannek <forgivn@fxxxnet.net>: [Recipies ~VIA~ the Web!] New Recipe Submitted!, Sun, 29 May 2011 21:49:02 -0700 [Score: 0]. mailfilter: Pass: Dianne <forgivn@xxxnet.net>: Hotmail thinks you are suspicious :), Sun, 29 May 2011 23:55:08 -0500 [Score: 0]. mailfilter: Deny: Conley Erin <erconleyin@gmail.com>: =?GB2312?B?uaTStbrN0MXPoruvsr+52NPavtm w7KGwxNq12NbQ0KHG8w==?= =?GB2312?B?0rXJz8rQyNrXytPr0MLI/bDludL FxrGovNvKtc7xstnX97jfvLbR0A==?= =?GB2312?B?zNaw4KGwtcTNqNaqIDYuMjSjqMT PvqmjqSA3LjExo6ixsb6po6nVxcu8?= =?GB2312?B?1LQ=?= , Mon, 30 May 2011 14:30:29 +0800 [Maxsize Deny exceeded]. [youcantoo@laptop ~]\$

If you see something like this, congratulations, mailfilter is working properly.

If you see any errors, then you have made a mistake, so go back and recheck your work. The above information should have been recorded also in your mailfilterlog file in your home directory. As you can see in the example above, all the emails I received were approved and passed with the exception of the last one. The reason is that it exceeded the maximum message size as specified in the .mailfilterro file. By default that size is set at

*MAXSIZE\_DENY* = 1000000. That includes attached files to the email also!

For more details of the TAGS used by default in Mailfilter open a console window and type in "man mailfilterex"

#### Adding filters

Adding a spam filter to Mailfilter is actually very easy. Basically, there are two actions that can be taken: ALLOW or DENY.

#### A word of caution!

When you match any filter using DENY that email will be deleted from the server.

There is **NO** way to recover these deleted emails. It is important to always use the TEST flag when trying out new filters. All ALLOW/DENY entries are logged, but it only logs a minimum amount of information.

The format is simple.

#### **Example:**

Keyword = "expression" The expression could include any of the following, or combination of them.

**Content-Type:** 

Subject

Body

From

To

Cc

ALLOW = ^From:.@pclinuxos.com

The above filter would allow any email coming from pclinuxos.com

DENY=^Subject:.\*(Monthly|Unlimited|Inc
rease).\*Income

This filter will DENY all email(s) that contains the

words Monthly, Unlimited, Increase or combination of those words that also has Income in the phrase.

You can combine the "expressions" to create more complex filters such as

DENY=^(From|Cc|To):.\*(Market(ing)\*|Inc
ome).\*@(yahoo|hotmail|juno|excite|aol)

This filter will DENY all email(s) with the words Market, Marketing, and Income or combination of them from the domains of yahoo, hotmail, juno, excite and aol. You can find a list of working third party filters here.

#### Run Mailfilter using cron

Cron. It's the way to run tasks on a schedule in Unixlike systems. Say, for example, I wanted to run mailfilter once every minute of every day. Well, we think of it this way:

Syntax:

minute hour day month day\_of\_week
command here

A guick explanation what it all means:

The first field specifies the minute (0 to 59).

The second field specifies the hour (0 to 23).

The third field specifies the day of the month (1 to 31).

The fourth field specifies the month of the year (1 to 12).

The fifth field specifies the day of the week (0 to 6 for Sunday to Saturday).

The sixth field specifies the command to be executed.

#### **Installing & Using Mailfilter**

So, for a quick example, if I wanted something to run every night at 3 AM, I would use the following (an asterisk is the same as saying "anything").

0 3 \* \* \* mailfilter

Or, lets say I wanted every weekday (days 1-5) every hour at half past the hour:

30 \* \* \* 1-5 mailfilter

Or, every 10 minutes (which is what I use):

10,20,30,40,50 \* \* \* \* mailfilter

#### How do I set it up a cron job on my system?

For those that are console window impaired, there is a GUI program in the package manager to handle cron. It is a GUI program, called VCRON. It is in the PCLinuxOS repository, so you can install it via Synaptic. You can also use Gnome Schedule, which is also very good at setting up cron jobs.

- 1. Open a console window.
- 2. As the root user, change directories to "/var/lib/spool/cron."

[root@workbox dwmoar]# cd
/var/lib/spool/cron cpress
return/enter>
[root@workbox cron]#

3. Now enter the command "touch yourusername."

## [root@workbox cron]# touch <yourusername> return/enter> [root@workbox cron]#

This will create a file called yourusername.

4. Now we want to add our information to this newly created file. For this, were are going to use the text

editor called nano. Still being the root user enter the command "nano yourusername." This will open the file, and you should be greeted with a blank screen. Assuming that we are going to run mailfilter every 10 minutes, we would enter the following line:

10,20,30,40,50 \* \* \* \* mailfilter

5. Now, we want to save our file and close nano. Press the "CTRL + X. you should see the following at the bottom of the screen:

## Save modified buffer (ANSWERING "No" WILL DESTROY CHANGES)?

- 6. You have 3 choices "Y" "N" or "C". Press "y." It does not matter if it is upper or lower case.
- 7. You will now see something like this.

## File Name to Write: dwmoar <----this should be your username

8. At this point, press return. The nano window will close and you will be returned to the command prompt. Now mailfilter will run automatically every 10 minutes.

Be sure that you check the "TEST" flag in your mailfilterrc file. If it is set to "yes," the Mailfilter program will <u>only simulate filtering</u> of your email. If you are sure that your filters are working properly, then change this flag to read "Test = off"

#### FAQ's

I think I accidentally deleted an important email with Mailfilter. Can I get it back somehow?

Once Mailfilter has deleted an email, all you get to see of it is where it came from, what it was about and when it was sent. Have a look in your logfile (mailfilterlog) and ask the author to send it again. If that's not an option for you, you may want to ask your ISP to recover this message for you, though I doubt this would be a very successful undertaking.

If I make changes to the Mailfilter rcfile, does it affect immediately?

If you are changing Mailfilter's settings while it's active, nothing special will happen. All changes you make in the rcfile will be considered next time you run Mailfilter.

Sometimes a few (spam-) messages slip through. How come?

This is not a bug in Mailfilter. Consider this a feature of every POP email server. Once you start checking for spam or downloading messages, the server locks your mailbox. If new messages arrive during the locked state, they will be queued and provided for further processing after the lock has been removed. So Mailfilter does not see incoming messages while it checks for spam and sometimes it happens that a message or two arrive just in time to be too late for filtering, but in time for download. That's life.

#### c ibiblio



## Graphics Tutorials: GIMP, Part 7

#### by Meemaw

We see text reflections all the time. I think they are pretty neat, and I always wondered how it was done. This tutorial will show you a simple text reflection.

Open a new image (I made mine 400x300), select the **Text** tool from the Tools Dialog, choose your font and type in a word. If you want, you can rename the Text layer to Main Text or it will end up being named using the text you typed. In the layer dialog tick the **Lock Alpha Channel**.



We want to put a border around our text. In creating smooth outlines, we want to use the text as a guide.... to do this, right-click on the Main text layer and select Alpha to Selection.

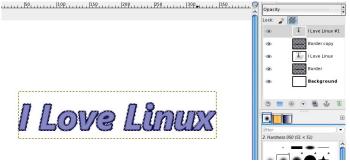
Then go to **Select > Grow** to access the Grow Selection dialog

or you can right-click on top of the Text and in the menu click on **Select > Grow**. I added 2px for the Grow Selection.



Click on **Create New Layer**, name it **Border** and fill it with a darker color using the **Bucket Fill Tool**, then place it behind the Main Text layer to become a border.

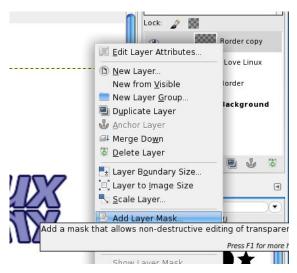
Now we want to create the reflection effect. First, right-click on the Border Layer and in the menu click on **Duplicate Layer**. Move the layer on top of the Main text layer by clicking the up arrow in the Layers Dialog box. Do the same for the for the Main text layer and move it on top of the border Copy layer.



Using the **Move** tool, place the new duplicated text logo image below the original text logo. Choose the **Flip** tool, make sure it's on Vertical mode, then drag upwards to finally flip it, or select **Layer > Transform > Flip Vertically**. Make sure they are lined up the way you want them.



Right-click on the Reflection layer and in the menu click on Add Layer Mask, selecting Black Full Transparency, and then click Add. Your reflection will disappear.



Grab the **Blend** tool and select the **FG to BG (RGB) Gradient** and apply it to the reflection from bottom to top. Make sure your foreground color is black and the background color is white.



Where you start and end your gradient determines the visibility of your reflection. Starting at the bottom

**Graphics Tutorials: GIMP, Part 7** 

of your reflection text and going to the middle of your main text results in a bigger reflection (below, left). Starting in the middle of the reflection text and going to the top of your main text results in a much smaller visible reflection (below, right).

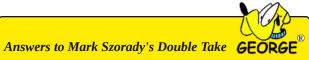


Experiment with it until you get what you want (remember <CTRL> + Z is the key combination for Undo). When you get your reflection the length you want it, you can always play with the transparency of that layer to make the reflection lighter.



This can be as simple or fancy as you want. Make sure your Main Text editing is finished before you do the reflection.

Have fun!



(1) Wizard's clothes missing stars and moons; (2) Book missing title; (3) Table legs shorter; (4) Wizard's beard longer; (5) Stool missing leg; (6) Pitcher missing water; (7) Bowl facing opposite direction



Looking for an old article? Can't find what you want? Try the

PCLinuxOS Magazine's searchable index!

The **PCLinuxOS** magazine

## Screenshot Showcase

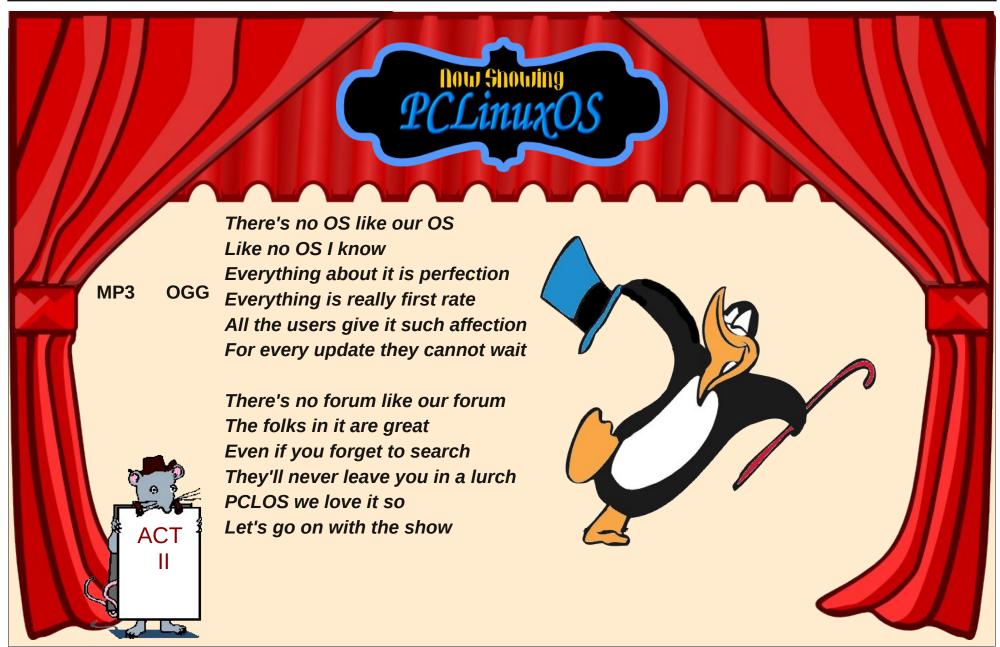


Posted by Crow, December 16, 2012, running LXDE.

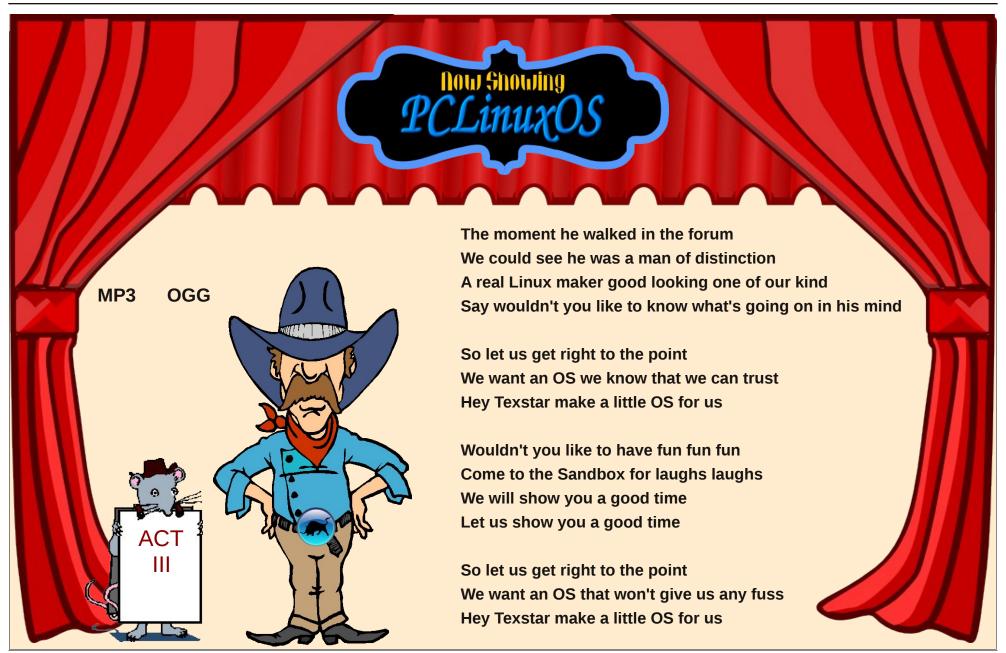
## Forum Foibles Follies Act I



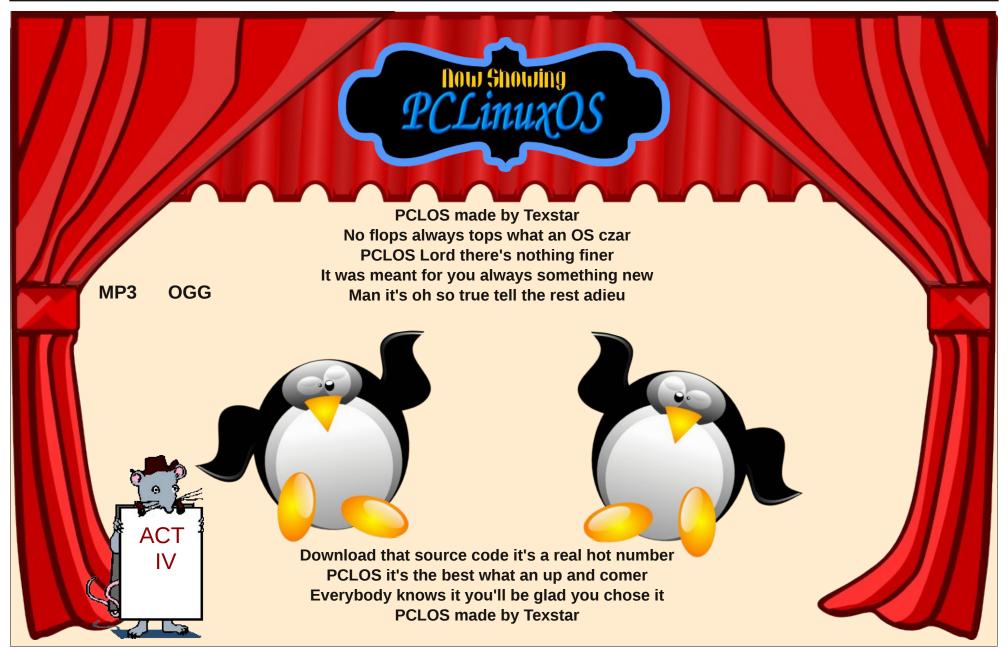
## Forum Foibles Follies Act II



## Forum Foibles Follies Act III



## Forum Foibles Follies Act IV







## Screenshot Showcase



Posted by GermanTux, December 2, 2012, running KDE4.

#### by horusfalcon

I'll start off by offering a disclaimer: this article is based on my own personal experiences, and does not purport to be the definitive all-inclusive solution. Your results may vary wildly - in fact, I hope they do, as this article is still very much a work-in-progress.

Greetings from the North Pole, and Ho! Ho! Ho!, Everyone! I hope some of you have found a tablet under the Christmas tree this year. Having recently become the proud owner of a Google (Asus) Nexus 7 Tablet myself, it was only natural that I would sooner or later want to transfer files to it from my PCLinuxOS laptop (a Dell Latitude D620 running PCLinuxOS 2012.08 Maintenance Release with both KDE-4 and LXDE desktop environments loaded).

First, I just plugged the USB cable into the laptop, and then the tablet, hoping they would simply connect up and go. I should be so lucky! All I saw was the notification from my tablet that it was now connected as a media device.

"Oh," I said to myself, "Let's see if Clementine can read from it." Nope. Okay, so it's time to hit the books (or at least the big virtual book that is the World Wide Web). After some fiddling about, and some reading, and some more fiddling about, here's what I've come up with:

#### **Connecting via USB Cable**

The Nexus 7 comes with its own very nice little USB cable. This cable is capable of not only charging the device via a computer's USB ports or the included USB charger, but is also capable of transferring data, once a few things are known to the user.

**Caution:** The mini-usb port on the tablet is quite small. Don't force the cable in - go gently and if it doesn't fit easily, take another look and try again. This precaution is a good one to follow with all cables and connectors, but especially here.

Since the device mounts as a media device by default (and it can also be selected to mount as a camera), the tools to use for mounting and dismounting the tablet for access are mtpfs (for mounting) and fusermount -u (for unmounting).

On my first attempt, I set up a folder at ~/media/Nexus\_7 (read the ~ character as "the current user's home directory"). I naturally reasoned that since ~/media/ is the usual path for removable storage devices, it might be best to mount the tablet somewhere on that path.

This worked the first time I used it, but did not on subsequent tries. Rather than figure out why that was true, I chose to create a new mount point at ~/000\_USB/Nexus\_7 (which is away from the removable devices tree) and try again. This has worked more consistently but seems to be a bit slow loading data from the tablet. Creating this mount point was easy from within a file manager (e.g. Dolphin, PCManFM) or can be done from the shell as:

#### [xxx@localhost ~] mkdir ~/000\_USB/Nexus\_7

Avoid spaces and "special" characters in the pathnames for a mount point to avoid unnecessary complications.

To mount the tablet, I open a shell in a terminal, and issue the following command:

[xxx@localhost ~] \$mtpfs ~/000\_USB/Nexus\_7

You will, of course, wish to substitute the path you create on your system for the one I have used above. To unmount, close all applications using or viewing data on this path, and issue the following command from the shell prompt (all on one line):

### [xxx@locahost ~] fusermount -u ~/000\_USB/Nexus\_7

Once the mount point is created, the sequence of events to transfer files goes something like this:

- 1. Connect the Nexus 7 to a USB port on your system via the cable supplied with the unit.
- 2. Open a shell (via Konsole or other terminal program) and issue the mounting command as above, edited for your path (mtpfs).
- 3. Minimize the shell (or move to another virtual desktop) and leave it open.
- 4. Open your favorite file manager.
- 5. Use cut/copy/paste commands to move data as needed between the Nexus\_7 and the rest of your system.
- 6. Wait for all file transfer operations to completely finish.
- 7. When done, close all file manager and other programs which are accessing or viewing the Nexus 7's files.
- 8. Restore the shell (or move to it if on another desktop) and issue the unmounting command as given above, edited for your path (fusermount -u).

9. At this point, it is permissible to disconnect the tablet from the USB port. (You may leave it connected if you need for the tablet to charge.)

NOTE! When you issue the fusermount -u command, you may see a message stating that the device is busy. If this happens, check to see that no other program on the computer is still accessing/using the tablet (file managers are the most common culprits here). If nothing else is using the tablet, there may be some cached data that hasn't yet been written to it. To be safe, shutdown the computer in an orderly manner and remove the tablet after the system is powered down. During shutdown, the operating system will flush its caches and do any pending writes so that all files on the tablet will be properly finished and closed out.

During file transfers by this method, I receive an error message for each file as seen below:



Despite the permissions issue, all video and image files (photos, etc.) are viewable and editable on the tablet. (I have yet to figure this part of it out - it is probable that I need to alter the permissions on the mount point in some way?)

#### **Connecting The Tablet Wirelessly Using Airdroid**

Airdroid is a free application available at the Google Play store. To be able to use it, your tablet and the computer with which you wish to exchange data must be on the same wireless network. (I have had intermittent success with a laptop connected via Ethernet to my wireless router, but results are definitely not consistent unless both devices are connected wirelessly. Again, your mileage may vary.)

Install the application from Google Play in the usual manner and start it on the tablet. Airdroid will display a passcode near the bottom of the screen.

Above the passcode are instructions to visit either a URL or an IP Address and port number on your wirelessly connected system. I have had best results with the URL. For better functionality, I recommend using the Chromium browser (available in the Synaptic repositories for PCLinuxOS), as certain folder operations are not supported in Firefox or other browsers.

The URL to enter into Chromium's address bar is: http://web.airdroid.com as shown at right. Note: numbers in the passcode are shown in grey text. (This helps tell a zero from the letter O.)



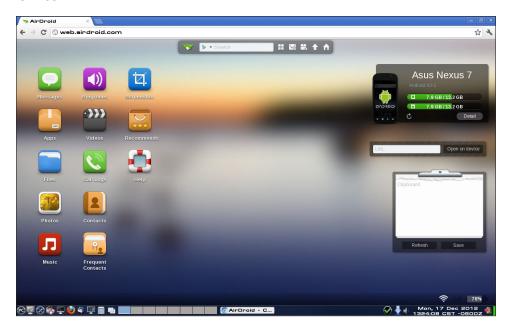
Here's a shot of the Airdroid welcome screen (bottom, previous column). Note the password field in the lower right. Click there before trying to enter the passcode.



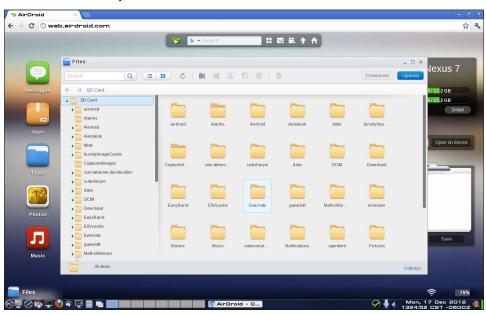
Once the passcode is entered and a connection is established, the screen on the tablet will change to show the connection is working.



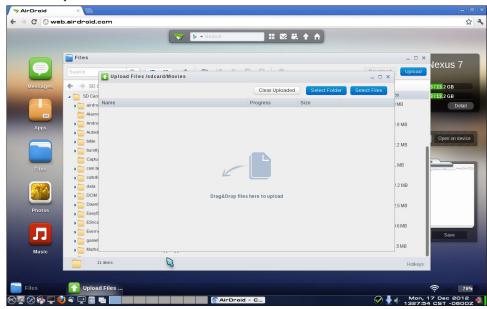
The airdroid client in Chromium will update to display several icons, one of which is Files.



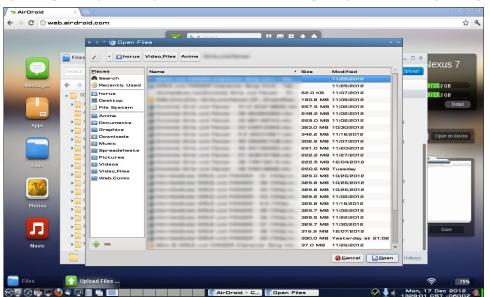
Double-clicking this icon will open a file upload/download window in the client from which files may be moved to and fro.



In the following screen, I have selected my /sdcard/Movies/ folder as the destination for uploading from my laptop to the tablet. I choose to use the "Select Files" button rather than do drag-n-drop as I feel it's a safer way to move files, but that's just me.

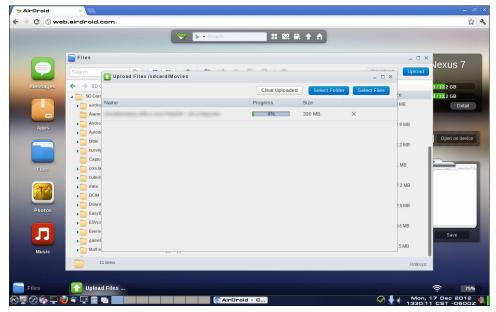


When the "Select Files" button is clicked, a PCManFM window opens on my system (you may see Dolphin or whatever file manager is your default depending



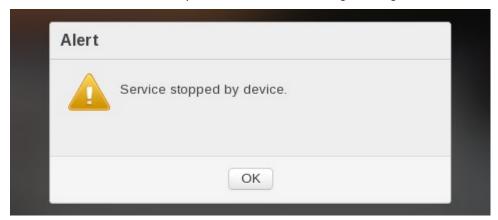
on which desktop environment you are running.) The screenshot (bottom right, previous page) shows that with file names blurred out.

The next shot shows the upload dialog with progress bar indicating the file I selected is uploading. It is also possible to upload multiple files simultaneously by the usual selection methods in this window.



Once file moves are completed, exit from the Airdroid app on the tablet. (Press the back button at the bottom of the tablet's window to bring up the "Exit Airdroid?" dialog and tap Yes to exit.)

The screen on the client will update to show the following message:



Now close the window or tab in Chromium for the Airdroid client on the computer. This completes file transfer operations.

There are other things that can be done from Airdroid, but I have not yet had opportunity or need to try them, and so, can't comment.

#### Summary

Of the two methods I give here, direct cable connection is the faster. Neither method is as reliable nor as simple as I would like yet, but they do work with patience and a little persistence.

While I'm wrapping up, let me just mention a few Android apps I am finding I can't live without:

- 1. Airdroid a free file transfer app, which I've just scratched the surface on here.
- 2. **MX Player** a free video player that rivals any I've seen for versatility and ability to play darn near any format or encoding. (Hasn't failed to play even anime' vids with Hi10P encoding!) {Note: ad supported, but not too heavy-handed.}
- 3. Olive Office Premium a free office suite that is capable of editing and viewing Microsoft Office files (which I can't avoid using at work!) Note that if you don't need editing ability, they also offer a viewer-only product (Olive Office Basic) that is optimized for viewing. Both handle PDFs well, too.
- 4. **File Expert** a free file manager with lots of features.
- 5. File Commander another free file manager I like a lot.
- 6. **Business Calendar Free** a free calendaring app that links in nicely to your Google Calendar. Can do multiple recurring events, and multiple reminders on events.
- 7. **Linux Pocket Guide** under \$3.00 from O'Reilly Media, this is a handy app mimicking their popular back-pocket guide to everyone's favorite free operating system. (Be careful searching for this one there's also a book that goes for just under \$7.00 with the same content as this app.)
- 8. **Linux/Unix manpages** just what it says. Very useful, and yes, it is free. Who says there's no such thing as Santa Claus?

9. Fantasy Defense - I couldn't wrap this up without a game to kill time between kernel compiles, now could I? Fantasy Defense is a completely free and free to play tower defense game which uses anime' characters (always a big plus for me). It is addictive, richly appointed with stunning graphics, complex levels, and a wide variety of advancements and upgrades all available in-game. You can spend money to buy items, mana or gold points, but the game is completely playable (and winnable) without doing that, and it's actually rather fun. Free for the downloading, as are all my picks here.

All of these are available at the Google Play store. Go get 'em, kids! They're cheap! (Most of them are free!).

My next experiments will involve transferring data using an On-The-Go cable and a USB flash drive. I've heard it can be done, and might be even simpler than these two methods. If so, I'll do a follow-up at a later date.





# **Visit Us On IRC**

- Launch your favorite IRC Chat Client software (xchat, pidgin, kopete, etc.)
- Go to freenode.net
- Type "/join #pclosmag" (without the quotes)

# **Reach Us On The Web**

PCLinuxOS Magazine Mailing List:

http://groups.google.com/group/pclinuxos-magazine

PCLinuxOS Magazine Web Site: http://pclosmag.com/

**PCLinuxOS Magazine Forums:** 

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

# Screenshot Showcase



Posted by menotu, December 20, 2012, running KDE4.

### by Paul Arnote (parnote)

I know what you're thinking ... faxes are "old school." Faxes are "so 1980s." Nonetheless, the business community has tightly hung onto faxing as a part of their business model. Indeed, many business still rely heavily on faxes. For them, it's as deeply ingrained as much as the checkout line is at the grocery store. Plus, unless you are rather savvy with a flatbed scanner, faxing a document is easy enough for even the most technologically challenged individual to muddle through.

Fax software has been around ... well ... ever since some bright individual figured out how to bypass the fax machine and do paperless faxing from a computer equipped with a fax modem. Yet, for many Linux users, sending a fax isn't necessarily the easiest thing to do – and it has nothing to do with a lack of fax software. Nope. The problem is that most computers come with a WinModem. WinModems are software driven fax modems that ... you guessed it ... work especially well with Windows, but not so good with any other platform.

Understanding the proliferation of WinModems is easy: they are a very cheap fax modem solution, and since the vast majority of computers come with Windows installed (except for your home built computers), WinModems have pretty much become the dominant and "preferred" modem installed in new computers. Unfortunately, this goes back many years, so that even the older equipment you might find lying around – say 10 or so years old – has a WinModem installed.

Of course, you know the drill. The manufacturers of the WinModems won't reveal the technical specifications for the software that drives the modem, using the excuse that they don't want to reveal "industry trade secrets" about how their software works. Damn the proprietary closed sourced community! Although there are packages in the PCLinuxOS repository that *might* help you get a WinModem up and running, it's usually a "hit and miss" (mostly miss) proposition.

I discovered the frustrating reality of WinModems under Linux a couple of months ago, first hand. My wife was needing to fax some paperwork back to the contracted company that the hospital we work for uses to manage the "short term disability" plan, when she had to take a couple of weeks off of work following a minor surgery. Then, a few weeks later, she needed to fax a LONG medical questionnaire to the offices of a specialist that her doctor had referred her to. By the way, my wife is fine. We can't say the same for our frustration level after trying to fax all of the paperwork back to the respective parties.

Never having a need to fax *anything* during the entire time (nearly six years) that I've been a Linux user, I never took the time or expended the energy to setup a fax modem. Like most of you reading this article, I saw faxes as outdated. Indeed, they are an outdated form of document transmission, but a necessary evil when dealing with businesses who rely on that outdated technology to help run core parts of their businesses.

## **Finding A Solution, Part One**

I set out to try to find a viable solution to my lack of "fax-ability" under Linux. My first attempt was to seek out one of the many "free" fax services that dot the internet landscape. If you have limited fax needs and don't need to fax very many pages, you might

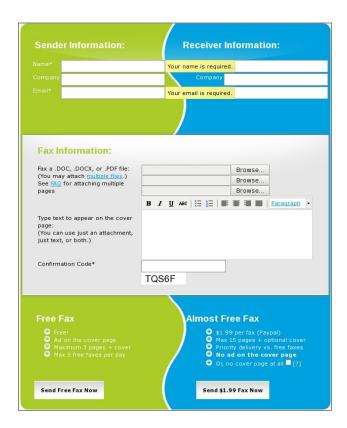
actually get by using an internet based "free fax" service.

They all work pretty much the same way. You upload your document, usually as a PDF or \*.docx file, and the service will fax your document to the party you indicate (via the phone number you enter for the recipient). You will then receive an email to inform you whether your fax was successfully or unsuccessfully delivered.



However, most of the "free" fax services are ad based, meaning they place ads on your fax cover sheet. Also, most of these "free" services limit you to between three and eight pages per fax, with most of them placing their limit at the lower end of that range. If you want to fax more pages than the "allowed" limit, they all offer a "premium" service. With the "premium" service, you can pay a monthly fee to be able to fax up to 200 faxes per month, coupled with a more generous page limit. There were only a few "premium" services that would have allowed us to fax the 21 page medical history forms back to the specialist doctor.

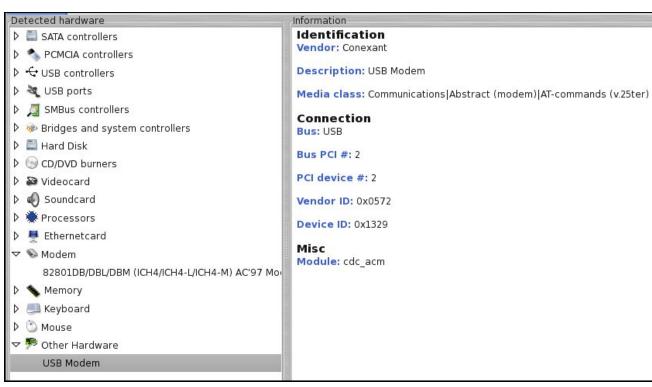
As you can see from the screenshot from the Fax Zero web site, the paid service listed is for a "per fax" premium service. Many others offer other "premium packages" that allow more pages and a large number of faxes per month. Most of the "premium" services cost around \$10 per month. Just enter "free internet fax" into your favorite search engine, and you will be inundated and overwhelmed by all the sites offering "free internet fax" services.



Like I mentioned earlier, I did not have a need to fax anything in the past six years that I've been using Linux, and probably hadn't faxed anything from home in the past 10 years or more. (The last fax software that I remember using was the old WinFax v2.0, and if I remember correctly, either Windows 98 or Windows XP had some rudimentary fax software application that did all I wanted.) I couldn't see a good reason to sign up for a monthly service that I haven't needed in that long of a period. So, the internet fax service definitely wasn't for me.

## **Finding A Solution, Part Two**

Since the internet fax service wasn't going to adequately or efficiently resolve my lack of ability to send faxes, I started searching for another solution. I



figured, why not take a stab at seeing if I had just **one** computer where the WinModem would work? To be perfectly honest, of the 10 computers I tried, the WinModem was seen by PCLinuxOS on only four of them.

To see if PCLinuxOS can even see the WinModem installed in your computer, open PCC (PCLinuxOS Control Center), select the "Hardware" entry, then select "Browse and configure hardware." If PCLinuxOS can even see your WinModem, you will see an entry called "Modem" in the left hand pane of the window. Don't hold your breath, however, hoping you'll be able to actually configure and use your WinModem, even if it can be seen. It's relatively rare that they work under PCLinuxOS — or any other Linux distro. For what it's worth, I was unsuccessful at getting any of the seen WinModems on the four computers configured or running. Just because the hardware can be seen doesn't necessarily mean

that it can be configured to work; it just means that the device answered the query during the polling of available hardware. The "Modem" shown in the above image, by the way, does not work under PCLinuxOS.

So, I figured if none of my WinModems were recognized or useable, why not try to find a modem that is useable with PCLinuxOS? Believe it or not, external RS-232 serial modems *do still exist!* That simple find did surprise me. U.S. Robotics, Hayes, Zoom, Dynex ... they are all still out there selling the trusty, old school external modems. But looking around Amazon.com, I also saw USB fax modems. Given that Linux has a history of excellent USB support, I figured that a USB fax modem might be my best bet, despite the fact that I hadn't realized that they even existed before I went searching for an external fax modem.

How else can I say this? SCORE! Touchdown! Home Run! Victory Lap! Triple Crown! Not only did I find an affordable USB fax modem, but the very description even *touted* that it was useable and compatible under Linux. I found the TRENDnet 56K USB 2.0 Phone, Internet, and Fax Modem TFM-561U (White) for only \$22.48, on Amazon.com.



Sure enough, on the side of the box it lists Linux as a compatible operating system!

Data Compression	MNP5 V 42bis, and V,44
Supported OS	Windows 7 (32/64-bit), Vista (32/64-bit), XP (32/64-bit), and Linux
Dialing	Armodo DTMF Tone
LEDs	Data, Link
Data Rates	Up to 56Kbps
Power Management	USB bus powered

Here (top of next column) are the unboxed contents of that retail package (excluding the CD-ROM that contains the user guide, and all the paperwork).

The "installation manual" on the CD-ROM did make me laugh, though. The Windows installation section goes on for 14 pages with baby step instructions. Meanwhile, the Linux installation instructions take up less than one-half of a page, consisting of poorly



explained commands to be entered on the command line. Here are those instructions (copied and pasted, verbatim, from the user guide PDF):

### Linux

You can refer the below how to do install Harley USB Modem under Linux.

\$ cat /proc/bus/usb/devices

\$ modprobe usbserial vendor=0x1111
product=0x2222 ----> (1111 & 2222 is VID &
DTD)

<TFM-561U Vendor =0x0572 product=0x1329>

\$ dmesq

\$ minicom

That's it. So let me try to help a bit, if I can. First, unless you are using the fax modem for dial up networking, the last two commands are not necessary. Minicom, available in the PClinuxOS repository, is a terminal based application designed to help you get connected to your dial up provider.

Next, plug in the fax modem to an available USB 2.0 port. While I haven't tried it yet, I've heard reports that the fax portion of the modem doesn't work with a USB 1.1 port. However, the modem will work for dial up networking through a USB 1.1 port. This shouldn't be an issue, except on very old hardware that does not have USB 2.0 ports. More recent hardware usually has an abundance of USB 2.0 ports.

You will need to enter the commands as the root user. So, su to root, then type the first line exactly as shown above. Enter the next line exactly as shown below (all on one line):

# modprobe usbserial vendor=0x0572 product=0x1329

Next, enter the dmesg command on the command line. You will have a rather lengthy output. (Note: you can shorten the dmesg output shown by entering the command as dmesg | tail -n 100 to display only the last 100 lines of the dmesg output. If you don't see what you are looking for, increase the number at the end of the tail command.) You are looking for something similar to this:

usb 2-1: new full-speed USB device number 2
using uhci\_hcd

usb 2-1: New USB device found, idVendor=0572, idProduct=1329

usb 2-1: New USB device strings: Mfr=1,
Product=2, SerialNumber=3

usb 2-1: Product: USB Modem

usb 2-1: Manufacturer: Conexant

usb 2-1: SerialNumber: 24680246

cdc acm 2-1:1.0: ttyACMO: USB ACM device

cdc\_acm: USB Abstract Control Model driver
for USB modems and ISDN adapters

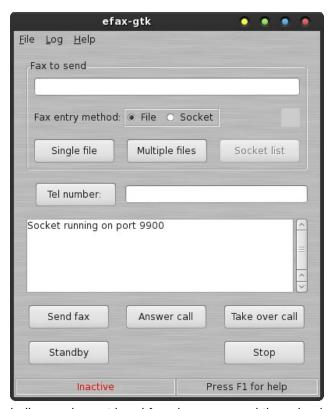
On my computers, this bit of information (fortunately) appears near the end of the massively long dmesg output. You are interested in the serial address that PCLinuxOS has assigned to the USB fax modem. I've highlighted that information above in **red**. **Write this down**. You will need it later when you set up the fax software. While your computer may report it exactly as I've shown above, don't count on it. You may have other USB serial devices plugged into your computer, which may change the assigned serial address. DO NOT skip this step.

The only thing you now have left to do is to plug in one end of a modular phone cord to the other end of the USB fax modem, and the other end of the modular phone cord into an available modular phone jack. A 6 foot (1.8 m) modular phone cord is provided with the fax modem, but if you're like me, you have a thousand of these things lying around already.

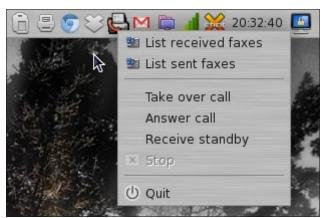
# The Software: efax-gtk

Now, you will need to install efax-gtk from Synaptic. Yes, there are other fax software packages available in the PCLinuxOS repos, but efax-gtk is simple, easy to use, and probably better suited for personal faxing from your home. One of the other fax packages that is available is called Hylafax, but it is more suited for use in an enterprise environment and would most likely be overkill for home use. Thus, we're going to focus our attention on setting up and running efax-gtk. If you want the more "technical details" of efax-gtk, you can view the efax-gtk man page online, here.

Don't let the simple appearance of efax-gtk fool you. There's more power under the hood than you might think. To be honest, the simple appearance of efax-gtk is one of the reasons I find it such a pleasure to use. It stays out of your way, yet all the whistles and

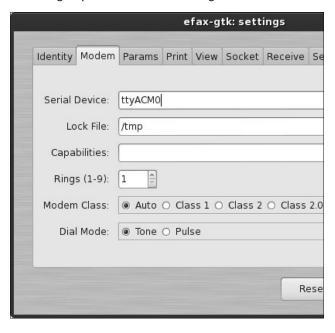


bells are close at hand for when you need them (and if you even need them). It follows the principle adhered to by many Linux developers: do one thing, and do it well.



When you launch efax-gtk, you will notice an icon placed on your panel. Right clicking on this icon will grant you access to the most common and useful controls available in efax-gtk. When you "close" the efax-gtk main window, the icon remains present and running in your panel. "Closing" the efax-gtk window only hides it from your view; it is still running, albeit in the background. A left click of the mouse on the icon will cause the efax-gtk main window to reappear.

Before we can use efax-gtk, we first need to set a few things up. Select File > Settings from the menus.



On the first tab, you simply enter your name and the number from where you are sending your fax. I'm not sure about anywhere else, but it is a FCC regulation in the United States to list the number you are faxing from on your outgoing faxes. Remember that serial address I told you to write down when you were setting up the fax modem? Well, on the second tab, you will need to enter the serial address that PCLinuxOS assigned to your fax modem when you set it up. Enter only the serial address, without any

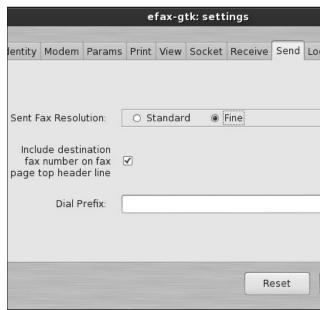
preceding slashes or anything else. On the second tab, you can leave everything else set to the default settings.



You can, if you choose, skip the next three tabs. The third tab lists the modem string for initializing the modem. I found that you can leave this set to the default values, and that it works as is. The fourth tab allows you to determine how to print out any faxes you might receive. I have the "Use GTK+ Print System" checked. Under the fifth tab, "Print," you can set the default application to use when viewing received faxes. The default is gv, also known as ghostview, but I have changed mine to "evince," since that is the postscript/PDF viewer I use under Xfce. KDE users may want to change "gv" to "okular," allowing them to use the powerful Okular document reader to view their faxes.

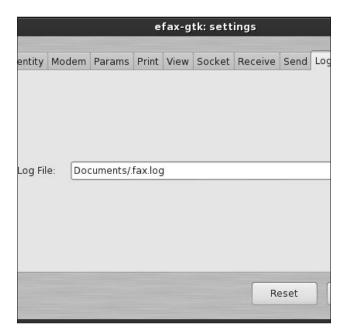
The "Socket" tab is definitely one you will want to set up. This sets up efax-gtk to listen in on a CUPS socket (default is 9900) so that you can send a fax directly from any application that allows you to print. We'll cover setting up the socket a little bit later, but

it isn't all that hard (once you've been introduced to how to do it). I had to dig through the online efax-gtk man page to figure it out. To make it easier for you, make all of your settings mirror what I have entered on this tab. shown above.



There aren't a lot of choices under the "Receive" tab. There, you can choose whether you want efax-gtk to display a popup window when you receive a fax, and you can also specify a program or script to execute whenever you receive a fax. I just told efax-gtk to display a popup window, then moved on. Under the "Send" tab (the eighth tab), you can set the fax resolution you prefer (I always set mine to "Fine"). You can also check the box to include the destination fax number on the fax page top header line. On the third line, you can specify a prefix to dial before the actual number is dialed. This is particularly useful if you wish to disable call waiting before making your call (\*70 on most U.S. phone networks).

In the ninth tab, "Logging," you can set up where to write the fax log. I have created mine as a hidden file

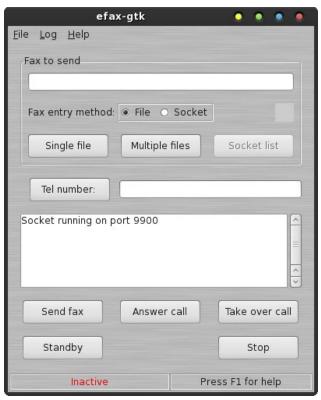


in my ~/Documents folder, by placing a "dot" before the filename, and called it simply .fax.log. Be sure to create the empty log file before pointing efax-gtk to it, or otherwise, efax-gtk will complain that the file doesn't exist. I strongly encourage you to keep a fax log. It can be quite revealing if you should ever encounter errors. A quick look at the log file will spell out everything that transpired while attempting to send that fax.

The tenth and last tab, "Page," allows you to set the paper size efax-gtk is going to deal with. Your choices are A4, Letter or Legal. Most U.S. users will want to choose Letter, while my European friends will most likely choose A4.

# **Putting It All To Work**

Now that we have efax-gtk all set up, it's time to put it to work, doing what it's intended to do: send and receive faxes.



What's that, you say? You don't know anyone to send a fax to so you can test your fax modem? Ahha! That's an easy solution! There are a couple of different routes you can take. To start with, you could find a local friend and send them a fax, via their fax modem. You could also fax something to your place of employment (it would probably be best to get your boss's OK first, though).

But the best solution I've seen (for U.S. users, anyways) is to dial 1-888-877-1655. The number is toll free, within the United States. Once your fax is sent, wait a couple of minutes and head over to the FaxToy website. If your fax was successfully sent, your fax will appear on their website. Just keep hitting your browser's refresh button. They suggest you send a single page fax only. If you send a multipage fax, only the last page will show up on the FaxToy website.

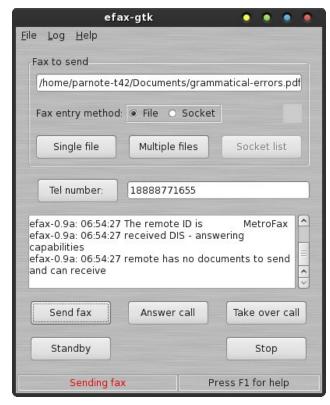
If your fax didn't send successfully, review the fax log file to help diagnose any problems you might be having. You will know if there are any errors when sending the fax, since they will show up as red text in the text area that's in the lower half of the efax-gtk window. Since all errors – minor and major – show up in red text, you will need to check to see which ones are important enough to follow up on.

There are other "fax test" numbers you can use. Hewlett-Packard (HP) has a test fax number on their website. You send a fax to the HP fax test line, and a return fax will be sent to you in less than five minutes. This is good, since it also gives you an opportunity to test how well you are able to receive faxes.

You can also test your fax modem's ability to receive faxes. One way is to head over to Interpage Network Services, Inc. website and follow the instructions to have the service send you a fax. Alternatively, you can go to FaxZero and send yourself a free fax by entering your phone number into the recipient field.

So, pick which test service you want to use, and let's start off by first sending a fax from our fax modem. I chose the FaxToy service for my initial tests. Remember that whatever you are sending via efaxgtk has to be in the PDF format (we'll get to sending a fax from a word processing document later). Select the "Single File" button, then select the PDF document you want to send.

Next, enter the phone number for the fax service you are using. Do NOT use any spaces or dashes in the phone number. Once you have entered the phone number, make sure your fax modem is plugged into your computer, and that the modular phone cord is plugged in at both ends (one end to your fax modem, the other end to a modular phone jack). Then, just click on the "Send Fax" button and wait for the process to complete. You should see the lights on the USB fax modem spring to life and start blinking madly.

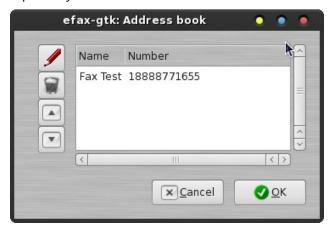


Similarly, to receive a fax, press the "Answer Call" button in the main efax-gtk window. Your fax modem should now answer the call and display the connection data in the text area. In the inadvertent case that you receive a voice call and you have your fax modem answer that call, you can click on the "Take Over Call" button to wrest control away from your fax modem.

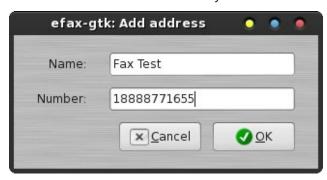
If you've done everything properly up to this point, you should be able to send and receive faxes. If not, go back and recheck your entire setup, and make sure you didn't skip any of the steps that I've outlined. Also check to make sure you entered everything properly. Just one misspelled command on the command line would be enough to prevent a successful setup of your fax modem.

#### The "Extras"

As I mentioned earlier, there are many powerful features hidden under the simple appearance of efax-gtk. One such nice feature is the built-in address book. This allows you quick access to someone that you might want to send faxes to repeatedly.



Of course, when you first open the address book, it will be empty. Click on the button with the pencil icon on it to make an address book entry.



Enter the name of the contact on the first line, and the contact's fax number on the second line. Click on the OK button, and you will see your fax contact in the efax-gtk address book. Now, when you click on the "Tel number" button in the efax-gtk window, the address book will open. Select your recipient, and click on the OK button. Your fax recipient's phone

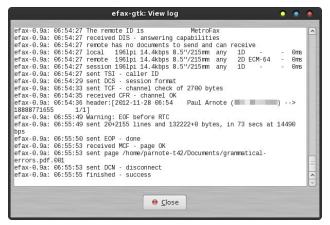
number will be transferred to the telephone number line in the efax-qtk main window.



Another nice feature built into efax-gtk is the "List Received Faxes" and the "List Sent Faxes" lists. Both dialog boxes look identical, except for the dialog box title on the window title bar. Simply highlight the fax you want to work with, and choose whether you want to print or just view the fax, edit its description, or send it to the trash. You also have the option to add custom folders and to move your sent faxes to custom folders, (like for keeping track of faxes sent to or received from a particular recipient).



You can also send multiple documents/files to a recipient during a single fax session. Not only is this handy, but it also makes sense to fax them all in one fax session, as opposed to having to send each document as a separate fax. Just click on the "Add files to list" button at the top of the dialog box, and select the files you want to include in the fax. When you're finished adding files, click the OK button at the bottom. Your files will be queued for sending.



Under the "Log" menu, you have the option to either print the log file, or to view the log file. If you choose the latter, the contents of the log file are displayed in a dialog box, like that above. Of course, if you haven't set up a fax log file under the "Logging" tab of the efax-gtk settings, you will not have anything to print out or display.

# "Printing" To A Fax Recipient

As I mentioned earlier, you can set up efax-gtk to send a fax directly from your favorite word processor to your fax recipient. In fact, you can do this from any application that supports printing. Before we can "print" to a fax recipient, however, we have to set up our fax modem as a "printer." Trust me ... it's easier than it sounds.

To set up our fax modem as a "printer," we need to install a new printer in the PCLinuxOS Control

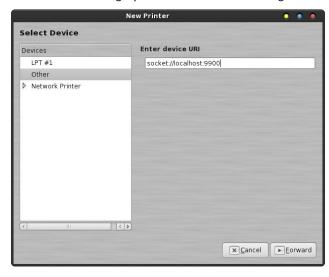
Center, a.k.a. PCC. If you have not yet installed task-printing from Synaptic, now would be a good time to do so, before proceeding any further.

# Configure printing and scanning



Set up the printer(s), the print job queues, ...

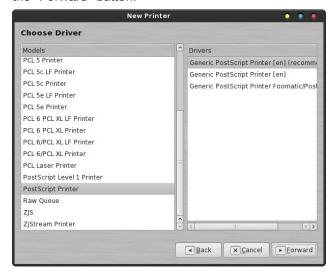
Under the "Hardware" tab in PCC (in the left pane), click on the "Configure printing and scanning" section (in the right pane, as shown above). Once you get to the next window, click on the first icon on the toolbar to bring up the "New Printer" dialog box.



In the first window of the "New Printer" wizard, select "Other" in the left pane of the window. Then, enter **socket:**//localhost:9900 as the URI entry. Click on the "Forward" button. A smaller dialog box will open to inform you that PCLinuxOS is searching for drivers. Let it run until the next screen appears.



Once at the screen above in the PCC New Printer Wizard, accept all the defaults and simply click on the "Forward" button.

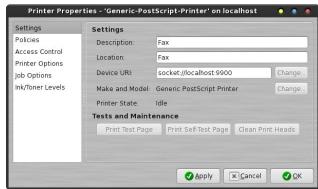


Once again, accept all the defaults in the window above, and simply click on the "Forward" button.

You can accept the default values here, but I would make a suggestion that you change the name and description to something simple, like "Fax." Otherwise, it won't be apparent that this is the fax



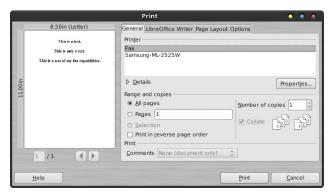
"printer" in the list of available printers. If you choose to not change them now, you can change them later in the PCC Printer Configuration window. All you have to do is highlight the printer whose name you want change, press F2, and type in the new name – just like changing a filename in your favorite file manager. Click on the "Apply" button to finish the setup of your fax modem as a "printer."



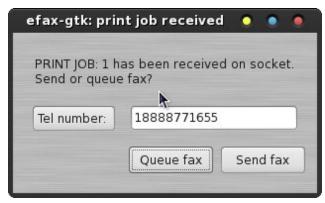
If you right click on a printer in the Printer window of PCC, you can select "Properties" from the pop up context menu. When you click on the fax "printer" icon, you will get a window similar to that shown above. You can make changes to the description and location of the printer here, too.



Select the "Policies" category of printer properties. You will find that "Shared" is checked by default. Click on the checkbox to deselect the check mark for sharing your fax modem. This will keep the fax modem exclusive to the machine that you have it set up on, and help you to avoid conflicts with CUPS wanting to share your fax modem over your entire home network. Also, if you have multiple computers in the house and you set up the fax modem on multiple computers, having them all shared will make multiple entries for the fax modem appear on all of your computers. You won't know which fax printer is for the local machine! Take it from me that neglecting to unshare the fax modem is problematic, and this is the easiest solution.



Now that you have the fax "printer" installed, you notice that "Fax" shows up in your list of available printers. Simply select "Fax" as your printer, and click on the "Print" button.



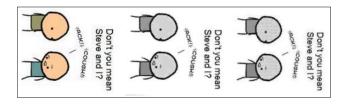
Click on the "Tel number:" button to select a number from efax-gtk's address book, or manually enter the fax number in the space provided. Then, click the "Send fax" button. From this point on, efax-gtk will take care of faxing your document to the selected recipient.

#### Things To Keep In Mind About Faxes

Like we mentioned at the beginning, faxes are an old, archaic technology. Some of the limitations of faxes are ruled by a couple of factors. First, there are the speed limitations of the POTS/PSTD telephone network. Second, the fax "standard" has become static, and in the process, hasn't kept up with technological advances. Part of the second factor is due to the first one. They are inextricably linked, to a large degree.

The second thing to keep in mind about faxes is that the fax world is a black and white world. Color images will get dithered to black and white, so that your fax ends up as shades of gray that are made up of black dots on a white background.

Third, faxes are inherently low resolution. Even the "fine resolution" setting is, maximally, only 200 dots per inch. Below are some examples of how a "color" document gets dithered, and the resulting resolution that your recipient sees.



On the left is a snippet of the original color image. In the middle is a snippet of the dithered TIFF image that makes up the outgoing fax. On the far right is the low resolution image that was placed on the FaxToy website. Looking from left to right, the direct comparisons above make it easy to see the quality loss from the original to the lower resolution images that your recipient receives.

### Some "Cleanup" Tasks

When you installed and first ran efax-gtk, you will notice that it also created some special folders in your /home directory. Below is a snippet of those directories, as they appear in Thunar on my Xfce installation.



You will notice four folders that have "fax" as part of their names. Let me explain what is in each one. In the "efax-gtk-server" folder are postscript files containing a copy of what was transmitted by efax-gtk using the "socket." The "faxin" folder contains TIFF copies of incoming faxes that you have received. The "faxout" folder contains TIFF copies of faxes that are in the process of being sent. Finally,

the "faxsent" folder contains TIFF copies of faxes that have completed sending.

TIFF (Tagged Image Files Format) files, if you're not familiar with them, aren't necessarily the smallest image file to store. I suspect that they are used because they are capable of storing and maintaining images at a high resolution. TIFF files may or may not employ LZW compression. LZW compression will make them consume less space, but will make them take longer to display. TIFF files may also contain multiple images within the TIFF "container," which initially makes them appear to be a single image. Because of the amount of space these files consume, you may wish to periodically clean out old files from these folders that are no longer needed.

One other "house cleaning" chore you may wish to perform is to periodically pare down the fax log file, especially if you do a lot of faxing. Since the most recent log information is appended to the end of the fax log file, you will want to trim it down from the beginning of the file. An ordinary text editor (KWrite, Mousepad, Leafpad, Geany, etc.) can be used to edit down your fax log file. If it is important to you to keep records of your fax activity, you may want to print out the fax log before you trim it down. Otherwise, there is no other reason to keep records of your fax activities even several months after the fax has been sent.

#### Are There Alternatives?

Yes, Virginia. There are better alternatives to faxing. The main alternative is to create PDF files, (either by printing to a file or by scanning documents with a flatbed document scanner), and email them to the recipient. Email is faster, more reliable and a lot more efficient than faxing. Even some of the more advanced office copiers can create a PDF file that is emailed to the recipients, rather than sending them a fax. The added benefit is that your recipient not only gets a document at a much higher quality, but they can also receive color images within the PDF file.

Because of one fiasco that we recently encountered, (the "Time Off From Work" contractor's fax machine was "messed up" and we made 26 attempts to fax the required paperwork back to them so that my wife could return to work), I now ask for an alternate email address I can simply email the PDF file to. Even my 300 dpi scans from my flatbed scanner have much better resolution than the paltry 200 dpi maximum resolution of a received fax. I also used this method to send pictures taken during my wife's laparoscopic surgery to the specialist doctor, scanning the images and putting them into a PDF file

### **Summary**

As you can see, it's not difficult to gain fax capabilities under Linux - provided you have the right equipment. Although fax technology is old, slow, inefficient and archaic, it remains firmly rooted in the business community. Because of that entrenchment, faxing remains a necessary evil for the rest of us have to endure, despite its limitations. Not all of your fax recipients are going to be willing to provide an email address to receive a alternate email from an untrusted and unknown user. They will, most likely, be running Windows and will be afraid of viruses in received files. It also doesn't help that Adobe (who "invented" and drives the PDF format) has a much-less-than-stellar reputation with "security vulnerabilities" in their proprietary file formats. The best we can do is to make our use of faxes as painless as possible. The ability to use a fax modem on Linux does remove some of the sting.





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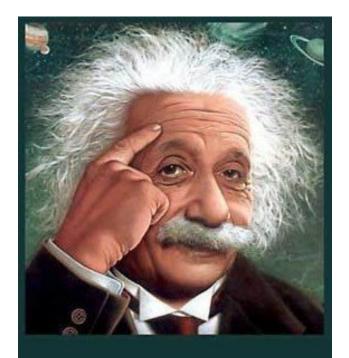
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It's easier than E=mc²
It's elemental
It's light years ahead
It's a wise choice
It's Radically Simple
It's ...



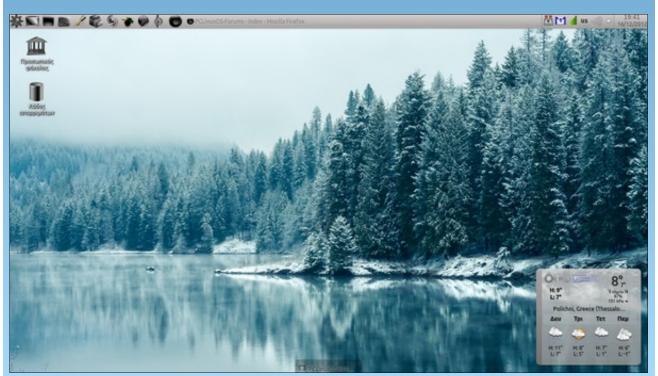
# TorrentFreak

The place where breaking news, BitTorrent and copyright collide





# Screenshot Showcase



Posted by agmg, December 16, 2012, running KDE4.

# Game Zone: Zombie Driver HD



by daiashi

## About the game

Zombie Driver is basically a car crazed zombie smash game where you fight your way through the streets of a city that has become infested with a zombie outbreak. Your mission is to save the survivors of a chemical accident that turned most of the city's population into brain crazed monsters. You will drive several different vehicles on your way to completing your missions. There is also a blood race if you get tired of the missions. You earn cash in this

mode as you battle other vehicles, while at the same time running down zombies. If that is not enough to get your zombie on, there is also slaughter mode which is similar to survival mode on other titles, where you try to last as long as you can. http://www.zombiedriver.com/

## System requirements

#### Software:

Wine and steam.

#### Hardware:

Processor: 1.5 GHz dual core

Memory: 512 MB

Graphics: 120 MB Directx 9.0c compatible or better

with pixelshader 3.0 Hard Drive Space: 2 GB

Sound: Directx 9.0c compatible.

These are the minimum requirements for Windows 7/Vista/XP. However, I have always had better luck when these specs are slightly higher, on account of playing through WINE.

#### **About The Company**

Exor Studios is a game development company founded in August, 2007, and based in Szczecin, Poland. Its developers have extensive experience in developing games for Microsoft's Xbox 360, the PC (Windows platform), and mobile platforms. Formerly, EXOR Studios key personnel have worked with gaming industry giants, such as EA Mobile, Nokia, Namco and Sony Online Entertainment.

## **Some Gameplay Screenshots**



# **Game Zone: Zombie Driver HD**





# **Getting It To Run**

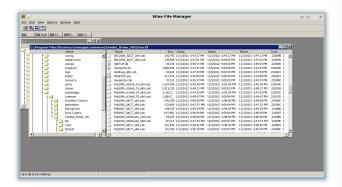
Ok, first things first. Head on over and grab Steam. WINE should install it without any problems, as the WINE team has made lots of progress from where they used to be. Once you have Steam up and



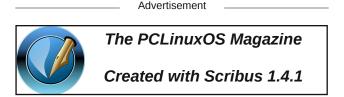
running, type "zombie driver" in the search bar within Steam to quickly locate it.

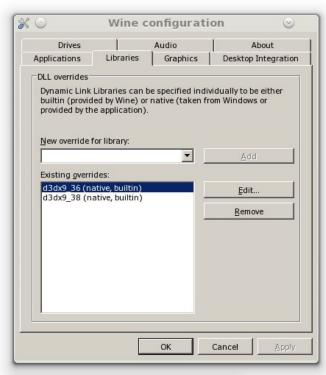


After you download it, let it install. You will have to do just a few things to get it running. At least, this is what worked for me. At first, the program would not start, until I manually used the directx.exe here.



Second, open up WINE configurator here, and add d3dx9\_36 and dedx9\_38 to the libraries. Be sure to set them both to (native, built in).







When you first start the game, you will be given some settings from which to choose. Make sure you turn Bloom:off and Clouds:off to help the stuttering that's sometimes present. Well, that's about it, so go hit the streets and kill some zombies.

# Adding 'Play Folder Content As DVD Video In SMPlayer' Entry To KDE Actions Service Menu

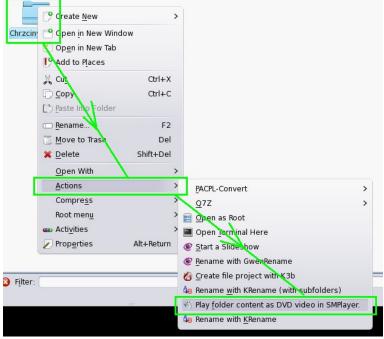
### by AndrzejL

I have a bunch of folders on my hard drive containing DVD videos. These are family videos from Christmas, weddings, baptisms and other occasions recorded with my camcorder in DVD format, and then backed up to my HDD. I could rip them into .avi files just to make it easier to play them, but then I am risking losing the quality of the originals. It would be pointless, really – recording in DVD quality just to encode it to avi. If not the waste of quality, then definitely a waste of time and cpu power/electric energy.

Anyway, as you probably know, DVD video content is a whole structure. It's not just one file, so it's not as easy as going into the file's folder and clicking on it to make it playable. There are vob files inside that could be played one after another. Sure, but it's a waste of time. Plus, each DVD has at least two to four of those vob files. You would have to click on each of them to watch the entire video, and sometimes the rewinding or fast forwarding won't work when you do that. Nah. That won't work for me.

When you right click on something in KDE4, you get a context menu and one of the items in this menu is 'Actions'. I have decided to add 'Play content of this folder as DVD video in SMPlayer' entry to this menu in PCLinuxOS KDE4.9.2. It took me a while, but I have succeeded. Here is how you do it.

First, make sure you have SMPlayer installed. Under PCLinuxOS 2012.08, VLC was set up as the default media player, so you will probably have to install it



from Synaptic. After you install SMPlayer, open a terminal session and run these commands (each on one line):

mkdir -p
~/.kde4/share/kde4/services/ServiceMen
us/

#### kwrite

~/.kde4/share/kde4/services/ServiceMen us/playwithsmplayer.desktop

Then, paste this into Kwrite:

[Desktop Entry]
Type=Service
Version=1.0

Actions=PlayWithSmplayer; Name=Play content of this folder as DVD video in SMPlayer. GenericName=Play content of this

folder as DVD video in SMPlayer.

Icon=/usr/share/icons/hicolor/64x64/
apps/smplayer.png

ServiceTypes=ServiceTypes=KonqPopupMenu/Plugin

X-KDE-

ServiceTypes=KonqPopupMenu/Plugin,in ode/directory

[Desktop Action PlayWithSmplayer] Name=Play folder content as DVD video in SMPlayer.

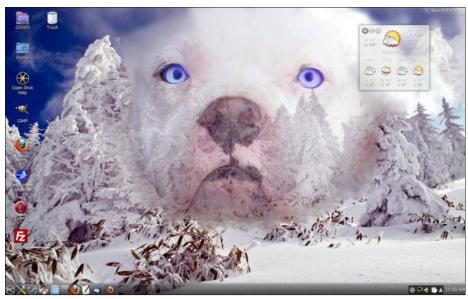
Exec=smplayer 'dvd://1//%U'
Icon=/usr/share/icons/hicolor/16x16/
apps/smplayer.png

Now save the file. There. You're all done.

Right click on any folder containing a DVD structure and choose Actions > Play folder content as DVD video in SMPlayer from the menu. SMplayer will start and will start playing DVD from the folder that you have chosen.



# More Screenshot Showcase



Top Left: Posted by ff103, December 2, 2012, running KDE4.

Bottom Left: Posted by Jim Dandy, December 1, 2012, running KDE4.





Top Right: Posted by RobNJ, December 8, 2012, running e17.

Bottom Left: Posted by ferry\_th, December 20, 2012, running Openbox.

