



PCLOS

>digital magazine

- Including**
- Well, Well, Well
 - I Have Used
MS Windows
 - Linux Media Players



PCLinuxOS & VirtualBox How-To





CONTRIBUTORS

Editor in Chief:
Doug

Assistant Editor:

Consultants:
**Archie
Watcher**

PDF Layout:
**pmbashore
Doug
jsdesign
Dai**

HTML Layout:
gseaman

Proof Readers:
**jaydot
historyb
TakiKin
GuyPronouncedGuy
DtrudOh
MeeMaw
malador jaslor
moriancumer_12**

Website:
**Viveksri
Watcher**

Translators:
**Dutch: Hank123
Spanish: Carlos Vegas**



Howdy all,

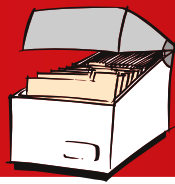
This month we once again have a great issue. Is there ever a time we don't? :)

We have a virtual box how-to and we have some of the old favorites like the third chapter of the Gnome User Guide and Chapter 7 of the KDE use guide. Hope everyone enjoys this issue!

Doug



CONTENTS



PCLOS

>digital magazine

DISCLAIMER

All the contents of PCLinuxOS Magazine (pclosmag.com) are only for general information and/or use. Such contents do not constitute advice and should not be relied upon in making or refraining from making any decision. Any specific advice or replies to queries in any part of the magazine is the personal opinion of the contributors and are not subscribed to by PCLinuxOS Magazine.

The information in PCLinux Magazine is provided on an "AS IS" basis, and all warranties, expressed or implied of any kind, regarding any matter pertaining to any information, advice or replies are disclaimed and excluded.

PCLinuxOS Magazine and its associates shall not be liable, at any time for damages (including without limitation, damages from loss of any kind) arising in contract, tort, or otherwise from the use of or inability to use the magazine or any of its contents, or any of its contents, or from any action taken or not taken as a result of using the magazine or any contents or for any failure of performance, error, omission, interruption, deletion, defect, delay in operation or transmission, computer virus, communications line failure, theft or destruction or unauthorized access to, alteration of, or use of information contained in the magazine.

No representations, warranties, or guarantees whatsoever are made as to the accuracy, adequacy, reliability, completeness, suitability, or applicability of the information to a particular situation.

Certain links on the magazine lead to resources located on servers maintained by third parties over whom PCLinuxOS Magazine has no control. By visiting these, you are doing so of your own accord and assume all responsibility for such action.

These terms constitute the entire agreement between the parties with respect to the subject matter hereof and supercedes and replaces all prior or contemporaneous understandings or agreements, written or oral, regarding such subject matter.

Editorial.....	2
GUG Chapter 3.....	4
Testimonial 1.....	8
VirtualBox Easier Than You Think.....	10
Computer Languages: BASIC.....	22
Multimedia Graphics.....	26
Linux Media Player Roundup.....	37
Testimonial 2.....	43
Distro's.....	44



Using the Desktop

The Desktop provides a useful metaphor for a modern office/home work environment. On the Desktop we find that the applications that we want to run can easily be started or launched and the information and data that we need can easily be located.

Running Applications

Applications that we can run from the Desktop are found either from the Applications Menu (and sub-menus therein), or, as icons on the Panel and the Desktop itself.

To run an application from the Applications Menu, open up the menu (or sub-menu) and click on the application listed in the menu bar.

To run an application from the Panel,

click once on the icon representing the application.

To run an application from the Desktop itself, click once on the icon representing the application.

Sometimes it is handier to have an application as an icon on the Panel or Desktop where you can launch it more easily by just clicking on it, rather than in the Applications Menu, especially if it is buried deep within several sub-menus. To achieve this, open the Applications Menu and select the application item by clicking with the right mouse button. Click on the "Add this launcher to panel" and a copy of the application icon will be placed on the Panel.

To make a link of the application on the Desktop, click with the right mouse button, and select "Add this launcher to desktop" and the application icon will be placed on the the Desktop.

To remove an application icon from the Panel, right-click on it and select the "Remove From Panel" option.

To remove an application icon from the Desktop, right-click on it and select the "Move to Trash" option.

The Panel

The Panel houses many useful utilities called applets. Applets are small applications that run on the Panel. As discussed in Chapter One, by default, the



Taskbar and the workspace switcher applets are placed in and run on the bottom Panel. Other useful applets that are placed on the top Panel include:

clock

network status icon

volume control

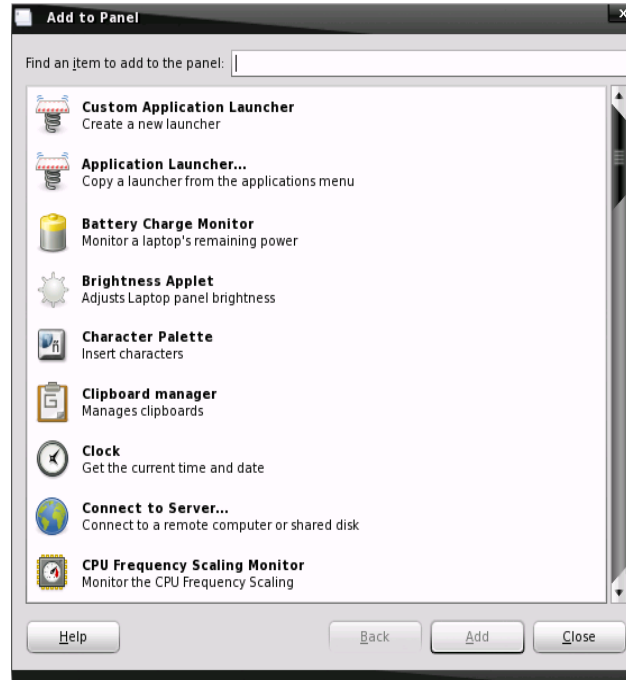
preferred applications (Firefox, Thunderbird, Glipper, and a terminal)

Placing an Applet on the Panel

To place an applet on the Panel, move the mouse over to an empty space on the Panel and right-click it. Select the item "Add to Panel" and from the sub-menu select the applet to place on the Panel. For example, to place the "Battery Charge Monitor" applet on the Panel, select:

Add to Panel --> Battery Charge

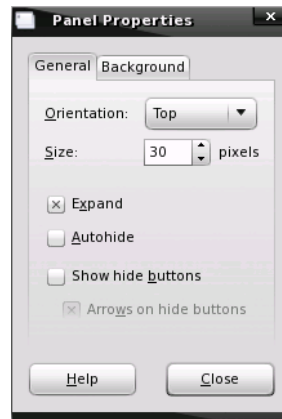
Monitor -->Add



To prevent accidental removal of an applet, you can lock the applet by right-clicking on it and selecting "Lock To Panel."

Removing an Applet from the Panel

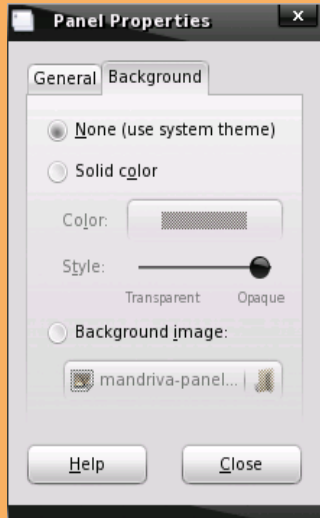
To remove an applet, right-click on the applet icon and select the "Remove From Panel" option. If the applet is locked, you will have to unlock it first by right-clicking on the icon and clicking on "Lock To Panel."



Configuring the Panel

To change the properties of the Panel, right-click on the Panel and select "Properties."

From the General properties tab you can change the position, length, whether to hide it or not, and size of the Panel.

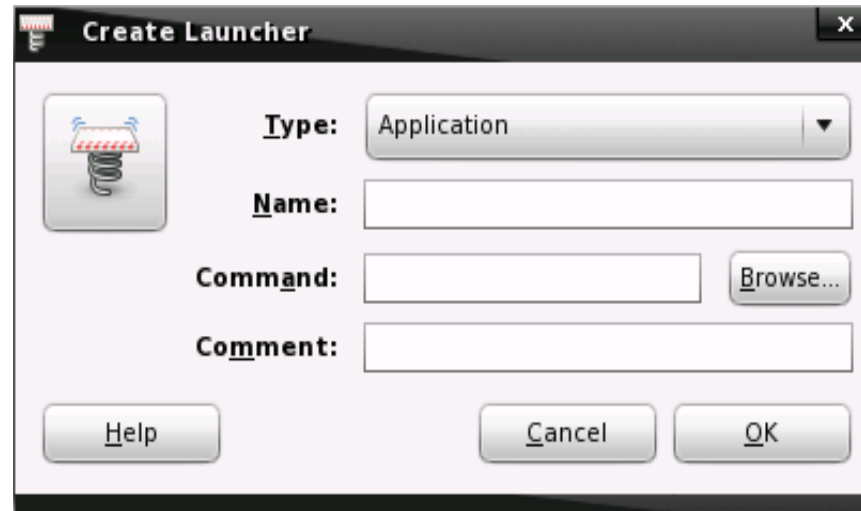


From the Background properties tab, you can change the background of the panel to match the current theme, to a solid color, or match your Desktop background.

Launchers

Launchers allow the user a quick way to access specific resources on the system. For example, if a user often needs to access a specific file in one of the folders, he/she can create a launcher to run an application to open the file and this launcher can be placed on the Desktop. In this way the resource (the file) can be accessed very quickly by just double-clicking on it.

To create a launcher on the Desktop, right-click on an empty area on the Desktop and select the item "Create New." From the sub-menu, select "Link to Application". Enter the Name and the Command to run (in the box seen below) and if you want, you can select an icon for it by clicking on the icon button.



You can find most of the commands you need by clicking on the "Browse..." button, use the "up" arrow to move up in the file structure to "/" and double-click on "/usr." Once that window opens you can double-click on either "/bin" or "/share" and choose the necessary command in most cases.

Exercises

The Gimp image manipulation program is a popular application for Linux systems. Locate the Gimp application in the Applications Menu and place it on the Panel as well as the Desktop. Launch the Gimp application from:



the Desktop
the Applications
Menu the Panel

Configure the Panel so that it has the following properties:

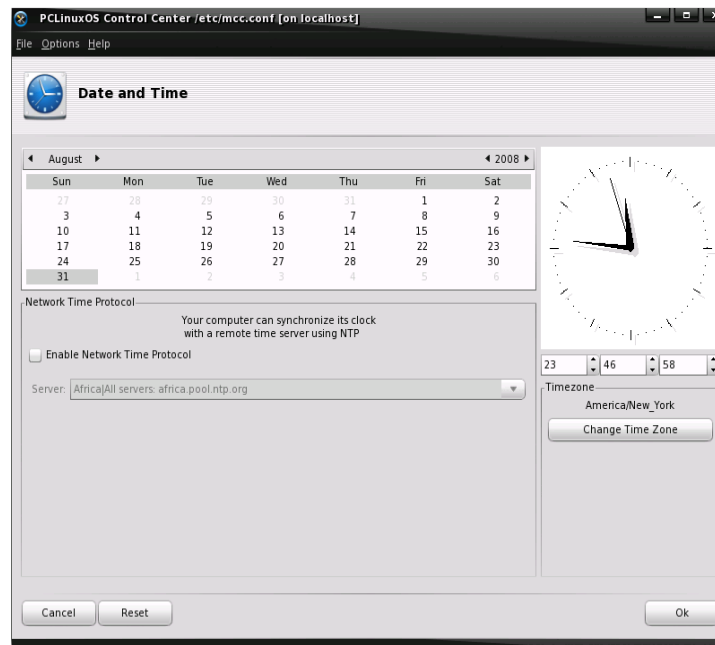
a background color of solid blue
contains the Battery Charge Monitor and Force Quit (locked) applets

Create a launcher to run the text editor command "GEdit" on the Desktop. Use an appropriate icon for the text editor.

Setting the Date and Time

It is important that the date and time are set correctly in your system. This will make it easier to manage the system resources and files, and also aid in troubleshooting any problems. To set the date and time, run the Date & Time application tool from the PCLinuxOS Control Center:

System --> Administration --> Configure Your Computer --> System --> Adjust the date and the time



A dialog box asking for the root password will appear if you are not logged in as root. This is because the system date and time are important system parameters and so only the system administrator, or root, is allowed to change it. After entering the correct root password, you can change the date using the displayed calendar, and the time in the boxes provided. Select the Time Zone tab and check to see that the timezone selected is correct. If not, correct it by selecting the appropriate timezone region.

Click on the OK button after all is done to enable the new date and time. You can check for the new date and time by looking at the clock (time) applet display on the Panel at the top of the screen. If the time is correct, click on the OK button.

So ends another chapter on learning and using our Gnome desktop. I will bring you some more interesting information next month as we continue on this journey. See you then!

TESTIMONIALS



I have used MS Windows for 13+ years.

That's right, Windows 95 came out in 1995, of course, and I was using Windows way before Windows 95.

I spent \$1800.00 and built the computer of my dreams. I loved it. Man, it ran great. But alas, they broke into my house, and when I walked in after work, the first thing I noticed was that my computer was gone. Yup, they stole it, my beautiful piece of machinery. I've been online for 13 plus years, and I don't seem to function right without a computer and the internet. So, I bought a Dell Optiplex GX110 at a yard sale for 20 dollars. This thing sucks, 384M of ram, and the on-board video was SOOOO weak, I installed the only thing I knew to install, Windows XP. My poor, timid, 8Gb hard drive was half gone after an install, needless to say it ran like tee total crap. Yeah, it was fairly stable, as

stable as it has always been, but just booting my computer consisted of hitting the power button, and keeping busy for 6-7 minutes. I couldn't take it any more; I needed a solution. I spent more time waiting for my PC to do something than actually using it. I erased XP and installed, per the 'designed for' sticker on the front of my new PC, Windows 98, only to find out that every 3 out of 4 programs that I was used to running, didn't work, didn't offer an alternative and, above all else, did not have a half decent replacement. If you can install 98, then try to get a firewall, antivirus, and spyware remover, and succeed, you are indeed a tech genius. I could not even find adequate programs to ensure a secure system.

Again, I needed a solution.

My old machine couldn't compete with today's software, so I searched.

I don't remember my exact words when doing a search that brought me to an article about PCLinuxOS. Sure, I had heard of Linux before, but many brief experiences with it proved much too complicated for me. However, there was something about the screenshots and the articles I read that for whatever reason, for the first time in my life, I downloaded a version of Linux.

I have used MS Windows for 13+ years.

WOW

I really mean it, WOW

I downloaded, burned and installed PCLinuxOS effortlessly, and I have used it for over three weeks. I switched 2007 to MiniMe 8 days ago, and I can not express the ease of installation, use, configuration and sheer



enjoyment that I have felt since discovering what many in this world have known for many years..... Linux really is a good operating system, and PCLinuxOS is, among what I have learned, one of many "types" of Linux. It is one "kick butt" OS! I have been misled for many years; there are not also other operating systems, there are in fact, BETTER operating systems.

PC Linux OS 2008 "MiniMe" is the greatest thing I have ever installed on my computer. Although there are many types of Linux, I know that had I not tried 2007 first, I would never have stayed. I have a fully functional, highly capable, extremely smooth-running machine, that not only does everything I want it to do, it does it well, and super-fast. After the install of MiniMe, I am, for the first time ever, building my OS from the ground up, the way I WANT IT, not the way your company, ahem, MS, says it should be.

I haven't rebooted in days; my OS has NEVER crashed or froze; the configuration and customization is utterly endless.

What can I say except YOU GUYS ROCK!

I am on websites learning how to use consoles, learn Linux commands and understand the file structure. I am convinced, I am not erasing my MiniMe. I'm converted, I'm here to stay,

As a final note, on this extremely long-winded testimony, I needed space in my CD holder to hold my 2007 Full and 2008 MiniMe CD's..... so I threw away my burned copy of Microsoft Windows XP Professional!





VirtualBox Easier Than You Think!

By Paul Arnote

I had been looking at VirtualBox (in the PCLinuxOS repositories) with great interest for quite a while. However, I was somewhat intimidated about giving it a try, due to all the reports from folks in the forums who reported some difficulties in getting it properly set up, coupled with how difficult the directions seemed. Boy, was I wrong on both accounts!

I run one of my many laptops as a dual boot system, dual-booting PCLinuxOS and Windows XP. Yet, the longer I use PCLinuxOS, I find myself logging in to Windows XP less and less frequently. Currently, I only log into Windows XP to 1) do the required periodic updates, and 2) to do some occasional photo editing. (I'm not fully comfortable with

GIMP or any other Linux graphics editing package ... but I'm working on it!)

So I finally decided to "take the dive" and give VirtualBox a try. The following is a step-by-step method of how I was able to get VirtualBox up and running with a full installation of Windows XP. This should work relatively well with Windows 98, Windows ME, Windows 2000, or possibly even Vista.

STEP ONE:

You will need the following items:

A Windows XP installation CD (or other version of Windows; this guide is centered around Windows XP, but should be similar to other Windows versions.)

The nLite application from the Web (freeware download)

Windows XP SP3 (if using Windows XP and a free download from the Windows web site. Download and save to your computer. Look for the file for IT/Network Professionals.)

A blank CD-R (or DVD-R) and CD-Burning software (K3B works well) [Optional]

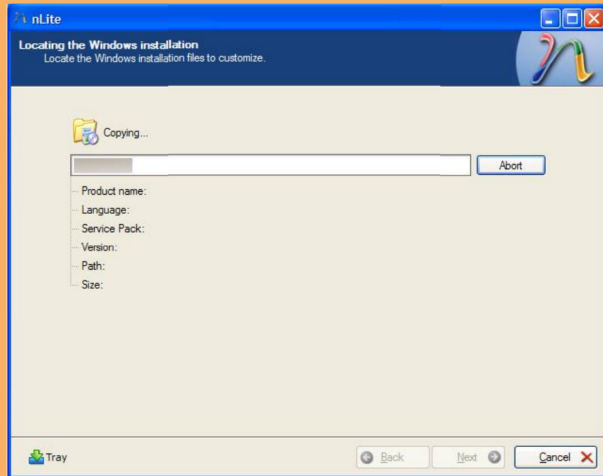
STEP TWO:

From within Windows XP, install nLite.



STEP THREE:

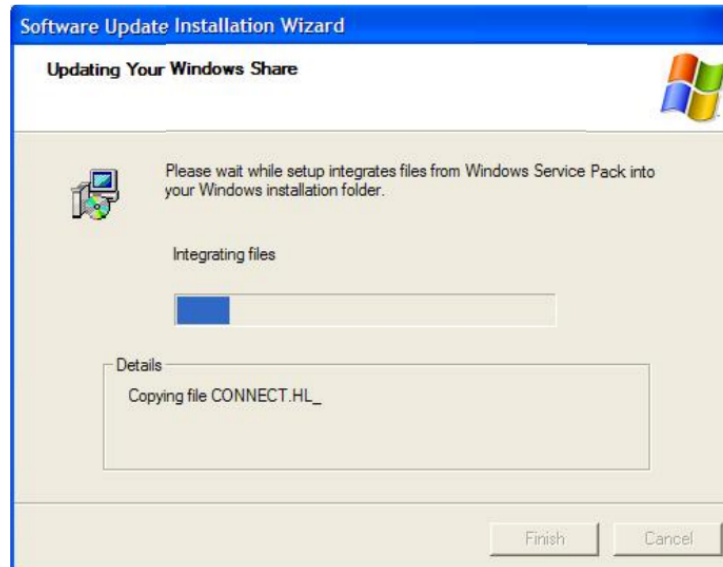
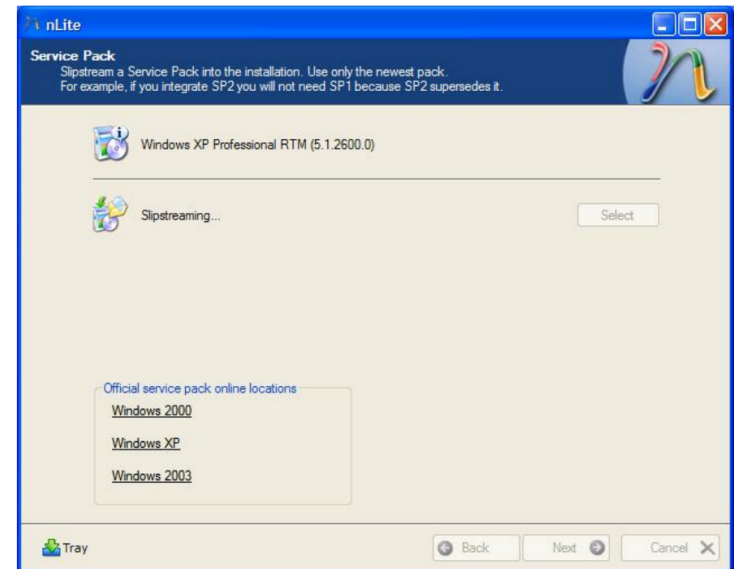
Insert your Windows XP installation disk. Allow nLite to copy the CD contents to your hard drive. You will also need your Windows XP Product Key later on, so be sure to have that handy.



STEP FOUR:

Select ALL the options, including "Slipstreaming" your Windows XP installation to include the Windows XP Service Pack 3 update in your nLite

install disk. "Slipstreaming" the latest service pack into your installation will prevent you from having to spend your time downloading it again, and you will create an installation disk with the latest version of Windows on it. Also, you will only need the latest service pack (SP3), since it contains all the updates that were included in the previous service packs.



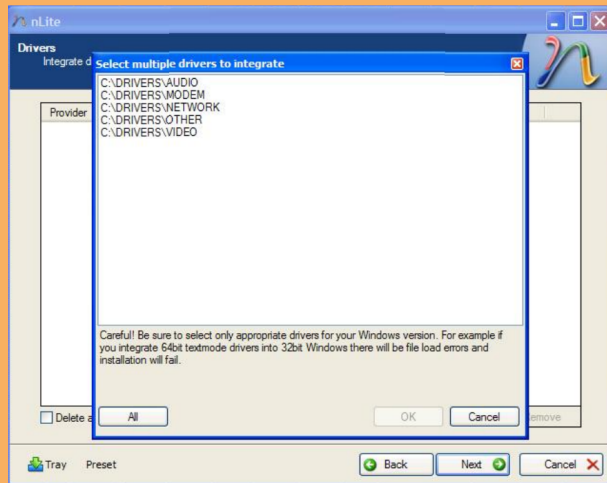
STEP FIVE:

Now, sit back and wait while nLite performs the slipstreaming procedure, and while Windows updates your "Windows Share," integrating the SP3 update into your Windows installation folder.



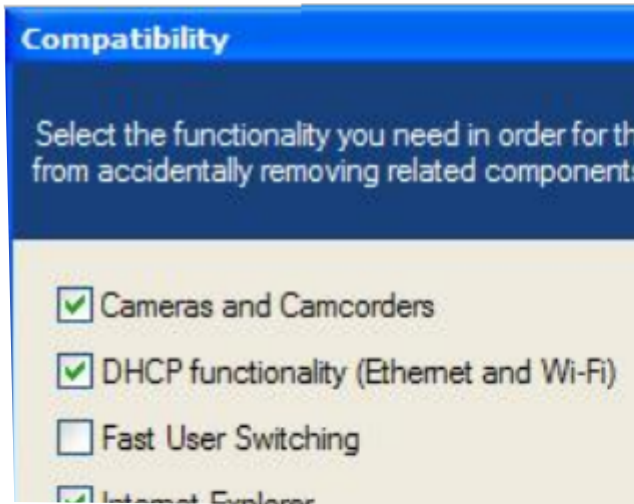
STEP SIX:

Unless you have them downloaded as EXE files, you can skip by the next step of including Hotfixes, Add-ons, and Update Packs by hitting NEXT.



STEP SEVEN:

Locate your drivers and add them from your Windows installation. Usually, selecting Multiple Driver folder will load all your drivers in. Select ALL, then OK, then NEXT.

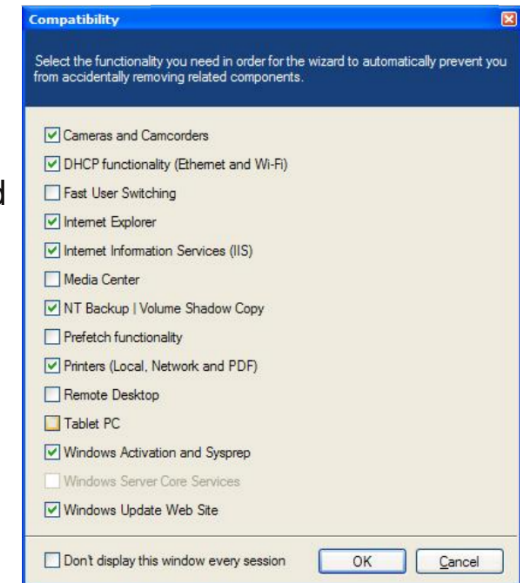


STEP EIGHT:

In the Compatibility dialog, select the components you want to prevent being removed accidentally.

STEP NINE:

Select components to remove but DO NOT include your new Windows installation CD. You can be somewhat ruthless here. For me, this

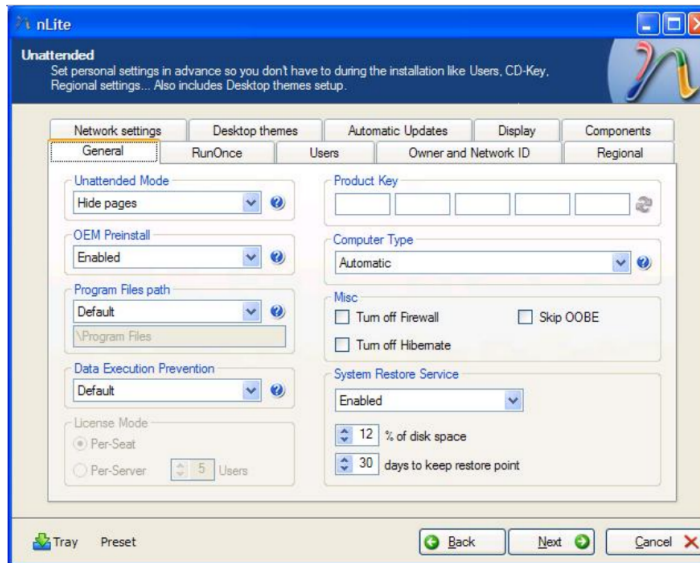




was rather easy. Things I never use, such as Bluetooth connectivity, and WordPad, I chose to leave out. You may also want to leave out the games and any other programs that you don't routinely use while working in Windows. The more you leave out, the smaller your installation files will be, the faster Windows may run, and the less room it will take in your VirtualBox installation. Just be careful when it comes to system services, since exclusion of some items will break certain features of Windows XP. Fortunately, nLite is pretty good at letting you know which features may be broken should you choose to leave out or disable features. Just tread cautiously here, but be honest and ruthless.

STEP TEN:

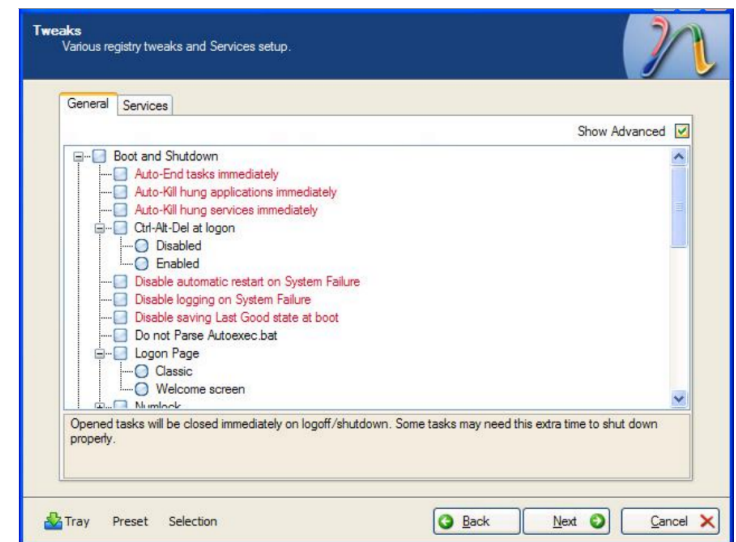
Set the Unattended Installation options. Here is where you will need your Windows XP CD Key, User



STEP ELEVEN:

Set Tweaks for your new Windows installation. Windows has all kinds of hidden tweaks and settings, and nLite allows you to make many of them so they are set up from the start. Some of the various "hidden" settings in Windows XP include Windows Explorer behavior, viewing of hidden or system files, viewing of file extensions, etc. Spend the time

names, passwords, etc. Be sure to check for options you want on ALL the tabs. Taking your time here will save you the hassle of having to enter all sorts of things during the Windows XP installation on your future virtual machine, and having to sit there and wait to be prompted to enter each and every little thing.

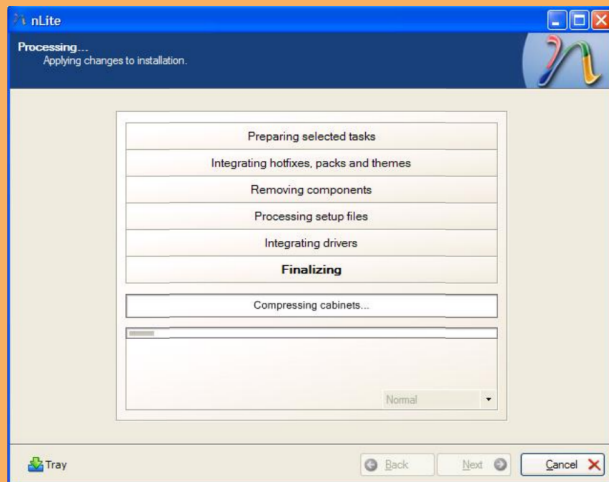




at this point to carefully select your options to minimize the "customization" you will have to do when you install Windows XP into VirtualBox. You can leave the items in the Services tab as they are (set to Default). Click on NEXT.

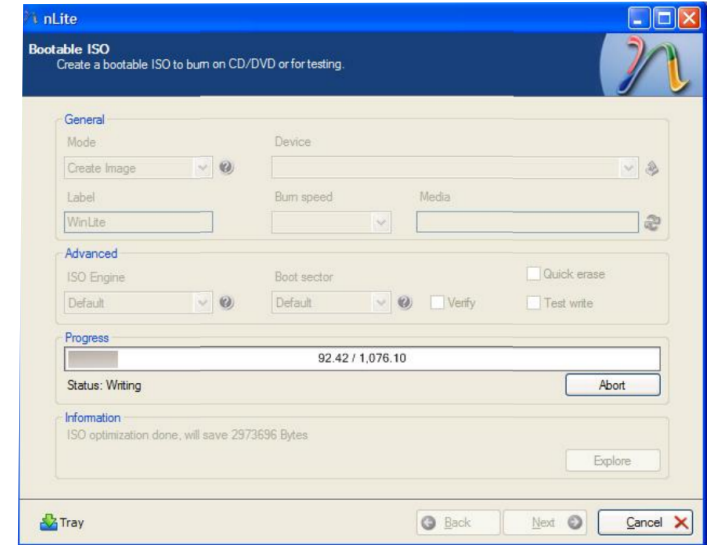
STEP TWELVE:

Now sit back and wait while nLite processes all the changes you have made to your Windows installation. Depending on the speed of your processor, this may take a little while.

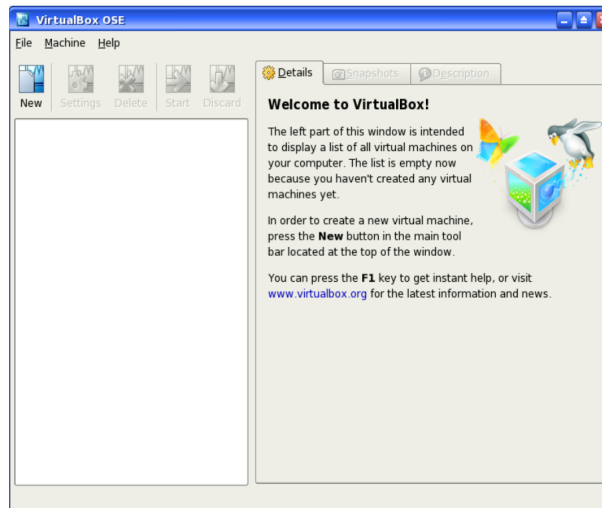


STEP THIRTEEN:

Now it's time to make the ISO file of your new Windows XP installation! You're almost there! This process, like the last one, may take a little while, so go grab a snack from the fridge or a glass of cold iced-tea.



STEP FOURTEEN (Optional):

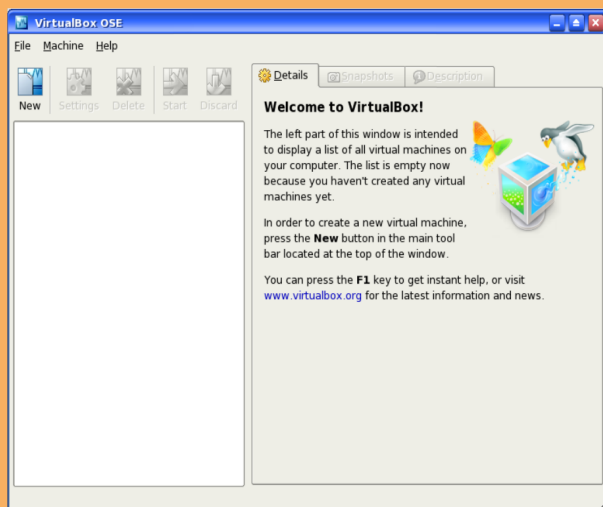


Reboot your computer into PCLinuxOS and burn a copy of your ISO to a CD (or DVD if your ISO file size exceeds the capacity of a CD-R). K3B works exceptionally well for this. This step is listed as optional, since VirtualBox can install directly from an ISO. However, I wanted to save a copy for future use, should I decide to repeat this at a later date, saving me from having to repeat the



process spent making the ISO file in nLite.

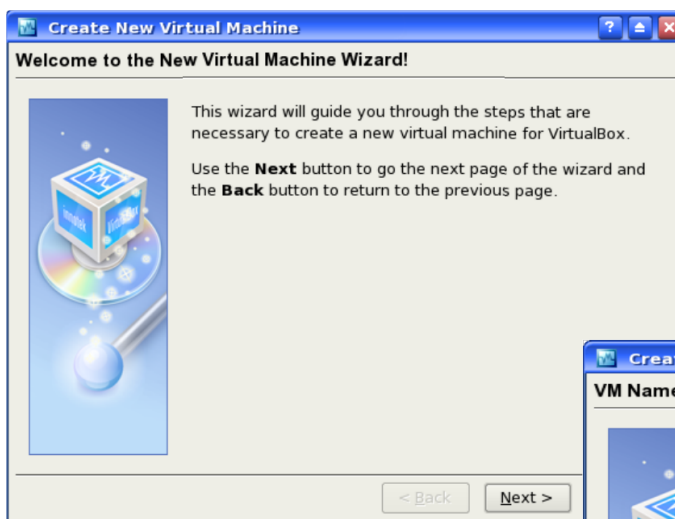
STEP FIFTEEN:



Install a copy of VirtualBox from the PCLinuxOS repositories. It is also a good idea, at this time, to go ahead and install the VirtualBox Guest Additions as well. Start VirtualBox and select a NEW virtual machine.



STEP SIXTEEN:



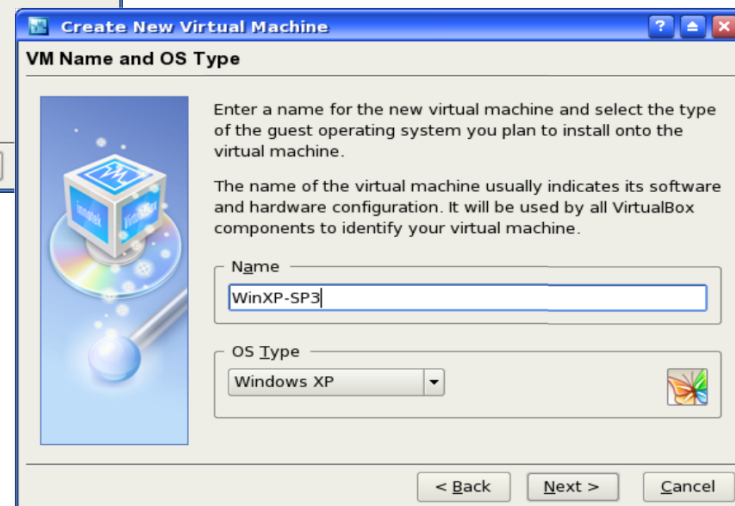
Now you are greeted with the VM Name and OS Type window. Give your guest OS a recognizable name, and specify the type of OS it is. In my case, I named it WinXP-SP3, and selected Windows XP as the OS type.

STEP EIGHTEEN:

Now you'll be asked how much of your computer memory you want to devote to running the guest OS. In my case, I chose only 192 MB. Windows XP will run OK

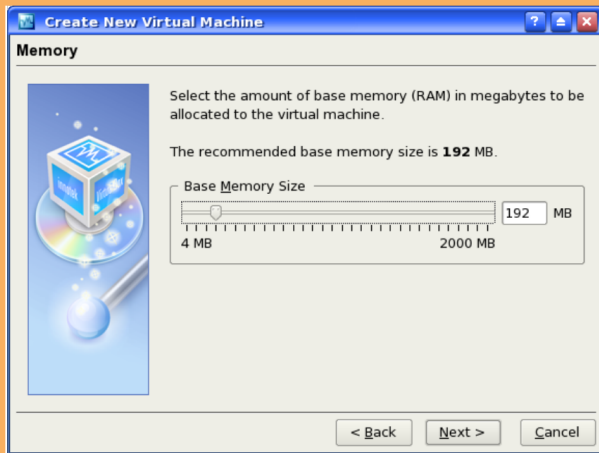
When you select a NEW virtual machine, you will be greeted with the "Welcome to the New Virtual Machine Wizard" window. Click on NEXT.

STEP SEVENTEEN:





with even less. One reason I chose only 192 MB (besides it being what was recommended by VirtualBox), is that this particular computer only has 512 MB of total memory installed. My other laptop, which also has a copy of Windows XP running in VirtualBox, has 512 MB of memory assigned to running the guest OS, since that computer has 1 GB of memory installed.



STEP NINETEEN:

Now is where you specify how much of your hard drive you want to assign



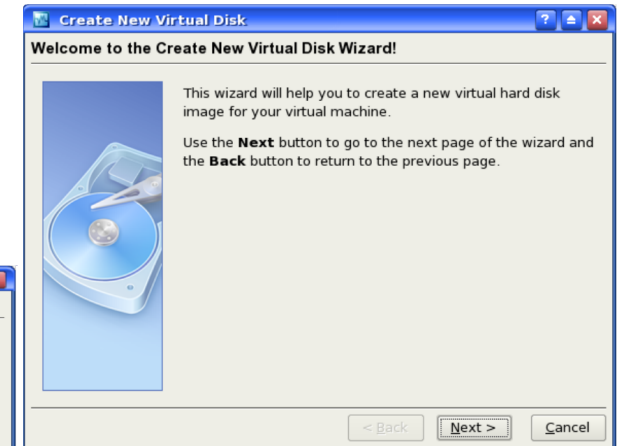
Selecting the “Dynamically Expanding Image” ensures that the virtual machine will only use as much hard drive space as



the guest OS in your virtual machine. Since you have not yet created any virtual machines, you will not have any virtual hard drives set up. So you need to select NEW at the bottom of the window.

STEP TWENTY:

This will bring up the Create Virtual Disk Wizard. First, click on Next, then select Dynamically Expanding Image.

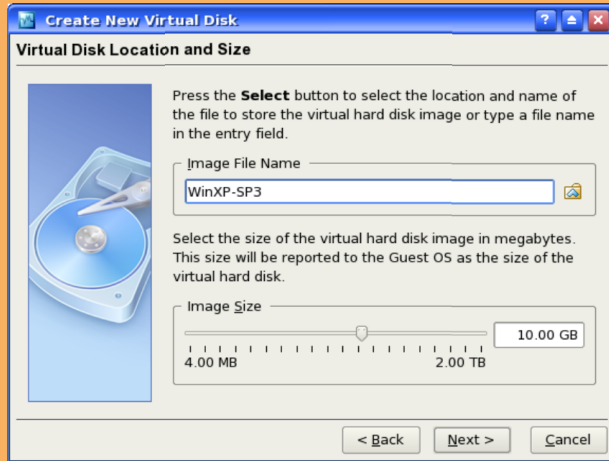


is necessary, and will allow it to “grow” up to the specified size on an “as-needed” basis.



STEP TWENTY-ONE:

Now you need to set the size of the virtual hard drive you want to allocate to the guest OS. I chose only 10 GB, the minimum recommended size, since I rarely have a need to use Windows these days and prefer to stick with PCLinuxOS for most of my computing needs.



STEP TWENTY-TWO:

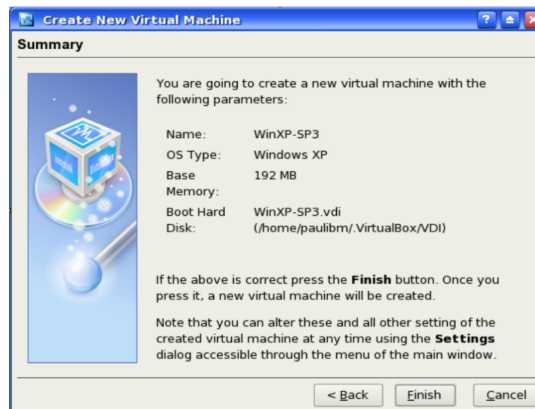
You will now see a summary of the previous few steps to set up the Virtual

Hard Drive. Click on NEXT.



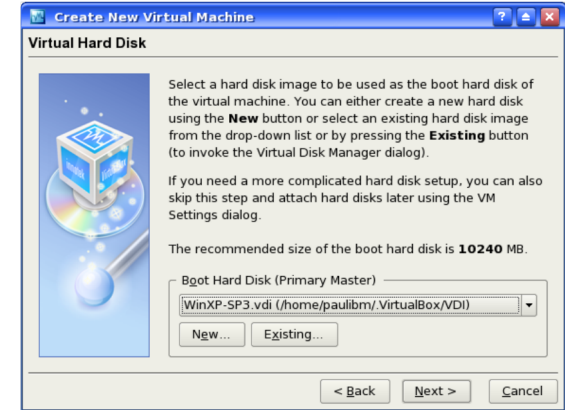
STEP TWENTY-FOUR:

Now you will see the Virtual Machine



STEP TWENTY-THREE:

You are now returned to the Virtual Hard Disk window. Select the new virtual hard disk you just created, and click on NEXT.



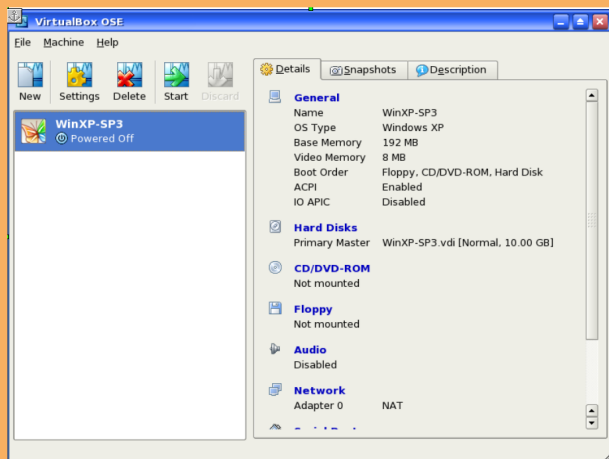
Summary. Select the FINISH button to proceed.





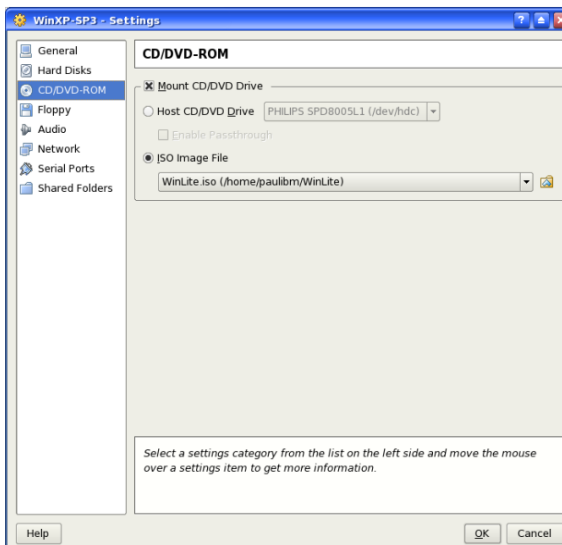
STEP TWENTY-FIVE:

Once that is all done, your new virtual machine will be listed in the VirtualBox OSE main window.



STEP TWENTY-SIX:

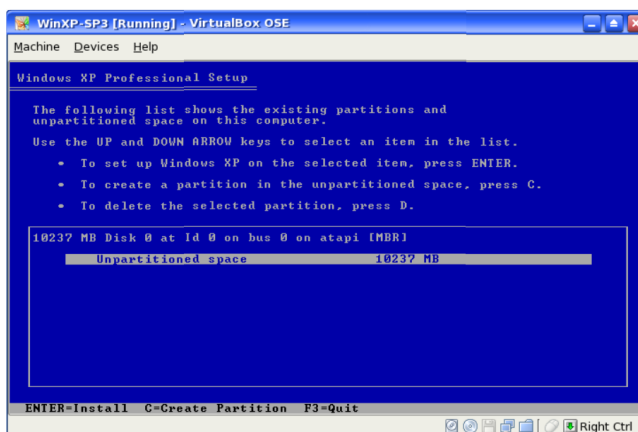
Now it's time to install your guest OS (in this case, Windows XP) into your newly created virtual machine. To start, you will need to tell VirtualBox where to find the guest OS. Click



on CD/DVD-ROM and you can tell VirtualBox to either boot from the ISO file you created with nLite, or from the CD/DVD you burned from your ISO file. In my case, I chose to simply boot from the ISO file, and pointed VirtualBox to its location.

At this point you might want to make any other changes in the different categories listed on the left. This includes enabling audio in your guest OS by setting it to be parsed by the Linux ALSA driver.

STEP TWENTY-SEVEN:



Now it's time to start your new virtual machine. When you do, the ISO (or CD/DVD) will boot and your guest OS will be installed. It's time to take another short break while Windows XP installs. Typically, this takes about 40 minutes or so.

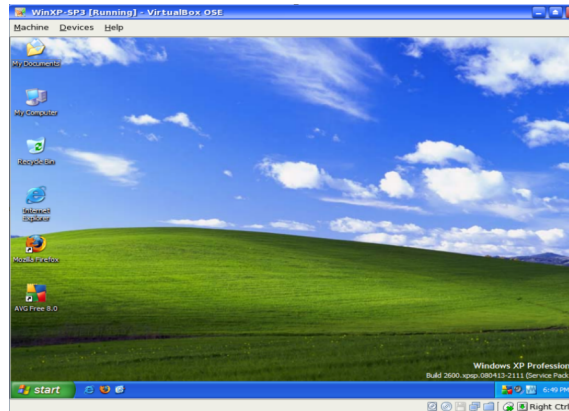


STEP TWENTY-EIGHT:

When Windows XP has finished installing, you will have a fully capable installation of Windows XP running in a window on PCLinuxOS! However, you are NOT finished yet. At the top of the Windows XP window, you need to click on the “Devices” menu and select “Install Guest Additions.”



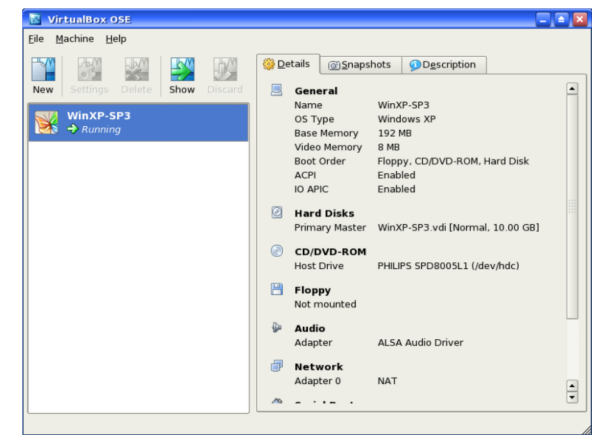
STEP TWENTY-NINE:



You need to now close your Windows XP window, and return to the VirtualBox OSE main window. We need to change the CD/DVD-ROM from the ISO file to the computer's built-in CD/DVD drive. To do this, simply click on CD/DVD-ROM and make the change in the settings window. Note that this is ONLY possible when the virtual machine is NOT running, and the heading is BLUE in color.

STEP THIRTY:

This might also be a good time to (optionally) set up any folders on your host computer that you want to share with the guest OS. Doing so, will give your guest OS access to files on the host computer. In the “Details” tab of the VirtualBox OSE window, scroll down to “Shared Folders” and add the folders you would like to have access to while working in your guest OS in a virtual machine.





STEP THIRTY-ONE:

You will be faced with a few additional updates to your Windows XP installation. Now is as good of a time as any to go ahead and allow them to complete. Windows XP will use the PCLinuxOS wireless or ethernet connection to connect to the Internet to complete this task.

SUMMARY:

Now you are running Windows XP in a virtual machine in PCLinuxOS! Imagine ... Windows XP in a PCLinuxOS window! From within your VirtualBox installation of Windows XP, you can install any programs you want to have available from within Windows XP.

I have to say, Windows XP literally FLIES inside VirtualBox! My previous installation of Windows never ran so good when it was natively installed on

my hard drive. My Windows XP startup, which typically used to take from 1 minute, 30 seconds to a full two minutes, now takes LESS than 45 seconds to boot. And it's very fast and responsive, almost as if it were created especially for VirtualBox.

Another nice attraction is that I can choose to run Windows XP within a virtual machine window on top of PCLinuxOS, or I can choose to run Windows XP full screen by pressing the Right CTRL key in combination with the 'F' key. A simple toggle of that key combination allows me to switch back and forth, at will, between a full screen display and a windowed display of Windows XP.

Had I known it was this easy to set up VirtualBox, I'd have done it a LONG time ago! Now, with the success I've had in setting up Windows XP running in VirtualBox, I'm very seriously considering the removal of my Windows XP partition from my hard drive and reclaiming it's use for PCLinuxOS! Who couldn't use another 50 GB of hard drive space (the amount I have reserved for Windows XP in my dual boot configuration)!

I have done this on two of my laptops running PCLinuxOS! It's literally THAT easy to do! So if you've ever thought about running or using VirtualBox, don't shy away! Plus, the added benefit (providing you have the hard drive space to allow it), you can also run or try out other Linux distro's in VirtualBox, running straight from the downloaded LiveCD ISO files!



If you would like some more information, you can check out the following internet links:

VirtualBox:

<http://www.virtualbox.org>

LifeHacker:

<http://lifelifehacker.com/386526/slipstream-service-pack-3-into-your-windows-xp-installation-cd>

The VirtualBox links will give you access to the documentation files for VirtualBox. The LifeHacker link will give you some good information on using nLite to create your “slipstreamed” Windows XP installation disk.





Gary L. Ratliff Sr.
<eronstuc@gmail.com>

An Alphabet of Computer Languages: BASIC

When people first purchased their new computers in the early years of personal computers, one of the things they could be most sure of was that the computer would come with the Basic language installed. The Commodore PET came with a version from Microsoft as did the Apple and the TRS 80. However, each computer sported a slightly different version of the language. There were so many dialects of Basic that soon David A. Lien wrote A Handbook of Basic which defined all the keywords for the many dialects.

The repositories for PCLINUXOS have three separate versions of Basic which this article will discuss: REALbasic, Basic256, and Gambas. Each of these

may be obtained by using the Synaptic Package Manager. One opens the program and locates these items by doing a search for “basic.” The list is so long because any package which has “basic” in its description will be included in the search results.

REALbasic

The use of this language was the subject of my article in the February 2008 issue of this magazine. You may find the article from this link:

<http://pclosmag.com/html/Issues/200802/page05.html>

I mentioned that the language is being actively developed and that there is a new release every three months. For this reason, one may wish to obtain the language from the Real Software site itself. The instructions for obtaining, installing and using the product are in the article and will not be repeated. This is a wonderful product and it seems to be free for the Linux community. The programs developed for my Windows system only worked for a period of 30 days. However, the programs developed for the Linux system are still functional. Also, there is video support for speeding your learning process with this system.

BASIC256

This program was originally named Kidbasic and was inspired after the creator read the article “Why Johnny can't code.” This article remarks that while the older



generation grew up with a computer which came with Basic installed, this is not currently true. This language was developed so that one may teach children how to program using a simple line-oriented language.

To install it to your system just open the Synaptic Package Manager and give the root password. Search for "Basic" as previously mentioned. Find the file named basic256 from the list offered and mark it for installation. Note that this will also install several other programs which the system depends upon to function. Your results will most likely vary but my system installed a total of 11 packages to get a working basic256 system.

To open your new system, go to the menu and select: More Applications -> Development ->Development Environments -> BASIC256. You will be presented with a new program IDE. In the text window you will type in the

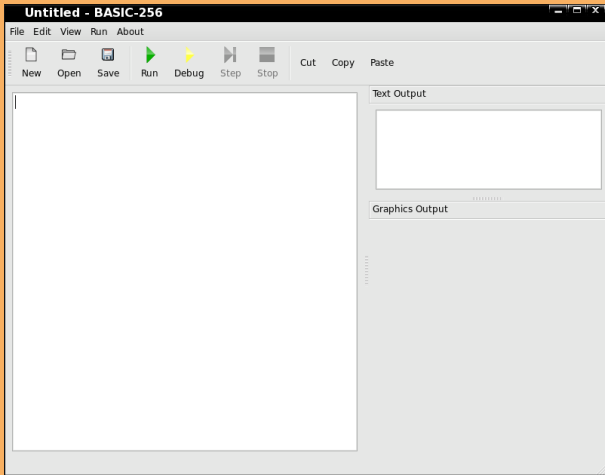
familiar Basic commands and when the Run command is clicked your program will execute in either the text or graphics display area. If instead of clicking the run command you select debug, then an item allowing you to step through the program one line at a time will be offered.

Once you have the system installed, you are ready to learn to use your new system. By clicking the About menu item you will learn that you may find tutorials and documentation for the system at:

<http://kidbasic.sourceforge.net/>

The website will contain menus for the tutorials, the documentation, and an article which shows how the Basic computer language is still useful for teaching new computer users, specifically children, about the functions of a computer. In the documentation section you will receive a list of the correct syntax for using all the commands of the language. As this material is only seven printed pages it might be best to just make a printed handbook of this information. That way it is available for use as you begin to create example programs to run.

You will notice that this system is free under the GPL. It is also available in a version for Windows. This comes as a zipped file and should be extracted to its own directory. Then one gets it to run issuing a basic256.exe command.



Here is the development screen for BASIC256. The text of the Basic program is entered into the Window. Any text output will appear in the Text Window, while commands which produce graphical output will appear in the Graphics Window.

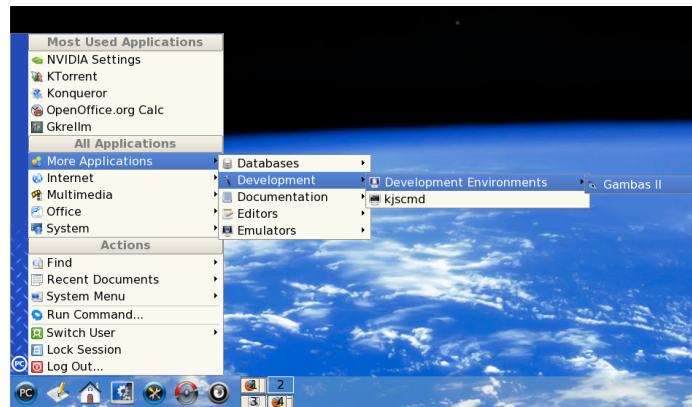
The Run arrow will run the entire program. The Debug item will allow the program to be run one step at a time.

GAMBAS (Gambas Almost Means Basic)

The repositories for PCLINUXOS have two separate sets of Gambas programs. There is a set for the first version of Gambas and another set for Gambas2. I installed the Gambas2 set on one of my computers, Eronstuc, and the original version of Gambas was installed on another machine, Gabriel. Because either version has a tremendous set of dependencies which must be satisfied, use the Synaptic Package Manager for your install of either system.

Once you call upon the package manager you will be asked for the root password. Now do a search for "Gambas." You will note that a tremendous number of applications will appear. These will be divided into camps; one will start Gambas,

and the other Gambas2. As either system supports several features, select all items from either set. This will involve about fifteen to twenty of the Gambas or Gambas2 items being selected. Then select Apply and let the system install the



Gambas items.

For an introduction to some of the abilities of the system you will need to launch your new system. To do this go to the main menu and select: More Applications -> Development -> Development Environments -> Gambas or Gambas II. You will be presented with the opening screen for the particular





version you have installed.

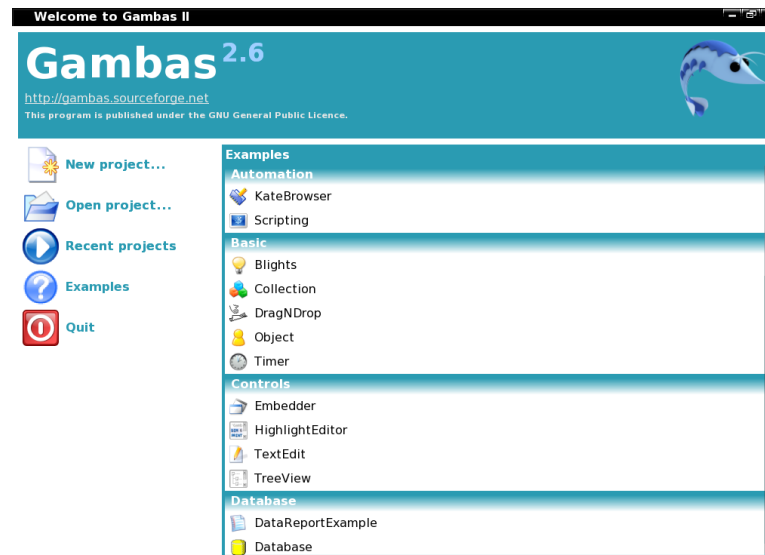
By exploring the recent projects area you will be able to launch several example applications to watch the Gambas system running. Each of these applications will be read only so that they may not be altered. Here pay attention to the fact that each will have several classes and other structures which will make up the system.

To learn how to use this system, run a search for “Gambas” in Google. You may wish to learn the many features offered by the system from the wiki articles on the language. However, the best source for learning to use this system is the pdf file: A Beginners Guide to Gambas. This is a 365 page book which will guide you step by step through the process of learning how to program using the Gambas language. The examples should be followed in order as the material builds systematically on what has been learned before.

I am making a video which will be available in the “videos by eronstuc” area of YouTube. This will be called “Gambas Setup”. At the moment people are being rushed out of their homes and apartments to avoid being in the path of Gustav, so this article is being cut short. There is much to learn and once you master the material you will have a very powerful tool for developing either GUI or text applications. Also, if you used one of the early computers of the 80's you will most likely recognize the true BASIC heritage of the Gambas system.

This shows the path through the main menu to launch your Gambas application.

Here we see some of the many Example applications which may be launched to



show just some of the power of the Gambas system. This is the set from the second version of Gambas.

Again the very best source for learning to use this system is the book:

Gambas for Beginners.

Editor's Note – This was inadvertently left out last month I apologize for any inconvenience it may have caused.



Published by

the United Nations Development
Programme's

Asia-Pacific Development Information
Programme (UNDP-APDIP)

Kuala Lumpur, Malaysia

Web: <http://www.apdip.net/> Email:
info@apdip.net

© UNDP-APDIP 2004

The material in this guide may be reproduced, republished and incorporated into further works provided acknowledgment is given to UNDP-APDIP.

This work is licensed under the Creative Commons Attribution License. To view a copy of this license, visit <http://creativecommons.org/licenses/by/2.0/> or send a letter to Creative

Commons, 559 Nathan Abbott Way, Stanford, California 94305, USA.

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

Chapter 7: Multimedia Graphics Access

Multimedia Access and Players

Apart from being able to view and create graphics and other images, the PC is capable of supporting a wide range of audio and video features and facilities. These include the playing of audio CDs, audio digital files, VCD and DVD as well as multimedia games.

Note:

While support may be available in the software, the necessary hardware has to be available before these multimedia facilities can be used, e.g. a DVD drive is required to be present on the system before you can play a DVD.

By default most modern PCs come with a CD-ROM drive capable of playing audio CDs and VCDs as well as a sound card and speakers. As such in this chapter we shall discuss how you can listen to an audio CD, play audio digital files and view VCDs.

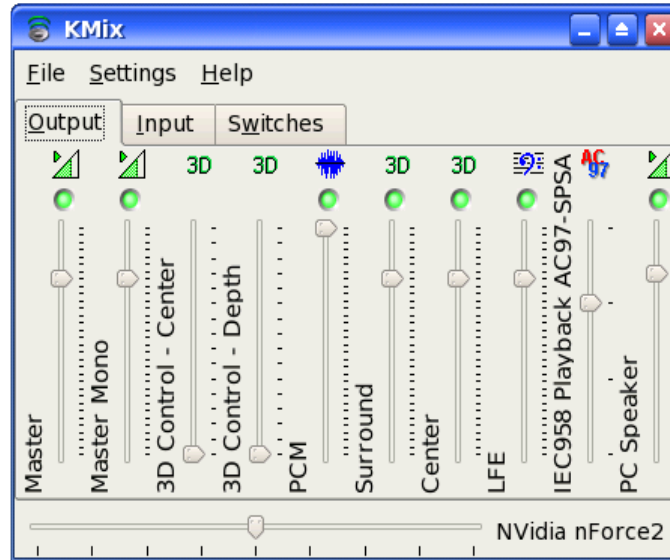


In the following sections we shall be discussing several media players. Some of these e.g. mplayer and xine are multimedia players in that they can be used as generic players for audio CD, digital audio files, VCD and DVD.

The Volume Control Applet

Since almost all the multimedia applications require some form of audio production and mixing, it is useful if we know how to control the various channels of audio available from the sound card using the Volume Control Applet on the Panel. This may be launched by right-clicking the Volume Control icon on the Panel and selecting Open Volume Control. If it is not there you can also launch it from the Main Menu:

Main Menu -> Multimedia -> KMix



KMix is essentially an audio mixer which enables you to mix the audio for a 2-channel sound card. Every mixer control that your sound card provides is represented by a volume slider. Mono controls always have a single slider while stereo controls can have either one or two sliders, depending on your settings. There is also a panning slider at the bottom of the window. If your system has more than one sound card, a list will be displayed at the top of the window.

The KMix window can have up to three different sections, Output, Input, and Switches. Each section will contain volume sliders, switches for enabling/disabling record or playback functions, and multiple choice selectors.

Output: This tab holds the controls that are most likely related to playback, like the Master volume control.

Input: This tab holds the controls that are most likely record related, like Capture.

Switches: These controls allow you to switch certain functions On and Off, like External Amplifier.



KMix also features LEDs. The general coloring rule is as follows:

Green: An LED dealing with playback

Red: An LED dealing with recording

Yellow: An LED dealing with special sound card capabilities

A lit LED means On, a non-lit LED means OFF.

In most situations the volume can be adjusted by clicking on the Volume Control applet on the Panel and raising or lowering the slider accordingly.

Playing Audio CDs

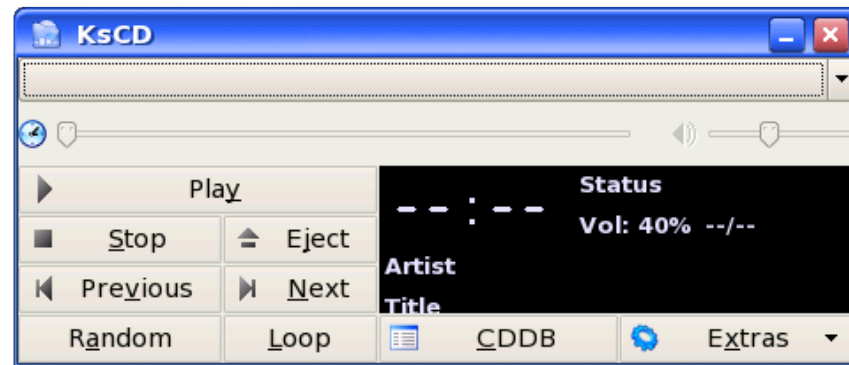
You can play an audio CD by placing the CD into the CD-ROM drive. The CD player application (KsCD) will be run automatically to play the CD.

Ensure that your speakers are turned on so that you can hear the CD! You

can also manually start the CD Player application from the Main Menu:

Main Menu -> Multimedia -> Sound -> KsCD

You can control the CD Player just like a normal CD player with the buttons shown



on the CD Player screen. These include volume control, track forward/backward, play/pause, stop, eject as well as jumping to any track on the CD directly.

Playing Digital Audio Files

PCLinuxOS gives us Amarok which is arguably the most complete music manager available today. Amarok serves many functions rather than just playing music files. For example, Amarok can be used to organize a library of music into folders according to genre, artist, and album, can edit tags attached to most music formats, associate album art, attach lyrics, and automatically "score" music as you play it.



Amarok plays media files in various formats including but not limited to (depending on the setup), Flac, Ogg, Mp3, AAC, WAV, WMV, and Musepack.

Note: Amarok will not play digital music files protected by DRM, such as those purchased from the iTunes Music Store.

It also can Sync, retrieve, play, and upload music to digital music players, such as Ipods or Creative Zens.

Note: To work with Creative Zens or other MTP devices, libmtp0 will need to be installed from the repositories.

One last notable feature is Last.fm support, including submitting played tracks (including those played on some digital music players) to Last.fm, retrieving similar artists, and playing Last.fm streams.

You can find Amarok by going to:

Main Menu -> Multimedia -> Sound -> Amarok

Another excellent player that in the repositories and can be easily installed is XMMS. The XMMS (X Multimedia System) application can be utilized to play a wide variety of digital audio file formats. These include the popular MP3 as well as the open Ogg Vorbis formats. To launch XMMS, (after it is installed) select:

Main Menu -> Multimedia -> Sound -> XMMS



Note:

XMMS may need additional plug-ins to be able to play some of the audio file formats. If these are not already installed on your system they can be installed from the repositories using Synaptic.



You can control the XMMS player using the graphical knobs and buttons displayed. In addition, you can select the source of the audio files to play. To do this, right-click on the XMMS player and from the pop-up menu select "Play File" to select the audio file to play. If you want to be able to play an audio file from the Internet select "Play Location" and enter the Internet location of the file.

Playing VCD and DVD

There are several excellent applications readily available for you to use to play VCD and DVD media. Here we shall look at two of them: Kaffeine and Mplayer. These can also play CD and digital audio music files.

Kaffeine

The Kaffeine application may be used to play VCD and DVD. You can start

Kaffeine from the Main Menu:

Main Menu --> Multimedia --> Video -> Kaffeine

The Kaffeine user interface is highly intuitive as it resembles a normal VCD/DVD player with all the basic control knobs and buttons.



To play a VCD, place the VCD into the CD-ROM drive and click on the Play VCD button on the Kaffeine control panel.

To play a DVD, place the DVD into the DVD drive and your movie should start playing. If it does not then right click on the DVD icon on your desktop and choose "Play DVD with Kaffeine."

The volume control can be adjusted by clicking on the volume control button.

Kaffeine is a very powerful multimedia application with many features. It can also play audio CDs as well as digital audio files.



Note: to be able to play encrypted DVDs you will need to install libdvdcss and win32codecs from the repositories using Synaptic. You will need to check to see if the use of these libraries is legal as it is considered illegal to use this in certain parts of the world.

MPlayer

Mplayer is a popular movie player for Linux. In addition to being able to play VCD and DVD it is also able to handle a wide variety of audio and video file and streaming data formats. Hence it is useful to use Mplayer as the universal multimedia player. The Mplayer GUI can be started from the Main Menu,

Main Menu -> Multimedia -> Video ->MPlayer

On start up, the main Mplayer control screen and the Mplayer video output

screens are displayed.



The control screen enables you to control the operations of Mplayer while the video screen displays any video that is being played. In addition, right-clicking with the mouse when it is inside either the control or video screens will also bring up a menu for controlling the use of Mplayer.

The Mplayer control screen enables you to perform the following:

- start, stop and pause play
- go to the next and previous stream
- jump to the first and last tracks
- adjust the sound balance
- adjust the volume and mute



- select files to play
- set up a playlist
- set the video and audio equalizer
- configure preferences
- exit the Mplayer application

All of the above functions are represented by intuitive knob, dial, and button icons on the control screen making it very easy to use Mplayer.

To play a VCD, place the VCD in the CD-ROM drive, move the mouse over the control screen or video screen and right-click it. Select, VCD -> Open disk

To play a DVD, perform the above for VCD but instead select,

DVD -> Open disk

The size of the video screen can be controlled by right-clicking on the mouse and selecting normal size, double size or full screen. When you are in the full screen mode, to return to

normal size, right-click on the mouse and select normal size.

Exercises

Play an audio CD using the KsCD Player

Play an audio digital music using Amarok

Play a VCD or DVD using Kaffeine and MPlayer

Graphic Images Access

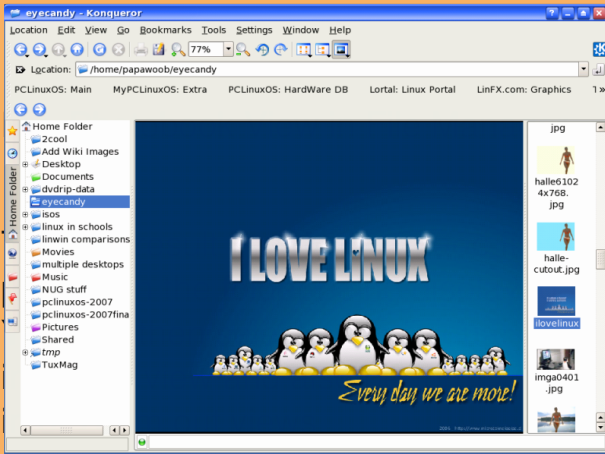
Very often it is useful if we are able to view graphic image files on their own, or in thumbnail fashion if there are many of them. It is also useful if there are simple tools available which will enable us to manage these image files, e.g. catalog and classify them and recall them for viewing. In this section, we shall look at several tools available on your system which provide some of these functionalities.

File Manager

The File Manager itself provides a simple and convenient means to access and view image files. To view an image file from the File Manager, move your mouse pointer over the file and a larger thumbnail picture will appear. To view the file full size double click on it. Another convenient way of viewing when you have a lot of files in a folder is to select the "View Mode > Photobook" option from the View menu



selection.



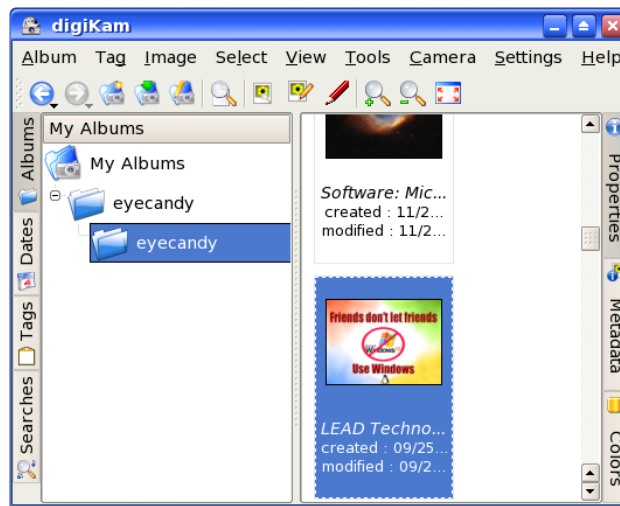
DigiKam Camera Access

Digikam is a simple digital photo management application, which makes importing and organizing digital photos a "snap". The photos can be organized in "albums" which are automatically sorted chronologically. An easy to use interface is provided to connect to your camera and preview images and download and/or delete them.

Digikam uses a folder on your file

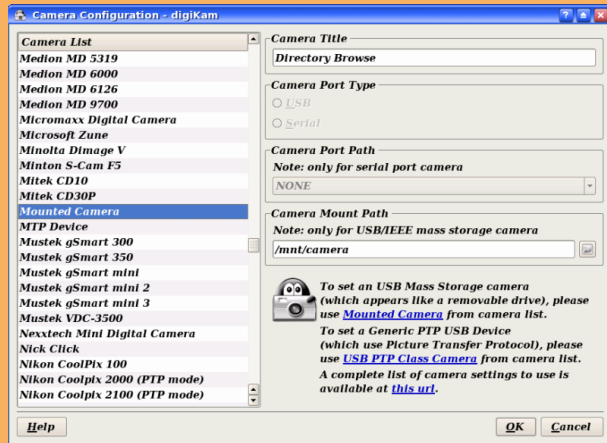
system as an album library, meaning that every sub folder of this folder will be considered as a photo album and displayed in the album list on the left side of the main window.

Clicking on an album will start showing the thumbnails for the images in the album. You can change the icon size to small, medium, large or huge from the magnify buttons in the toolbar. Right Clicking on an item will give you a pop up menu, using which you can view, rename, delete, see the exif information, and add/edit comments of the images. Double clicking on an item will open it up in the image viewer.



can auto-detect the camera; if not, you can set the camera model and port manually.

To be able to use your digital camera with DigiKam, connect the camera to your computer, switch the camera to the image display mode and turn it on. If your camera is detected as a mass storage device (ex. sda1) a "New Medium Found" window will be displayed on your desktop along with an icon. If this does not happen when you plug your camera in and turn it on then you will need to setup the camera model and port using the setup interface. Try and see if DigiKam



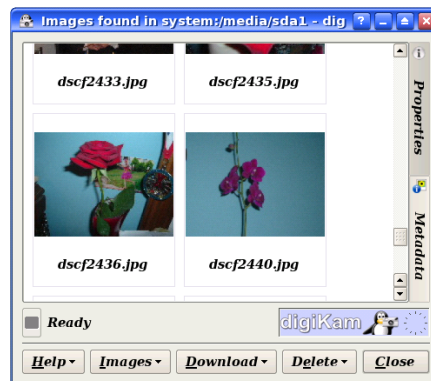
Once you have the camera setup, go to the "Cameras" menu in the main interface and you will see the camera listed in the menu (Note: You can choose any title you like for the camera in the setup and this title will be used in the "Cameras" menu). If you have more than one camera, you can add them throughout the setup interface.

Clicking on the camera item in the menu will pop up a new Camera Interface and this will connect to the camera, and thumbnails (if supported by the camera) will be downloaded

and displayed. You can then select the images and download or delete them from the camera. Downloading can be done by using the menu/toolbar buttons or by dragging and dropping them onto an album folder or any other folder that you choose.

Digital cameras nowadays store images on either a CompactFlash card, SD card, or SmartMedia card. The camera internally makes sub folders in these storage media which it uses to save the images. Digikam displays these internal folder trees and also provides a global virtual folder which shows all the images available in the camera.

When you open the camera interface for the first time the folders are hidden and the contents of the global virtual folder are shown (i.e. all the pictures in the camera). You can choose to see the actual folders on the camera by unselecting "Hide Folders" in the "View" menu. This will show the folders on the camera, the topmost folder being the global virtual folder. Clicking on a folder will show the contents of the folder in the thumbnailview.

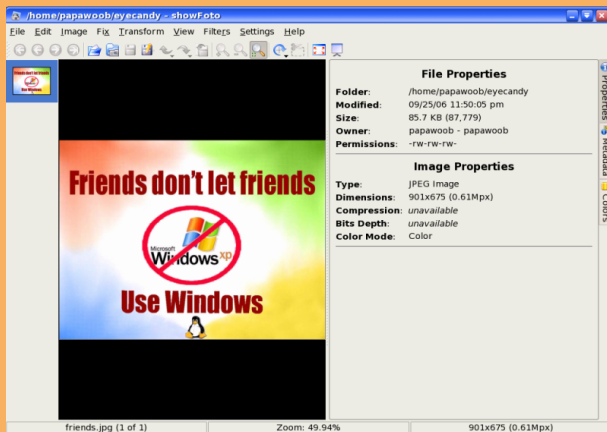




showFoto Image Viewer

The showFoto image viewer is a powerful tool for viewing, and organizing graphic image files. To start this application perform:

Main Menu -> Multimedia -> Graphics -> showFoto



View

The simplest way to view an image is to double-click on the name of the

image and it will be displayed in full. You can also navigate to the next/previous image as well as go to full-screen viewing. The Zoom function can be used to zoom in or out of the image currently being displayed. Click on the Folders button at the top of the screen to go back to the thumbnail view. A preview of the image will be displayed in the preview area if you just select the thumbnail.

One useful feature of showFoto is the slide show. After a folder has been opened (File > Open folder), selecting View > Slide Show will start a full screen slide show of the images in that folder.

Image Manipulation

You can also manipulate the images under showFoto. Some supported functions include rotation, flipping, resizing, and Blowup. To access these functions select "Transform" from the menu bar at the top. Additional tools for working on your graphics files can be found under the Fix menu.

Convert Format

The Save As function of showFoto allows you to convert your image files from one format to another. Some of the 14 supported formats are:

Portable Network Graphics (PNG)



Joint Photographic Experts Group
(JPEG, JPG)

Tag Image File Format (TIFF)

TARGA format (TGA)

To use the Convert function, select an image first and then from the top menu bar, select,

File -> Save As

and choose whichever format you would like to save to from the drop down list.

Help

showFoto has many other useful features. The online help guide should be consulted for more details on how to use showFoto.

[showFoto Handbook](#)

Exercises

Use showFoto for the following:

View the images in the following folder: `usr/share/backgrounds/images`

View a slide show of the images in the folder above.

Copy one of the images from the above folder into your home directory and scale it down to 25% of its original size and save it.





Part 4

Welcome to part 4 of our media player roundup. Today we'll be covering a couple of interesting players that most older Linux users may remember, and most new users may not even know exists. We will also be covering players that don't typically fit what would be considered the norm for a media player, but which could provide you with quite a wide range of possible applications for daily use. I once again want to thank everyone for their feedback. It's been educational to me (hey, even I don't know everything) and a number of the suggestions have been passed along in one form or another to you, the reader.

So, without further delay, let's dive in and see what up on our platter for today!

Mpg123

A screenshot of a terminal window titled 'raiden@localhost: /home/raiden/Music/edgan - Shell - Konsole'. The terminal shows the output of the 'ls' command, listing various mp3 files in the 'edgan' directory. Below the file list, the 'mpg123' command is executed, displaying the version information and the current playback status of a file.

```
raiden@localhost: /home/raiden/Music/edgan - Shell - Konsole
Session Edit View Bookmarks Settings Help

[raiden@localhost edgan]$ ls
Edgen_Animations-A_Better_Place.mp3*
Edgen_Animations-Art_of_the_Saber.mp3*
Edgen_Animations-Awakening.mp3*
Edgen_Animations-Dark_Armada_-_Hostile_Energy.mp3*
Edgen_Animations-Dark_Armada_-_Main_Theme.mp3*
Edgen_Animations-Fear_Upon_the_Captains_of_the_Knights_Unearthed.mp3*
Edgen_Animations-Fort_of_Flight.mp3*
Edgen_Animations-Kings_and_Kingdoms_-_Vengence.mp3*
Edgen_Animations-Rise_and_Fall_of_Middle_Earth.mp3*
Edgen_Animations-Sixteen.mp3*
edgen_crossing_time.mp3*
edgen_dark_armada_voyage.mp3*
edgen_halo_the_spartans.mp3*
edgen_kandk_knights2.mp3*
edgen_stone_of_horus.mp3*
[raiden@localhost edgan]$ mpg123 *
High Performance MPEG 1.0/2.0/2.5 Audio Player for Layers 1, 2 and 3
version 0.60; written and copyright by Michael Hipp and others
free software (LGPL/GPL) without any warranty but with best wishes

Playing MPEG stream 1 of 15: Edgen_Animations-A_Better_Place.mp3 ...
MPEG 1.0 layer III, 192 kbits/s, 44100 Hz stereo
```

Mpg123 is a console based player. It's really quite a simple player overall. Play list support is non-existent, as is any form of music management. But that's not a problem. That's because mpg123 is a console based music player. As such, you would create your own play list via a text file and then let mpg123 read from that instead. For those of you who like minimalist media players, this is it. It can't find directory trees full of music, but it can browse a single directory, and by using a

wildcard, can play all of the files in that directory for you. That might get a bit tedious, but that's also not a problem. While mpg123 was originally the second mp3 player ever created for Unix (MaPlay was the first), it's simple, yet efficient core decoding engine made it a huge hit amongst Unix users, and then Linux users later on.

As graphical media players came into existence and eventually widespread use, mpg123 took on a different role. It became the mp3 engine for a lot of popular graphical media players, most notably, XMMS and Winamp. As time went on, focus began to shift away from mpg123 to newer, more advanced mp3 decoder engines. During this time, mpg123 languished, with development being spotty and bugs left



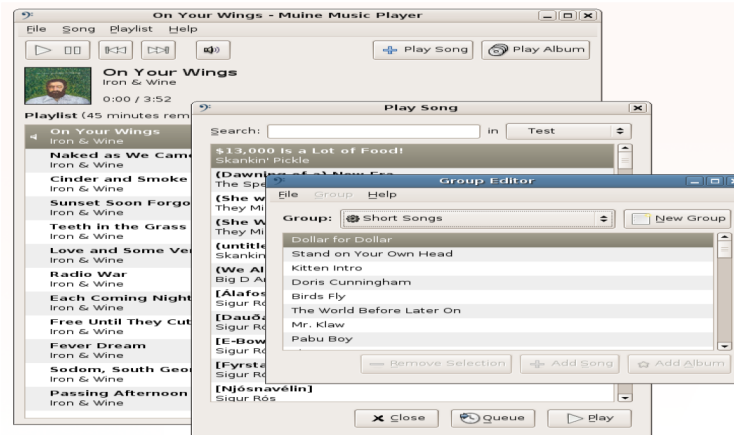
unfixed for long periods of time. Because of this and other issues, in 1999, Joe Drew created a fork of mpg123 named "Mpg321", which was destined to pick up where its parent left off and continue to develop this versatile media player.

Then in 2002, all development on both mpg123 and mpg321 stopped and the two players fell to the side as has-been media players. Mpg321 was eventually completely abandoned in favor of newer mp3 engines. Despite the abandonment of mpg123 by its developers, the old guard would not let it die. While no active development was undertaken during this time, developers at Gentoo, Debian, FreeBSD and other distributions all took it upon themselves to create extensive patch sets to fix dozens of bugs and security holes found in the software over the years, thus keeping the software alive through that time. Then, in 2006, new developers took up the project and picked up where the old

developers had left off, even releasing an updated version (version 0.66) in June of this year.

What is the uniqueness of mpg123 I've been talking about? Mpg123 can be used as a media player engine. As mentioned above, it's already used by several different open and closed source projects out there and can be easily used to build your own media solution. For example, if you wanted to build your own custom jukebox, mpg123 is a perfect backend for whatever you want to create, and you can use either the core engine, the plug-in version of it, or the entire application. It's very versatile that way and very light-weight at only 206k for the entire package. It also supports audio streaming via the web, and it can export mp3's as several different formats, including wav, Sun audio, and audio cd CDR format. This only touches on all that it can do. Check out the man file for more information.

Mpg123 is available via most distributions as a pre-installed default application.



Muine

Muine is an audio player written and designed specifically for the Gnome desktop environment. It's capable of being used on Solaris, Linux, BSD, Unix and any other Unix derivatives. Unlike most media players, it's written in C# using Mono and GTK#, an



unusual feature indeed given that most players are written in C, C++ or Assembly.

While it may be written and designed differently than most media players, it strives to keep things simple while still providing you with a fair number of features. In most cases you either have simplicity, or you have features. You rarely have both. Muine does a fair job of trying to balance things between those two and provide you both. By default, Muine supports Ogg, Flac and MP3 via GStreamer. With its simplistic plugin system, adding or changing format support on your player is very easy.

It supports automatic album art fetching for your music albums, complete ID3v2 support, and support

for many languages to name a few distinguishing features. Playback is good, and getting started is easy. The playlist is also quite good. While the above picture doesn't give a true example of this, it does show the basics. That screenshot isn't mine because I can't seem to get good screenshots under Gnome for some reason. But I did find this one above on the Internet and added it here so you could see just some of what's in there.

It gagged a little bit trying to handle my 2500+ song collection, so it's possible that larger collections may severely lag the player. Plugin support for things like iPods and other media players was non-existent, at least that I could find. But I suspect with the focus on balancing simplicity with features, that was tossed aside. This could also be due to something I saw quoted on Freshmeat that says the developers designed it to be simply a music player and not a music management system like other players.

For more information, check out the [muine player homepage](#).

Music Player Daemon

There's not a lot to be said about the Music Player Daemon. As its name says, it's designed to be a daemon, a miniature server of sorts with the goal of creating headless media systems. This would be a perfect little program to use in a Linux powered media device, such as a jukebox, a home theater system, or more. It's certainly not for the faint of heart, nor the average user, as you have to create your own frontend software that will interface with the daemon.



If you're adventurous enough to try and build your own media device using this, then you'll be happy to know that it contains support for a wide range of media formats, including Ogg Vorbis, Wav, FLAC, OggFLAC, MP2-4, MOD and more. It can be remotely controlled over a network and has support for playing FLAC, OggFLAC, MP3 and Ogg Vorbis streams via HTTP. It also has quite an extensive list of other supported features, including ID3v1 and v2, native support for different audio systems such as ALSA and PulseAudio, and can run on an impressive list of different operating systems, including Linux, FreeBSD, MacOSX, HP-UX and many more.

It can also be used as a console based desktop media player if you so choose to use it that way, especially if you're in and out of Xwindows quite a bit. Hence why it's included here. For the hard core Linux Audiophile, this is the perfect tool to create a "roll your own" media player of your own unique

and personal design. Of course, if you don't want to create your own frontend for MPD, there's a wide range of pre-existing projects that are designed to directly interface with MPD. Some of those include graphical clients like GMPD, KMP and Pygmy, or console based clients such as mpc, ncmpc, or even web based clients such as phpMp2, Pitchfork and mpdDS. As you can see by the wide variety of ways in which you can interface with it, it's very flexible.

Music Player Daemon is available in, or for, nearly any and every type of OS out there that I'm aware of, except Windows. I haven't seen anything that says it'll run on the Windows platform. But anything else is pretty much fair game. For more information check out the MPD webpage.

MusicIP Mixer

If you're into creating detailed playlists and meticulous information about each of your songs, you'll love MusicIP Mixer. It's much more than the name implies. It also doesn't matter what OS you're running. MusicIP Mixer is available for Linux, Windows and MacOS. The Windows version is shown above, however, the layout remains the same across all versions.

Consistency is a good thing, but that's not what makes this program great. It's able to create some amazingly detailed playlists for you, including cover art, detailed genre, artist and album info, and much more, and all of this is displayed before you in the four basic windows you see above at the center and right. It's ability to handle large music collections is very impressive. While it takes a considerable amount of time for initial cataloging of larger collections of music, once it's done, you'll never have to do



it again with your collection. You'll still need to let the software catalog all new music you add to your collection over time, but again, it only needs to do it once. If you keep your music in a given folder, you may never have to add anything to the library ever again as the monitoring feature will keep track of what's on your drive and update your collection accordingly.

It does all this cataloging through what it calls its "MusicDNS acoustic fingerprinting" which is a fancy way of saying that it essentially listens to all your music and comes up with the best possible information about each song that it can. I had some rather obscure artists in my collection and through simple analysis using this system, it found even them. It even found information on a rare song by T Texas Tyler I had which I've never seen any other player with album and Internet media database support EVER get before. This is the first one so far that I'm aware of. So to say I'm impressed

by this is an understatement.

Media support in general seemed pretty good. I couldn't find a list of all of what was supported, but it found all my mp3 and ogg files ok. I couldn't see if it found the other formats, but it did find those two. While the system is very good overall, there are some downsides to it. For one, it's not an open source project, so if you're paranoid about software that's not open source, you'll want to take note of that. Also, some parts of the software are free, some are not. The basic service itself and basic MusicDNS system are all free, but any of the extended services you may want to work with will cost you some money.

In general, if you're fanatical about your playlists, and other data surrounding your music, it's a good program, but other than that, there's really nothing notable enough about it to set it apart from other media players. There's supposedly support for Tivo and a wide range of other media devices, but nothing that would make me run out and pay the extra money to get that support. Also, the non-open source nature of the software is a big show stopper for many fans of OSS software. For more information on MusicIP Mixer, check out their website.

Summary

Well, that's it for part 4. In part 5 we'll be covering several more audio player applications as well as one that's not quite what you'd expect. For those who have sent in information about media players I've missed so far (ones that would have alphabetically come prior to today's), I've added those to the review queue and will add them into the roundup somewhere in the next couple of weeks. Till then, stay

FEATURE



tuned! We've got some of the best media players in the entire Linux and OSS world coming up!

Editors Note: PCLOS prefers that you get packages from the repositories and not individual application homepages.



TESTIMONIALS



Well Well Well

My Mother has Vista and my father has XP

My brother has a Mac says "It's good enough for me."

I'll only use a Linux and it better be PCL

And if you don't get one you're going straight to...

Well I went to the forum to learn a thing or two

Everyone said "We'll tell you what to do

Click on your partitions and all will be swell

And if you don't mount them you're going straight to..."

Well I hung around the forum everyone was oh so kind

Right then and there I made up my mind

Now all the information is starting to gel
If I don't learn my lesson I'm going straight to...

Well I logged into the forum to have a little chat

Read the testimonials what do you think of that

Everyone was happy with PCL

Now none of those users will go straight to...

Well I haven't met Tex so I say "Howdy do"

He'll probably tip his hat and say "Send me a buck or two.

Just put it in an envelope and stick it in the mail

And if you don't do that you're going straight to..."

Well I've finished with my story but there's a lot more to say

When you get a 'puter go Linux all the way

It always will be free, you can't buy it at Dell

Just make sure your System is a PCL



by Papawoob

Just thought I would try and bring everyone a list of currently active PCLinuxOS based distros. If I have missed any, I apologize. If anyone knows of any others that are being actively developed please drop me a note at the Magazine website or at Papawoob@pclosmag.com.

CAElinux

CAElinux is based on PCLinuxOS and is designed for computer-aided engineering. Based on the open-source CAE softwares [Salomé](#) & [Code Aster](#), you can load STEP / IGES geometry in Salomé and start partitioning and meshing your problem in just 5 minutes.

Granular Linux

Granular Linux is an easy-to-use, desktop Linux distribution based on PCLinuxOS. Its main features are a carefully selected set of applications for common tasks, the ability to

customize the distribution, and the inclusion of two popular desktop environments - the flexible KDE and the lightweight Xfce.

Karoshi

Karoshi is a free and open source school server operating system based on PCLinuxOS. Karoshi provides a simple graphical interface that allows for quick installation, setup and maintenance of a network.

Ruby on Rails

Rails Live CD is a specialist distribution providing a pre-configured and fully operating Ruby on Rails development environment on a bootable CD. The distribution is derived from PCLinuxOS.

SAM Linux Desktop

SAM Linux Desktop, a live and installation CD based on PCLinuxOS, is an easy-to-use, fast and clean XFCE Linux desktop for home users. The distribution is enhanced by several popular non-free applications, such as Macromedia Flash Plugin, Java and RealPlayer.

VideoLinux

VideoLinux is a PCLinuxOS-based distribution with focus on DVD backups, video encoding and transcoding, DVD authoring, format conversion and pretty much anything else you want to do with video.



[TinyMe](#)

TinyMe 2008.0 “Final” has been released! TinyMe is a PCLinuxOS-based distribution, which is targeted at older computers and people who want a very light and fast desktop environment. Although TinyMe comes as a small, 200MB ISO, it provides tools for most all of your everyday wants and needs.

[PCFluxboxOS](#)

PCFluxboxOS is a series of remasters of PCLinuxOS catering for different end-user needs. All the following remasters are installable live-CDs and all come with the i586 'Legacy' Kernel 2.6.18.8 for increased compatibility with older hardware. Newer kernels can be installed via Synaptic.

[TinyFlux - Version 1.0](#)

PCFluxboxOS 2008 is currently under development and release should tie in with the release of PCLinuxOS 2008. The aim for the next release will be to

create a truly modular operating system using metapackages to enable users to quickly and easily add groups of applications, all fully configured for maximum performance with your Fluxbox desktop. See TinyFluxdownloads page for full details.

MidiFlux – 0.6b

A large selection of applications in a relatively small ISO 340MB in size.

[Keldix Linux](#)

Keldix is a Linux distribution primarily for the Small business Office and Home Office (SOHO) market. Keldix is a live-DVD built on PCLinuxOS.

[PCLOS Gnome](#)

All new bootsplash, backgrounds, and really nice features, upgraded to a great looking operating system, the best out-of-the-box look and user experience possible!

[Business Edition Linux \(BEL\)](#)

BEL or Business Edition Linux is a business implementation of PCLinuxOS 2007. Our goal is to provide solutions for small business needs using one of the easiest to use Linux Distributions available.

[MythTVOS](#)

MythTVOS 2008 is based on MiniMe 2008 and has MythTV and all plugins installed



and (pre)configured. Just boot from the liveCD, select your TV / SAT / CABLE card and scan for channels...

EeePCLinuxOS

EeePCLinuxOS is a PCLinuxOS remaster specifically for the EeePC.

PCLinux Educator

A new name and a new, initial, new way of releasing. EduLos will now be called PCLinux Educator and will in first instance be distributed as a 'meta'package. This means that you can just use your vanilla PCLinuxOS setup and in Synaptic select one package that will immediately install all softwares that we think are useful as a primary student, a secondary student or an educator.

MiniMe

This is a minimal LiveCD that is bootable, plus it can be installed. Add in your own background, window

decoration, localizations, preferred applications and supporting libraries to fully trick out your desktop. In addition, you can remaster your own custom version of PCLinuxOS. Have fun! You can find the .iso image under the Downloads button at: http://www.pclinuxos.com/index.php?option=com_frontpage&Itemid=1

Linux EduCD

LinuxEduCD is education-scientist version of livecd type. It can be installed on hard drive but it is not a must. System is maximally simple because for learning purposes in schools. It contains education, graphical, business and multimedia packets.

DFPE

Pre-installed packages for everything concerning the managing and editing of digital images. These are in almost all cases standard PCLOS packages out of the official repositories. In only one case, a package has been upgraded to a newer version and the upgraded packages have been provided upstream to the PCLOS development team.

SaxenOS 2008

SaxenOS is a full fledged Linux office desktop and based on PCLinuxOS. SaxenOS 2008 isn't as lightweight as the former versions. The full OpenOffice package was added to the speedy XFCE desktop. Also, multimedia apps and games were cut in favour of productivity.



Bugnux

Bugnux is a complete Linux (Mandriva) distribution that runs from a single bootable CD and runs entirely in RAM. Bugnux contains an extensive set of Open Source software testing tools that can be used for functional and performance testing. Standalone tools to test GUI applications and Mozilla Firefox extensions pre-installed to aid in web application testing have been packaged. This virtually can turn any PC into black-box testing device without having to install any software.

