# The PCLinxOS magazine

Volume 170

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# Happy St Patrick's Day!







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### The **PCLinuxOS** magazine

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# From The Chief Editor's Desk...

So now filling the news stream are endless reports of coronavirus (specifically SARS-Cov2) mutations. There's the British B.1.1.7. There's the South African B.1.351. There's the California CAL 20C. There's the New York B.1.526. There are many, many more variants of the coronavirus that causes SARS-Cov-2. And, they are all nasty little buggers.

Yes, we need to monitor these variants so we know whether or not (or how much) people are at risk, and to be able to plan how to handle them should they become the dominant strain. But do we really need to report on every. single. solitary. variant? Yes, the scientists and the doctors and the nurses and all the other healthcare professionals need to know if the vaccines that are still being rolled out are effective against these new variants. But does this information need to flood the airwaves, creating hysteria?

Most people outside of the scientific and medical communities simply don't possess the ability to fully comprehend the genetic technobabble of these reports. Hell, there are a lot of scientists and medical personnel who struggle with it, as well. So probably the last thing we need are the talking heads on the nightly news (who probably understand none of it) causing panic and mayhem. There's a LARGE gap between keeping people informed and whipping a crowd into wild hysteria. The talking heads excel at the latter. It does, after all, make great headlines, even at the expense of the truth. And big, sensational headlines increase viewership, which increases advertising prices, which increases profits for the broadcaster.

Remember. This is what virii do. They mutate. They always have, and will always continue to do so. Transcription errors in the genetic code of the virus when it reproduces is one of the things that causes



these variants. Sometimes, the virus adapts to thwart something that has blocked its ability to infect and multiply. These mutations can cause a virus to become more easily transmissible, or just as easily cause a virus to be more virulent.

These mutations can also go the other way. The right mutation can cause a virus to become less transmissible or less virulent. There are some theories that this is exactly what happened to the H1N1 influenza virus that was responsible for the 1918 Spanish Flu pandemic. It just mutated itself

right out of the headlines. The mutations of H1N1 caused it to become less virulent, less deadly, and less transmissible, or so the theory goes.

I'm not advocating for keeping such information locked away or behind closed doors. But you don't have to drive it into the ground with wall-to-wall, gene-by-gene coverage, either. Like I mentioned before, there's a LARGE gap between keeping people informed and whipping up mass hysteria. When you drive it into the ground with the wall-to-wall, gene-by-gene coverage, you are achieving the latter. Those who want to know more should have the resources already available to seek out the additional information, should they desire.

Of course, it also comes into play whether or not the news media deserve our trust, anyways. Their recent track record has been way, way, way less than stellar. Little of what is pawned off as news today is really news at all, at least by traditional measures. I know. I was once a member of that "mainstream media" establishment years ago. The media today is much more interested in pushing an agenda than they are in telling the truth or just telling the story about what happened. And if that story doesn't pair well with the agenda they are pushing, it simply gets omitted, as if it never happened. These were things that we were taught to NEVER do, no matter what.

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



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# Two PCLinuxOS Family Members Finally Meet

#### by Paul Arnote (parnote)

Things have been crazy over the past year, with the latest dose of crazy imposed by the coronavirus pandemic. As a result, many across the globe have endured lockdowns and travel restrictions. People haven't been as "able" to get out and about in any manner that they would have normally been able to do in the times before the pandemic.

Face-to-face meetings have been pretty much out of the realm of possibilities, out of fear of spreading COVID-19 to others. The pandemic has definitely impacted and changed our interactions with others.

New Zealand has done a remarkable job squelching the effects of the pandemic on its population. The country of five million people closed its international borders and imposed mandatory social distancing early in the pandemic. As a result, New Zealand has only had just over 2,330 cases of COVID-19, and just 25 deaths attributed to the virus since the pandemic started. You would be hard pressed to find a country in the world that has even come close to New Zealand's ability to contain the spread of the virus.

With things so well under control in New Zealand, two PCLinuxOS users jumped at the chance to finally meet, face-to-face. On February 13, 2021, jimwilk, a.k.a. Jim Wilkinson, traveled with his wife, Rita, to meet Treedragon and his partner. Both live in New Zealand.





Jim Wilkinson, left, and Treedragon, right.

"On a beautiful summer morning, we traveled up the Coromandel Peninsula and visited the superb environment that is Treedragon's home. I know we have all seen Treedragon's great photographs of his area, but, believe me folks, the area is even better than depicted in the shots.

"Treedragon and his partner made us very welcome there in the Coromandel ranges. I sure hope to go back for another visit sometime soon."

"We had hoped to meet them last August but, back then, Covid matters in our largest city Auckland meant that travel was less easy to justify. There are currently no restrictions in New Zealand. We thank our lucky stars each day that we live in this country," said jimwik.

Treedragon added, "A pleasure indeed to meet the man behind the words, and to experience both Jim and Rita finding enjoyment in their visit.

"The planned earlier visit would have worked even better with greater arrays of colour and with less of the drought effect currently starting to really show. While we were down in the food forest area, I was asked by Rita, "How do you decide what to do next....," as she surveyed the array of stuff needing attention, (note to self). Well, I hesitated on that, as I had no adequate answer to that eternal conundrum, but I am pleased with myself for resisting the temptation to offer pruning shears, rake, harvest basket or similar. However, I was more than compensated with a welcome break to the seasonal routines and a chance to share a little. Maybe next time, as more visits are promised.

"The lockdown aspect in this country has stopped visitors from far off lands, and for us being tucked away off the beaten track, it has meant an increase in New Zealanders visiting, as they realize there is magic to be found in their own country. So, thank you Jim and Rita for taking the opportunity to visit



The PCLinuxOS Magazine

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and see behind the photographic vista and get a "feel" of the "place."

Jim and Rita's visit to Treedragon's lair happened just one day before New Zealand officials instituted a three-day lockdown for Auckland (New Zealand's biggest city) on February 14, 2021, after three members of one family tested positive for COVID-19 in Auckland. Those new cases now make just four in the last three months, and the first lockdown in New Zealand in six months.

I know that the question of meeting other PCLinuxOS users has, again, recently come up in the PCLinuxOS forums. While the middle of a pandemic might not be the best time to meet up with other PCLinuxOS users, it can be the perfect time to start planning a meeting for once this pandemic is in our rearview mirror.

Meemaw and I, despite having "worked together" on The PCLinuxOS Magazine for many years, have never met face-to-face. We've burned up the email wires, and always do. We've "talked" extensively on IRC. We've texted each other on our cell phones. We've even talked to one another on the telephone. We are planning/hoping to get together for a trip to the Kansas City Zoo, just as soon as the weather turns decent. Even though Meemaw grew up in the Kansas City area, she hasn't been to the Kansas City Zoo in many, many years.

If you live near another PCLinuxOS user, reach out and try to meet them. PCLinuxOS has always had a close, family kind of feeling to it, especially among PCLinuxOS forum members. So, why not try to meet those other family members? If you do, let us know about it here at The PCLinuxOS Magazine. We might just feature your "getting to know you" escapades in a future issue. And remember ... pictures, or it never happened!





# PCLOS-Talk

Instant Messaging Server





# Screenshot Showcase



Posted by daniel, on February 14, 2021, running LXQT

# PCLinuxOS Recipe Corner



#### Tortilla Casserole

#### **INGREDIENTS:**

1 pound lean ground beef

1 small onion, chopped (1/4 cup)

1 1/3 cups hot water

1 cup Thick and Chunky medium salsa

1/2 cup milk

1 package Hamburger Helper™ cheeseburger macaroni

6 flour tortillas, 6 inch

1 1/2 cups shredded Cheddar cheese (6 oz)

#### **DIRECTIONS:**

Heat oven to 350F (176C). Cook beef and onion in a 10-inch skillet over medium-high heat, stirring occasionally, until brown; drain. Stir in hot water, salsa, milk, uncooked Pasta and Sauce Mix. Heat to boiling, stirring occasionally. Reduce heat; cover and simmer about 7 minutes, stirring occasionally, until pasta is tender.

Cut tortillas in half. Spread 2 cups beef mixture in an ungreased rectangular baking dish, 11x7x1 1/2 inches, or shallow 2-quart casserole; top with 6 tortilla halves and 3/4 cup cheese. Spread with 2 cups beef mixture; top with remaining tortilla halves.

Top with remaining beef mixture and cheese.

Bake uncovered 15 to 20 minutes or until hot and cheese is melted.

**Nutrition:** 

Calories: 447.7 Carbs: 27.9 Fiber: 4.4q Sodium: 919.9mg



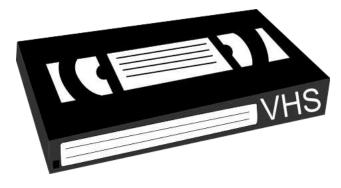


## H.264 vs H.265: The Evolution Of Video Codecs

#### by Paul Arnote

Ever since computers became commonplace and mainstream, users have sought ways to incorporate video into their computing lives. In 1984, the CCITT (now called the ITU-T) created the first main video compression standard, then called H.120. Its quality was quite poor, especially when compared to what computer users today are accustomed to. Despite its poor quality, it allowed developers to refine their approach to video encoding, and to achieve the high quality video we all can access today.

Video files, especially high quality ones, have always been behemoths when it came to file size. While that is still true today, the video codecs used today to encode and compress video result in infinitely smaller file sizes than raw video, and significantly smaller file sizes than those codecs used just 20 years ago.



I'm sure that many of you reading this can remember the infancy of home video, with the relatively low resolution VHS and Beta tape systems (compared to DVD and Blu Ray, VHS has resolution of 240 x 320, vs. 480 x 720 for DVD, and 1080 x 1920 for Blu Ray). Boy, oh boy, have we ever come a long, long way since those days! Advances in video

compression standards gave users DVDs, which offered much higher resolution than the tape-based home video systems, and much clearer pictures as a result. DVDs are currently in the process of being supplanted by Blu Ray discs.

The progression and advances in the past 40 years has been mind boggling. As CPU speeds have steadily increased, coupled with drastic advances in the video processing capabilities of today's video cards, advances were inevitable. Add in the (over)abundance of mobile platforms recording and streaming unprecedented amounts of video, those mobile networks crave a video compression standard that results in smaller file sizes with higher video quality, all so they can save precious (and limited) bandwidth on their networks while maintaining the quality that users expect and demand. So, the service providers to all those mobile devices running around out there have an intense interest in supporting/encouraging the development of more efficient video compression standards. A guick search of ITU-T members shows all three of the "big" U.S. mobile networks (Verizon, T Mobile, and AT&T) as members.

I'll leave the "history" of the video compression standards to Wikipedia, which covers them quite nicely. We'll focus our discussion more on the two current video compression standards that are available and used today, and the two that dominate today's video landscape. We'll also take a brief peek into the future of video compression.



H.264



H.264, also referred to as AVC, or Advanced Video Coding, was released in 2003. It gave rise to the very common \*.mp4 video files we all are familiar with. In fact, H.264 is the most common video compression standard used to encode videos on Blu Ray discs.

Having come out 18 years ago, the H.264 standard was released before 4K, and now 8K, video was available. (Forget for a moment that you cannot even see in 4K, much less 8K, but that is a discussion for another time.) You will often see the open source implementation of H.264 referred to as x264.

As such, H.264 is starting to show its age. It is \*\*just barely\*\* able to handle 4K video. As for 8K video, fuggedaboutit. It has to do with how H.264 is set up to handle CTUs, or coding tree units. H.264 can handle between 4x4 and 16x16 pixel block size CTUs. As such, H.264 peaks out just at the level of 4K video.

H.265

# H.265 HEVC

### High Efficiency Video Coding

As standards started to be drawn up for 4K video and beyond, it became apparent that the H.264 standard would need to evolve in order for video compression requirements to keep pace.

Released in 2013, H.265 expands CTU capabilities from a 16x16 block of pixels, up to a CTU of 64x64, and an assortment of other enhancements that affect performance and file size. H.265 is also known as High Efficiency Video Coding. The open source version of the H.265 codec is also known as x265.

Here's the REAL upside to H.265: smaller file sizes. When a video is encoded with H.265 versus H.264. the H.265 video, when encoded at the same resolution as the H.264 video, will be 40 to 50 percent smaller in file size. So, users can expect clearer images compressed into a smaller space than ever before. In my own experiences, H.265 encoded video files were around 40 percent smaller than their H.264 encoded counterparts. Encoding was done on the same machine, under similar loads, at the same resolution.

So, if there's an upside, there's always a downside. That downside is, due to the complexity of the video compression algorithm, encoding is much slower with H.265 than H.264. In my own tests, H.265 video took at least two to three times more time to encode

than the same video encoded with H.264. Using Handbrake (available in the PCLinuxOS repository), converting a 93 minute \*.webm encoded video to H.264 encoded \*.mp4 video took roughly two hours to complete its encoding. Just changing the encoder to using H.265 (and leaving all the other settings the same as the H.264 encoding), that same 93 minute video took over five hours to encode in a H.265 encoded \*.mp4 file.

As far as the decoding part (which is what happens when you watch the playback of a compressed video), that appeared to be seamless and fully transparent to the end user ... which is what you want. The non-technical consumer of video really doesn't care about the encoding side of things. They are pleased to just be able to watch high quality video playback.

H.265 appears to be the encoder d'jour, now represented by up to 40 percent of Blu Ray discs using the encoder to compress video. It offers disc makers and content creators a choice of either having smaller file sizes at the same resolution, enabling them to offer even more "extra" content on discs, or offering even higher resolution video than previously available in the same amount of space used by H.264 encoded video.

The newer video compression standard supports up to 8K UHD video, and is the second most widely used video coding format, right after H.264/AVC.

On a side note, this month's Tip Top Tips column, featuring a tip from Archie, centers around converting video to H.265 using VLC. As with all tips, your mileage may vary, and mine did when attempting to do the conversion with VLC. My copy of VLC would crash whenever attempting to use it to convert any video to the H.265 encoder. Nearly all of my "experience" using the H.265 encoder has been with using Handbrake as the program that handles the re-encoding/transcoding. Using Handbrake, I've never experienced any problems, aside from my own impatience, brought on by the much slower

encoding of H.265 video. In the end, I'm always pleased by the high quality video resolution of H.265 encoded videos and the significantly smaller file sizes.

#### What's The Future?

Don't think that the ITU-T is resting on its hind guarters, happy with where H.265 has taken them. Nope. They are already working on the next version of video compression. It seems that the "future" may be just around the corner.



In July 2020, the H.266 video compression standard was finalized, with the aim of making 4K broadcast and streaming commercially viable. It is also being dubbed the "Versatile Video Coding" video compression standard. (Is it just me, or should they be running out of superlative adjectives to name these new video compression standards by now?)

The early claims surrounding VVC/H.266 is that it will be capable of yet another 50 percent reduction in file sizes over H.265. When compared to H.264 (by far the most prevalent video compression encoder in use at the time of the writing of this article), that will represent high quality video, stored in a file that is roughly only one-quarter of the H.264 file size. VVC/H.266 will also support up to 16K video, as well as 360 degree videos.

All of this comes at a cost. Remember me telling you that H.265 video encoding takes two to three times as long to encode as it does to encode a video using H.264? Well, it seems that VVC/H.266 will take up to 10 times as long as using H.265! There is a significant cost in computing and the time it took to encode H.266 video, according to an article about the new video compression standard on Bitmovin.com. Decoding complexity of H.266 is expected to be roughly twice that of H.265, too.

There is currently no x266 (open source) encoder for H.266 available at this time, either. However, the same group, MulticoreWare, who oversaw the creation of the x265 codec, is also overseeing the creation of the forthcoming x266 open source implementation of the H.266 video compressor.

I suspect that the resource-heavy compression and encoding of H.266 will be somewhat mitigated by newer, more powerful CPUs and GPUs, as they come out on the market for the general consumer.



Also, don't discount some company or consortium that just dumps everything that ITU-T has done, and tries to take the whole process in a whole new direction. Even though it seems like it might be a colossal undertaking, there are companies out there doing just that. One such company is Cinegy LLC, with their Daniel2 codec. They have literally thrown out the bath water, the tub and the baby, and left all legacy dependencies and old codec architectures behind to create fully-GPU based a encoder/decoder. In the process, they claim to have created the world's fastest decoder. It's no secret that GPUs use incredibly fast processors (typically, far faster than CPUs), so it makes sense to offload some of the CPU-intensive work to the GPU. And. it's going to be the GPU anyways that is responsible for displaying the video image, thereby eliminating

the bottleneck between the slower CPU and the faster GPU.

Here's the summary statement by Cinegy about the Daniel2 codec, from their website:

"Traditionally video codecs have been defined by chip makers and not by software developers. Daniel2 is different. It was designed by software developers that for decades had suffered implementing "industry standard" codecs such as MPEG2 or H.264 in software running on ordinary PC hardware, but these had not been created with PC hardware in mind. Daniel2 was designed to be a massively multithreaded parallel processing software codec that runs extremely fast on CPUs and even faster on GPUs with their thousands of parallel cores and ultra fast RAM."

It will be interesting to see if the Daniel2 codec, or any other alternative codec, receives any traction in the market, which could prove to be an insurmountable obstacle. Users aren't going to be any too happy to lose legacy support, which is part of what Daniel2 does. Still, since "the Daniel2 codec is acquisition and production codec meant to be used for recording from camera sources, editing and post-production as well as playout," users may still see some benefit from its use earlier on in the production cycle.

#### **Summary**

Things could get quite interesting for video enthusiasts in the next few coming years. Higher resolution video stored in smaller files sounds like a win, win, win for everyone concerned. Sure, the newer video compression codecs are slower to encode and require a LOT of computing power and time, but that is a one time expenditure. The end results will be worth it, allowing users to store more high quality content in the finite spaces they have available.

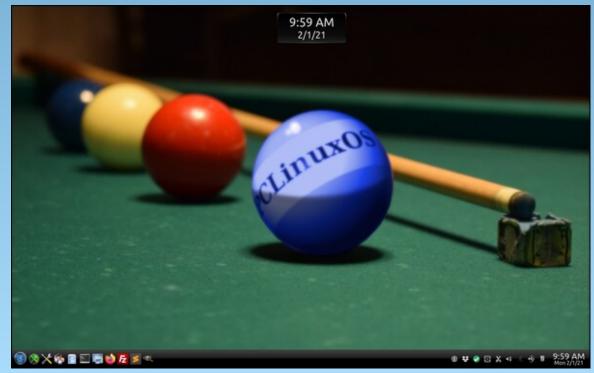




# DOS GAMES ARCHIVE WWW.DOSGAMESARCHIVE.COM



# Screenshot Showcase



Posted by Knot-2-Smart, on February 1, 2021, running KDE.

# The End Of The EU-US Privacy Shield: A Great Challenge for Businesses

by The Cat

On July 2020, on its "Schrems II" judgment, the Court of Justice of the European Union (CJEU) invalidated the European Union-United States Privacy Shield, an international agreement regarding the storage and processing of personal data from European Union (EU) residents by businesses in the United States. While many politicians and the media expressed their surprise and concern of such an outcome, the Privacy Shield invalidation was an announced failure for most of those acquainted with the very different views on privacy held by the US and the EU, and on the not very successful diplomatic history regarding transatlantic treaties on those matters.



(photo by openDemocracy)

The Privacy Shield, a problem child born on the Harbor

Back in the late 80's. Europeans started to concern themselves with how their personal data was being stored and processed. As a consequence, came the Safe Harbor decision in 2000, establishing privacy principles on EU-US personal data transfers for commercial purposes. Nevertheless, Amendments Act of 2008 to the US Foreign Intelligence Surveillance Act (FISA), adding the controversial Section 702 empowering NSA's PRISM program and exposed by Edward Snowden, resulted in an increasing distrust from the European side, resulting in its invalidation by the CJEU in 2015. Politicians and businesses tried to save the agreement with a slightly improved and patched

version – the Privacy Shield –, in 2016. However, the CJEU didn't swallow it and nullified the agreement. So, what to do now?

Things don't look very shiny for the American counterpart. As there was no period of grace in the court decision, at this time you or your contractor should already have implemented implementing) the measures determined by the Court, with the risk of being fined by some European data protection agency. Some recent examples show that they are not taking it easy: on October 2020, H&M's Service Center in Hamburg had a 35.3 million Euro fine for the unlawful monitoring of several hundred of its employees by its management, and Twitter was fined on more than US\$ 500,000 on December 2020 by Ireland's Data Protection Commission for having failed to notify a data breach on time and to adequately document the breach.

Now you may be thinking, "I am in the US, so I am not under the jurisdiction of this European court, they have nothing to say about the way I run my business". This is true, at least in part, because the European Union changed its approach toward the definition of personal data. With its growing importance as an asset to both companies and governments, the EU's General Data Protection Regulation (GDPR), that entered into force in 2018, started to consider data as a highly valuable good, and as so, subject to certain export rules, as any other good. Therefore, when your company processes or stores personal data in the US, you are importing this good named "personal data" from the EU and executing the tasks your business partner asked vou.

The Privacy Shield was like a "free trade agreement" regarding the importing of European data. With its

annulment, you fall under stricter rules to be able to keep importing this data, which are: adopt appropriate safeguards and provide a level of protection equivalent to that found on European countries. The "appropriate safeguards" demanded by the GPDR are one of the following:

- standard data protection contractual clauses (SCCs): adding special, previously EU approved clauses in your contract;
- ad hoc contractual clauses: tailored to your business specificities, but more risky, as they are not previously approved as the SCCs:
- binding corporate rules: for groups of enterprises:
- codes of conduct;
- certification mechanisms: by now they are few, and normally quite costly.

In general, the simplest way for small and medium enterprises to adopt these "appropriate safeguards" is by employing SCCs, for having been written and previously approved by the EU. But remark that they will change soon. And you will have to change your clauses again! Here is their draft text, still subject to modifications.

In addition to those appropriate safeguards, companies must provide an equivalent (but not identical) level of protection that one would find inside the EU. To implement this there is no onesize-fits-all formula. The EU states that those measures should be taken on a case-by-case basis, according to the kind of operation being performed, and the kind of data being stored/processed.

For it, you should first make an assessment on the intrinsic risks of your activity, like hackers, infrastructure and the like, and indicate what measures you will take to counter these risks, like strong cryptographic keys, secure servers, measures to avoid loss of data and damage to

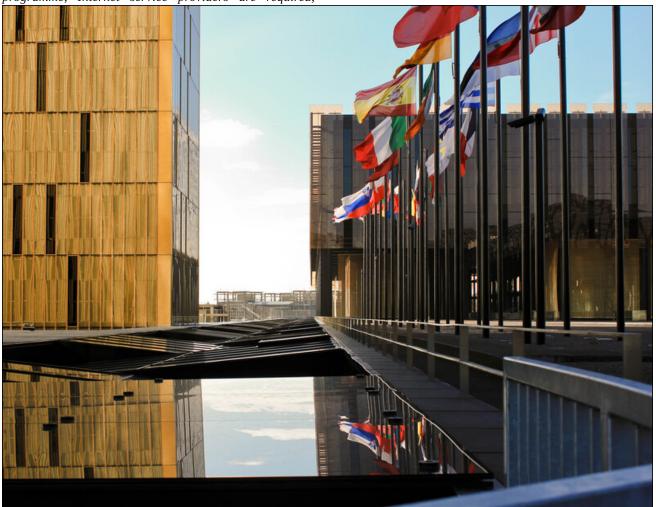
#### The End Of The EU-US Privacy Shield: A Great Challenge for Businesses

devices, etc. Until there, nothing new, you would probably say. The new issue is that the CJEU stated that the Section 702 of FISA and the Executive Order (E.O.) 12333:

"Allow the surveillance of individuals who are not United States citizens located outside the United States in order to obtain 'foreign intelligence information', and provides, inter alia, the basis for the PRISM and UPSTREAM surveillance programmes. In the context of the PRISM programme, Internet service providers are required,

according to the findings of that court, to supply the NSA with all communications to and from a 'selector', some of which are also transmitted to the FBI and the Central Intelligence Agency (CIA)".

Moreover, "Section 702 of the FISA does not indicate any limitations on the power it confers to implement surveillance programmes for the purposes of foreign intelligence or the existence of guarantees for non-US persons potentially targeted by those programmes."



CJEU's building (photo by katarina\_dzurekova)

#### The End Of The EU-US Privacy Shield: A Great Challenge for Businesses

The most concerning, according to the CJEU is that "data subjects have no right to an effective remedy" in the courts against US authorities. This doesn't relate only with data inside the US, but also passing by it through its backbones. In the UPSTREAM program:

"Telecommunications undertakings operating the 'backbone' of the Internet — that is to say, the network of cables, switches and routers — are required to allow the NSA to copy and filter Internet traffic flows in order to acquire communications from, to or about a non-US national associated with a 'selector'. Under that programme, the NSA has, according to the findings of that court, access both to the metadata and to the content of the communications concerned."

Here lies thus the big challenge for American businesses and their European counterparts. They have to implement technical measures that avoid the access to the data they store/process by the US government under FISA and E.O. 12333 while at the same time abiding to American laws. This could include, for example, a statement, followed by the necessary technical measures, that they have not left purposefully open backdoors or spyware in their encrypting everything. systems. handling cryptographic keys to the European counterpart and don't keeping a copy of them, anonymizing or psedonymizing data before receiving it, not keeping logs or deleting them as soon as possible, etc. However, if this seems impossible due to the nature of your business, you unfortunately will not be able to store/process personal data from the EU in the US and should stop doing it immediately.

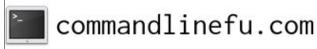
#### A Great Challenge for US Companies

American and European companies will have to use all their creative power to develop such challenging tools that comply with both US and EU law. Whether you are in the European Union or in the United States, check with your transatlantic business partner if you are fully compliant. The Court's

decision is in force since July 2020, without a period of grace, and, as you saw, the measures to be implemented are not easy and are time-consuming. Moreover, the several European data privacy agencies are being tough with non-compliance, imposing hefty fines.

#### More Information

- The General Data Protection Regulation (GDPR): https://gdpr-info.eu/
- EDPS Website Evidence Collector, a free and open source software developed by the European Data Protection Supervisor for the automation of privacy and personal data protection inspections of websites: https://edps.europa.eu/press-publications/edps-inspection-software\_en
- GPDR Checklist: https://gdpr.eu/checklist/, a lengthy checklist of all that must be implemented, with some templates and FAQs
- The European Data Protection Board's recommendations and examples for implementing those measures: https://edpb.europa.eu/sites/edpb/files/consultation/edpb\_recommendations\_202001\_s upplementarymeasurestransferstools en.pdf







Text
Phone
Web Surf
Facebook
Tweet
Instagram
Video
Take Pictures
Email
Chat

While Driving.

Put Down Your Phone & Arrive Alive.

# Sharing A USB Drive From Your Wi-Fi Router, Part 2

by David Pardue (kalwisti)

Connecting to an FTP Server with PCManFM-Qt in LXQt

#### Introduction

In my previous article, I omitted the LXQt desktop environment because I am not well acquainted with it, and was unsure about the status of its "parent" (LXDE). Although LXDE coexists with LXQt and is technically still being maintained, it is living on borrowed time because it has a GTK2 codebase. LXDE's most recent stable release dates from 2016. LXDE's founder, Hong Jen Yee (aka "PCMan"), found it impractical to base LXDE on GTK3. GTK3 broke backward compatibility and caused components to become more memory-hungry and slower. So Dr. Hong1 began experimenting with Ot as a base; eventually, his LXDE-Qt project merged with the Razor-qt project (in July 2013). LXOt is now the successor to LXDE. Although a bit rough around the edges compared to LXDE, LXQt is very usable and is progressing towards its goal of reaching version 1.0. (Its current release is 0.16.0). LXQt's primary goals are simplicity and being light on resources, with sensible default settings that meet most users' needs.

I have been testing the PCLinuxOS LXQt Community Release, created by daniel (Daniel Meiß-Wilhelm), on a spare partition of my trusty netbook.<sup>2</sup> This version resembles a Mini.iso, insofar as it does not include a large collection of applications; however, the applications are well-integrated, responsive and the system is visually appealing. The screenshots were taken from the most recent 2020.11 release.

#### FTP with FileZilla

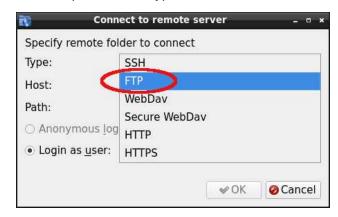
As I discussed earlier, one approach to transferring files on your home network ("home cloud" or "NAS Lite") is to use a reliable FTP client such as FileZilla. The FileZilla method works identically to what is described in the MATE section (in my first article).

#### Via FTP (using PCManFM-Qt [0.16.0])

The PCManFM file manager was originally developed as a lightweight alternative to Gnome's Nautilus. The LXQt version is known as PCManFMQt. The file manager can connect to a remote server via FTP and Samba. We will discuss FTP access here.

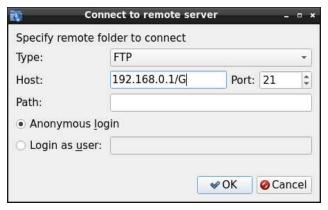
#### **Option A**

From PCManFM-Qt's Go menu > select Connect to Server. The "Connect to remote server" dialog window opens. Under Type, choose FTP.



Supply the information as shown at top right.





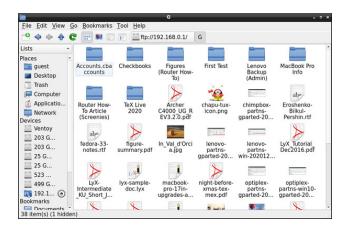
Click the OK button. The "Mount" dialog window appears.



Check that the Connect anonymously radio button is selected. Click the Connect button. It connects to the FTP server.

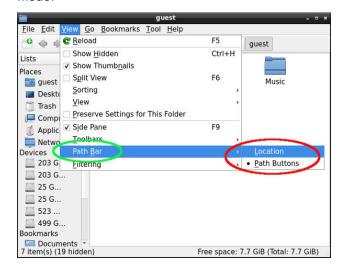


#### Sharing A USB Drive From Your Wi-Fi Router, Part 2



#### **Option B**

From the View menu > Path Bar > choose Location mode.

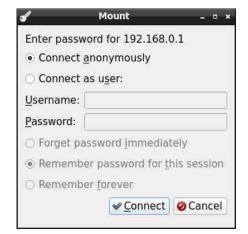


In the Location bar / box, type in the path as shown below. Next, click the "Go" button (the downward arrow icon). (center, top)

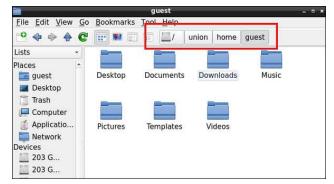
The "Mount" dialog window appears (center).

Check that the Connect anonymously radio button is selected. Click the Connect button. It should connect to the FTP server.



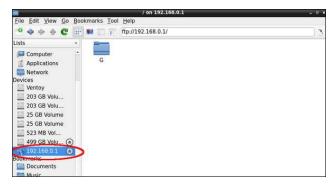


For comparison's sake, below is a screenshot of the Path Bar in Path Buttons mode. You cannot type anything in the Location bar when it is in this mode:



#### To Add a Bookmark

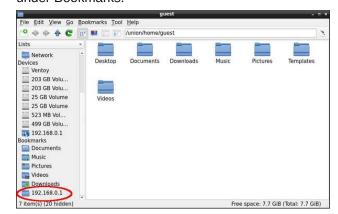
In the side pane, under Devices, click on the FTP server's URL to select it.



From PCManFM-Qt's Bookmarks menu > choose Add to Bookmarks.

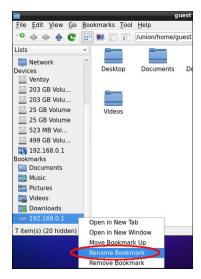


A new bookmark will be created in the side pane, under Bookmarks.

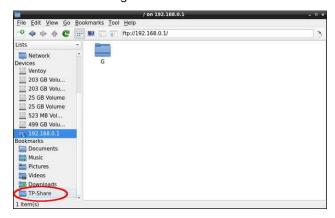


#### Sharing A USB Drive From Your Wi-Fi Router, Part 2

To change the bookmark's name, right-click on 192.168.0.1 and select Rename Bookmark.



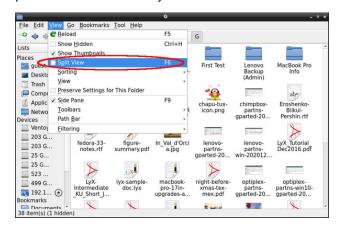
Type in the new name: TP-Share. The bookmark's name will be changed.



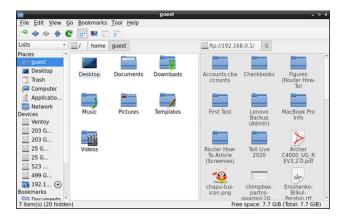
#### **Split View**

PCManFM-Qt added a new split-screen feature with release 0.14.0 (January 2019), which makes it convenient to copy files between two different locations.

Activate this from the View menu > Split View. Or, press the F6 function key.



Here is a screenshot of PCManFM-Qt with its Split View. The guest user's /home directory is on the left side of the screen, while the FTP server (TP-Share) is visible on the right side.



If you would like to read in more detail about PCManFM-Qt's features, or how to customize its behavior, the Lubuntu Manual devotes one chapter to the file manager. You can read it here.

<sup>1</sup> In addition to his work in computer programming, Hong Jen Yee is a physician – specializing in rheumatology – at Taipei Veterans General Hospital (Taiwan). He temporarily stopped development of PCManFM in 2008, to focus exclusively on his medical studies.

<sup>2</sup> HP Mini 210 with an anemic Intel Atom N455 processor and 2 GB of RAM (the maximum allowed).



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by Paul Arnote (parnote)

**CAT S42 Antimicrobial, Washable Cell Phone** 

Press Release: Bullitt Group, the global licensee for Cat® phones, today announced that the Cat S42 has been enhanced by advanced antimicrobial product protection, making it the first antibacterial phone. Every exterior component of the product has been treated with Biomaster® antimicrobial technology and tested to ISO 22196.

Based on the inclusion of silver ions during manufacturing, the process creates a permanent level of product protection, inhibiting the growth of microbes on the phone surface and therefore reducing microbial levels on the surface.

Research shows that our phones are home to thousands of germs, with one University of Michigan study finding in excess of 17,000 bacteria on handsets. We interact with our mobile devices many times a day — around 47 times, on average, according to research from Deloitte. Mobile phones

are handled and pressed to our faces, meaning that any bacteria or other microorganisms can easily transfer back and forth between the hard surfaces of your phone and your skin.

The Biomaster active antimicrobial agent is proven to inhibit bacteria cells from replicating, in testing a reduction of over 80% within 15 minutes was shown and 99.9% within 24 hours. Combined with the existing Cat phone rugged credentials that ensure the device can be thoroughly and regularly washed with soaps and water, sanitisers, and even bleach, the Cat S42 represents the next generation of hygienic product protection in smartphone design.

"Throughout 2020 we have consistently been driving awareness of the importance of mobile hygiene for us all, but this is vital for those among our customers working within a health or social care setting, and those visiting multiple sites for their job," said Peter Cunningham, VP Product Portfolio at Bullitt Group. "Using a Cat phone already allows them to have confidence that they can wash and sanitise their Cat phone regularly or between visits. The addition of antimicrobial product protection into the Cat S42 is another first for Cat phones, and will make the Cat S42 safer for users – such an important feature in the current climate."

The Biomaster-treated Cat S42 will be available from early 2021, with the treatment coming to other devices in the Cat phones range later in the year.

Tested to Cat phones' demanding rugged standards, the Cat S42 features MIL SPEC 810H and IP68 and IP69 ratings, and surpasses our rigorous and repeated drop testing from 1.8m onto steel, including multiple drops onto every side and corner. It's fully waterproof, tested submerged in water at depths up to 1.5m for 35 minutes. Like all Cat smartphones in



the range, it is also put through vibration and tumble tests, salt mist conditions, and it's built to operate in high and low extremes of temperature and to survive thermal shocks. Take it with you anywhere and everywhere. It's built tough to help you thrive in challenging outdoor work situations and extreme leisure pursuits alike.

The Cat S42 Smartphone has an MSRP of £229 / €249. The S42 with antimicrobial protection will be available in early 2021. For more information visit www.catphones.com.

#### **Key Specifications**

- \* Powerful 4,200mAh battery
- \* Water / Dust proof (IP68, IP69), Drop tested to 1.8M onto steel, MIL SPEC 810H, Corning® Gorilla® Glass 5
- \* Waterproof Smartphone up to 1.5 meters for 35 minutes
- \* 5" HD+ 18×9 display optimised for outdoor use with a touchscreen that can be used with wet fingers or when wearing gloves
- \* Android™ 10 (with upgrade to 11)
- \* 3GB RAM, 32GB ROM, Expandable Storage (microSD $^{TM}$ )
- \* Mediatek Helio A20 MT 6761D chipset, 1.8GHz quad-core processor
- \* 13MP rear camera, 5MP front camera
- \* LTE Cat 6, VoLTE, VoWiFi
- \* Textured, extra grip design
- \* Programmable Shortcut Key useful for Push to Talk (PTT), SOS (Lone worker app), or to easily launch its torch or camera

- \* Bluetooth 5.0, NFC
- \* 5mm audio jack (waterproof)
- \* Curated apps and content catalogue
- \* Dual SIM Nano SIM + microSD™
- \* 2-year warranty
- \* Android Enterprise support
- \* Security updates cover for 3 years
- \* Zero-touch support

*Editor's Note:* The phone appears to only be available in the UK at the moment, but US customers can sign up for a notification of when it's available. The estimated MSRP for the phone is expected to be around \$300 (US). While it probably isn't necessarily the most powerful cell phone around, most people buying this phone aren't buying



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

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

it for its power. They are buying it for its antimicrobial properties and its ability to be washed with soap and water, or even bleach. It appears that nearly all CAT phones can be washed, but the S42 is the first model to incorporate the Biomaster antimicrobial properties into the phone case. For more information on just how filthy your cell phone might be, check out the study from the US National Library of Medicine and the National Institutes of Health.

#### How Much Is Your Data Worth On The Dark Web?



**Comparitech** researchers analyzed over 40 dark web marketplaces to find out how much your credit card, Paypal, and SSN are worth to cybercriminals, and they revealed their findings in a report on their blog.

Any time your personal data is stolen through either a data breach or a successful phishing attack, more often than not your data will end up being sold on one of the many marketplaces that sell your data.

The prices for that data depend on several things. One is where you live. If you live in the US, your credit card data may only be worth an average of \$1.50, but credit card data belonging to a resident of

Japan may go for as much as \$8. Other stolen credit card information can go for as high as \$986. Of course, you may or may not be on the ropes for any charges made using your stolen credit card information, depending on where you live and whether or not you notice the charges.

Your Social Security number (SSN) (or other nationally issued identification number) isn't worth much by itself, but is often packaged into what's called "fullz," shorthand for full credentials, which couples it with other vital information that might make it useful. Fullz from the US run for a measly \$8, while fullz from UAE, Japan and Europe go for over three times as much, at \$25.

Hacked PayPal accounts can range in price from \$5 to \$1,767. See, nothing is sacred.

This only illustrates why it's so important to safeguard your personal information. You should also go to the Comparitech website to read the rest of their report. It will give you a much better idea of how much of your information is vulnerable.

#### 10 Year Old Sudo Security Bug Patched



A 10 year old "vulnerability" has been discovered in the code that makes up sudo, which is commonly used in Linux and Unix systems, according to an article on TechPost. Now, don't get all indignant or worried. So far, the vulnerability mostly appears to be only a "proof of concept" vulnerability. However, rogue botnets which attack Linux systems (and they are becoming more prevalent by the day) might be able to gain low-level access to affected systems via brute force attacks, and allow root access to the botnet, which can then wreak havoc on targeted systems.

Qualys is the firm that discovered the vulnerability, and it appears to only be accessible to users who already have access to a Linux/Unix based system. The bug requires local access, such as a user already having an account, or being granted SSH access, and was introduced in a code update in sudo that dates back to 2011. It involves a buffer overflow situation, where the buffer is read beyond the escape characters that tell sudo to stop. Those extra bytes can be changed, and in the process, somehow elevate user privileges. The bug was named by the Qualys researchers as "Baron Samedit," and can be tracked using the assigned code CVE-2021-3156.

The sudo authors have updated sudo with a patch (reported to be a relatively easy fix), and it appears in version **1.9.5p2** of sudo. If you're a sudo user, you'll be happy to know that the patch doesn't fundamentally affect how sudo works.



**CentOS Gets Another New Fork: AlmaLinux** 



As we reported in the January 2021 issue of The PCLinuxOS Magazine, RHEL announced that CentOS was changing directions as of December 31, 2020. CentOS is a favorite for servers across the world, and RHEL's change of CentOS to CentOS Stream didn't settle too well with CentOS users.

In response, one of CentOS's founding members, Greg Kurtzer, went back to work to create Rocky Linux. The Kurtzer-led replacement for CentOS is on track for a second quarter 2021 release.

Meanwhile, CloudLinux has also chosen to fork CentOS into a new distribution, named AlmaLinux. It seems that CloudLinux is putting their money where their "mouth" is, by backing the new CentOS replacement with \$1 million (US) annually. AlmaLinux currently has beta ISOs available on its website, and is based on the current RHEL 8. CloudLinux has promised to update AlmaLinux as RHEL is updated, just as has been done with CentOS over the years.

According to an article on TechRepublic, everything on AlmaLinux works pretty much the same as on CentOS, with one exception. Currently, cPanel isn't yet working on AlmaLinux. This should be remedied in subsequent releases of AlmaLinux, since cPanel currently works on CloudLinux.

According to the statement on the AlmaLinux website, "we intend to deliver this forever-free Linux distribution in Q1 2021 – initially built by our own expertise, but owned and governed by the community."

It will be interesting to see the differences between AlmaLinux and the forthcoming Rocky Linux. As we mentioned in our first article, the whole situation with CentOS is rapidly evolving, and continues to evolve at a brisk pace.

**PCLinuxOS Short Topix Roundup** 



**Electronic Frontier Foundation** (EFF) has reported that nearly a year after they called on Amazon to offer end-to-end encryption on its Ring doorbell

camera feeds, Amazon has responded with just that. Encryption, though, isn't the default setting, and users will have to turn encryption on deliberately.

**EFF** has also penned a scathing condemnation of government-operated autonomous robots and the surveillance threats they impose on the public. These rolling, trashcan-looking robots not only use cameras to navigate their surroundings, but they also are capable of recording all cell phones – down to each individual MAC address – that are, say, in an prescribed area surrounding a protest or gathering.

Thus, if your cell phone details are vacuumed up in a sweep of the area, you are incriminated as a participant, even if you have nothing to do with the protest or gathering.

Lifehacker covers a new Google Maps feature on Android phones. The new feature allows users to display the map in the lower half of the screen, while displaying the street-view of the current location at the top of the screen. The article gives step-by-step instructions on how to activate the split-screen display.

# Screenshot Showcase



Posted by mutse, on February 4, 2021, running Mate.

# PCLinuxOS Recipe Corner Bonus



#### Chocolate Pots de Crème for Two

#### **INGREDIENTS:**

1/3 cup bittersweet chocolate chips (2 oz) 2 tablespoons sugar 1/8 teaspoon salt 1/2 teaspoon vanilla 1/2 cup heavy whipping cream Sweetened whipped cream, if desired Chocolate curls, if desired

#### **DIRECTIONS:**

- 1 Place chocolate chips, sugar, salt and vanilla in a blender.
- 2 In a small microwavable bowl, microwave whipping cream uncovered on High, in 20-second increments, 1 to 2 minutes or until cream begins to boil. Pour hot cream into the blender; cover and blend until smooth.
- 3 Pour chocolate mixture into 2 small dessert bowls. Cover and refrigerate at least 2 hours until set and cold. Garnish with sweetened whipped cream and chocolate curls.

#### TIPS:

To make chocolate curls, let the bittersweet chocolate bar stand at room temperature for 15 minutes. Pull vegetable peeler across the edge of the bar using long strokes.

Semisweet chocolate chips can be substituted for bittersweet chocolate in this recipe.

**NUTRITION:** 

Calories: 352 Carbs: 21 Fiber: 0g Sodium: 51mg



The PCLinuxOS Magazine

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# DOS GAMES ARCHIVE

WWW.DOSGAMESARCHIVE.COM





#### by Meemaw

We were looking at Michael Davies' list of his top 10 GIMP filters. From the site Davies Media Design, we're looking at his top ten favorite GIMP filters. The list is:

- 1. Gaussian Blur
- 2. High Pass We did this one in January
- 3. Unsharp Mask We did this one in January
- 4. Newsprint We did this one in January
- 5. Drop Shadow We did this one in January
- 6. Long Shadow
- 7. Vignette
- 8. Add Border
- 9. Bump Map
- 10. Little Planet

#### **Gaussian Blur**

I've used this filter (Filters > Blur > Gaussian Blur) to soften photos just a bit, but Davies points out that you can use it to fix a photo problem. Sometimes we want to use the subject of a photo, but not the background. After cutting away the background we're left with some rough edges on the subject. Gaussian Blur can help minimize them.

In this image we have a white flower and many green leaves. Suppose I wanted to add this flower, but not the leaves, to another floral image.

Using the "Intelligent Scissors" tool, I can draw around the image (next column, left top):

While I'm not too accurate, each line can be moved on your way around, before you click OK (next column, top right).







Notice that in several spots I have some green at the end of my petals. That probably won't bother anyone in the artwork I'm doing, but we all want to make things look as good as possible. Just setting Gaussian Blur at .24 (X and Y radius) will soften the edges a bit.



This filter could be most useful on a picture of a person with a background you didn't like. You could cut the person out and change the background to something you like better, or add them to another photo.

Another neat effect is to draw a stroke around your cutout (you can put it in its own layer) and then use the Gaussian Blur on the stroke. Depending on the color of your stroke, you can make a sort of "glow" effect on your cutout. I found an adorable baby picture on Pixabay (all their stuff is free), cut out just the baby, then added a layer where I drew around her with a 3 px paintbrush. You could probably use as large an outline as you wanted, but I'm not sure I'd go much more than 5, depending on the effect I wanted.



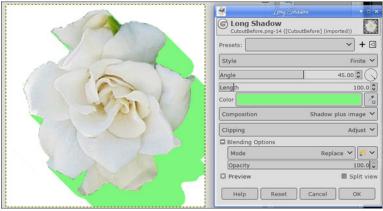
If I turn off that layer, the line goes away, but if I turn it on and use Gaussian Blur on it, I get a kind of shiny halo around her. It kind of de-emphasizes any mistakes I've made while cutting her out, and may even emphasize her soft hair.



I imagine if my line was white instead of yellow, the blur would look silvery. That would be useful on many designs!

#### **Long Shadow**

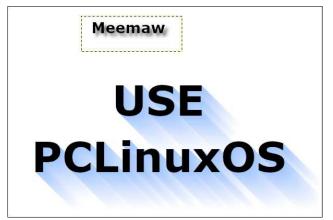
This is a fun filter! When I first started experimenting with it, I used the gardenia I was using above. There are several settings here. The shadow can be adjusted according to size and direction, but also according to how you want the shadow to look. Using the gardenia, I left the length at 100 and the angle at 45 (changing the angle changes the direction of the shadow), then changed the shadow to a light green.



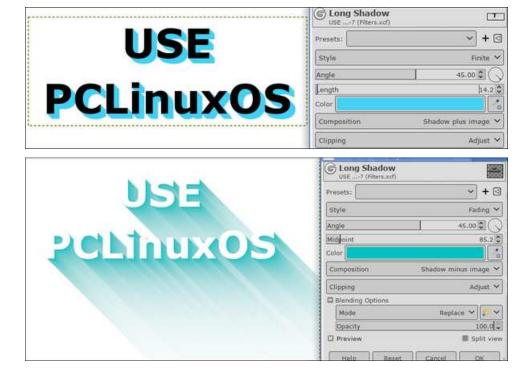
I thought that it would be good to find out how it looked with text (we put shadows on our text often, to emphasize the message of our text). The regular drop shadow looks completely different. The long shadow gives the effect of the text sort of zooming toward you. Depending on your settings, it can be solid like the one on the gardenia, or can fade out. The setting for the fade out is the Style

setting at the top of the options window. You can see here the difference between the drop shadow and the long shadow.

Along with the shadow style are a couple of other settings that give interesting options. You can make the shadow very short, essentially creating 3D text, or you can make it fade out like I did above.



plus set how soon it starts to fade out (in the case of fading, the length setting decides the length of the visible fade). Or, with the Composition setting, you can make the shadow visible and the text itself invisible.

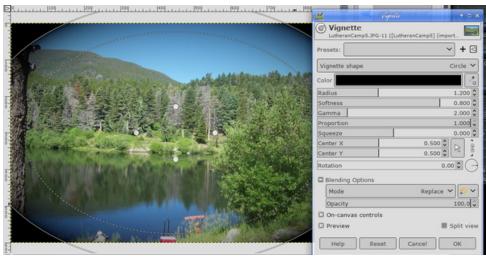


#### Vignette

Vignette is basically a shadowed frame around the photo. Choose a photo and then choose Vignette (which is also in the Light and Shadows section of the filters).

When you first start the filter, the default looks like this (top, right):

The shape can be a circle, square, diamond, or horizontal or vertical. You'll have to experiment to see what works best for your photo. The tutorial I'm referencing says that you should use this filter on nearly any photograph to accent it, but that it should barely show at all. The other settings will help you accomplish that. This picture of a Colorado mountain lake has the Vignette filter applied (below). It has ended up with a very faint shadow around the edges which emphasizes the center of the photo (right).







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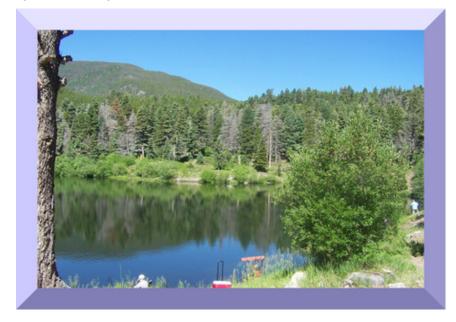
#### **Add Border**

In Vignette, we added a hint of a border, but here, we'll actually add one. I'll use the same photo. Click **Filters > Decor > Add Border**. You will get four settings:

Border X and Border Y determine how wide, in pixels, you want your border. The border color is default white, but you can change to any color you want. Delta value on color makes some of the borders a different



shade so it can look like the light is coming from a specific direction. I used the settings above and got this:

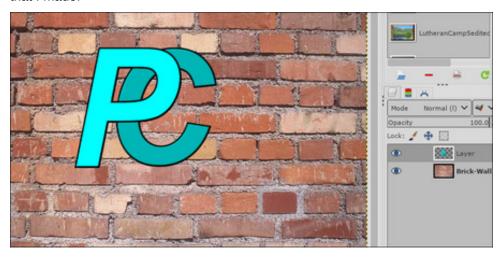


The Delta value is some sort of formula that shades part of the border differently. Setting it higher seems to darken it, but you should probably experiment.

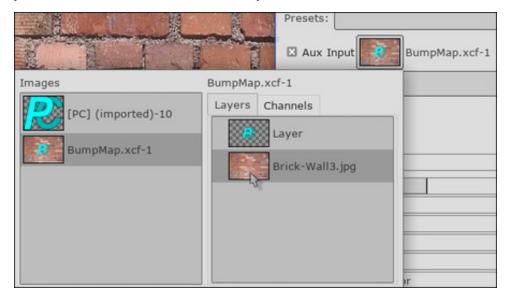
#### **Bump Map**

We actually did Bump Map in the September, 2015 issue. It is essentially a way to incorporate the background texture into a graphic you have put in the image.

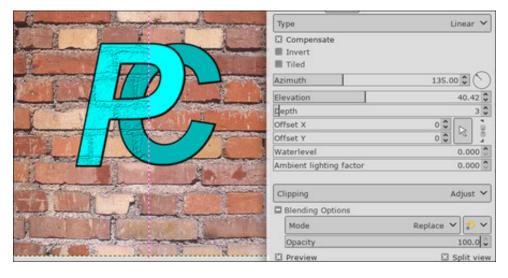
We used text before, but could use some sort of logo if we wanted. Also, you should choose a background you'd like to use. I'll go back with the brick wall I used before because the effect is cool. I added, on another layer, a small logo that I made.



Choosing the layer that has the logo, click on **Filters > Map > Bump Map**. In the window that appears, first click on Aux. Input. Another window will open. On the left side is everything you have open in GIMP. When you click on your project, the layers will appear on the right side. You should choose the background texture you want to use. I chose the Brick Wall layer.



Once you choose the background, the effect will begin to be visible. The rest of the settings are for fine-tuning. The **Compensate** checkbox can lighten up your logo, if you think the bump map has darkened it up. The **Ambient Light** slider towards the bottom does mostly the same. **Azimuth** changes the direction of the light. **Elevation** makes the texture more prominent, but I think it's because of the elevation of the logo layer (how high off the background it is) because the higher number lessens the effect. **Depth** also makes the texture more prominent. I would say that you should play with these settings to get the effect you want. The picture below has the Split View activated, so you can see the before on the right and after on the left. When you are happy with your effect, click OK.



#### Little Planet

This is a fun, different filter that works best with skyline photos. When you click **Filters > Map > Little Planet**, GIMP will rearrange your skyline into a circular pattern. You have zoom and rotate settings, along with another setting that can change the angle of the photo (top right and right).





There are many more filters in GIMP, but these are some that could be used a lot. Many of them have settings you just have to mess with. I liked Davies' list, though, and I hope you did too.



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# Screenshot Showcase



Posted by Texstar, on February 2, 2021, running KDE.

# Free Software Foundation Awarded Perfect Score, Eighth Consecutive Four-Star Rating From Charity Navigator

by Free Software Foundation Press Release

Boston, Massachusetts, USA -- February 9th, 2021. The Free Software Foundation (FSF) has been awarded a four-star and 100% rating, the highest possible, from Charity Navigator, the largest independent evaluator of US-based nonprofit charities. The FSF was also selected for Charity Navigator's "Top Ten List" as one of "10 Charities Worth Watching." These designations exemplify the FSF's strong financial health and commitment to accountability and transparency.



Using objective analysis, Charity Navigator awards only the most fiscally responsible organizations a four-star rating, with metrics including governance, ethical practices, operations in accordance with industry best practices, and openness with donors and stakeholders. This is the eighth year in a row the FSF has received a four-star rating, a record attained by only six percent of the 160,000 charities evaluated by Charity Navigator. The FSF also earned perfect scores on "Financial Health" and "Accountability & Transparency," resulting in the organization's first-ever 100% rating, accomplishment less than one percent of all charities evaluated by Charity Navigator are able to achieve. This is the second time the FSF has placed in the list of "10 Charities Worth Watching."

"The Free Software Foundation's exceptional four-star rating sets it apart from its peers and demonstrates its trustworthiness to the public," according to Michael Thatcher, President and CEO of Charity Navigator. "Only a quarter of charities rated by Charity Navigator receive the distinction of our four-star rating. This adds the FSF to a preeminent group of charities working to overcome our world's most pressing challenges. Based on its four-star rating, people can trust that their donations are going to a financially responsible and ethical charity when they decide to support the Free Software Foundation."

FSF executive director, John Sullivan, shared: "This is truly an accomplishment requiring the whole organization's efforts. It reflects excellence by our board of directors in its leadership, especially overseeing the FSF's financial management and key organizational policies, and by our whole staff, doing their work with exceptional efficiency and diligence, focused precisely on the FSF's mission. This is full validation of our supporters' confidence that when you contribute to the FSF, that hard-earned money will substantially advance the cause of software freedom."

The FSF's Charity Navigator profile can be visited at https://www.charitynavigator.org/index.cfm?bay=sear ch.summary&orgid=8557.

#### **About the Free Software Foundation**

The Free Software Foundation, founded in 1985, is dedicated to promoting computer users' right to use, study, copy, modify, and redistribute computer programs. The FSF promotes the development and use of free (as in freedom) software -- particularly the GNU operating system and its GNU/Linux

variants — and free documentation for free software. The FSF also helps to spread awareness of the ethical and political issues of freedom in the use of software, and its Web sites, located at <a href="https://fsf.org">https://fsf.org</a> and <a href="https://fsf.org">https://fsf.org</a>, are an important source of information about GNU/Linux. Donations to support the FSF's work can be made at <a href="https://donate.fsf.org">https://donate.fsf.org</a>. Its headquarters are in Boston, MA, USA.

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## Tip Top Tips: How I Converted My H.264 Video To HEVC

Editor's Note: Tip Top Tips is a semi-monthly column in The PCLinuxOS Magazine. Periodically, we will feature — and possibly even expand upon — one tip from the PCLinuxOS forum. The magazine will not accept independent tip submissions specifically intended for inclusion in the Tip Top Tips column. Rather, if you have a tip, share it in the PCLinuxOS forum's "Tips & Tricks" section. Your tip just may be selected for publication in The PCLinuxOS Magazine.

This month's tip is from Archie.

The HEVC (High Efficiency Video Coding) encoder has been available since around 2013, and until recently very few videos were encoded in this format. First of all there are a handful of benefits to HEVC, which you can read at https://linuxreviews.org/High\_Efficiency\_Video\_Coding.

The purpose of this is to show you how I converted a 27 MiB video into the same MP4 format (the same resolution, the same duration) at only 11.4 MiB, using VLC. These are the two files:

```
-rw-rw-r-- 1 archie archie 11940902 Aug 28
22:41 Mom-Is-Magic_1.mp4
```

-rw-rw-r-- 1 archie archie 28279772 Aug 22 21:28 Mom-Is-Magic.mp4

Using ffprobe <video\_filename>, here are the technical details: The first file is Mom-Is-Magic.mp4.

```
Input #0, mov,mp4,m4a,3gp,3g2,mj2, from
'Mom-Is-Magic.mp4':
   Metadata:
```

major\_brand : isom minor\_version : 512

compatible\_brands: isomiso2avc1mp41 encoder : Lavf58.29.100

```
Duration: 00:02:09.11, start: 0.000000, bitrate: 1752 kb/s
    Stream #0:0(und): Video: h264 (High) (avc1 / 0x31637661), yuv420p(tv, bt709), 1280x714 [SAR 1:1 DAR 640:357], 1381 kb/s, 23.98 fps, 23.98 tbr, 24k tbn, 47.95 tbc (default)
    Metadata:
        handler_name : VideoHandler
    Stream #0:1(und): Audio: aac (LC) (mp4a / 0x6134706D), 48000 Hz, stereo, fltp, 365 kb/s (default)
    Metadata:
```

handler\_name : SoundHandler

Note that on Stream #0:0(und) the video was encoded using **h264**. The other video file is Mom-Is-Magic\_1.mp4.

```
Input #0, mov,mp4,m4a,3gp,3g2,mj2, from
'Mom-Is-Magic_1.mp4':
   Metadata:
        major_brand : isom
        minor_version : 0
        compatible_brands: mp41avc1
        creation_time : 2020-08-
28T14:41:16.000000Z
```

encoder : vlc 3.0.11.1 stream

output

encoder-eng : vlc 3.0.11.1 stream



output

Duration: 00:02:08.92, start: 0.000000,

bitrate: 740 kb/s

Stream #0:0(eng): Audio: mp2 (mp4a / 0x6134706D), 44100 Hz, stereo, fltp, 127 kb/s (default)

Metadata:

creation\_time : 2020-08-

28T14:41:16.000000Z

handler\_name : SoundHandler Stream #0:1(eng): Video: hevc (Main) (hev1 / 0x31766568), yuv420p(tv, bt709), 1280x714 [SAR 1:1 DAR 640:357], 606 kb/s, 23.97 fps, 23.98 tbr, 1000k tbn, 23.98 tbc (default)

Metadata:

creation time : 2020-08-

28T14:41:16.000000Z

handler\_name : VideoHandler

Note that on Stream #0:1(eng) the video was indeed encoded in hevc. I have to highlight the significant reduction in file size without losing video and sound quality from the original copy.

What I did on the VLC menu was click on *Media* > *Convert / Save* (Ctrl+R). On the *File* tab, click *Add* then *Open* the video you want to convert. Once listed, click **Convert/Save**.

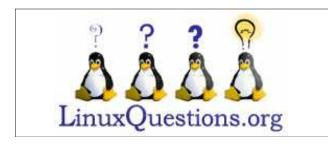
Check that the Source is the actual file you wanted to convert. On the Settings section of the dialog window, you'll see **Profile** and a down arrow. Click to change the Profile to **Video - H.265 + MP3 (MP4)** or you can create your own profile using the (Encapsulation) MP4, (Video codec [enable Video] > Codec) H-265 (Note: also check that the resolution scale is set to either Auto or 1 or you can shrink your video dimensions), (Audio codec [enable Audio] and enable Keep original audio track or as I prefer, change the codec to MPEG 4 Audio (AAC)) ... Subtitles? If you're creating a new profile, do not forget to give it a **Profile Name** so it'll be easier to find next time.

The last part is the *Destination*. You will need to click on *Browse*, navigate to the folder where you want to

save your file, and click Save. When all is ready, click **Start** and wait for VLC to complete the task. Depending on the duration of your video, it may take a couple of minutes or longer.

OR if you prefer the command line (which is much, much simpler):

ffmpeg -i
<original\_video\_fiilename.extension> -c:a
copy -c:v libx265 <new video filename>.mp4



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# PCLinuxOS Recipe Corner Extra



#### Cauliflower Pizza Crust

You can make a great pizza crust that does not fall apart after baking, from this recipe. Hold it, slice it, roll it up, eat it - it holds its shape and it actually tastes like pizza. This cauliflower pizza crust is gluten free and definitely worth trying.

#### Ingredients:

3 - cups cauliflower (grated)

1 1/2 - cups parmesan cheese (shredded)

2 - eggs (beaten)

1/2 - tsp salt

1/2 - tsp black pepper

1 - tsp oregano

1 - tsp basil

1 - tsp onion powder (optional)

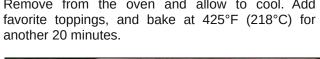
In a large nonstick pan, heat the cauliflower on low heat for 15 to 20 minutes, stirring constantly. The object here is not to cook the cauliflower, but to get rid of excess moisture. After the moisture is removed, move the cauliflower to a large bowl to cool.

Add the beaten egg, parmesan cheese and spices to the cauliflower and mix until everything is well coated.

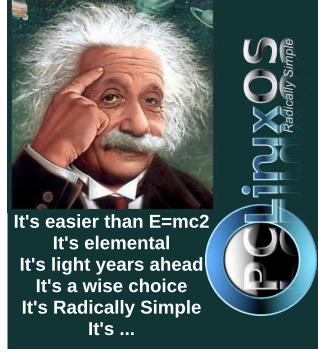
On a pizza pan or large baking sheet, place a sheet of parchment paper and lightly grease (I use a nonstick cooking spray). Pour ingredients in the middle of the paper, and flatten to about 1/4 inch (6.35mm).

Bake at 400°F (205°C) for 20 to 25 minutes.

Remove from the oven and allow to cool. Add













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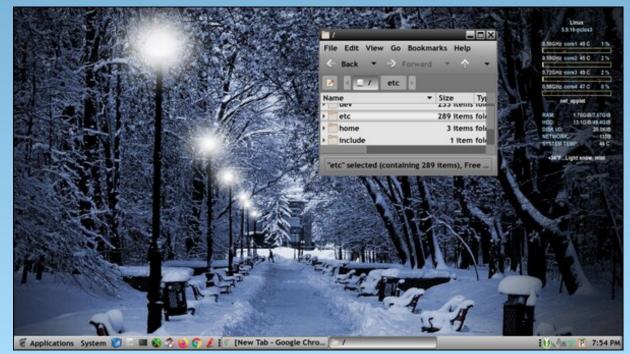
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# Screenshot Showcase



Posted by Yankee, on February 4, 2021, running Mate.

by Alessandro Ebersol (Agent Smith)



There is an old Spanish saying that goes like this: "don't breed Crows, they'll sting your eyes," and this saying fits perfectly with the class of American tech companies, the so-called Big Techs.

Yes, with a few exceptions, most Big Techs were born as projects of the US government, US Army, CIA or NSA. Or, they are entwined with the American government, in one way or another.

I stress that everything that has been written in this text is not secret. It is available on several websites on the internet, and, there is nothing new here. Just search, and anyone will find this information.

## The CIA has grown too much, and so have its tentacles

The CIA, the American Central Intelligence Agency, was born in 1947, as a successor to the OSS (Office of Strategic



Services), which was the agency that operated during World War II.

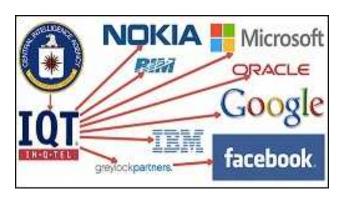
The CIA expanded rapidly outside its intelligence-gathering mandate, to include covert operations and unauthorized operations (the so-called black ops). By providing funding and organization, it proved to be a vital step in the development of a fief within the American state, an organization that has grown so much that it has become an end in itself.

It can be said today that the CIA is an almost autonomous body, which responds to the President and the American Congress, but only if investigative committees are set up.

With so much looseness about its actions, the "company" "had enough freedom to create its own venture capital firm, In-Q-Tel." In the words of a former CIA director, George Tenet, "We [the CIA] decided to use our limited dollars to leverage technology developed elsewhere. In 1999 we created In-Q-Tel. While we (CIA) are paying the bills, In-Q-Tel is independent of the CIA. The CIA identifies pressing problems, and In-Q-Tel provides the technology to solve them. The In-O-Tel alliance has put the agency back at the forefront of technology. This collaboration allowed the CIA to take advantage of the technology Las Vegas uses to identify crooked card players and apply it to analysis for terrorists, and to adapt the technology online booksellers use and convert it to scour millions of pages of documents for unexpected results."

Outsourcing the CIA's activities is also a way to keep them hidden from public opinion, since private companies do not have to account for their activities. Hillhouse wrote on July 8, 2007, in the Washington Post, "Tell me that more than 50% of the National Clandestine Service (NCS) - the heart, brain and soul of the CIA - has been outsourced to private companies such as Abraxas, Booz Allen Hamilton, Lockheed Martin and Raytheon."

#### Startups that received funds from In-Q-Tel



Now, let's list some technology companies that have received funds from In-O-Tel:

<u>Google</u> For two decades, the US intelligence community (CIA, NSA and DARPA) worked closely with Silicon Valley in an effort to locate citizens in cyberspace. Google is at the heart of this origin story. Some of the research that led to Google's ambitious creation was funded and coordinated by a research group established by the intelligence community to find ways to track individuals and groups online.

I myself wrote a series of eight articles that appeared here in The PCLinuxOS Magazine on the genesis of Google, so there is not much else to talk about here. It is a company that has in its roots a close association with the American intelligence bodies.

Facebook LifeLog was a project of the Office of Information Processing Techniques of the Defense Advanced Research Projects Agency (DARPA) of the United States Department of Defense (DOD). According to its 2003 bid request pamphlet, it would be "an ontology-based subsystem that captures. stores, and makes accessible the flow of a person's experience and interactions with the world in order to support a broad spectrum of associates/assistants and other system capabilities." The purpose of the LifeLog concept was to "be able to track the life lines of an individual in terms of events, states, and relationships", and the system has the ability to "monitor all of a subject's experiences, from dialed phone numbers, from read email messages, to every breath taken, every move made, or place visited." Scary, right?

The government funded the initial money for Facebook through the CIA's personal venture capital investment firm, In-Q-Tel, and then, through a sort of revolving door scheme, they (Facebook) just hired DARPA executives to work for the same companies they had helped create since its inception. Regina Dugan, for example, ran Facebook's "Building 8," where DARPA and government-funded projects are being implemented. Before that, Regina Dugan left DARPA for Google and then for Facebook Building 8. Where she's going to appear next, no one knows, but we can be sure it's probably some kind of government spying initiative or a CIA DNA data capture cloud.



<u>Oracle</u> Founded in May 1977, the company's name came from a CIA project called Oracle. Company cofounders Larry Ellison, Robert Miner and Ed Oates worked on the Oracle project at a consulting firm before working on their own.

Larry Ellison wrote in the New York Times in January 2002: "The only step that Americans could take to make life harder for terrorists would be to ensure that all information in numerous government databases is copied to a single, comprehensive national security database."

But who watches the watchmen? Who's to say that only the "bad guys" are in these databases?

Maybe they shouldn't create these databases. Even assuming the best-case scenario, in which Oracle is not actively enabling all kinds of domestic espionage, which Americans have rightly been concerned about since the Snowden revelations, it seems that the quality of the company's product security are still cause for concern.

"Of all commercial databases, Oracle is the least secure," British security expert David Litchfield recently told Reuters. This is a problem, both from the point of view of national security and even from the point of view of consumer confidence. Because today, everyone uses Oracle databases, and they're subject to data theft by external crackers.

<u>Microsoft</u> The company that was born in 1975 in Albuquerque, New Mexico, as a creator of BASIC interpreters for microcomputers, and then, through a series of misadventures, became the largest software company in existence, also has very deep ties to intelligence agencies.

Microsoft has been working closely with U.S. intelligence services to allow users' communications to be intercepted, including helping the National Security Agency circumvent the company's own encryption, according to top-secret documents



obtained and leaked by Edward Snowden in 2013. These documents show the complicity of several technology companies, in the so-called Prism project.

The documents demonstrate that:

- Microsoft helped the NSA circumvent its encryption to address concerns that the agency would be unable to intercept web conversations on the new portal Outlook.com.
- The agency already had pre-encryption access to the email in Outlook.com, including Hotmail.
- The company worked with the FBI in 2013 to allow the NSA easier access via Prism to its cloud storage service SkyDrive, which now has more than 250 million users worldwide.
- Microsoft also worked with the FBI's data interception unit to "understand" potential problems with a feature in Outlook.com which allows users to create fake names by email.
- In July 2012, nine months after Microsoft bought Skype, the NSA boasted that a new capacity of its system had tripled the amount of Skype video calls being collected through Prism.

 Material collected through Prism is routinely shared with the FBI and CIA, with an NSA document describing the program as a "team sport."

Now, I invite you to think a little. I've known Microsoft for many years, and this company amasses more flops than hits. Indeed, Microsoft, were it any other company, would have been bankrupt and closed for many years now. But no. It looks like they have a cash printer in Redmond, or does the American government not let the company break, to not lose its source of backdoors? Something to think about.

Other than these companies, In-Q-Tel invests in other, little-known companies ranging from video games and virtual reality, to big data and data capture from social networks.

But, but, Big Techs generate a lot of jobs and taxes for governments. They develop the place where they operate.

Just they don't. Big Tech are vertical organisms that only generate benefits for themselves.

Let me explain.

If I have a car factory, the production is horizontal. As a car manufacturer, I'm going to need tires, car seats, windshields, and not everything I can produce. Thus, when a car factory settles in a city, it generates benefits for everyone in the city: rental houses for workers, restaurants, for employees, other companies that will produce items that will be used in cars (windshields, mirrors, tires, etc.). Thus, it is a virtuous circle, where everyone close to the factory profits from its production.

Only big techs aren't like that. They are extremely vertical companies. That is, they produce the raw material of their final products themselves. And, the thing is going to a point, that the big Microsoft and Apple want to stop using third-party chips and

manufacture their own processors, not to depend on other factories anymore. Thus, they would have full control of the production and prices charged. But don't think a MacBook is going to get cheaper because of it. No, Apple's profit margin is going to get bigger.

But, with their data centers, big techs move the local economy. After all, they must have buildings with servers and people to operate these servers.

Negative. The big techs are very scattered around the globe, and often rent servers around the world, wherever it is cheaper. Or, when they choose a location to set up a data center, it's usually a cheap place, with plenty of water (to cool their servers) and, small towns, where the cost of living is low.

Since data centers are operated remotely, they do not need to have a very large staff, so staffing costs are kept low. That is, they do not move the local economy much, but they benefit the shareholders.

But, but, the Big Techs must hire a lot of programmers. And this staff should earn well.

No again. Usually, these companies hire technical personnel from countries such as Pakistan, India, Thailand, the Philippines (formerly China, but now specialized labor is being harnessed in the country itself), which are generally cheaper than workers in countries with a more parity exchange with the dollar, thus keeping the cost with staff low.

Some examples that have been documented in the media are:

#### Microsoft (where's my surprised face?) - India

In 2010, Microsoft signed a three-year contract with Infosys Technologies to manage significant portions of its internal IT operations worldwide. The

agreement included specific services such as technical assistance, database management, software applications and devices. The agreement covered more than 450 locations across 104 countries.

Located in Bangalore, India, Infosys had already partnered with Microsoft in certain areas, but this particular business further expanded that relationship. Infosys has also partnered with Unisys Corporation in Pennsylvania to provide technical support to desk and deskside service to Microsoft employees. This Agreement has seen Infosys improve its capabilities to help other customers leverage Microsoft innovations and adopt new technologies.

#### General Electric (GE) - India

General Electric decided to focus on India and invested about \$130 million in the creation of a large state-of-the-art research and development center in Bangalore, India. This center is General Electric's largest research and development center and the company's second largest in the world and has qualified Indian professionals. The center is equipped with the latest engineering and technology tools and is responsible for interacting with GE customers, suppliers, subsidiaries, partners and other technology centers around the world.

General Electronics also has a technology center in India that employs more than 2,200 engineers and scientists with Chemical Engineering, Mechanical Engineering, Polymer Science and new synthetic materials. GE has also opened an E-knowledge center in India to disseminate knowledge and technological developments to its business centers.

#### **CISCO - India**

The famous networking giant has invested more than.150 million in structuring and expanding its technology development company in India. Cisco has also set up its second largest R & D facility in

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Bangalore, India, which is home to over 1500 Indian technical professionals. Cisco's research and Development Center in Bangalore was developed to help the company deploy products and solutions faster, develop new technologies, as well as successfully meet customer demand by providing technical support. Cisco also has plans to make more investments in India and leverage the skills of Indian network professionals. The type of support offered is the Live Chat Support Services and email support service.

Other than that, we have call centers, which, most often, are located in India.

## But, but, Big Techs should generate billions in taxes and help the economy, right?

No, definitely not. In fact, ALL, ALL Big Techs have tax evasion schemes.

And, amazingly, it seems that Ireland's climate must be very good, since Apple chose Ireland to be its headquarters in Europe. Google also chose Ireland for its European headquarters.

No, it has nothing to do with weather. Apple has settled in Jersey, the small island in the English Channel that, like many Caribbean havens, does not charge corporate profits taxes to most companies. Jersey would play a significant role in the new Irish tax structure set up by Apple, created in late 2014. Backed by this deal, the MacBook maker continued to enjoy ultra-low tax rates on most of its profits and now holds much of its earnings outside the U.S. on a \$252 billion offshore cash mountain.

Google has also settled in Ireland, and maintains remittances of profits to tax havens in Bermuda. By legally channeling the profits of foreign subsidiaries in Bermuda, which have no corporate income tax, Google has reduced its overall tax rate by almost half.

Microsoft, for its part, hid US\$108 billion in offshore profits, using a network of foreign subsidiaries to dodge U.S. taxes, bringing its tax rate to a tiny 4.5 percent in its offshore profits. This is lower than most middle-class families pay in taxes.

Microsoft began building this tax maze more than 20 years ago when it changed software royalty rights to a fictitious company in Nevada to avoid a fee in its home state of Washington. This first domestic evasion eventually grew into the company's current tax evasion system based on tax havens around the world.

Well, now that communications have migrated in droves to the internet, at least we're sure there's democracy to spread ideas, thanks to Big Techs!

That couldn't be further from the truth. Let's take a look at the past. Let's remember Germany in 1933...

## When the German Ministry of Propaganda was born, and why was it born



Joseph Goebbels, minister of propaganda

Founded on March 14, 1933, a few months after the Nazi takeover of power by Adolf Hitler's government, it was led by Reich Minister Joseph Goebbels. The

role of the new ministry, which established its offices in the Orderpalals in front of the Reich Chancellery, was to centralize Nazi control of all aspects of German cultural and intellectual life. An undeclared goal was to present to other nations the impression that the Nazi Party had the full and enthusiastic support of the entire population. Censorship in Germany was vital to the maintenance of political control by the Nazis. He was responsible for the control of German media, literature, visual arts, cinema, theater, music and Broadcasting.

And by controlling the media, Goebbels would control the narrative. And whoever controls the narrative controls the truth. After all, the facts, according to Goebbels, should be slaughtered, until reality is reduced to a mere matter of opinion. The truth? A simple choice of sides. My truth against your truth. Until one no longer knows how to distinguish what is true and what is not.

## And after more than 70 years of these events, they repeat themselves...

On November 5 last year, the president of the United States, Donald Trump, noted the "historical interference in the elections of big money, big media and big tech" and labeled the Democratic Party as "the party of the big donors, the big media, the big technology". On January 6, 2021, during his speech to the crowd of protesters who stormed the U.S. Capitol, Trump accused the Big Techs of rigging the election and veiled banishment of conservatives, while promising to hold them accountable and work to get rid of Section 230. On January 11, after Trump's Twitter account was suspended, German Chancellor Steffen Seibert's chief spokesman noted that Angela Merkel considers the suspension of Trump's account "problematic," adding that lawmakers, not private companies, must decide on any necessary restrictions on free speech, and whether speech incites violence or not.

So Big Techs control the media, now mostly occurring over the internet, these companies decide what's good, and what's bad. What can be broadcast and what should be silenced, controlling the narrative and, lately, the perceived "truth".

But what truth is that? One that corroborates the narratives of Big Techs, which have grown so much that they can't be regulated anymore (thanks to a lot of lobbying in the U.S. government, they almost always escape without a scratch).

Scott Galloway, a staunch critic of Big Techs, argued that the current situation is the result of economic deregulation, globalization and the failure of politicians to understand and respond to technological developments. And in this ignorance, these vultures thrive.

#### A brief word before the end...

President Kennedy regarded the CIA as a nuisance, something that hindered the U.S. government more than it helped. So much so that he promised to break the CIA into a thousand pieces and spread them in the wind.

He was assassinated before that happened, and much is speculated about the role of a renegade CIA in this episode.

Trump also wanted to end section 230, hold Big Techs accountable for their actions, their opinions, and, more importantly, for the censorship these companies exert in their vehicles. He ended up virtually "murdered." Things to think about.

In a next opportunity, I want to discuss what is the purpose of this technology oligopoly, which today, along with the financial complex, controls the Western world.

Until then, be careful with your Twitter accounts, email, Facebook, etc.





# Screenshot Showcase



Posted by brisvegas, on February 1, 2021, running Mate.

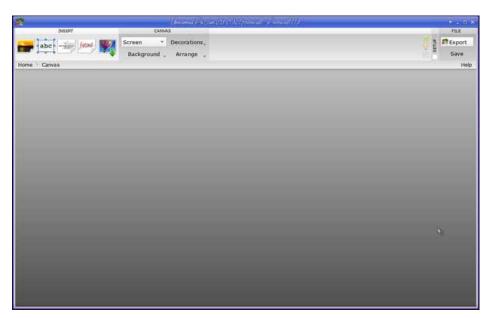
# Create A Collage or Wordcloud With Fotowall

#### by Meemaw

In January, ms\_meme posted in the forum that she had been using a program called Fotowall, and was wanting a bit of help. I downloaded it and started talking to her. Turns out that it's a nifty little program if you want to make a photo collage. It has other features, so I'll cover some of them, too. It's a pretty nice little program, but it has some problems and limitations.

There's a beginning screen, which says Create in the center at first. After you've saved a project it looks a bit different, listing your previous projects at top left so you can open one if you want. Click on **Create**.

Here's the main screen.



The toolbar is pretty simple (top, right)... but it doesn't have NEAR the tools that GIMP and Inkscape have. However, if you just want to arrange some photos and export the resulting collage, it works well.

The things you insert are separate layers (from left to right above - Pictures, Text, Wordcloud, Canvas and Search Web Pictures). I looked at **Add Canvas**, but that

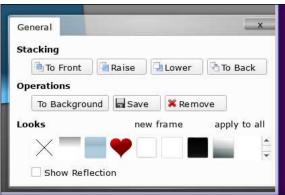


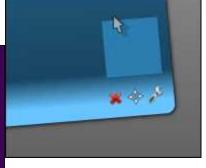
asks for something with a filename extension of .fotowall, so I'm not sure about that. The projects are saved with that extension, so maybe it's inserting an already made canvas into a new project. **Search Web Pictures** is pretty limited as it only lets you search Flickr. Your best bet is to search for yourself and then use the **Add Picture** tool.

Whatever layer you are on shows in the next section. I was using the Wordcloud layer when I took the screenshot above. The tools to the right include a Stack dialog and an effects dropdown (for the layer). The slider is to change the opacity of that blue layer background and the pink dot is in the middle of a grid where you can change the perspective. The wrench has some more tools.

In the bottom right corner of the layer you are working on is the same wrench, a four-pointed star for perspective, and an X to delete that layer.

If you click the wrench there, you get mostly the same tools.



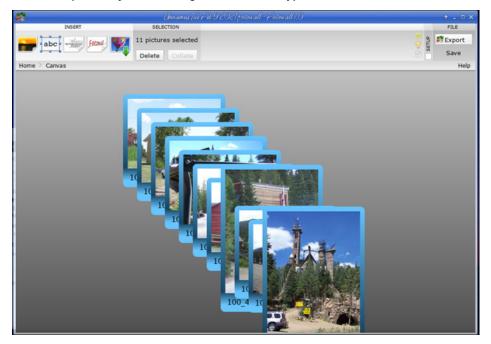


If you're going to do a collage, choose **Add Picture**. You will be able to navigate to the folder that contains your photos.

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#### **Create A Collage or Wordcloud With Fotowall**

Choose several photos. I'm not yet sure what the limit is, but you can safely choose 12 (I already did a collage with that many).



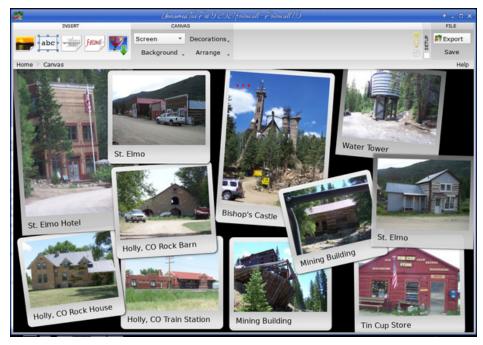
Your photos will be inserted in a stack, and from there you can grab each one and move it, enlarge or reduce it and rotate it, until you have them arranged the way you want. While you're at it, highlight the photo file name and put in a title for that photo (top, right).

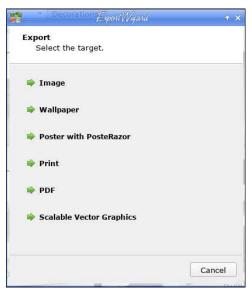
Clicking outside the photos and in the window, you can set a black, white or gradient background for your collage.

In the top right corner, you can save it as a Fotowall file, or Export it as an image file. If you Export, you'll get the following windows, with a filename dialog in between (right).

ms\_meme was trying to create a Wordcloud, so that's mainly what we discussed. When you select **Add Wordcloud**, you need a list of words you want included. I make word lists for the puzzles, so I condensed and used one called family.txt.

The first couple of times I tried the Wordcloud, I didn't get anything, but I did it after I added a graphic, so I inserted the Wordcloud first, and it worked fine. There are a couple of windows that pop up and ask (1) how many letters the smallest word is, and (2) how many words are in the list. The defaults are 3 (for number of letters in the smallest word) and 100 (for number of words).







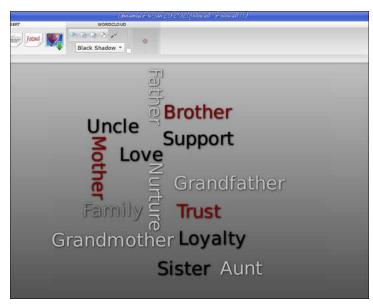
I had a little trouble at first and would get a layer with no words in it (maybe a glitch?) but after a couple of tries I got a pretty good Wordcloud (next page, top left).

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#### **Create A Collage or Wordcloud With Fotowall**



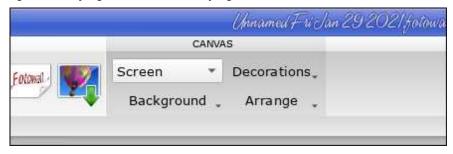
Also, using the opacity tool, you can choose black shadow, and it will shadow the layer... but if you set the opacity to zero (the blue will be gone), the shadow goes to the words. I like that better.



Also, you can double click on the Wordcloud layer and it will bring you to another set of directions. Here, you can move individual words around, but there doesn't

seem to be a way to save your changes to your original Wordcloud. It won't change the font either - even though there's a list of fonts, or the color scheme - even though there are 3 to choose from. If you click back to Canvas, the Wordcloud is just gone... no saving, no alterations, nothing, just an empty layer. This is the frustrating part!

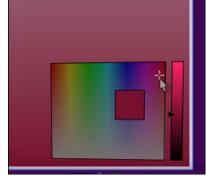
If you click outside the Wordcloud, on the background layer, the toolbar will change from saying 'Wordcloud' to saying 'canvas'.



The dropdown that says Screen apparently is a size setting because the others say Exact Size, Desktop CD Cover and DVD Cover (which are all different sizes). The dropdown that says Background has None, White, Black and Gradient. If you

choose Gradient, then move your mouse pointer to the bottom right of the window, and you can choose your gradient by moving the plus sign to the color you want. Then you can make it lighter or darker by moving the arrow up or down in the bar at the right.

If you add a picture, then click the wrench in the right corner of the layer, and you can eliminate the blue background by clicking on the x under Looks. I haven't been able to copy & paste, so if you want to add two copies of a picture, you have to add it twice.



The boxes at the corner of your active layer are the resize and rotate boxes. Clicking & dragging in the layer allows you to move it wherever you want it. However, I haven't found a way to make the Wordcloud fit a specific shape. You may have to make your own to get that. The four-pointed plus sign in the tools is the perspective tool, which you can use to "twist" your layer (next page, top left).

Export lets you save your creation as several things. I haven't tried them all yet, but I have saved this one as a .png. After you click OK, it always tells you what size your finished picture is (next page, bottom left).

# Export tandmother Famil



If you choose Wallpaper, you are asked the same questions as the scale mode on your Image save window (Zoomed, Scaled, keep proportions, Scaled and Original). I chose Scaled, keep proportions, and clicked Finish. However, my wallpaper didn't change.

#### **Create A Collage or Wordcloud With Fotowall**

If you choose **Poster with PosteRazor**, you will get a window that asks if you want to go to the PosteRazor website, or watch a tutorial, or click finish and open PosteRazor. This is a program which lets you load a document and enlarges it to print as a large poster, but on letter or legal sized paper.

The other choices are Print, PDF or SVG (Scalable Vector Graphics can be edited and manipulated in Inkscape).

Setup ONLY lets you enable OpenGL, which is a graphics accelerator. Mine's working fine right now so I didn't bother with it.

Fotowall is a pretty good program for what it does, but it has some problems. It does the collages pretty well, but the Wordclouds confound me as there seem to be several glitches in the program. If I wanted my words arranged a specific way, however, or a different font, I would fall back to Scribus. There are also a few good internet sites you can use to make Wordclouds. The downside to Fotowall is that it apparently hasn't had much, if anything, done to it since 2017. Hopefully, they will update and improve it soon.





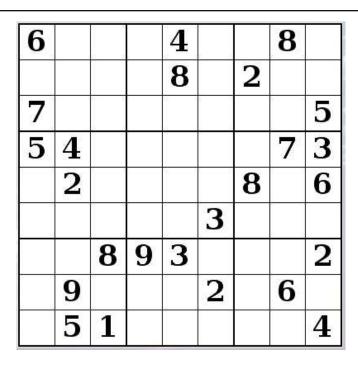
DONATE **TODAY** 







# 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 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 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 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, 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.

Download

7. Have fun! It's only a game!



Possible score 218, average score 153.

BANSHEE

POT OF GOLD

SHILLELAGH

**TRIFOLIUM** 

SAINT PATRICK

# PCLinuxOS Word Find: March, 2021 St. Patrick's Day

AKTGJXARXTSCVYYRSVGOODLUCKADBH D Z S J A R I O P J C X Y T A M H J J Z J A F K W M X I E H U R Z S L K N E Y O O B I J C E G O O N V K C I R E M I L P R D G Y H U F G E Y I E O J W K J R Y V H Q F X V Y H Y K X TAESFMELGHNYINXWFEGOLXAUHZDTVX RALRYEZBPBSAHKYENVBLWKPSPLRCJE AURNCOITFBENETRBXODBHUTGNANQRM D Z O Y J G X G W Z B W A E R D B L B C K S R D P J I C K K IGCOJXJEDLAYFBSERCNGVWIZDDVBGR T C E B V G J E T C U A S A T O J F F E G X F L C A O M V Y IVLCKXOZHOLIDAYJVATOHMOJWRKIWW O S T O T N R F O T G U R H K Y D E W A R G L F M T W S E C NAIMVVHNFBHBBFACTLFGFXISQYRCAI VICDJEIPUGEMAGAMNROOCCUNAXLHRF C N H B Z C R D A L J N G C Z S S U T G M L M J H H H I I K ITLVWJIUEYSNPIPNAODFVEIVCUSENQ L P G D O Z S C D U N E I R O N P F Y F V P J P C A I V G M EAKRBOHAIDKEPVELSIDLAREMESROOB ATNCNUYDWTBEEKCVGBYHNEKVENIUFL G R I A I P B N K F E U O A Z M Q L M G M C T P N C E S T A F I L F A Y B E O F J O B L X Z L L A A U H W J U C H E H R X C O T R E Q G B L R S C I M B J U G L C A K U T F T Y E N N K R W T S K E O B T I S H J I B D I E B U A N R B F O G E O O K R H G B L Y F R G O A G N E D C L I N L G O J O T R Y N W M J H L G N E B N O G E U F K L A L P D H O F U K D E S F X F P J Y N I Q U F T G L Q D K U L I N X G I V Y C K E T A A G A F O Y C U C B R Y U N M I S C H I E F B R O U F N O ZYHJDPTYFPQOHYEHJAYSASDKAHLGEN WGAGXCVORZQCENWVRIIMYDJCPTFEBE H S B I S H A M R O C K H W R W A L K I N G S T I C K Q B U

**BLARNEY STONE BROGUE CELTIC** CELEBRATE **CLOVER** COINS DONNYBROOK **EMERALD ISLE FORTUNE** FOUR LEAF CLOVER **GAELIC** GOLD **GOOD LUCK HOLIDAY IRISH LEGEND LEPRECHAUN** LIMERICK LUCK OF THE IRISH MAGICAL **MISCHIEF MISCHIEVOUS** 

**BAGPIPE** 

PATRON

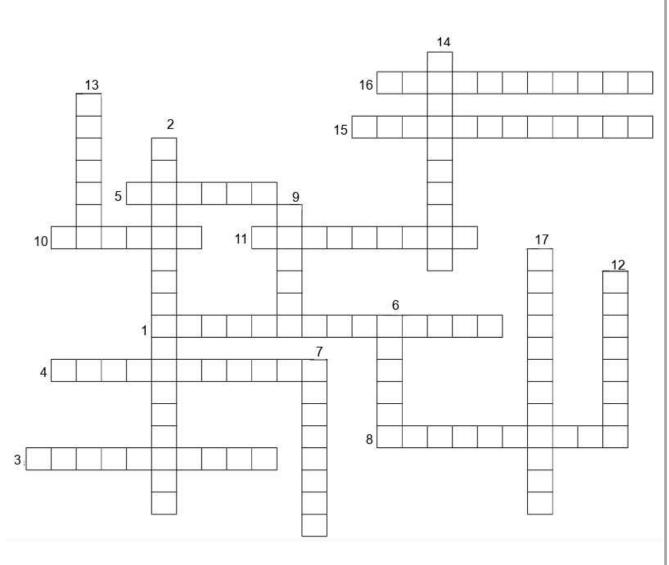
**RAINBOW** 

SHAMROCK

TRADITION

WALKING STICK
WEARING OF THE GREEN

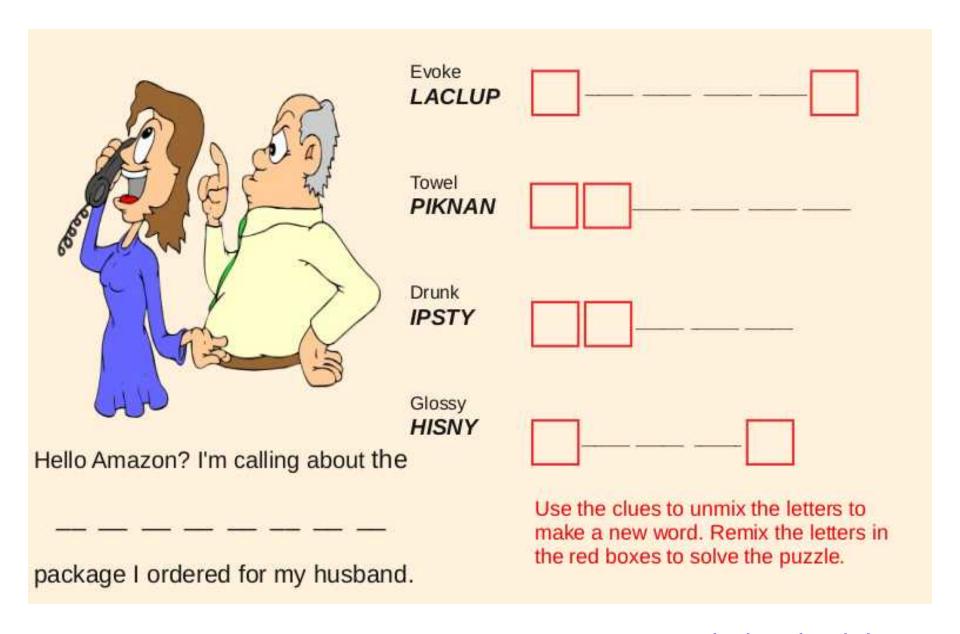
# St. Patrick's Day Crossword



- 1. It's considered good luck to find one of these, rather than its 3-leafed relative
- 2. The name of an Irish street ballad.
- 3. A cudgel of oak, blackthorn, or other hardwood ending with a large knob.
- 4. Maliciously or playfully annoying.
- 5. One of the Celtic languages.
- 6. A story coming down from the past.
- 7. A plant having compound leaves with three small leaflets
- 8. A wild brawl or a rowdy dispute.
- 9. A strong dialectal accent, especially a strong Irish or Scottish accent when speaking English.
- 10. A branch of the Indo-European languages that was spread widely over western and central Europe in the pre-Christian era.
- 11. A genus of plants with characteristic 3 leaves, like clover.
- 12. A light humorous, nonsensical, or bawdy verse of five lines where the rhyme scheme is aabba.
- 13. A woodwind instrument using enclosed reeds fed from a constant reservoir of air in the form of a bag.
- 14. In Irish folklore, a mischievous elf-like creature or fairy who grants wishes or reveals the location of hidden treasure when captured.
- 15. A stone in an Ireland castle, said to endow whoever kisses it with the gift of the gab and skill in flattery.
- 16. A description of Ireland.
- 17. The patron saint of Ireland and its national apostle.

**Download Puzzle Solutions Here** 

# Mixed-Up-Meme Scrambler



**Download Puzzle Solutions Here** 

# More Screenshot Showcase



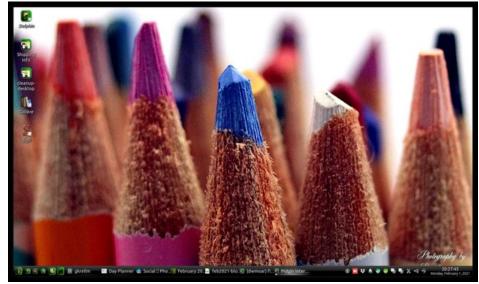
Posted by jp, on February 28, 2021, running LXDE.



Posted by luikki, on February 3, 2021, running KDE.



Posted by OnlyHuman, on February 1, 2021, running e24.



Posted by The Cranky Zombie, on February 1, 2021, running KDE.