The PCLinxOS magazine Volume 57 October, 2011



Openbox: Use Pipe Menus For More Functionality Openbox: Tips & Tricks Openbox Resources: Learn More About It Game Zone: PlayOnLinux -A Quick Overview **Schedule Tasks With** cron & anacron **Behind The Scenes: scoundrel** Forum Family & Friends: exploder Six New PCLinuxOS Remasters WindowMaker On PCLinuxOS: **Window Handling Functions Computer Languages From** A to Z: Yorick Forum Foibles: Celebrate PCLOS **Double Take &** Mark's Quick Gimp Tip **Testimonial** And more inside!

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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

As fall arrives for the Northern Hemisphere, amidst all the ghosts, ghouls and goblins that will be popping up at the end of the month, it brings a lot of relief to many of us who literally baked in oven-like summer temperatures. In the Southern Hemisphere, a winter thaw is approaching, signaling a new summer season that is about to be ushered in.

Around PCLinuxOS, things have never cooled down. Work continues on the 64-bit repositories, as well as a new 64-bit PCLinuxOS ISO. New, specialized community remasters continue to populate the PCLinuxOS landscape, filling in niches previously uncovered. This can only mean increased appeal to computer users everywhere, as they look towards PCLinuxOS to fulfill their specialized needs and interests.

Vigilance is needed when dealing with the new users flooding into the PCLinuxOS Forum. We will be bombarded with endless questions about sudo, endless comparisons to _______ distro (you fill in the blank with any number of possibilities), and those who just are not fully clued into other aspects of "the PCLinuxOS way" of doing things. In the process, we need to remember the proper way to act in the forum, so that we can project "the PCLinuxOS way" of doing things. This means remaining kind with new users, despite how many times we've seen the question asked. This means no RTFM, or any other similar incarnation, which isn't used in the PCLinuxOS forum.

At the same time, we need to keep our eyes open for those new users who, despite being shown the proper way to behave, have the ways of other Linux forums ingrained in them. Our forum moderators



and administrators may need those extra eyes to help keep things under control. If a new user is not behaving in a manner that is fitting for OUR forum, it may be a better choice to simply report the post so that a moderator or administrator can handle the situation.

This month's magazine cover is by assistant editor Meemaw, celebrating the coming Halloween season. Until next month, I wish each of you peace, happiness, tranquility and serenity.







Openbox: Use Pipe Menus For More Functionality

by Paul Arnote

We've already covered how to customize your Openbox right click menu in the August issue of The PCLinuxOS Magazine. However, you can further increase the functionality of your Openbox menu by using what's known as "pipe menus." Pipe menus are menus that activate an external script, and the information is dynamically displayed in your Openbox menu.

Pipe menus work fairly simply. First, you write a script (a bash script, a python script, etc.) that performs the "work." You then modify your ~/.config/openbox/menu.xml file to display the dynamic menu. As daunting as it may sound, it's actually easier than you may think.

To get started, you need to find a script to control your Openbox pipe menu – or write your own. If you choose to use one that someone else has already created, then your task will be quite a bit simpler. Fortunately, there are several "collections" of Openbox pipe menu scripts scattered around the web. One place you will definitely want to check out serves as, more or less, a central "clearing house" for all pipe menu scripts. That place is the pipes menu page on the Openbox Wiki.

If, however, you want to write your own custom script, the Openbox Wiki also has a page that details what you need to include in your script. Of course, you may want to take a look at the examples in the first link. I know that, for me anyway, it's so much easier to see an example of how to do it, in conjunction with the "technical directions" on some web page.

Putting Pipe Menus To Work

Take a look at this screen shot (below), that displays your local weather forecast:

Menu		
Applications	•	
Browsers File manager Terminal Run Program	•	
Weather		Independence, MO (201 <u>1-08-02)</u>
System Info	٠	Current conditions
Desktops	×	Weather: Clear
OpenBox	*	Temperature: 107 F
Preferences	+	Humidity: Humidity: 22%
Log Out		Wind: Wind: W at 10 mph
Reboot		Forecast: Tue
Shutdown	3	Weather: Clear
Suspend		Minimun Temperature: 79 F
		Maximun Temperature: 108 F
		Forecast: Wed
		Weather: Chance of Storm
		Minimun Temperature: 76 F
		Maximun Temperature: 95 F
		Forecast: Thu
		Weather: Chance of Storm
		Minimun Temperature: 77 F
		Maximun Temperature: 94 F
		Forecast: Fri
		Weather: Chance of Storm
		Minimun Temperature: 74 F
		Maximun Temperature: 92 F

To get the weather forecast to appear in your Openbox menu, here's what you need to do. First, go grab the python script. This particular version of the weather forecast script uses weather information from Google. If you prefer to use the weather information from Yahoo, you can grab a different python script. There is yet a third, different weather script, displaying information from weather.com. The setup steps for that script are very similar to the steps that follow for the Google and Yahoo weather information sources.

All of the scripts will give you similar information. The Google source will give you a four day forecast (today's, plus the next three days), while the Yahoo source will give you only a two day forecast (today's and tomorrow's).

I copied the script(s) into Geany, and saved them in ~/.config/weather. Next, go into the directory and mark the file as executable. In PCManFM, if you right click on the file and choose "Properties" from the context menu, select the second tab and place a check mark in the "Make the file executable" option. To avoid confusion, I saved the Google weather script as gweather.py, and the Yahoo weather script as yweather.py.

Next, you need to add a line to your ~/.config/openbox/menu.xml file, so that the menu displays in your Openbox menu. For the Google weather script, I added the following line (all on one line):

Openbox: Use Pipe Menus For More Functionality

<menu id="pipe-weather" label="Google Weather" execute="python ~/.config/weather/gweather.py 64052 en" />

For the Yahoo weather script, I added the following line (again, all on one line):

<menu id="yahoo-weather" label="Yahoo Weather" execute="python ~/.config/weather/yweather.py 64052 Fahrenheit" />

As you can see, the options for both differ a little bit. For the Google weather script, you include the city code for your area (in the U.S., that's your ZIP code) and the language you want to use to display the information (in my case, "en" for English). For the Yahoo weather script, you include the city code for your area, along with the measurement units you want to use for displaying the temperature (Fahrenheit for the U.S., and Celsius for most everywhere else).

After editing your ~/.config/openbox/menu.xml file, right click your mouse on an empty spot on your desktop, and select the Openbox > Reload Openbox menu item to load your new menu into the Openbox menu. On subsequent reboots, this step will not be necessary.

One caveat about the Yahoo weather script, however, is in order. The script is set up to cache the data from Yahoo, so that repeated access to the script doesn't keep retrieving data from Yahoo. The time length for the cache is set to six hours, meaning that despite how many times you access the Yahoo weather script during that time frame, you will be viewing the cached data. Near the top of the script (line 27), look for the entry named "CACHE_HOURS." Change the "6" to "1," and now the cached data will expire after one hour. This means that repeated attempts to access the Yahoo weather data will be refreshed if the data is more than one hour old. Accessing the weather data in less than the one hour time frame will result in the cached data being displayed.

More than just weather reports

Of course, you can do more than just display weather information on demand via the Openbox menu. Another one that I found useful is called "sysinfo."

As you can see by the screenshot (top of next column), sysinfo provides lots of information about your computer system. This information includes the current kernel you are using, information about your drive partitions, data about RAM usage, swap file usage and CPU usage, information about your network connection, as well as time and date information.

To use this on your Openbox installation, first go grab the bash script that controls the display of this information. You may need to edit the bash script so that the information displayed reflects your computer and its hardware options. For example, I had to edit the bash script to display the proper hard drives for my system, as well as the network information.

Menu							
pplications >							
rowsers >							
ile manager	and the second						
erminal							
un Program							
Veather >							
ystem Info 🔸	parnote-openbox @ localhost.localdomain						
esktops 🔸	Linux 2.6.38.7-pclos1.bfs i686						
penBox +	Filesystem ~~ Type ~~ Tsed ~ Free ~ % ~ Mount						
references >	/ <u>d</u> ev/sda5 ext4 22G 3.6G 17G 18% /						
og Out	/ <u>d</u> ev/sda6 ext4 74G 22G 53G 30% /home						
eboot	CPU ~ RAM ~ Swap Used/Total						
hutdown	RAM used: 392.04 MiB/501.05 MiB ~ 78.00%						
uspend	Swp used: 0 MiB/3093.36 MiB ~ 0%						
	CPU ~ Mobile Intel(R) Pem(R) III CPU - M 1133MHz						
	CPU @ 733.000 MHz ~ CPU Cache: 512 KB						
Constant of the local division of the local	Network ~ eth1						
	eth1 ~ ip: 192.168.1.107						
	eth1 ~ downloaded: 10.5 MiB						
	eth1 ~ uploaded: 2.7 MiB						
	Date ~ Time						
	Date ~ 2011.08.02. (Tue)						
	Week ~ 31						
	Day ~ 214						
	Time ~ 15:39 [CDT]						
	Up ~ 1h 38m						

Again, I copied the script into Geany, saved it at ~/.config/sysinfo as sysinfo.sh, and made the file executable. Next, I placed the following line in my ~/.config/openbox/menu.xml file (again, all on one line):

<menu id="sysinfo" label="System Info" execute="~/.config/sysinfo/sysinfo.sh" />

Reload Openbox, via the Openbox > Reload Openbox menu item on your Openbox menu to access your new menu item.



Having some more fun

There are more items you may want to add to your Openbox menu. One pipe menu script adds RSS news feeds to your Openbox menu. Another checks your email, from the Openbox menu. Another displays a calendar and the current time. Yet others control playback of sound files, change wallpapers, and much more. Refer to the Openbox Wiki "clearing house" for a full list of pre-made Openbox pipe menus.

Summary

Basically, anything you can script can be formatted to work with Openbox's pipe menus. This is where your custom scripting skills can help to truly make your Openbox experience unique.

If you want to read more about Openbox pipe menus, check out the TechRepublic articles that appeared at the end of July and in early August. This article had been planned since before we ever started doing Openbox articles, back when we were in the planning stages for the series of articles on Openbox. The TechRepublic articles help provide even more resources for those interested in learning more about Openbox's pipe menus.

You can make the use of pipe menus as easy or as complex as you like. But use them you should, since they help provide a more complete, more customized user experience.

Screenshot Showcase



Posted by Crow, September 8, 2011, running KDE.



Forum Family & Friends: exploder

by Archie Arevalo (Archie)

Most of us regular forum members know a stern PCLinuxOS advocate using the handle exploder. The handle belongs to a humble 50-year-old family man from Hartford City, Indiana named Don Cosner. He and his wife are raising a daughter and three sons.



"What's with the nick exploder? You were not a demolition expert in the Navy Seals, are you?"

"I picked exploder as my user name in remembrance of my '91 Ford Explorer and in honor of a good friend that passed away some years ago."

Exploder is one of the regular PCLinuxOS community member who spends much of his free time at the forum. He works for Stoneridge North America in the Lead Prep Department making wiring harnesses. He also used to work as a Desktop Support Technician until the PCs and phones were unplugged "but that's just how things go sometimes."

"How were you introduced to Linux?"

"I got involved with Linux several years ago. My wife turned me into a full time Linux user the day she brought home "Point & Click Linux" by Robin Miller. I have worked for a couple of different distributions to try and give back and lend a hand wherever possible."

"... and PCLinuxOS?"

"Over the years I have run several different distributions but most of them just seemed to lack something in one area or another for me. I wanted good hardware support and updated applications without the need to re-install my operating system every so often. Back in 2007, I tried PCLinuxOS and had some problems. I had no idea back then that problems were quickly resolved and foolishly moved on. It was a huge mistake on my part, for sure.

"I kept an eye on PCLinuxOS because I thought to myself that Texstar really understands what people want in an operating system, and I grew to admire what he was doing. To see a lead developer actually participating in the forum and interacting with the community made a lasting impression on me. I began to notice that the phrase "upstream issue" did not mean "forever broken" with PCLinuxOS. Seeing the word "Solved" in a lot of threads on the forum woke me up and made me seriously think about what I wanted to run on my computer.

"I came in on the 2011.6 development cycle, and was really impressed with the way major updates

were handled. Things were planned out and carefully phased in, and there were plenty of opportunities for community involvement. I was more used to a cycle of breakage, but this was not the case with PCLinuxOS."



"Which desktop environment do you prefer?"

"I have tried the Xfce, LXDE, e17, Gnome and KDE versions of PCLinuxOS. I went with KDE, because everyone in my family could use it with no learning curve at all. I like just about any desktop environment, especially the lighter ones, but my wife and kids seem more comfortable with KDE. I keep the desktop and panel pretty clean. I like a minimalistic look to the system.

"The default applications in PCLinuxOS KDE are excellent, and are always rated highly in opinion polls I have looked at. I had very little customizing to do when I installed PCLinuxOS. For the first time in years, I am enjoying my computer, rather than





Forum Family & Friends: exploder

spending time fixing it! The community has rekindled my interest in collecting music, thanks to the monthly music thread. I really enjoy being on the forum, and there are a lot of terrific people here. I like the humor on the forum and some of Texstar's Twitter posts really got me laughing!"



"How do you find our community?"

"I like the way things are done on the PCLinuxOS forum. The support is outstanding. I have posted a couple of questions for help and advice, and the community quickly jumped in to assist me. PCLinuxOS does a lot of things different from other distributions, but the end result is one of the highest quality projects there is. I have observed a group of artists work together to build the theme for the 2011.6 release, in amazement. You just don't see people working so well together everyday. PCLinuxOS stands as an example in my eyes of how things should be done." "How would you advocate PCLinuxOS, say to your neighbor?"

I'd tell him I have PCLinuxOS running on my computer longer than anything I have ever install, and it has become the operating system of choice. I would highly recommend PCLinuxOS to everyone that shows an interest in Linux. PCLinuxOS has a permanent place on my computer and show them my amazing desktop.

"Well, Don ... thank you for sharing your time and we'll see you at the forum!"



A magazine just isn't a magazine without articles to fill the pages.

If you have article ideas, or if you would like to contribute articles to the PCLinuxOS Magazine, send an email to: pclinuxos.mag@gmail.com

We are interested in general articles about Linux, and (of course), articles specific to PCLinuxOS.







Find at least seven differences between cartoons.

Answers on Page 38.

Mark's Quick Gimp Tip

If you're a frequent reader of this column, you know that I use Gimp for all my cartoon work. And I sometimes, when I need to create a cartoon that has an added visual effect, I turn to the Gimp and its many filters. One of the most fun filters I use is **Gaussian Blur**. You can find it in Gimp's menu by going to **Filters>Blur>Gaussian Blur**. Here's the way I used Gaussian bBur in the cartoon at right. I like to sometimes have the foreground cartoon stand out a bit more than the background. So, I make sure to scan it at a high resolution in order to keep it as crisp as possible. Then,I create a background using Gimp. In this case, I added a gradient sky and then used the cloud brush to add clouds. I did this all on a separate layer. For the last step, I merely used Gaussian Blur to blur the entire background layer. This softens the clouds and sky, especailly around the edges. I'm left with a very hard foreground image atop a nice soft blurred image. It gives a nice 3D effect of sorts.



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





Forum Foibles: Celebrate PCLOS

2003

Just eight short years ago I want you all to know Texstar had an idea He took the best of Tux Created a new Linux PCLOS

> His style is quality No frivolity An icon of creativity No ambiguity Just ingenuity PCLOS

2011

The years went by so fast He wondered if it would last But his worries now are past It's wonderful wonderful

Years and years of sacrifice To create something nice For users around the world His OS is here to stay We celebrate today PCLOS



Thank you, Texstar For an OS so nimble & swift, You have given us The gift of all gifts.

Freed from the weight Of viruses that make my computer suffer, PCLinuxOS is the best, It tops all others.

So here's to you Over all those many years For giving so much of yourself We all owe you so many beers!

parnote

Seven years and no more tears.

Neal









Reach Us On The Web

PCLinuxOS Magazine Mailing List: http://groups.google.com/group/pclinuxos-magazine

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

PCLinuxOS Magazine Forums:

PCLinuxOS Magazine Forum: http://pclosmag.com/forum/index.php Main PCLinuxOS Forum: http://www.pclinuxos.com/forum/index.php?board=34.0 MyPCLinuxOS Forum: http://mypclinuxos.com/forum/index.php?board=157.0

P CLINXOS Radically Simple

Screenshot Showcase



Posted by T6, September 10, 2011, running KDE.



Openbox: Tips & Tricks

by Darrel Johnston (djohnston) & Paul Arnote (parnote)

Add a run dialog to the Openbox menu

Open Synaptic and install the gnome-run-dialog package. Once that is accomplished, open the ~/.config/openbox/menu.xml file in a text editor. Add a section like the one shown below.

<item label="Run"> <action name="Execute"> <execute>gnome-run-dialog</execute> </action> </item>

The item label is what we want shown in the Openbox menu. gnome-run-dialog is the program we want executed when we click on Run in the



Openbox menu. Once you have edited and saved the menu.xml file, you can freshen the Openbox menu by logging out, rebooting, or clicking on Reconfigure or Restart in the submenu of the OpenBox label. Once you click on Run in the menu, the gnome-run-dialog window will appear.

Turn off fades and shadows to speed things up

In the Bonsai version of the PCLinuxOS Openbox edition, xcompmgr is disabled. We can enable it at login by opening the ~/.config/openbox/autostart.sh



file and uncommenting the line #xcompmgr & by removing the # sign at the beginning of the line. However, this is unnecessary, as the composite manager effects can be turned on and off from the Openbox menu.

If the effects are off, selecting any of the Transparency menu items will turn the composite manager on. Doing so will automatically uncomment the xcompmgr & line in the autostart.sh file by executing one of the ~/.config/openbox/scripts/ xcompmgr.sh options, as defined in the menu.xml file. Selecting Transparency will execute ~/.config/ openbox/scripts/xcompmgr.sh set. Selecting Transparency, fadings will execute ~/.config/ openbox/scripts/xcompmgr.sh setshaded. Selecting Transparency, fadings, shadows will execute ~/.config/openbox/scripts/xcompmgr.sh setshadowshade. Selecting No effects from the menu will comment the #xcompmgr & line in the autostart.sh file, and will execute ~/.config/openbox/ scripts/xcompmgr.sh unset in the menu.xml file. Any changes made are kept at next login.

Use lxcursor to change cursor theme

We can use lxcursor to change our cursor theme. Open Synaptic and install the lxcursor package. Once that is accomplished, there is nothing to edit in the Openbox menu.xml file, unless you want to show the item in the main portion of the menu. We will, however, need to edit the desktop file, located at /usr/share/applications/lxcursor.desktop. As user root, open the desktop file in a text editor. Scroll down towards the bottom of the file and locate the line OnlyShowIn=LXDE;. Here, you can either



comment the line by adding the # symbol at the beginning of the line, or by deleting the entire line. Once the changes have been made, save the desktop file. To have the LXCursor item show in the Openbox submenu, freshen the Openbox menu by logging out, rebooting, or clicking on Reconfigure or Restart in the submenu of the OpenBox label.



If you change the current cursor theme, the change will not take effect until you have logged out and logged in again.

elect the new cursor theme or press Cancel to g ou must logout to apply the new cursor theme!	```
Cursor Theme	
ComixCursors-Black-Large	Ξ
ComixCursors-Black-Large-Slim	
ComixCursors-Black-Regular	1
ComixCursors-Black-Regular-Slim	1
ComixCursors-Black-Small	
ComixCursors-Black-Small-Slim	
ComixCursors-Blue-Large	V
	elect the new cursor theme or press Cancel to q ou must logout to apply the new cursor theme! Cursor Theme ComixCursors-Black-Large ComixCursors-Black-Large-Slim ComixCursors-Black-Regular ComixCursors-Black-Regular-Slim ComixCursors-Black-Small ComixCursors-Black-Small-Slim

Screenshots Via The Keyboard - Revisited

In the November 2010 issue of The PCLinuxOS Magazine, back when we were wrapping up our series of articles on the LXDE desktop, we covered how to add keybindings to take screen shots (see the Advanced Keyboard Shortcuts section of the article).

One problem with the keybindings, as they were presented, is that they take the screen shot immediately. Normally, this isn't necessarily a problem. But it is if you want to capture menus in your screen shots, or some other on-screen animations (as I needed to do when taking the screen shots for the article on launch bars), taking the screen shots immediately won't work.

Fortunately, there is a solution, and it's quite simple. For example, take the command to capture the full screen shot (as excerpted from the original article):

bash -c "xwd -root | convert /tmp/screenshot-\$(date +%s).png"

I simply added **sleep 5**; to the beginning of the command that is between the quotes. This provides a five second delay before carrying out the rest of the command that takes a screen shot of the full screen. The five second delay gives you ample time to activate a menu or animation that you might want to capture in the screen shot. This command uses the keybinding Ctrl + Print.

While I was "tinkering" with this command, I also took time to reformat the file name and where my

screen shots were stored. As it was in the original article, it a) stored the image in your /tmp directory, and b) used a cryptic number after the date that specified how many seconds since 01-01-1970 UTC (the %s in the command above).

Instead, I changed the location where the screen shots are saved. I created a "Screenshots" directory under my "Pictures" directory, and used that instead. Second, I reformatted the information after the date to reflect something that is more easily read (and understood) by humans. I ended up with this:

bash -c "sleep 5;xwd -root | convert -~/Pictures/Screenshots/screenshot-\$(date +%F-%H-%M-%S).png"

The %F uses the full date (YYYY-Month-Day), then prints a dash, then the hour (%H, based on a 24 hour clock) as two digits, another dash, then the minutes (%M) as two digits, another dash, then the seconds (%S) as two digits. Done this way, it makes it easier to locate the appropriate screen shot in a directory full of other screen shots.

Another Thing About Screen Shots

The above method does have one teensy-weensy problem: it won't capture transparency areas of a screen image that you may want to preserve. Instead of showing the transparency, it shows a transparent region as black. Most of the time, that is not a problem – unless I'm trying to show the transparency in the screen shot.





One of the applications I routinely use from the PCLinuxOS repository is MTPaint. When it comes to cropping an image for the magazine, there's little else that beats the simplicity of MTPaint. It's much faster to load than Gimp, and it makes sense to me to use a simple tool for a simple job.

Fortunately, MTPaint will also take screen shots. Anyone who has installed MTPaint from the PCLinuxOS repository will also notice that there are *two* entries in the Graphics section of the applications menu: one for the MTPaint program itself, and another one labeled MTPaint Screenshot. The latter will preserve any level of transparency that is displayed on your screen, as well, which is why I like to use it.

The only problem is that MTPaint Screenshot takes the screen shot image immediately. This doesn't allow me to capture any menu images or animations on the screen that I may also need to display. Fortunately, the solution was only a very short bash script away.

Borrowing from my five second delay I added to the keybinding method above, I created a bash script that executed a five second delay, and then used MTPaint to capture the screen shot. Here's the simple bash script:

#! /bin/bash
sleep 5
/usr/bin/mtpaint -s

The first line (of course, after the bash line) causes a five second pause before executing the second line,

which runs MTPaint in the screen shot mode (hence, the -s command line option).

The only drawback here is that MTPaint will only grab a screen shot of the entire screen. But, what the hey. It also loads it into the MTPaint editor, where I can easily crop the image to only the part that I need.

Add A Power Manager & Monitor

Openbox, as it comes, doesn't have its own power manager or monitor. However, you can install the Gnome Power Manager, via Synaptic. With Gnome Power Manager, you can monitor your power and battery status. Additionally, it will warn you when your laptop battery gets low, and suspend, hibernate or shut down your computer when it the battery becomes critically low. Fortunately, Gnome Power Manager doesn't pull in many Gnome dependencies, helping to keep your Openbox installation light and nimble.

To insure that mine starts every time I start my computer, I added the following two lines to my autostart.sh file, in my ~/.config/openbox directory:

gnome-power-manager & sleep 1

Now, Gnome Power Manager starts and runs in my system tray all the time, keeping a watchful eye on the status of my power and battery status.

Let There Be Sound

Well, okay. I may be exaggerating a bit, but out of the starting gates, Openbox doesn't have a sound volume manager running either. Check in Synaptic to see if VolumeIcon is installed already. If it isn't, go ahead and install it.

Next, much as we did with the Gnome Power Manager above, add the following two lines to your autostart.sh file:

volumeicon & sleep 1

Now, whenever you start up your computer, VolumeIcon will be ever present to allow you quick and easy access to controlling the sound volume on your computer.

Want To Help?

Would you like to help with the PCLinuxOS Magazine? Opportunities abound. So get involved!

You can write articles, help edit articles, serve as a "technical advisor" to insure articles are correct, create artwork, or help with the magazine's layout.

Join us on our Google Group mailing list.



Behind The Scenes: scoundrel

Editor's Note: Periodically, we run articles in The PCLinuxOS Magazine to help acquaint you with the moderators and administrators of the PCLinuxOS Forum. This month, we get a more personal view of PCLinuxOS Forum Administrator scoundrel.

Q: Can you introduce yourself? (Forum name, real name, occupation, where you live, marital status, pets)



In the PCLinuxOS forum, I'm known as Scoundrel. Others know me as Haukur Erlendsson. I'm single and planning on staying that way. I am currently living off of my medical pension. I live in southeast Sweden, with Shakira, my seven year old Rottweiler.

Q: How and when did you get started with computers?

After hurting my back I had nothing to do, so I thought I might give computers a try. I think that was around 2005, if I recall correctly.

Q: When did you get interested in Linux and why?

Soon after I had a "freak hammer incident" with my first computer, sometime in early 2006.

Q: What Linux distro did you start with?

I think I first tried one of the *buntus, and then moved to Linspire.

Q: What one song best describes your style in the forum?

Sympathy for the Devil, from the album Beggars Banquet, Year - 1968.

Q: When did you join PCLinuxOS?

I first joined in early 2007.

Q: What led you to PCLinuxOS?

It was kind of a random, luck of the draw thing really.

Q: How many hours a week do you estimate that you spend working as a PCLinuxOS moderator?

As many hours as I have left over, I spend at the forum.



Q: What one thing is the most challenging thing you have to deal with as an moderator?

Having to moderate family and friends.

Q: What is the most rewarding thing about being a PCLinuxOS Forum moderator?

Seeing new family members excel at Linux and the happiness that brings about.

Q: In the animal kingdom, which animal best represents you?

Hawk

Q: What parting advice or words of wisdom would you like to leave The PCLinuxOS Magazine readers?

It has all been said. My advice is keep it true to yourself. You certainly can't go wrong with that.



The PCLinuxOS Magazine

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Six New PCLinuxOS Remasters

by Paul Arnote (parnote)

I usually mention recent happenings in my monthly "Welcome" column every month. However, there has been more activity than usual going on in the PCLinuxOS community – enough that this month, it deserves being split off into its own article.

Full Monty 2011.09

To kick it all off, there's a new Full Monty.

What is Full Monty? FullMonty (FM) is a regular PCLinuxOS KDE installation, coupled with a special desktop layout, and with many applications & drivers pre-installed. The idea of the FM concept is to provide the best out-of-the-box experience in an intuitive, thematically organized desktop setup. FM is designed for Linux beginners and newcomers from other operating systems. Experienced Linux users may find this edition bloated.

The typical user is provided with a cream of the crop selection of activity-related applications available in PCLinuxOS. The most popular ones are easily accessible from their respective virtual desktop and many more applications can be accessed from the PC menu.

The variety of applications in FM serves several purposes: advertising these great applications to the users, stimulating the comparative usage of these applications in the forum, learning about and discussing specific application features, and finally



helping deciding on and providing constructive feedback to finding the most popular application for a given task. FM should facilitate the entry into the Linux desktop experience, provide an intuitive and easy to use working environment, and ultimately promote the best Linux distribution to the first place in the charts!

The FM ISO is a 4 GiB download that will fit neatly on a blank DVD. It contains 3,427 pre-installed packages. If you have already downloaded and/or installed the regular PCLinuxOS KDE version, you can install Full Monty Light, via Synaptic, to install only the basic FullMonty desktop layout and its tools (in Synaptic search for and install fullmonty-light), without the need to download and reinstall a 4GiB ISO. In addition, the user can customise the FMsystem by setting up their preferred applications. For a full discussion of what is in the new Full Monty, including a changelog, check this topic in the PCLinuxOS forum.

BlackCat Astronomy Edition

PCLinuxOS user Taco.22 has made another remaster, this one aimed at astronomy enthusiasts. Based on the latest Openbox Bonsai, BlackCat Astronomy edition (md5sum here) contains a suite of dedicated software for those interested in astonomy.

It has a variety of planetarium programs, a couple of CCD apps, and a comprehensive star chart, as well as image manipulation programs and telescope drivers. The browser also has links to appropriate astronomy sites. Plus, the home page gives an









explanation of the included software, with links to the parent web sites.

Some of the software is in the repos, but quite a bit isn't. Because it is quite a narrow field of interest, it

would probably be asking a bit much for all the apps to be packaged for PCLinuxOS. So be aware that there is no official support for this edition. However, its previous incarnations seem to have been running for a while without issues. The BlackCat Astronomy edition contains a full compliment of the useful software that you are likely to find in any remaster based on PCLinuxOS, as well as the following astronomy applications:

virtualmoon kstars stellarium xephem gpredict qastrocam wxastrocapture fitsblink sao ds9 skycat skychart jskycat astroimagej jskycalc nightfall

Keybindings are pre-defined in BlackCat, and are centered around the use of the "Windows" key that is commonly found on many keyboards. There is even a list of them in a Conky listing on the desktop, for quick and easy reference. If you are running BlackCat on a computer that doesn't have a "Windows" key, Taco.22 has included an alternate set of keybindings that center around the alternate use of the "Ctrl" key.

PCLinuxOS Edu

An idea that has been kicked around for quite some time, PCLinuxOS Edu (md5sum here) is the product





Six New PCLinuxOS Remasters



of melodie, Crow and a bevy of testers. Its target audience is children, and is built around Openbox, to ensure that it runs fast while being energy efficient. Because it uses Openbox, PCLinuxOS Edu runs especially well on computers with low hardware specifications – such as older computers that are likely to be "handed down" to children by their parents, siblings or other relatives. The CD-sized 686 MiB ISO contains many applications geared especially for children. They include:

GCompris - a high quality educational software suite comprising of numerous activities for children aged 2 to 10. Some of the activities are game orientated, but nonetheless still educational. Below you can find a list of categories with some of the activities available in that category.

- computer discovery: keyboard, mouse, different mouse gesture

- algebra: table memory, enumeration, double entry table, mirror image

- science: the canal lock, the water cycle, the submarine, electric simulation
- geography: place the country on the map
- games: chess, memory, connect 4, oware, sudoku
- reading: reading practice

- other: learn to tell time, puzzle of famous paintings, vector drawing, cartoon making,

Currently GCompris offers in excess of 100 activities, and more are being developed. GCompris is free software, which means that you can adapt it to your own needs, improve it and, most importantly, share it with children everywhere.





Childsplay - a collection of educational activities for young children and runs on Windows, OSX, and Linux. Childsplay can be used at home, kindergartens and pre-schools. A fun and safe way to let young children use the computer and at the same time teach them a little math, letters of the alphabet, spelling, eye-hand coordination etc. Childsplay is part of the schoolsplay.org project.

Omnitux - The project aims to provide various educational activities around multimedia elements (images, sounds, texts). The types of activities included are associations, items to place on a map or a schema, counting activities, puzzles, card faces to remember, and others.

Omnitux features support for multiple languages, including German, English, French, Italian, Polish, Portuguese and Spanish.

Gamine - the game for the youngest. Starting at the age of 18 months, when your child starts climbing on your knees and messing around your desktop with the mouse, hop ! Start Gamine, and the child will have colorful shapes and music reacting to the moves of the mouse, leaving your desktop alone, and discovering that the move of the mouse has an action!

gTans - A tanagram game offering plenty of possibilities, and very configurable.

Tuxtype - a game to learn and improve typing while feeding Tux.

Tux Paint - to draw and paint. A set of thumbnailss

are installed, and more can be installed later.

TuxMathScrabble - a game to learn maths while playing scrabble with Tux.

Scratch - An astounding programming language for everyone. While building stories and scenes, you will learn and teach development to young children, and many projects which can be downloaded for use can be found at the main site. Scratch: Create interactive stories, games, music and art - and share them online.

Okawix – Okawix is an offline reader that allow you to download the content of Wikimedia projects, with or without pictures, in order to then access it offline. Okawix's library includes the 253 languages of the various projects of the Wikimedia Foundation (Wikipedia, Wikisource, Wiktionary, Wikiquote, Wikibooks).

OOo4Kids Manager - Install OpenOffice For Kids in 17 different languages. You can also install the full LibreOffice suite for older students who may find OOo4Kids too confining or restrictive.

Of course, PCLinuxOS Edu features all of the latest from the PCLinuxOS repository, including the latest (2.6.38.8-bfs) kernel, video card support for nVidia, ATI, SiS, Intel, Matrox and Via, wireless support, multimedia playback, and printer support.

PCLinuxOS Edu also comes with the following applications already pre-installed: Firefox, PCManFM, AbiWord, Evince, Gnumeric, Galculator, Labyrinth, VLC, DeadBeef, MTPaint, Viewnior, File Roller, Gnomebaker, Geany, PCLinuxOS Control Center, Synaptic and Obconf. Over 12,000 additional programs and packages are available for installation, via Synaptic.

Hardware requirements

Processor: Modern Intel or AMD processor.

Memory: 384 MB minimum, 1 GB recommended.

Hard disk: 3 GB minimum, 10 GB or more recommended if you plan to install additional software from our repository.

Video card: nVidia, ATI, Intel, SiS, Matrox, VIA.

3D desktop support requires a 3D instructions set compatible card.

Sound card: Any Sound Blaster, AC97 or HDA compatible card.

Other: CD/DVD drive required or PC capable of booting from USB

Additional security measures have been implemented, via the PolicyKit.conf file in PCLinuxOS Edu to help prevent unauthorized (nonroot) access to sensitive areas of the operating system.

Please check out the full announcement for PCLinuxOS Edu for additional information.





Six New PCLinuxOS Remasters



e17

Linuxera has created some new e17 remasters since the last issue of the magazine was being prepared for publication. They include an updated "Summer Fairy" edition (md5sum), a new "Black Myst" edition (md5sum), and the "Barebones Laptop" edition (pictured above ... md5sum), which is literally the e17 desktop installed over the top of a stripped down PCLinuxOS. With the latter, users install the applications they want, and only the applications they want.

Enlightenment users have no reason to fear. Linuxera's server is back online after her recent move from Oregon to Alabama, and all of her e17 remasters can be found there.

Summary

There you have it – six new PCLinuxOS flavors, all made by enterprising and dedicated PCLinuxOS users. Now, PCLinuxOS users have even more choices than ever before.





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 LKJ, September 7, 2011, running LXDE.





Openbox Resources: Learn More About It

by Paul Arnote (parnote)

After all the talk in these magazine pages about Openbox in the recent months, you may be wondering where you can find more information about Openbox. While the articles dealt with Openbox 3.4, Openbox 3.5 has just been released. Fortunately, all the information in the articles we've published over the last few months is equally applicable to Openbox 3.5. Melodie has been working on updated Openbox ISOs that feature the newer Openbox 3.5, and it should be released before too much longer.

Meanwhile, check out these resources below for more Openbox information.

Openbox Wiki

For all things Openbox, this is your one-stop-shop. You will find information about all sorts of Openbox options, as well as the "official" documentation. You can also find information regarding all sorts of Openbox add-ons. Just remember that it is not recommended to install applications from outside the official PCLinuxOS repository. Instead, make a post in the Package Suggest section of the PCLinuxOS forum for one of our packagers to package the addon, so it can be added to the official PCLinuxOS repository.

Box-Look.org

There's nothing quite like redecorating from time to time, and when the urge strikes you to redecorate your Openbox desktop, make this site your first stop. Here, you will find new Openbox themes, wallpapers, fonts, logos and other cool stuff.

Customize.org

Find even more Openbox themes, wallpapers and icon sets at this site. The link above sorts out those user-submitted customizations that have the Openbox tag applied to them.

Urukrama's Openbox Guide

If a well written, well researched guide to Openbox, written in plain English is more to your liking, then look no further than Urukrama's Openbox Guide. The guide appears to be quite complete, and should be bookmarked by every Openbox user, so that the full potential of Openbox may be realized.

ArchLinux Wiki

Over at the ArchLinux Wiki, they maintain a very complete Openbox section, separate from the "official" Openbox Wiki. Of special interest is the special "Tips & Tricks" section. Topics in the "Tips & Tricks" section range from fairly simple to advanced and complex.

DeviantArt

To be honest, I would have never thought to look at DeviantArt for window manager themes. But, Io and behold, they are there. As with anything you might expect to find at DeviantArt, the quality is quite nice, so you should take the time to check out the offerings here.

I'm sure that with a little more digging, you can find other Openbox resources on the 'net. However, these six sites should go a long way towards getting you sailing a smooth course with Openbox.









Game Zone: PlayOnLinux - A Quick Overview

by Ezekiel Keator (glamdring)

What is PlayOnLinux?

From the site: (http://www.playonlinux.com)

PlayOnLinux is a piece of software which allows you to easily install and use numerous games and apps designed to run with Microsoft® Windows®.

Few games are compatible with GNU/Linux at the moment and it certainly is a factor preventing the migration to this operating system. PlayOnLinux brings a cost-free, accessible and efficient solution to this problem.

What are PlayOnLinux's features?

Here is a non-exhaustive list of the interesting points to know:

You don't have to own a Windows® license to use PlayOnLinux.

PlayOnLinux is based on Wine, and so profits from all its features yet it keeps the user from having to deal with its complexity.

PlayOnLinux is free software.

PlayOnLinux uses Bash and Python.

Nevertheless, PlayOnLinux has some bugs, as every piece of software:

Occasional performance decrease (image may be less fluid and graphics less detailed).

Not all games are supported. Nevertheless, you can use our manual installation module.

My personal use:

clicking the configure

button you get a

pleasant GUI that

your Wine drives.

applications you can

install which have

---->



New

Remove

program You can also create your own PlayOnLinux scripts, too, Throughout most of my tutorials. I will be taking advantage of PlayOnLinux. Although if you prefer not to use it, they can all be done in regular Wine too!



Getting PlayOnLinux:

PlayOnLinux configuration 4ª 💿 GuildWars General Wine Install packages Display Miscellaneous 🗑 Guild Wars Wine 👹 Update Guild Wars 🔜 SpeedFan allows you to manager 🋟 SpeedFan 🔜 Steam 🌓 Steam 🔜 default Configure Registry Editor It also has a nice list of Comman Task manage preconfigured settings targeted to that specific

The simplest way to get PlayOnLinux is through Synaptic package manager. You can find this under "Software Center" of your menu. After launching Synaptic, simply search for "PlayOnLinux" in the search bar and mark it for installation. You will then find PlayOnLinux in "More Applications" under "Emulators" in your menu.





Windowmaker on PCLinuxOS: Window Handling Functions

by Patrick G Horneker (phorneker)

Last month, we discussed configuring Workspace options with WindowMaker. This month, we shall discuss Window Handling functions configured from the *WindowMaker Configuration Manager*. These options control the behavior of windows that are displayed on your Workspace (desktop).

As with last month, we shall go through the configurable options in the order shown in the Configuration Manager.

Don't Cover Those Application Icons

The first option is labelled *"Prevent windows from overlapping minimized windows when maximized"*. The phrasing of this option can be a bit confusing.

What this option means is that if you have applications whose windows have been minimized, they show up as icons at the bottom of the screen (unless configured otherwise as discussed last month with the Workspace options). By default, when you maximize the window of an open application (for example, Firefox), the window will be sized so it covers the entire screen (barring options that prevent the window from covering the Clip or the Dock as discussed earlier with the Workspace options).

When checked, maximizing the application window will resize the window to cover the screen except for

File Themes

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the portion of the screen occupied by minimized application icons, either as a row or column (also configurable with the Workspace options).

This is useful if you have minimized applications that you want to be able to access anytime you need the application.

New Windows Get Your Mouse's Attention

The next option is labelled "Automatically give focus to a window when it is mapped". This means when a new window is opened, either by an application, or when you launch an application, that window gets all mouse and keyboard events. Help Sidenote: What is Focus? When there are multiple applications and/or multiple windows of an application displayed on the screen with any desktop environment, how does the window manager or desktop environment know where to pass keystrokes and mouse movements?

WindowMaker, GNOME, KDE, OpenBox, and other window managers keep track of any windows that are open, whether they are minimized as icons, maximized to full screen, or any other size of window. Within the mechanism for window management, there is a pointer to the current window on which to send mouse and keyboard events. This pointer is called the Focus.

Window Focus Mode

WindowMaker provides two modes of operation when it comes to window focusing.

Sloppy Focus: In this mode, the window where the mouse pointer is currently on the desktop gets the focus for keyboard and mouse events. You need to click on that window to bring it to the front of your desktop. This is the default for WindowMaker (and was the default for NeXTStep desktops). This default also applies to window managers such as FVWM, TWM, and other window managers that were developed back in the early days of the X Window System development (i.e. the 1980s and 1990s).



Click to Focus: In this mode, you need to click on any given window for that window to receive events from the keyboard or mouse. This mode should be familiar as it is the default for KDE, GNOME, XFCE, and LXDE. This should also be familiar to Windows or Mac OS-X users as that is how windows are handled on these systems.

Stay off the Dock

The next option, when selected will prevent any application window you maximize from occupying the column (or row if configured) where the Dock occupies the Workspace (desktop).

Show Me The Window List

Labelled *"Popup the window list as you cycle through windows..."*, this option enables the window list to appear on the screen as you focus on windows with the mouse. By default, this is disabled. First, having the window list appear on the screen when using the mouse can be annoying. Second, you can use the Alt-Tab combination on your keyboard as a shortcut for this function, similar to KDE, GNOME, Windows or Mac OS-X.

Mouse Lag

Labelled *"Delay before window is raised"*, this option delays the focus (in milliseconds) on the window where you move the mouse pointer. (I am not sure why anyone would want to activate this option.)

Options for Window Placement

The next two options determine where new windows opened in WindowMaker are placed on your Workspace (desktop).

The first, labelled "Offset (x,y) between windows in cascade mode", is the offset in pixels (column by row) from the window that has the current focus. This option only works with the Cascade Window mode, described next.

The second option selects which mode new windows are placed on your desktop.

Cascade Window Mode: The first window is placed x pixels from the left edge of the screen, and y pixels from the top edge of the screen. The parameters for x and y are set with the previously described option labelled "Offset (x,y) between windows in cascade mode".

Windows opened after the first are placed x pixels from the left edge of the previously placed window and y pixels from the top edge of the previously placed window (hence the cascading effect).

Place Window in the Free Space: This is the default for the PCLinuxOS implementation. Free space is determined by the size of the window, and where the Dock and Clip are located, usually where the left hand corner of the window is placed next to the Clip.

Place Window in the Best Free Space: Similar to the previous option, only WindowMaker looks for the largest available free space to place the open window.

Manual Placement: This is where you determine where to place the window. An outline of the window is displayed on your desktop. The window appears after you click on the spot where the window will be placed. This option is the default for FVWM and TWM, and maybe some other window managers.

Random Placement: Just what it says. WindowMaker will place the open window in a random position on your Workspace (desktop), which may not be the best choice for what you may be doing in a given session.

The next option, labelled "Use the Windoze style when cycling through windows..." is deprecated thanks to the Alt-Tab keyboard shortcut. There is no reason to select this option.

For 8-Bit Color Displays Only

This option tells WindowMaker which windows should be assigned more colors from the 8-bit color palette. Leave this setting as it is, unless you are running a 256-color display on really old video hardware. (WindowMaker was around back in 1998 when I first started using Linux with Red Hat 5.2. This setting was relevant then as I was using a 512MB video board on an old AcerFrame 500.)

The Alt-Tab Option

Labelled "*Raise windows as you cycle them using the keyboard*", This enables Alt-Tab (by default) to cycle through the current list of open applications and their windows. I prefer to keep this setting as



this is the standard way we cycle through open windows, and not just on WindowMaker either. This is true for KDE, GNOME, Mac OS-X and Windows among other desktops.

Open The Dialog Box Where?

This option allows you to place dialog boxes called by applications on the Workspace (desktop) where the application is running rather than on the Workspace (desktop) the user is currently working with. By default, all dialog boxes open on the current Workspace (desktop).

Conclusion

Window handling capabilities in WindowMaker have been around since the first version back in the late 1990s. Some of these features have been deprecated and are only applicable to very old hardware. I have presented this article to show some of what WindowMaker is capable of, and to show some of the history of this window manager.







Posted by omskates, September 12, 2011, running Xfce.





ms_meme's Nook: PCLOS Will See You Through



MP3

When I was just a little girl I asked my mother what will be Will my computer be Windows free Here's what she said to me

PCLOS will always see you through Texstar made it just for you PCLOS

When I was young and so carefree I went to the Forum to find romance There I found Tux he offered Linux I loved him at first glance

PCLOS has always seen me through Texstar makes it just like new PCLOS

Now I have children of my own They ask their mother what will be Will I have worms and viruses I tell them tenderly

PCLOS will always see you through Texstar we all thank you PCLOS



OGG



Schedule Tasks With cron & anacron

by Pete Kelly (critter)

Imagine having a faithful servant that could perform all your regular, mundane and necessary tasks for you? One who never forgets to do something, performs their duties precisely as they have been instructed and only ever needs to be told once how to do something? If only such a servant existed.

Well in the Linux/Unix world, there is just such a servant and its name is **cron**. Actually there are a few variations of this available but let's concern ourselves with the basic, available on all systems, **cron**.

The first version of cron to appear in Unix was written, as were so many of the basic Unix tools, by Brian Kernighan. More modern versions usually follow the format of the version by Paul Vixie, so you may sometimes see it referred to as vixie-cron. Cron is intended to take some of the drudgery out of a system administrators life and to ensure that critical tasks are not overlooked. Cron is an essential tool for system maintenance, but can equally well help to keep a much simpler system, on a laptop or desktop PC, trim, tidy and backed up.

If all of this sounds too good to be true, well then I am sorry, but there are a couple of minor issues that you may not like.

The first issue is that this is a command line utility and so you will need to enter a terminal to set it up. It is really easy to do once you have the information. Cron is a daemon, which means that once started, it sits in the background until it is needed, consuming very few resources. It is started by one of the startup scripts when you boot the computer, so all you have to do is to configure it once and then forget it.

The other thing to be aware of is that cron is not intelligent. Faithful, accurate and reliable – yes, but not too bright. Tell cron to do something really stupid and it is done regardless of the consequences. Stupid is as stupid does, as our beloved Mr. Gump would say. Beware.

To configure cron, you have to provide a list of instructions, along with times and frequencies to carry them out. This is usually done in a plain text file known as a crontab. The format of this text file is simple but strict, and there is a command named crontab that allows you to manipulate it, as we shall see. Although the crontab file is a plain text file, it is not meant to be edited as you would normally do. There is a good reason for using the crontab command to create and edit your crontab file. When you save the file, it will check for and report on any syntax errors.

There is a file named crontab in the /etc/ directory that is used by the system for its maintenance scripts, but each user can have their own personal crontab. Let's take a look at the global system /etc/crontab.

SHELL=/bin/bash PATH=/sbin:/bin:/usr/sbin:/usr/bin MAILTO=root HOME=/

run-parts

01 * * * * root nice -n 19 run-parts -report /etc/cron.hourly 02 4 * * * root nice -n 19 run-parts -report /etc/cron.daily

22 4 * * 0 root nice -n 19 run-parts -report /etc/cron.weekly

42 4 1 * * root nice -n 19 run-parts -report /etc/cron.monthly

The first line just tells cron which command shell to use to interpret the commands you want to execute. The next line tells it where to look for the commands. The third line tells cron to mail the results to root. Yes, it can do that, although I prefer to redirect any output that I want with a command similar to:

cron-command >> /home/me/cron-output.txt

Lastly is the home directory that cron should use. If this is not specified then cron will use the home directory of the user as specified in the /etc/passwd file.

Now we come to the bit that actually tells cron what to do and when to do it.

The first 5 positions separated by spaces or tabs tell cron when to execute the command in this order (see chart on the following page).

Using an asterisk in any position means first - last or, every possible value. Values may be given as lists – 1,3,5 or as ranges 1-5. A step may be given as value/step e.g. in the hours range 0-23/4 would execute the command every 4 hours. */4 achieves the same result.



minute	0-59			
hour	0-23	0=midnight		
day of the month	1-31	(29-31 where applicable)		
month	1-12	or jan - dec	(case insensitive)	
day of week	0-7	or sun - sat	(case insensitive)	sun=0 or 7

Additionally these five positions may be replaced by one of the following short-cuts:

@reboot	Run	once	after reboot
@yearly	Run	once	a year
@annually	Run	once	a year
@monthly	Run	once	a month
@weekly	Run	once	a week
@daily	Run	once	a day
<pre>@hourly</pre>	Run	once	an hour

After these five is the name of the user who runs the command, here it is root but this field is neither required nor allowed in a users personal crontab.

Finally we have the command to execute. The actual command need not concern us but for those who may be interested:

nice -n 19 tells the process scheduler to give the following command the lowest priority (in other words be nice and don't hog too much of the processors time when it may be needed by others).

Run-parts --report This command runs all executable files in the following named directory.

So, for example, the third command down will execute all files at 4:22am on each Sunday every month i.e. weekly and at a time when system usage is likely to be low. If you want to make use of this feature and add your own scripts to one of these directories then make sure that the script name does not contain a period – myscript not myscript.sh. From the run-parts documentation: *"the names must consist entirely of upper and lower case letters, digits, underscores, and hyphens."*

The first time that you use the crontab command, if no crontab file exists for you then it creates one but you won't find a file named crontab anywhere in your home directory. The file is named with your user name and is put in /var/spool/cron/.

The crontab command has few options and only three that are likely to be useful. They are:

- -e edit or create the file
- -1 list the contents of the file
- -r remove the file

Typing "crontab -e" will open the file in the vi or vim editor ready to be edited. If the idea of having to use the vi editor fills you with dismay, then don't despair. To force crontab to use a friendlier editor, such as nano, you can enter this on the command line

export EDITOR=nano

You can use whatever your favorite editor happens to be. You can even add this to your .bashrc file to make the change permanent. You may notice that the file you are editing is not called crontab, but has a rather strange name. Just accept the name and all will be well.

It's now time for an example.

First of all, check that cron is actually running with this command

ps aux | grep crond

You should get output similar to this

root 2955 0.0 0.0 4512 1144 ? Ss 09:51 0:00 crond

pete 15518 0.0 0.0 4300 720 pts/3 S+ 13:38 0:00 grep --color crond

The first line is cron running. The second is the command we used to find that out. In the extremely unlikely event that cron is not running, then the easiest way for PCLinuxOS users to start it is with the PCC control panel.

PCC > System > Manage system services.





Schedule Tasks With cron & anacron

- off

PCLinuxOS Control Center Liberation Sans

File Options Help



Manage system services by enabling or disabling them

Services and daemons							
acpid	running	Info	 On boot 	Start	Stop	Î	
alsa	running	Info	 On boot 	Start	Stop		
apmd	stopped	Info	📃 On boot	Start	Stop		
apmiser	stopped	Info	📃 On boot	Start	Stop		
apt	stopped	Info	📃 On boot	Start	Stop		
atd	running	Info	On boot	Start	Stop		
atieventsd	stopped	Info	📃 On boot	Start	Stop		
avahi-daemon	running	Info	On boot	Start	Stop		
bpalogin	stopped	Info	On boot	Start	Stop		
cpufreq	stopped	Info	📃 On boot	Start	Stop		
crond	running	Info	On boot	Start	Stop		
cups	running	Info	On boot	Start	Stop		
cups-lpd		Info	Start when requested				
						~	
Cancel					Ok		

Make sure that crond is running by clicking the start button and check the 'On Boot' box.

If I want to wrap the contents of a folder into a tarball (one big file) everyday and compress it, then save it, with a unique file name that includes the date, to a remote directory and to have all of this executed automatically for me at 2:25am every day, then I could write a simple script to do that called maybe *docsbak* like this:

#!/bin/bash

tar -czf /backups/`date +%d-%m-%Y`backup.tar.gz /home/pete/Documents/*

exit 0

A - - X

Make it executable with chmod +x docsbak

Edit my crontab by typing crontab -e

25 02 /home/pete/docsbak

Then after a few days I might see a directory listing like this

pete@connaught\$ 11 -h /backups/ total 75M -rw-r--r-- 1 pete pete 19M Sep 11 02:25 11-09-2011-backup.tar.gz -rw-r--r-- 1 pete pete 19M Sep 12 02:25 12-09-2011-backup.tar.gz -rw-r--r-- 1 pete pete 21M Sep 13 02:25 13-09-2011-backup.tar.gz -rw-r--r-- 1 pete pete 18M Sep 14 02:25 14-09-2011-backup.tar.gz





I could now add a command to delete files that are more than say 30 days old and have that automatically executed monthly.

Of course this assumes that your computer is running continuously and I know many Linux users leave their machines running for months at a time.

But what if **you** don't leave your machine running? And what about laptop users? If the time to perform a task falls when the machine is off then the job doesn't get done. In these cases we need **anacron**.

While the cron daemon runs permanently in the background and wakes up every minute to check if there is something that needs to be done, then either does it or goes back to sleep for another minute, anacron employs a different strategy. Anacron looks not at the current time but at how long it is since a task was carried out.

There are other differences, too. There are no individual user configuration files. All tasks are executed as root and listed in the global configuration file /etc/anacrontab, unless directed to another file by using the -t option (actually root may use his powers to execute the file as another user for reasons of security). Also, anacron does not use minutes and hours to time the execution of tasks, only days.

The configuration file has a similar layout to crontab but has four fields per task line.

1. The period in days before a task needs to be executed

2. A delay in minutes before starting a task



3. A unique job identifier

4. The command to execute

The first field tells anacron how many days should have passed before the task is executed. This can be replaced by one of the short-cuts as used by crontab, with the obvious exception of @hourly.

The second field is to tell anacron how long it should wait after it is started before executing a due task. Why should you want a delay? Well anacron is not a daemon hanging around in the background like cron. It is executed, does what is necessary and then exits. Normally, it is executed by a start-up script on boot up, so it is a good idea to let things settle down and allow the user to get started using the system before quietly getting on with the housekeeping and maintenance tasks assigned to it.

Field number three is a name you give to the task. This can be anything you want that is unique, reasonable and meaningful to you. Anacron will create a file of this name in /var/spool/anacron. The contents of this file is simply a time-stamp of the form **year month day** e.g. 20110828. This is what anacron looks at when executed. If this date, plus the contents of field one is less than or equal to **now** (now being the current date), then the task will be carried out and the time-stamp in the file updated to **now**.

Finally comes the command to carry out, which is often preceded by the **nice** command to introduce a degree of niceness to reduce system load. Here's part of a basic PCLinuxOS anacrontab:

SHELL=/bin/sh

PATH=/sbin:/bin:/usr/sbin:/usr/bin

MAILTO=root

the jobs will be started during the following hours only

START_HOURS_RANGE=6-22

#period command		delay	job-identifi		
1	19	5	cron.daily		
nice -n		run-parts	/etc/cron.daily		
7	19	25	cron.weekly		
nice -n		run-parts	/etc/cron.weekly		
@monthlv	,	45	cron.monthlv		

nice -n 19 run-parts /etc/cron.monthly

(Editor's note: the spacing was done to promote clarity. Each blank line represents the end of the previous entry, which appears on a line of its own in the actual file.)

You may notice that anacron is being told to execute some of the same tasks as cron. So what is going on here?

There is some clever interplay between cron and anacron. If the system is down for a period of time, then certain tasks set to be run by cron will be missed. Then these can be checked and completed by anacron. Similarly if cron has completed a task, then you don't need anacron to repeat the process. This is achieved in various ways by different distributions. PCLinuxOS does it by having anacron look at daily, hourly, monthly and possibly yearly cron tasks to see if they have been missed, and also by cron running a little script to update the anacron time-stamp of any tasks it runs so that anacron knows that the task has been completed.

The START_HOURS_RANGE variable limits the time period when anacron is permitted to execute tasks, here 6AM to 10PM, which ensures that anacron will not be executing tasks when cron is most active.

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Screenshot Showcase



Posted by Archie, September 13, 2011, running KDE.





Testimonial: I Took The Red Pill And Look Where I Ended Up

by Opey

The Rabbit Hole had a chamber with a wall of windows behind a veil with the words, "IGNORE WHAT'S OUTSIDE," painted on it. Emboldened by my previous experiences of discovery of forbidden Truths while burrowing about, I indignantly tore aside the veil and defiantly peered outside the windows into the Open Source landscape. After gazing for what seemed like months at the plethora of variously-sized edifices, all of which are marked with the words, "Welcome! Freely enter!" I decided to actually lumber through a window and go investigate the buildings.

After noting the building directory of several buildings, I decided to further investigate the "PCLinuxOS" building, and walked through the KDE entrance. The guard at the doorway, however, held up his hand and insisted that I choose to comply with password etiquette. Not wanting to seem untoward, I acquiesced.

'Whoa!" I exclaimed. "Totally rad!" ... or some such retro-effusion. "Jeepers! ... so much alien stuff!" Then I came upon requests from seemingly every direction to provide a password. "This is getting really old, really really fast," I thought.

Shortly, however, I discovered that, when scanning over the building's directory outside, either I missed the part, or else it was missing from the directory, that cautioned me to don high-speed slippers before entering. Since I hadn't ever previously forayed into any of these buildings in the Open Source landscape, it took me awhile, and required my poking around some forums for info, to finally learn that it was my PC's clod-hopper MS-esque modem that the building's floor just could not handle. By this point, my frustration over having spent so much time on a futile foray was heaped upon my disappointment with not being able to explore all the rooms. I resolved that I would forestall revisiting the building until after I'd made certain preparations upon my laptop. Perhaps someday my PC would once again enjoy high-speed ... slippers.



Meanwhile, as I sauntered back toward the building's exit, it occurred to me to attempt to recant my agreement to provide a password at every turn. As I was (and am) completely oblivious to the functions of this alien land, I poked around fairly haphazardly. I left the building. By then, I was ready to just dualboot back through windows and fogedaboutit. After a session in what now seemed like a breath of fresh cyber-air, I needed to reboot for some reason (prolly some apps installation).

Zip. Nada. Niente. Caput. Finis. ... well, for all intents and purposes, anyway.

Some lingering message about loading something ... and no recourse but to turn off the lights. On retrospect, this .. snafu ... may have had something to do with my having, inventively, I concede, encrypted an extra FAT32 partition that I created during the setup process.

After reformatting, reloading the system, and then restoring from Paragon BU/Restore archive, I was up-to-snuff ... but, of course, the windows entryway out into the Open Source landscape was gone.

I mulled over reconstructing it on the PC. naw. What for? I'm not about to go invest money into what only turns out to be a slow boat to China, one that will, hopefully, be sunk in short order (no offense to China).

So. That brings me to today. Today I am preparing to reconstruct the window entryway into the Open Source landscape ... but on my laptop. (Starbucks is a fine place where to don high-speed slippers.) I am going to follow the CD-Live instructions TO THE CYBER-LETTER. I am going to be compliant and be a good little adventurer. I am not going to cast off the password etiquette for what seems like every move I make while rummaging through the PCLinuxOS





building until I can make friends with some of you out there who can hold my MS-esque hand ... while I rummage through the PCLinuxOS building. ... so ... um

... can someone meet me at the door?

Opey, forevermore.



lt's ...



Screenshot Showcase



Posted by agmg, September 26, 2011, running LXDE.





ms_meme's Nook: Texstar So True





Computer Languages From A to Z: Yorick

by Gary L. Ratliff (eronstuc)

The computer language Yorick was developed in 1996 by David Munro while he was working at the Lawrence Livermore National Lab. This is an interpreted language written in the C computer language and which has a syntax which is very much similar to that of C itself. Its main uses are in mathematical programming of large data sets and other numerical calculations. Its main feature is in array handling, which makes it able to execute code much faster than the normal interpreted languages.

Because of the uniqueness of the language features, the best method to approach learning this would be to read one of the introductory articles found on the Internet. Since the language was only introduced in 1996, one of the earliest treatments of the language was an article which appeared in a 1998 issue of the Linux Gazette. This was written by Cary O'Brien and he called it: The Yorick Programming Language. You may find it on the web http://linuxgazette.net/issue26/obrien.html.

There is an article in Wikipedia which has several illustrations of the array features of the language: http://en.wikipedia.org/wiki/Yorick (programming lan guage)

Now as the language has syntax which is very Clike, you might expect that the last letter of the file would give a clue to the nature of the program. As with gcc, the .c indicated a C program, the .f a Fortran and the .cc one for the c++ compiler in the

set. Files for Yorick seem to be called include files, and are so indicated by having .i as the final part of the file name. This is borne out by the treatment in the official Yorick home page found on Sourceforge.



K KNOPPIX

Done

You can see clearly the similarity of the Yorick code to that of the c language. All the types of skins a comment notation for C or C++ are also used in Yorick code. ---->

The Sourceforge home page for Yorick is negotiated in much the same manner as the file for the APL language.

any of my PCLinuxOS installations. 📀 📎 👻 🕃 🕘 🍙 🛊 http://yorick.sourceforge.net/manual/yorick_23.php#SEC23 ✓ Ŋvorick computer langu 1.3.2.2 Comments There are two ways to insert comments into a Yorick program. These are the C style /* ... */ and the C++ style //: // C++ style comments begin with // (anywhere on a line)
// and end at the end of that line. F = m*a; // Here is another C++ style comment.. divE = 4*pi*rho; /* ... and a final C style comment. */ I strongly recommend C++ style comments when you "comment out" a sequence of Yorick statements. C style comments do not nest properly, so you can't comment out a series of lines which contain comments: = π^*c^2j /* ERROR -- this ends the outer comment --> */ = π^*a / <-- then this causes a syntax error The C++ style not only works correctly; it also makes it more obvious that the lines in question are comments // E = n*c^2; /* Any kind of comment could go here. */ // Γ = m*a;

Yorick recognizes one special comment: If the first line of an include file begins with #1, Yorick ignores that line. This allows Yorick include scripts to be executable on UNIX systems supporting the "pound bang" convention:

#//art/local/bin/ports/-batts /* if this is has execute permission, UNIX will use Yozick to * secute it. The Yozick function gt_argy can be used to accep to any intergenetic (see Stat), get_argy(). To might each to accept the secure state of the secure state of the secure * on process argy and botch for next information. */ wits, "The equater root of pin (*, equt(bin))

n 🖟 📰 🚱 🌠 📕 👩 Yorick: Commen... 📉 Freecell Solitaire 🛛 🙀 Take Screenshot

available for Windows, Macs, Unixes, and Linux, all without the need to contribute to the Bill Gates retirement fund. The tabs at the start of the Home page take you to full coverage of the Yorick language, where you can download the code, example programs, a programming manual, and several example programs (next page, top). While reading the material, you also learn that versions for Fedora and Debian will be found in the repositories for these systems. An impending hard drive failure prohibited me from being able to load

The documents suggest that once you read the

16:4

The arrows at the top and bottom of the page will move one through the system. The code for Yorick is

covered by the BSD license, and versions are

material, you try to install a version of Yorick on your system and key in the examples to actually see the system in operation. Once I visited the Synaptic program on the Debian 5.04 system I learned that there were many files for Yorick and Yorick documentation. So this was easily installed to the system. However, all mv





Computer Languages from A to Z: Yorick



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More Screenshot Showcase



Top Left: Posted by ferry_th, September 7, 2011, running KDE. Bottom Left: Posted by konaexpress, September 19, 2011, running Gnome.

Top Right: Posted by tanara, September 24, 2011, running KDE. Bottom Right: Posted by Itelmo, September 5, 2011, running LXDE.







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