The PCLinxOS magazine Volume 187



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From The Chief Editor's Desk

Technology is great! But as great as the latest advances in technology are, it carries heartaches as great as the advances. In probably no other industry is this as clear and poignant as the computer industry.

Think back to just storage mediums. We've seen large reels of tape, to tape drive cartridges, to 8" floppy disks, to 5.25" floppy disks, to 3.5" floppy disks, to CD-ROMs, to DVDs, to BluRay discs, to static USB thumb drives of ever increasing size.

We've seen a similar progression with CPUs. My first "IBM Compatible" PC was a 486-SX25. GPUs with 8 KiB memory were the norm for guite a while. Today's GPUs commonly support 1000 times as much memory. Today's web browsers are larger in file size than the memory that used to come as "standard" on many of yesteryear's computers (my first PC ran Windows 3.1 and had 4 MiB RAM). Expansion ports (remember PS/2 keyboard and mouse connections?) have seen their fair share of advancements. Parallel and RS-232 ports gave way to USB, and even USB has shown advances from USB 1/2/3, with USB 4 literally right around the corner and ready to supplant USB 3. You can throw FireWire and Thunderbolt into the mix, too. IDE, SCSI, and PATA yielded to the superior SATA interface. BIOS gave way to UEFI. The list goes on and on and on. No part of the computing landscape has been spared its share of advances.

This month, we celebrate the 31st birthday of Linux. Try to imagine the changes that have happened in just the 31 years of Linux. During that time, now try to imagine all of the support that has been rolled into the Linux kernel in an effort to support all of those changes. Much of that support still exists, even if the hardware is no longer commonly used.



It's here where the heartaches come in. There are MANY computer users who get used to the hardware they have, and/or can't afford/don't want to run out and buy the latest-greatest new gizmo on the market. And no one can blame you. Hey, if it still works and meets your needs, there's no incentive to run out and spend more hard earned dollars on yet more expensive hardware. And, among computer users, NO ONE can match the Linux user's mindset and track record of using what you've got, and making it work.

Linux is unbeatable when it comes to supporting older hardware. Do you have a 10 year old laptop? Sure, no problem. Linux will thrive on it. But, can you really expect Linux to support old, obsolete hardware F-O-R-E-V-E-R? It wasn't all that long ago when Linux support for floppy disk drives was going to be dropped because the kernel modules were no longer being maintained. I don't know about you, but I haven't even seen floppy disks available for purchase in over a decade, after seeing them available just about everywhere for years. For what it's worth, I do still have two USB floppy disk drives available for use (and I've used them only once since I became a Linux user), but because they use a USB interface, they don't use the kernel's floppy disk drive driver. Instead, the Linux kernel sees the USB floppy disk drive merely as another USB storage device. If I recall correctly, someone stepped up at the 11th hour with an offer to support the antique barely-used driver, saving it from being omitted from the Linux kernel.

There are many similar stories surrounding the Linux kernel. And with the Linux kernel numbering in excess of 28,000,000 lines of code, how much smaller can the kernel be made by eliminating all of the code that supports outdated, obsolete, rarely used hardware? A smaller kernel should run even faster, be more secure (less "entry points" for malevolent actors), and have a smaller footprint. This is otherwise known as "kernel bloat." Eliminating kernel bloat has benefits for nearly everyone. As for those users who still think they need support (e.g., RS-232 serial port support, which was THE serial interface before USB came along and simplified things), they can build their own custom kernel with that support enabled. For the rest of us, we get a leaner, cleaner, faster kernel without the weight of that excess, no-longer-needed baggage.

From The Chief Editor's Desk

This month's cover, created by Meemaw, celebrates Linux's 31st birthday. Linux was "born" on August 25, 1991, when Linus Torvalds released the very first version of the Linux kernel to the world.

Until next month, I bid you peace, happiness, serenity, prosperity, and continued good health!



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Screenshot Showcase



Posted by DrMop, July 12, 2022, running Xfce.

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digiKam 7.7.0 Released

by digiKam Team



After three months of active maintenance and another bug triage, the digiKam team is proud to present version 7.7.0 of its open source digital photo manager. See below the list of most important features coming with this release.

Bundles packaging improvements

Qt 5.15 LTS used in Windows and macOS bundle

With this release we take care about upgrading the Qt framework with a LTS version. Since Qt 5.15.2, the framework is only published privately to the registered clients from the Qt Company. By chance, the KDE project deals with the Qt company to provide a rolling release of the whole Qt framework including all the most important patches. This is the Qt collection patch used from now by the digiKam AppImage bundle. This allows digiKam to benefit from important fixes as to support the most recent version of Mysql and Mar iadb database in the QtSql plugin. Even if Qt 5.15.5 is just released as open-source, more than one

year later 5.15.2, we will continue to use the Qt Collecti on Patch, as the last customer Qt5 release is 5.15.8. So there exists again a serious gap between the open-source and the customer versions of Qt.



Update of KDE framework and Libraw

KDE framework has been updated to the latest 5.95 release including plenty of bug fixes. Internal RAW processors based on Libraw source code have been updated to the latest snapshot 2022-06-17. More than 1180 different RAW cameras are now supported with this release. The new Olympus OM-1 camera is now supported in this release.

TorrentFreak

The place where **breaking news**, BitTorrent and copyright collide

digiKam 7.7.0 Released



Maintenance and Improvements

This new version arrives with 84 files triaged and closed in bugzilla.

With this release, the modern AVIF and JPEG-XL image containers support was improved in all bundles. We also remove the older internal copy of libheif and libde265 codecs in favor of more recent system libraries for a better support of the HEIF image container used by iPhone cameras.

Other improvements are crash fixes in specific conditions, fixes for regression use cases, more stability with the remote Mysql database. The application internationalization has also been updated.

Future Plans

We will continue to maintain the Qt5 version of digiKam in a dedicated branch of gitlab repository. Only bug-fixes Will be applied to this code.

In parallel, the git master branch is now finally ported to the new Qt6 framework. It use the partial port done by a student during summer 2021 and makes this code compatible also with Qt5.

Not all regression tests are yet done as plenty of changes have been introduced but we are near to release the first 8.0.0- beta1 while this summer. All new features will also be hosted to this code for a future 8.0.0 release probably published at the end of this year.



We also advance to provide bundles signed for the macOS and Windows stores using the KDE Craft infrastructure. These tasks are so far to be completed as the Craft framework used to build KDE applications do not use last and all dependencies provided by our handmaid and well tuned bundles, but we share hard working hours on these topics to be ready for 8.0.0 release.

Finally, this summer, two students have been retained and will join the game to complete the Image Quality analyzer using neural network, and to write a new plugin to perform OCR over images using Tesseract.

Final Words

Thanks to all users for your support and donations, and to all contributors, students, testers who allowed us to improve this release.



Linux 31st Birthday Trivia & Fun Facts

by Paul Arnote (parnote) Reprint from August 2016 issue

Here are some interesting facts and tidbits about our favorite operating system, certain to tickle the curiosity of even the most casual Linux user.

The original name wasn't what we know today. Linux had been previously considered and rejected by Linus Torvalds as possibly being seen as too egotistical. The original name was to be Freax, formed by the words free and freak (the latter an homage to the name applied to computer nerds of the day), with the "x" alluding to Unix.

The name change from Freax to Linux came about when Ari Lemmke, a coworker of Linus Torvalds at the Helsinki University of Technology and a volunteer administrator of the FTP server, didn't think "Freax" was a good name. So, without consulting Torvalds, he changed the name of the project to "Linux" on the server. Linus later consented to the name change.

The first release of the Linux kernel, 0.01, contained 10,239 lines of code.

The latest Linux kernel has over 28,000,000 (yes, million) lines of code, contributed by over 4,000 corporations, individuals and maintainers. But not all of those lines are compiled into the kernel. Some sections are old and unused, others exist to facilitate portability, some are experimental, and others just aren't needed for every system.



The Linux kernel source code, being as large as it is, has its share of "bad words." The latest count, which goes up through kernel 4.5.4, kind of goes like this. (Note: this is the latest count of this type that I'm aware of). There are 179 incidences of a word that refers to human excrement (rhymes with map), and 136 that refer to another word for human excrement (rhymes with bit). There are 41 occurrences of another word referring to coitus (rhymes with truck), 24 occurrences of another word that refers to an illegitimate male child (rhymes with mastered), and six occurrences of another word that refers to urination (rhymes with miss).



Similarly, the Linux kernel has its share of "good words." Once again, the latest count goes up through kernel 4.5.4 (again, the latest count of this type that I'm aware of). There are 4,332 occurrences of the word "good" in the Linux kernel. The word "nice" shows up 1,363 times. The word "love" occurs 658 times, while "kiss" appears 229 times, and "sweet" appears 71 times.

Linux isn't just developed by aging nerds hacking away in their parent's basement. Over 80% of Linux development comes from paid developers working for a number of corporate entities.

Linux 31st Birthday Trivia & Fun Facts

Some of those corporate contributors to Linux development include some surprises. Microsoft has even contributed to Linux development, to help ensure that Linux users are able to utilize Azure and Hyper-V efficiently. Other top corporate contributors include Red Hat, Suse, Novell, Oracle, Linaro, Samsung, HP, Broadcom, IBM, and Intel among the mix.

Microsoft's contribution of 22,000 lines of code to the Linux kernel in 2009 wasn't so much an altruistic move (as is commonly portrayed), as it was a move to help Microsoft avoid legal troubles. It was discovered that Microsoft had used GPL code in a closed source Hyper-V network driver, which is in direct violation of the GPL. To remedy the situation, Microsoft contributed the drivers to Linux. It was portrayed by Microsoft as a charitable act, but was more intended to help Microsoft avoid legal entanglements.

In 2009, the 22,000 lines of code contributed to the Linux kernel made Microsoft one of the largest contributors. By 2011, they had fallen to 17th. By 2015, they were no longer even in the top 30 contributors.

The animosity between Microsoft and the Linux community is nothing short of legendary. The tension climaxed between 1998 and 2004 when internal confidential Microsoft documents, known as the Halloween Documents, were released. These documents branded Linux a threat to the Microsoft platform and their business model. You can read them, in their entirety and with annotations, by following the link included above. Even the infamous Steve Ballmer branded Linux a "cancer" and "communist."

Correctly or not (a hotly debated topic), those Halloween Documents assert that Linux's market

penetration is greater than that of Apple's Macintosh computers, and that there are more Linux users than Mac users.



In 1996, Linus Torvalds announced that a penguin would be the official mascot of Linux. He decided on a penguin after being bitten on the finger by a small penguin at the National Zoo & Aquarium in Canberra, Australia. sit3-shine.png

Tux, the Linux mascot, was created by Larry Ewing when, as he states, he should have been studying for finals at college. Ewing is a developer on the Gimp team, and assists with the development of F-Spot, Evolution, and GtkHTML. You can view his story about the creation of Tux here. His Tux page is here. Ewing, who lives in Austin, Texas, created Tux in Gimp 0.54. Neal Tucker created a scalable graphics version of Tux based on the black and white version that was drawn in Gimp. PC World also ran an article (although I can no longer find a link to the article) in 2003 about Tux becoming the logo/mascot for Linux.

Over 95% of the world's supercomputers run Linux.

Android, Google's mobile operating system based on Linux, is fast becoming the world's most popular operating system. Besides Android, the Google Chrome operating system that runs on Chromebooks runs on the Linux kernel.

Chances are high that the menu system in your DVD player, BluRay player, and modern TV are run by an embedded Linux operating system. Linux is also making huge inroads on IoT (Internet of Things) appliances. Furthermore, you're likely to see Linux in your new cars in the very near future, as most major automotive manufacturers have embraced a new, robust "automotive Linux" standard.

Linux forms the backbone of the internet, with over 67% of servers (overall) running Linux, and with over 57% of websites running on Linux servers.

Thanks to the security built into Linux, there are NO viruses (virii) in the wild for Linux. Occasionally, security vulnerabilities are found (there is no such thing as a 100% secure operating system), but those vulnerabilities are typically patched and closed within just a few days of their discovery. All Linux virus reports are simply "proof of concept" viruses conducted in a laboratory, and typically don't exist in the wild. In the lab, certain criteria must be met in order for the virus to even have a chance to infect a



Linux 31st Birthday Trivia & Fun Facts

system, and that criteria would almost never exist in the wild (hence the reason to NEVER run your computer as root, except for periodic maintenance tasks).

Distrowatch lists 779 different Linux distros, with 252 of them listed as "active."

As of 2006, Linus Torvalds had written about two percent of the Linux kernel code. Despite the seemingly small percentage, it makes him one of the largest contributors, considering that thousands of people have made contributions. Today, he is the maintainer of the Linux kernel, merging code into the kernel from other contributors. Torvalds has final say over what gets included and what is omitted.

Linus Torvalds was granted the trademark to the Linux name after several people from different countries attempted to trademark the name in 1994 and 1995. Torvalds subsequently transferred the Linux trademark to Linux International. Today, the trademarked name is protected by the Linux Mark Institute.

Linus Torvalds has become a legend not only for creating Linux, but also for his responses to Linux kernel contributors on the Linux kernel mailing list. In person, he's not much better. Let's just say that Torvalds isn't afraid to say the first thing that pops into his head, and ... well ... simply doesn't have much of a filter. He simply isn't afraid to call it as he sees it. You can read some of his most famous quotes here. Whether you agree or disagree with his tactfulness (or lack thereof), it certainly keeps things interesting.

Since its inception on the Intel 386 processor in 1991, Linux has been ported to most every other computer platform.

The corporate membership of the Linux Foundation reads like a who's who of leading corporations from across many walks and disciplines. They include IBM, NEC, Google, Adobe, Mazda, Hitachi, Samsung, Toshiba, Toyota, AMD, Intel, Bosch, Denso, Honda, Epson, Cisco, HP, Fujitsu and many, many others.

The Linux kernel is released under the GNU GPLv2 license. Torvalds and many of the other kernel developers decided against adopting the newer GNU GPLv3 license when it was released in 2007.



Screenshot Showcase



Posted by mutse, July 14, 2022, running Mate.

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PCLinuxOS Recipe Corner



Pizza-Stuffed Pasta Shells

Serves 6



INGREDIENTS:

1 lb lean (at least 80%) ground beef 1 clove garlic, finely chopped 4 oz pepperoni slices, cut into quarters 3 cups organic pizza sauce 21 uncooked jumbo pasta shells 2 cups shredded mozzarella cheese (8 oz)

DIRECTIONS:

Heat oven to 375F. Spray 13x9-inch (3-quart) glass or ceramic baking dish with cooking spray.

In a 10 or 12-inch nonstick skillet, cook 1 lb lean ground beef and 1 finely chopped garlic clove over medium-high heat 5 to 7 minutes, stirring occasionally, until thoroughly cooked. Drain. Stir in half of the 4 oz quartered pepperoni slices and 1 cup of the pizza sauce. Cook for 5 minutes or until mixture is thoroughly heated. Remove from heat.



Meanwhile, cook 21 uncooked jumbo pasta shells as directed on the package. Drain. (top, right)





Stuff each cooked shell with 2 tablespoons of beef mixture; place in a single layer in a baking dish. Cover shells with remaining 2 cups pizza sauce, the 2 cups shredded mozzarella cheese and the remaining half of the pepperoni.



Bake for 25 minutes or until bubbly and cheese is melted. Let stand for 5 minutes before serving.

NUTRITION:

Calories: 530 Carbs: 36g Sodium: 1130mg Protein: 32g Fiber: 3g

Inkscape Tutorial: Create A Magnifying Effect

by Meemaw

Here's a neat effect that I saw at goinkscape.com. It uses clipart of a magnifying glass and an object of your choice. I'm using a red crayon.



The magnifying glass I chose had a clear center and a bit of white in it indicating glass... if yours isn't clear in the center, you should be able to make one that is. You might just use a circle with no fill and a black stroke of 6 or 8, and some black ellipses to make the handle. To make it look like there's glass in it, just add a white fill that's almost transparent, and change it to a white to clear linear gradient. (The purple circle is only there to show the gradient.) Mine was already there. Now, make a circle the same size as your magnifying glass, and move your magnifying glass to the side. Then duplicate your object, in my case the crayon, and move it to the side.



Now we're going to work our magic on these two objects. Choose the crayon, and enlarge it. Make it bigger but still not as big as your circle. Position the circle over the bigger crayon, choose them both, then click **Object > Clip > Set**. This saves only the part of the crayon inside the circle, and even rounds off the part that will be covered by the magnifying glass.







Now bring back your magnifying glass and crayon, and arrange them where you want them, with the clip under the magnifying glass (top, right).





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PCLinuxOS Magazine

by Paul Arnote (parnote)

Last month, I took you through how to set up VLC to watch live, OTA (over the air) broadcasts via a USB TV tuner. This month, let's take a look at how to do the same with MPlayer.

MPlayer is one POWERFUL multimedia powerhouse program. Did I mention that it was powerful? As with anything that wields that much power, it can sometimes present a level of complexity that is daunting, as it strives to cover as many multimedia bases as it can. In fact, MPlayer will often play files that other multimedia programs simply shrug at.

MPlayer is a multiplatform program, with versions for Linux, MacOS, and Windows. MPlayer is also "desktop agnostic." That means that it doesn't use either the Qt or GTK+ programming toolkits, opting instead for good, sound code that runs equally well regardless of which programming toolkit is employed.



MPlayer also serves as the "backbone" for other multimedia programs. SMplayer is one such program on Linux that wraps MPlayer in a "simpler" wrapper to playback multimedia files, insulating end users from the complex command line options for MPlayer.

So, how difficult can the command line options get for MPlayer? Take a look at MPlayer's man page. This is NOT an exercise in "light reading." It will take you a while to go through all of the options available to MPlayer. Also, the sheer number of available options makes it easy to miss what you are looking for.

In short, MPlayer is a workhorse for playing back most, if not all, multimedia sources.

Watching OTA TV With MPlayer

Of the programs in the PCLinuxOS repository that I've tried for watching OTA broadcasts, MPlayer is, by far, the most challenging one to set up and use. Most users are familiar with MPlayer as a GUI program, launched from the "Video" section of their desktop's applications menu. But MPlayer is actually a command line program. What users "see" when it's launched from their applications menu is a GUI wrapper. At its core, though, MPlayer is a command line program. It's only through the command line that the real power of MPlayer is unleashed.

The ability to watch OTA broadcasts hinges on, first of all, knowing how to pass the command line parameters to MPlayer. The second requirement is the presence of a list of channels from **w_scan** saved in the format recognized by MPlayer, with the name of **channels.conf**, stored in the hidden .mplayer directory in your home directory. Phew! Yep, that's a lot to take in.

The file listing the channels found by w_scan MUST be named channels.conf, or MPlayer cannot find the list when it's needed. While the ability might exist (the MPlayer command line options are more than plentiful), I've not found any command line parameters that allow you to specify a different filename.

This is vastly different from VLC, which allows you to load up a file containing the listing of all the channels, and which can be named whatever you want to name it, just so long as it has the proper file extension and is formatted in VLC's special XML formatting. The latter is taken care of by w_scan when you select the -L

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command line option when scanning for OTA broadcasts, or when using the vlcchannel-scan.sh bash file I shared last month.



So, thanks to the complexity of MPlayer, I ended up writing two scripts to make it easier to watch OTA broadcasts with the program. The first script is to scan for channels with w_scan, and to place the output into the hidden .mplayer directory, in the file named channels.conf. The second script makes it easier to start up MPlayer with the OTA broadcast of your choice. Without it, it's a matter of not only remembering a complex MPlayer command line, but also switching back and forth between a terminal session and reading the channels.conf file in a text editor to discover the proper name of the OTA broadcast you want to watch. Instead, my script lists the channels in a zenity dialog box. Then, you just click on the channel you want to watch, and then the OK button to launch MPlayer playing that chosen channel.

For those of you who like to avoid the command line at all costs, never fear. These scripts include zenity dialog boxes, which insulate you from the mundane/complicated command line execution. It would be a trivial task to create a custom .desktop file, and place that in your usr/bin directory. Then, the scripts could easily be launched from your desktop's applications menu. Without the .desktop file, you can simply launch a terminal window and type in the name of the script. That is how I run them. Or, you could simply create a launcher on either your desktop or on one of your panels that execute the scripts. Isn't it nice to have so many choices under Linux?!

Script #1: Scanning For OTA Broadcasts

I have to praise the developers of w_scan. They seem to have made it adaptable to several different formats. In our case here, we need to output the channel listing of OTA broadcasts in a format that MPlayer can read and understand.

But, because MPlayer only accepts the channel listing as a specially formatted file named channels.conf, we can't give the file different names to indicate the locale and date for the channel scan. This part is important if you travel to different areas. So, I had to come up with a different way to indicate the locale that the current channels.conf file was configured for.

While my "solution" isn't as good as being able to look at the filename and determine the locale and date of the last scan, it's probably the second best solution. Any line in the channels.conf file (or any other MPlayer configuration file, or even bash files for that matter) that starts with *#* is interpreted as a comment. So, when you open up the channels.conf file and look at it in a text editor, there'll be no mistaking the locale and the date of the last channel scan, as it's right at the top of the file. Running the bash script to rescan for channels will completely overwrite the existing channels.conf file, if one already exists. That's handy for a couple of reasons. First of all, if the channels.conf file doesn't already exist, then it is created. Secondly, it helps make sure your list is up-to-date and current for the current locale.

So, here's the first script, which I've named **mplayer-channel-scan.sh**. As usual, you can download the script from the magazine website, or you can type it in yourself (it's quite short), or you can cut and paste it into a text editor. If you download it, strip the .txt file extension from the download file. And, in any of the cases mentioned, don't forget to mark the file as executable. Also, as I usually do, I've numbered the lines of the script to make it easier to tell what exactly comprises an entire line (before you have to press the "Enter" key to start a new line and execute a new command).

```
1. #! /bin/sh
2.
3. n=1
4.
5. LOC=`zenity --title="Locality" --entry --text="Enter the
location for the channel scan:"
6.
      if [ $? == 1 ]; then
7.
             exit
8.
     fi
9.
10. echo "# "$LOC" MPlayer TV Channel Scan" >
             $HOME/.mplayer/channels.conf
11. echo "# Date of scan " $(date "+%F") >>
             $HOME/.mplayer/channels.conf
```

```
12. echo "# -----" >>
         $HOME/.mplayer/channels.conf
13. echo " " >>$HOME/.mplayer/channels.conf
14.
15. while [ $n == 1 ]
16. do
17.
      w scan -f a -A 1 -M >> $HOME/.mplayer/channels.conf
18.
      n=0
19. done | (zenity --progress --title "MPlayer Channel Scan" --
text "Scanning for channels ... Please be patient.\nDialog will
close automatically when task is complete." --width=400 --
height=100 --pulsate --auto-close --auto-kill)
20.
21. exit 0
```

The MPlayer channel scan script is *almost exactly* like the VLC script from last month, with some notable exceptions to accommodate MPlayer's needs. So, let's instead only cover those items that are different.

0	Locality	💿 🔅 🧶
Enter t	he location for the cl	hannel scan:
Kansa	as City	
	Cancel	ОК

Line 10 starts off by writing the locale of the channel scan, as it was specified by the user in the dialog box as a comment in the channels.conf file. **Line 11** appends (hence, the >> redirection) the date as a comment in the channels.conf that the scan was done. **Line 12** appends a line of 40 dashes to provide a visual separator from the rest of the REAL data that MPlayer needs, while **line 13** appends a blank comment line to channels.conf, merely for more visual separation.

0	MPlayer Channel Scan	0 0 0
	ng for channels Please be patient. will close automatically when task is	
	Cancel	ок

Lines 15 through 19 setup the same while \dots do loop as the VLC script. The only differences are that the w_scan command uses a -M command line switch to output the MPlayer formatted channel list, and the scan data is appended to the channels.conf file.

Below is a screenshot snippet from my channels.conf file.

41 KCWE-HD:575000000:VSB 8:49:52+53+52+53:3 42 TCN:575000000:VSB 8:65:68+69+68+69:4 43 Cozi TV:575000000:VSB 8:81:84+84:5 44 Comet:575000000:VSB 8:97:100+100:6 45 HSN:575000000:VSB 8:113:116+116:7 46 WDAF-DT:593000000:VSB 8:49:52+53+52+53:3 47 ANT TV :593000000:VSB 8:65:67+67:4 48 CourtTV:593000000:VSB 8:81:84+84:5 49 TBD :593000000:VSB 8:97:100+100:6 50 Mystery:593000000:VSB 8:113:116+116:7 51 HSN :593000000:VSB 8:129:132+132:8 52 KSHB-TV:605000000:VSB 8:49:52+53+52+53:3 53 Grit:605000000:VSB 8:65:68+68:4 54 Laff:605000000:VSB 8:81:84+84:5 55 GetTV:605000000:VSB 8:97:100+100:6 56 KMCI-TV:605000000:VSB 8:113:116+117+116+117:7 57 Bounce:605000000:VSB 8:129:132+132:8

As you can see, w_scan picked up all 53 of the OTA broadcasts in my area (Kansas City area). Wait a minute, you say? I see 57 lines there! Remember that the first four lines written to the channels.conf file were comments that we added. (Sneak peek: we'll use those comment lines in the second script!)

Take care to note how many OTA broadcasts are in your area. I've run w_scan enough times just in writing these articles to know that there are 53 OTA broadcasts in my area. So, one time when I ran the MPlayer channel scan script, it only picked up 49 of those. For whatever reason (there are several possibilities, ranging from low signal strength to fringe stations to atmospheric conditions to just ghosts and goblins), w_scan missed four of the channels. So, I ran the script again, and that time, all 53 OTA broadcasts were picked up and listed.

Script #2: MPlayer TV Player

Now that we have the channels listed in channels.conf, we'll need an easier way to start up MPlayer with the OTA broadcast we want to watch already loaded. Like I mentioned before, if you use the command line to playback the OTA broadcasts from your tuner card, you'll have to switch back and forth between the channels.conf file opened up in a text editor and a terminal session to be able to issue the command properly. In my humble opinion, that's just too much to ask of anyone, even a command line commando. Plus, I'm all about working smarter, not harder.

So, below is the script, which I've called **mplayer-tv-player.sh**. As with the other script, it will be available for download from the magazine website, or you can type it in (it's really short), or copy and paste from the PDF into your text editor. Be sure to mark the file as executable, and if downloading from the magazine website, remove the .txt file extension. I've numbered the lines of the script to make it easier to know when to press the "Enter" key. All total, this script is 13 lines, subtracting out the blank lines that were added to aid readability.

1. #! /bin/sh

```
2.
3. DATA=$(grep -m3 '^#' $HOME/.mplayer/channels.conf)
4.
5. CHANNEL=$(grep -v '^#' $HOME/.mplaver/channels.conf | cut -d
":" -f 1 | zenity --list --title="MPlayer TV Channels" --
text="$DATA\n\nSelect the TV channel to watch with MPlayer...\n"
- column="Channel")
      if [ $? == 1 ]; then
6.
7.
             exit
8.
      fi
9.
10. zenity --question --width=350 --title="MPlayer TV Channels" --
text="Do you want to play $CHANNEL full screen?"
       if [ $? == 0 ]; then
11.
              mplayer dvb://'1@'$CHANNEL -vf pp=fd -really-quiet
12.
-fs
13.
       else
14.
              mplayer dvb://'1@'$CHANNEL -vf pp=fd -really-quiet
       fi
15.
16.
17. exit 0
```

Now we will walk through this script line by line. Of course, **line 1** is the typical shebang that designates this as a bash script.

Line 3 uses grep to read the first three lines (-m3) that start with # from the channels.conf file that we created with the mplayer-channel-scan.sh script, and places the string into the variable \$DATA.

òcan
NATIONAL CONTRACTOR
MPlayer
ок

There's a lot going on in **line 5**. First, we read in the channel data from channels.conf, using grep and telling grep to forget about all lines that start with the *#* symbol. Then, that is piped to the cut command, because we ONLY want the first field. Each field of the channel data uses a colon as a field separator. So we "cut" the results at the first colon. Then that is all piped to a Zenity list dialog box to populate the list. In that dialog box, we display the comments we put into the channels.conf file as part of the static text in the dialog box, along with some light instructions. The user's selection is then stored in the \$CHANNEL variable.



Lines 6 through 8 exit the script if the user presses the "Cancel" button. Line 10 uses the Zenity question dialog to ask the user if they want to display the selected OTA broadcast as full screen or not. The user's response is then filtered out by the subsequent if-then-else conditional loop in **lines 11 through 15**. If the user answers "Yes," then the selected programming is displayed full screen on the user's computer. If the user answers "No," then the selected programming is displayed in a window on their computer screen.

In **lines 12 and 14**, we start up MPlayer with the selected OTA broadcast. The channel selection previously made in line 5 (and stored in the \$CHANNEL variable) is inserted into the MPlayer command. The only difference between the lines is that line 12 has the setting for full screen playback. **Line 17** allows the script to exit cleanly.

Keep in mind that MPlayer is a command line program. There are some choices you can make when starting MPlayer, and these commands are where you can make them. First of all, I prefer a non-interlaced image, and the **vf pp=fd** command line switch does an admirable job of deinterlacing the video image, without taxing system resources too heavily. Secondly, if you *prefer* a GUI, then place the **-gui** command line switch *immediately* after the mplayer command, as the first command line parameter. To display the GUI, you MUST issue the -gui parameter as the first command line switch. The first image in this article uses the GUI, and that's how it was displayed.



Running MPlayer TV Player & MPlayer

When you use MPlayer TV Player to launch MPlayer, the script's window will immediately disappear. If you want to use it again, you'll have to re-launch it. To close out the MPlayer window (whether it's windowed or full screen), just press the "Escape" key.

There are some other keyboard controls for MPlayer you should know about. To raise the volume, press either the "0" (zero) or "*" key. To lower the volume, press either the "/" or "9" key. To mute the volume, press the "M" key. To go up one channel, press the "K" key. To go down one channel, press the "H" key. The "Space bar" pauses and restarts the currently playing video. The "F" key switches between full screen and windowed display modes. Press the "S" key to take a screenshot. The "O" key toggles the on-screen display.

To see a full listing of all of the other keys, check out this section of the MPlayer man pages. The keyboard controls work whether or not you're using the GUI.

Summary

Have I mentioned that MPlayer is very powerful? And, true to form, something this powerful is also very complicated. It's only easy if you're a frequent user or a student of its ways. I hope these scripts go a long way to making it easier for you to get much more use out of MPlayer. It truly is a worthy program. But it can also make a worthy opponent "if you don't know its ways with the force."

Next month, I plan to take a look at using Kaffeine to view OTA broadcasts.



Ring Reveals They Give Videos To Police Without User Consent Or A Warrant

by Jason Kelley and Matthew Guariglia Reprint from Electronic Frontier Foundation Under Creative Commons Attribution License

Amazon's Ring devices are not just personal security cameras. They are also police cameras—whether you want them to be or not. The company now admits there are "emergency" instances when police can get warrantless access to Ring personal devices without the owner's permission. This dangerous policy allows police, in conjunction with Ring, to decide when access should be granted to private video. The footage is given in " cases involving imminent danger of death or serious physical injury to any person."

The company has provided videos to law enforcement, without a warrant or device owner consent, 11 times already this year. This admission comes in response to a series of critical letters from Senator Ed Markey (D-MA). Markey chastised the company over many of the same privacy problems that EFF has brought up, including the far-reaching audio capabilities of Ring devices, and the company's refusal to commit to not incorporate facial recognition technology into their cameras.

Amazon must consider the danger these products pose to the public by creating a growing web of surveillance systems that are owned by individuals, but are de-facto operated by law enforcement.

Police are not the customers for Ring; the people who buy the devices are the customers. But Amazon's long-standing relationships with police blur that line. For example, in the past Amazon has given coaching to police to tell residents to install the Ring app and purchase cameras for their homes—an arrangement that made salespeople out



of the police force. The LAPD launched an investigation into how Ring provided free devices to officers when people used their discount codes to purchase cameras.

Ring, like other surveillance companies that sell directly to the general public, continues to provide free services to the police, even though they don't have to. Ring could build a device, sold straight to residents, that ensures police come to the user's door if they are interested in footage—but Ring instead has decided it would rather continue making money from residents while providing services to police.

These cameras can exacerbate racial profiling. They can also make people feel more paranoid, rather than more secure, because of the constant alerts the device is capable of providing.

Before this latest admission, Ring has faced other controversies about the way it facilitates police access to user footage. Ring had enabled police to send bulk requests directly to many device owners over a large area. Police did so at a staggering level: in 2020, for example, police requested videos over 20,000 times. In 2021, however, Ring caved to activist pressure and changed how police send requests, requiring them to publicly post them to the Neighbors app, which shed important light on these requests.

The "emergency" exception to this process allows police to request video directly from Amazon, and without a warrant. But there are insufficient safeguards to protect civil liberties in this process. For example, there is no process for a judge or the device owner to determine whether there actually was an emergency. This could easily lead to police



Ring Reveals They Give Videos To Police Without User Consent Or A Warrant

abuse: there will always be temptation for police to use it for increasingly less urgent situations.

Sen. Markey also raised concerns about Ring's audio recording of people in public places, and asked Amazon for information about this. The company failed to clarify the distance from which Ring products can capture audio recordings. Earlier this year. Consumer Reports revealed that Ring's audio capabilities are more powerful than anyone anticipated, collecting conversation-level audio from up to 25-feet away. This has disturbing implications for people who walk, bike, or even drive by dozens of these devices every day, not knowing that their conversations may have been captured and recorded. The company also refused to commit to eliminating the default setting of automatically recording audio.

In addition, the company refused in its response to Sen. Markey to commit to making end-to-end encryption the default storage option for consumers-though it is available as an option as of 2021.

We thank Senator Markey for raising these issues. For too long, Amazon has not taken seriously the many civil liberties concerns with its Ring products. We hope the strong response to these latest admissions will help push Amazon to make privacy overhauls. The company must consider the danger these products pose to the public by creating a growing web of surveillance systems that are owned by individuals, but are de-facto operated by law enforcement.







Posted by kalwisti, July 2, 2022, running LXQt.

by Alessandro Ebersol (Agent Smith)



In the week of July 05, 2022, it became public that Lennart Poettering was no longer working for Red Hat, having been hired by Microsoft. Such an event should have no repercussions whatsoever, were it not for who Lennart Poettering is, were Microsoft not the company it is, and were the future of GNU Linux not at stake here.

However, such an event has consequences, and let's analyze what should have been done, and what can happen.

Poor human resources

I teach information security, and one of the subjects is information security in human resources.

This discipline teaches us that when an employee is terminated from the company, he/she has to have all credentials revoked, even before leaving the building, to preserve the information security and information assets in the company. What is going on here? The statements that have been made public on the Phoronix website state that Lennart will continue his work as a systemd init developer.

Now, from what is publicly available, IBM / Red Hat and Microsoft are rival companies, competitors that offer the same products, and to let an ex-employee go to work at a rival company and continue developing a product that is essential to your company... One has to wonder what his loyalty will be? (but, we all know that people are loyal to those who pay their salaries).



IBM's main rivals

However, the consequences get worse.

What are the consequences?

These events already send shock waves throughout the free software community. And, the consequences are not few.

Companies that depend on Free Software

Several companies that have GNU/Linux as their main pillar of support or use it as technology are going to be affected by this move.

Companies like: Oracle, Suse, Canonical, Amazon, Facebook, just to name a few.

Now, where does that leave these companies? Who will determine the course of GNU Linux development is... Microsoft, the company that has always fought against GNU Linux.

Who is the cancer now?

We must not forget Steve Ballmer's famous quote: Linux is a cancer that attaches a sense of intellectual property to everything it touches.

Now the question remains: Who is the cancer now? Because Microsoft is sticking to everything related to Linux, and like a parasite, will control its host (The Last Of Us sends regards).

However, it has been some time since Microsoft gave up fighting openly against Linux, and decided to infect it from the inside in order to be better able to erode it, with less resistance and more ease.

As Brian Lunduke, in his article Microsoft's growing control of Linux, tells us: Microsoft controls: The largest open source hosting on Earth, a large portion of the Linux conferences, The Linux Foundation, The Open Source Initiative, and prominent Linux developers. (It's not just Lennart who has moved to Microsoft, many open source developers are already working for it: Steve French, Matteo Croce, Matthew Wilcox, Tyler Hicks, Shyam Prasad N, Michael Kelley, Guido Van Rossum, the father of the Python language).

The implications

As I wrote above, several companies depend on GNU Linux for their business, be it Amazon, Facebook, or any other, and will be affected. But, let's look at some of those involved, and the implications.

IBM and Microsoft

As I mentioned above, IBM, the parent company of Red Hat, is a competitor of Microsoft. They compete on several products, and as far as I know, and it's public, if IBM is going to let an employee of one of its biggest rivals develop the backbone of one of its biggest products, there's something wrong there. For if there is a tacit or explicit agreement, which the public is unaware of, it is collusion. After all, Lennart's presence at Microsoft, and his salary being paid by Microsoft, is a sign that he will favor the Redmond company. But if he does this, what about the rest of the ecosystem?

Free Software Foundation

This will be an interesting reaction to see: Over the years, the FSF is always launching campaigns attacking Microsoft and its monopolistic and abusive practices against users. Of course it has never attacked Red Hat (one of the reasons could be that Red Hat has been a sponsor of the FSF for many years...)



The FSF dedicates a page of its website, to warn users about the dangers of using Microsoft products. And now that systemd will be a Microsoft product?

Linux users

This is the most fragile and sensitive part, in which I include myself. We depend on Linux for our personal / professional computing, but we have no representation where the decisions happen. But, what could go wrong, now that the systemD will be developed at Microsoft? Everything... Let's see:

- Microsoft has WSL, the Linux emulator system, which acts like Wine in reverse.
- Recently, a new line of notebooks, with the Pluton chip, does not allow Linux to run, only Windows, which even Matt Garret complained about (the guy who created UEFI shim for Linux)

Now, the ramifications of the systemd development at Microsoft are obvious: make Linux a client operating system, dependent on windows and

The Creature Has A New Master...

unable to run alone on any hardware whatsoever, something like a guest VM, of which windows will be the inescapable host. On the desktop, WSL, for servers, the Azure cloud.

But, what's wrong with systemd?

Systemd is just software. It does no harm by itself. The problem is the people (and the corporations that control it).

Since its creation, from how it was conceived, in 2010, it has, in 12 years, achieved a position of dominance in the Linux ecosystem, where other solutions have taken decades, being improved upon.

But, the rush to make systemd a "standard," was, without soft words, a power struggle.

A power struggle between Red Hat and Canonical, which also had a solution, Upstart, that competed with systemd.

A component that does not do what it should

The nature of systemd is so controversial that even it doesn't know what it is. Is it a daemon init manager? Yes, it might be. But, it is not only that. Nowadays, systemd controls too much stuff. So much so, that if compiled properly, 69 binaries are created that control many parts of the system.



But why so much power? Power corrupts, and absolute power corrupts absolutely.

systemd Ut	journalctl	notify	analyze	cals	cgtop	loginct	nspawn
	-			- 9	-9		
systemd Da	emons	system	d Targets				
systemd							
journald n	etworkd	bootmod	e basic		i-user elephony	J p	user-session lisplay servic
loginduser	session	shutdowr		dlog	logind	sesssion	tizen service
systemd Core							
manager	service tim	unit er mount	target		ogin eat inhibit	namespa	ice log
systemd	snapshot pat	th socket	: swap	sessi	on pam	cgrou	dbus
systemd Libraries							
dbus-1	libpam lit	ocap lib	cryptsetup	tcp	wrapper	libaudit	libnotify
Linux Kerne		roups	autofs		kdbus		

According to several reports, which I could gather from https://www.quora.com, those who had to debug systemd suffered like a stray dog.

A developer, who worked with Suse maintaining systemd for Suse Linux, stated:

A few years ago, I was working for SUSE Linux Enterprise (SLE) as a full-time developer. My boss asked me if I am interested in maintaining Systemd for SLE. At that time, I knew little about Systemd. So I said, "I'll see what I can do.

I downloaded the source code accompanied with more than 2000 backport patches, this took almost half a day. While I was waiting, I reviewed the code and tried to figure out what is in it. And I had contacted several experienced colleagues to learn about it.

Finally, I managed to figure out how Systemd takes advantage of Linux Kernel stuff to start services in parallel. This sounds good, but introduces unbelievable complexity for this functionality. If you are an average desktop user, you may rarely encounter problems or can put up with a few bugs in Systemd. But for a corporate version of Linux, it makes the maintainer's job difficult. So much so that I talked to my boss, and I made the case to him that something like systemd needed a small team to maintain. My boss agreed with me and passed the project on to a team. To this day I feel sorry for the poor souls who were left with this task.

So something that should be simple becomes complex, hard to understand, and even harder to maintain, since its code is vast (it was at 1.3 million lines of code... just to be a startup system...). And because of this, several problems arise. Mainly being a gigantic piece, opaque and, because of the complexity, obscure. Yes, obscure because of the complexity, and there goes transparency down the drain (and the user's control over the systems he runs on his computer).

Ahh, if it were that bad, it wouldn't be the standard in most distros...

This is one of the arguments of systemd's defenders. But a half-truth is a complete lie. Continuing on the Quora site, in the research I did in order to write this article, I came across questions about systemd. One of them: Why is Linux switching to systemd when it is so bad? And, there are several such questions on the site. One of the answers, however, caught my eye, because it's the standard response from systemd advocates : "To be fair, the number of users who hate systemd is really just a noisy minority in the Linux community."

Now, that is what Red Hat wants everyone to think, that is the official narrative, which they have worked so hard to create and maintain. But, that statement couldn't be more wrong.

Most users and professionals are apathetic, that's for sure. Like our whole society is apathetic, and has been for some time. People don't like systemd, but, as it was Red Hat's init, everyone **put their heads down and moved on.** Actually, those who defend systemd are a noisy minority. And, who knows, very well paid by Red Hat. And, this nature of systemd, supported by narratives created by Red Hat, leads us to its creator, Lennart. And, the choice of Lennart to lead the project was not random. Lennart was chosen precisely because he is... Lennart.

The father of systemd: The guy who is never wrong



As I wrote above, Lennart was not chosen by chance. His choice for this project was more for his controversial personality than for his programming talent. Lennart has a tendency to be inflammatory in his comments on social media. So much so that in 2014, he made a post on the late Google+ social network complaining about the Linux community. He discussed how the Linux community in general was a very toxic environment. So much so that he was constantly receiving hate messages and even death threats. In his words "The Linux community is dominated by Western, white, heterosexual men in their 30s and 40s these days. I fit that pattern perfectly, and the garbage they dump on me is horrible. I can only imagine it's much worse for members of minorities, or people from different cultural backgrounds, particularly those where losing face is a major issue."

However, he does not cite how he attacked the POSIX standard, the cornerstone of Unix's KISS principle, or how he disregarded compatibility with

other open source operating systems (BSD is no longer relevant).

He, on the other hand, uses the old tactic of social engineering: victimization. He says what he wants, complains about many things in the development of GNU Linux, and then comes running and says that the community is toxic and that they don't like him. Of course, acting this way, who would like him?

Aside from the fact that he does not accept criticism, he always tries to reflect the target of criticism, to another subject. And, for this nonchalant attitude, he won the Pwnie award in 2017 as the worst vendor response of the year.



Pulseaudio: The "Lennartix" way of doing things - Spaghetti software

Thanks to his way of speaking without restraint, in which he complains about whatever comes to his mind, he was chosen to lead systemd, since criticism of systemd would be reflected in Lennart's persona, and in the heated discussions that followed, over the internet, in forums and mailing lists, the goal would be lost and would turn into personal insults, ad-hominem aggressions, and the focus would no longer be on systemd, but on the people who developed it. And, more social engineering tactics were used, to paint critics of systemd as backwards, dinosaurs who live in the past and can't accept the new. Not to mention an online shock troop that attacked several opponents

of systemd, in particular Denis Roio, developer of the Dyne:Bolic distro and one of the creators of the Devuan distro.



Now, at Microsoft, what to expect from Lennart and systemd?

Well, for all his background, it is a wonder that Lennart worked on GNU Linux. In fact, he has always praised the audio and boot systems of other platforms, notably MacOSX and Windows. Most recently, Lennart praised the Windows 11 feature of needing the TPM2 device in order to boot.

But back to systemd, at first Lennart modeled it after launchd from MacOSX, but over time it has become something worse, with tentacles in (almost) every part of the system. As one BSD system user commented on the FreeBSD forum https://forums.freebsd.org/, "systemd is really just a poor implementation of launchd. Instead of just coherently merging service-related daemons; it has gone too far with its features and swallowed up most of what runs alongside the GNU userland. Binary logs emulating plists, dbus integration emulating Mach IPC, etc. NIH Linux syndrome at its best. I think the dumbest thing was making Systemd a dependency for gnome-session. That's really how it became a de facto standard."

Several developers, who got their start on GNU Linux, actually always wanted to work at Microsoft. One of them was **Miguel de Icaza**, who has been working at Microsoft since 2016, when his company, Xamarin, was acquired by the Redmond giant. The other was Lennart...



Lennart and his true love

And what to expect for GNU Linux?

We come to a crucial point here: What can we expect, now that the init system adopted in most Linux distributions, will be developed by a Microsoft employee?

Thanks to the various problems brought about by the forced insertion of systemd in several Linux distros, the landscape has become even more fragmented. And because of its complex design, systemd is a nice attack surface for crackers and malware:



Sadly, the whole mess surrounding systemd has served to tarnish the reputation of GNU/Linux. Yes, there is a rebellion against the one-size-fits-all digital tyranny. Add to this the gradual death of several distributions (CentOS, most recently), and you have numbers like below:

Opinion Poll (by Jesse	Smith)		
Do you use RHEL or a clone?	Do you run RHEL or a clone?		
This week we began with a newiner of <u>AlmaLina COS</u> , a clone of <u>Red Hals Enterprise_Inux</u> . In the past few years, the number of Red Hal's clones has increased a tet. Meanwhile Red Hal has made it possible on init softical Enterprise Linux (Bhithuton free of charge in many statutons. Do you currently not Red Hal Enterprise Linux (BHEL) or one of its many clones? Pease tells which clones you nut, a many, in the <u>commets</u> .	i run RHEL: i run a clone: i run multiple clones: i run RHEL and a clone: i run RHEL and multiple clones:		
You can see the results of our previous poll on openSUSE Leap versus openSUSE Tumbleweed in <u>last week's edition</u> . All previous poll results can be found in our <u>poll archives</u> .	I do not run RHEL or any clones	1404 (78%	

In other words, both Red Hat Enterprise Linux and its derivatives are not the preferred distributions of those who use/work with GNU/Linux. In fact, they are used today more for inertia than for their merits. The new projects are all being based on BSD variants: Whatsapp, for example. Another example is Netflix.

Another problem, both for systemd and for GNU Linux in general, is that Microsoft is the place where companies / products go to die. Yes, I can list several projects / companies that, after being "touched" by Microsoft, have taken the kiss of death:

- Skype
- Nokia
- Novell
- Ensemble Studios (Age of Empires)
- Aces Game Studio (Flight Simulator)

Not to mention Github, which, under Microsoft's direction, suffered a mass exodus to other platforms (Gitea, Gitlab, SourceForge, etc...), because Microsoft would abuse the code hosted there (as it ended up abusing).



So, I leave the Ned Stark meme to you the reader, and like him, I say: Prepare for impact!





Donate NOW





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



Repo Review: AbiWord

by CgBoy

AbiWord is a lightweight and powerful word processor with many features. Started back in 1998 and continuing to this day, AbiWord is well known in the open-source community, although development seems to have slowed down somewhat in recent years. In this article, I'll take a quick look at this small and efficient word processor.



AbiWord has a well laid out user interface, not all that different from LibreOffice Writer, albeit somewhat simpler in design. You've got toolbars at the top with easy access to common formatting options, along with the printing and preview tools. Unfortunately, though, the word count is not displayed on the lower bar, but can be accessed from the menu instead. In general, AbiWord is well designed and easy to use. You can change the page layout to Print, Web, or Normal mode, depending on the type of document you are editing.

All the usual word processing features are available, such as text formatting, lists, styles, tables, page headers, columns, annotations, and many more. Tables, boxes, bookmarks, footnotes, fields, and other objects can all easily be added to documents. Images can also be inserted into documents, either from a file or from the small selection of clip art images that AbiWord supplies. AbiWord also lets you create custom document templates for ease of use.

Available Styles:	Paragraph Pi	review		
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	Character Preview			
	What Hath God Wrought			
	D New	Modify	📅 Delete	
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O User-defined styles	family:Times I font-weight:n			

AbiWord gives you a number of useful tools available from the menu, such as a detailed word counter, and mail merge utilities. You are also provided with a nice thesaurus (using Aiksaurus), as well as spelling and grammar checking tools. However, I did have to make sure that the appropriate myspell packages were installed in Synaptic first for the spell checking to work correctly. AbiWord also has a number of built-in shortcuts for online services such as Wikipedia, Google, a dictionary, and others, which will simply open those sites in your web browser for you (although some of the translation sites aren't around anymore).

One of AbiWord's interesting features is the ability to

collaboratively work on a shared document with other people through TCP or Jabber (XMPP). Unfortunately, I was unable to test this feature, so I am not too sure how well it actually works, but it is still nice to have.

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hared	documents			
Bud	dy			+ Add Buddy
	D. *	Add Buddy	~ ^ X	O Refresh
	Add buddy			
	Name:	8		
	Account:		*	
	1 Help	O Cancel	~ ок	

AbiWord supports a large variety of document formats, such as Doc, DocX, ODT, XML, HTML, and many others, while AbiWord's native document format is ABW. AbiWord also supports auto-saving your document so you don't lose any work if something goes wrong. Another interesting feature of AbiWord is Presentation mode, where you can view your document as a full screen slide show presentation.

Summary

Apart from a few annoying bugs, I did not encounter too many issues with AbiWord. Compared to LibreOffice Writer, AbiWord used nearly three times less memory during my use of it, making it an excellent option for older systems. All in all, AbiWord is a very decent, lightweight and efficient word processor.

Ο

Short Topix: Wolfenstein, Doom Designer Making A New Game

by Paul Arnote (parnote)

Assault On Your Privacy Monthly Update



Amazon Prime Days shoppers were the favored targets of phishers and scammers, according to an article on TechRepublic.

The IT security company Barracuda Networks found that **HTML attachments are the most malicious types of files** by more than double the next leading types of files, according to an article on TechRepublic.

The U.S. government is warning healthcare companies to watch for and protect themselves against ongoing ransomware attacks from cybercriminals sponsored by North Korea. In a joint advisory posted Wednesday, the FBI, Cybersecurity and Infrastructure Security Agency, and Department of the Treasury cautioned that these state-sponsored attackers have been using Maui ransomware to target hospitals, laboratories and other public and private healthcare organizations, according to an article on TechRepublic.

Researchers have discovered a new Russian malware sample capable of hiding from more

than 50 antivirus (opens in new tab) products available on the market right now, according to an article from TechRadar. The malware was discovered by cybersecurity researchers from Unit 42, the threat intelligence team at Palo Alto Networks. The team first spotted the strain in May, when it discovered that it was built using the Brute Ratel (BRC4) tool. The malware hides in a weaponized ISO file, and is suspected of coming from the Russian state sponsored hacker group Apt29, a.k.a. Cozy Bear.

Cyberattacks caused the website that handles unemployment benefits for several states to be taken down, in an effort to stop the attacks, according to an article on TechRepublic, and another from the Associated Press. The website handles unemployment benefits for 35 states and territories, including Tennessee, Florida, Texas and Nebraska.

A new Android malware family on the Google Play Store that secretly subscribes users to premium services was downloaded over 3,000,000 times, according to an article on BleepingComputer. The malware, named 'Autolycos,' was discovered by Evina's security researcher Maxime Ingrao to be in at least eight Android applications, two of which are still available on the Google Play Store.

A new method devised to leak information and jump over air-gaps takes advantage of SATA cables as a communication medium, adding to a long list of electromagnetic, magnetic, electric, optical, and acoustic methods already demonstrated to plunder data, according to an article on The Hacker News.

Google pulled 60 malware-infected apps from its Play Store, installed by more than 3.3 million

punters, that can be used for all kinds of criminal activities including credential theft, spying and even stealing money from victims, according to an article on The Register.

Dozens of apps in the Google Play store were discovered that harbored Joker, Facestealer and Coper malware, according to cybersecurity researchers at ZScaler ThreatLabz. The malware-infected apps were downloaded over 300,000 times. A full list of the apps (over 50 of them infected with Joker malware alone) is available at the link. The apps have all since been removed from the Google Play store, and uninstalled from users' devices than might have them installed.



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Short Topix: Wolfenstein, Doom Designer Making A New Game

Mozilla Sends Microsoft A Cake To Commemorate IE Death



In case you haven't heard, Microsoft OFFICIALLY killed off Internet Explorer, otherwise known as IE, in June of this year. The raucous cheering noise echoed throughout the computer world, glad to be finally done with this scourge upon web browsers. IE 11, the latest and last version, was officially released on October 17, 2013 ... nearly NINE YEARS AGO ... with the nearly as infamous release of Windows 8.1.

To commemorate the milestone occasion, the Mozilla team sent a cake to the folks at Microsoft. But this might not be the end just yet. The IE core engine is hanging around as "Internet Explorer Mode" in the new Microsoft Edge browser, and it's looking like Microsoft plans to continue supporting that until 2029 at the earliest. Once that happens, maybe it'll be an occasion for another cake ... or maybe a steak dinner?

Wolfenstein, Doom Designer Making A New Game



John Romero, a former ID Software designer who helped design Wolfenstein 3D, Doom and Quake, has started a new company called Romero's Games, according to an article on Cracked.

The yet-to-be-named game will be built on the Unreal Engine 5. He's currently hiring folks to help bring his vision to a gaming console/PC near you.

Given his past creations, it's a safe bet that whatever game he comes up with will involve shooting "stuff."

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

PCLinuxOS Magazine's searchable index!



Examining Webb Telescope Damage



Image Source: NASA/CSA/ESA

NASA has released images that show the damage done to one of the hexagonal mirror panels of the James A. Webb Space Telescope. The image (above) shows a white "scar" in the lower right corner of the mirror array.

Despite the micrometeor strike, the JWST continues to ooh and awe with images of unprecedented clarity and detail. Already, it has delivered images of space never before seen by human eyes, and in a level of detail that surpasses even best estimates.

If you want to see more images from the JWST, you can pop on over to its Flickr page. Prepare to be amazed by the clearest pictures ever captured of the cosmos.



Short Topix: Wolfenstein, Doom Designer Making A New Game

Scary: OpenAl Prepares To Launch DALL-E



The company OpenAI has announced that it will launch its beta of its new artificial intelligence image generator DALL-E to 1 million lucky users, from the millions of people who have signed up for beta access on its website. The company announced that it would be notifying individuals within the coming few weeks of their participation in the beta.

DALL-E is capable of creating photorealistic images from a simple text prompt. All a user has to do is describe the scene they want to create, and DALL-E will create the image. The images are so realistic that it's difficult to discern what is real and what isn't. And that is the scary part.

Pricing seems reasonable. Every DALL-E user will receive 50 free credits per month, and additional credits will be available for \$15 (U.S.) for 115 credits. One credit is applied each time a prompt is entered and a user hits "generate" or "variations."

To increase safety, OpenAI is putting some restrictions on what it will allow. For example, they will reject image uploads containing realistic faces and attempts to create the likeness of public figures, including celebrities and prominent political figures. They will also disallow image uploads that violate their content policy, which does not allow the creation of violent, adult, or political content. DALL-E will also use a new technique that more accurately reflects the diversity of the world's population. Additionally, they will use automated and human monitoring to insure against misuse.

With DALL-E, your mind's eye is the limit. Users of DALL-E get full usage rights to commercialize the images they create with DALL-E, including the right to reprint, sell, and merchandise. This includes images they generated during the research preview.

The PCLinuxOS Magazine Short Topix Roundup

Ventura. When activated, it will harden device defenses and will strictly limit device functionality to greatly decrease the attack surface of the device, thereby increasing protection against mercenary spyware.

According to an article on Science Alert, an astrophysicist has shown that faster-than-light travel could work within Einstein's physics. It's an interesting look at the whole concept and exploration of faster-than-light travel, and makes for an interesting read. Even though the article is a fairly easy read, it's far above my pay grade to even present a summary here.

Microsoft has done a U-turn on its decision to disallow monetization of open source apps in the Microsoft store, according to an article on PC Gamer. While they were attempting to "do the right thing" regarding open source software, it turns out that doing nothing at all is an even better solution.



Already the most secure mobile platform, **Apple has announced that it is adding another layer of security, called Lockdown Mode**, according to an **article** at TechRepublic. The extra layer of security will be available this fall for iOS, iPadOS and MacOS



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Short Topix: Wolfenstein, Doom Designer Making A New Game

Google Search and Drive are erroneously flagging links to Association for Computing Machinery (ACM) research papers and websites as malware, according to an article on Bleeping Computer. The ACM was founded in 1947 as a nonprofit, and is headquartered in NYC. Bleeping Computer confirmed that both Google and Google Drive were reporting the ACM site as "harmful."

If you have always wanted to get into drones and drone photography/videography, but were always deterred by the high costs involved with getting into drones, this next one will interest you. **ZDNet Academy has the Copernicus Mini Drone available for only \$91 (U.S.)**. The full-featured drone is small enough to fit into your hand, but is capable of producing high quality photographs and 4K video with its onboard camera.

The first quarter numbers for Netflix should/could have been foretelling. In the first quarter of 2022, Netflix lost 200,000 paid subscribers in its largest market (Canada and the U.S.). According to an article on ZDNet, **Netflix lost 1.3 million subscribers in its second quarter of 2022**. Ouch! The only thing that Netflix attributes to not losing more subscribers is the Netflix series "Stranger Things 4.



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Screenshot Showcase



Posted by jogurtmen, July 6, 2022, running KDE.

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EFF Statement On EU Parliament's Adoption Of Digital Services Act & Digital Markets Act

EFF Press Release

The laws have important tools to make the internet a fairer place, but there are implementation challenges ahead.

SAN FRANCISCO–The European Union reached another milestone by approving the "Digital Services Act package" this week. The Digital Services Act and the Digital Markets Act are intended to create a safer and more competitive digital space.

By setting out new responsibilities for online platforms, the Digital Services Act (DSA) was supposed to rein in the power of Facebook, Google, Apple, and Amazon and both better educate and empower users, but many of its approaches were initially quite problematic. The final bill avoids transforming social networks and search engines into censorship tools, which is great news. It also retains important principles under the previous internet rules that helped to make the internet free, such as allowing liability exemptions for online platforms for the speech of others and limiting user monitoring. And it improves things as well, by imposing higher standards for transparency around content moderation and creating more user control over algorithmically-curated recommendations.

However, the DSA is not a panacea for all problems users face online and the final deal isn't all good news: It gives way too much power to government agencies to flag and remove potentially illegal content and to uncover data about anonymous speakers. The DSA obliges platforms to assess and



mitigate systemic risks, but there is a lot of ambiguity about how this will turn out in practice. Much will depend on how social media platforms interpret their obligations under the DSA, and how European Union authorities enforce the regulation.

"There's a lot to like in the Digital Services Act. Far too many proposals launched since work on the DSA began in 2020 posed real risks to free expression by making platforms the arbiters of what can be said online and the DSA avoids many of them," said Christoph Schmon, EFF's International Policy Director. "That being said, we can expect a highly politicized co-regulatory model of enforcement with an unclear role of government agencies, which could create real problems. Respect for the EU's fundamental rights charter and inclusion of civil society groups and researchers will be crucial to ensure that the DSA becomes a positive model for legislation outside the EU."



EFF Statement On EU Parliament's Adoption Of Digital Services Act & Digital Markets Act

The final judgment on the success of the related bill, the EU's Digital Markets Act (DMA) also hinges on the question of human rights-centered enforcement. While the complete set of responsibilities the DMA places on "gatekeeper" platforms should help create space for competition, the crucial steps of implementation and enforcement must be done very carefully, especially to avoid reversing important gains in the security and privacy of end-to-end encrypted messaging services like Whatsapp and iMessage. That's why we've advised the EU Commission to broaden its security exceptions in practice, and show flexibility in enforcing the DMA's interoperability mandate to make sure that there's sufficient time for resolving all significant technical and policy hurdles."



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Screenshot Showcase



Posted by Meemaw, July 16, 2022, running Xfce.

Good Words, Good Deeds, Good News

compiled by Meemaw

High School Students Sign Yearbook



Brody was so excited the day the yearbooks arrived at his school, but when everyone was signing each other's books, very few would sign his. Two just scribbled their first names, but many just refused. He ended up with 2 students and 2 teachers writing in his yearbook. So, Brody wrote in his own yearbook, "I hope you get some friends next year."

When his mother looked in his yearbook, she was heartbroken, seeing Brody's words to himself, in addition to the bullying he had experienced at his last school and this one as well. Frustrated, she vented on Facebook. Amazingly, the next day at school, a group of high school students came into Brody's class and asked to sign his yearbook. When it was all over, Brody had over one hundred signatures in his yearbook, with comments like:

"Brody — you are the kindest little kid. You are so loved. Don't listen to the kids that tell you different." "Brody — I hope you have an amazing summer! You're worth it and you matter!"

Some of the older students have also gone with him for ice cream, or planned other activities for the summer.

Vicky Returned The Money



Vicky was looking for some furniture to furnish her new house, and she went on Craig's List. As she was scrolling, she saw two couches and a matching chair that looked really good, and were listed for free. She figured it might be some kind of gimmick, but she called, and was told that the family had lost a loved one, and was trying to get rid of the furniture they didn't want. She went and got the furniture and brought it home. While she was checking it over, she felt something funny in one of the cushions. When she unzipped it she found several envelopes, each filled with cash. Not considering any other course of action, she called the family back and gave them the envelopes. When it was all counted, the family told her that there had been \$ 36,000 in the envelopes!



The family gave Vicky a reward of \$ 2,200, which she used to purchase a refrigerator for the new house.

Keeping the Dogs Safe

A non-profit in Colorado Springs called "Vested Interest in K9s" has donated bullet and stabprotective vests to two of the K9 officers in their area. One officer, Moody, will have the following embroidered on his vest: "In memory of Jinx, El Paso County SO, EOW 4/11/22". The other, Goose,

Good Words, Good Deeds, Good News

will have this: "Honoring those who served and sacrificed".



The non-profit's website states their mission -

Protecting K9s is our priority. It's not just a tagline, we demonstrate our commitment to protecting K9s by ensuring that the vests we donate to them are of the highest quality (Made in USA) with NIJ certified ballistic panels to provide the maximum amount of protection. K9s are a big investment of time and finances by the community, by the handler, and by the department. You cannot put a price on the peace of mind that comes with outfitting their K9 in certified body armor that is manufactured based on the latest design and manufacturing technologies.

The vests are valued from \$ 1,700 to \$ 2,300.

Traffic Stop Turns into Moment of Prayer

Dr. Ashlye had been at the hospital with her father during his treatment for stage four Colon Cancer, and they were on their way home when she got pulled over for speeding. Her father told the officer, "This is my baby girl. She's driving me back home from treatment, I had chemo."



At that, the officer decided there was no way he was going to write the ticket, and instead, sat in the car for a few moments to figure out what to say. The officer had just returned to work after having part of his colon removed to treat his ulcerative colitis.

When he got back to the car, he gave Ashlye's father a small cross, and asked if he could pray with them. During the conversation, she snapped the photo above, and when her father passed away in May, she posted it on her social media site as a tribute to the men. Her page was filled with messages of love and prayers.

"Thank you for sharing this beautiful story in your time of grieving. Prayers for you and your family," one person wrote.

Money Raised for Employee

Kevin had worked for Burger King for 27 years, and they celebrated that by gifting him a movie ticket, candy, a coffee tumbler, and a few pens. In spite of the sparseness of the gift, Kevin was still thankful. One of the other employees who was at the party posted a video on TikTok.



Kevin's daughter Seryna started a GoFundMe to honor her father for his years of hard work. He had started at Burger King to gain custody of his two daughters, then kept working there. He had never taken any time off or called in sick. Servna stated, "He originally began working at this job as a single father when he gained custody of me and my older sister 27 years ago. Then as our family grew and he remarried, he continued to work here because of the amazing health insurance that was provided through this employer because it was unionized. Which got all four of his daughters through high school and college with full healthcare coverage. My dad continues to work here, because though he does look young, he is coming up on retirement age and leaving would cost him his retirement. In no way are we asking for money or is he expecting any money but if anyone feels like blessing him he would love to visit his grandchildren."

The fund collected \$125,000 in the first four days, and has, at the time of this writing, collected over \$383,000, including a \$ 5,000 donation from actor David Spade.





Good Words, Good Deeds, Good News

Teen Starts Lawnmowing Business



Fourteen year-old Tyce has never known a time when Eric was not around, having been dating Tyce's mother since Tyce was 2. After his mother and Eric married they talked about Eric adopting Tyce and his brother. They even hired a lawyer who said he would work pro-bono. However, other legal fees would be steep, and they would have trouble affording it.



DESTINATION

Tyce decided to help, so using a lawnmower his mother bought, he started mowing lawns in May under the name Tyce & Company Lawn Service. He now cares for 16 customers' yards, and has started earning money.

Social media has had great comments. "Incredible testament to a great man and father. Love this!"



Screenshot Showcase



Posted by luikki, July 11, 2022, running KDE.

PCLinuxOS Recipe Corner Bonus



Microwave Meatloaf

Serves 2

INGREDIENTS:

8 oz (225g) lean ground beef 1/3 cup (43g) onion, finely minced 1 teaspoon garlic powder 1/2 teaspoon black pepper 1/2 teaspoon salt 1/2 teaspoon dried thyme or oregano 1/2 cup (20g) bread crumbs 1 tablespoon Worcestershire sauce 1 large egg 1/4 cup ketchup 2 tablespoons brown sugar

DIRECTIONS:

In a mixing bowl, combine beef, minced onion, garlic powder, black pepper, salt, thyme or oregano, bread crumbs, Worcestershire sauce and egg and mix well. Pack the mixture into a microwave-safe baking dish, pressing to create an even surface.

In a small bowl, mix the ketchup and brown sugar. Brush the top of the meatloaf with half of the sauce, reserving the rest. Cover with a vented lid and cook for 4-5 minutes or until the meat is fully-cooked. Brush or spread the remaining sauce on top of the meatloaf while hot.

Allow the meatloaf to rest for 5-10 minutes before serving.



NUTRITION:

Calories: 164 Carbs: 14.8g S Fiber: 0.6g Protein: 11.7g

Sodium: 399mg

TIPS:

Substitute Ground Turkey for ground beef. Top with taco Sauce instead of the ketchup mixture.



PCLinuxOS Puzzled Partitions



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 dame.

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 vou 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 be able to use all seven (7) of the letters in S your set to form a "legal" word.

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 LO N R T L S LL

- 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
- Download 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!











Possible score 242, average score 169.

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PCLinuxOS Puzzled Partitions

Word Find: August, 2022 Car Parts

C P O N S Y C E W S E K A R B R E W O P U P Z Q T U B Y V N Q L I E T A R E Y Q D N I J G L O V E C O M P A R T M E N T C V A E A D O E L R N P R K Z K P O W E R S T E E R I N G H A K X I R S T M T B C L A I G E A R S H I F T G V S W J F Z ACCELERATOR **AIR CONDITIONER** M W Z U T J A D L T P S Z V O P G K O T A C H O M E T E R C ALTERNATOR AXLE S W F T E N R Q H L A C H N R J N O I T I N G I B X U D U J BRAKES H C E S R Q E S F U W B D C F U W N T P E Y S E K A R B O J BATTERY A F O I X P L R X D Z L O G W C E K L F V R U P X I D F F S CARBURETOR CAMSHAFT F W C G S I E E E R O N V O H H J L U K F E U F Z A C K K T CATALYTIC CONVERTER CHASSIS T S J E K N C W O F N Z C U D A B O L U N A K B S G F Y R E **CRANK SHAFT** CRUISE CONTROL D M B T R U C T I U F W A O C S A R D G X U E J R S B L E E H T W O D V A N R T P I H N U S V T I X P N E G E A J P L R CYLINDER DIESEL ENGINE S G L O M N A I R C O N D I T I O N E R I Z A P T R C C F I **DRIVE SHAFT** DIFFERENTIAL E O M C R M J M N I N V L U F S E O S G X S L A R O X P F N EMERGENCY BRAKE ENGINE BLOCK G P P E L F E Y G G E C Q K G B F C N H W U B G E T N S U G EXHAUST SYSTEM **GEAR SHIFT** E S T I L Z R Y C N K E W X L C F E P Z Q W P W V A F E M C **GLOVE COMPARTMENT HEADLIGHTS** C L U J S W M D R U A D T O G T L S F N M R E D N I L Y C O A I X F S T G F T S R H C E P E N I M P E O X D O D P T S L **IGNITION** MANIFOLD 0 C K A I P O V W I B K D I S R D U B X T R B B C A P E B U MUFFLER **ODOMETER** X T A O M U N N V E Y L Z E F I A R Q C S J T D C R J R G M PISTON POWER BRAKES Z H T J W T H E D B C J I X W Y T C W V Y J Q Y I O O E A N POWER STEERING I E G F D D S Q P R N D H R X C R A N K S H A F T J W T Z B RADIATOR R A E R Y H L D U M E E C Z C V M A Z Q T A U N Y J Y E V B SPEEDOMETER STARTER R D F L A W F M L I G T G N A K W W E Z S A I R L G M M F D STEERING COLUMN **SUSPENSION** A L A F W O P J F N R J E Y K O U U S P U A T F A R C O U Z TACHOMETER J I T R H J I M T R E U E M W F X M G B A Q S W T I M D H G I G P L Y Y B M S N M H H B O U X O K B H P X H A V H E H O Q H S F M Y K A T R E P K C V D M W X H X O Y E C X F E O U Y T G Q O B C U P V J H E S P O O X K K E E O D F E X P R J X S X J W X U K W Q M D G S U S P E N S I O N W C J A S I B

Download Puzzle Solutions Here

Car Parts Crossword



- A metal rod that is connected at one end to the transmission, and on the other end to the differential. It transmits torque from the transmission and creates rotation.
- 2. A device that displays the vehicles traveled distance.
- 3. A device that works with the battery to generate power for the electrical components of a vehicle.
- 4. A device that is useful in measuring the operating speed of an engine at the revolution of RPM and is helpful for many types of vehicles.
- 5. A system of hydraulics used to slow down or stop most motor vehicles.
- 6. A device used in internal-combustion engines to produce an explosive mixture of vaporized fuel and air.
- 7. A device that absorbs noise, especially one used with an internal-combustion engine.
- 8. The part of the engine that distributes the air/fuel flow between the cylinders.
- 9. A cylindrical plug moving up and down the engine cylinder. It transforms the force of expanding gases in the cylinder into rotation, helping to move a vehicle.
- 10. A device, especially the gas pedal of a motor vehicle, for increasing speed.
- 11. A structure that contains the cylinders, and other parts, of an internal combustion engine.
- 12. An automobile exhaust-system component containing a catalyst that causes conversion of harmful gases into mostly harmless products
- 13. The central component of a vehicles cooling system by monitoring and regulating a vehicle engine's temperature and prevent it from overheating.
- 14. Objects used in internal combustion engines (to operate the intake and exhaust valves),
- 15. A set of gears that transmits engine power to the wheels, allowing them to rotate at different speeds on turns.
- 16. A protective lattice of shock-absorbing components such as springs and dampers to make your ride smoother.
- 17. A set of metal pipes that carries away noxious emissions created by the combustion of gas usually from an automobile engine.

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PCLinuxOS Puzzled Partitions

Mixed-Up-Meme Scrambler



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Posted by zoid, July 4, 2022, running Trinity.

Posted by fluffy butt, July 24, 2022, running KDE.



Posted by parnote, July 15, 2022, running Xfce.



Posted by francesco bat, July 12, 2022, running Trinity.