Linux: Soaring Ever Higher For 26 Years

linux inside

DANGER   LINUS TORVALDS

In This Issue ...

From The Chief Editor's Desk ...

It's not very often we get to say this, but this month we have something new for you. Thanks to **ms_meme**, we have expanded our monthly PCLinuxOS Puzzled Partitions. Ms_meme has made a new puzzle, which she calls Cryptograms. It features a quote from a PCLinuxOS user that was made in the PCLinuxOS forum, with a new one every month.

Ms_meme reports loving to do the cryptogram puzzle in the daily newspaper. Who better to create our new puzzle than someone who not only loves doing them, but who also seems to be very good at them. Until she came bearing her gift, I had no idea of her affinity for the cryptogram puzzles.

So, if you're into puzzles … and specifically, the cryptogram style of puzzles … you're in for a treat. The monthly Cryptogram puzzle features some of ms_meme's excellent artwork, which also changes every month. Thank you, ms_meme, for unselfishly sharing your vast talents.

The most astonishing thing happened on my daily trip through the PCLinuxOS forum recently. Some users were complaining about random freezes with the new KDE5. That is, until **mrfill** posted about a possible solution: turning off the KDE5 wallpaper slideshow.

I had been experiencing random freezes on Xfce for several months. Originally, I chalked it up to a heat problem. But the random freezes persisted. Then, I chalked it up to a variety of different programs. I pared down the programs I ran all the time to just the very bare minimum, but the random freezes persisted. Then, I thought maybe it was just hardware gremlins, because that was the only other thing that made sense. The problem was frustrating and infuriating, without any solution in sight.

That was, until I read mrfill's post in the forum. I use the Xfce desktop environment, and as such, I use the Xfce's desktop wallpaper slideshow setting to change my wallpaper every five minutes. Correction, I *used* to use the slideshow. I figured that since both were open source projects, they just might share some common code. So, I figured it was worth a shot. I turned off the slideshow, and what would you know. I haven't had a random freeze in over three days (and counting) as I write this for the magazine.

I have a bash script I wrote a few years back that performs a wallpaper slideshow (it appeared in the magazine), but I haven't tried it recently. When I did use it previously, it worked well … and I don't recall any random freezes occurring from its use. Right now, I'm enjoying being free from the random freezes. Should I ever get the inkling to setup a wallpaper slideshow in the future, this is probably the route I will take.

I haven't looked at the code to compare the Xfce and KDE5 versions of the desktop wallpaper slideshow. But given the positive results, I have to say that it is very likely that they share the same code (or code segments) that are responsible for the random freezes. So, I guess the lesson here is that even though solutions are posted for a desktop environment that you don't use, don't discount them just because it's for a different desktop environment. There's a chance that it might just help fix a similar problem you are experiencing on the desktop environment you do use.

Until next month, I bid you peace, happiness, serenity and prosperity.

Transferring Files Between Your Devices

by Meemaw

Each month we do a Tip Top Tips article from the Tips and Tricks section of the forum. However, this thread was so extensive that we felt it needed an expanded version.

Started by The Chief, it was subsequently added to by a great many people, each giving their own suggestions of useful programs. We'll outline many of them in this article. I'm sure many of you have different phones and different Desktop Environments, so I'm outlining what works for me. My cell phone is a Samsung Galaxy Grand Prime, and I am running PCLinuxOS (of course!) with Xfce on a 7 year-old Lenovo laptop. The screenshots I show will be what my phone displays, then what my computer displays. I am listing these in the order that I found them in the thread, but I have added at least one that wasn't there.

Dropbox - Putting any file in Dropbox syncs it to all your devices. All you need to do is make sure you are signed into Dropbox on whichever device you need. Dropbox is in the repo, and there is an app in Google Play. (Sorry, I don't own anything Apple, so I can't tell you if it is in the Apple store.) No matter which device you are on, it is simple to download or upload files.

PCLOS-Cloud wasn't mentioned until later in the thread, but it's just as useable as Dropbox. Simply install Nextcloud to your computer and phone, and configure PCLOS-Cloud as YouCanToo has taught us, and you're good to go. (Remember that NextCloud replaced ownCloud.)

KDE Connect - tbschommer, The Chief and cozzykim all mentioned it in the thread and said it works very well. I don't use KDE, so I asked The Chief for help, and he graciously added the following information.

KDE Connect is a multi-platform app that allows your Android devices to communicate with your Linux computer (eg: your phone and your tablet). Sorry, it is only available for Linux KDE and only for Plasma 5 or KDE4 with Android devices. If you are not using Plasma 5 or KDE4, you will also need to install indicator-kdeconnect for integration with other desktops using appindicator. There is no support for Mac or Windows yet. An iOS app (for Apple devices) is in the works.

Installation: On your PCLinuxOS computer, using Synaptic, install either the kdeconnect-kde (for KDE4) or, kdeconnect-plasma (for KDE5). Since KDE Connect is a service, there isn't anything else to do. Then, on your Android devices, go to the PlayStore and install the KDE Connect app (it's free).

Setup: There is very little to actually do on your computer. On your Android device, touch the KDE Connect icon. In the upper left corner, touch the menu icon (the three horizontal bars) and then select Pair new device. You should see a list of other devices on your wi-fi network that are running KDE Connect. You computer should appear as user_name@computer_name. Select it. Then, on your computer you should see KDE Connect pop up a window with Accept and Reject buttons. Click the accept button. That's it, you are now set up to communicate with that particular Android device. You only need to do this once, but will need to repeat the process on each Android device you wish to connect.

Use: Whenever your Android device is within range of your wi-fi network (and awake), it will appear as a device in Dolphin, on the left hand side, as shown below where both my Pixel phone and Fire tablet appear.
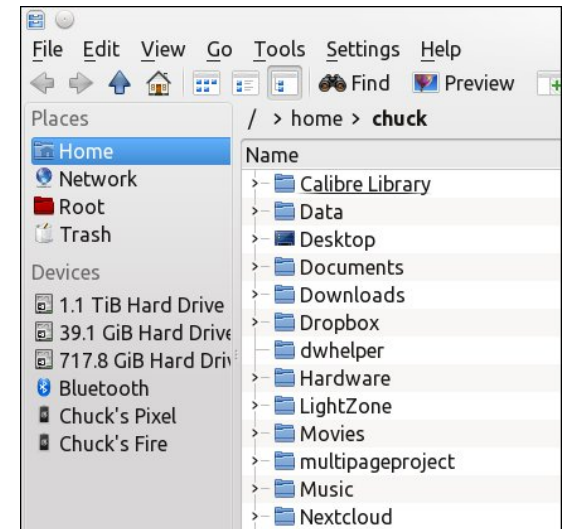
When you select one of your Android devices, you will see the files on it, just as if it were physically connected, as shown below.
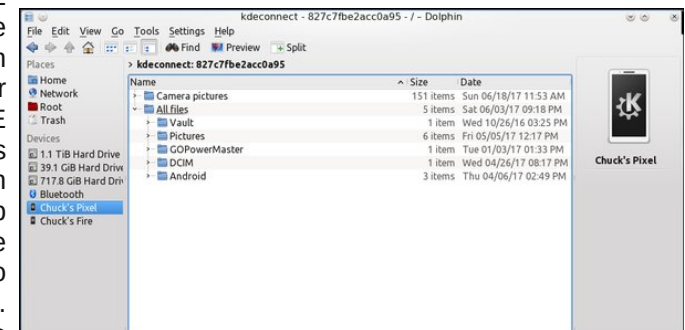
Perhaps you wish to transfer some files? Then just split the Dolphin screen and select the location of the files you wish to transfer, as shown below.

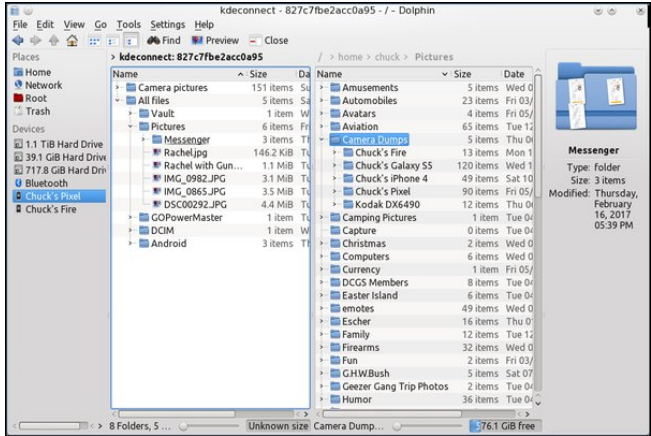Now, it's just a matter of just drag and drop – in either direction – with the usual Copy or Move options. You can also move files between the various Android devices. The trick when moving a file to an Android device is knowing exactly where to place it so Android can find it. You may also delete and/or rename files on your Android device, but make sure you know what the heck you are doing, for catastrophe awaits the careless or inexperienced.

Other useful features

KDE Connect also provides:

Shared clipboard: copy and paste between your Android device and your computer.
Notification sync: Read your Android notifications from the desktop.
Share files and URLs: Share them instantly from one device to another.
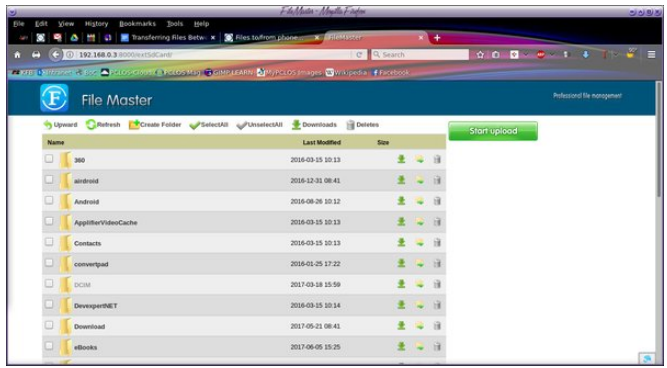**Multimedia remote control**: Use your phone as a remote for Linux media players.
Virtual touchpad: Use your phone screen as your computer's touchpad.

You can also trigger custom commands from your phone, reply to SMS messages from your desktop, receive desktop notifications on your phone, and you can do all this with TLS encryption.

All you KDE users grab it and enjoy! Someone has done an excellent job.

Many thanks to The Chief for adding this thorough description!!

node.js & FileMaster - Archie said that he had installed these two and was having success. I don't have node.js installed, but I installed FileMaster. I got the screen shown below. I went into the menu (the horizontal lines on the top left)and chose Web Share. FileMaster works well.

The web interface is simple to use and lets me access not only my phone but also my external SD card, which is where my photos are stored. It seems much simpler than others, having a menu across the top where others didn't (top, right).

I actually used this program in a meeting to download some photos from my phone to my boss's laptop.

Bluetooth - I have never tried doing anything with Bluetooth. Our chief editor and his wife transfer files (mostly pictures and videos of the kids) between their phones all of the time using Bluetooth. But unless you have Bluetooth on your computer, this won't be a means of file transfer for you … at least from your portable device to your computer. However, if you have a Bluetooth adapter for your computer (or, even better, bluetooth connectivity built into your computer), this might actually be a viable choice for you. Keep in mind that the range of Bluetooth is fairly limited, so you will have both devices within 10 meters (33 feet) of each other. The closer, the better. Also, the more walls and other obstructions between the devices, the shorter the Bluetooth range.

Paul did try to move a bluetooth adapter to his laptop and configure it to transfer files. He was successful … once, with one file (an image). Most of the time, he had considerable trouble keeping the bluetooth connection, and most of the time, the device (his LG V20 phone) was seen, but a connection was not established. Out of frustration, he unpaired the phone with the bluetooth adapter, and was then subsequently unable to re-pair the phone with the adapter connected to the computer.

Even the one time it worked, the transfer was rather slow. He is unsure if his issues are because of it being an old bluetooth adapter, a cheap bluetooth adapter, or a combination of the two (which is the most probable case). Thus, he was unable to get it running sufficiently to capture any screenshots of it in action.

Still, if you feel compelled to give this method a try, you can typically pick up a bluetooth adapter that plugs into your USB port for not too much money from places like Newegg.com. Bluetooth 4.0 adapters there sell for under $15 (U.S.). Our chief editor plans to try this again in the future, once he purchases a newer, better quality bluetooth adapter.

Dukto - This program was first mentioned by tuxlink. The app is in the repo, and also in the Google store. Install it to each phone/device and open it each place. It looks the same on both screens (computer and phone). The description says drag files and drop in window… but I can't do that on my phone, and the only way to transfer stuff that I can see is to put it in the Dukto folder on my phone and transfer my choice of items to a Dukto folder on my computer. However, once you have copied the files to the Dukto folder on the phone and pressed Send, transfer seems very fast. (By the way, the default color is green but you can change it in the settings.)
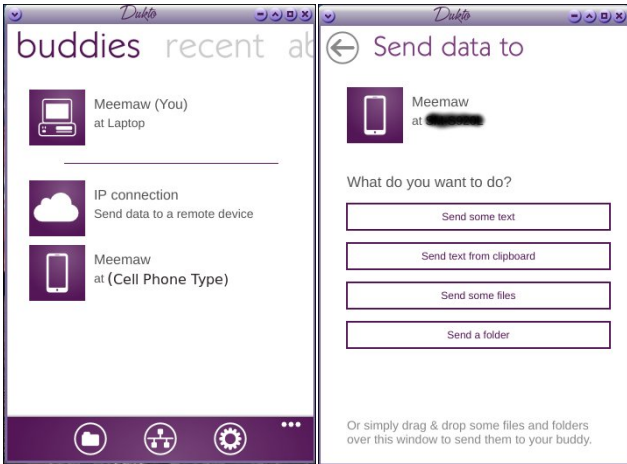
AirDroid - I've had AirDroid for a couple of years and it works well most of the time. It is available in Synaptic and on the Play Store. You start it by signing into AirDroid on both devices, or open it on your phone and scan the QR code that is on the Airdroid webpage on your computer screen. Then

you can open the folder you need from your computer and upload or download the desired files. The reason I said it works well most of the time is that sometimes I get a message about telling the computer or phone where the files are, then getting an error message that the location can't be found. If I just close the error, I can see the file structure on my computer screen and navigate to where I need to go. Be aware: if you choose several files and click Download, AirDroid with place them in a zip file and download that to the folder you choose. From there, it's easy to extract the files from the zip file.
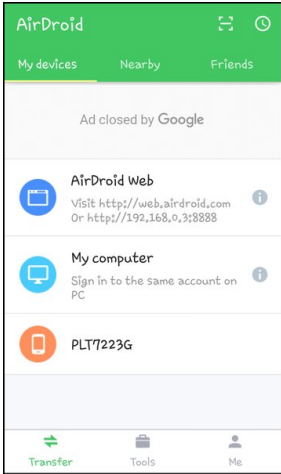
Android File Transfer - Synaptic says this is an "Interactive MTP client with Qt5 GUI." When you install it, you will find it under File Tools. This one has a drop-down towards the top of the window which allows you to choose between your phone

and the external SD card you have. The photo below is the main screen.
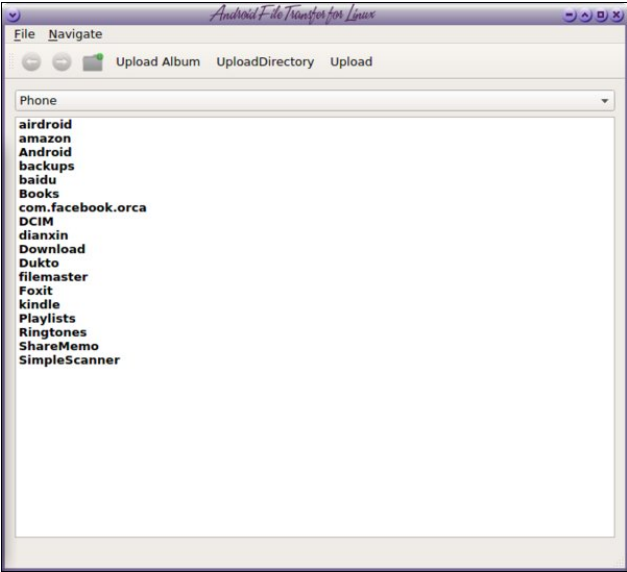
It's easy to use, since it acts as a file manager. Just navigate to the folder you want to access, then choose the files you want. Click on File > Download and you will see a window to designate where you want to place the files. In the image below I navigated to my external SD card, and the folder DCIM > Camera to download some pictures to the computer.
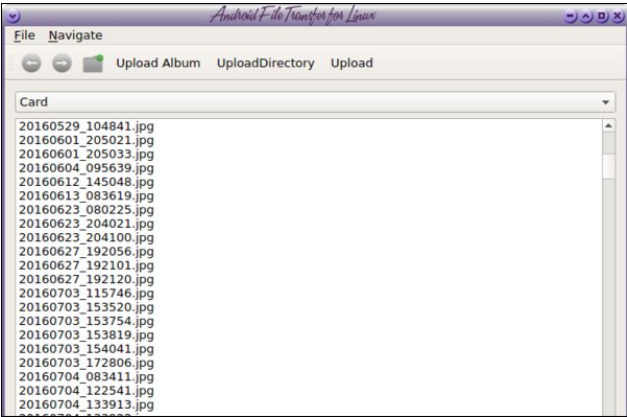
gmtp - Synaptic says gmtp is "A simple MP3 and Media player client - gMTP is a client for accessing MTP devices." When I finally found it in the menu, it was under Sound. The process is the same - plug in your device, open the program and click Connect. This one will ask whether you want to connect the phone or the SD card. Then it will show the files in the main window.
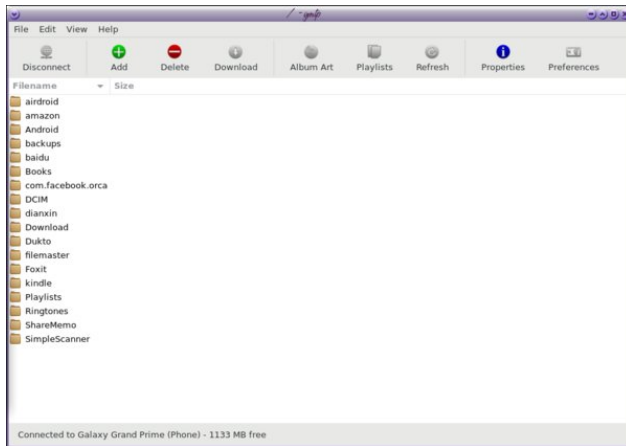
ES File Explorer - frazelle09 recommended this one, but many others said they use it as well. I had trouble locating the Remote Manager he mentioned, but after sending a PM to frazelle09, I found out where the Remote Manager is located. It's in the Menu, under the section called Network. Select that, and in the menu that appears you will see Remote Manager. When you choose it, you will see a button that says "Turn On." Touch that and you will see a web address starting with ftp:// When you type that address into your browser, the window changes to a file window showing the file structure of your phone. So far I've only been able to access my phone, and most, if not all of my photos are on my external SD card (center, top).

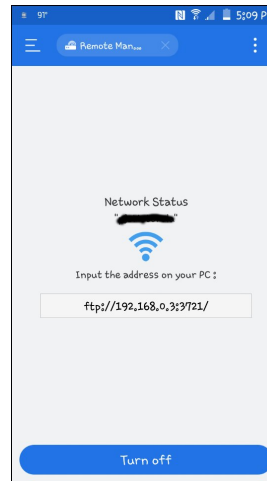When I click on the "Up to a higher level directory" link from the phone directory (shown below), I get an error message that says the program has failed to change directory. Most of what I download is on my external SD card, so if I can't get to it, the program is useless for me. At this point I have tried using my file manager (Thunar in Xfce) and installing PCManFM, and the only file system I can access is the internal phone storage. frazelle09 tells me that he opens it in Krusader and he can access both. I'm guessing it works better in KDE than anywhere else.

The other thing that disturbs me about ES File Explorer is the endless ads I keep seeing. The program offers to unlock what seems to be a great feature, but only after you download some program you don't want. It has been games, but in the screenshot below, it is a Home Advisor program. If I wanted that program on my phone, I would already have it.
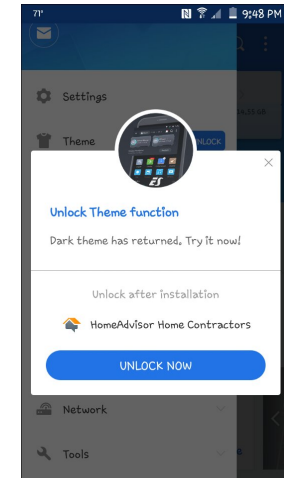
Wifi File Transfer - In the course of researching this article, I came across another file transfer program very similar to FileManager and ES File Explorer and very easy to use. (The Play Store has loads of them, actually.) This one is called Wifi File Transfer. It works very much like FileManager, except it's GUI on the phone is only one screen, with a big START button in the middle. You press START and it gives you an address to enter into your browser, from which you can access the files on your phone. The web interface is easy to use as well, and gives you a couple of useful views along with the files: an overview of your phone storage, your battery level and a separate section for transferring files TO your phone (since you are looking at the files on your phone.) This one can also be password protected, and you can set it up to just run in the background. You can also download your files as individual files or in a .zip file. You could buy the Pro version if you will be transferring files larger than 5MB. The minimal menu is at the bottom: Settings, Help, and Upgrade. This one doesn't do anything else, or bombard you with ads (next page, left).

I also noticed another handy little feature that I don't think others have. If you are looking through your photos and have lost track of that certain one you need, you can position your mouse cursor over one of the photos, and a larger thumbnail will appear. It won't be a really great thumbnail, but good enough that you can tell what photo it is so you can find the one you are searching for.

Another idea is one I have used on occasion - email. I can access both my company email and my personal email on my phone. If I need something really fast, I just email it from one to the other, then access my personal email on my laptop. It will be there as a sent or received email, and I can get to it quickly. Yes, I know: some companies frown on that, but if I do it very seldom, mine doesn't. I have also been able to send a text message to my email with a file attached, but that's probably not the answer for transferring several files at once or a large file.

Many people have also said that plugging their device into their computer allows it to be seen as another hard drive, and can directly transfer anything. That doesn't work for some, but in the course of researching this article, I have discovered that my Android phone does work that way. Connecting my phone to my laptop shows it as an external USB drive in my Thunar file manager, and then I can transfer to my heart's content. **Note**: If you have put security measures on your phone, like a pin or a password, the phone won't show up in your file manager until you unlock your phone using your pin / password. At least that's how mine works.

Conclusion

In the course of researching this article, I found several awesome suggestions. I hope you have found something that works well for you. ES File Explorer, FileMaster and Wifi File Transfer were new experiences for me. FileMaster's web interface seems easier than ES File Manager. The bonus is that the FileMaster program is smaller, with Wifi File Transfer even smaller than either of the others. If space on your phone is at a premium, you might choose FileMaster over ES File Explorer as it is about ⅓ the size of ES File Explorer. Wifi File Transfer is tiny compared to FileManager. I may uninstall everything except Wifi File Transfer, but I haven't decided yet. I can always uninstall everything and connect directly as well, but I know that many can't. There are many choices to try.

In the end, it's all about what works best for you. We're all about choice, after all.

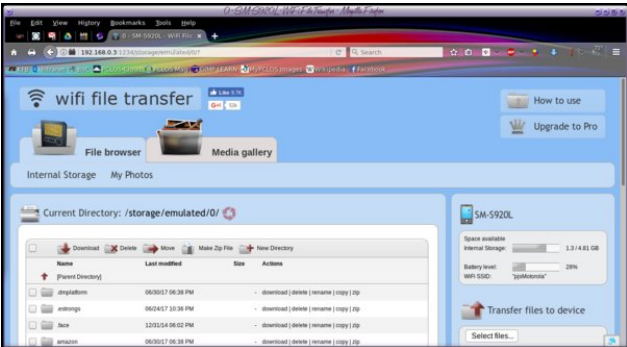*parnote*, **The Chief** and **frazelle09** contributed to this article.

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Screenshot Showcase

Posted by aguila, July 13, 2017, running KDE.

Send Command Line Output To A File Or Image

by Paul Arnote (parnote)

It's understandable that some Linux users shun the use of the command line. Sure, there's a lot to remember. And considering how good the various Linux desktops have become, those users with a command line phobia almost never have to face their fear and nemesis. But those users are missing out on the speed and robustness of the command line that can't be matched with a GUI desktop.

So, if you're still reading this article by this point, you must fall into one of two categories. First, you might be a regular user of the command line. Or second, you might have a desire to use the command line (or become more proficient at it).

One thing you can do that might be helpful is to send the output from your commands to either a file or image. This will enable you to easily share the information with others, something that is desirable when you are having difficulties and asking for help.

Send Output To A File

Probably the easiest thing to do is to send the output of a Linux command to a file. This is called **redirection**. We simply redirect the output to the file that we specify.

So, entering `ifconfig > ifconfig.txt` will create a text file with the output of the ifconfig command in the current working directory. Here's the output:

```
eth0      Link encap:Ethernet  HWaddr 00:1E:33:CC:38:41
          UP BROADCAST MULTICAST  MTU:1500  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:0 (0.0 b)  TX bytes:0 (0.0 b)

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          UP LOOPBACK RUNNING  MTU:65536  Metric:1
          RX packets:8117497 errors:0 dropped:0 overruns:0 frame:0
          TX packets:8117497 errors:0 dropped:0 overruns:0 carrier:0
```

```
          collisions:0 txqueuelen:1000
          RX bytes:3646040980 (3.3 GiB)  TX bytes:3646040980 (3.3
          GiB)

tun0      Link encap:UNSPEC  HWaddr 00-00-00-00-00-00-00-00-00-00-
          00-00-00-00-00-00
          inet addr:00.00.00.0  P-t-P:00.00.00.0
          Mask:255.255.255.255
          UP POINTOPOINT RUNNING NOARP MULTICAST  MTU:1500  Metric:1
          RX packets:265420 errors:0 dropped:0 overruns:0 frame:0
          TX packets:230357 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:100
          RX bytes:239563564 (228.4 MiB)  TX bytes:30136829 (28.7
          MiB)

wlan0     Link encap:Ethernet  HWaddr 00:22:5F:C0:4F:87
          inet addr:192.168.3.104  Bcast:192.168.3.255
          Mask:255.255.255.0
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:1117090 errors:0 dropped:0 overruns:0 frame:0
          TX packets:945128 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:974768414 (929.6 MiB)  TX bytes:225041909 (214.6
          MiB)
```

Of course, I've obliterated the IP address that I'm using in the output above, replacing the entire address with zeroes (under tun0, which represents my VPN).

But what if you have results of another command that you want to share? You could just redirect it to its own file (and share two separate files), or you could append the results of the second (and third, fourth, fifth, and so on) command to the file made with the first command (and just have one file to share). For example, let's say that besides the results from the **ifconfig** command, you also need to include the results from the **ip netconf** command. You can append the results of the second command to the end of the results from the first command by entering `ip netconf >> ifconfig.txt`.

Redirection, however, doesn't always work as well as you might expect or hope. For instance, if you were to run the command **inxi -v3** and try to redirect it to a text file, the special formatting of the output that gives colors and bold text to certain aspects of the output come out confusing when redirected to a text file.

This is what you expect to get, and what you get when the command results are displayed on your screen:

```
[parnote-toshiba@localhost CommandLineOutput]$ inxi -v3
System:    Host: localhost.localdomain Kernel: 4.11.4-pclos1 x86_64 (64 bit gcc: 4.9.2)
           Desktop: Xfce 4.12.3 (Gtk 2.24.26) Distro: PCLinuxOS
Machine:   Device: laptop System: TOSHIBA product: Satellite L305 v: PSLB8U-14F025
           Mobo: TOSHIBA model: Portable PC
           BIOS: INSYDE v: 1.80 date: 03/20/2009
CPU:       Single core Intel Celeron 900 (-UP-) cache: 1024 KB
           flags: (lm nx sse sse2 sse3 ssse3) bmips: 4389 speed: 2194 MHz (max)
Graphics:  Card: Intel Mobile 4 Series Integrated Graphics Controller
           bus-ID: 00:02.0
           Display Server: X.Org 1.19.3 drivers: v4l,intel
           Resolution: 1280x800@60.00hz
           GLX Renderer: Mesa DRI Mobile Intel GM45 Express
           GLX Version: 2.1 Mesa 17.1.2 Direct Rendering: Yes
Network:   Card-1: Realtek RTL8101/2/6E PCI Express Fast/Gigabit Ethernet controller
           driver: r8169 v: 2.3LK-NAPI port: 2000 bus-ID: 02:00.0
           IF: eth0 state: down mac: 00:1e:33:cc:38:41
           Card-2: Realtek RTL8187B Wireless Adapter usb-ID: 002-003
           IF: null-if-id state: N/A mac: N/A
Drives:    HDD Total Size: 250.1GB (78.0% used)
           ID-1: model: TOSHIBA_MK2555GS
Info:      Processes: 305 Uptime: 3 days Memory: 2701.4/3821.4MB
           Init: SysVinit runlevel: 5 Gcc sys: 4.9.2
           Client: Shell (bash 4.3.481) inxi: 2.3.11
```

Instead, you end up with this (shortened for space considerations):

```
[1;34mSystem:   [0;37m [1;34mHost:[0;37m localhost.localdomain
[1;34mKernel:[0;37m 4.11.4-pclos1 x86_64 (64 bit [1;34mgcc:[0;37m
4.9.2)[0;37m
[1;34m               [0;37m [1;34mDesktop:[0;37m Xfce 4.12.3 (Gtk
2.24.26) [1;34mDistro:[0;37m PCLinuxOS[0;37m
[1;34mMachine:  [0;37m [1;34mDevice:[0;37m laptop
[1;34mSystem:[0;37m TOSHIBA [1;34mproduct:[0;37m Satellite L305
[1;34mv:[0;37m PSLB8U-14F025[0;37m
[1;34m               [0;37m [1;34mMobo:[0;37m TOSHIBA
[1;34mmodel:[0;37m Portable PC [1;34mBIOS:[0;37m INSYDE
[1;34mv:[0;37m 1.80 [1;34mdate:[0;37m 03/20/2009[0;37m
[1;34mCPU:          [0;37m [1;34mSingle core[0;37m Intel Celeron
900 (-UP-)[0;37m [1;34mcache:[0;37m 1024 KB[0;37m
[1;34m               [0;37m [1;34mflags:[0;37m (lm nx sse sse2 sse3
ssse3) [1;34mbmips:[0;37m 4389 [1;34mspeed:[0;37m 2194 MHz
(max)[0;37m
[1;34mGraphics: [0;37m [1;34mCard:[0;37m Intel Mobile 4 Series
Integrated Graphics Controller [1;34mbus-ID:[0;37m 00:02.0[0;37m
[1;34m               [0;37m [1;34mDisplay Server:[0;37m X.Org
1.19.3 [1;34mdrivers:[0;37m v4l,intel [1;34mResolution:[0;37m
1280x800@60.00hz[0;37m
[1;34m               [0;37m [1;34mGLX Renderer:[0;37m Mesa DRI
Mobile Intel GM45 Express[0;37m
[1;34m               [0;37m [1;34mGLX Version:[0;37m 2.1 Mesa
17.1.2 [1;34mDirect Rendering:[0;37m Yes[0;37m
[1;34mNetwork:  [0;37m [1;34mCard-1:[0;37m Realtek RTL8101/2/6E
```

```
PCI Express Fast/Gigabit Ethernet controller[0;37m
[1;34m               [0;37m [1;34mdriver:[0;37m r8169
[1;34mv:[0;37m 2.3LK-NAPI [1;34mport:[0;37m 2000 [1;34mbus-
ID:[0;37m 02:00.0[0;37m
```

If you look closely, you can see that the desired information is in there, but I wouldn't call this a very readable format.

So, any command line program that outputs formatted text isn't a good candidate for redirection. But any program that outputs plain text is an excellent candidate for redirection, if you need it.

Send Output To An Image

Why, yes, you can send the output to an image. Before you squish up your nose and ask why, just follow along. I'm sure that by the end of this discussion, you are likely to see the value of sending your terminal output to an image.

First, you will need to insure that the **ImageMagick** package is installed. It is in the PCLinuxOS repository. Just open Synaptic and install it … that is, if it's not already installed. If you're not familiar with the ImageMagick set of tools, you owe it to yourself to familiarize yourself with them. They literally are the proverbial "Swiss knife" of the graphics world.

In the first example, we're going to use a "pipe" to send the output to the ImageMagick **convert** command, which will then "print" the text into a graphic.

Here's the command:

```
ifconfig | convert label:@- myipaddress.png
```

The resulting image is at the top of the first column on the next page.

It's very simple, with black text on a white background. As I did before, I obscured the IP address I'm using, via my VPN provider (under tun0), by pixelizing the information. If you want a colored background, add the **-background [color]** flag right after the **convert** command. If you want to use a different color than black for the text, use the **-fill [color]** flag somewhere between the **convert** command and the **label** portion of the command. You can find a whole list of colors used by ImageMagick here. There is a "chart" about one quarter of the way down the page. You can use the color name (easiest), the RGB color code, or the hex color code.

Thus, the following (entered all on one line) will give you the same thing as above, but with green text on a gold background:

```
eth0      Link encap:Ethernet  HWaddr 00:1E:33:CC:38:41
          UP BROADCAST MULTICAST  MTU:1500  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:0 (0.0 b)  TX bytes:0 (0.0 b)

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          UP LOOPBACK RUNNING  MTU:65536  Metric:1
          RX packets:6679125 errors:0 dropped:0 overruns:0 frame:0
          TX packets:6679125 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:3007008838 (2.8 GiB)  TX bytes:3007008838 (2.8 GiB)

tun0      Link encap:UNSPEC  HWaddr 00-00-00-00-00-00-00-00-00-00-00-00-00-00-00-00
          inet addr:          P-t-P:            Mask:255.255.255.255
          UP POINTOPOINT RUNNING NOARP MULTICAST  MTU:1500  Metric:1
          RX packets:32875 errors:0 dropped:0 overruns:0 frame:0
          TX packets:30404 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:100
          RX bytes:19148843 (18.2 MiB)  TX bytes:4742580 (4.5 MiB)

wlan0     Link encap:Ethernet  HWaddr 00:22:5F:C0:4F:87
          inet addr:192.168.3.104  Bcast:192.168.3.255  Mask:255.255.255.0
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:862600 errors:0 dropped:0 overruns:0 frame:0
          TX packets:735183 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:729168045 (695.3 MiB)  TX bytes:175731986 (167.5 MiB)
```

```
ifconfig | convert -background gold -fill green label:@-
myipadd.png
```

(Hint: using -background black and -fill green1 will mimic the traditional terminal text, with green text on a black background).

If you want to get *really* fancy, you can also overlay the text over the top of another image. Here's the command (entered all on one line), followed by the result:

```
convert -font -misc-fixed-*-*-*-*-*-*-*-*-*-*-*-* -fill black
-draw "text 25,50 \" `ip addr` \"" FuzzyBackground.jpg myip.jpg
```


Just like with the last command, changing the **-fill black** flag to some other color will create text in the specified color overlaying the background image.

Just like with redirection above, attempting to send command output to an image file when the output is formatted (as with the inxi -v3 command previously used) results in gobbledygook for output. Below is a snippet from the image created from attempting to pipe the **inxi -v3** output to an image:

```
0x00000000: 5b313b33 346d5379 7374656d 3a202020 1b5b303b  -[1;34mSystem:  -[0
0x00000014: 33376d20 1b5b313b 33346d48 6f73743a 1b5b303b  ;37m -[1;34mHost:-[0
0x00000028: 33376d20 6c6f6361 6c686f73 742e6c6f 63616c64  ;37m localhost.local
0x0000003c: 6f6d6169 6e201b5b 313b3334 6d4b6572 6e656c3a  domain -[1;34mKernel
0x00000050: 1b5b303b 33376d20 342e3131 2e342d70 636c6f73  :-[0;37m 4.11.4-pclo
0x00000064: 31207838 365f3634 20283634 20626974 201b5b31  s1 x86_64 (64 bit -[
0x00000078: 3b33346d 6763633a 1b5b303b 33376d20 342e392e  1;34mgcc:-[0;37m 4.9
0x0000008c: 32291b5b 303b3337 6d0a1b5b 313b3334 6d202020  .2)-[0;37m--[1;34m
0x000000a0: 20202020 2020201b 5b303b33 376d201b 5b313b33       -[0;37m -[1;
0x000000b4: 346d4465 736b746f 703a1b5b 303b3337 6d205866  34mDesktop:-[0;37m X
0x000000c8: 63652034 2e31322e 33202847 746b2032 2e32342e  fce 4.12.3 (Gtk 2.24
0x000000dc: 32362920 1b5b313b 33346d44 69737472 6f3a1b5b  .26) -[1;34mDistro:-
0x000000f0: 303b3337 6d205043 4c696e75 784f531b 5b303b33  [0;37m PCLinuxOS-[0;
0x00000104: 376d0a1b 5b313b33 346d4d61 6368696e 653a2020  37m--[1;34mMachine:
0x00000118: 1b5b303b 33376d20 1b5b313b 33346d44 65766963  -[0;37m -[1;34mDevi
0x0000012c: 653a1b5b 303b3337 6d206c61 70746f70 201b5b31  ce:-[0;37m laptop -[
0x00000140: 3b33346d 53797374 656d3a1b 5b303b33 376d2054  1;34mSystem:-[0;37m
0x00000154: 4f534849 4241201b 5b313b33 346d7072 6f647563  TOSHIBA -[1;34mprodu
0x00000168: 743a1b5b 303b3337 6d205361 74656c6c 69746520  ct:-[0;37m Satellite
0x0000017c: 4c333035 201b5b31 3b33346d 763a1b5b 303b3337  L305 -[1;34mv:-[0;3
0x00000190: 6d205053 4c423855 2d313446 3032351b 5b303b33  7m PSLB8U-14F025-[0;
0x000001a4: 376d0a1b 5b313b33 346d2020 20202020 20202020  37m--[1;34m
0x000001b8: 1b5b303b 33376d20 1b5b313b 33346d4d 6f626f3a  -[0;37m -[1;34mMobo
0x000001cc: 1b5b303b 33376d20 544f5348 49424120 1b5b313b  :-[0;37m TOSHIBA -[1
0x000001e0: 33346d6d 6f64656c 3a1b5b30 3b33376d 20506f72  ;34mmodel:-[0;37m Po
0x000001f4: 7461626c 65205043 201b5b31 3b33346d 42494f53  rtable PC -[1;34mBIO
```

As with the results from trying to use redirection to capture the output in a file, the information is all there, but it isn't in a format that could be described as a human-readable output. So, just as with redirection, if a program formats the output with colored text and bold text, it probably isn't a good choice for piping the output to an image. But, if the output from a program is plain text (no formatting other than line breaks), then you can easily capture the output to an image.

Summary

I suspect that this might be of somewhat limited use, but when you need the ability to capture the output of a command, there is little else that accomplishes it as easily or completely. Sure, you could use a screen capture utility (for images), and it works well … until the output exceeds your screen's height. Sure, you could highlight and copy the text from the terminal, then paste it into a text editor, but that takes multiple steps. Why do multiple steps (and create more work) when you can simplify the task by cutting out steps?

Screenshot Showcase

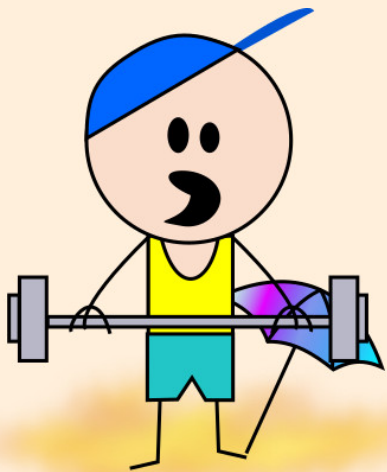

Posted by OnlyHuman, July 2, 2017, running e17.

ms_meme's Nook: Come To The Forum With Me

Come with me come with me
To the forum you'll agree
It's the place what a place
Where we all want to be

When Texstar comes a strolling in
Let the fun begin
Everything will be cool

Posting and boasting do it with flair
With the mods we'll be at odds
But what do we care

You'll love to be inside
You'll never be denied
At the forum and it is all free

Come with me come with me
To the forum you'll agree
It's the place what a place
All your friends you will see

When Texstar starts that updating
We will be waiting
Get 'em now don't be a fool

Posting and boasting do it with flair
With the mods we'll be at odds
But what do we care

Users found worldwide
Always satisfied
Come to the forum with me

MP3

OGG

PCLinuxOS Recipe Corner
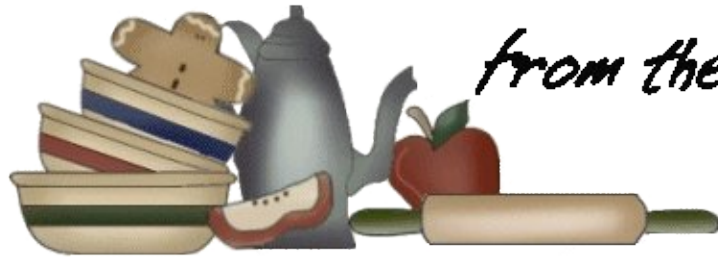
from the kitchen of youcantoo

Mexican Manicotti

Ingredients

12 uncooked manicotti pasta shells
1 lb lean (at least 80%) ground beef
1 can (6 oz) organic tomato paste
1 package (1 oz) taco seasoning mix
1 1/2 cups water
1 package (3 oz) cream cheese, softened
1 egg
1 1/2 cups sour cream (12 oz)
2 1/2 cups shredded sharp Cheddar cheese (10 oz)
2 cans (4 oz each) whole green chiles, drained, chopped
1/4 cup chopped fresh cilantro

Directions

1. Heat oven to 350°F. Spray 13x9-inch (3-quart) glass baking dish with cooking spray. Cook and drain pasta as directed on package. Rinse with cold water; drain well.

2. In 10-inch nonstick skillet, cook beef over medium-high heat 5 to 7 minutes, stirring occasionally, until thoroughly cooked; drain. Stir in tomato paste, taco seasoning mix and water. Cook over medium heat 5 to 10 minutes until hot and bubbly.

3. In medium bowl, mix cream cheese, egg, sour cream, 1 1/2 cups of the cheese, the chiles and 2 tablespoons of the cilantro. Spoon about 3 tablespoons cheese mixture into each pasta shell. Spoon about 1 cup beef mixture into baking dish; top with filled shells and remaining beef mixture.

4. Cover; bake 40 to 45 minutes or until hot. Uncover; sprinkle remaining 1 cup cheese over shells. Bake 5 minutes longer or until cheese is melted. Sprinkle with remaining 2 tablespoons cilantro.

Tip: Serve the manicotti with favorite Mexican toppings, such as guacamole, sliced green onions, chopped tomatoes, sliced ripe olives and pickled jalapeño slices.

Linux! Twenty-six Years Old!!!

by Meemaw

According to Wikipedia's, The History of Linux:

The history of Linux began in 1991 with the commencement of a personal project by Finnish student Linus Torvalds to create a new free operating system kernel. Since then, the resulting Linux kernel has been marked by constant growth throughout its history. Since the initial release of its source code in 1991, it has grown from a small number of C files under a license prohibiting commercial distribution to the 4.2.3 version in 2015 with more than 18 million lines of source code under the GNU General Public License, v2.

In 1991, while studying computer science at University of Helsinki, Linus Torvalds began a project that later became the Linux kernel. He wrote the program specifically for the hardware he was using and independent of an operating system because he wanted to use the functions of his new PC with an 80386 processor. Development was done on MINIX using the GNU C compiler. The GNU C Compiler is still the main choice for compiling Linux today. The code however, can be built with other compilers, such as the Intel C Compiler.

On August 25, 1991, computer science major Linus Torvalds posted the following on the comp.os.minix Usenet newsgroup:

Hello everybody out there using minix -

I'm doing a (free) operating system (just a hobby, won't be big and professional like gnu) for 386(486) AT clones. This has been brewing since april, and is starting to get ready. I'd like any feedback on things people like/dislike in minix, as my OS resembles it somewhat (same physical layout of the file-system (due to practical reasons) among other things).

I've currently ported bash(1.08) and gcc(1.40), and things seem to work. This implies that I'll get something practical within a few months, and I'd like to know what features most people would want. Any suggestions are welcome, but I won't promise I'll implement them :-)

Linus (torvalds@kruuna.helsinki.fi)

PS. Yes - it's free of any minix code, and it has a multi-threaded fs. It is NOT portable (uses 386 task switching etc), and it probably never will support anything other than AT-harddisks, as that's all I have :-(. — Linus Torvalds

However, there were a few things that happened first, so that our wonderful Linus Torvalds could create his project. Let me list a few:

1969 - 1970: Ken Thompson and Dennis Ritchie, working for AT&T Bell Labs, designed and implemented Unix.

1972: First release of the C programming language, also developed by Dennis Ritchie at AT&T Bell Labs. Unix is rewritten using C, which has become the preferred programming language used by Linus Torvalds.

1977: BSD, a Unix like operating system based on the 6th edition of Unix from AT&T, was developed at UC Berkeley. Since BSD contained some code owned by AT&T, a lawsuit was filed in the 1990s, hindering development and adoption of BSD.

1983: Richard Stallman started the GNU project, also writing the GNU General Public License (GPL).

1986: Maurice T. Bach, of AT&T Labs, published a book titled The Design of the Unix Operating System.

1987: Andrew S. Tanenbaum released MINIX, which was a Unix-like system intended for academic use.

With the advent of the 80386 processor developed by Intel, the stage was set for Torvalds to want to adapt Minix, a free Unix-like system for academic use, into a system he could use on his own personal computer. Linux, which was originally going to be called Freax (a play on the words Free, Freak and Unix), contained no code from Minix, and was written from the ground up by Torvalds, using a monolithic kernel (as opposed to Minix's modular style of kernel).


Torvalds did point out a few years ago on his Google+ stream that most people associate the "birth" of Linux with his initial announcement on

August 25, 1991. However, he goes on to point out that the actual code dump for Linux 0.01 didn't actually occur until a couple of weeks later.

From there, of course, we know how Linux has spread, from the first distributions being written in 1992 (Slackware), to Mandriva in 1998, to our own Texstar branching out and establishing PCLinuxOS in 2003, to today, where there are over 60 million Linux users, by some estimates.
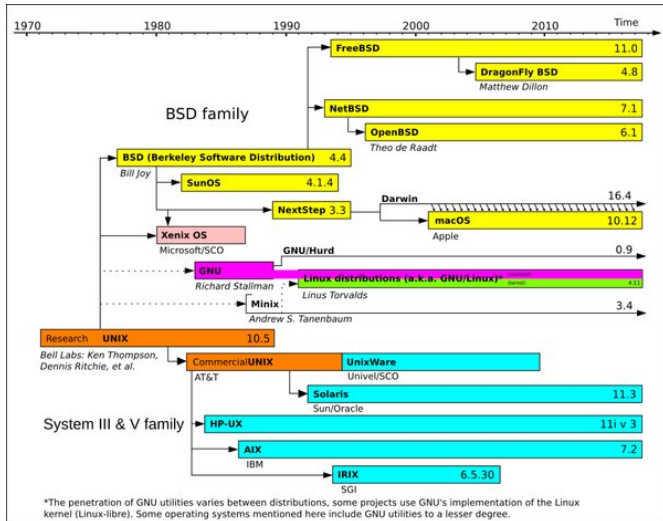
By Guillem, Wereon, Hotmocha (copied from old version's history)Christoph S. (redrew the image with Inkscape) - Original image: Image:Unix.png, Public Domain, https://commons.wikimedia.org/w/index.php?curid=1667764

1996: Torvalds announced that the official mascot for Linux would be a penguin. As they were trying to decide on a mascot, he was bitten by a penguin while visiting the National Zoo & Aquarium in Australia. A fellow programmer named Larry Ewing, did the original drawing of a penguin, which is the Tux we all know today.
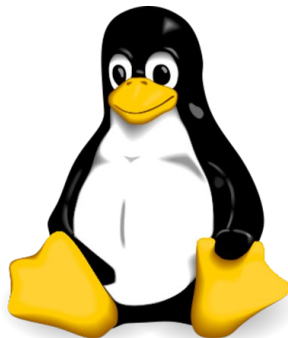
2001: *Just for Fun: The Story of an Accidental Revolutionary* is an autobiography written by Linus Torvalds and David Diamond, describing his Linux journey.

2003: PCLinuxOS is born! Thanks, Texstar!

2013: Android claims 75% of the smartphone market share.

FACTS (also from Wikipedia):

Linux was originally developed for personal computers based on the Intel x86 architecture, but has since been ported to more platforms than any other operating system.

Linux is also the leading operating system on servers and other big iron systems such as mainframe computers, and is used on 99.6% of the TOP500 supercomputers.

It is used on about 2.3% of desktop computers. However, Linux also runs on embedded systems – devices whose operating system is typically built into the firmware and is highly tailored to the system. This includes TiVo and similar DVR devices, network routers, facility automation controls, televisions, video game consoles and smartwatches. Many smartphones and tablet computers run Android and other Linux derivatives. It is gaining ground in the Chromebook, which uses the Linux-based ChromeOS, in many schools because of the Chromebook's inexpensive price.

I've been using Linux since 2006, specifically, PCLinuxOS since 2006 (once I got here, I stayed!) I'm amazed at the many changes in Linux which have taken place in only 26 years!
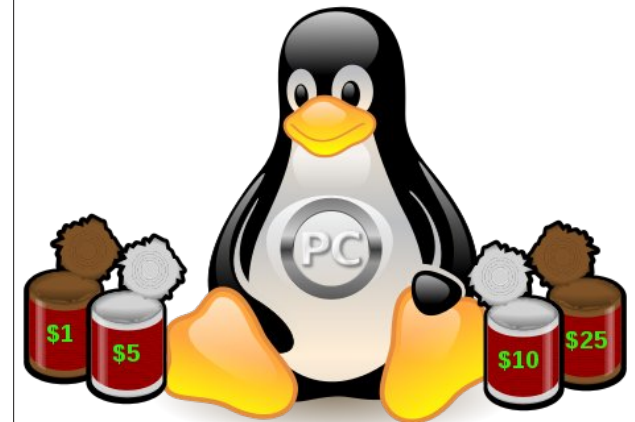
Happy Birthday, Linux!

GOG's Gems: Blood

by Alessandro Ebersol (Agent Smith)

In a region known for cruelty, Caleb was legendary. Born in West Texas in 1847, he earned the reputation of a ruthless gunman at just 17 years old. His blood lust found a new menacing tone as he entered the Tchernobog cult. But the real massacre began when he was betrayed and discarded by his master, the God of Darkness Tchernobog...

So begins the Blood game, a first person shooter video game developed by Monolith Productions and published by GT Interactive Software. The shareware version was released for the PC on March 5, 1997, while the full version was released on May 31, 1997 in North America, and June 20, 1997 in Europe.

History

The game begins with the four chosen in the presence of his master, Tchernobog, and for some unknown reason at the time, punished and shattered. To each of them a horrible end is given: One is devoured by hellhounds, another is attacked by a giant spider, Shial, Ofelia, the love interest of our hero, is dragged into the darkness by Cheog, one of Tchernobog servants, and finally, Caleb, is thrown into the darkness of the abyss, where the words of Tchernobog echo "consider my power, in an empty grave."

Years later, in the 1920s, he wakes up in a grave, in the Morningside cemetery, and exclaims: I live. Again!

But the land that Caleb finds is very different from the one he left. The cult of Tchernobog grew as Caleb rotted in the grave, to the point that now it dominates almost all of the land. Yes, cultists of Tchernobog walk the streets in preparation for the arrival of his master to this world. And because of this proximity, the dead were awakened from their eternal sleep, and infest the streets.

Caleb revived by the same power that destroyed him, will seek for revenge against the being who betrayed him. It is evil against a greater evil.

*Concept design
of the Caleb character*

Thus starts the epic story of Blood, following a gunman revived against the cabal of Tchernobog and a myriad of monsters loyal to Tchernobog: Zombies, hell hounds, gargoyles, giant spiders, rats, bats, possessed hands (as in Evil Dead).

Gameplay

The gameplay is similar to the common FPS of the era where the player must find the way out of a level, seeking keys, solving puzzles, and of course fighting against hordes of monsters and Tchernobog servants, always seeking to reach the next stage.

Brains!

Blood is organized into four episodes, each episode containing a total of 8-9 different maps that consist of 6-7 regular levels, a boss level and a secret level. The level design is varied, as some levels seem to lead to each other, but others jump to the player. Some levels were inspired by the cities of the time, with places like buildings, museums, pubs and shopping malls. Others are generic temples or mines.

Weapons, artifacts and bonus items appear in Blood. Firearms include a flare gun, a sawed off shotgun, and a Tommy gun, explosive weapons like dynamite and napalm launcher, a shock rifle named after the inventor Nikola Tesla, and various artifacts of black magic, including a Voodoo doll and an aerosol can that can be used as a flamethrower. The game also features a power-up known as "Guns Akimbo," which allows the player to use certain weapons in pairs (with both hands, à la John Woo).

Die!

Graphics

Graphics can be improved and seen in 640x480, and are considered the best graphics of all the games based on the Build engine, by the engine's creator, Ken Silverman. Even though most are 2D bitmaps, they are very well-made and neat.

Sound

Here's where Blood excels: The work of actor Stephan Weyte is fantastic. If Duke Nukem had funny one liners, Blood has over a hundred lines where Caleb, by the acting talents of Stephan Weyte, comments the deaths of his opponents in the game, or events succeeding to the player. The

interpretation of Weyte is the high point, where his voice smooth, sarcastic and sadistic, gives the exact tone of the game: a laughing terror.

A labyrinth where we find Jack Torrance frozen?
I think I've seen this movie.

Verdict

Blood is considered today as the best of games based on the Build engine, surpassing even Duke Nukem 3D. At the time, however, it was eclipsed by the launch of Quake 1, which was a great injustice. After all, the game is super fun.

Ignored at launch, it gained a legion of fans over the years, so much so that many websites have been created about the game. Total conversions of Doom and even Duke Nukem appeared, as well as attempts on unofficial remakes and re-creations.

The game is something like a virtual version of a horror movie from the Evil Dead franchise. Yes, it's that good. The exact mixture of fright, adventure and humor is present in this game. The game is very difficult, but rewarding, either with the cartoonish deaths of Caleb's opponents or funny comments he does when bad things happen to the player, when one reaches the end, the feeling of accomplishment is rewarding and fulfilling.

Besides the cultural references of several films (Evil Dead, The Shining, Return of The Living Dead, etc.), there are references as well to TV shows and pop lore, like the Simpsons.

And, costing US $3.19, it is a bargain, something to buy without blinking.

Buying Blood

GOG offers the Blood package: One Unit Whole Blood, which includes the original Blood and the addons Plasma Pak and Cryptic Passage. The package has 287 MB to download, also includes three manuals in PDF, the soundtrack and the video "Love You to Death".

The url of the game is: https://www.gog.com/game/one_unit_whole_blood. The package will be downloaded to your computer, and installed by a script in your /home folder.

As always, I recommend using DBGL to manage your DOS games and use the native DOSBOX of PCLinuxOS, and not the bundled version in the package.

As written above, the game achieved cult status, and today there are several sites dedicated to unofficial addons, extra levels and conversions made by fans. It is worth exploring all there is about Blood, beginning on the site http://www.blood-wiki.org, starting point for all things Blood on the internet.

Blood also had a sequel, Blood 2, which is also available from GOG, however only for Windows. It works in PCLinuxOS via POL (PlayOnLinux), so, you can play it too. But it is a topic for another future article.

And the future of Blood?

Blood became a legally controversial item, since the rights to the game IP belong to Atari, but the engine of Blood is owned by Monolith productions, which is now part of Warner games.

Therefore, a third incarnation of Blood is unlikely at the moment.

Let's enjoy Blood, a game that turned 20 in May, but is still highly playable, challenging and fun today.

The PCLinuxOS Magazine

Created with Scribus

Open Source Initiative
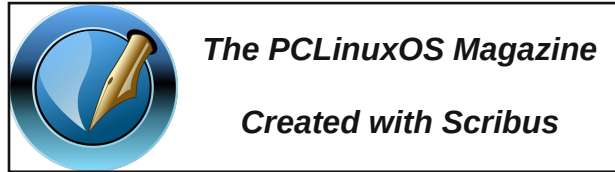
Screenshot Showcase

Posted by bones113, July 16, 2017, running KDE.

PCLinuxOS Family Member Spotlight: bones113

As told to YouCanToo

What is your name/username?
Tony Harbour/bones113

How old are you?
59

Are you married, single?
Married

How about Kids, Grandkids (names and ages)?
3 children, 2 grandkids

Do you have pets, what is your favorite?
A dog named Rusty

Are you retired, still working and if working, what do you do?
Still working I am a chemical plant technician.

Where do you call home? What is it like? IE: weather, scenery
Mobile, Al. It is beautiful. Subtropical weather with Beautiful Mobile Bay and the Gulf of Mexico at the ready (center).

Where did you go to school and what is your education level?
Went to the University of South Alabama thru sophomore year. John Shaw High School, Mobile, Alabama (top, right).

What kind of things you like doing? hobbies, travel, fishing, camping
Hobbies include playing guitar, fishing, gardening, riding my motorcycle and last but not least enjoying life with my lovely new wife.

Why and when did you start using Linux?
I started getting interested in Linux after one of many virus invasions on my Windows machines. I grew tired of all the restrictive stuff that went along with using Windows. Seems I had to reinstall every couple of months. My first distro was Mepis. It was then that I realized that there were viable alternatives to Windows. But there seemed to be something missing. I searched further and came across I came across PCLinuxOS Version .92 I believe.It was just a wonderful operating system and did everything i needed out of the box. Been using it ever since. What a fine operating system it is.

What specific equipment do currently use with PCLOS?
Currently I use PCLinuxOS KDE 5 plasma on a mid 2009 Mac Book with a Core2 duo processor. It runs beautifully. I have had up to 5 different machines at a time all with PCLinuxOS on them.

What would you like to see happen within PCLOS that would make it a better place. What are your feelings?

It is a great place now. The powers that be behind this great operating system do everything they can for the community to make this project possible. The forums are pleasant and extremely helpful. The thing I would like to see most is the donations pick up to keep this distribution going into the future. I just donated. I wish more would.

PCLinuxOS Family Member Spotlight is an exclusive, monthly column by YouCanToo, featuring PCLinuxOS forum member. This column will allow "the rest of us" to get to know our forum family members better, and will give those featured an opportunity to share their PCLinuxOS story with the rest of the world.

If you would like to be featured in PCLinuxOS Family Member Spotlight, please send a private message to youcantoo, parnote or Meemaw in the PCLinuxOS forum expressing your interest.

Screenshot Showcase

Posted by tuxlink, July 3, 2017, running KDE.

# Inkscsape Tutorial: Easily Create A Neon Effect

by Meemaw

We've done many text effects in Inkscape and GIMP, but this is a really quick and easy way to create the effect on almost any path you draw. I experimented with a font called Scriptina, and came up with the following effect in just a few minutes. I'm sure you can do the same. The good thing is that if you draw any spirals or curves to accompany your text, you can use this method to match them.


Open Inkscape and set your document as you desire. I always start with an 8.5 x 11 page, oriented landscape, but you do whatever you like. One of my good friends designed a template that he opened every time, then renamed to the project. His was 1600 px by 1200 px, I believe, also oriented landscape. Anyway, now you have a new page, ready to create!

Design the item you want to change to neon. It may be text like above, or a stroke of some kind. Let's start with a stroke. I'll use my "pencil" and draw a

line. Then I'll click on the node tool, and move the nodes around until I like my curve, then click on the selection tool. Change the color of your line to the color you want.
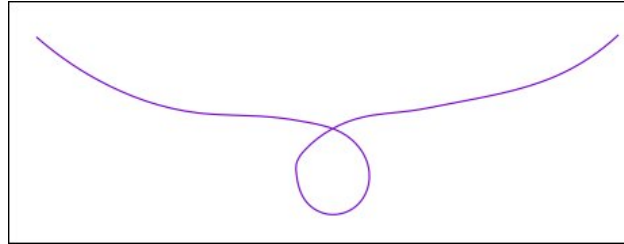

You want to duplicate this line twice. Hold down the CTRL key, and press D twice. You won't see much but your line seeming to darken, but all duplicates are stacked on top of one another. Grab and move the two duplicates.
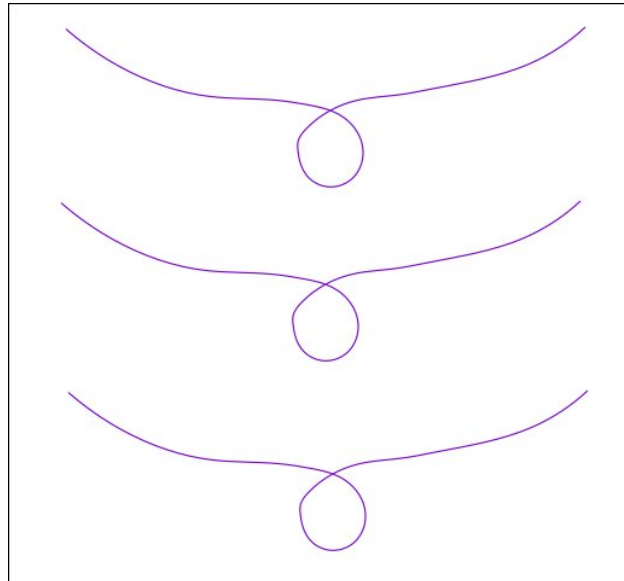

Let's change things now. Open your Fill & Stroke window, and click the Stroke Style tab. Select your top curve, and change the stroke to about 18.

Also,click on the buttons that make your curve round on the corners and at the ends. Go down to Blur, and change it to 3. In your main window click on "Lower selection to bottom". We want this curve to be behind the other two.
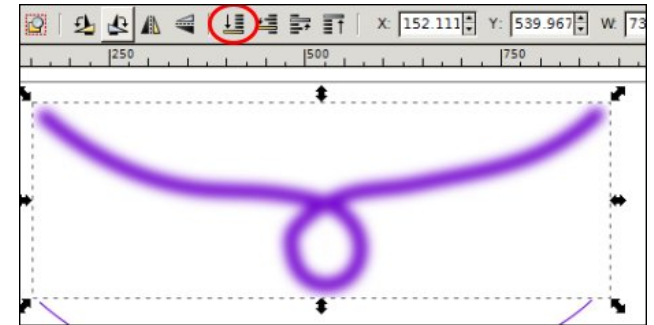

Choosing the center line, change the stroke to about 8, and make sure the round corner and end buttons are clicked. This curve will be between the other two, so leave it where it is.
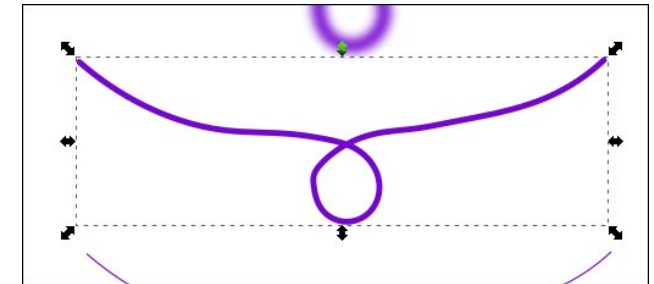

Now for the bottom curve. This one will be on top, so select it and click on "Raise selection to top". Change the stroke to 2 or 3, whatever looks good to you (I used 3), and change the color to white. Give it a blur of 1, and make sure the rounded curve and corner buttons are clicked. I changed mine to a very light purple so you could see it in the following image, but then changed it to white for the next step.
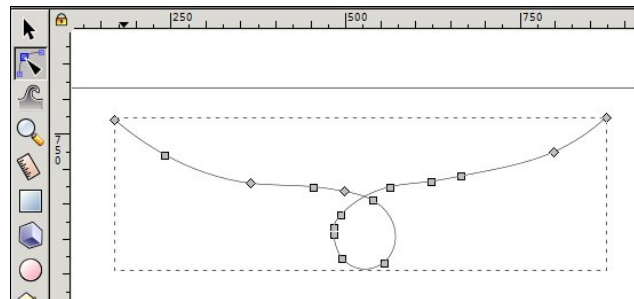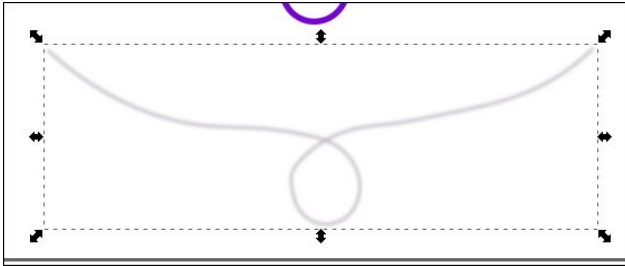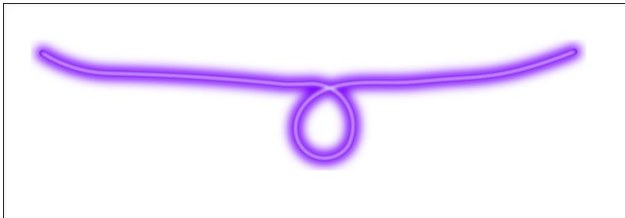
Now we want to stack them up for our neon. Using your mouse, draw a rectangle around all three curves to select them all.
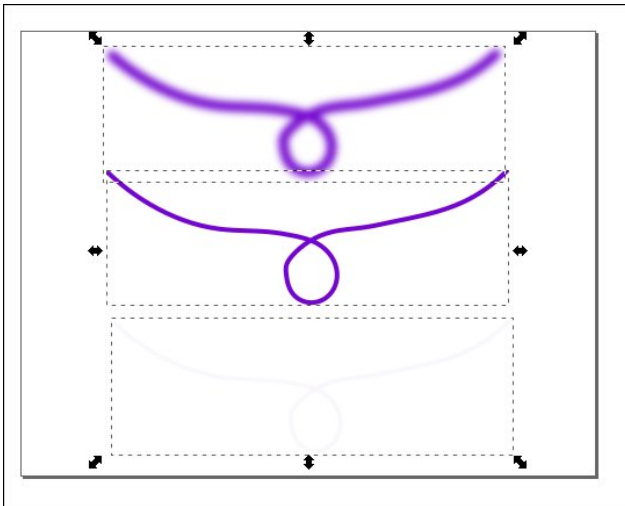

Open your Align and Distribute window. With all 3 curves selected, click on Align vertically and Align horizontally. This will put them right on top of each other, something like the following:

Now I can export this as a .png so the background will be transparent, then add it to my text (center, top):

This is fun! I did the text first, and you will have to set the stroke differently because your text has fill as well. Setting your stroke to 18 will make a mess (since the stroke is basically an outline, and it will overlap the letters a lot), so make your stroke about 4 or so. If you use text, you can also try making the fill and stroke different colors, which may enhance the neon effect.

Available in the following desktops:
KDE   LXDE   Xfce
Openbox   Gnome
Enlightenment e17
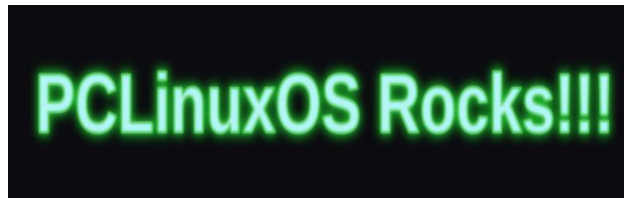
NotiFyre: Notifications When Terminal Tasks Complete

by Paul Arnote (parnote)

Virtually every Linux user, at some point, has tried using the command line to get tasks completed. Some users despise and avoid the command line like the plague. Others, though, discover how powerful and fast the command line actually is, and use it frequently.

Regardless of where you fall in that spectrum of users, there's one thing that is more annoying than anything else. That one thing is running command line programs that take a while to finish, without any progress indicator. A lot of the time, you have no idea whether it is finished, almost finished, just beginning, or even still working.

Wouldn't it be nice if you could go on to do other tasks, and your terminal session would notify you when it was finished? Well, now you can.

NotiFyre

You will need to head over to GitHub and download the NotiFyre scripts. Click on the green button that says "Clone/Download" and select to download the ZIP file. Save and extract the ZIP file to a folder of your choosing in your /home folder.

Next, go to the folder where you saved the GitHub files, and copy **bash-preexec.sh**, **notifyre.sh**, and **terminal.png** to your /home directory. We'll discuss the locations of these files a bit more a little later.

Now, open up your **.bashrc** file in a simple text editor. It is in your /home directory, and is a hidden file. Add these two lines to the end of your .bashrc file:
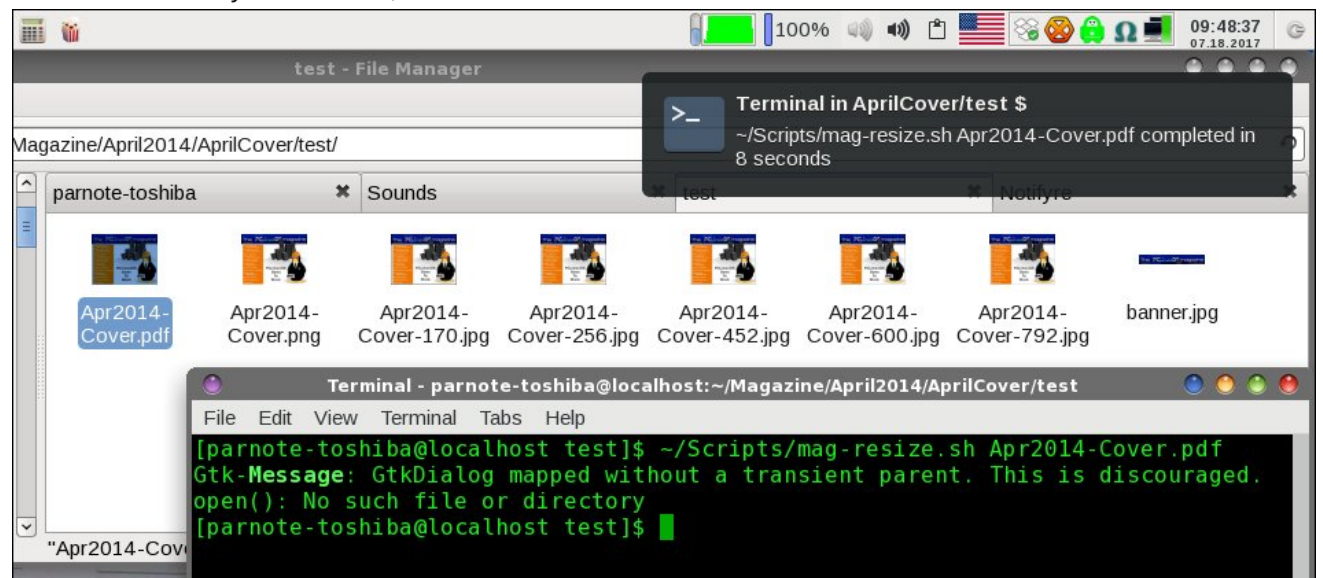
```
source ~/notifyre.sh
source ~/bash-preexec.sh # as close to end
as possible
```

Lastly, you need to be sure that **libnotify** and **notify-osd** are installed on your computer. Open up Synaptic and search for each one. If you find that they are not installed, install them. Alternatively, you can type **notify-send "hello"** at a command line prompt in a terminal session. If a notification shows up that says "hello", then everything is working. If it doesn't display the notification, reinstall the **libnotify** and **notify-osd** programs from Synaptic. On PCLinuxOS, chances are very high that these "dependencies" are already installed. The other "dependency" is **paplay**. This should already be installed, if you are using a relatively recent release of PCLinuxOS, and haven't removed pulseaudio.

I have a number of scripts that I mostly use as custom actions in Thunar. However, these scripts can also be run by themselves, from the command line. One script I have, called mag-resize.sh, creates all of the different sizes of JPG files of the magazine cover (and the banner for each issue), from the magazine cover PDF. This is a HUGE timesaver for me, as it's the same process every single month. I simply created the script to utilize ImageMagick commands to create the various sizes of JPG images that we need. While it does the task in fairly short order, it does take a few seconds to complete (usually less than 15 seconds on my computer with a single core Celeron processor to make seven different images from the magazine cover PDF).

So, when you run a command in a terminal session after setting up NotiFyre as directed above, it will display a popup notification to let you know when the command has completed, just like in the upper right corner of the image above.

Tweaking & Tuning

In the notifyre.sh script, you have two lines that are supposed to define an alert sound to play when the notification is displayed on the screen. Lines 13 and 26 initially read as:

```
ALERT=/usr/share/sounds/ubuntu/notification
s/Slick.ogg
```

Well, it's obvious we're not running this on Ubuntu, and this sound file does not exist on my system. So, I tried changing the line to point to a sound file I did have saved on my system.

```
ALERT=/home/parnote-
toshiba/Sounds/bicpenclick.wav
```

Even after trying a couple of other sound files I have on my computer, none of them will play as the script has it set to do.

Even though I do have and use pulseaudio, I also tried to use the ALSA command play (as opposed to paplay) in lines 19 and 36 of the script. Still no joy to be had for my ears. The lack of the ability to play a sound file is far from a deal breaker, at least for me, anyway.

You can imagine how startled I was when, all of a sudden, I heard the sound of a Bic pen click. At first, it really did startle me. It appears that the sound does work and play, but only sometimes, and with certain commands. Your mileage may vary.

On my computer, I really dislike having bash scripts scattered all around my hard drive. I especially hate having bash scripts in my top level /home directory. It really breaks up how I have my files organized. Instead, I prefer to have all of my scripts placed into my ~/Scripts directory. This directory has been placed into my PATH statement so that my scripts can just be executed from anywhere on my system without me having to provide a complete path and filename. Instead, I just have to provide the name of the script ... and any extra parameters it requires.

So, when I place the necessary scripts into my ~/Scripts directory, and alter the .bashrc file additions to point to the new locations, nothing I've been able to do will allow the terminal.png icon file to be displayed. The results are in the image above. The scripts still work, though, and just like with the inability to play a sound, not displaying an icon is definitely not a deal breaker, at least for me. Granted, I didn't spend an inordinate amount of time trying to get it to work, either, so your mileage may vary.

Most of the "script magic" occurs in the following lines (which appears all on one line in the script):

```
[ $(($(date +%s) - start)) -le 0 ] ||
notify-send "Terminal in ${p[-2]}/${p[-1]}
\$" "$commandx completed in $(($(date +%s)
- start)) seconds" -i
~/Scripts/terminal.png -t 50
```

I say "lines" because this line appears twice, once on line 17, then again on line 35. There are a few additional areas available for customization in these lines.

-le 0 can be changed to any number you want. This is the number of seconds before NotiFyre will display the notification. That is, by default, commands that take longer than zero (0) seconds to complete trigger the NotiFyre notification. You can change this to two seconds, three seconds, five seconds, 15 seconds, 30 seconds, or any other number of seconds you want.

-i ~/Scripts/terminal.png. In line 17 of the script, this appears (by default) as **-i utilities-terminal**. In line 35 of the script, this appears as **-i ~/terminal.png**. You can change this to point to any icon on your computer by providing the path and filename of that icon file.
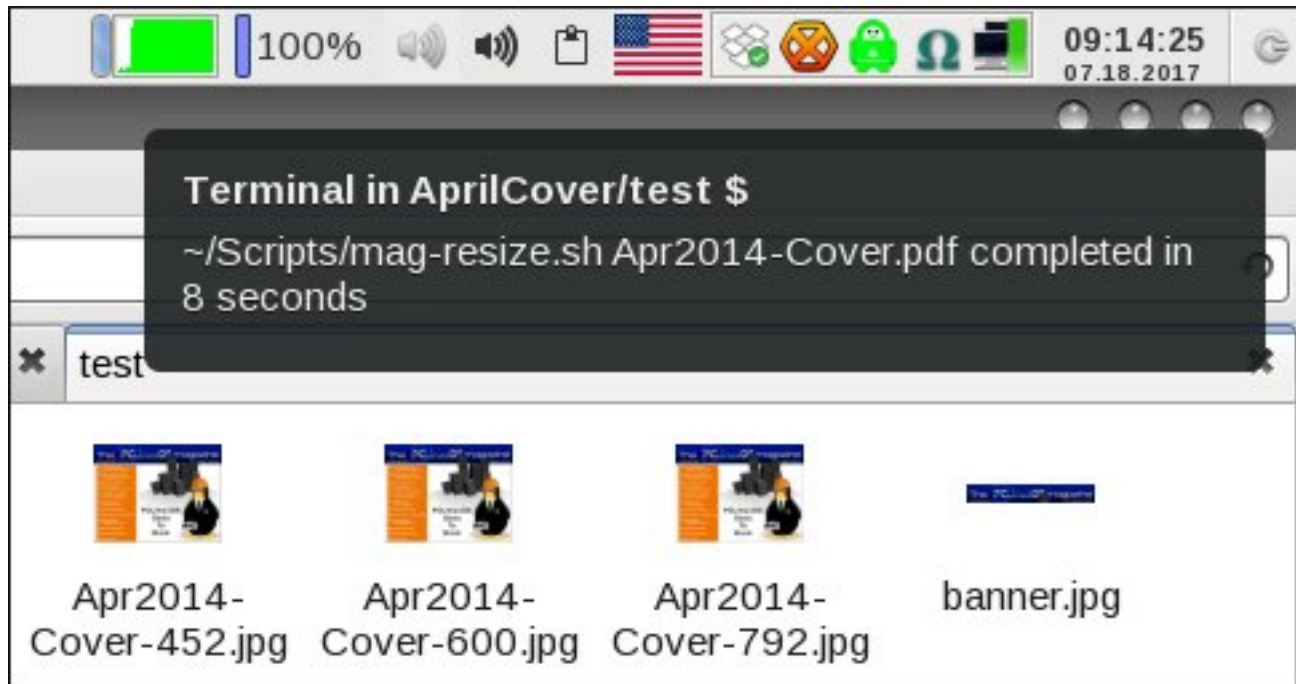
-t 50 specifies the timeout time (in milliseconds) for notify-send to display the notification. However, due to a bug (a design decision by its developer, which is by most accounts still a bug) in the notify-send command, the timeout parameter is ignored, yielding to the system wide setting for the amount of time to display the notification on your computer. Trust me on this. I tried changing it to 500 and even 5000, with absolutely no difference in the amount of time that the notification was displayed on the screen.

Summary

If you use fish as your shell (instead of bash), there are also instructions on the NotiFyre GitHub page on how to set NotiFyre up with the fish shell. Most users make use of the bash shell (the default in PCLinuxOS), so I'll leave the fish shell instructions as something fish shell users can look at on their own.

If you spend any time at all on the command line, NotiFyre is an excellent addition to your system. There is nothing more bewildering and frustrating than sitting there, waiting for a command to complete – especially those commands that don't update their progress or status. With NotiFyre, you can go on to do other tasks, and receive a notification when the terminal command has completed.

Another nice thing about NotiFyre is that there is nothing to install from outside the official PCLinuxOS repository. NotiFyre exists as nothing more than a couple of scripts. Thus, using NotiFyre does not break the PCLinuxOS rule of not installing programs from outside the official repository.

Screenshot Showcase

Posted by Wade1961, July 21, 2017, running KDE.

Tip Top Tips: How I Rescued My Printer

This month's tip *comes from PCLinuxOS forum member* ***One_Beerhunter****.*

I have a **Brother MFC J6920DW** printer that doesn't get a lot of use. Recently, it quit printing text. I initially suspected some update may have messed up my system, but the more I thought about it, I became suspect of the print head.

This left me with few options: buy a new printer, run $100 worth of ink through the "clean cycle," purchase a print head cleaning kit online, or fake it. So with limited funds, I hit the dollar store and purchased a turkey injector, one of those syringe type devices. I then took a 6" section of Cat5 cable

and removed the interior wires just to obtain the jacket. Using the jacket as a tube to extend the length of the injector outlet I could then reach the ink inlet (after removing the ink cartridge).

Using isopropyl alcohol, I partially filled the injector and holding the jacket/tubing to the inlet (not a perfect fit, I put some paper towels under the inlet), I pushed some of the alcohol into the fitting. I then withdrew the plunger on the injector to pull the softened ink from the line going from the print cartridge to the print head. I repeated this process several times, dumping the blackened contents of the injector each time, then refilling with fresh alcohol.

I then replaced my black ink cartridge and ran a clean cycle to flush the ink line, printed a test page twice for somewhat improved print quality. I then ran the clean cycle a second time with the same test pages and the printer is pumping out pages like a new printer.

I hope this saves a few printers from the landfill, and helps other PCLinuxOS users wondering why their printer no longer works as expected.

Agent Smith added the following to the thread:

I did something like this, but with an Epson printer.

[It was] good quality, but when the printer head gets jammed, the trash bin is usually its destination.

I recovered mine with a solution of hot water and a bit of mild soap, a syringe and a small rubber tube.

[It] worked for three more years.

Editor's note: according to beyondtype1.org, the price of **black** printer ink, at the prices the printer companies charge, is about $2,700 (U.S.) per gallon (3.8 L). That's roughly $1,200 more than a gallon of human blood, and about $700 less than a gallon of mercury. Almost always, the price of the ink cartridge(s) is/are far more than the price of the printer.

Factoring in the costs involved in printing your own pictures from your digital camera yourself, at home, you will find the costs way, way higher than taking your memory card to your local photo finisher and getting real photo prints. You have to factor in the costs of the printer, the ink (the most expensive component), and the special photo paper. The costs definitely don't justify the convenience, plus you end up with a print with far higher quality.

You will be far better off and save way more money by getting a monochrome laser printer to print out text. The price of toner is often less expensive than the inks in a color laser printer, and the toner never "dries up" or clogs up. On my personal laser printer, I'm still using my original toner cartridge that came with the printer, after purchasing the printer over three years ago. You **cannot** do that with any printer that uses ink.

Screenshot Showcase

Posted by Robin, July 4, 2017, running Xfce.

PCLinuxOS Puzzled Partitions

	8		2				7	
	5		4	8				3
	9	2		1		6		4
2		9			3	1	4	8
	1		8	2			6	
4			7					
		5	3	6		9	1	7
7		1			4	5		
9							2	

SUDOKU RULES: There is only one valid solution to each Sudoku puzzle. The only way the puzzle can be considered solved correctly is when all 81 boxes contain numbers and the other Sudoku rules have been followed.

When you start a game of Sudoku, some blocks will be prefilled for you. You cannot change these numbers in the course of the game.

Each column must contain all of the numbers 1 through 9 and no two numbers in the same column of a Sudoku puzzle can be the same. Each row must contain all of the numbers 1 through 9 and no two numbers in the same row of a Sudoku puzzle can be the same.

Each block must contain all of the numbers 1 through 9 and no two numbers in the same block of a Sudoku puzzle can be the same.
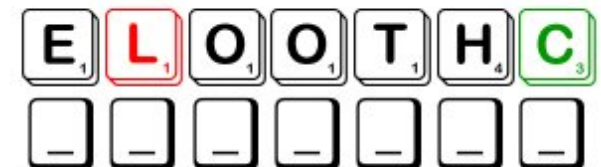
SCRAPPLER RULES:
1. Follow the rules of Scrabble®. You can view them here. You have seven (7) letter tiles with which to make as long of a word as you possibly can. Words are based on the English language. Non-English language words are NOT allowed.
2. Red letters are scored double points. Green letters are scored triple points.
3. Add up the score of all the letters that you used. Unused letters are not scored. For red or green letters, apply the multiplier when tallying up your score. Next, apply any additional scoring multipliers, such as double or triple word score.
4. An additional 50 points is added for using all seven (7) of your tiles in a set to make your word. You will not necessarily be able to use all seven (7) of the letters in your set to form a "legal" word.
5. In case you are having difficulty seeing the point value on the letter tiles, here is a list of how they are scored:
  0 points: 2 blank tiles
  1 point: E, A, I, O, N, R, T, L, S, U
  2 points: D, G
  3 points: B, C, M, P
  4 points: F, H, V, W, Y
  5 points: K
  8 points: J, X
  10 points: Q, Z
6. Optionally, a time limit of 60 minutes should apply to the game, averaging to 12 minutes per letter tile set.
7. Have fun! It's only a game!

Download Puzzle Solutions Here

O L **D** P I **H** D

Triple Word

C R A I **G** O U

G R **L** A E T I

E **L** O O T H **C**

Double Word

A **R** O L L I **G**

Possible score 221 average score 154.

PCLinuxOS Magazine

PCLinuxOS Word Find: August 2017
Animals

```
Y B T W O U P A P O W P O R C U P I N E P I B J F Y K D R C
K R J E L L Y F I S H W T T G V K P O U P J G E P P B R N H
R N U J B K A N G A R O O Y Q O C Q O E J U P U E V T I O G
Y A D G R O T A G I L L A R F O R L N K P W J B A T G B O Q
J M U L R H I N O C E R O S P O U I D F X G I P J N A G C D
D Z V G A R U V C Z W N R J A C K A L F Z R E O J J A N C K
W I M N A X Y J B M F J W V H F R E A L E S O Q S L A I A C
H F F R Y J B U K O D H K L E E C S P P A N T H E R G M R M
A I T W X H W T X C G A X X T V A K N E G L Q T A W P M H L
S I S S K U Z X D K H D C X O U A V T O L E C O I O S U V L
C W S U P O T C O I V K P D Y T R R A T E V X H Q D G H X B
U Q P Z S V V O P N E K C G O I D Q E A Y E A W P G X F F A
M G W U V Q X J E G E V P X C L V L W F C R O C O D I L E B
V L G Y E G Z B D B Z C H E E T A H I I H M O A D V E A C O
M V R A G U O C G I N S E N A H R F E V L U I X B P C M B O
D B Y V F K U T C R A L H U W C K W F Q S D Q X I O V I W N
M L O B S T E R K D P I T H M P O I O U G B E R O K Z N F Q
C Y B B B Q O Y E D M Y A N E Y H C J T B J N B L V G G U D
E P Y T C B O F Y P I Z H P Q A M G K N H H M D E L G O G B
L E X V C A F Z O T H D S T N W M A S A L A O K X E S D G B
L N R X P A T N G E C B C U V K Z X N H S V R S U Z S U L W
E G V P R Q H F S R Q L E J G G T O A P T T G I Z F P T O B
Z U N I H P L O D U T X O D D C J N T E X Z B R E J J S E K
A I G R C C O Z Q F C D Y U B R T V N L O F S M Z A G J A M
G N R J U M X J K Q H U Z Z U E A U I E E S Y K E Y W Z T A
X W G K R Z W P P S A O J K L F E P S U M A T O P O P P I H
M V P K M F M K X C Z C S O F S Z R O D V M S R D A D V N B
A R K B U O L K Z N V C P O G M Z X G E M J O K I O B L X X
F A H B J A N T E A T E R Q B H W P Q K L O Q K K C L R V V
T Q Y A U G Z O R A N G U T A N I K J N U S P U F X H G Y N
```

Aardvark	Alligator
Anteater	Antelope
Baboon	Bobcat
Buffalo	Cheetah
Chimpanzee	Cougar
Coyote	Crocodile
Dolphin	Eagle
Elephant	Flamingo
Gazelle	Giraffe
Gorilla	Hippopotamus
Hummingbird	Hyena
Iguana	Jackal
Jaguar	Jellyfish
Kangaroo	Koala
Leopard	Lobster
Manatee	Mockingbird
Moose	Ocelot
Octopus	Orangutan
Ostrich	Panther
Peacock	Penguin
Porcupine	Raccoon
Rhinoceros	Wildebeest
	Whale

Download Puzzle Solutions Here

Animal Crossword
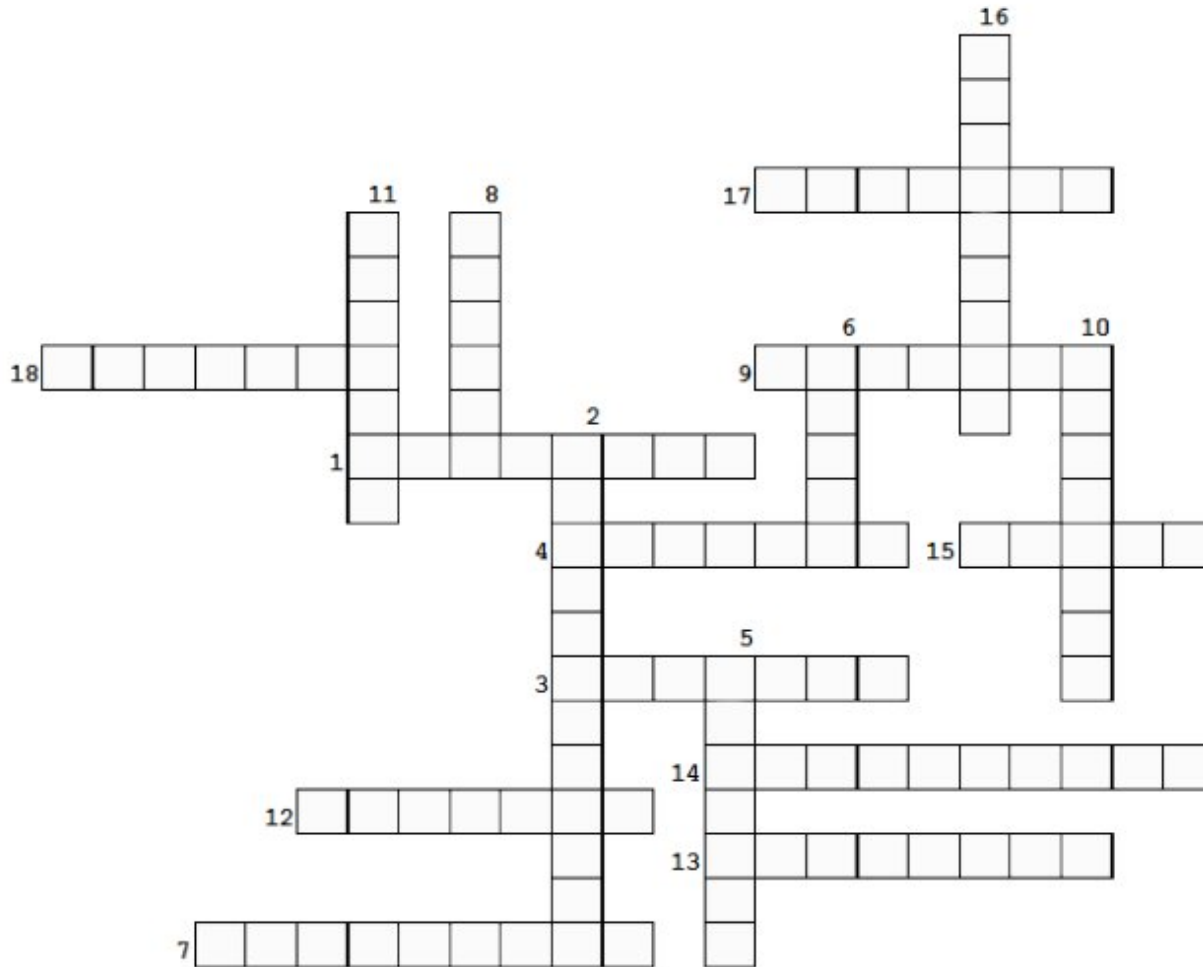
1. Largest of the land animals
2. Derived from Latin for "water horse"
   - very large mammal.
3. Tux's species!
4. Close relative of the leopard
   – many are black
5. One with the longest neck
6. USA's national symbol
7. Sea creature which looks delicate but can
   be poisonous
8. Wolf-like predator in the plains
9. Bird whose fan-like feather display is large
   and beautiful.
10. Marsupial with strong tail used for balance
11. Tasty shellfish
12. Spotted cat known for its speed
13. This long-legged bird gets its pink color
   from the vegetation it eats.
14. As large as a hippo, but with a big horn
   on its nose.
15. Largest sea creature
16. Same species as a crocodile
17. Huge for a bird
18. Sea creature with 8 arms

Download Puzzle Solutions Here

Cryptograms

From the computer of ms_meme:

Everyday I work the daily crosswords and cryptograms in the paper. I like the cryptograms as they are wise/silly sayings of famous people. The magazine article about secure passwords made me think of the cryptograms. We have people in the forum who are always posting famous/wise/silly sayings. I have made a few into cryptograms, and hope our readers will enjoy them.

"Q GFQMARHYYFC LEYQMNKDA AD
LGFANTHZYX Q MDP IHUF SCF5.
ODR QR ZNR PIHR CD Q CD PQRI QR?"

THNGQEC

C = D
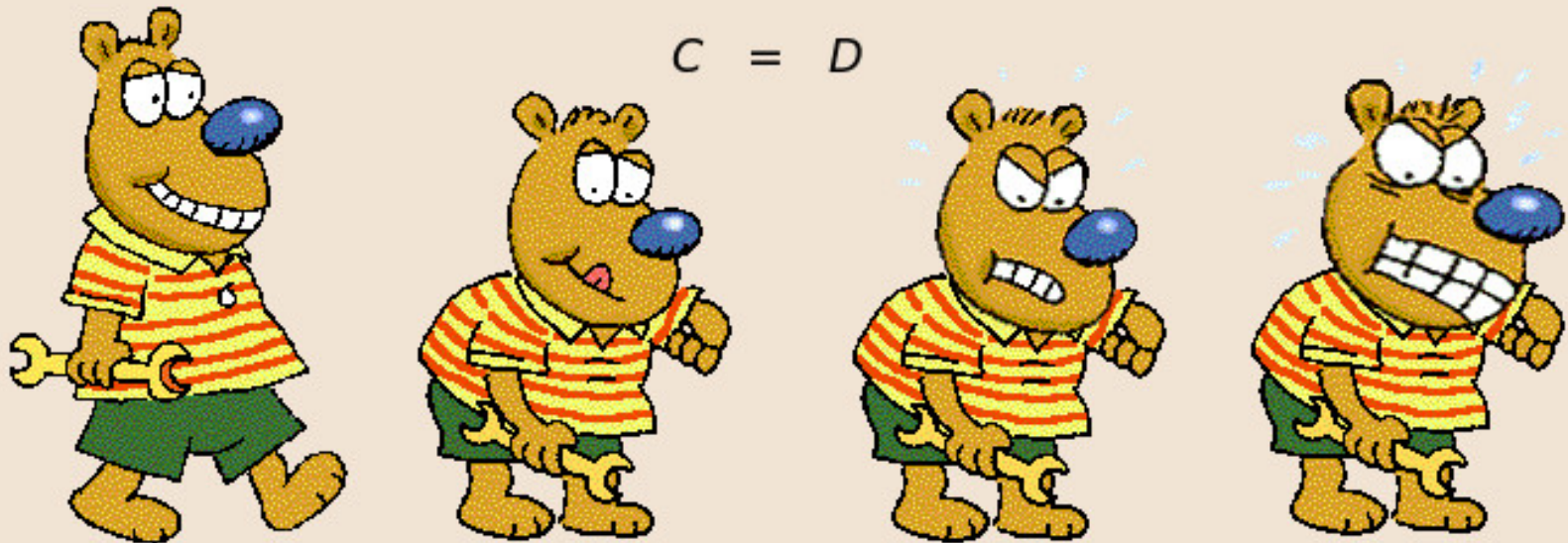
Download Puzzle Solutions Here
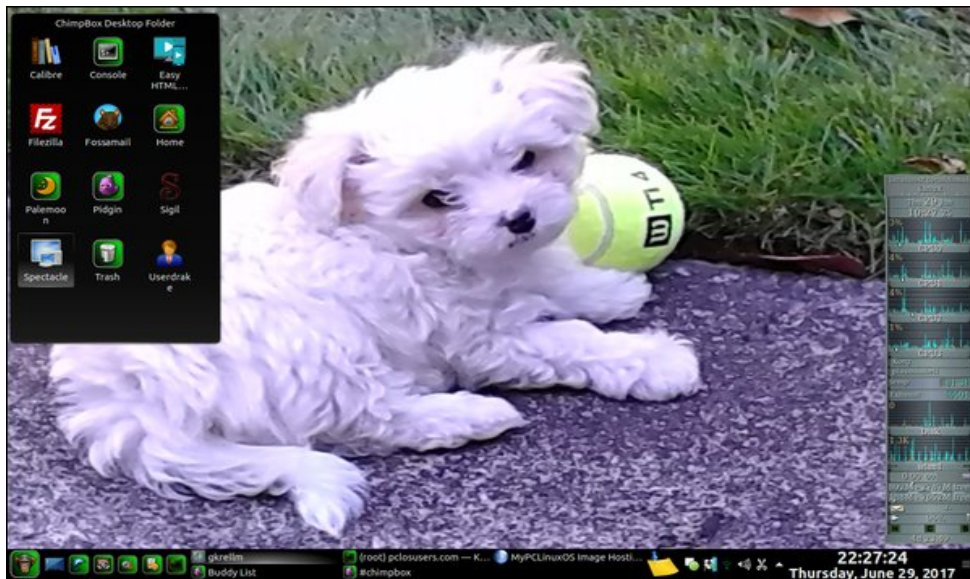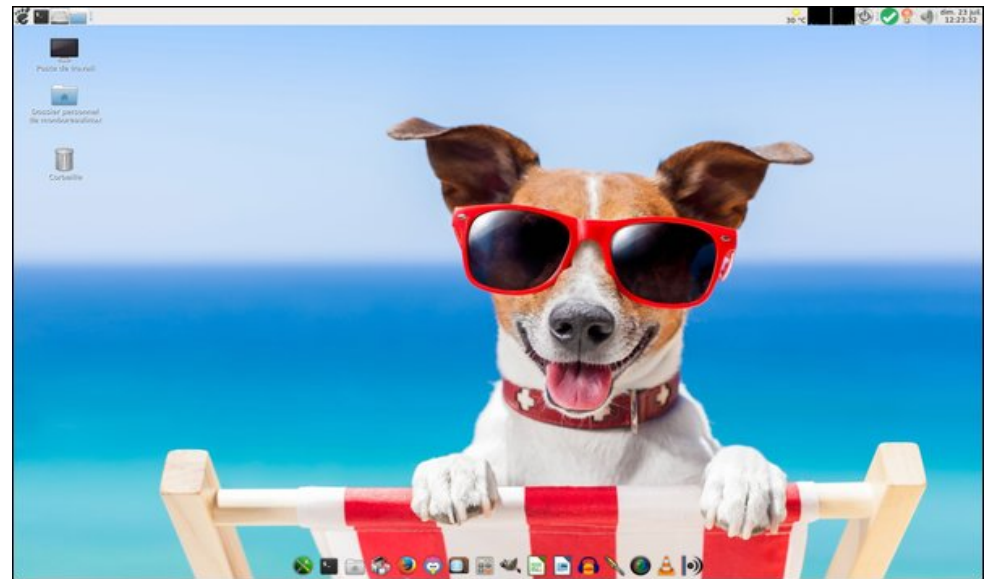
More Screenshot Showcase

Posted by weirdwolf, July 17, 2017, running LXDE.

Posted by sammy2fish, July 7, 2017, running KDE.

Posted by YouCanToo, July 4, 2017, running KDE.

Posted by gnutuxdroid, July 23, 2017, running MATE.