The PCLinuxOS magazine

Volume 54

July, 2011

The PCLinuxOS Magazine

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The PCLinuxOS Magazine is a monthly online publication containing PCLinuxOS-related materials. It is published primarily for members of the PCLinuxOS community. The magazine staff is comprised of volunteers from the PCLinuxOS community.

Visit us online at http://www.pclosmag.com

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Welcome From The Chief Editor

It's here! It's here!

Of course, I'm talking about the first 2011 release of PCLinuxOS. Dubbed the "06.11" release, it has the latest version of KDE (4.6.4), the 2.6.38 Linux kernel, X.org Server 1.10.2, and updated video drivers. It also sports a new look, with brushed-metal wallpaper and splash screens.

An updated, 2011 ISO of PCLinuxOS-LXDE has also been released, in both a "full" and light version. It also sports the 2.6.38 Linux kernel, X.org Server 1.10.2, updated video drivers, and a new look using new brushed metal graphics.

Updated Gnome, Xfce, Openbox and e17 versions will be released soon. As is typical for a PCLinuxOS rolling release, there is no need to reinstall … just so long as you have maintained an updated system by routinely (and regularly) updating your 2010 installation via Synaptic.

This month, we start up a new series of articles that cover the Openbox releases of PCLinuxOS. We also continue our series on using Scribus, photo viewers, WindowMaker on PCLinuxOS, backup basics, and alternate operating systems. With the "Ladies of PCLinuxOS" article series, we get to learn more about another female member of the PCLinuxOS community. This month, we learn more about melodie.

Game Zone makes a return, with a reprint of a blog entry by Igor Ljubuncic at Dedoimedo.com about how to install DirectX in Linux using Wine, opening up access to a much greater number of Windows games that can be played on Linux using Wine.

Meanwhile, stay tuned. Meemaw and myself have been brainstorming about some additional regular columns that may find their way into The PCLinuxOS Magazine very soon. We have a few more details to work out, but have made some progress.

July brings the American celebration of independence from England, with the 4th of July holiday. For the rest of the northern hemisphere, July brings the beginning of some of the hottest summer weather of the year. Meanwhile, those living in the southern hemisphere are well into winter.

This month's cover, by Meemaw, depicts the American 4th of July holiday, when families gather to celebrate that independence from England 235 years ago with fireworks, picnics and family cookouts.

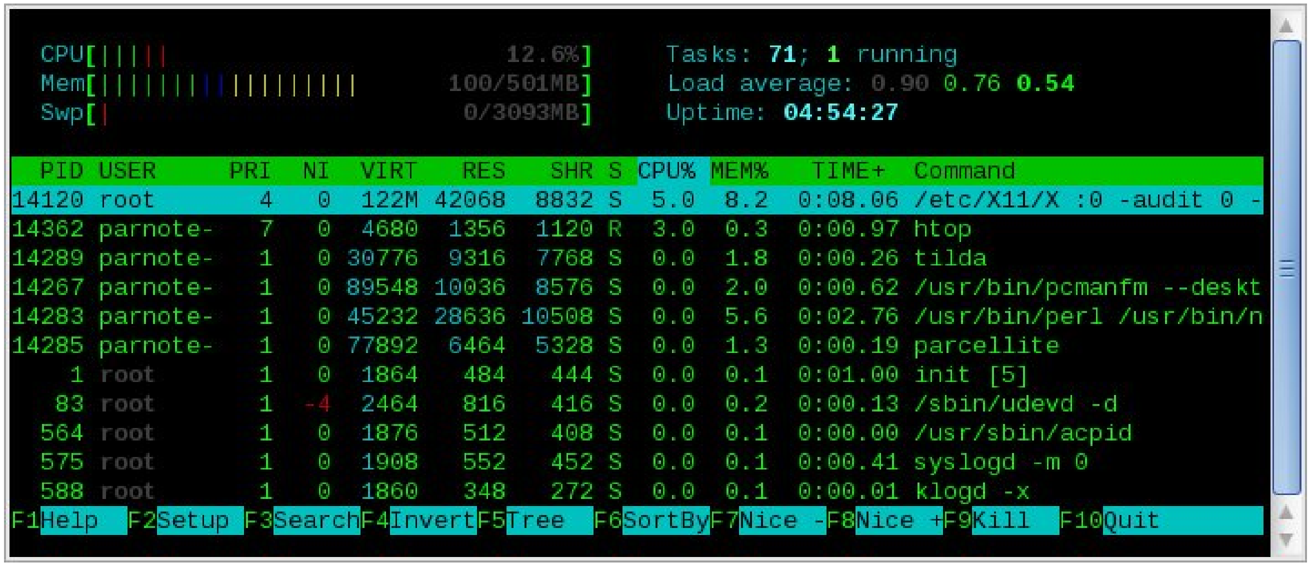
Until next month, I wish each of you peace, happiness, serenity and tranquility.

Openbox: An Overview

by Paul Arnote (parnote)

If you are like most PCLinuxOS users, you have an old computer stuck back in a closet. Like most PCLinuxOS users, you cannot bear the thought of an older computer that has ***any*** life left in it sitting idle, especially if you can find a good use for that computer.

Openbox can resurrect and re-purpose that old computer that's just gathering dust in the back of that closet. With minimal hardware requirements, Openbox can breathe new life into that old computer, and provide a very usable second computer.



```
  CPU[|||||                          12.6%]     Tasks: 71; 1 running
  Mem[||||||||||||||||||||         100/501MB]     Load average: 0.90 0.76 0.54
  Swp[|                             0/3093MB]     Uptime: 04:54:27

  PID USER      PRI  NI  VIRT   RES   SHR S CPU% MEM%   TIME+  Command
14120 root        4   0  122M 42068  8832 S  5.0  8.2  0:08.06 /etc/X11/X :0 -audit 0 -
14362 parnote-    7   0  4680  1356  1120 R  3.0  0.3  0:00.97 htop
14289 parnote-    1   0 30776  9316  7768 S  0.0  1.8  0:00.26 tilda
14267 parnote-    1   0 89548 10036  8576 S  0.0  2.0  0:00.62 /usr/bin/pcmanfm --deskt
14283 parnote-    1   0 45232 28636 10508 S  0.0  5.6  0:02.76 /usr/bin/perl /usr/bin/n
14285 parnote-    1   0 77892  6464  5328 S  0.0  1.3  0:00.19 parcellite
    1 root        1   0  1864   484   444 S  0.0  0.1  0:01.00 init [5]
   83 root        1  -4  2464   816   416 S  0.0  0.2  0:00.13 /sbin/udevd -d
  564 root        1   0  1876   512   408 S  0.0  0.1  0:00.00 /usr/sbin/acpid
  575 root        1   0  1908   552   452 S  0.0  0.1  0:00.41 syslogd -m 0
  588 root        1   0  1860   348   272 S  0.0  0.1  0:00.01 klogd -x
F1Help  F2Setup F3SearchF4InvertF5Tree  F6SortByF7Nice -F8Nice +F9Kill  F10Quit
```

History & Background

To get a real feel for the history of Openbox, you have to go back in time to a point before Openbox came to fruition. Openbox was originally derived from the X window manager Blackbox. Blackbox was created in 1997 as a lightweight X window manager, and was written in C++ with entirely original code. Along about Blackbox 0.65, Openbox was spun off, and is written entirely in C.

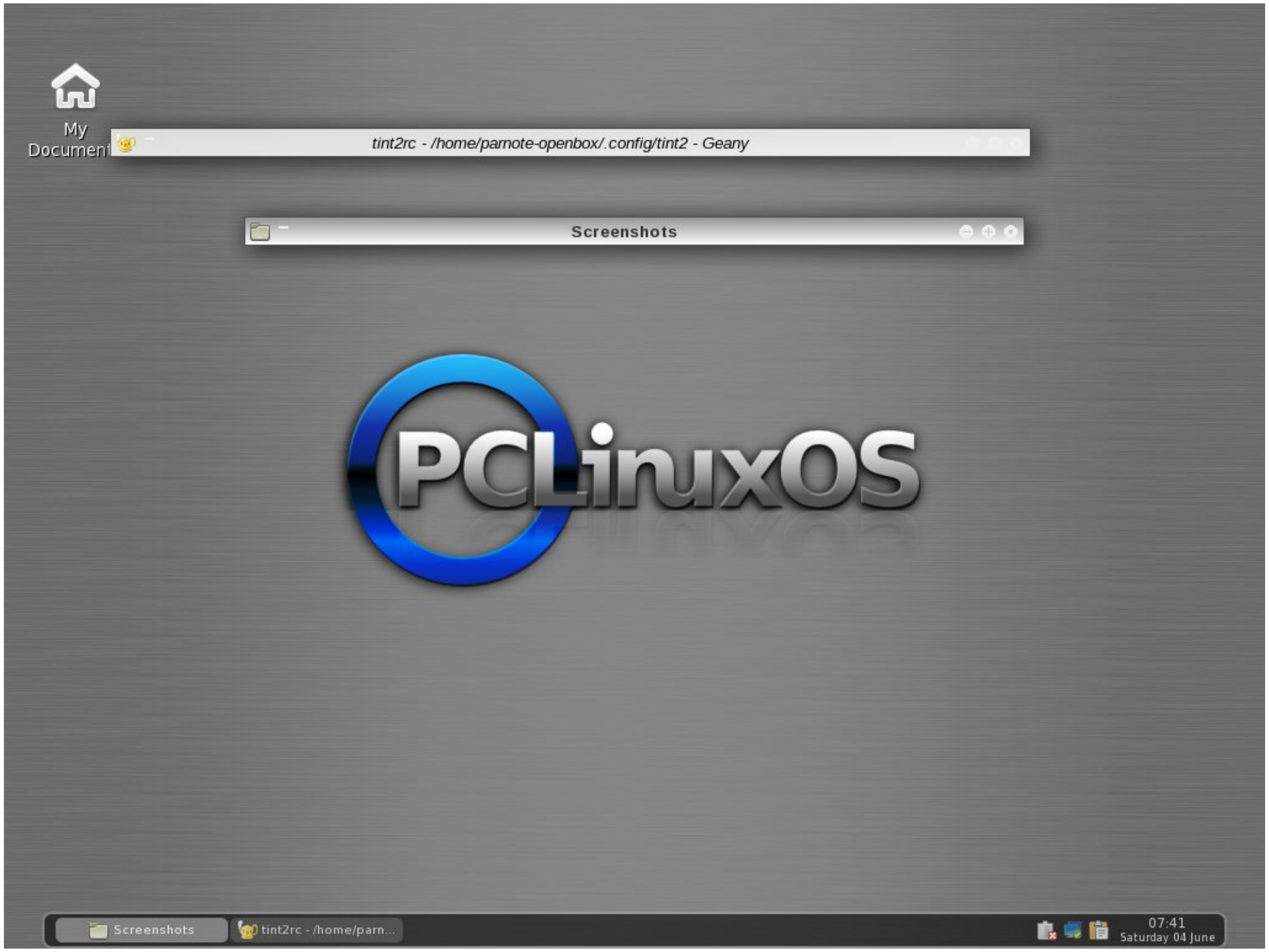
Openbox, currently at version 3.4, has been devoid of any remaining Blackbox code since version 3.0. The Openbox project is written primarily by Dana Jansens of Carleton University in Ottawa, Ontario, Canada. Openbox also serves as the window manager for the LXDE desktop environment.

Putting It To Use

I have installed Openbox on an IBM Thinkpad T23, running a Pentium III 1.13 GHz processor, with 512 MB RAM, and a S3 SuperSavage IX/C graphics card with 8 MB video RAM. To say that the T23 is fast and responsive running Openbox is an understatement. With the low CPU demands and low memory overhead of Openbox, the T23 acts like a new computer. I can only imagine how fast and responsive Openbox is on a newer computer with a faster, more modern processor and more memory.

Of course, I have fully updated my system, since the latest Live CD is from November, 2010. I am running the 2.38.x kernel, along with X.org 1.9.5. Above is a screen shot that shows my CPU and memory usage. These values are ***after*** all the tweaks I've applied to my Openbox installation. For example, I'm running **tilda** in the background, and using **gnome-power-manager** as my battery notification and power manager. **Tint2**, a lightweight panel replacement, serves as my panel. All information comes from running **htop** at the command line prompt in tilda.

Below (next page) is my tweaked Openbox desktop, displaying a custom wallpaper I created a few years ago. I've applied a custom Openbox window theme,



called Appleish. After my tint2 configuration took a nosedive, I went with the default tint2 configuration – of course, with a few custom, handmade tweaks to the tint2 configuration file.

Summary & Things To Come

The PCLinuxOS Openbox ISO, created by PCLinuxOS community member melodie, is rock solid. It goes a long way to breathing new life into an older computer you may have lying around. Will it make your Pentium III with 512 MB RAM behave like a new computer with a quad-core processor and 4 GB RAM? Certainly not. But then again, you will have another computer running PCLinuxOS, and one that can do service as a media server, or as a computer that does the “basic tasks” (like checking email, creating documents, browsing the web, etc.) very, very well.

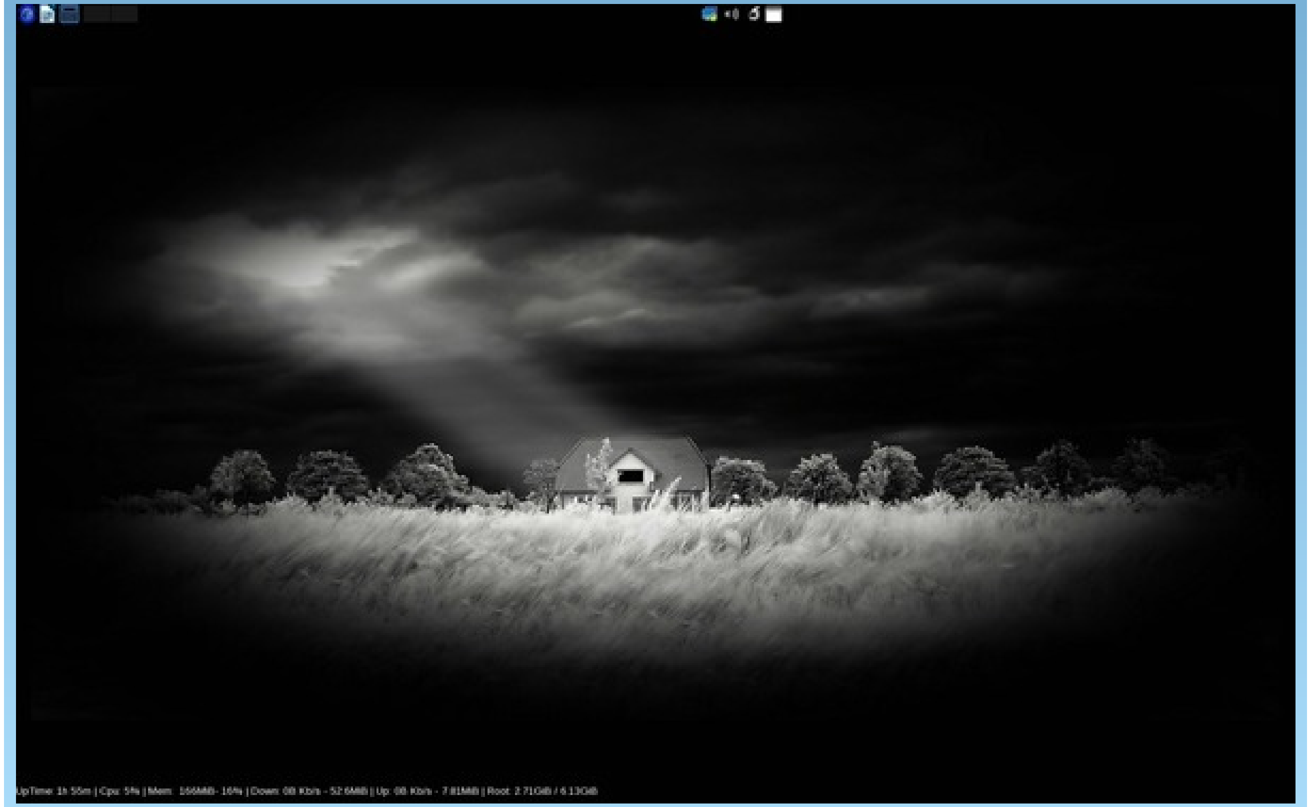
Openbox is ***not*** for beginning Linux users. Tweaking and tuning Openbox involves, in many cases, hand editing various configuration files that are tucked away in your Linux file system. In keeping with the lightweight nature of Openbox, there aren’t a lot of GUI tools available to assist with the management of those files, as there are with the bigger and heavier full-blown desktop environments like KDE and Gnome. But if you ever wanted to learn more about Linux and how it all comes together, learning the ins and outs of Openbox will be help you along that path. If you are a power Linux user, then you will feel right at home with Openbox, and with making all of the manual edits to the configuration files to tweak and tune your Openbox installation.

One difference that I did notice was the inclusion of **sudo** in the PCLinuxOS Openbox ISOs. Traditionally, sudo is NOT included with official PCLinuxOS releases, since an improper use of sudo could compromise the security of a computer it is being used on. In somewhat of a defense, there is not a user predefined in the sudoers file. Still, it has become pretty much standard operating procedure for PCLinuxOS to not embrace the use of sudo. Having sudo pre-installed gives the opposite impression.

As we here at the magazine explore Openbox, we'll be bringing you articles on ways to customize your PCLinuxOS Openbox installation. Hopefully, these articles will show you the elegance, simplicity and various uses of Openbox, as well as ways you can customize and tailor your Openbox installation.

Through the articles we have planned, we hope that we take the "sting" out of configuring Openbox, and show you the options you have for tweaking Openbox. As you will see, it is actually quite easy to make your Openbox installation quite unique.

Screenshot Showcase



```
UpTime: 1h 55m | Cpu: 5% | Mem: 166MB - 16% | Down: 0B Kb/s - 52.6MB | Up: 0B Kb/s - 7.81MB | Root: 2.71GB / 6.13GB
```

Posted by coffeetime, June 21, 2011, running Openbox.

ms_meme's Nook: A Tribute To O-P

I don't want to alarm you but that machine is getting pretty long in the tooth.

Check your doorstep. There's a box with 4 baby kitties in it. At least there was on mine, after the last upgrade.

Under the circumstances I don't know if this will work at all, but it's worth a shot.

With a good red wine... could have possibilities.

We can't help if you don't give us accurate information.

Some sort of errors means nothing to the rest of us.

Didn't you bother to read the thread before asking?

Seriously, I have no idea.

For now, if it's working, don't worry about it.

Fifty lashes with a wet kluski noodle will force that decision out of you.

What, exactly, do you have installed?
And why would you want to remove it?

Well, that saves considerable time.
So far you've been telling us a story about what's happening, but we're getting no details we can work with, so let's start from scratch, getting some of those details.

old-polack deserves praise for his forum posts
Everyone agrees his help is the most

He explains things so all can understand
His way of thinking is never bland

He's a colorful character so full of mirth
Read his advice .... for what it's worth

To our friend who writes in red blue and green
Here's a special tribute from the magazine

Instructions! Huh Real men don't read instructions... they just go commando... then piss and moan when things break.
Real manliness is measured by the degree of pissing and moaning. The ultimate real man is the one who ends up crying like a little girl with a sliver in her finger, when their systems are totally borked.

Sometimes you have to think outside of the box.

He with the stickiest fingers gets to cast the first bone.

Don't do that!

I'm still trying to wrap my head around why you didn't just use apt-get install kernel-2.6.33.7-pclos6.bfs-1-1pclos2010?

Seriously, you have to follow the instructions to the letter.

I'm trying to get you to do what is necessary.

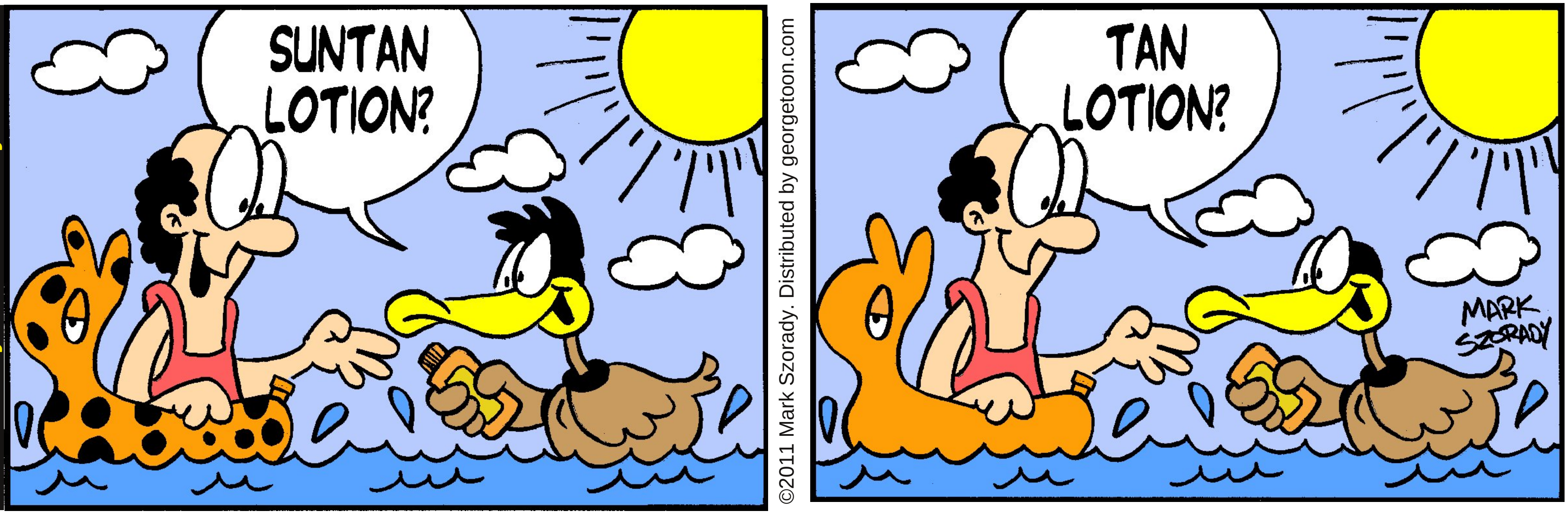
Whatever trips your trigger. Personally I prefer real women, even if they don't always do exactly what you want them to do, whenever you want.

Not picking on you, or being critical... just saying.

Double Take & Mark's Quick Gimp Tip

Double Take

by Mark Szorady



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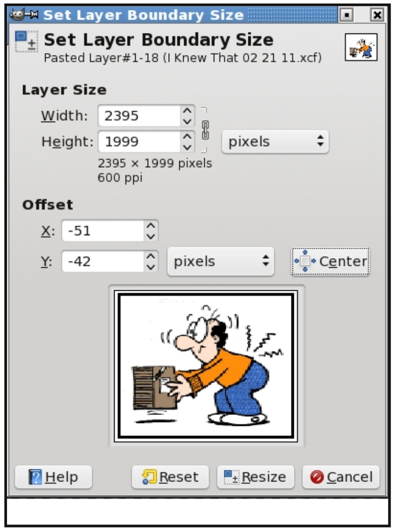
Find at least seven differences between cartoons.

Answers on Page 21.

Mark's Quick Gimp Tip

The Gimp, like a lot of other photo editing programs, utilizes layers in order to composite images. Sometimes, when you're working with multiple layers, you may run into a situation where you need to trim or expand the boundary of a specific layer. To do this, first select the layer. Now, from the Layer menu, select Layer>Layer Boundary size. A new dialog window opens. It's here in this new window where you can adjust the layer's dimensions. You can expand or trim the boundaries, set the image offset, and also set the measurement units to inches, pixels, percent, etc. In addition, you can center the layer's image in one click. Once you have things the way you want, simply hit the Resize button. In a similar fashion, if you simply want to resize the layer boundaries to the size of the image you're editing, simply select Layer>Layer to Image size. The Gimp automatically expands the layer's boundaries to the image size without the need to go through the layer boundaries routine. Selecting Layer/Autocrop Layer automatically trims the layer's boundaries (removes empty borders from the layer).



Set Layer Boundary Size
Pasted Layer#1-18 (I Knew That 02 21 11.xcf)

Layer Size
Width: 2395
Height: 1999
pixels
2395 × 1999 pixels
600 ppi

Offset
X: -51
Y: -42
pixels

-Mark Szorady is a nationally syndicated cartoonist with georgetoon.com. He blogs at georgetoon.com/blog. Email Mark at georgetoon@gmail.com.

Ladies of PCLinuxOS: melodie

by Meemaw

Can you start off by introducing yourself, and telling us a little bit about yourself? (Real name, where you live, marital status, children/grandchildren, hobbies/interests, etc).

I was born in the United States (NY City) half a century ago, and brought up in France since I was a small baby. As for many other American citizens, my origins contain quite romantic stories.

I have one child, one companion, and I love living in the South of France, close to the Spanish border.

How did you get started in computers?

This is related to my hobby: communicating about ecology, organic food, alternative energies, and so on. I wanted to communicate and create a magazine. I created a blog instead.

What drew you to Linux?

A few things. My computer was new, but the BIOS was buggy and I didn't know that. I supposed all way long that all the problems I met were due to Windows XP, whereas only part of the problems were due to it.

I found great people on the web who helped me install my first distribution, and also some who helped me create my first blog, http://meets1901.info/blog, which is about to move again now, to a new place, at http://meets.citrotux.org.

What was the first Linux distro that you used?

It was Mandrake 10, for 3 months.

When did you first start using PCLinuxOS? What attracted you?

It has been Minime 2008. The primary reason was quality. It was stable, fast, and reliable. This was especially true for printing, as once a while it's necessary to write and send a letter fast, and can't wait for the printer to be reconfigured, and tested again and again. At the time, I had switched distributions several times.

It was running nicely on my former laptop HP Pavilion N5442, with 386 MB ram, and 933 Mhz processor, and the updates were fast enough, considering there is only one repository which needs to be used. Finally, I found many advantages, and I discovered that it was possible for me to ask for new packages, and so on.

With Linux having a reputation of being a realm predominately populated by males, do you feel that your being a woman has an impact on your treatment by the rest of the community? If so, in what way?

No impact at all. I feel I am a Linux user like any other. In other Linux communities, if I don't produce a minimum effort when asking a question, I'll get a “STFW” or a “RTFM” as any other person. In PCLinuxOS, I am careful too, telling what I can about a problem when I meet one, or seek for information, and the people who answer seem to appreciate it.

Another thing: this statement (Linux dominated by males) is valid for all the computing world. However, if you look at children playing games on computers, I think we will find out girls are as much interested as boys in using computers.

Do you feel that your use of Linux influences the reactions you receive from your computer peers or family? If so, how?

I don't have many computer peers. My family lives afar.

How do you feel you contribute to the PCLinuxOS community?

I am very much engaged. Once in a while, I have to tell myself to do my duties before using time for the computer and the remasters. Being “moderator” of the French forum, does not require much time from me, as the people have seldom problems to deal with, and generally are solved easily. Sometimes English speaking people also come there to help, and this is very nice too.

My goal is to bring more French users into the PCLinuxOS community, and this will take a while, because I try to do it in a way such that the people who come to it feel like they found the distribution they need, and also make them feel that they can contribute, and that their contribution is appreciated. Now there is a website, http://pclinuxos-fr.org, I hope to see a PCLinuxOS-Fr Wki appear soon, and more to come as soon as it will be possible. Some of our French friends of PCLinuxOS-Fr have done several translations from English to French, (Pinoc's “How-to translate”, and “Addlocale”, as well as “Lomanager”) and I hope this will continue.

ONE CLICK LINUX
A place for Linux beginners!
George © and © 2008 Mark Szorady

Which desktop environments have you tried? Which one appeals most to you, and why?

I tried KDE3, Gnome 2, Ion3, Awesome, Xfce and Xfce4, Lxde, KDE4, and Openbox standalone. I liked Ion3, but then it was not free anymore. Now I use Openbox standalone only. This is the environment I wanted for myself, and that I wanted to share with others, which is the reason why I produced the PCLinuxOS Openbox versions.

What aspect of PCLinuxOS most appeals to you?

The way Texstar leads the project. He decides, but he takes care of getting the community's opinion about one thing or another once a while. There is this organization of the forum that makes the community very much alive, the request packages section, the Fun boards, the International boards, the mailing lists, and this possibility for anyone who wants to make his own version starting from any other.

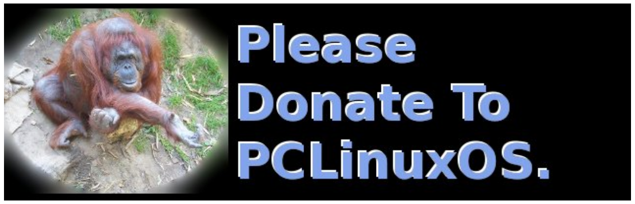
Would you recommend PCLinuxOS to a friend?

I recommend it to all people, each time I get an opportunity.

Have you helped install PCLinuxOS on a friend's or family member's computer? What has been their response to PCLinuxOS, after having time to learn and adjust to the new OS?

I have installed it to several people's machines recently. They have had no problem with it. One got a full Openbox version, the 2 other ones a PCLinuxOS Openbox Bonsai that I had completed with more programs. Two of theses persons are French. One is a young woman who was more used to Windows (more than 10 years using Windows). Another is an English man who lives in France. I put an English version on his machine, of course.

Their response: just perfect! I had to help them a few times, but not much. I have also pointed to the forum and documentations. They found it easy to handle and use. The young woman loves the pink color, red, and purple. I helped her setup her background, a pink theme in Firefox, pink icons with the icon theme (LilaU Icon Theme). She has been happy ever since with her PCLinuxOS.



Forum Foibles

Hot Time In The Ol' Forum Tonight

Late last night when the forum was all asleep
I woke up and in there I did creep
I saw the biggest bull when I took a peep
Having a hot time in the old forum tonight

Strutting through the forum went this bull geek
All the greasy bacon was what he did seek
I'm telling you this bull really is unique
Having a hot time in the old forum tonight

He had a flask and took a little snort
It's all true just as I report
He gave a little burp oh what a sport
Having a hot time in the old forum tonight

The users awoke to see this bull so hep
He was a dancing the Texas Two Step
Then they all joined in the place was full of pep
Having a hot time in the old forum tonight

MP3 **OGG**

BULL SIGHTINGS

I know times are hard. Thanks to everyone renewing their account for another year.

Thank gawd! It's about time. Whew!

I hate it when stuff happens to other people but not me on my systems. Kinda makes it hard to offer a fix when it isn't broken for me.

It is like everything is in ram which basically it is.

Have you updated today?

My only goals for PCLinuxOS is to share it with friends who might like it too, have some good fun and to carve out a modest living doing something I love to do.

BULL CITINGS

It is a good idea to read the software announcements area.

If this Linux stuff makes sense to me and it makes sense to you, then I know we're both high.

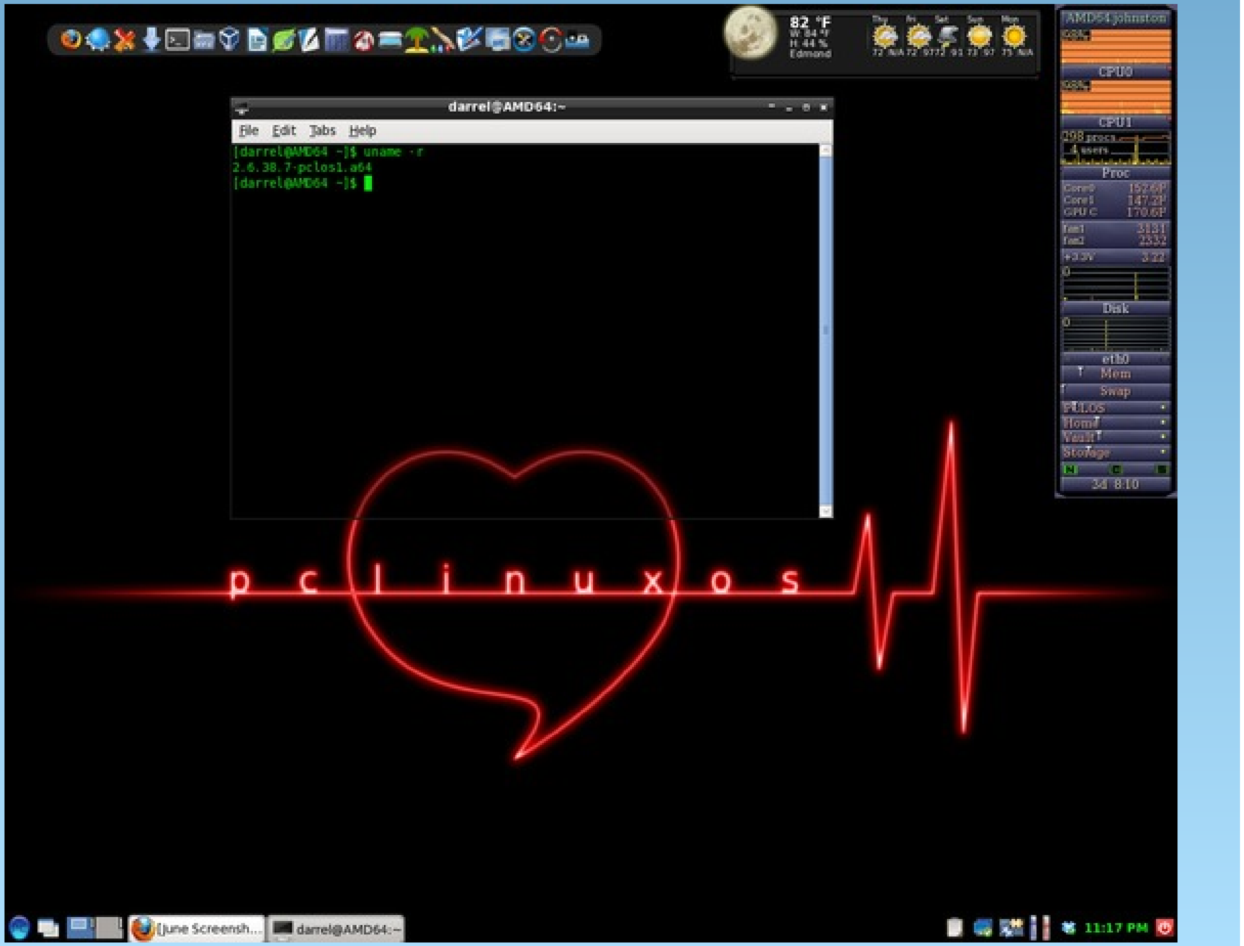
On this forum, if at first you don't succeed, you'll get a lot of free advice from folks who didn't succeed either.

I think there is some kind of disease affecting some Linux users ability to read and comprehend at the same time.

For Sale: Large Collection of Shoes. Some one of a kind. Contact Texstar for details.

Why you gotta go and tell everything you know?

Screenshot Showcase



```
[darrel@AMD64 ~]$ uname -r
2.6.38.7-pclos1.a64
[darrel@AMD64 ~]$
```

Posted by djohnston, June 9, 2011, running LXDE.

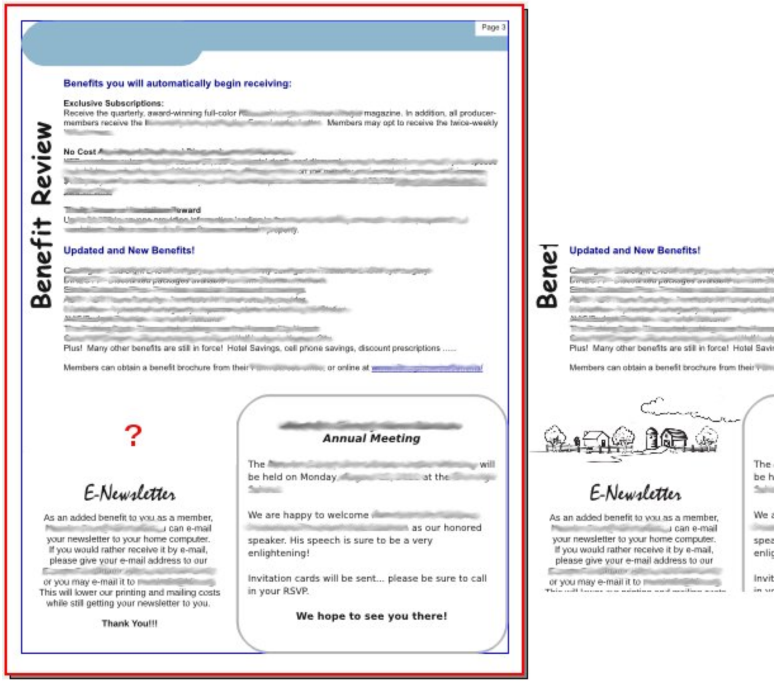
Using Scribus, Part 7: Add a Little Flair!

by Meemaw

I'm sure that by now, your newsletter or brochure has everything it needs to be printed or e-published. However, if you haven't added any extras to dress up your document a little, maybe some of these ideas will help make your document 'pop.' You don't have to fill your pages with everything, but a few accents here and there will make things more interesting.

Graphics

Many of your articles probably have photos, but what about that page with purely informational pieces that are graphics-free? Sometimes the page will have a spot or two that look bare, even though there are several articles. Sometimes you don't want to start another article on that page, but prefer to start on a new page, and you have room left over. Magazines, even this one, have ads they can put in the open spaces, but in your newsletter, you may not sell ads, so you could find some graphics, clipart or even logos that will fill a small space and dress up your document.



Page 3

Benefit Review

Benefits you will automatically begin receiving:

Exclusive Subscriptions:
Receive the quarterly, award-winning full-color [redacted] magazine. In addition, all producer-members receive the [redacted] Members may opt to receive the twice-weekly [redacted]

No Cost [redacted]

[redacted]eward
U[redacted] property.

Updated and New Benefits!

[redacted]
Plus! Many other benefits are still in force! Hotel Savings, cell phone savings, discount prescriptions ......

Members can obtain a benefit brochure from their [redacted] or online at [redacted]

?

E-Newsletter

As an added benefit to you as a member, [redacted] can e-mail your newsletter to your home computer. If you would rather receive it by e-mail, please give your e-mail address to our [redacted] or you may e-mail it to [redacted] This will lower our printing and mailing costs while still getting your newsletter to you.

Thank You!!!

[redacted]
Annual Meeting

The [redacted] will be held on Monday [redacted] at the [redacted]

We are happy to welcome [redacted] as our honored speaker. His speech is sure to be a very enlightening!

Invitation cards will be sent... please be sure to call in your RSVP.

We hope to see you there!

Bene

Updated and New Benefits!

Plus! Many other benefits are still in force! Hotel Savi

Members can obtain a benefit brochure from their

E-Newsletter

As an added benefit to you as a member, can e-mail your newsletter to your home computer. If you would rather receive it by e-mail, please give your e-mail address to our or you may e-mail it to

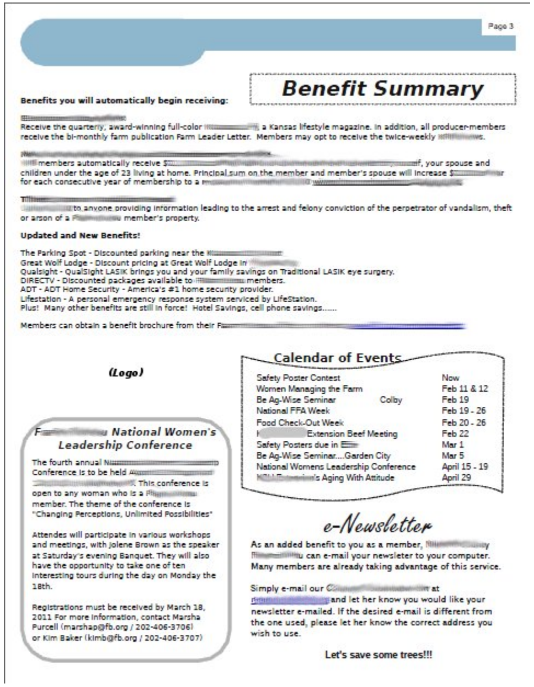
However, take care not to fill up every single inch with text or graphics, or jam your articles so close together that they are un-readable. Leave a little 'white space' so as not to overwhelm your reader. White space is a design element, too.

Fonts

A font that is different from all the rest can draw the reader's eye. If you have a notice or announcement you want everyone to read, you might put the title in a different font to draw the reader's eye to that announcement. However, be careful, since the use of too many 'different fonts' can have the adverse effect of making your newsletter difficult to read.

In the example below, there are only two fonts that differ from the 'regular' title and body fonts. They are the top and bottom titles.

Also, if you are announcing an event you want people to attend, make sure the "Who, What, Where, When and Why" are in a prominent place so your readers won't have to search for it. I actually read an announcement recently for a local meeting which did NOT include the date of the meeting! If the writer had put those items in a prominent place rather than the body of the notice, he probably would have seen that the date was missing. (Yes, he got loads of calls.) In the newsletter above, I just gave the date and location of the Annual Meeting. However, another thing I use Scribus for is the invitation postcards for the same event, which will have a section where the date, place and time are clearly listed. Another use is an advertising flyer or brochure, where the facts should be more clearly stated.



Page 3

Benefit Summary

Benefits you will automatically begin receiving:

[redacted]
Receive the quarterly, award-winning full-color [redacted], a Kansas lifestyle magazine. In addition, all producer-members receive the bi-monthly farm publication Farm Leader Letter. Members may opt to receive the twice-weekly [redacted].

[redacted]
[redacted] members automatically receive $[redacted]f, your spouse and children under the age of 23 living at home. Principal sum on the member and member's spouse will increase $[redacted] for each consecutive year of membership to a [redacted]

T[redacted]
[redacted] to anyone providing information leading to the arrest and felony conviction of the perpetrator of vandalism, theft or arson of a [redacted] member's property.

Updated and New Benefits!

The Parking Spot - Discounted parking near the [redacted]
Great Wolf Lodge - Discount pricing at Great Wolf Lodge in [redacted]
Qualsight - QualSight LASIK brings you and your family savings on Traditional LASIK eye surgery.
DIRECTV - Discounted packages available to [redacted] members.
ADT - ADT Home Security - America's #1 home security provider.
Lifestation - A personal emergency response system serviced by LifeStation.
Plus! Many other benefits are still in force! Hotel Savings, cell phone savings......

Members can obtain a benefit brochure from their F[redacted]

(Logo)

Calendar of Events

Safety Poster Contest		Now
Women Managing the Farm		Feb 11 & 12
Be Ag-Wise Seminar	Colby	Feb 19
National FFA Week		Feb 19 - 26
Food Check-Out Week		Feb 20 - 26
K[redacted] Extension Beef Meeting		Feb 22
Safety Posters due in [redacted]		Mar 1
Be Ag-Wise Seminar....Garden City		Mar 5
National Womens Leadership Conference		April 15 - 19
[redacted]'s Aging With Attitude		April 29

F[redacted] National Women's Leadership Conference

The fourth annual N[redacted] Conference is to be held [redacted]. This conference is open to any woman who is a F[redacted] member. The theme of the conference is "Changing Perceptions, Unlimited Possibilities"

Attendes will participate in various workshops and meetings, with Jolene Brown as the speaker at Saturday's evening Banquet. They will also have the opportunity to take one of ten interesting tours during the day on Monday the 18th.

Registrations must be received by March 18, 2011 For more information, contact Marsha Purcell (marshap@fb.org / 202-406-3706) or Kim Baker (kimb@fb.org / 202-406-3707)

e-Newsletter

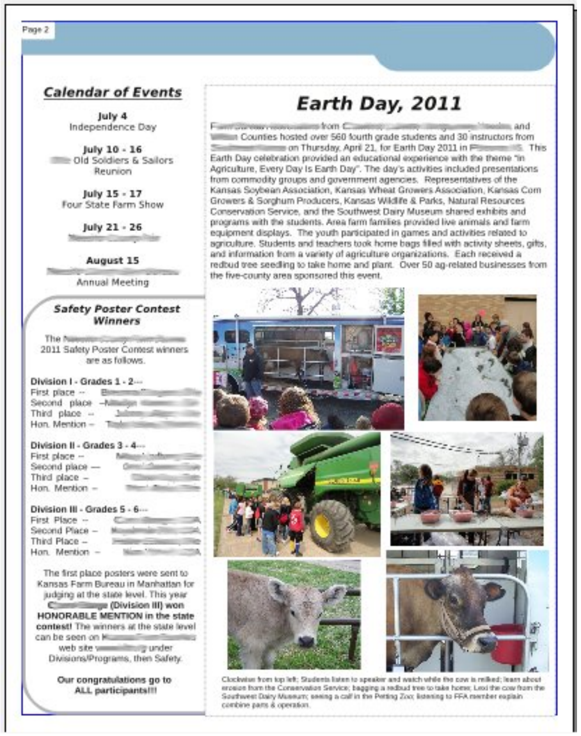
As an added benefit to you as a member, [redacted] can e-mail your newsleter to your computer. Many members are already taking advantage of this service.

Simply e-mail our [redacted] at [redacted] and let her know you would like your newsletter e-mailed. If the desired e-mail is different from the one used, please let her know the correct address you wish to use.

Let's save some trees!!!

Borders

Borders can draw the reader's eye as well. You can put a border around an article on a page that you want to emphasize. Some of my newsletter pages have two articles with borders, but the more important one is usually surrounded by the darker or thicker border. In the example, the contest winners are the information that I wanted to be emphasized, so that article has the thicker border.



Page 2

Calendar of Events

July 4
Independence Day

July 10 - 16
[redacted] Old Soldiers & Sailors
Reunion

July 15 - 17
Four State Farm Show

July 21 - 26
[redacted]

August 15
[redacted]
Annual Meeting

Safety Poster Contest Winners

The [redacted] 2011 Safety Poster Contest winners are as follows.

Division I - Grades 1 - 2---
First place -- [redacted]
Second place --[redacted]
Third place -- [redacted]
Hon. Mention -- [redacted]

Division II - Grades 3 - 4---
First place -- [redacted]
Second place — [redacted]
Third place -- [redacted]
Hon. Mention -- [redacted]

Division III - Grades 5 - 6---
First Place -- [redacted]
Second Place -- [redacted]
Third Place -- [redacted]
Hon. Mention -- [redacted]

The first place posters were sent to Kansas Farm Bureau in Manhattan for judging at the state level. This year [redacted] **(Division III) won HONORABLE MENTION in the state contest!** The winners at the state level can be seen on [redacted] web site [redacted] under Divisions/Programs, then Safety.

Our congratulations go to ALL participants!!!

Earth Day, 2011

[redacted] from [redacted] and [redacted] Counties hosted over 560 fourth grade students and 30 instructors from [redacted] on Thursday, April 21, for Earth Day 2011 in [redacted]. This Earth Day celebration provided an educational experience with the theme "In Agriculture, Every Day Is Earth Day". The day's activities included presentations from commodity groups and government agencies. Representatives of the Kansas Soybean Association, Kansas Wheat Growers Association, Kansas Corn Growers & Sorghum Producers, Kansas Wildlife & Parks, Natural Resources Conservation Service, and the Southwest Dairy Museum shared exhibits and programs with the students. Area farm families provided live animals and farm equipment displays. The youth participated in games and activities related to agriculture. Students and teachers took home bags filled with activity sheets, gifts, and information from a variety of agriculture organizations. Each received a redbud tree seedling to take home and plant. Over 50 ag-related businesses from the five-county area sponsored this event.

Clockwise from top left; Students listen to speaker and watch while the cow is milked; learn about erosion from the Conservation Service; bagging a redbud tree to take home; Lexi the cow from the Southwest Dairy Museum; seeing a calf in the Petting Zoo; listening to FFA member explain combine parts & operation.

Borders can be any design from a very thin line to starbursts or thick polygons. If you want some information to stand out, use the starburst or a thick polygon, keeping in mind not to overwhelm your information with the border design.

Color

If you are doing a newsletter or brochure you may want your company logo on it. Make an effort to choose the other colors you use so they don't clash with the colors of the logo. That way your finished document will look unified. If your main logo has very bright colors, the choice of complementary colors is especially important.

Choose your photos so they are bright enough to be easily viewed whether the document is viewed on a computer or printed and mailed. I have some members that want theirs sent by email and, for the rest of the members, it is printed in black ink on colored paper and mailed. The photos have to be bright and clear enough to be seen either way.

Next month we'll examine a few more items you need to complete your project.

Screenshot Showcase

Posted by brilz, June 10, 2011, running KDE 4.

Openbox: Edit rc.xml To Gain Control

by Paul Arnote (parnote)

Last November, we covered the **`lxde-rc.xml`** file, back when we were covering the LXDE desktop. Since LXDE uses Openbox as its window manager, a lot of the information we covered then is also applicable to the Openbox release of PCLinuxOS.

Openbox uses a file similar to that used by LXDE, called **`rc.xml`**. The file, stored in your **`/home/username/.config/openbox`** folder, is responsible for helping define various aspects of how your windows are displayed on the screen, mousebindings, keybindings, and many other settings. You will have to enable the display of hidden files in your file manager in order to see the hidden folder.

So that you can tweak, tune and customize your Openbox installation fully and completely, let's take a look at the different sections of the rc.xml file, as well as some things you can do with it.

Basic File Structure

As you might have already guessed, the rc.xml file uses the XML format, which stands for E**x**tensible **M**arkup **L**anguage. XML is very much like HTML. Just like with HTML, the command sets have opening and closing statements, or tags. For example, to make bold text in HTML, you would use <b>*some text here*</b>, placing the text you want to make bold between the <b> and </b> tags.

In XML, every opening tag has a closing tag. So, if you have a <keybind *something something*> tag, you will also have a </keybind> tag to close it out. XML commands can also be nested (and most often are), as this excerpt from the rc.xml file shows:

```
<keybind key="C-A-x">

    <action name="Execute">

        <command>xchat</command>

     </action>

</keybind>
```

As you can see, the nested commands in XML work from the outside to the middle, then back out again. In the excerpt above, we start with the keybinding tag (<keybind …>), define the keys on the keyboard to use (C-A-x), specify the action to take when those keys are pressed (Execute), specify the command to execute (<command>xchat), then we back our way out, closing out the command tag (</command>), then closing out the action tag (</action>), then closing out the keybind tag (</keybind>). Failure to close out the tags, or closing out the tags in the wrong order, will result in a corrupt XML file. Typos and misspellings will also result in a corrupt XML file. ***So, double check everything before you save the file!*** In fact, it would be a prudent decision to make a backup copy of your original, unaltered rc.xml file. This way should something go horribly wrong, you can always restore your computer to a previous working state, simply by replacing the bad rc.xml file with one that you know works.

Fortunately, the text editor that comes installed on the PCLinuxOS Openbox releases is **Geany**, which is very good at syntax highlighting. While it may not initially seem like a really big deal, syntax highlighting in a text editor can save you hours of debugging time, in the event that you end up with a corrupt XML file. Since the highlighting is done "on the fly," it's also easy and quick to see if you have made any mistakes ***as you are typing*** the commands.

You may notice comments interspersed throughout the rc.xml file. Comment lines are those that look like this:

```
<!-- comment placed here -->
```

If you make additions to your rc.xml file, it would be a great idea to also insert your own comments. Six months after you make changes or additions, you may not remember exactly what you did, unless you left yourself a "calling card" of sorts, in the form of a comment that describes what you did. Also, the comments that are built into the default rc.xml file can go a long way in helping you understand what to do in any given section of the file.

When you open up the rc.xml file, you will notice that the first tag in the file starts off <openbox-config *something something*>. This means that the last tag in the rc.xml file will be </openbox-config>, to close out the rc.xml file. In between will be all of the other XML tags that define the Openbox options.

First Section: Resistance

Think of the resistance setting as how hard you have to push a window on your screen against the screen edge before it moves that window to the next virtual desktop. The higher the number, the harder you have to "push" before that window will move to the next desktop. Here are the default settings in the installed Openbox:

```
<resistance>

     <strength>10</strength>

     <screen_edge_strength>20

     </screen_edge_strength>

</resistance>
```

The "strength" setting determines how much resistance there is between adjacent windows, before one is allowed to overlap the other. The "screen_edge_strength" setting determines how much resistance there is at the screen edge, before allowing the selected window to move to the next desktop.

On my copy of Openbox, I've changed the strength to 50, and the screen_edge_strength setting to 100. This requires me to push fairly hard against the screen edge, before the window moves over to the next desktop. I've done this because sometimes I simply want a window positioned at the screen edge, and not moved to another desktop.

Second Section: Focus

The second section of rc.xml deals with how Openbox focuses the windows on your desktop. There are a number of options you can choose from. Here is the "focus" section from my installation of Openbox:

```
<focus>

     <focusNew>yes</focusNew>

     <!-- always try to focus new windows
      when they appear. other rules do
      apply -->

     <followMouse>no</followMouse>

     <!-- move focus to a window when you
      move the mouse into it -->

     <focusLast>no</focusLast>

     <!-- focus the last used window when
      changing desktops, instead of the one
      under the mouse pointer. when
      followMouse is enabled -->

     <underMouse>no</underMouse>

     <!-- move focus under the mouse, even
      when the mouse is not moving -->

     <focusDelay>200</focusDelay>

     <!-- when followMouse is enabled, the
      mouse must be inside the window for
      this many milliseconds (1000 = 1 sec)
      before moving focus to it -->

     <raiseOnFocus>no</raiseOnFocus>

     <!-- when followMouse is enabled, and
      a window is given focus by moving the
      mouse into it, also raise the window
      -->

</focus>
```

To start with, the "FocusNew" setting tells Openbox to automatically focus on any new windows that are displayed on your desktop. The "followMouse" setting tells Openbox to change the window focus to the window under your mouse. The default setting here is "yes," but I have changed that to "no."

The "focusLast" setting only has an effect when "followMouse" is enabled, or set to "yes." The default value for "focusLast" is "no." Changing it to "yes" will automatically re-focus the last active window on a different desktop, instead of allowing the focus to change to whichever window is currently under your mouse pointer.

With the "underMouse" setting, the window focus is moved to the window under the mouse, even if the mouse isn't moving. The default value is "no." The "focusDelay" setting selects the number of milliseconds delay before the window is focused when moving a mouse into a window. The default value is 200 ms. The "raiseOnFocus" setting causes the window receiving the focus to be raised to the top, automatically. The default setting is set to "no." These three settings are dependent on the “followMouse” setting, and if the “followMouse” setting is turned off (set to “no”), then these settings effectively do nothing.

Third Section: Placement

The “Placement” section of the rc.xml file tells Openbox how to place the windows on your desktop. The default values are shown below:

```
<placement>

     <policy>Smart</policy>

     <!-- 'Smart' or 'UnderMouse' -->

     <center>yes</center>

     <!-- whether to place windows in
      the center of the free area found
      or the top left corner -->

     <monitor>Active</monitor>

</placement>
```

You can choose whether the windows are placed under the mouse, or if Openbox places the windows (the “smart” policy). You can also determine if the windows are centered on your desktop or not, by changing the “center” setting.

Fourth Section: Theme

The “Theme” section of rc.xml tells Openbox what theme to use when displaying your windows, as well as what options (fonts, window decorations, window decoration order, etc.) to use. Below is a snippet of the theme section of the rc.xml file:

```
<theme>

     <name>Appleish</name>

     <titleLayout>NSLIMC</titleLayout>

     <!--
       avaible characters are NDSLIMC,
       each can occur at most once.
       N: window icon
       L: window label (AKA title).
       I: iconify
       M: maximize
       C: close
       S: shade (roll up/down)
       D: omnipresent (on all desktops).
      -->

     <keepBorder>yes</keepBorder>

     <animateIconify>yes</animateIconify>

     <font place="ActiveWindow">

     <name>Liberation Sans</name>

     <size>10</size>

     <!-- font size in points -->

     <weight>Bold</weight>

     <!-- 'bold' or 'normal' -->

     <slant>Normal</slant>

     <!-- 'italic' or 'normal' -->

     </font>

     ...
```

The first setting, “name,” tells Openbox which theme I’ve chosen to use. In my case, that is the “Appleish” theme, which I installed via Synaptic.

The next setting, “titleLayout,” tells Openbox which window decorations you want to have displayed on the window title bar, along with the placement of those decorations. Fortunately, there is a “key” provided in the comments of this section of the rc.xml file. Each character can be used only once in any given theme.

The “keepBorder” setting tells Openbox if it should keep the window borders if window decorations are turned off. The default value here is “yes.” The “animateIconify” setting enables a slight animation feature when the windows are minimized to the panel. The default setting is “yes.”

Next, we specify the attributes of the various text parts of the theme. Starting with the title bar of the “ActiveWindow,” we specify the “name” of the font, “size” of the font, “weight” of the font, and the “slant” of the font. We repeat this for each of the following:

InactiveWindow, MenuHeader, MenuItem and OnScreenDisplay.

We'll discuss themes in more depth, a little later, in a separate article.

Fifth Section: Desktops

As you may guess, this section of the rc.xml file specifies the details about your virtual desktops.

```
<desktops>

     <!-- this stuff is only used at
     startup, pagers allow you to change
     them during a session

     these are default values to use when
     other ones are not already set by
     other applications, or saved in your
     session

     use obconf if you want to change these
     without having to log out and back in
     -->

     <number>4</number>

     <firstdesk>1</firstdesk>

     <names>

     <name>Water</name>

     <name>Fire</name>

     <name>Earth</name>

     <name>Air</name>

     </names>

     <popupTime>500</popupTime>

     <!-- The number of milliseconds to
     show the popup for when switching
     desktops. Set this to 0 to disable the
     popup. -->

</desktops>
```

The first setting, "number," sets the number of virtual desktops available. The "firstdesk" setting specifies which desktop should be displayed when Openbox is first started. Under the "names" setting, you can give a name to each of your virtual desktops. You can give them any name you want. You can call them the names of your children, give them philosophical names, or keep it simple and give them numbers. By default, they are named Water, Fire, Earth and Air. The last setting, "popupTime," setts the number of milliseconds to show the popup window on your screen, when changing desktops. The default setting is 500 ms, or one-half second.

Sixth Section: Resize

The "Resize" section governs how Openbox displays windows when you are resizing or moving windows. Below is the "resize" section of the rc.xml file, with all the default values displayed:

```
<resize>

     <drawContents>yes</drawContents>

     <popupShow>NonPixel</popupShow>

     <!-- 'Always', 'Never', or 'Nonpixel'
     (xterms and such) -->

     <popupPosition>Center</popupPosition>

     <!-- 'Center' or 'Top' -->

     <popupFixedPosition>

     <x>0</x>

     <y>0</y>

     </popupFixedPosition>

</resize>
```

The "drawContents" setting tells Openbox to redraw the program inside the window whenever you are resizing or moving the window. The "popupShow" setting, set to "NonPixel," only displays a popup window on the screen when the resizing window specifies that it is being resized more than one pixel. The popup window shows the screen coordinates for the resized window, along with the pixel size of the window. This usually applies to terminals. You can also set the "popupShow" setting to always be displayed, or to never be displayed.

The "popupPosition" setting allows you to specify the location where the popup window will appear. With the default setting of “center,” the popup window is displayed at the center of the window being resized or moved. The other choices are “top,” where the popup window is displayed above window’s title bar, or “fixed,” where the popup window is displayed at a location defined by “popupFixedPosition.” The latter accounts for the two settings, x and y, under the “popupFixedPosition” setting.

Seventh Section: Margins

The “margins” section of the rc.xml file literally creates margins on your screen.

```
<margins>

    <top>1</top>

    <bottom>2</bottom>

    <left>2</left>

    <right>2</right>

</margins>
```

Specify the number of pixels you want to have as a screen margin in the top, bottom, left and right settings, and no items (except for wallpaper) will be drawn in those areas of your screen.

Eighth Section: Dock

Openbox makes good use of items from other desktops and window managers, and allows you to use any number of dockapps that are available for WindowMaker, Xfce, KDE, Gnome, and many others. You can find a whole slew of dockapps available for use with Openbox at dockapps.org. The “dock” section of the rc.xml file helps govern their placement, and is in effect only if you are running a dockapp.

```
<dock>

    <position>TopLeft</position>

    <!-- (Top|Bottom)(Left|Right|)
    |Top|Bottom|Left|Right|Floating -->

    <floatingX>0</floatingX>

    <floatingY>0</floatingY>

    <noStrut>yes</noStrut>

    <stacking>Above</stacking>

    <!-- 'Above', 'Normal', or 'Below' -->

    <direction>Horizontal</direction>

    <!-- 'Vertical' or 'Horizontal' -->

    <autoHide>no</autoHide>

    <hideDelay>300</hideDelay>

    <!-- in milliseconds (1000 = 1 second)
    -->

    <showDelay>300</showDelay>

    <!-- in milliseconds (1000 = 1 second)
    -->

    <moveButton>Middle</moveButton>

    <!-- 'Left', 'Middle', 'Right' -->

</dock>
```

The “position” setting allows you to set where the dockapp appears. The default value is TopLeft. Other possibilities are TopRight, BottomLeft, BottomRight, Top, Bottom, Left, Right or Floating. If you select floating, then the next two settings, floatingX and floatingY set the horizontal and vertical positioning, respectively.

The “noStrut” setting allows windows to be placed over the dockapp. The “stacking” setting determines which layer of the desktop to place the dockapp. You can decide if your dockapps are positioned in a vertical or horizontal row with the “direction” setting.

By toggling the “autoHide” setting (the default is “no”), you can cause your dockapps to automatically hide until you mouse over their position. If the “autoHide” setting is activated, then the “hideDelay” and “showDelay” settings are activated. The setting for both are in milliseconds, and the default value is 300 ms.

Finally, the “moveButton” setting determines which mouse button to use to move the dockapp to a new location on your desktop. The default value is “Middle.”

Ninth Section: Keyboard

The “keyboard” section is typically the largest section of the rc.xml file, and one where you can make some very interesting changes in the functionality of Openbox. Below is an excerpt from the first few lines of the keyboard section of my rc.xml file:

```
<keyboard>
    <!-- Keybindings for desktop switching -->
    <keybind key="C-A-Left">
      <action name="DesktopLeft">
        <dialog>no</dialog>
        <wrap>yes</wrap>
      </action>
    </keybind>
    <keybind key="C-A-Right">
      <action name="DesktopRight">
        <dialog>no</dialog>
        <wrap>yes</wrap>
      </action>
    </keybind>
    <keybind key="C-F1">
      <action name="Desktop">
        <desktop>1</desktop>
      </action>
    </keybind>
```

I previously covered keybindings fairly thoroughly in the November, 2010 article LXDE: Meet The Heart & Soul – lxde-rc.xml. Since LXDE uses Openbox as its window manager, the information in that article applies equally to the Openbox rc.xml file. Instead of repeating all of that information here, I’ll simply refer you to that article for a more complete discussion of keybindings.

One thing that I did find in my installation of Openbox were keybindings that were either duplicated, or that are assigned to keystroke combinations that typically are reserved for other functions. For example, for the “DesktopLeft” and “DesktopRight” settings in my excerpt above, the default values are defined as C-Left (Control key + Left cursor key) and C-Right (Control key + Right cursor key), respectively. However, those keystroke combinations are typically reserved for use in word processing programs to move your cursor through your document one word at a time. Thus, I changed my keybindings for “DesktopLeft” and “DesktopRight” to C-A-Left (Control key + Alt key + Left cursor key) and C-A-Right (Control key + Alt key + Right arrow key). This preserves the proper functioning of the original keystroke combination for use in my word processing programs.

Another dubious keybinding (for me, at least) is the definition of the C-w (Control key + “w” key) to execute the “ShowMenu” function, that brings up a menu displaying all of the desktops and the applications running on each one. I typically use the C-w key to close out child windows in an application, like individual tabs in my web browsers. I simply changed my keybindings so that C-A-w executes the “ShowMenu” function, preserving the use of C-w for what I normally use it for.

Additionally, many keybindings are defined to use the Super key (a.k.a. the Windows key). However, my IBM T23 does not have a Super key, so those keystroke combinations are impossible for me to use. Instead, I changed those keybindings that use the Super key to keybindings that use Control + Alt.

One real beauty of the “keyboard” section of the rc.xml file is that I can change the keystroke combinations used so that they are more closely tailored to how I tend to work with my computer, and to better fit the configuration of my hardware. For the predefined keybindings that use the the Super key to launch programs I never or rarely use, or that perform tasks that I customarily don’t perform from the keyboard, I simply left them unchanged.

Another real beauty of the “keyboard” section is that if there is a bash script you like to routinely run, you can assign it a keybinding so that it is only a keystroke or two away from execution.

I recommend that you study how the keybinding section is set up. It won’t take long before you catch on to the format and start coming up with your own custom keybindings. If you want more information on keybindings, you can visit the Openbox Wiki entry on keybindings, where there is a complete breakdown of all of the keybinding settings. We’ll also be mentioning keybindings later on, in other Openbox articles in The PCLinuxOS Magazine.

Tenth Section: Mouse

Under the “mouse” section of the rc.xml file, you can control most of the settings for how your mouse functions under Openbox. Below is an excerpt from the rc.xml file on my Openbox installation (this section is too long to print in its entirety):

```
<mouse>

    <dragThreshold>8</dragThreshold>

    <!-- number of pixels the mouse must
move before a drag begins -->

    <doubleClickTime>200</doubleClickTime>

    <!-- in milliseconds (1000 = 1 second)
-->

<screenEdgeWarpTime>400
</screenEdgeWarpTime>

<!-- Time before changing desktops when
the pointer touches the edge of the
screen while moving a window, in
milliseconds (1000 = 1 second). Set
this to 0 to disable warping -->

<context name="Frame">

  <mousebind button="A-Left"
  action="Press">

    <action name="Focus"/>

    <action name="Raise"/>

  </mousebind>

  <mousebind button="C-A-Left"
  action="Click">

    <action name="Unshade"/>

  </mousebind>

  <mousebind button="A-Left"
  action="Drag">

    <action name="Move"/>

  </mousebind>

  <mousebind button="A-Right"
  action="Press">

    <action name="Focus"/>

    <action name="Raise"/>

    <action name="Unshade"/>

  </mousebind>
```

Some basic mouse settings, like how fast a double click of the mouse has to occur before it is recognized as a double click, the number of pixels to move the mouse before it is recognized that you are dragging a window or other screen element, or how much time you have to push a window against a screen edge before it warps to the adjacent desktop, are taken care up right up front.

The bulk of the “mouse” section deals with mousebindings. Mousebindings are very, very similar to keybindings, and define what action to take when different mouse buttons are pushed, in combination with certain key presses, depending on the context in which Openbox detected them. The latter is determined by the “context name” setting.

For a full discussion of the settings you can make, check out the Openbox Wiki page on mousebindings. Most users probably won’t find much of a reason to mess around with the mousebindings – unless you are a tweak-aholic, or unless you have the latest, greatest gaming mouse with 56 button combinations.

Answers to Mark Szorady's Double Take:
(1) Man's hair different; (2) Man's mouth different; (3) Duck's hair different ; (4) Polka dots missing; (5) Cloud moved; (6) Word balloon different; (7) Bottle cap missing

Eleventh Section: Menu

As you might imagine, the “menu” section controls the behavior of menus on Openbox. Below is the entire menu section from the rc.xml file on my Openbox installation:

```
<menu>

    <!-- You can specify more than one menu
    file in here and they are all loaded,
    just don't make menu ids clash or,
    well, it'll be kind of pointless -->

    <!-- default menu file (or custom one
    in $HOME/.config/openbox/) -->

    <file>menu.xml</file>

    <hideDelay>200</hideDelay>

    <middle>no</middle>

    <submenuShowDelay>100

    </submenuShowDelay>

    <applicationIcons>yes

    </applicationIcons>

</menu>
```

The first setting, “file,” specifies which file contains the data used to create the application menu in Openbox, which is accessible via a right click on the desktop. You can have multiple menu files, but as the comments above indicate, you have to insure that there are no clashes between menu ids across all of the menu files. Typically, the menu file being specified here resides in your **`/home/username/.config/openbox`** folder. There is another menu.xml file in **`etc/xdg/openbox`**, but to be totally honest, I cannot see that it is used or where it fits into the picture.

The “hideDelay” setting causes the menu to immediately disappear if you click longer than the specified length of time (default is 200 ms). If you are a “slow mouse clicker,” you may want to specify a longer time. Just remember that 1000 ms equals 1 second, so 500 ms would be one-half of a second. Clicking and releasing the menu for a time less than that specified will cause the menu to continue being displayed when you release the mouse button.

The “middle” setting causes the menus to be center aligned vertically, as opposed to being top aligned. The “submenuShowDelay” and “submenuHideDelay” (not shown) determine the time delay before showing, and subsequently hiding, a submenu. Both values must be less than the “hideDelay” setting, or they are ignored.

With the “applicationsIcons” setting, you can tell Openbox whether or not to show the application icons on the desktop and in the application menu. I have found that this setting has no effect with the right click Openbox application menu, as I’ve never seen any application icons displayed in that menu, regardless of the setting. However, it may play a role when you use a bona fide application launch menu, like that which you get when using the LXDE panel (lxpanel).

One setting not included in the menu section of the rc.xml file on my Openbox installation is the “manageDesktops” setting. This allows you to add or subtract desktops as you need, on the fly, right from the right click Openbox menu. If you are working along, and all of a sudden discover that having another it would help your productivity to have an additional desktop desktop, you can add it right there, on the spot, from the right click Openbox menu. Apparently, the default value for this setting is “yes,” since I have that ability in my right click Openbox menu, despite its absence from the menu section of my rc.xml file.

Twelfth Section: Applications

Under the “applications” section, you can define the behavior of individual applications in Openbox. Below is a copy of the “applications” section of my rc.xml file:

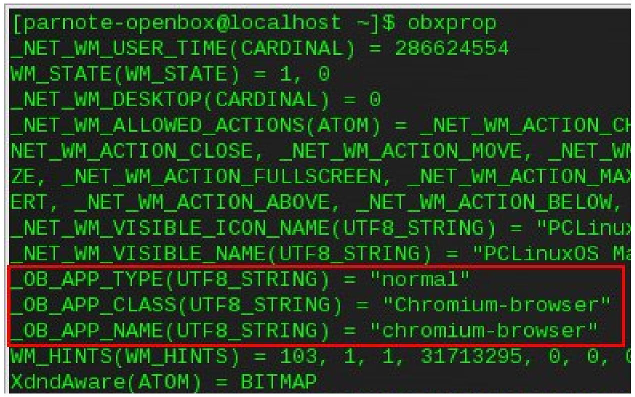
```
<applications>

    <application name="draklive-install">

      <maximized>true</maximized>

    </application>

    <application name="tint2">

      <layer>below</layer>

    </application>
    … (example deleted)

</applications>
```

This section of your rc.xml file can easily become quite a bit larger than what is shown here. With the settings in this section, I can specify positioning, desktops, display states, layers and a whole host of other options, for each of the applications you typically run.

Call me a creature of habit if you will, but I've gotten into the habit of having my web browser window on desktop 1, and my open IRC chat client on desktop 3. I do this on all of my computers, all running different versions of PCLinuxOS. It just one thing that helps keep me organized when I have several applications open at the same time.

So, if I click on a link in IRC, I really don't want Firefox to open up on desktop 3. It puts a chink in my routine. With the settings in the "applications" section of my rc.xml file, it's very easy to restrict Firefox to opening only on desktop 1.

In order to provide Openbox the information it needs, it's a good idea to run a command line program, called **obxprop**. When you run obxprop, the cursor will change to a cross-hair. Move your cursor over the window you want information on, and click your cursor. Immediately, you will be presented with a lot of information, as in the image below:



```
[parnote-openbox@localhost ~]$ obxprop
_NET_WM_USER_TIME(CARDINAL) = 286624554
WM_STATE(WM_STATE) = 1, 0
_NET_WM_DESKTOP(CARDINAL) = 0
_NET_WM_ALLOWED_ACTIONS(ATOM) = _NET_WM_ACTION_CH
NET_WM_ACTION_CLOSE, _NET_WM_ACTION_MOVE, _NET_WM
ZE, _NET_WM_ACTION_FULLSCREEN, _NET_WM_ACTION_MAX
ERT, _NET_WM_ACTION_ABOVE, _NET_WM_ACTION_BELOW,
_NET_WM_VISIBLE_ICON_NAME(UTF8_STRING) = "PCLinux
_NET_WM_VISIBLE_NAME(UTF8_STRING) = "PCLinuxOS Ma
_OB_APP_TYPE(UTF8_STRING) = "normal"
_OB_APP_CLASS(UTF8_STRING) = "Chromium-browser"
_OB_APP_NAME(UTF8_STRING) = "chromium-browser"
WM_HINTS(WM_HINTS) = 103, 1, 1, 31713295, 0, 0,
XdndAware(ATOM) = BITMAP
```

You are looking for the information highlighted in the red box. You need to specify either the _OB_APP_CLASS or _OB_APP_NAME, or both in order for Openbox to find the proper application. You can shorten the output by entering **obxprop | grep "^_OB_APP"** to list only the information needed by Openbox.

Now that you have the information that Openbox needs, you can start to set up your application specific controls. First, we need to tell Openbox which application we want to make rules for. We do this by specifying the name and/or class of the application, with the information provided by obxprop.

```
<application name="chromium-browser"
class="Chromium-browser>
```

Let's say we always want Chromium to start up on desktop 1. We next need to enter the following:

```
<desktop>1</desktop>
```

If we wanted to make sure that it always opened up maximized, we'd enter another line:

```
<maximized>true</maximized>
```

Finally, we close out the "application" tag:

```
</application>
```

You can also use wildcard characters in the name and class fields. A "*" matches any number of characters, while a "?" matches any single character.

There are several options available when making application specific settings or rules. Refer to the Openbox Wiki section on per application settings to see examples on how to apply those rules and settings. You can also take a look at your rc.xml file to see some examples of how to set up application specific rules and settings.

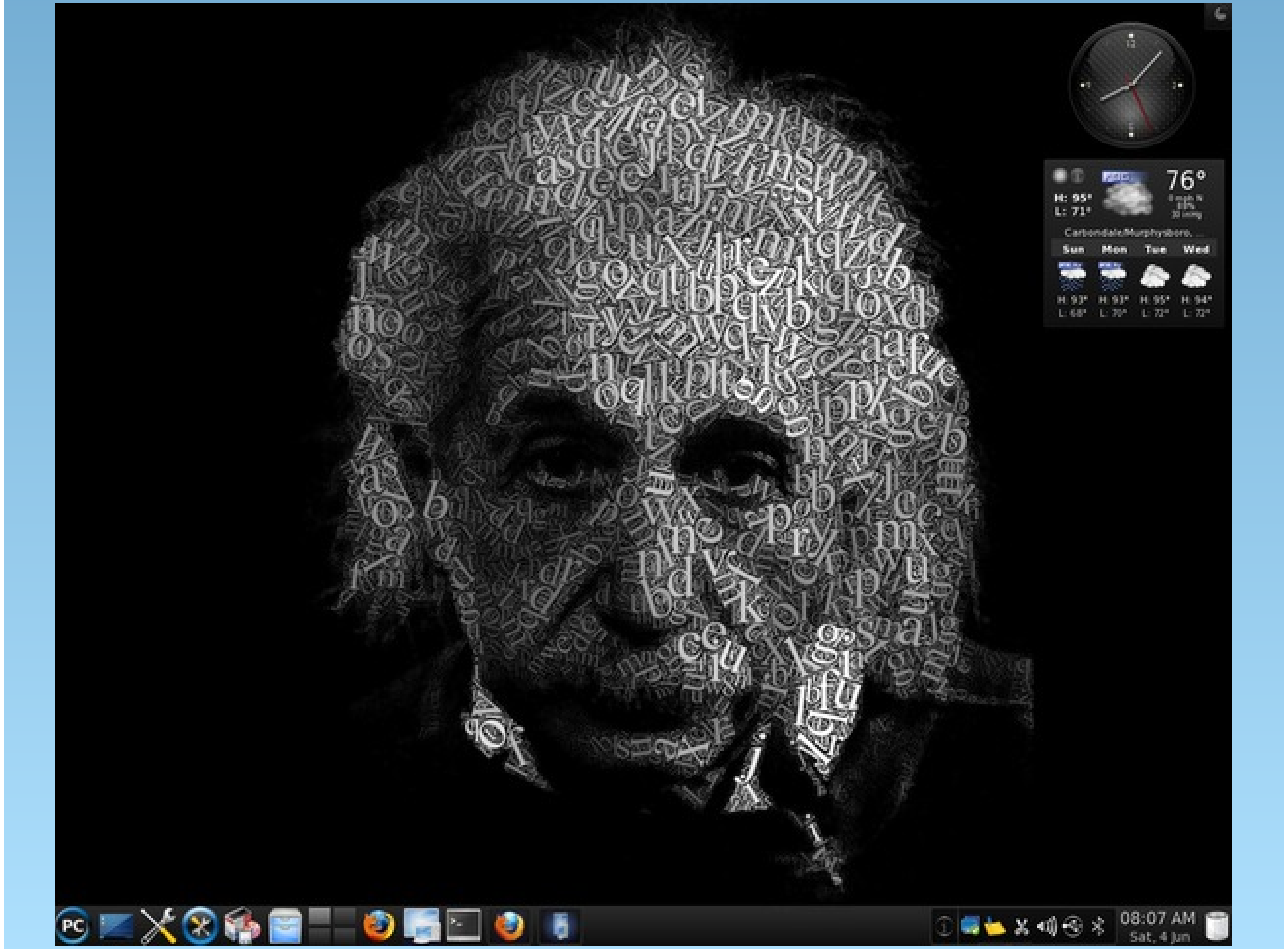
Thirteenth Section: Coordinates

This section of the rc.xml file is not included in my Openbox installation. As such, this section can be considered to be optional, since everything works just fine without it. If you are interested in learning more about the coordinates section of the rc.xml file, I'll refer you to the coordinates section of the Openbox Wiki.

Summary

As you can see, the rc.xml file exerts a ***lot*** of control over the behavior of Openbox. Once you get the hang of the XML format of the file, making changes is very easy. Because it is so easy to make changes, and because it offers so many options, you have a lot of leeway in customizing the behavior of your Openbox installation. You can truly tailor and trim your Openbox installation to be uniquely yours.

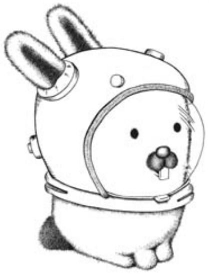
Screenshot Showcase



Posted by Ramchu, June 4, 2011, running KDE 4.

Alternate OS: Plan9, Part 1

by Darrel Johnston (djohnston)



Glenda, Plan9's bunny mascot, in a space suit.

This article is not about Plan9 From Outer Space. It is about Plan9 from Bell Laboratories. It was created in the late 1980s as a research operating system. Some of the team members were also involved in the original creation of UNIX and the C programming language.

In 1992, Bell Labs provided the first public release of Plan9 to universities. In 1995, a commercial second release version became available to the general public. In the late 1990s, Lucent Technologies, having inherited Bell Labs, dropped support for commercial interests in the project. In 2000, a non-commercial third release was distributed under an open source license. A fourth release under a new free software license occurred in 2002.

A user and development community, including current and former Bell Labs members and Massachusetts Institute of Technology personnel, continues to produce minor daily releases in form of ISO images. Bell Labs still hosts the development. The development source tree is accessible over the 9P and HTTP protocols and is used to update existing installations. In addition to the official components of the OS included in the ISOs, Bell Labs also hosts a repository of externally developed applications and tools.

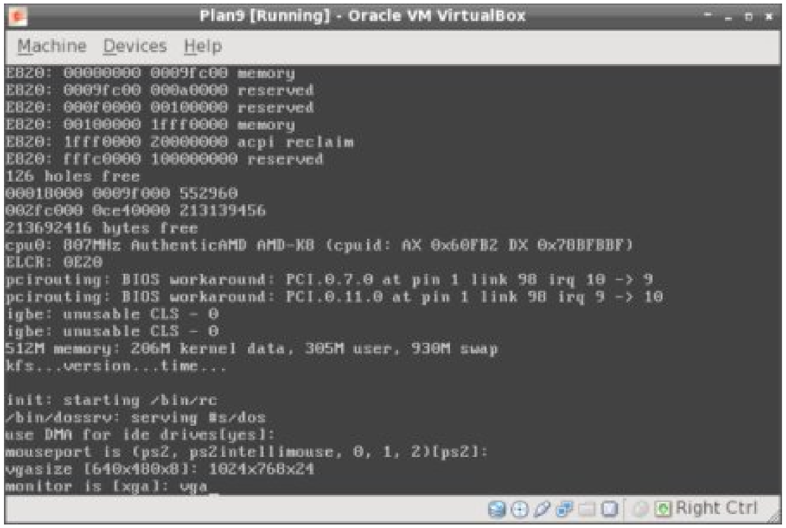
Like the BSDs, Plan 9 is an operating system kernel and a collection of application programs. Most of the software is written for Plan 9 rather than ported from Unix or other systems. It was the first operating system with complete support for the UTF-8 Unicode character set encoding. The graphics display capabilities are built into the kernel, rather than relying on an external server or user space. It is sometimes difficult to port external software to Plan 9. In particular, Plan 9 has no full-featured web browser.

Before UNIX, most operating systems had different mechanisms for accessing different types of devices. For example, the application programming interface (API) to access a disk drive was different from the API used to operate a printer. Unix attempted to remove these distinctions by performing all input/output operations via disk inodes. Every device driver was required to support read and write operations as a means of control. This allowed users to send data from one device to another without being aware of the underlying implementation details. However, as new features like the X Window System were developed, they were implemented outside of the file system. New hardware features, such as the ability to eject a CD in software, also encouraged the use of hardware-specific control mechanisms. The Plan 9 research project rejected these different approaches and returned to the file system-centric view of the system. Each Plan 9 program views all available resources, including networking and the user-interface resources, such as the window it is running in, as part of the hierarchical file system, rather than specialized interfaces.

Plan 9 has a distributed architecture. It can be installed and used on a single self-contained system, but also has the capability to separate the functional components of the OS between separate hardware platforms. In a typical Plan 9 installation, users work at lightweight terminals running the rio GUI and connect via the network to CPU servers that handle computation-intensive processes, with permanent data storage provided by additional hosts acting as file servers and archival storage. Currently available desktop computers can also re-create this architecture internally using multiple virtual machines.

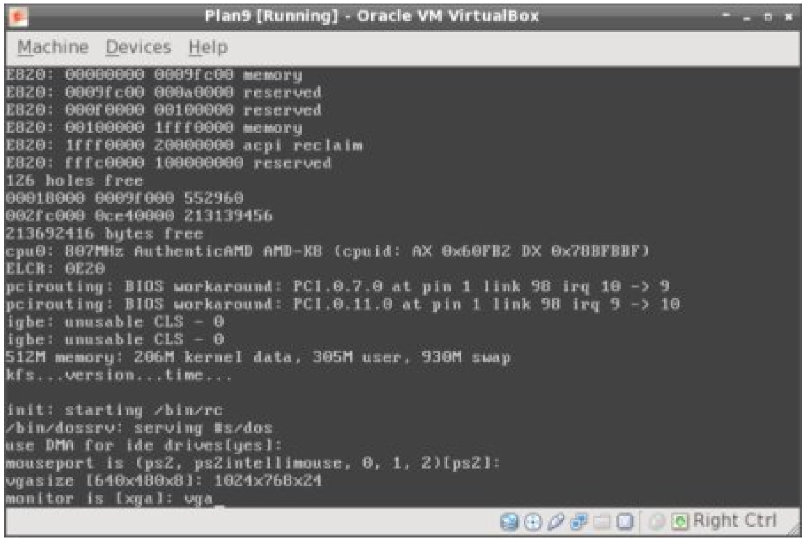
This article will deal with Plan9 installed as a single self-contained system, running within a virtual machine. The Plan 9 CD image is both a live boot CD and an installation CD. When you boot it, a menu will give you a choice between the two. You can boot as a live CD to explore the system. You can obtain the ISO image here. The system requirements for running the OS from the CD, or installing it, are 32MB of RAM and 300 MB of unpartitioned disk space on a primary partition. The installer on the CD assumes that your CD-ROM is on the second IDE master. VirtualBox sets up the CD device this way by default. For this installation, I allocated 512MB of RAM, and a dynamically sized disk partition of 1GB.

The downloaded ISO image is a bzipped file that must be uncompressed to get the resulting ISO CD image. After setting up the VirtualBox Plan9 VM, we begin by booting from the CD. You will see a plain text menu with the option to install Plan9 or to run the OS from the CD. Choose the install option.



```
E820: 00000000 0009fc00 memory
E820: 0009fc00 000a0000 reserved
E820: 000f0000 00100000 reserved
E820: 00100000 1fff0000 memory
E820: 1fff0000 20000000 acpi reclaim
E820: fffc0000 100000000 reserved
126 holes free
00018000 0009f000 552960
002fc000 0ce40000 213139456
213692416 bytes free
cpu0: 807MHz AuthenticAMD AMD-K8 (cpuid: AX 0x60FB2 DX 0x78BFBBF)
ELCR: 0E20
pcirouting: BIOS workaround: PCI.0.7.0 at pin 1 link 98 irq 10 -> 9
pcirouting: BIOS workaround: PCI.0.11.0 at pin 1 link 98 irq 9 -> 10
igbe: unusable CLS - 0
igbe: unusable CLS - 0
512M memory: 206M kernel data, 305M user, 930M swap
kfs...version...time...

init: starting /bin/rc
/bin/dossrv: serving #s/dos
use DMA for ide drives[yes]:
mouseport is (ps2, ps2intellimouse, 0, 1, 2)[ps2]:
vgasize [640x480x8]: 1024x768x24
monitor is [xga]: vga_
```

OPTIONS:
(text shown in [] brackets is the default choice)
1. use DMA for ide drives[yes]: press ENTER for yes
2. mouseport is (ps2, ps2intellimouse, 0, 1, 2)[ps2]: press ENTER for ps2
3. vgasize [640x480x8]: That screen resolution is too small. Change the options to 1024x768x24
4. monitor is [xga]: enter vga



```
E820: 00000000 0009fc00 memory
E820: 0009fc00 000a0000 reserved
E820: 000f0000 00100000 reserved
E820: 00100000 1fff0000 memory
E820: 1fff0000 20000000 acpi reclaim
E820: fffc0000 100000000 reserved
126 holes free
00018000 0009f000 552960
002fc000 0ce40000 213139456
213692416 bytes free
cpu0: 807MHz AuthenticAMD AMD-K8 (cpuid: AX 0x60FB2 DX 0x78BFBBF)
ELCR: 0E20
pcirouting: BIOS workaround: PCI.0.7.0 at pin 1 link 98 irq 10 -> 9
pcirouting: BIOS workaround: PCI.0.11.0 at pin 1 link 98 irq 9 -> 10
igbe: unusable CLS - 0
igbe: unusable CLS - 0
512M memory: 206M kernel data, 305M user, 930M swap
kfs...version...time...

init: starting /bin/rc
/bin/dossrv: serving #s/dos
use DMA for ide drives[yes]:
mouseport is (ps2, ps2intellimouse, 0, 1, 2)[ps2]:
vgasize [640x480x8]: 1024x768x24
monitor is [xga]: vga_
```

The installation process will begin within a Plan9 GUI window as shown below. Rather than show a screenshot for each step in the installation process, I will summarize the messages given. The messages associated with a step number are complete, along with the response that should be given to complete that step (right).

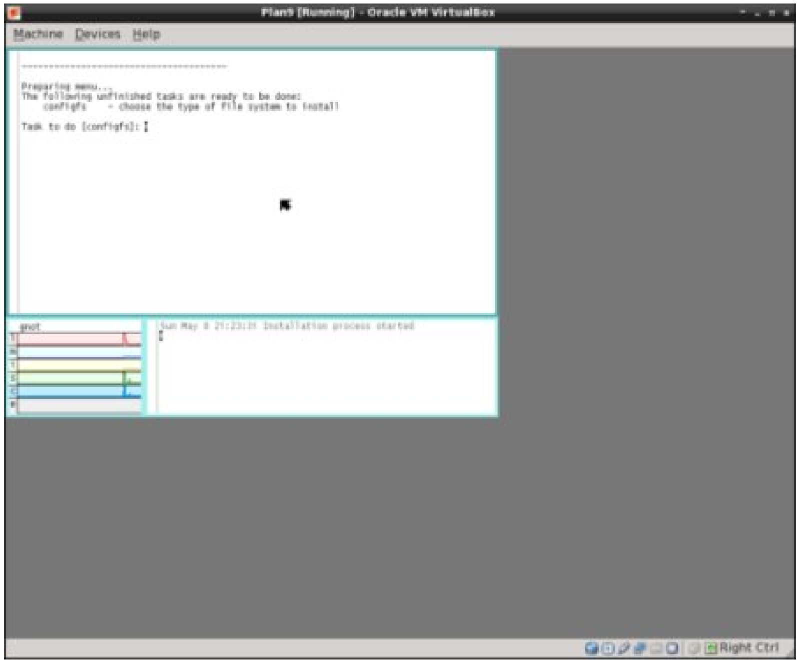
INSTALLATION PROCEDURE:
(text shown in [] brackets is the default choice)
1. Task to do [configfs]: press ENTER
2. File system (fossil, fossil+venti)[fossil]: press ENTER

The following tasks are done:
configfs - choose the type of filesystem

The following unfinished tasks are ready to be done:

partdisk - edit partition tables
3. Task to do [partdisk]: press ENTER

The following disk devices were found,
sdC0 - VBOX HARDDISK
sdD0 - VBOX CD-ROM 1.0



```
----------------------------------------

Preparing menu...
The following unfinished tasks are ready to be done:
    configfs    - choose the type of file system to install

Task to do [configfs]:
```

```
Sun May 8 21:23:31 Installation process started
```

4. Disk to partition (sdC0, sdD0)[no default]: Enter sdC0

The disk you selected HAS NO master boot record on its first sector.

5. Install mbr (y, n)[no default]: enter y

This is disk/fdisk; use it to create a plan 9 partition.
… you can probably just type “w” and then “q”.

6. enter w
7. enter q

The following unfinished tasks are ready to be done:

prepdisk - subdivide plan 9 disk partition

8. Task to do [prepdisk]: press ENTER
9. Plan 9 partition to subdivide (/dev/sdC0/plan9)[/dev/sdC0/plan9]: press ENTER

This is disk/prep; use it to subdivide the Plan 9 partition. … you can probably just type “w” and then “q”.
(A suggested plan9 partition table will be displayed.)

10. enter w
11. enter q

The following unfinished tasks are ready to be done:

fmtfossil - initialize disks for a fossil server

12. Task to do [fmtfossil]: press ENTER

You have the following fossil partitions.

13. Fossil partition to format (/dev/sdC0/fossil)[/dev/sdC0/fossil]: press ENTER

The following unfinished tasks are ready to be done:

mountfs - choose and mount file system partition

14. Task to do [mountfs]: press ENTER

The following partitions name fossil* were found.
Please choose one as the installation file system …

15. Fossil partition (/dev/sdC0/plan9)[/dev/sdC0/plan9]: press ENTER

The following unfinished tasks are ready to be done:

configdisk - choose the source of the distribution archive
download - download or continue to download the distribution archives

16. Task to do [configdist]: press ENTER
17. Distribution is from (local, net)[local]: press ENTER

The following unfinished tasks are ready to be done:

mountdist - locate and mount the distribution
download - download or continue to download the distribution archives

18. Task to do [mountdist]: press ENTER

The following storage media were detected.
Choose the one containing the distribution.
/dev/sdC0/fossil (plan9 fossil)
/dev/sdD0/cdboot (microsoft fat)
/dev/sdD0/data (iso9660 cdrom)

19. Distribution disk [no default]: enter /dev/sdD0/data

Which directory contains the distribution?
Any of the following will suffice (in order of preference):
- the root directory of the CD image
- the directory containing plan9.iso
- the directory containing plan9.iso.bz2

Typing ‘browse’ will put you in a shell that you can use to look for the directory.

20. Location of archives [browse]: press ENTER

This is a simple shell. Commands are:
cd directory - change to directory
lc - list contents of current directory
exit - exit shell
Move to the directory containing the distribution and then exit.

21. (At the /% prompt) enter exit

At this point, the installation will begin copying files to the selected file system with a progress bar showing (next page, top).

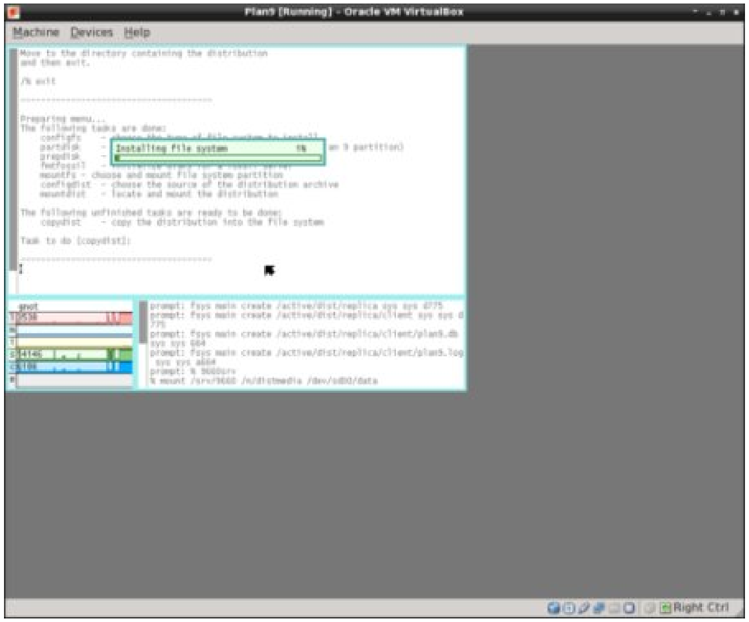
The following unfinished tasks are ready to be done:

bootsetup - create a boot floppy or configure hard disk to boot plan 9

22. Task to do [bootsetup]: press ENTER

Initializing Plan 9 FAT configuration partition (9fat)

There are myriad ways to boot a Plan 9 system.



```
Move to the directory containing the distribution
and then exit.

/% exit

-------------------------------------

Preparing menu...
The following tasks are done:
    configfs     - choose the type of file system to install
    partdisk     -                                          on 9 partition)
    prepdisk     -
    fmtfossil    -
    mountfs - choose and mount file system partition
    configdist   - choose the source of the distribution archive
    mountdist    - locate and mount the distribution

The following unfinished tasks are ready to be done:
    copydist     - copy the distribution into the file system

Task to do [copydist]:

-------------------------------------
```

```
Installing file system        1%
```

```
prompt: fsys main create /active/dist/replica sys sys d775
prompt: fsys main create /active/dist/replica/client sys sys d
775
prompt: fsys main create /active/dist/replica/client/plan9.db
sys sys 664
prompt: fsys main create /active/dist/replica/client/plan9.log
 sys sys a664
prompt: % 9660srv
% mount /srv/9660 /n/distmedia /dev/sdD0/data
```

23. Enable boot method (floppy, plan9, win9x, winnt)[no default]: enter plan9

If you use the Windows NT/2000/XP master boot record or a master boot record from a Unix clone (e.g., LILO or FreeBSD bootmgr), it is probably safe to continue using that boot record rather than install the Plan 9 boot record.

24. Install the Plan 9 master boot record (y, n)[no default]: enter y

The following unfinished tasks are ready to be done:
finish - finish the installation and reboot

25. Task to do [finish]: press ENTER

Congratulations; you've completed the install.

Halting file systems...done

Remember to take the install disk out of the drive.
Feel free to turn off your computer.

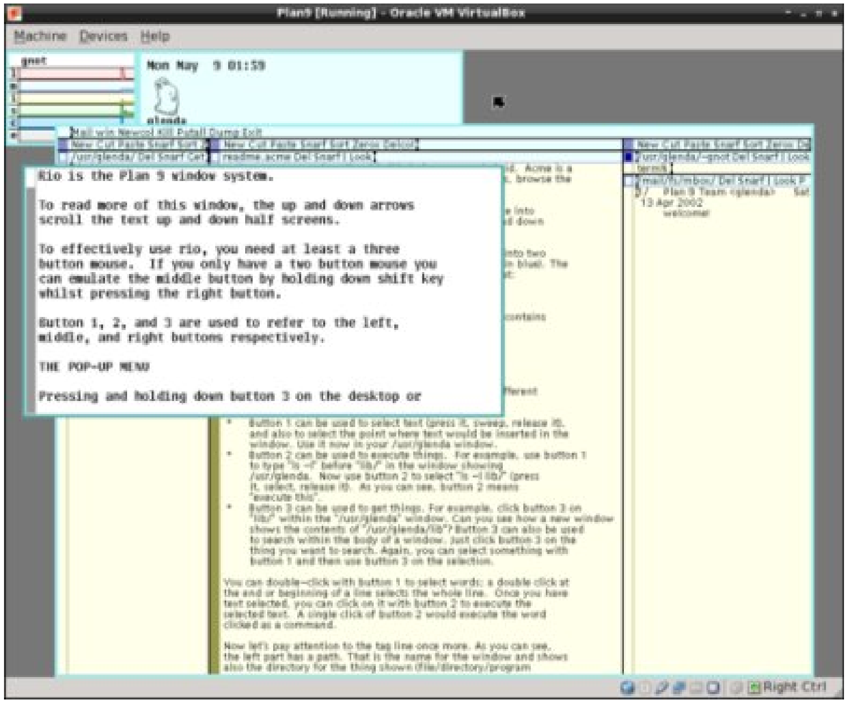
At this point, we need to click the close button on the VirtualBox window and answer Power off the machine in the requestor window. Having done that, detach the CD image from the Plan9 VM, then start the VM again.

The boot menu is all text. At the prompt -> root is from (tcp, local)[local!#S/sdC0/fossil]: press ENTER

At the prompt ->
user[none]: enter glenda

Plan9 has entered a GUI environment, and we are logged in as user glenda (right). The window at the front is a set of help instructions.

Next month we'll learn how to navigate the system, create a new user and update the distribution.


Plan9 [Running] - Oracle VM VirtualBox
Machine Devices Help
gnot
Mon May 9 01:59
glenda
Mail win Newcol Kill Putall Dump Exit
New Cut Paste Snarf Sort Zerox Delcol
/usr/glenda/ Del Snarf Get
readme.acme Del Snarf | Look
New Cut Paste Snarf Sort Zerox Delcol
/usr/glenda/-gnot Del Snarf | Look
mail/fs/mbox/ Del Snarf | Look
3/ Plan 9 Team <glenda> Sat
13 Apr 2002
welcome!
Right Ctrl

```
Rio is the Plan 9 window system.

To read more of this window, the up and down arrows
scroll the text up and down half screens.

To effectively use rio, you need at least a three
button mouse.  If you only have a two button mouse you
can emulate the middle button by holding down shift key
whilst pressing the right button.

Button 1, 2, and 3 are used to refer to the left,
middle, and right buttons respectively.

THE POP-UP MENU

Pressing and holding down button 3 on the desktop or
```

- Button 1 can be used to select text (press it, sweep, release it), and also to select the point where text would be inserted in the window. Use it now in your /usr/glenda window.
- Button 2 can be used to execute things. For example, use button 1 to type "ls -l" before "lib/" in the window showing /usr/glenda. Now use button 2 to select "ls -l lib/" (press it, select, release it). As you can see, button 2 means "execute this".
- Button 3 can be used to get things. For example, click button 3 on "lib/" within the "/usr/glenda" window. Can you see how a new window shows the contents of "/usr/glenda/lib"? Button 3 can also be used to search within the body of a window. Just click button 3 on the thing you want to search. Again, you can select something with button 1 and then use button 3 on the selection.

You can double-click with button 1 to select words; a double click at the end or beginning of a line selects the whole line. Once you have text selected, you can click on it with button 2 to execute the selected text. A single click of button 2 would execute the word clicked as a command.

Now let's pay attention to the tag line once more. As you can see, the left part has a path. That is the name for the window and shows also the directory for the thing shown (file/directory/program

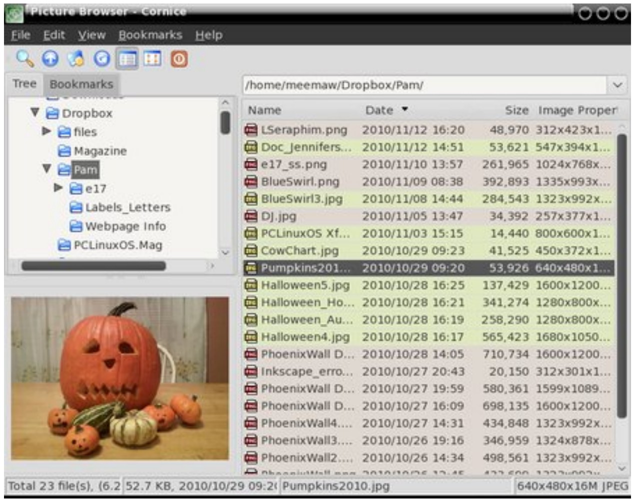
Photo Viewers Galore, Part 3

by Meemaw

In this part of our series, we finally get to the viewers that can do some simple photo editing. By 'simple', I mean that the flip and rotate functions are there. In the coming articles, some of the programs will have more advanced editing, like crop, resize, convert, and more.

Cornice

Cornice is the last of our viewer-only programs. It was designed to be a free replacement of ACDSee, and it's mainly a viewer. Cornice is written in Python, and is a cross-platform viewer. However, development has stopped on it. The website has the source code, and one of our wonderful packagers was kind enough to package it for me so I could install it and give it a try.

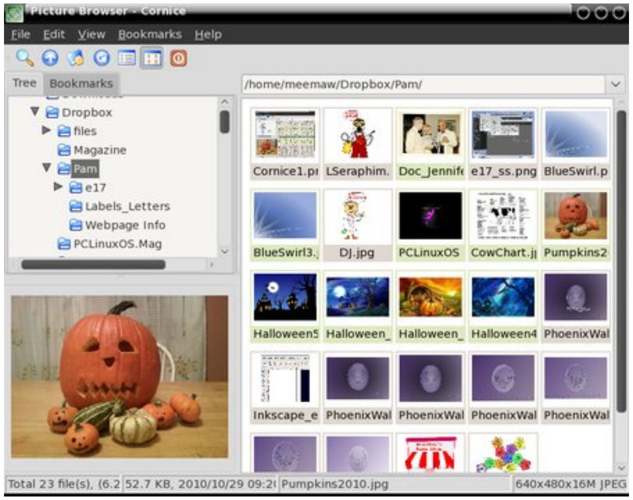


/home/meemaw/Dropbox/Pam/

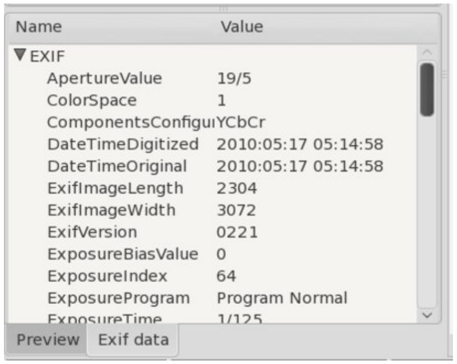
Name	Date ▾	Size	Image Proper
LSeraphim.png	2010/11/12 16:20	48,970	312x423x1...
Doc_Jennifers...	2010/11/12 14:51	53,621	547x394x1...
e17_ss.png	2010/11/10 13:57	261,965	1024x768x...
BlueSwirl.png	2010/11/09 08:38	392,893	1335x993x...
BlueSwirl3.jpg	2010/11/08 14:44	284,543	1323x992x...
DJ.jpg	2010/11/05 13:47	34,392	257x377x1...
PCLinuxOS Xf...	2010/11/03 15:15	14,440	800x600x1...
CowChart.jpg	2010/10/29 09:23	41,525	450x372x1...
Pumpkins201...	2010/10/29 09:20	53,926	640x480x1...
Halloween5.jpg	2010/10/28 16:25	137,429	1600x1200...
Halloween_Ho...	2010/10/28 16:21	341,274	1280x800x...
Halloween_Au...	2010/10/28 16:19	258,290	1280x800x...
Halloween4.jpg	2010/10/28 16:17	565,423	1680x1050...
PhoenixWall D...	2010/10/28 14:05	710,734	1600x1200...
Inkscape_erro...	2010/10/27 20:43	20,150	312x301x1...
PhoenixWall D...	2010/10/27 19:59	580,361	1599x1089...
PhoenixWall D...	2010/10/27 16:09	698,135	1600x1200...
PhoenixWall4....	2010/10/27 14:31	434,848	1323x992x...
PhoenixWall3....	2010/10/26 19:16	346,959	1324x878x...
PhoenixWall2....	2010/10/26 14:34	498,561	1323x992x...

Total 23 file(s), (6.2 | 52.7 KB, 2010/10/29 09:2(| Pumpkins2010.jpg | 640x480x16M JPEG

You can scroll through your photos one at a time (bottom left), and can set up your main screen to show you your directory tree, a list of the photos or thumbnails in the directory you've chosen and even a preview of the photo you have highlighted (below).



Notice at the bottom of the preview, there are two tabs, one saying preview and the other saying 'Exif data'. This tab gives you lots of technical information about your photo, but is out of the way until you need or want to see it (right).

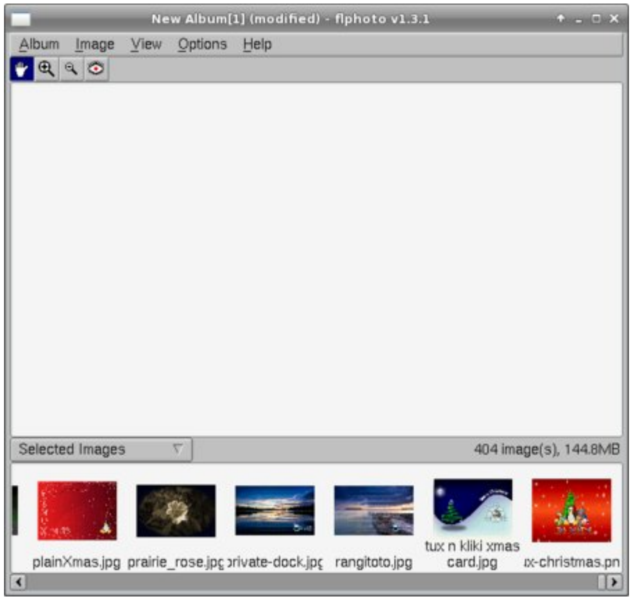


Name	Value
▼ EXIF	
ApertureValue	19/5
ColorSpace	1
ComponentsConfigu	YCbCr
DateTimeDigitized	2010:05:17 05:14:58
DateTimeOriginal	2010:05:17 05:14:58
ExifImageLength	2304
ExifImageWidth	3072
ExifVersion	0221
ExposureBiasValue	0
ExposureIndex	64
ExposureProgram	Program Normal
ExposureTime	1/125

flPhoto

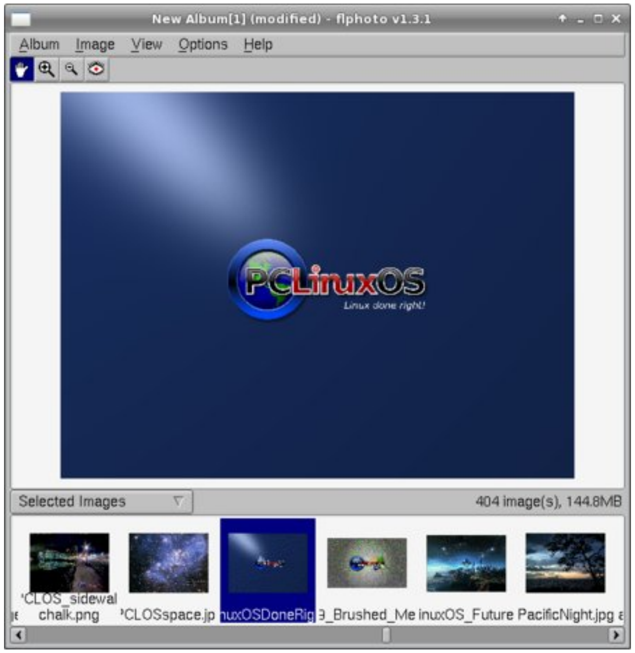
I just found this in Synaptic! flPhoto is a photo managing program. You can import photos from a camera, import a single image, or even a folder on your computer.

When you import a directory (folder), a thumbnail viewer appears at the bottom of the screen.

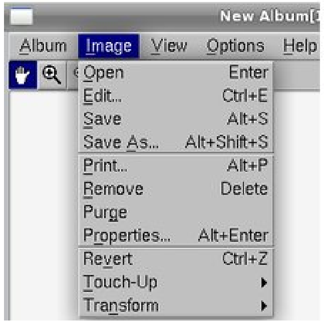


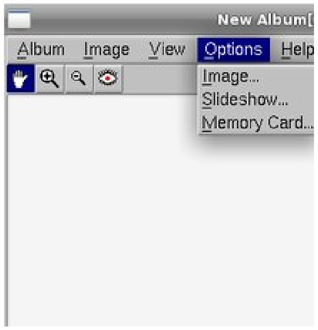
Clicking on a thumbnail will allow you to view it in the upper section of the window (next page).

The tools at the top of the window are (L to R above) Pan, Zoom In, Zoom Out and Remove Red-Eye.



Other included tools are shown below. In the Image menu, **Touch-Up** includes Brightness & Contrast, Blur and Sharpen. **Transform** includes Crop Rotate and Scale. The touch-up choices are all automatic, so you have no choices, but the crop and scale give you choices as to how much you want to crop or how small you want to scale. You can always type **<CTRL> + Z** to revert back to your image before the change.

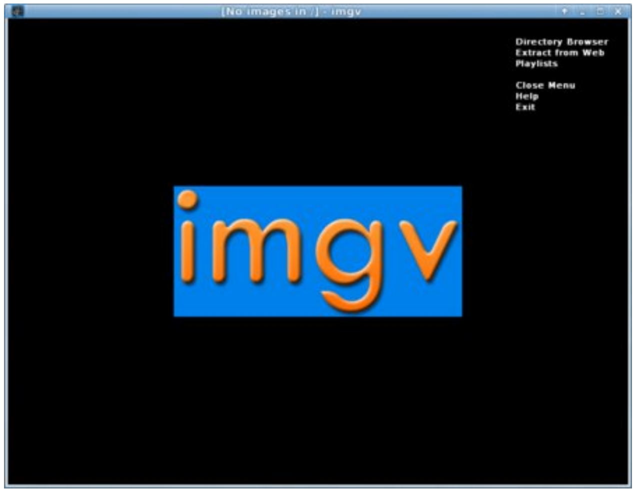




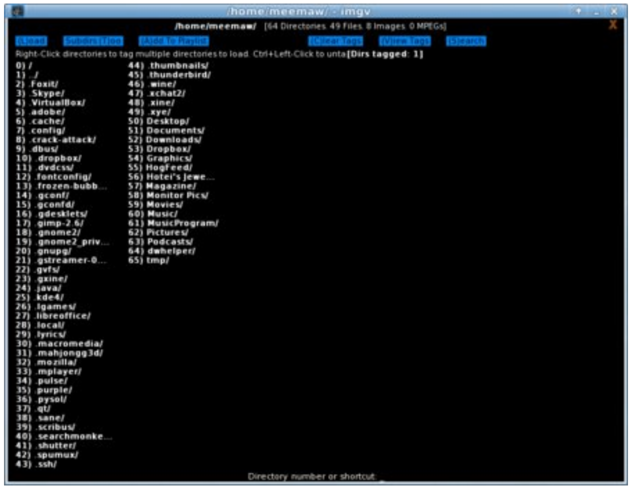
Clicking the X to close the program will first close the album. Clicking it again will close the program.

Imgv

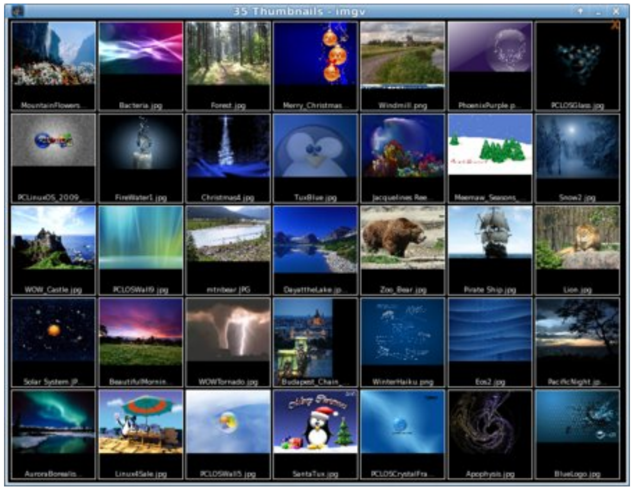
This is a light image viewer with slideshow and simple editing. When you first open it, it doesn't really look like much, but there's more there than you think.



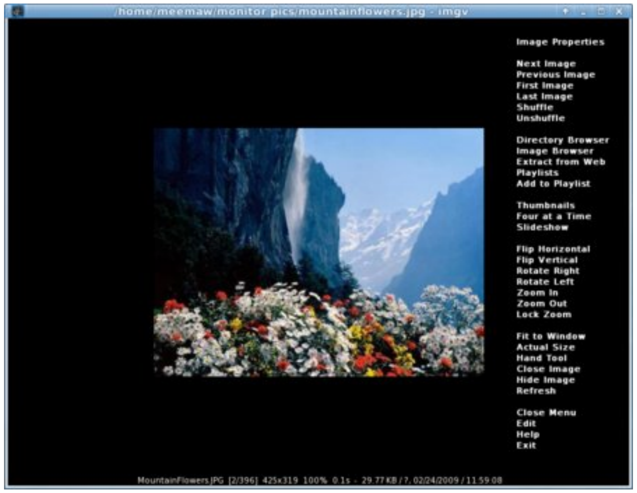
When you click on '**Directory Browser**', you will get a list of everything. Left click on /home and then /Your-Home folder, and you'll see something like the following (top right):


```
/home/meemaw/  [64 Directories 49 Files 8 Images 0 MPEGs]
[Load]  [Subdirs Too]  [Add To Playlist]          [Clear Tags]  [View Tags]  [Search]
Right-Click directories to tag multiple directories to load. Ctrl+Left-Click to unta[Dirs tagged: 1]
0) /                      44) .thumbnails/
1) ../                    45) .thunderbird/
2) .Foxit/                46) .wine/
3) .Skype/                47) .xchat2/
4) .VirtualBox/           48) .xine/
5) .adobe/                49) .xye/
6) .cache/                50) Desktop/
7) .config/               51) Documents/
8) .crack-attack/         52) Downloads/
9) .dbus/                 53) Dropbox/
10) .dropbox/             54) Graphics/
11) .dvdcss/              55) HogFeed/
12) .fontconfig/          56) Hotei's Jewe...
13) .frozen-bubb...       57) Magazine/
14) .gconf/               58) Monitor Pics/
15) .gconfd/              59) Movies/
16) .gdesklets/           60) Music/
17) .gimp-2.6/            61) MusicProgram/
18) .gnome2/              62) Pictures/
19) .gnome2_priv...       63) Podcasts/
20) .gnupg/               64) dwhelper/
21) .gstreamer-0...       65) tmp/
22) .gvfs/
23) .gxine/
24) .java/
25) .kde4/
26) .lgames/
27) .libreoffice/
28) .local/
29) .lyrics/
30) .macromedia/
31) .mahjongg3d/
32) .mozilla/
33) .mplayer/
34) .pulse/
35) .purple/
36) .pysol/
37) .qt/
38) .sane/
39) .scribus/
40) .searchmonke...
41) .shutter/
42) .spumux/
43) .ssh/
                                  Directory number or shortcut
```

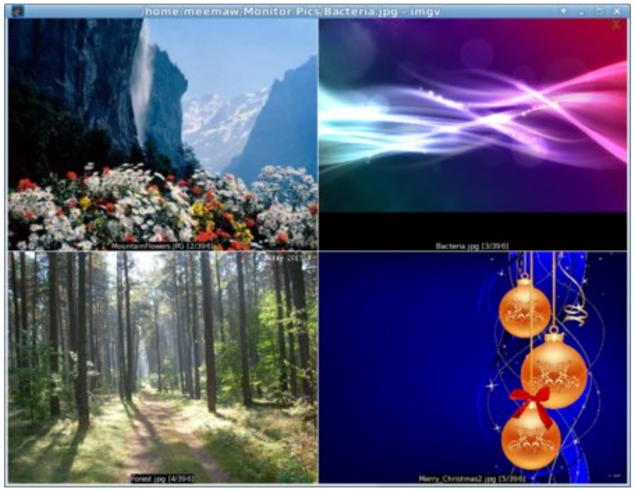
Directory Browser (above) Thumbnails (below)



Right-click on a folder to choose it (I chose the folder 'Monitor Pics/'), then click on the blue box at top left that says **LOAD**.



Clicking on one of the pictures lets you view only it (above).

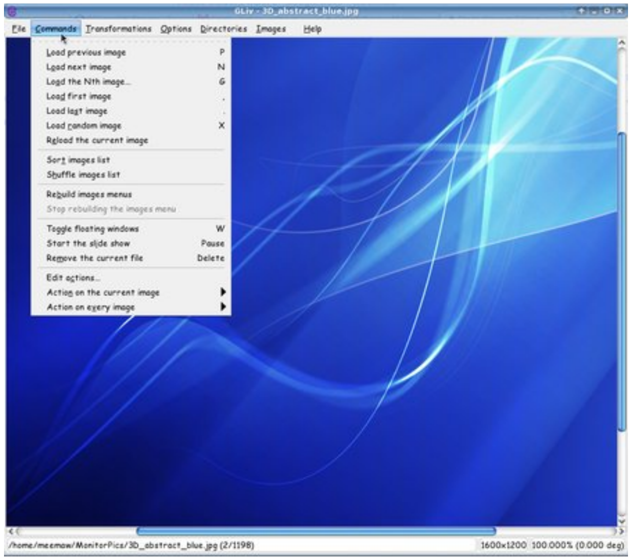


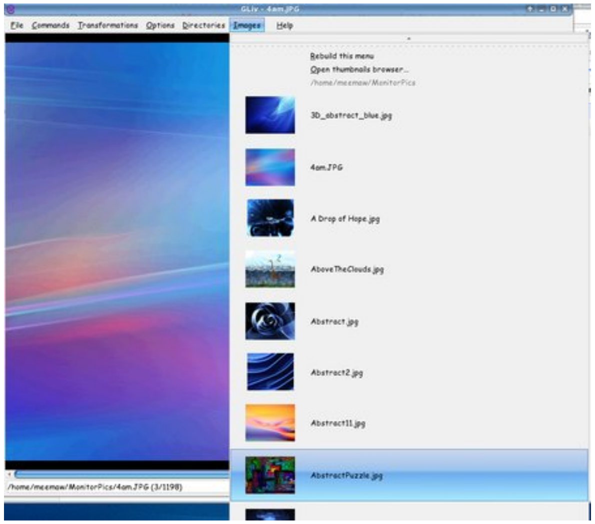
As you can see from the menu above, you CAN view the photos four at-a-time if you wish.

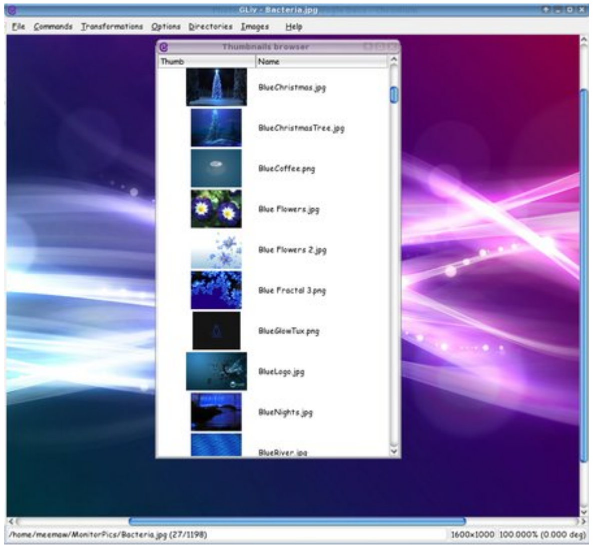
Oh, by the way, if a bigger picture is loaded, you can zoom out or even move the menu to another location. Zoom in and Zoom out are in the menu, and if you right-click somewhere else in the window, the menu will move there.

gliv

gliv is mainly a viewer, but it does have some simple editing and a slideshow. The menus are a little different than most of the ones we are used to. The File section is, as usual, where you can open the photos, but then the next section is Commands, which will let you go to the next or previous photo (or first or last), instead of having a tool bar with arrows in your window.

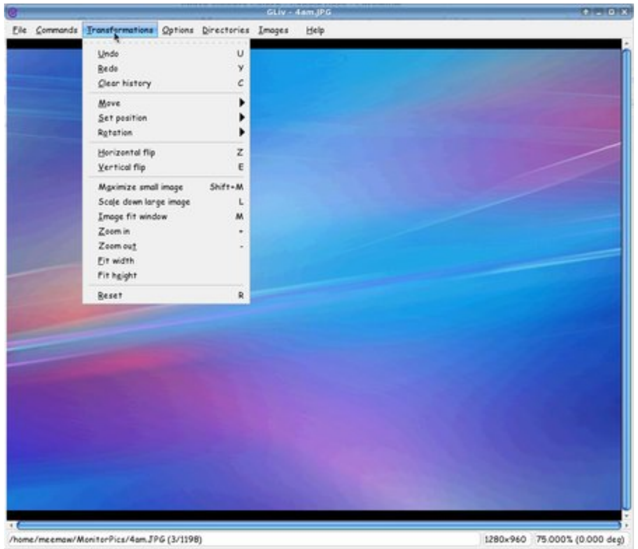






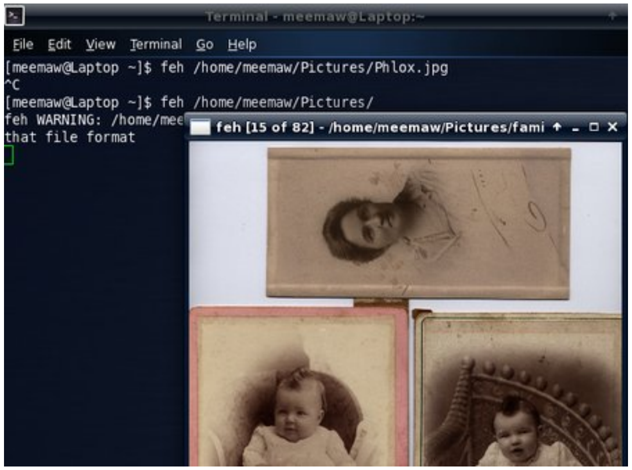
The Images section gives you a thumbnail list of the folder you are in. You can view them there, or click on '**Open Thumbnail Browser**' which will pop that list out into its own window.

Transformations is the menu where the editing features are. You can rotate or flip the image or scale down an image to fit within the window.



feh

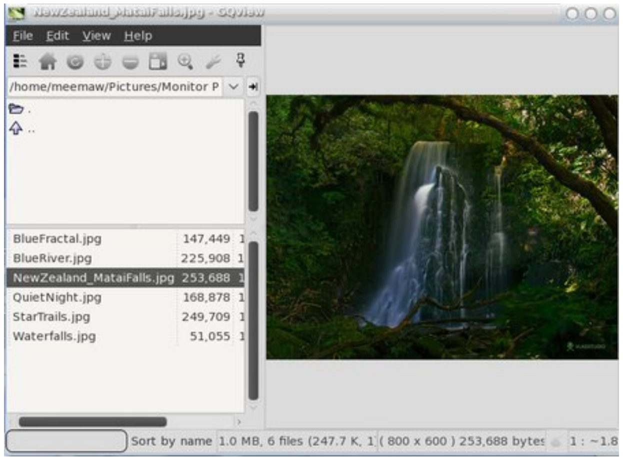
This is a CLI program which can do a lot with the proper terminal commands. It is run from a terminal. Entering the command **feh 'path/to/photo'** will open a photograph for you (center top). Entering the path to the *folder* that contains the photos puts the viewer into slideshow mode, and you can use your left and right arrow keys to scroll through the pictures in that folder. (The up and down arrow keys will enlarge and reduce your pictures.) There is a 'montage' command which displays several photos in the folder randomly. The general commands manual site has a full summary of the functions of feh.


Terminal - meemaw@Laptop:~
File Edit View Terminal Go Help
feh [15 of 82] - /home/meemaw/Pictures/fami

```
[meemaw@Laptop ~]$ feh /home/meemaw/Pictures/Phlox.jpg
^C
[meemaw@Laptop ~]$ feh /home/meemaw/Pictures/
feh WARNING: /home/mee
that file format
```

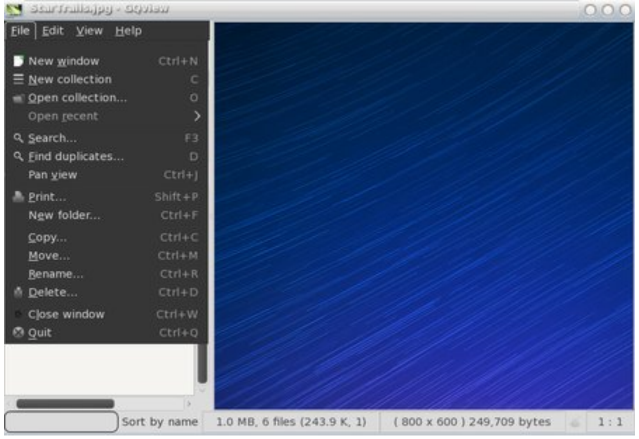
GQView

When you open GQView, you will see a directory tree at left. Choosing the folder that contains your photos will produce a list of them at lower left. Choose one and GQView will let you view your photos in a window at right.

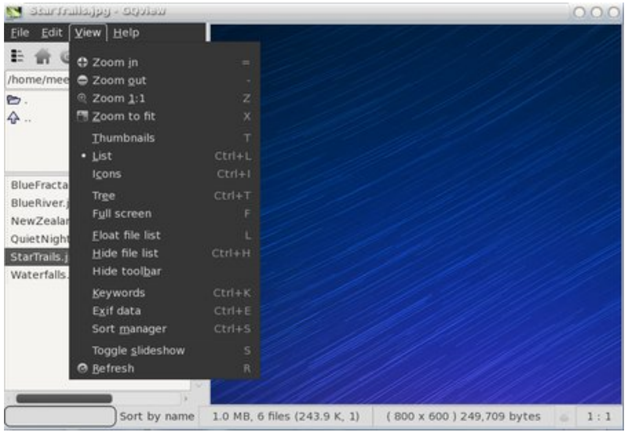

NewZealand_MataiFalls.jpg - GQview
File Edit View Help
/home/meemaw/Pictures/Monitor P
Sort by name
1.0 MB, 6 files (247.7 K, 1
(800 x 600) 253,688 bytes
1 : ~1.8

BlueFractal.jpg	147,449	1
BlueRiver.jpg	225,908	1
NewZealand_MataiFalls.jpg	253,688	1
QuietNight.jpg	168,878	1
StarTrails.jpg	249,709	1
Waterfalls.jpg	51,055	1

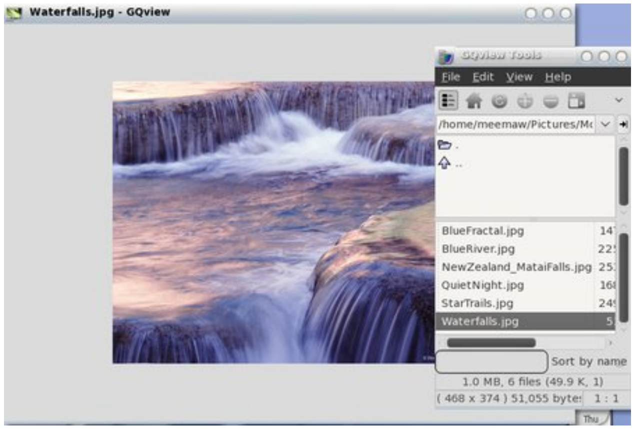
In the File section, you can create and open a 'Collection.'



In View, you can see your photo however you want; fullscreen, zoom in and out, even a group of thumbnails. The exif data is also in this menu.



Clicking the 'stickpin' in the toolbar above the file list will 'float' the file list and allow you to view your pictures in a larger window. You can also click **View - Float File List** or type the letter '**L**' to float or anchor that list.

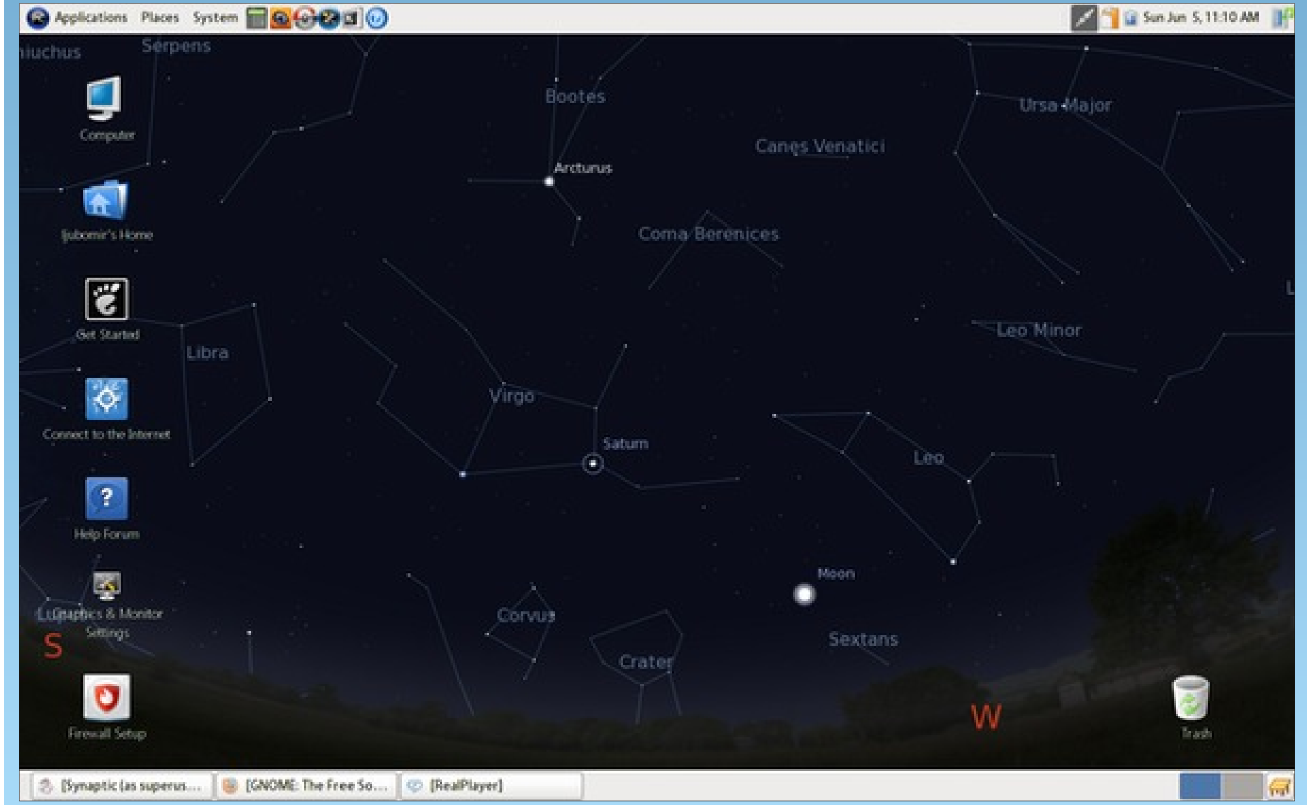


Next month we'll look at even more photo viewers.

Visit Us On IRC

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

Screenshot Showcase



Posted by Galeb, June 5, 2011, running Gnome.

Game Zone: How To Install DirectX In Linux Using Wine

by Igor Ljubuncic
Reprinted with Permission
From Dedoimedo.com

Would you like to play the latest and greatest Windows games? Sure. In Linux? Sure. Now comes the tricky question, how exactly do you do that? Linux uses OpenGL, whereas most Windows games rely on DirectX. No problem. That's what Wine is made for.

I've mentioned Wine in my Linux gaming mega how-to, as one of the tools that allow you to run Windows games in Linux, for whatever reason you may want to do so. The results may vary and may not be perfect, but you can still manage a handsome array of games easily.

What prompted me to try running one of the Windows heavyweight games on Linux was the pure simple hardware limitation. The game in question was Tropico 3, a fabulous dictatorship simulation with some pretty hefty requirements, including 2GB of RAM and at least 256MB Nvidia 6600GT card. As it turns out, my two older Athlons both running Windows and equipped with Nvidia 6600GT and 7600GT cards were not exactly tailored for this game. But if you recall, I've just recently bought myself a shiny new laptop, with the powerful Nvidia 9600GS card with 512MB VRAM. So I figured, what the hell, it's worth a try.

What I did was install DirectX 9.0c in Linux using Wine and then installed Tropico 3. Lo and behold, it works, beautifully. I can play the game with details set to high without any problems or glitches, everything runs smoothly and even the sound quality is great.

In this article, you will learn how to install DirectX using Wine. It's not simple, but it's not difficult either. And then, the world's your oyster. I hope you will enjoy this guide, plus you get a few dandy Tropico 3 screenshots. A full review will come later.

Follow me.

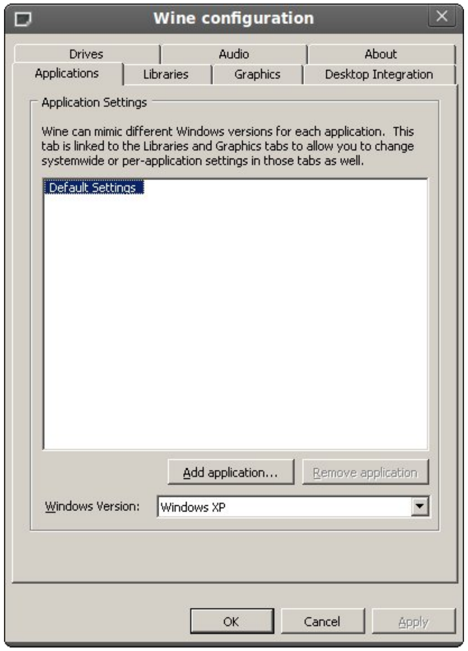
Install Wine

This is simple. Just open the package manager and install the software.

Configure DirectX libraries

This is the most complicated step of all. But do not worry, you get everything, step by step.

Launch Wine configuration. You can either do it via the Application menu in your distro, Wine > Configure Wine or by running winecfg from the command line. Once the main menu opens, click on the Libraries tab.

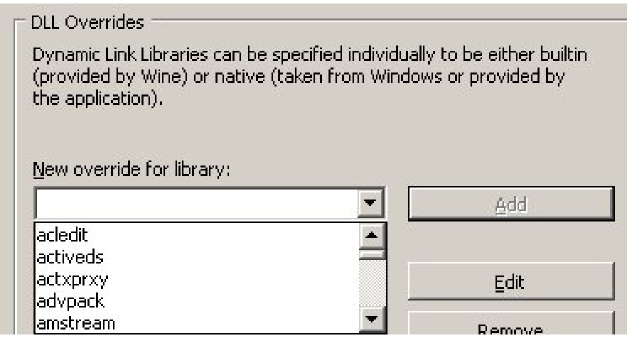


Wine can mimic different Windows versions for each application. This tab is linked to the Libraries and Graphics tabs to allow you to change systemwide or per-application settings in those tabs as well.

Default Settings

Windows Version: Windows XP

This tab allows you to specify the behavior of different DLLs and override the possible defaults. To get DirectX running, you will need a long list of DLLs listed. The first step is to click on the New override dropdown box icon and expand the list. Search for the d3d8 DLL. Once found, click Add.



DLL Overrides

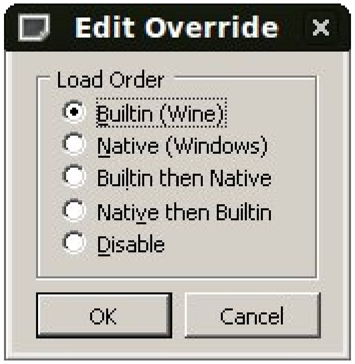
Dynamic Link Libraries can be specified individually to be either builtin (provided by Wine) or native (taken from Windows or provided by the application).

New override for library:

acledit
activeds
actxprxy
advpack
amstream

It will be added to the Existing overrides list like this: d3d8 (builtin,native).

This is not what we need. Therefore, you must select the DLL in the list and click Edit. Then, change the configuration to builtin only.



Edit Override

Load Order

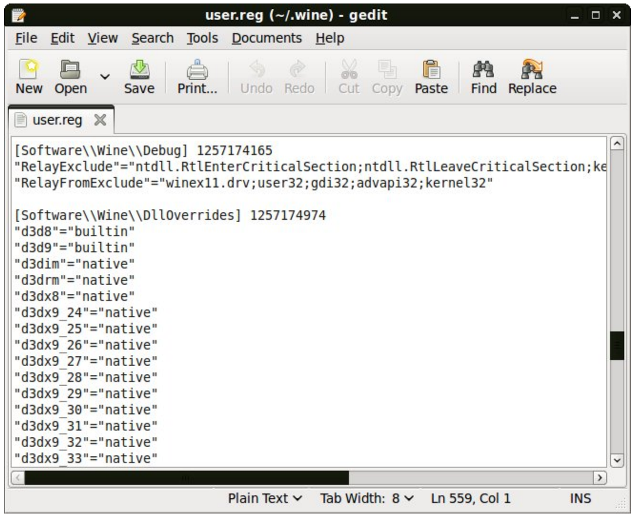
● Builtin (Wine)
○ Native (Windows)
○ Builtin then Native
○ Native then Builtin
○ Disable

There's a very long list of DLLs and specifying them manually would be a torture. Luckily, you can hack the Wine registry directly and add the desired overrides as a list into the file, without going through the manual process of specifying each one using the GUI.

To edit the registry, open the file in text editor (e.g. gedit):

```
gedit ~/.wine/user.reg
```

In the file, look for the section labeled DllOverrides:



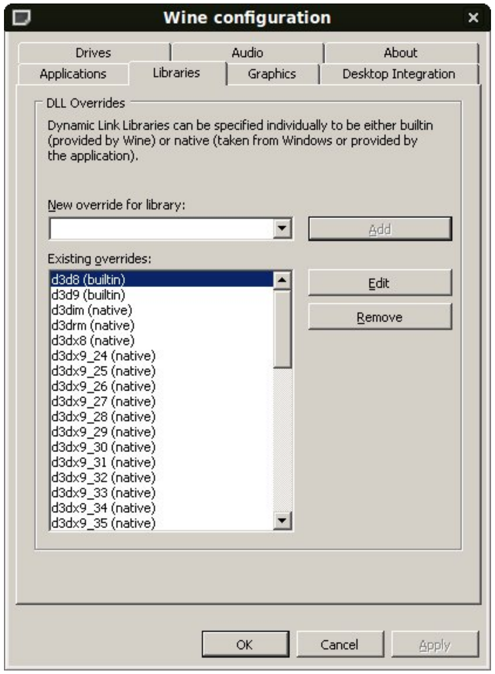
user.reg (~/.wine) - gedit
File Edit View Search Tools Documents Help
New Open Save Print... Undo Redo Cut Copy Paste Find Replace
user.reg

```
[Software\\Wine\\Debug] 1257174165
"RelayExclude"="ntdll.RtlEnterCriticalSection;ntdll.RtlLeaveCriticalSection;ke
"RelayFromExclude"="winex11.drv;user32;gdi32;advapi32;kernel32"

[Software\\Wine\\DllOverrides] 1257174974
"d3d8"="builtin"
"d3d9"="builtin"
"d3dim"="native"
"d3drm"="native"
"d3dx8"="native"
"d3dx9_24"="native"
"d3dx9_25"="native"
"d3dx9_26"="native"
"d3dx9_27"="native"
"d3dx9_28"="native"
"d3dx9_29"="native"
"d3dx9_30"="native"
"d3dx9_31"="native"
"d3dx9_32"="native"
"d3dx9_33"="native"
```

Plain Text   Tab Width: 8   Ln 559, Col 1   INS

In this section, you can copy & paste the entire list of DLL overrides required. You can find the entire list in this great article. Copy the entire selection, save the file and exit. The next time you launch Wine configuration, the overrides will be loaded.

Eventually, you'll see something like this:



DLL Overrides

Dynamic Link Libraries can be specified individually to be either builtin (provided by Wine) or native (taken from Windows or provided by the application).

New override for library:

Existing overrides:

d3d8 (builtin)
d3d9 (builtin)
d3dim (native)
d3drm (native)
d3dx8 (native)
d3dx9_24 (native)
d3dx9_25 (native)
d3dx9_26 (native)
d3dx9_27 (native)
d3dx9_28 (native)
d3dx9_29 (native)
d3dx9_30 (native)
d3dx9_31 (native)
d3dx9_32 (native)
d3dx9_33 (native)
d3dx9_34 (native)
d3dx9_35 (native)

This is the first step. Now, we need to setup some core files.

Setup core files

These files may or may not be required, but it does not hurt to have them anyway. The two files in question are mscoree.dll and streamci.dll. The first is a module containing .NET Framework functions, the second is a library used to install streaming hardware devices.

You can copy these files from your Windows installations, if you have some, or download them from the web. A good online source that offers these file is DLL-files.com.

General advice

In general, when you have to download DLLs or similar files from the web, it is always a good idea to stick to reputable sources, compare the file size and hash to those advertised by Microsoft and perhaps even upload the files to Jotti or VirusTotal for a perfunctory scan. You can also check the reputation of the website serving DLLs using a community service like Web of Trust (WOT). In this case, DLL-files gets a pretty decent score.

Anyhow, back to our topic, download the two files and copy them to the Wine system32 folder.

```
cp mscoree.dll
~/.wine/drive_c/windows/system32/
```

```
cp streamci.dll
~/.wine/drive_c/windows/system32/
```

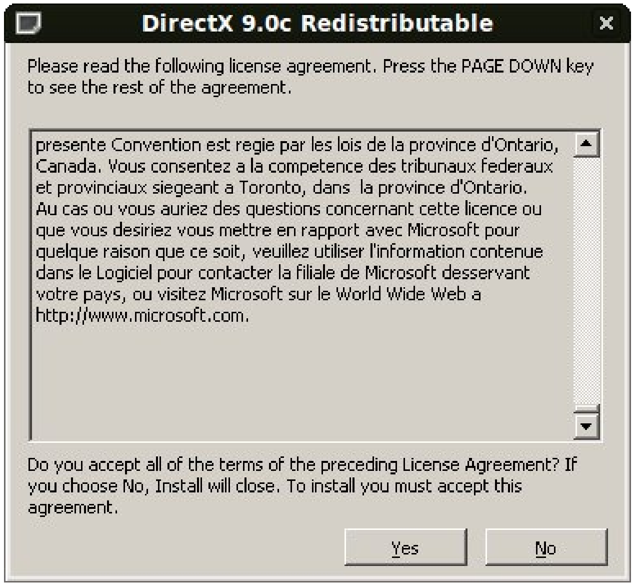
The next step is to download the DirectX 9.0c redistributable package.

Download DirectX 9.0c

You need the redistributable package, because the installation won't handle the online installer well. Once the file is downloaded, run the executable with Wine. Note: Microsoft tends to change the download links now and then, so if the link above is broken, Google for it.

```
wine directx_9c_redist.exe
```

This will start a wizard, which will ask you to accept the license and extract the files to a folder. Choose any folder and extract the files there.

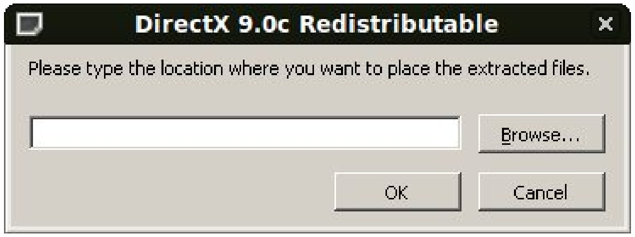


DirectX 9.0c Redistributable

Please read the following license agreement. Press the PAGE DOWN key to see the rest of the agreement.

presente Convention est regie par les lois de la province d'Ontario, Canada. Vous consentez a la competence des tribunaux federaux et provinciaux siegeant a Toronto, dans la province d'Ontario. Au cas ou vous auriez des questions concernant cette licence ou que vous desiriez vous mettre en rapport avec Microsoft pour quelque raison que ce soit, veuillez utiliser l'information contenue dans le Logiciel pour contacter la filiale de Microsoft desservant votre pays, ou visitez Microsoft sur le World Wide Web a http://www.microsoft.com.

Do you accept all of the terms of the preceding License Agreement? If you choose No, Install will close. To install you must accept this agreement.



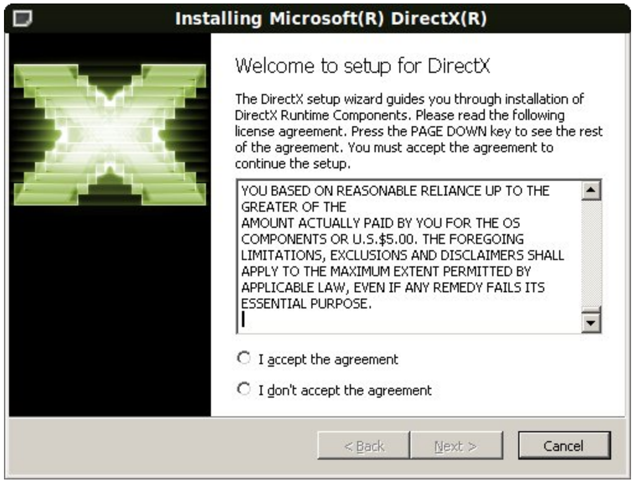
DirectX 9.0c Redistributable

Please type the location where you want to place the extracted files.

Install DirectX 9.0c

Navigate to the folder and run the actual DirectX setup:

```
wine dxsetup.exe
```



Installing Microsoft(R) DirectX(R)

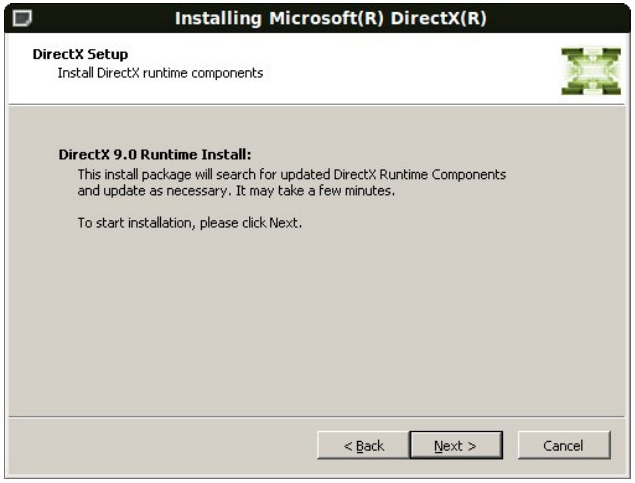
Welcome to setup for DirectX

The DirectX setup wizard guides you through installation of DirectX Runtime Components. Please read the following license agreement. Press the PAGE DOWN key to see the rest of the agreement. You must accept the agreement to continue the setup.

YOU BASED ON REASONABLE RELIANCE UP TO THE GREATER OF THE
AMOUNT ACTUALLY PAID BY YOU FOR THE OS COMPONENTS OR U.S.$5.00. THE FOREGOING LIMITATIONS, EXCLUSIONS AND DISCLAIMERS SHALL APPLY TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EVEN IF ANY REMEDY FAILS ITS ESSENTIAL PURPOSE.

○ I accept the agreement

○ I don't accept the agreement



Installing Microsoft(R) DirectX(R)

DirectX Setup

Install DirectX runtime components

DirectX 9.0 Runtime Install:

This install package will search for updated DirectX Runtime Components and update as necessary. It may take a few minutes.

To start installation, please click Next.

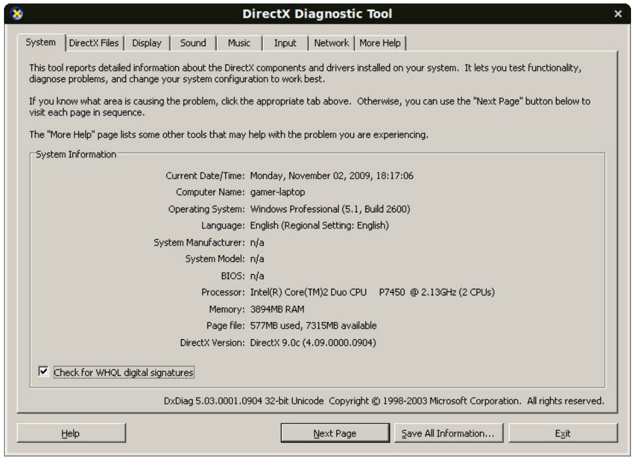
The installer should complete without any problems. It will ask you to reboot, but you do not need to do that.

Test DirectX 9.0c

Now, let's test. Go to the system32 folder (inside the .wine folder) and run dxdiag.exe.

```
wine
~/.wine/drive_c/windows/system32/dxdiag.exe
```

If everything went as it should, you should have DirectX setup and enabled. You can ignore most of the device and driver information, since we're doing a rather decent hack here.



This tool reports detailed information about the DirectX components and drivers installed on your system. It lets you test functionality, diagnose problems, and change your system configuration to work best.

If you know what area is causing the problem, click the appropriate tab above. Otherwise, you can use the "Next Page" button below to visit each page in sequence.

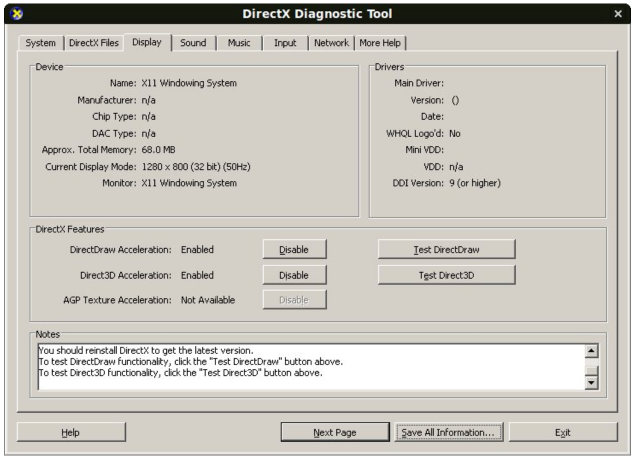
The "More Help" page lists some other tools that may help with the problem you are experiencing.

System Information

```
   Current Date/Time:  Monday, November 02, 2009, 18:17:06
       Computer Name:  gamer-laptop
    Operating System:  Windows Professional (5.1, Build 2600)
            Language:  English (Regional Setting: English)
System Manufacturer:  n/a
        System Model:  n/a
                BIOS:  n/a
           Processor:  Intel(R) Core(TM)2 Duo CPU     P7450  @ 2.13GHz (2 CPUs)
              Memory:  3894MB RAM
           Page file:  577MB used, 7315MB available
     DirectX Version:  DirectX 9.0c (4.09.0000.0904)
```

☑ Check for WHQL digital signatures

DxDiag 5.03.0001.0904 32-bit Unicode Copyright © 1998-2003 Microsoft Corporation. All rights reserved.



Device

```
                Name:  X11 Windowing System
        Manufacturer:  n/a
           Chip Type:  n/a
            DAC Type:  n/a
Approx. Total Memory:  68.0 MB
Current Display Mode:  1280 x 800 (32 bit) (50Hz)
             Monitor:  X11 Windowing System
```

Drivers

```
 Main Driver:
     Version:  ()
        Date:
WHQL Logo'd:  No
    Mini VDD:
         VDD:  n/a
 DDI Version:  9 (or higher)
```

DirectX Features

```
DirectDraw Acceleration:    Enabled
Direct3D Acceleration:      Enabled
AGP Texture Acceleration:   Not Available
```

Notes

You should reinstall DirectX to get the latest version.
To test DirectDraw functionality, click the "Test DirectDraw" button above.
To test Direct3D functionality, click the "Test Direct3D" button above.

Setup Direct Music

If you also want to have enhanced sound effects and whatnot, you will need another driver. The file in question is called gm.dls and you can find it listed on several websites, available for download. Again, use discretion when downloading files like this. Make sure they are digitally signed by Microsoft, with the proper size and hash value. Likewise, checking these files against Jotti or VirusTotal may not hurt.

If you have Windows installed, look for the file on your machine.

Copy the file to system32/drivers:

```
cp gm.dls
~/.wine/drive_c/windows/system32/drivers/
```

After doing this, rerun dxdiag and check the Music tab.

Setup additional files

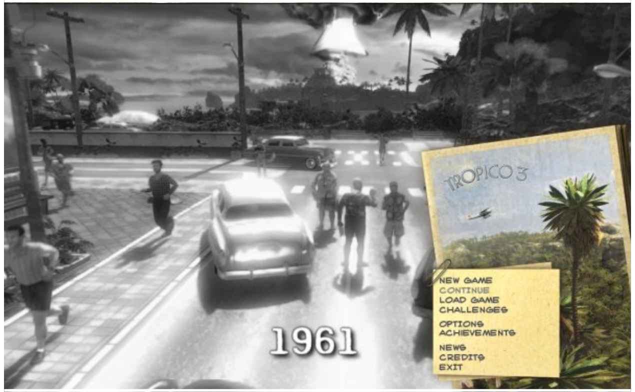
Your games may also require additional DLLs that are not found above. You will discover this only after installing them and running them, which is the step below. If you have already found online references that mention additional DLLs are needed for your games, then you can install them before trying the game, saving yourself time.

For example, Tropico 3 requires d3dx9_41.dll, without which the game start will fail. The above subset includes only d3dx9_24.dll and d3dx9_36.dll, but not the latest one. No worries, head to DLL-files.com and download the missing item(s).

Install and test your games!

Time to try your games. In my case, Tropico 3 installed without any problems, followed by the 1.04 patch, which solves lots of issues in the original game. Starting the game without the d3dx9_41.dll resulted in a failure, but once I copied the missing item into the system32 folder, everything worked fine.

The game runs smoothly even on high level - considering the hacks we just did, this is impressive. The sound quality is great. The game is stable. It's really a pleasure. A real blast!



Tweaks

Wine prints lots of debugging messages to the console, slowing things down a bit. You can definitely improve the performance by prepending a Wine debug environment variable to the wine command line, allowing yourself even more Frames Per Second (FPS) in your games.

Just run the game executable like this:

```
WINEDEBUG=-all wine <game-executable>
```

Example:

```
WINEDEBUG=-all wine Tropico3.exe
```

Conclusion

There you go, a perfect, foolproof tutorial to how you can configure and install DirectX in Linux. It's not easy and definitely not meant for new users, but if you're willing to invest some time, you can definitely expand the range of possibilities your Linux system offers you.

Many thanks to wine-reviews.net for compiling a great reference!

Well, that would be all. Stay tuned for Tropico reviews. I'm going to write both about the new game as well as the older, Tropico 2: Pirate Cove.

Cheers.

Editor's Note: This article originally appeared in January, 2010 on the Dedoimedo web site. It is reproduced here, with permission. I thought that many of the "gamers" and "beginning gamers" in the PCLinuxOS community would benefit from the instructions in the article, enabling the game play of their Windows games on PCLinuxOS. My thanks to Igor Ljubuncic for giving his permission to reprint his article here, in the pages of The PCLinuxOS Magazine. Visit Dedoimedo.com for more articles on gaming, Linux, and many other topics.

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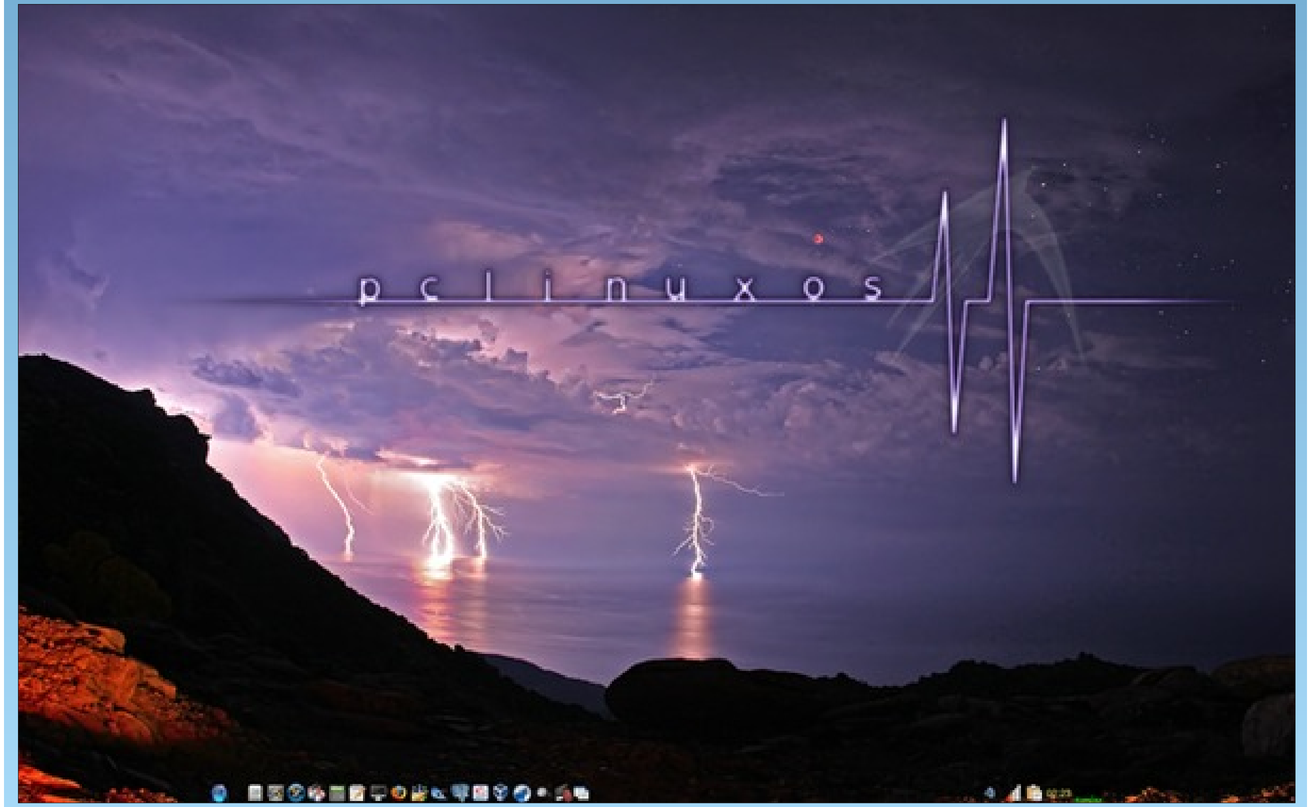
Screenshot Showcase



Posted by tedlane, June 24, 2011, running LXDE.

Openbox: ZRAM - What It Is & How To Use It

by Darrel Johnston (djohnston)

ZRAM (formerly ramzswap) is a block device which is created in your computer's memory, or RAM. It looks and acts to the system like a disk drive. However, this disk drive has only one function, to act as a swap disk. One difference between ZRAM and a normal swap partition is that the pages swapped to ZRAM are compressed before being stored. This technique has two advantages. (1) More page data can be stored because the data is compressed. (2) Because the swapped memory is stored in RAM, rather than a normal disk drive, read and write access times are much quicker.

The author of the program, nitingupta910, mentions another possible use on his Google code webpage. “With compcache at hypervisor level, we can compress any part of guest memory transparently - this is true for any type of Guest OS (Linux, Windows etc.). This should allow running more number of VMs for given amount of total host memory.”

Melodie has the older version (ramzswap) enabled on the live CDs for Openbox Bonsai and Openbox full, “out of the box” (pun intended). She has the new version (ZRAM) enabled on the Openbox Edu live CD. Both versions initialize a block device in RAM from the /etc/rc.d/rc.local file. The first (ramzswap) version creates the device /dev/ramzswap0. The size of the ramzswap0 device is defined by using the rzscontrol executable. The default size is 15% of RAM. The device can be used as a front end to a swap partition on a disk drive by defining the swap partition in the rc.local file as shown below.

```
# Ramzswap will act like a swap front end
if RAMZ_BACKING_SWAP is defined.

# Writes are forwarded to this device when
memory limit is reached or data
# is not compressible.

# i.e. RAMZ_BACKING_SWAP="/dev/sda3"

RAMZ_BACKING_SWAP=""
```

For kernel version 2.6.37 or higher, the device created is /dev/zram0. The rzscontrol executable can not be used to modify the zram0 device, so is no longer needed. Since it uses a different kernel module, the older /etc/rc.d/rc.local file must be replaced with the newer version. You can obtain it here. If you use the default parameters, the zram0 device will be 25% the size of available RAM. For example, if you have 1GB of available RAM, the created zram0 device will be 256MB in size, leaving you with 768MB of RAM. The default size is defined in the portion of the rc.local file shown below.

```
# Swap size = 25% of free memory;
    ZRAM_SWAP_SIZE=$(($FREE_MEM/4))

echo $(($ZRAM_SWAP_SIZE * 1024 * 1024)) >
/sys/block/zram0/disksize
```

In order to change the size to a fixed amount, comment the ZRAM_SWAP_SIZE= line and replace the string $(($ZRAM_SWAP_SIZE * 1024 * 1024)) with an integer representing the total number of bytes. As an example, to get a fixed size of 256MB of ZRAM, you would edit the rc.local file as shown below.

```
# Swap size = 25% of free memory;
#    ZRAM_SWAP_SIZE=$(($FREE_MEM/4))

# Swap size = 256MB
echo 268435456 > /sys/block/zram0/disksize
```

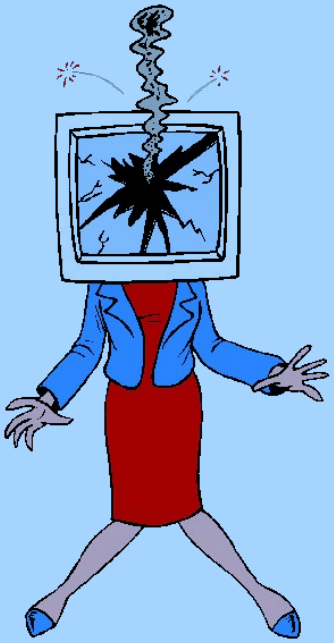
I understand the advantages of using a ZRAM device, and agree that storing virtual machines within ZRAM devices is a more efficient method for utilizing available RAM. What I struggle with is understanding how it is more useful on a desktop or laptop than a conventional swap partition, other than the speed advantage.

ms_meme's Nook: Hot Hard Drive

I got a hot hard drive I got a hot hard drive I got a hot hard drive
But I need PCLOS to keep away the cold
I got a hot hard drive I got a hot hard drive I got a hot hard drive
But I need PCLOS before I get too old

MP3 OGG

My mouse is really movin’ but still I need some groovin’
To keep it from freezin’ up tight
I got a hot new floppy but nothin’ I got’ll
Take the place of TEX comin’ in sight
I got a hot hard drive I got a hot hard drive I got a hot hard drive
But I need PCLOS on it I'm really sold



They told me to shove a new disk in my ’puter
They told me to shove a new disk in my ’puter
They told me to shove a new disk in my ’puter
But that don’t do no good

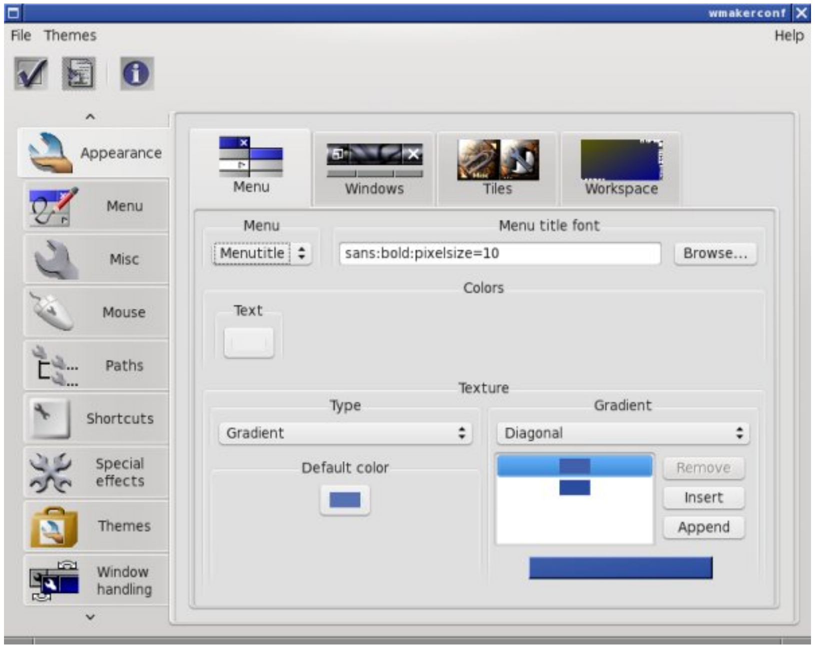
The told me to put some more ram in my rom
They told me to put some rom in my ram
They told me to put some more ram in my rom
But that don’t do no good

My mouse is really movin’ but still I need some groovin’
To keep it from freezin’ up tight
I got a hot new floppy but nothin’ I got’ll
Take the place of TEX comin’ in sight
I got a hot hard drive I got a hot hard drive I got a hot hard drive
But I need PCLOS on it I'm really sold

WindowMaker on PCLinuxOS: Keeping Up Appearance

by Patrick G Horneker

Last month, we started discussing the internal files that WindowMaker uses to configure itself. *Display Attributes* were also discussed. This article goes more into the changing of the appearance of your desktop (called *Workspace* in WindowMaker terminology). For this article, we will use the **WindowMaker Configuration Manager**, which is called from *More Applications -> Configuration -> WindowMaker Configuration Manager* on the system menu. (From here on out, WindowMaker Configuation Manager will simply be referred to as *Configuration Manager*.)



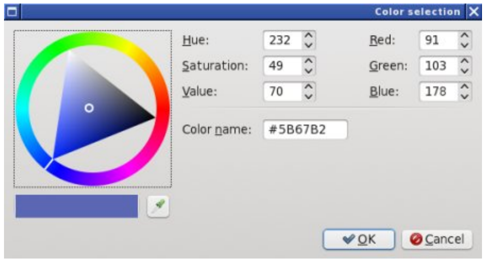
Menu: Menutitle

Menu title font: sans:bold:pixelsize=10 Browse...

Type: Gradient

Gradient: Diagonal

This is what appears when you first launch the *Configuration Manager*. There are four types of items that can be configured from the *Appearance* tab, namely Menu, Windows, Tiles and Workspace. *Tiles* refers to the space where icons such as those assigned to applications, or special icons such as the Dock and the Clip reside. Think of *Tiles* as a background to icons in WindowMaker. If an icon assigned has any transparency, the *Tile* fills in the gap created by the transparency.



Hue: 232

Saturation: 49

Value: 70

Red: 91

Green: 103

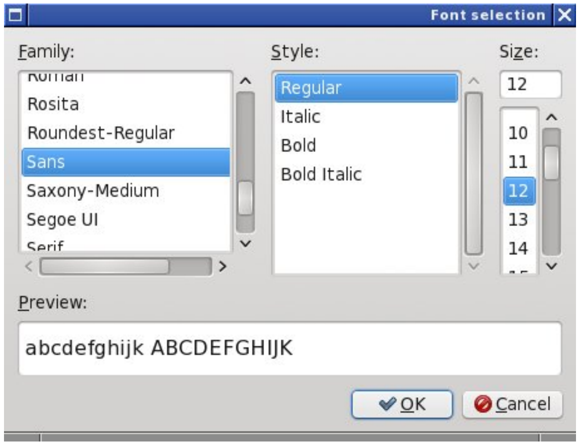
Blue: 178

Color name: #5B67B2

As shown here, you can select options to change the appearance of the *menu header* (called *Menu Title* here).

Clicking on the button below *Text* allows you to select the color of the text to appear in the menu header.

The value in *hexidecimal* that appears in Color Name will be the color assigned to whatever value (display attribute) is being assigned.



Family: Sans

Style: Regular

Size: 12

Preview: abcdefghijk ABCDEFGHIJK

Now, let us look at the *Menu Title Font*. Does the value shown here look familiar? It should as this is *the value assigned to attributes that require a font name*. Fortunately, *Configuration Manager* has a dialog box that does this for you. Click on *Browse*... and you will see this (right top):

Notice there are three parameters you need to set. The third parameter, *Size*, sets the **pixelsize**= parameter that we saw in last month's article on internal configuration files.

Thankfully, we get to see a preview of the resulting font before we click on OK, which will select the font to be used.

When we close this dialog box, the resulting string will represent the font we have selected and will appear in the *Menu Title Font* in the correct notation.

On the upper left hand corner of the *Configuration Manager* is a Check box, which closes out the *Configuration Manager*, and a “arrow on the document” box, which Saves the configuration files to **~/GNUstep/Defaults**. The ~ stands for your home directory assigned to your user account.

Be sure to always save your changes by clicking on that second box at the upper left hand corner of Configuration Manager. or your changes you have made will not take effect the next time you start WindowMaker. If you click on the *Check* box, *Configuration Manager* will ask if you want to save any changes before exiting.

Texture options for all configurable display attributes is *consistent*, be it for a menu, a window, a tile, or the background itself.

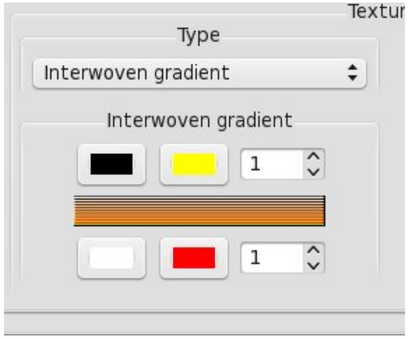
Solid Color: This option is just what it says. The only configurable option here is the color of the display attribute.

Pixmap: We described this option when we were discussing backgrounds for WindowMaker. You can use any image in the JPEG, PNG, GIF, TIFF, XBM or XPM (The latter are X Window System bitmap/pixmap graphics) formats not only as a desktop background, but as a background for title windows (including the popup menus), icon backgrounds (or *Tiles*), or as a background that displays in the popup menu. (Imagine the possibilities here. You cannot do this with GNOME 3 menus!)

Gradient: Here you can compose your own gradients with as many colors in the mix as you want. In addition, you can choose whether you want the gradient to be vertical from top to bottom, horizontal from left to right, or diagonal from upper left corner to lower right corner.

Textured: This option is similar to Gradient, except that the gradient is overlaid on top of whatever image you supply. The image provides the textured effect.

Interwoven Gradient: The first two colors supplied at the top end of the cluster provide a background gradient. The bottom two colors provide the foreground gradient. Each line in the gradient is drawn as lines of x pixels thick where x is supplied as the numeric parameter in the dialog box. The swatch between the selections is what you will see when you commit the changes to WindowMaker.

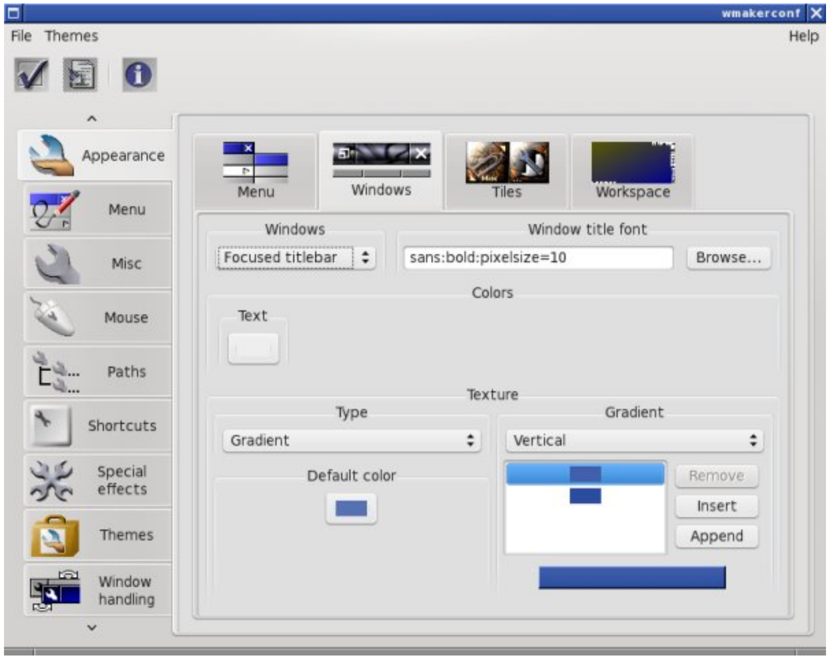


Type: Interwoven gradient

Interwoven gradient: 1

1

We have already discussed the *Workspace* tab when we discussed desktop backgrounds.



Windows: Focused titlebar

Window title font: sans:bold:pixelsize=10

Type: Gradient

Gradient: Vertical

The *Windows* tab (above) has several configurable options:

Focused Titlebar and **Unfocused Titlebar**: Windows are considered focused when they are active and ready to receive mouse and keyboard input. For PCLinuxOS, windows automatically focus when you move your mouse on them. There is an option elsewhere in *Configuration Manager* that allows you to change the mouse behavior so that you can click on a window to make it active (similar to the default in GNOME and KDE).

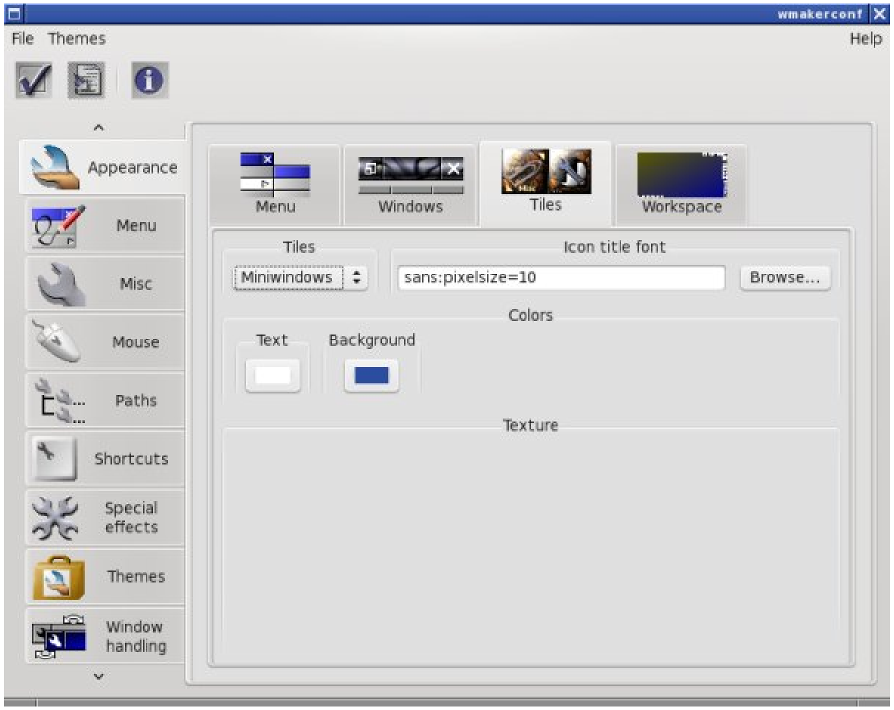
Parent Titlebar: When some applications open a new window, the main application window is called the parent window, and the windows they open are called child windows. This configurable option only configures the title bar on these windows.

Resize Bar: Located at the bottom of most windows in WindowMaker, this is where you adjust the size of the windows being displayed.

The *Tiles* tab (below) has some configurable options for icons and dock applications (called *Miniwindows*), and for the *Dock* and the *Clip*.

The *Dock and Clip* allows the use of the same options that are assignable to the *Menu* tab, with the addition of two selectable colors: one color is for the active (focused) state, and one for the inactive (non-focused) state.

The *Miniwindows* option has only two *selectable colors*: one for the foreground and one for the background.



Tiles: Miniwindows

Icon title font: sans:pixelsize=10

With all of these options available to you through the *Configuration Manager*, you are provided with opportunities to customize your WindowMaker desktop in ways you could not easily do with GNOME or with KDE.

Backup Basics, Part 3: luckyBackup

by horusfalcon

Hello again, everyone! Before we go any further, I’d better confess an error I made in an earlier article. While luckyBackup does have the ability to create compressed backups, it is not “built-in” to the program itself - it is necessary to pipe the output of luckyBackup through the compression tool of your choice with a “run after” command from the advanced options when creating the task.

Such tasks should be configured and tested very carefully. Built-in support for tar and bzip are rumored to be in the pipeline for future versions (a lot of requests from users have prompted this), but it’s not ready just yet. I’m sorry for any confusion this may have caused.

With that out of the way, we’ll be looking at how to use luckyBackup to perform two simple tasks. The first of these is an on-demand backup that introduces fundamental concepts. The second progresses from there to setting up a simple unattended task to help backup a selected user data set automatically.

What Is luckyBackup?

Before we get started on how to use it, let’s briefly review what exactly luckyBackup is.
At its simplest, it is a front-end which helps a user define and pass parameters to rsync for executing backup tasks. It does more than that, though, as we’ll see a bit later on.

This does beg the question, however: what is rsync? The short answer is that rsync is a utility for mirroring data from a source to a destination. This destination can be a local one or one that is remotely connected via a network. (A good technical introduction to rsync may be found here for those who would like to know more.)

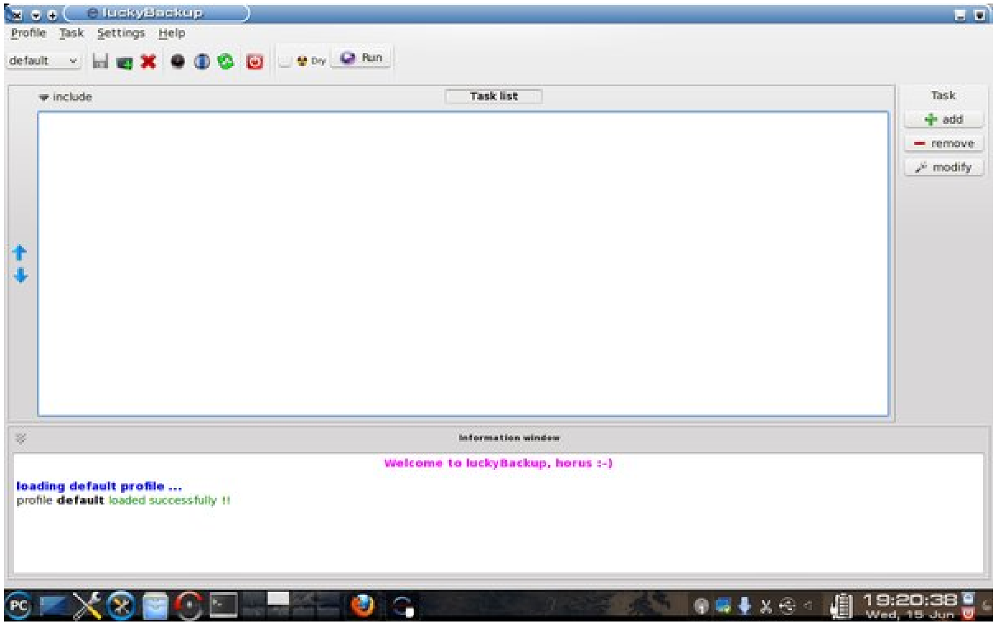
Installing luckyBackup

We’ll keep this part short & simple because, for PCLinuxOS users, it really is. luckyBackup installs via the Synaptic package manager. To find it quickly, just press the Search button on the Synaptic menu, enter luckyBackup in the search field and go. As usual, any dependencies needed by luckyBackup will be also selected automatically for installation. Once it is installed, menu items for luckyBackup may be found under the Archiving sub-menu.

Getting Started

Since we will be dealing with user data in this example, luckyBackup is started as a regular user, **not** as the super user. This will preserve the permissions and metadata associated with the original files in the backup so that the original user will still have all their privileges on any restored data.

Once luckyBackup is started and opens its main window we see something like this:



Welcome to luckyBackup, horus :-)

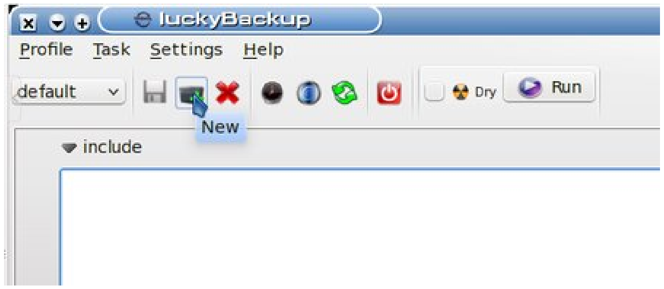
loading default profile ...
profile **default** loaded successfully !!

That message in the information window at the bottom about “profile **default** loaded successfully!!” is significant. It tells us that the program has started successfully and loaded its plain (default) profile. (At this point it might be useful to know that a “profile” in this setting is merely a collection of tasks. The default profile is blank right now because no tasks have yet been defined for it.)

Creating a New Profile

Since the first task I have in mind to create is for demonstration purposes only, I will be creating a new profile to keep it in. We could easily create other profiles for other reasons. (The best reason for creating separate profiles is to group tasks that *share a common schedule*, since all scheduling is done at the profile level, but we'll see more about that later on.)

Creating a new profile is easy - look at the screenshot below. The mouse cursor is resting on the New Profile button on the Profiles toolbar.

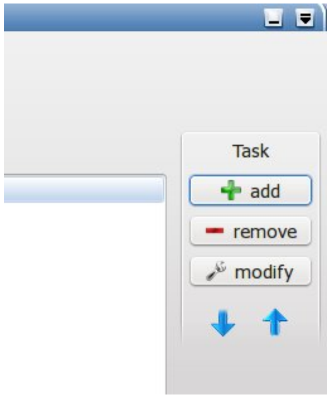


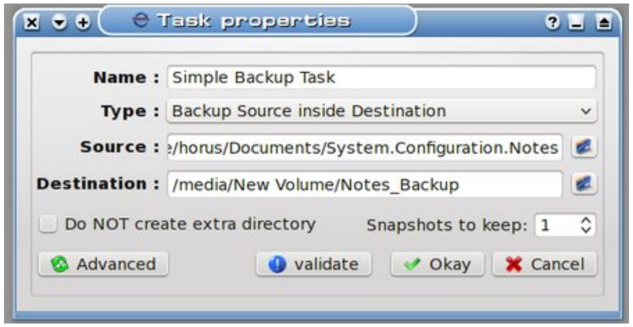
Clicking the New Profile button will bring up a dialog box which asks for a name for the profile being created. I named my new profile Demos. The information box updates to show that this profile has been created. Now let's create a simple backup task.

Adding a New Task

At the right of the Task List portion of the window there are three buttons which trigger actions related to tasks for this profile.

Clicking on the **add** button will open a dialog box which asks for data relating to this task:





Name : Simple Backup Task
Type : Backup Source inside Destination
Source : ≥/horus/Documents/System.Configuration.Notes
Destination : /media/New Volume/Notes_Backup
□ Do NOT create extra directory
Snapshots to keep: 1

There are some basic steps here:
1. Name the task.
2. Select a task type
3. Select a source from which to create the backup
4. Select a destination on which to store the backup
5. Select whether to create a subfolder for the backup on the destination (default)
6. Select how many snapshots of the data to keep.
7. Validation of the newly created task

The name I have given this is Simple Backup Task (sounds simple enough). Next up is selecting a task type.

There are two types of tasks: the one I've selected, "Backup Source inside Destination" will copy the data from the source into the destination. The other type is "Synchronize Source and Destination" and it uses a more refined method to *delta copy* only the differences so that both the source and destination reflect the most recent changes to the data set. This can be much faster than a straight copy of the data, and very useful for data that changes often because of the time saved backing it up by this method.

For this demo what I'm creating is a backup of my System Configuration Notes files (stuff I've learned about how to set up systems the way I like them.) Clicking on the folder icon at the right of the Source field allows me to browse to the folder where I keep my notes and select it.

Notice also that the destination here is /media/New Volume/Notes_Backup. This is on an external hard drive in a folder I was able to create on-the-fly after browsing to that drive. I could have easily clicked the check box for "Do Not create extra directory", but I want to demonstrate what happens when the default option is used. (It helps that I had the external drive already connected and automounted.)

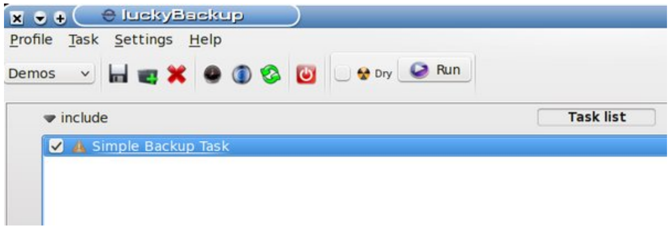
One last thing to notice above: the number of snapshots to keep. I will only be keeping one snapshot, since this task is for demonstration only. Some of you are probably wondering: What's a snapshot anyway, and what's it good for?

Data snapshots can be thought of the same way as photographic snapshots - they are particular instances of a backup task over time. Multiple snapshots of critical data can be handy when it becomes needful to recover a previous state of the data set. (e.g., Say someone made a mistake saving a Report to The Shareholders and wiped out a bunch of important data instead. Recovering from a previous snapshot could save the day!)

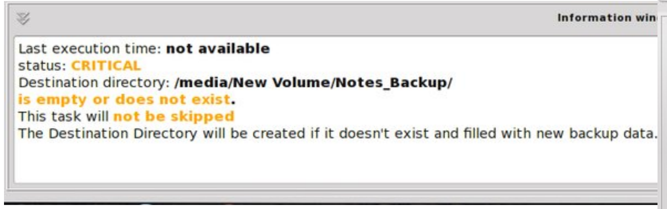
Finally we get to the last step: validation. After all options are selected, clicking the Validate button will put up a dialog box which shows the actual rsync command line generated by the choices made, also showing any errors in that command. In the case of this example, it is sufficiently simple that no errors were generated.

At this point, clicking Okay in the New Task dialog will post the new task to this profile's task list. We're through defining tasks for now, and are ready to run the new task to actually create a backup using it.

Our first step in using a task is to include it. In the screenshot, notice that the **include** checkbox for our task is checked. (Click on this checkbox to toggle it between checked or unchecked.)

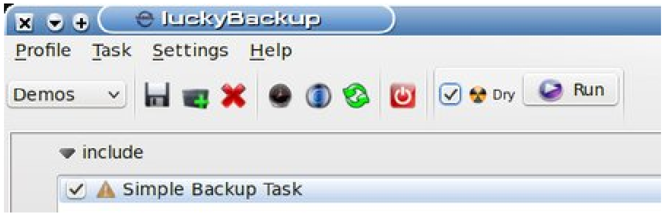


In the lower section, note the information displayed:

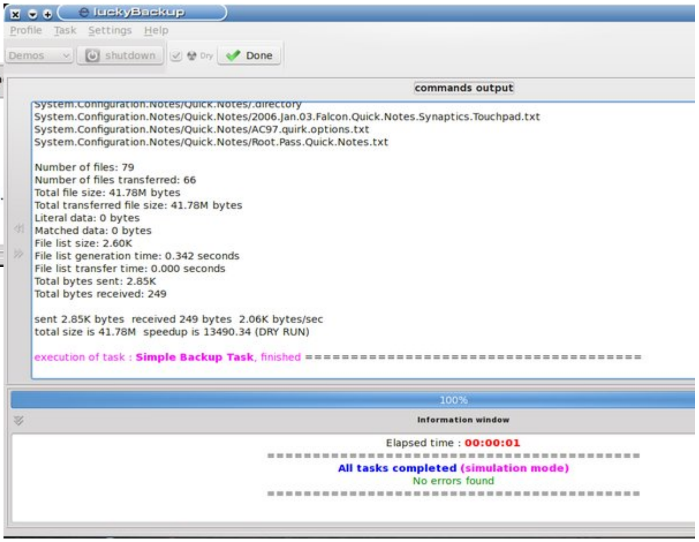


Last execution time: **not available**
status: **CRITICAL**
Destination directory: **/media/New Volume/Notes_Backup/**
is empty or does not exist.
This task will **not be skipped**
The Destination Directory will be created if it doesn't exist and filled with new backup data.

This looks pretty serious! What's that CRITICAL warning? Not to worry - it's warning us that this task has not yet been run, which means our precious data is not protected at this time. The other warning is telling us nothing exists in the destination directory (folder) or that the destination folder itself does not exist. Since I created this folder on-the-fly when I selected the destination earlier, I would reasonably expect it to be there. Just to take out some cheap insurance, though, my first attempt at this task will be a **dry run**:



Note the checkbox for **Dry** is checked now. This means that on the run I'm about to do, everything will be done except for actually writing the data for the backup. This allows us to test complex or advanced tasks before actually doing them. My next step is to click the Run button and watch the information window:



```
System.Configuration.Notes/Quick.Notes/.directory
System.Configuration.Notes/Quick.Notes/2006.Jan.03.Falcon.Quick.Notes.Synaptics.Touchpad.txt
System.Configuration.Notes/Quick.Notes/AC97.quirk.options.txt
System.Configuration.Notes/Quick.Notes/Root.Pass.Quick.Notes.txt

Number of files: 79
Number of files transferred: 66
Total file size: 41.78M bytes
Total transferred file size: 41.78M bytes
Literal data: 0 bytes
Matched data: 0 bytes
File list size: 2.60K
File list generation time: 0.342 seconds
File list transfer time: 0.000 seconds
Total bytes sent: 2.85K
Total bytes received: 249

sent 2.85K bytes  received 249 bytes  2.06K bytes/sec
total size is 41.78M  speedup is 13490.34 (DRY RUN)

execution of task : Simple Backup Task, finished ======================================
```

```
Elapsed time : 00:00:01
==========================================
All tasks completed (simulation mode)
No errors found
==========================================
```

We can see from the information window that all tasks were completed without error. All the statistics in the top section of the window, including a list of the individual files involved and some neat time slice info, can be useful in debugging tasks that fail their dry runs. As I said earlier, this task was simple, so there was no real need to worry.

Unchecking the dry run checkbox and rerunning the task will repeat this task and actually write the data. I just did this, and note that the task took a few more seconds (since the system actually did something useful this time), and that luckyBackup attempted to send an email but was unable to. That's because I didn't bother to configure this feature, which would be more useful for something that was more critical or that was backed up remotely.

So where's my backup stored? On the path:

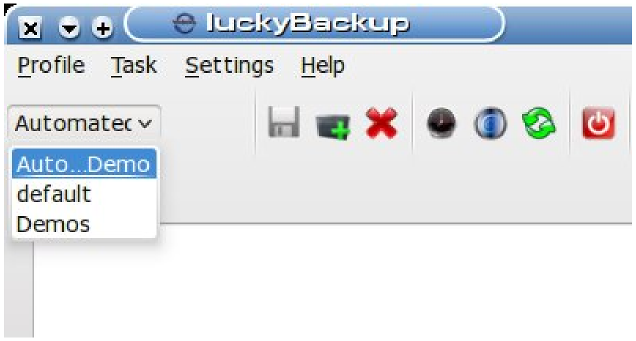
/media/New Volume/Notes_Backup/System.Configuration.Notes

Note that the data on this path is not compressed, nor is it encrypted, so it is available for immediate use. Yeah, it's a straight copy.

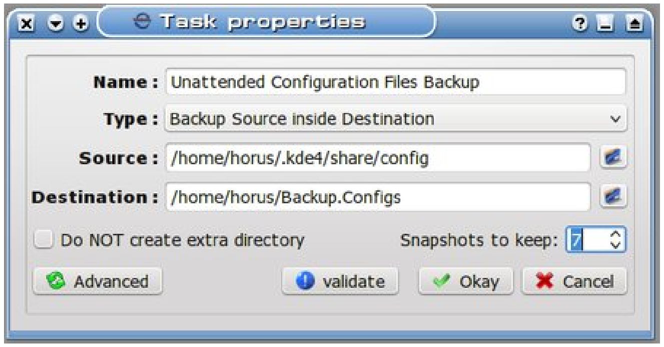
A More Complex Task

Since this next task I want to create will be a scheduled task, I will first create a new profile for it, called **Automated Demos**. I won't belabor this, as profile creation is simple enough. The reason I'm creating this new profile is because schedules are created at the profile level. Since I don't want to include our previous task, I need a separate profile for the new one.

You may note, if you have to re-start luckyBackup at this point to keep following along, that the profile **default** loads automatically (we would expect this, though). Simply click on the **New Profile** button as before and create the new task. Once it is created, it should load automatically, ready to accept new tasks. (If you need to select this profile at some point in the future, use the drop-down list to access it.)



As before, we click the **Add** button at the right of the task list, and enter information in the task definition dialog that opens (I have already completed the information here):



Name : Unattended Configuration Files Backup

Type : Backup Source inside Destination

Source : /home/horus/.kde4/share/config

Destination : /home/horus/Backup.Configs

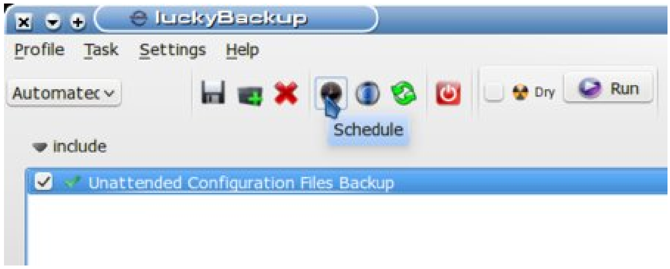
□ Do NOT create extra directory

Snapshots to keep: 7

(It's worth noting that the path for the source includes a hidden folder. To be able to browse to this location, once the browse window is open, right-click it and select "View Hidden Files". Browsing to the desired location is then a simple point-and-click process.)

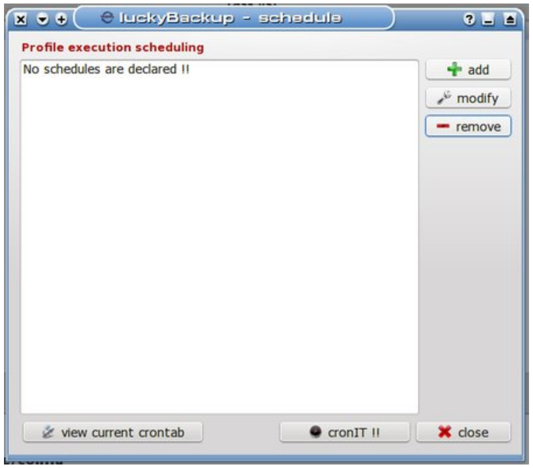
Note the number of snapshots went up. We'll be keeping seven snapshots of this task because the data can change rapidly on my system. Note also that I'm keeping this in a subfolder of my home folder, which might not be the best location if the task was truly critical. I'm doing this so I don't have to connect up a USB drive again every time this backup is scheduled to run, and so I will have ready access to the data locally. If I'm truly worried, I can always copy this backup to another drive (backups of backups? It's not as crazy as it sounds, really, if the data is important enough.)

Now we can schedule this task. First, remember to click the **include** checkbox for the task so that it will actually run when the schedule tells it to. Now click the **Schedule** button on the toolbar:



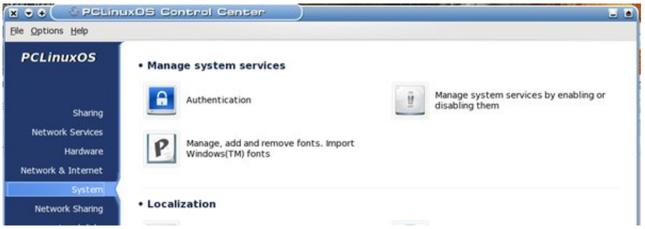
☑ Unattended Configuration Files Backup

After clicking the button, we can see the scheduling dialog box (top right):



No schedules are declared !!

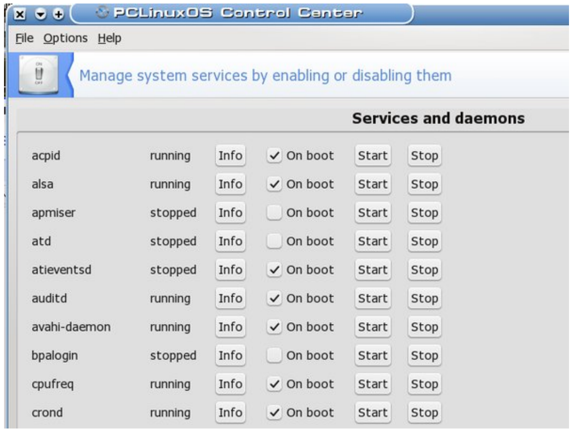
We see that no schedule elements are present at this time (nothing exciting about that), but we can also see by a survey of the buttons at the bottom that luckyBackup relies on cron to schedule its tasks. This is yet another example of how modular tools in Linux are leveraged to accomplish complex tasks (but enough politics for now). What's important to know here is that the *current user's crontab* is where these schedule elements are added. For this reason, it is important when using a scheduled profile to ensure that *crond* is actually running. The way to do this in PCLinuxOS is to open the PCLinuxOS Control Center:



Manage system services by enabling or disabling them

Manage, add and remove fonts. Import Windows(TM) fonts

Once you are here, select “**Manage system services by enabling or disabling them**”. This will bring up the following dialog to control system services. BE CAREFUL HERE! This is big medicine.



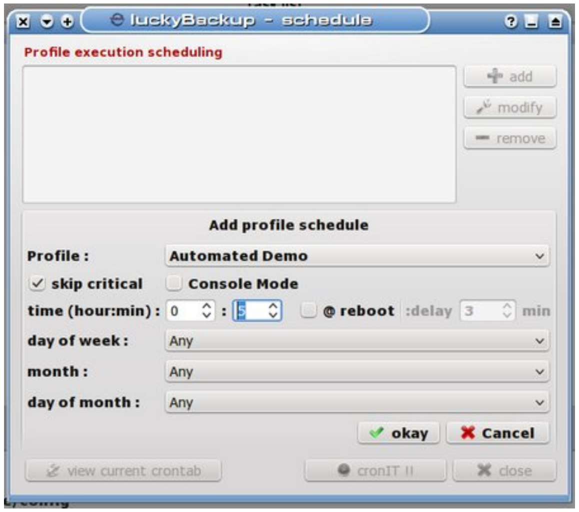
Manage system services by enabling or disabling them

Services and daemons

acpid	running	Info	☑ On boot	Start	Stop
alsa	running	Info	☑ On boot	Start	Stop
apmiser	stopped	Info	□ On boot	Start	Stop
atd	stopped	Info	□ On boot	Start	Stop
atieventsd	stopped	Info	☑ On boot	Start	Stop
auditd	running	Info	☑ On boot	Start	Stop
avahi-daemon	running	Info	☑ On boot	Start	Stop
bpalogin	stopped	Info	□ On boot	Start	Stop
cpufreq	running	Info	☑ On boot	Start	Stop
crond	running	Info	☑ On boot	Start	Stop

I have enabled *crond* to start at boot, so it shows running already. If your system is not already running *crond*, you will have to enable it (I believe PCLinuxOS does not run *cron* jobs by default). Now that this little divertimento is done, we’ll return to the Scheduling window in luckyBackup, already in progress.

Clicking the **add** button at right alters the landscape somewhat (right):



Profile execution scheduling

Add profile schedule

Profile : Automated Demo

☑ skip critical □ Console Mode

time (hour:min) : 0 : 5 □ @ reboot :delay 3 min

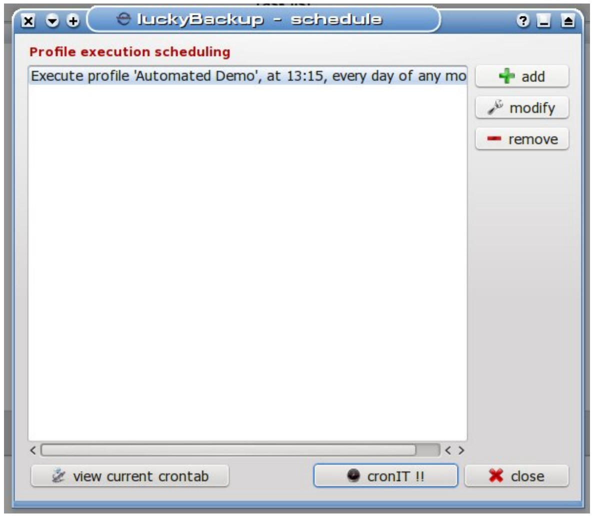
day of week : Any

month : Any

day of month : Any

In the entries for hour:min, I enter 13 for hour and 15 for minute, respectively.

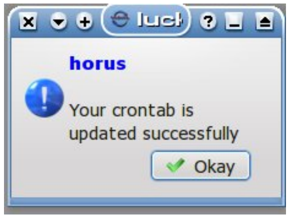
This will set the time of execution for the first schedule element.



Profile execution scheduling

Execute profile 'Automated Demo', at 13:15, every day of any mo

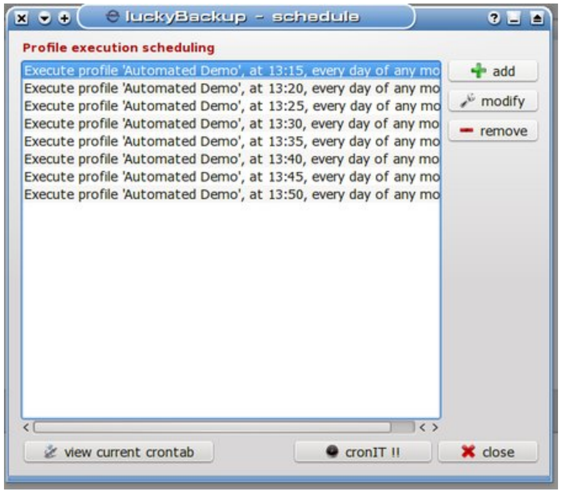
This shows the first of eight tasks I’m scheduling five minutes apart. Rest assured I’m just doing this for demonstration so that it doesn’t take me all day to show the results of the task (after all, I don’t want to miss my deadline here...). The backup task in this profile is relatively small, and should complete in under five minutes, so after I add this schedule element to my *crontab* by clicking the **cronIT !!** button we see:



horus

Your crontab is updated successfully

Clicking **Okay** will bring me back to the previous dialog, where I could easily click the button to view my current crontab, but that’s not really necessary. I will go ahead and add the remaining seven tasks so that the schedule looks like this:



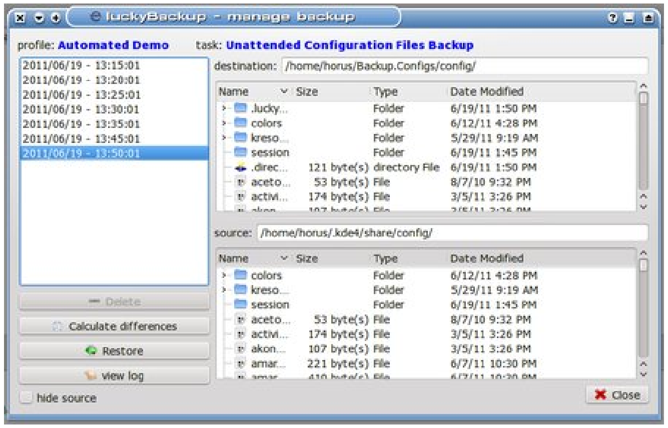
Profile execution scheduling

Execute profile 'Automated Demo', at 13:15, every day of any mo
Execute profile 'Automated Demo', at 13:20, every day of any mo
Execute profile 'Automated Demo', at 13:25, every day of any mo
Execute profile 'Automated Demo', at 13:30, every day of any mo
Execute profile 'Automated Demo', at 13:35, every day of any mo
Execute profile 'Automated Demo', at 13:40, every day of any mo
Execute profile 'Automated Demo', at 13:45, every day of any mo
Execute profile 'Automated Demo', at 13:50, every day of any mo

As I’ve been typing along here, I’m noting little pop-up boxes about every five minutes that flit by really quickly to notify me that my scheduled tasks are being executed even though I presently don’t have the luckyBackup window open. I’m going to take a break, get a quick sandwich or something for a late lunch, and we’ll check on how it’s going when I get back.

It’s now 13:51 local time, and I still haven’t gotten lunch yet! Oh, well, busy, busy. Meanwhile, our tasks have all completed - just look! (Click on **Tasks -> Manage Backups** to open this dialog.)

(Next page)



profile: **Automated Demo** task: **Unattended Configuration Files Backup**

2011/06/19 - 13:15:01
2011/06/19 - 13:20:01
2011/06/19 - 13:25:01
2011/06/19 - 13:30:01
2011/06/19 - 13:35:01
2011/06/19 - 13:45:01
2011/06/19 - 13:50:01

destination: /home/horus/Backup.Configs/config/

Name	Size	Type	Date Modified
.lucky...		Folder	6/19/11 1:50 PM
colors		Folder	6/12/11 4:28 PM
kreso...		Folder	5/29/11 9:19 AM
session		Folder	6/19/11 1:45 PM
.direc...	121 byte(s)	directory File	6/19/11 1:50 PM
aceto...	53 byte(s)	File	8/7/10 9:32 PM
activi...	174 byte(s)	File	3/5/11 3:26 PM

source: /home/horus/.kde4/share/config/

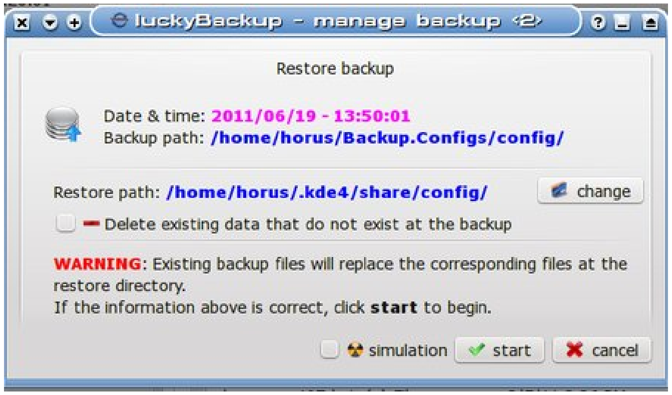
Name	Size	Type	Date Modified
colors		Folder	6/12/11 4:28 PM
kreso...		Folder	5/29/11 9:19 AM
session		Folder	6/19/11 1:45 PM
aceto...	53 byte(s)	File	8/7/10 9:32 PM
activi...	174 byte(s)	File	3/5/11 3:26 PM
akon...	107 byte(s)	File	3/5/11 3:26 PM
amar...	221 byte(s)	File	6/7/11 10:30 PM

□ hide source

So what happened to the snapshot at 13:40? We asked the system to save seven snapshots when we defined the task. As can be seen here, the snapshot for 13:40 was eliminated. What we can't see is that I crept back in the room between 13:40 and 13:45 and injected a file (an innocuous text file) into the session folder just to create a difference there. I removed that file after 13:45 again, so that the 13:50 backup would also show a change, and that has been duly tracked, but since all the previous backups matched the 13:40, it was discarded as irrelevant. Not exactly what we would have expected, but functionally equivalent to it.

Restoring From A Snapshot

Take another look at this dialog above, and we find the Restore button in the lower left. Yes, this dialog is the place to select a snapshot and then restore from it. I left the 13:50 snapshot selected and clicked Restore, which brought up this dialog (center top):



Restore backup

Date & time: **2011/06/19 - 13:50:01**
Backup path: **/home/horus/Backup.Configs/config/**

Restore path: **/home/horus/.kde4/share/config/**

□ Delete existing data that do not exist at the backup

WARNING: Existing backup files will replace the corresponding files at the restore directory.
If the information above is correct, click **start** to begin.

□ simulation

As is shown above, it is possible to make several choices here before beginning a restore operation:
1. We may change the Restore path (to restore to a different destination)
2. We may choose to delete any data that exists at the destination which does not exist in the snapshot we are using.
3. Finally, we may choose to simulate this operation for test purposes.

I would recommend that last one as a good place to start with any new restore operation. The log file generated by the simulation is verbose enough that it is generally easy to figure out if it is doing what we might expect it to, and it doesn't take long.

That second option is not enabled by default (erring on the side of caution), but it is useful when trying to make sure a restored folder contains only data from the backup set and not any pre-existing files.

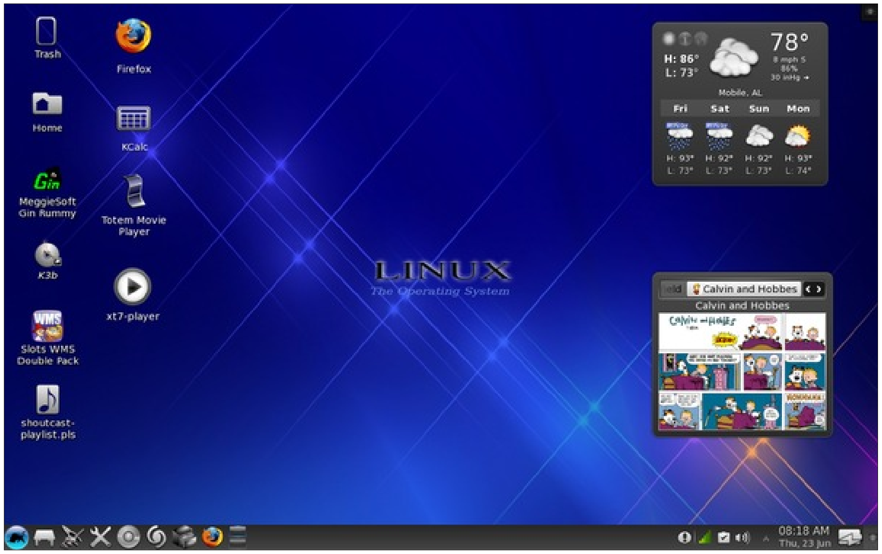
Conclusions

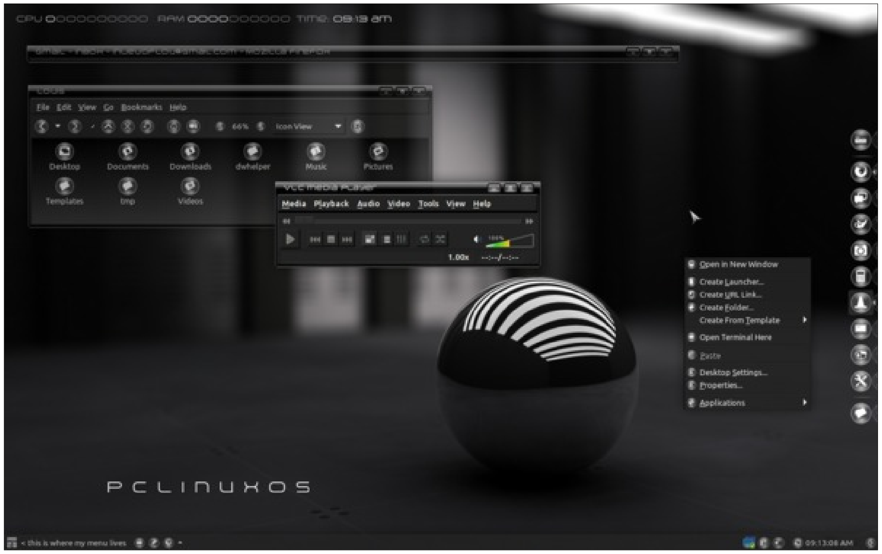
luckyBackup is a powerful toolset for creating on-demand and unattended backups. It demands a bit from the user because it is so powerful, and because it draws its strength from the modular tools *rsync* and *cron* which it harnesses to do much of its work.

We have explored how to set up simple uncompressed backups. What we have not explored are the many and powerful advanced options this package possesses which can make it truly versatile and able to serve a wider range of backup needs. These could fill a book. What I have tried to present here is a primer to give the reader some familiarity so that further explorations can be taken up individually with confidence.

As one of the tools in the Linux user's backup arsenal, it makes a good choice for backup of data that changes often, or that needs to be handled automatically and/or stored remotely. Used as part of an overall backup strategy, it can be very useful in helping to ensure the user is able to able to recover gracefully from a crash or system failure.

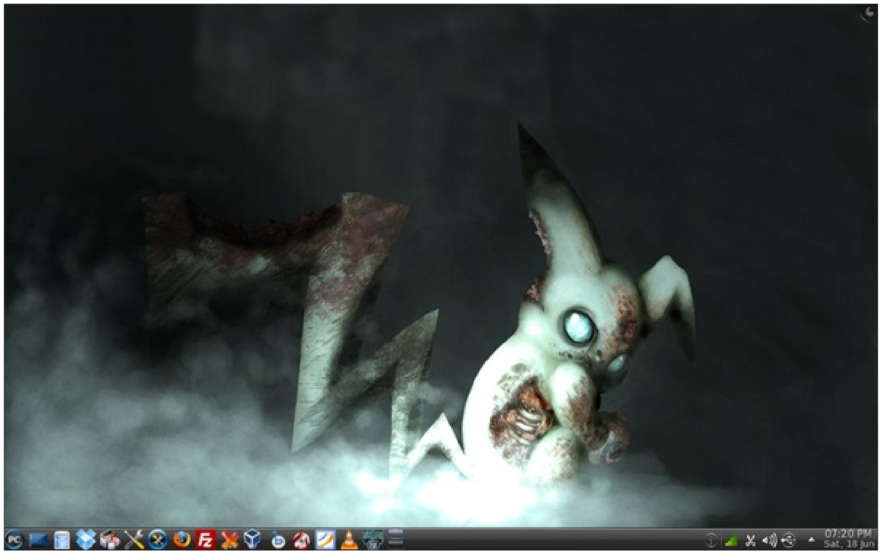
More Screenshot Showcase

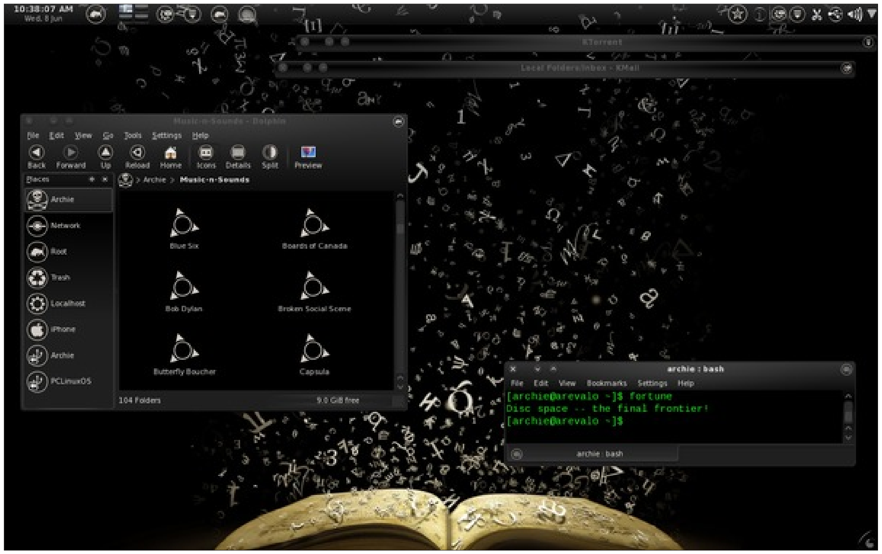




Top Left: *Posted by bones113, June 23, 2011, running KDE 4.*

Top Right: *Posted by LKJ, June 2, 2011, running XFCE.*





```
[archie@arevalo ~]$ fortune
Disc space -- the final frontier!
[archie@arevalo ~]$
```

Bottom Left: *Posted by MerReady, June 18, 2011, running KDE 4.*

Bottom Right: *Posted by Archie, June 7, 2011, running KDE 4.*

2011

July

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

lee
2010