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From The Chief Editor's Desk ...

Around the globe, countries are slowly and cautiously starting to “reopen” from the coronavirus pandemic “lockdown.” Businesses are opening back up, albeit with extra precautions to help prevent a second wave of infections racing through the population. People are going back to work … well at least those whose businesses were shuttered during the lockdown.

Even at the hospital where I work, restrictions are slowly being lifted on visitors (one visitor per patient per day, who must successfully pass the screening process at the hospital entrance, coupled with drastically reduced visiting hours). Outpatient procedures and elective surgeries/procedures are slowly being added to the schedule. There does seem to be some reluctance by some patients to even consider coming to the hospital, and who can blame them. After all, who wants to walk into a denizen of sick people during a pandemic?

By now, most of the people around my part of this ball of mud have divided themselves into two camps. In the first camp are those who are fearful that the relaxation of the lockdown will cause a resurgence of the coronavirus. In the second camp are those who think the whole thing with the pandemic is overblown, and they are almost overzealous to get things back to “normal.” Both camps have both validity and pitfalls to their reasoning. Due to limited testing, we don’t know the true mortality rate of COVID-19. Experts predict it to be far lower than what we currently see. But then public health experts were recently surprised to discover that the incidence of asymptomatic coronavirus victims to be far higher than previously thought. If that is the case, then that produces a very real and tangible fear from relaxing our guard.

I said it a couple of months ago, and I’ll say it again. What we perceived as “normal” back when all of this started is gone, replaced by a new “normal.” This pandemic will leave an indelible mark on humankind.

Wearing masks in public was never the “norm” in western cultures. Asian cultures are far more accepting of wearing masks in public. Even the “social distancing” guideline of six feet (~2 meters) has been proven by one study to be inadequate, finding that more than twice that (13 feet) was necessary to help minimize the spread of the virus.

To say that our knowledge of and our response to the coronavirus is fluid would be an understatement. Early recommendations have been reversed and/or revised, sometimes at break-neck speed. Stay inside. Go outside. Don’t wear masks. Wear masks in public. Be cautious of virus contaminated surfaces. The virus isn’t primarily spread by contact with contaminated surfaces. Take this medicine. Don’t take this medicine. It definitely makes it difficult for people to know exactly what to do or what’s expected of them to help minimize the spread of the coronavirus. What was “proper” two weeks ago has totally changed or evolved. In fact, it has left many people throwing their hands up in frustration in a “oh, what the h*ll” fashion.

What I’m most in awe of, though, is how my young kids have adapted to the situation. They took to wearing masks in public like a duck takes to water. Aside from Halloween, they had never worn a mask. We wear masks when we go out in public. Some places we go are worse than others. Walmart is the absolute worst. No one maintains social distancing, and considerably less than half of the shoppers wear masks. I’m just as surprised by which portion of the population that doesn’t follow the mask guidelines: those over the age of 50, who are at the greatest risk!

I hope each of you are taking appropriate precautions, as recommended by your local public health officials … even as confusing as those recommendations can sometimes be. We’d hate to lose even one PCLinuxOS family member to this “curse.”

About the cover: June is Aquarium Month, so we decided to have a little fun with that theme. Meemaw created the cover image to commemorate Aquarium Month. So, if you have an aquarium, dress it up to give your little fishies some new scenery. Or, June would be a good time to start your own aquarium. I know my five cats would love an aquarium, but I honestly don’t know just where I’d put it (I seriously need to get rid of some stuff!).

Until next month, I bid you peace, happiness, serenity, prosperity and good health!
Mind Your Step: Remembering GeoCities

by phroneker

Besides bringing back the EBCDIC to ASCII translation library, something else unexpected happened. While I was on YouTube, I came across a video that brought back memories of the early days of the Web.

How many of you remember a web hosting service called GeoCities?

This brings back memories as my flagship site (Horneker Online) got its start on GeoCities back in 1996 as a single page website about OS/2 (called “OS/2 Junction”).

GeoCities was founded in 1994 by David Bohnett and John Rezner as a web hosting service where anyone who wanted a website on the Internet could build one. Websites hosted here were organized into neighborhoods based on the topic of websites, such as SiliconValley, Heartland, and MadisonAvenue.

My website there was placed in SiliconValley as it was a website about OS/2. (This was back in 1996, long before I started using Linux.) The URL for that site was http://www.geocities.com/SiliconValley/Heights/4301. The Wayback Machine at Internet Archive can be used to view websites that were on GeoCities back in the day.

Some neighborhoods got so large, sublets were introduced to further organize the location of websites hosted at GeoCities. On the filesystem used in GeoCities, sublets are nothing more than subdirectories contained with the directories assigned to the neighborhoods.

Each website hosted on GeoCities had to fit into one megabyte of space on the server. Back in the 1990s, websites hosted there were simply HTML coded web pages, and graphics in GIF and JPEG formats. Scripting on pages was done in JavaScript and only client side scripting was allowed.

Server side scripts were not allowed on GeoCities pages, but then, that was not the point of GeoCities in the first place. GeoCities was a place to showcase creativity when building websites.

...then Yahoo! stepped in.


Back in the 1990s, the Google that we know today was simply a spinoff of Yahoo! and was nothing more than a directory of websites. Yahoo! was as powerful of a company then as Google is today. These days Yahoo! is now owned by Verizon, which happens to be both my Internet service provider and cellular phone service provider.

Users of GeoCities had their accounts converted to Yahoo! accounts and the websites were assigned a more conventional URL scheme, namely

http://www.geocities.com/username

where username was the login name used to log into GeoCities and later Yahoo!. After Yahoo! took over the service, priorities of the service changed to one of monetization. This took a toll on creative freedom, in terms of what happened to websites hosted there.

We all know how popup windows were the source of irritation for many website developers and consumers alike. GeoCities always had advertising as a funding source. Before the Yahoo! takeover, advertising appeared on the top of web pages in a non-obtrusive way. Since the Yahoo! takeover, those ads were literally “in your face” in the form of popups.

October 26, 2009 was the final day of the original GeoCities existence in the US, and ten years later the final closure of GeoCities as we know it came in Japan, the only country remaining where one could get a free website on GeoCities.

That same year, Yahoo! Small Business was set up as a repurposing of GeoCities from one of a straightforward community to one of an e-Commerce community.

What I did after Yahoo! took over in 1999

Before I adopted the name Horneker Online for my website, the site was given various names, namely:
While on GeoCities

• OS/2 Junction
• OS/2 in Focus
• OS/2 and Linux in Focus

The last one here was an adaptation of OS/2 in Focus after I started using Linux back in 1998.

Since the Yahoo! takeover

• OS/2 and Linux in Focus (on Bravepages)
• 32-Bits and Beyond Project (on Bravepages and later 20m.com and 50megs.com)
• Cybernightlife (on 50megs.com until 2009)

The name *cybernightlife* was originally spelled as *CyberNightLife* and later changed to its final incarnation, *cybernightlife*.

The origin of the name is simple. It is a combination of the terms "cyber-" and "nightlife", or literally “technology after hours”. I came up with this idea after having been to Las Vegas in 2002.

By 2007, the name started to take on a negative connotation. This is one of those “it seemed like a good idea at the time, but now it isn’t” moments. At the time, I was a bit concerned about how the public image of my website was being presented.

As the old cliche goes,

“That was then, this is now.”

The name *cybernightlife* may have been a good idea in 2002. But it proved to be a bad idea in 2007, given the growing popularity of Google usage as a way for employers to research candidates, and now with the plethora of security problems we now face on the Internet, it is more important than ever to have a name that cannot be negatively perceived.

I made the decision to drop the name “cybernightlife” and since adopted the current name of my website, Horneker Online.

Mind Your Step: Remembering GeoCities

Attempts to archive (and revive) GeoCities

Besides the Internet Archive, the following websites have attempted to archive the contents of GeoCities:

• GeoCities.ws
• Geocitiesarchive.org
• Oocities.org

Of these, only GeoCities.ws is currently hosting that type of website, and under the same terms and conditions as the original GeoCities. The other two sites are directories containing (somewhat) archived versions of the actual GeoCities websites.

GeoCities.ws does the same, except that you get unlimited storage space for your website instead of the one megabyte.

This is reasonable as back in the 1990s, content on websites were typically measured in kibibytes rather than in megabytes as we measure content today. Back then, pages were encoded in HTML (usually version 3.2 or 4) and graphics were rendered as GIF and JPEG.

In 1990s, we did not have PNG or WebP for graphics, nor did we have CSS, WordPress, Joomla or Drupal. If you wanted a video clip, the only viable choice was the AVI format. (Have you ever tried to use YouTube on a 56k dialup connection?)

JavaScript existed then, but it was mainly used for client side scripting, and mainly for basic website interaction or browser detection, and even then, the version of JavaScript was browser dependent, i.e. what worked on Netscape browsers (the commercial predecessor to today’s Firefox) may or may not work on Internet Explorer (of dubious fame).

In fact, the versions of the Java Runtime Library were completely different amongst browsers. (Microsoft insisted on its own version of the Java Runtime Library at that time, which resulted in a lawsuit from Sun Microsystems regarding the licensing of Java.)

The company behind GeoCities.ws has paid hosting services provided by GridHoster. The domain geocities.ws was registered at GoDaddy and the space for the free version of the website resides there as well.
I would have gone for this offer. However, my domain is also registered with GoDaddy.com and my current website resides there, too, so it makes no sense to claim that older website through geocities.ws when I have my own web space on the same GoDaddy infrastructure.

Another reason not to go for this offer is that the signup form is on a non-secure server (i.e. accessed through HTTP and not HTTPS), enabling significant privacy and safety risks for personal data.

There is, however, one more website not already mentioned that really brings back the GeoCities experience, and from what I hear, is used by educators for training the next generation of website developers.

Introducing Neocities

What do you get when you combine the latest trends in cybersecurity, open source, a community spirit (not unlike what we have here at PCLinuxOS), and the freedom to be creative when building websites?

You get Neocities. Established in 2013 by Kyle Drake and Veronica Wang, this web hosting service can be best described as the next generation GeoCities.

The main differences from GeoCities are as follows:

- No advertising! Like NPR and PBS, Neocities relies on donations to function.
- With the free account you get one gigabyte of space to store your website on (domain certificates included), 200 megabytes of bandwidth for website access, a subdomain, ability to backup your website to local disk with one click, RSS feed, a profile page, tags (not unlike what we use in social media), and a command line tool with Git style updating written in Ruby!
- You can write HTML, CSS and JavaScript code with the built in editor accessible from a web browser.
- Website development tutorials on the Neocities website.
- A rather awesome (and cool) mascot!

While Neocities offers free webspace for websites, you have the option to obtain a support account for $5.00 per month. This expense is well worth it. Not only do you support the mission of Neocities, but you get some generous bonuses as well (including everything you get with the free version), namely:

- 50GB of web space with domain certificates and 3 terabytes of bandwidth (useful for high traffic websites)
- The option to use your own domain in addition to the subdomain you get with the free version.
- WebDAV access to your website. This means, with the davfs2 package installed from the repository, you can mount a Neocities website as a storage device on PCLinuxOS.
- Create up to 30 websites with a single Neocities account. (The free version provides only one website.)
- The ability to upload any file type to your Neocities space. (The free version only allows graphics and HTML/CSS/JavaScript code. But then, the same was true for the original GeoCities.) Of course, only content you have a legal right to upload can be uploaded to a Neocities site.
- Just about anything else anyone could possibly want in a static website. The only restriction here is that the website has to be a static website. But then, that was true of the original GeoCities as there was no such thing as a blog back in the 1990s.
As for coding of websites, you can use HTML5 and CSS in addition to the classic HTML. The only scripting permitted in Neocities is that of scripts written in JavaScript. Websites here must be static. In other words, do not expect to be able to host a WordPress or Joomla website here, as the needed programming languages for that are not available for website development on Neocities, not to mention the cybersecurity risks involved with such websites.

Remember Webbrings? Those pieces of HTML programming that effectively make up a linked list of related websites. They sure were a piece of work to maintain.

Neocities uses a database of tags, searchable from within Neocities (no login required to search the tags). With a Neocities account, you get a profile page which functions as a ChangeLog file on many software projects, including those hosted at SourceForge, GitHub or GitLab. Tags associated with your hosted website are maintained on your profile page.

From what I have seen when browsing the collection of websites hosted here. The spirit of GeoCities is definitely here. If you are using a smartphone to access these sites, prepare to do a lot of scrolling.

Net Neutrality Welcome Here

If there is one thing that Neocities got right, it is that the people behind Neocities are pro net-neutrality. Their blog entry for April 27, 2017 says it all (at right).

Even at $5.00 per month, it is worth it to bring PCLinuxOS to Neocities.

Want To Help?

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

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

Join us on our Google Group mailing list.

The Net Neutrality Supporters Plan

Apr 27, 2017

The anti Net Neutrality lobbyists apparently didn't learn their lesson sufficiently the last time they tried to destroy the internet and devolve the entire thing into a nightmare dog-eat-dog civil war jungle. Now the latest lobbyist-in-chief at the FCC is trying to rip apart Net Neutrality, virtually guaranteeing that the entire internet will melt down into a broken TV box run by railroad barons 2.0: oligarchical super-monopolies like Comcast that will have a blank check to artificially price their competitors into bankruptcy (goodbye Netflix, Youtube, Twitch, and millions of small startups that can't afford the new rates that Comcast and its gilded partners won't have to pay).

Since the FCC apparently doesn't care anymore, I did some digging and found a bunch of IP address blocks used by net neutrality opponents, and made something special just for them.

Starting today, if you're at the US Senate, the FCC, the White House, or a Trump hotel, you will now see this instead of the normal page when you sign up for a Neocities account:

How to Sign Up

That is the easy part. The homepage for Neocities is also where you create your Neocities account. All you need is a username, a set of keywords to use as tags, and a working email address. No more than five tags can be used for your Neocities website.

Once you create your account, you have the option to immediately upgrade to the Supporter account.
This is what you see when your account has been created.

Every Neocities account comes with a profile.

This is very much straight forward. Click on **Edit Site** to enter the file manager (top, right).

Here you can create new folders (such as a folder to store wallpapers for your desktop), a new file (text, of course), or you can upload files.

You can also drag and drop files and folders to the large space provided here. (Plasma desktop recommended for this feature.)

Also, you can download the entire website to your local disk (as a Zip file), which is useful for making backups of your website.

The link next to the website download is a link to instructions for how to mount your new website with the WebDAV protocol. (**libdv2** must be installed from the repository for this to be possible).

There are four files already in this folder. The file called **not_found.html** is used in making a page to be displayed when someone tries to load a page that does not exist on the website (also called a **404 page**, named for the HTTP Code 404 error, or **File not Found**).

Besides that, we have a graphic that tells us this site is hosted at Neocities, a homepage (**index.html**), and a simple CSS stylesheet
All the HTML and CSS files can be edited. (I do not recommend messing with the graphic file as it shows that the website is hosted at Neocities, which shares many of the values we have in the PCLinuxOS community.)

To edit a text file, simply click on that file’s icon.

We can use any of the editors that are in the repository (such as Bluefish and Brackets) to create HTML and CSS pages, but this is available, and changes are immediate (simply click on Save).

With the exception of index.html, any of the other files in the file manager can be deleted or renamed by selecting that function from the menu that pops up when you hover over the icon.

Ready for the Renaissance

That is all we need to get started. I signed up with the Supporter option, not just for the bonuses, but for the values that are shared between Neocities and this community, and also with Horneker Online.

After having used the HTML5 template currently on my website, I am ready to try something new...a renaissance of 1990s web development fused with HTML5, CSS and simple website frameworks. The founder of Neocities has developed such a framework, and is a part of that website’s design.

I will be taking a look at that, then see what transpires.

Mind Your Step: Remembering GeoCities

If you have a static website, i.e. one built on HTML, CSS and JavaScript, you really should consider this service to host your website, or support and/or promote PCLinuxOS itself for that matter.
On my 'puter one day into the forum I did stray
Went there softly creeping 'cause I knew the mods were sleeping
And the vision that was planted in my brain does remain
And all were silent

Then I read a little word in a topic so absurd
And the users sat a waiting for to begin the debating
They all tried to write a defense made no sense
Wish they'd be silent

Mighty Tex he does appear I am sure I will hear
Words of wisdom he will make sorry that's a big mistake
Only spouts what he's a thinkin' what has he been drinkin'
Who's going tell him to be silent

So it goes every day oh what sounds they ever say
Sputtering chitter chatter about what it doesn't matter
For the friendship we are sharing is so deep and caring
Let us never be silent

I'm ms_meme hear my song I don't mean to do you wrong
I must play my little part I sing right from my heart
Use the volume on your speaker to make me a little weaker
But I can't be silent
Grilled Skinny Fish With Strawberry-Poblano Relish
Low Carbohydrate 5g

INGREDIENTS:

Fish 4-(4 oz to 5 oz) fresh or frozen sea bass
or halibut steaks, cut 1 inch thick
1/4 teaspoon salt
1/4 teaspoon cayenne pepper
Relish
1 small lime
1 cup chopped fresh strawberries or frozen organic
strawberries, thawed and chopped.
1/4 cup finely chopped seeded fresh poblano chile
pepper (1/2 of a small)
2 tablespoons snipped fresh cilantro
1/2 teaspoon cumin seeds, toasted*
1/8 teaspoon salt

DIRECTIONS:

Thaw fish, if frozen. Rinse fish; pat dry with paper
towels. Finely shred lime peel. Peel, section, and
chop lime; set aside. In a small bowl, combine lime
peel, the 1/4 teaspoon salt, and the cayenne pepper.
Sprinkle mixture evenly over both sides of each fish
steak; rub in with your fingers.

Arrange medium-hot coals around a drip pan. Test
for medium heat above pan. Place fish on the
greased grill rack over a drip pan. Cover and grill for
7 to 9 minutes per 1/2-inch thickness or until fish
flakes easily when tested with a fork, gently turning
once halfway through grilling time.

Meanwhile, in a medium bowl, combine chopped
lime, strawberries, chile pepper, cilantro, cumin
seeds, and the 1/8 teaspoon salt. Serve with grilled
fish.
It’s easier than $E=mc^2$
It’s elemental
It’s light years ahead
It’s a wise choice
It’s Radically Simple
It’s ...

Screenshot Showcase

Posted by luikki, May 1, 2020, running Mate.
Inkscape Tutorial: Draw A Rope

by Meemaw

I saw this tutorial recently, and thought of an advertisement that I had done for my job. It was an ad for a rodeo book, so I wanted it to have a western theme, including a rope. The art department at the main office did it for me, but with this tutorial, I might be able to do it myself next time using the Pattern Along Path effect. Let's get started.

Using the pen tool in Inkscape, draw a shape that will make up the part of our rope that will be repeated.

Next, create the shape that you want to apply to your rope. This can be any shape. In this example, I just used a simple curve.

With the path selected, open up the Path Effects dialog by clicking Path > Path Effects. Click the + button, and choose the Pattern Along Path option from the dialog. It will add the Pattern Along Path effect. Note, however, that nothing will change yet.

The Pattern Copies dropdown to Repeated, and mark the Pattern is vertical checkbox.

I have changed the Spacing value because the shapes weren't touching each other. The number is going to be a negative number, but will vary widely depending on the size of your image. If a setting of -1 doesn't change your path much, try a much larger number. My setting turned out to be -10. Change your value until the rope edges line up fairly cleanly.

The spacing is pretty close, but when you zoom in on the shapes, they may not fit perfectly. Using the original shape, adjust the nodes until you can see that the shapes fit together better.

Now, select your shape, and copy it to the clipboard with Edit > Copy or Control+C. Once copied to the clipboard, select your path again, and in the Path Effects dialog, press the Link to Path on Clipboard button (it's the last button in the Pattern Source section, with the tiny lock on it).

After doing this, your path should look different — the shape will be stretched out over the length of the path (right, top).

Well, that doesn't look like a rope! Let's change some settings. With the path still selected, change
The key here is that the outside edges line up neatly. Don't worry too much about the inside edges. The result should look something like this:

My finished rope looks like this:

Depending on what shape you use, you can make all sorts of shapes with your length of rope!

You can also select your path and tweak the shape of it if you want. Once you are happy with the shape, convert it to a path with **Path > Object to Path**. **NOTE**: Once you do this, you can't change the shapes anymore.

You can also break your path into individual shapes with **Path > Break Apart**, and set the fill colour and stroke to what you want. Once you set the fill colour, the inside overlaps will be covered up. You can also experiment with moving around different sections of your rope. Here, I took out a couple of shapes and rotated the middle section.
Short Topix: Privacy Issues Emerge During Pandemic

by Paul Arnote (parnote)

Solar One Light Sail Spaceship Proposed

The light sail would be propelled by the laser system, which receives its necessary power from the onboard fission reactor.

The proposed spacecraft would be able to accelerate to 30% of light speed (0.30c), carry two crews, and be able to travel to Alpha Centauri (4.24 light years away) in 15 years. To put that in a different perspective, since light travels at 186,282 miles per second (299,792 Kilometers per hour) and 670,615,200 miles per hour (1,079,690,472 kilometers per hour), 30% the speed of light would be 201,184,560 miles per hour (323,907,142 kilometers per hour). The light sail would be furled when cruising (neither accelerating or decelerating) to help prevent damage from micrometeorites, and unfurled for acceleration/deceleration maneuvers. The reactor section of the spacecraft would have the thickest protective coating, to also help protect it from micrometeorite damage.

Using “off the shelf” projects as he proposes, Caballero is certain that his project will cost less than $100 million (U.S.). The reactor currently costs around $16 million, the HELLADS costs around $21 million, and the Sunjammer light sail costs around $27 million. The ride to the heavens aboard SpaceX’s BFR would cost around $30 million. All total: $94 million (U.S.).

Of course, there would also be the added expense of building the crew capsule, the descent module, the light sail module, the reactor module, and the module that houses the laser, plus all of the support systems and equipment. All of that isn’t going to come cheaply, and may (at least) double the projected costs.

Upon arrival at Alpha Centauri, the search will begin to find a habitable planet. Upon finding one, a robotic probe will be sent to the planet to ascertain atmospheric composition, climate, etc. If the robotic probe reports back that the atmosphere is breathable, then members of the crew would use the descent capsule to land on the new world.

So, even if the spacecraft were to launch in 2029, it wouldn’t arrive at Alpha Centauri until 2044, and we wouldn’t even hear of its arrival until 4.24 years (2048 at the earliest) after it transmitted a radio message announcing its arrival. Of course, it should go without saying that this will be a one-way trip for the crews, barring further advances in space travel that allow us to travel faster than 30% the speed of light. It’s rather exciting to imagine the feats and accomplishments that our children and grandchildren may bear witness to.

Online Dating Threat Actors Target U.S. Universities

As if being single and trying to utilize online dating sites wasn’t bad enough, threat actors are now targeting adult singles at U.S. universities with the
Hupigon RAT (remote access trojan) malware, according to an article from Proofpoint.

The Hupigon RAT has been around since 2006, and is usually associated with state-sponsored threat actors. Researchers from Proofpoint have discovered a large volume campaign targeting faculty and students U.S. colleges and universities.

The messages arrive disguised as adult dating lures, where the user is asked to choose which picture represents someone they would like to date. Clicking on either picture causes the download to start. Once the executable (exe) file is downloaded, Hupigon is installed on the user’s system.

Hupigon allows threat actors to access the infected machine, has rootkit functionality, webcam monitoring, and the ability to log keystrokes and steal passwords. This version connects to a DNS server for its initial command and control communication. They also discovered that it uses the same address as another piece of malware, called “gogominer.”

In this particular case, the Proofpoint researchers believe the campaign is crimeware motivated, based on the distribution methods and message volumes, as well as other technical associations that were observed.

Privacy Issues Emerge During Pandemic

It’s not bad enough that privacy issues before the pandemic were mounting. Now, with many people telecomputing from home, bosses are attempting to log how much time employees working from home are spending doing their jobs, taking privacy concerns to new heights.

According to an article from NPR (National Public Radio in the U.S.), the increased incidence of working from home has led to an increase in surveillance by bosses spying on those working-from-home workers.

One company required its WFH (work from home) workers to install Hubstaff on their computers. In turn, Hubstaff logged every mouse movement, keystroke, and website the workers visited. The same company required WFH workers to install an app on their phones, called TSheets, to keep track of the worker’s whereabouts during work hours.

Companies try to sell it on the merits of “improving team productivity and efficiency.” But many WFH workers aren’t buying it. Nor are privacy advocates, who are fearful that the extra surveillance of WFH workers will normalize workplace surveillance, and that the digital surveillance will continue once workers return to working “on site.”

The software is intrusive and unforgiving. “If you’re idle for a few minutes, if you go to the bathroom or whatever, a pop-up will come up and it’ll say, ‘You have 60 seconds to start working again or we’re going to pause your time,' ” one woman said. But most workers, including this one woman, are afraid to say anything, fearful that they will lose their jobs.

Meanwhile, the companies selling the software say that the demand for and usage of their software has at least tripled since the beginning of the pandemic. Of course, that means more money for them, and we all know how powerful of a motivator GREED is.

Is it intrusive? Without a doubt. Is it illegal? Not at all. While there are laws (in the U.S.) that are supposed to prevent the government spying on its citizens, employers are not subject to those laws. In fact, the laws governing employers vary wildly from state to state.

For many employees, it comes down to choosing between privacy and a paycheck. With so many (in the U.S.) who have lost their jobs during the pandemic lockdown, employees may feel between a rock and a hard place. They at least have a paycheck coming in because they are able to work, but they are having to forfeit a fair amount of their privacy to keep that paycheck coming in.

Want to keep up on the latest that’s going on with PCLinuxOS?

Follow PCLinuxOS on Twitter!

http://twitter.com/iluvpclinuxos
Cloth Face Mask Hack Improves Efficiency

![Image of face masks with grommets](image)

With many countries around the world attempting to reopen their economies after the coronavirus pandemic, many of us will be (or should be) wearing masks when out in public for quite some time to come. Additionally, such reopenings will also have to leverage social distancing to avoid spreading the coronavirus and creating a spike of new coronavirus cases.

Two researchers from the Departments of Civil and Environmental Engineering and Marine and Environmental Sciences at Northeastern University in Boston, MA have come across a simple, quick, cheap and effective “hack” to increase the filtration efficiency of cloth face masks. Amy Mueller and Loretta Fernandez posted their findings in a preliminary paper (324 KB PDF) detailing their findings.

The hack is simple. Just cut out a section from the leg of a pair of panty hose, and slip it over the top of your cloth mask. The panty hose layer helps filter the air passing through it, and it helps seal the mask underneath to your face better. By eliminating the leaks around the edges of the mask, the mask filtration efficiency was improved between 15% and 50%. Thus, with a cloth mask (which varies widely and wildly in quality and caliber depending on style, craftsmanship and the style of mask), the mask wearer can attain the same level of efficiency as a hospital surgical mask. With the panty hose worn over a hospital surgical mask, the hospital surgical mask goes from around 75% filtration efficiency to around 90% filtration efficiency.

Since this is a preliminary paper, it has not been published yet in a peer-reviewed journal. Thus, the paper only appears on the Northeastern University website.

In a FastCompany website article, they laid out step-by-step instructions for anyone wanting to give the panty hose hack a try. First, researcher Fernandez recommended using queen size panty hose, because they are easier to breathe through. Then, cut out an eight to ten inch (20cm to 25cm) section of the leg. Put your cloth mask on first, and then put on the ring of panty hose material on your head, as if you were putting on a headband. Now, slowly pull it over your face mask so that it rests just above the upper part of your mask, down to under your chin past the bottom edge of your face mask.

One pair of panty hose should be able to provide at least four face mask covers.

If you’re going to wear a mask (and I hope all of you are, at least when you’re out in public), you might as well make it as efficient as possible, so that it provides the highest level of protection possible. Y’all know that I work in a hospital as a respiratory therapist, so help me help you and everyone else by urging you to, at the very minimum, follow the advice of public health officials with regards to social distancing, wearing a mask in public, proper hand washing, avoid touching your face, and just staying away from other people as much as possible.

Microsoft: $100,000 If You Can Hack This Linux Operating System

![Image of money](image)

Microsoft. That old bastion of Linux hatred turned to love. [tongue-in-cheek]

They have chosen Linux to power a line of IoT devices. Nope. Not Windows, or anything else that you typically associate with the Evil Empire. Linux.

According to an article on Forbes, they are offering hackers a $100,000 (U.S.) award if they can “break it.” Just as you might imagine, there are “strings” attached. First, it’s not the ordinary Linux that you and I run on our computers. Instead, it’s a very specific version of Linux that powers Microsoft’s IoT end-to-end security platform, called Azure Sphere.
Azure Sphere is a customized high-level and very compact OS, based on Linux. It is hardened with a secure application environment. Mix this with hardware, software and the cloud, and you have Microsoft’s end-to-end security platform.

The Azure Sphere Security Research Challenge, as it’s called, was accepting applications from hackers, and those had to be submitted by May 15. Then, starting June 1, 2020, the 50 selected hackers are given three months to try to “break” it. Microsoft will supply access to Azure Sphere, as well as to other Microsoft products and services the hackers can use in their attempts.

The hopes are that the hacking community – the “white hat” hackers, instead of the “black hat” hackers” – can help find any security vulnerabilities that were missed that would allow execution of code on the platform. Plus, if they find a security vulnerability on the “Secure World” layer, which runs below the custom Linux kernel, that allows code execution, there is another $100,000 up for grabs.

Transfer Your Facebook Videos & Photos To Google Photos With Ease

According to an article on Forbes, after a trial run in Ireland, Facebook has opened up its Data Transfer Project (DTP) to the 200 million Facebook users in Canada and the U.S. The tool allows Facebook users to transfer all of their photos and videos from Facebook directly to Google Photos. Previously, users had to click and download each image individually, one by one.

Even if you don’t plan on leaving Facebook, it’s always a great idea to have backups of your precious photos and videos.

So, to grab all of your photos and videos, head over to the DTP page. Choose your destination (Google Photos is currently the only one, thus far). In the next popup window, authorize Facebook to access your Google Photos. Select “Videos” or “Photos,” then click on the Next button. You have to select one or the other, and then go back and do the other one. You cannot transfer them all at once. Then, you’re done!

The process runs in the background, so go do something else for a while. When you come back, you can check on its progress. A couple of caveats though. The article reports that images transferred from Facebook to Google Photos seem to have had their exif data stripped away. Any panorama or 360 degree photos – especially the latter – seem to get mangled in the process.

So if leaving your precious photo and video memories behind has been keeping you from ditching Facebook, at least one obstacle has been eliminated. The service may or may not work in other areas of the world at this time (it is “unofficially” working in the U.K.), but it is being rolled out to other countries. So, if it’s not currently available in your area, keep checking back.

A “Sneaky” Way To Ditch Out On Those Zoom Meetings

With the lockdowns across the globe associated with the coronavirus pandemic, many workers have taken to conducting business over video conferencing programs, such as Zoom. In fact, Zoom has even been added to the PCLinuxOS repository.

Initially, I didn’t see a need – personally – for such a program. But then, as the lockdown dragged on, my son’s teacher started using Zoom to reach out to her students twice a week. It gives them a chance to see their classmates, their teacher, and to talk to one another. So, the program I didn’t think I’d ever use had ended up not only installed on my main PCLinuxOS computer, but also used at least twice a week.

There are some workers who conduct a LOT of their work via Zoom. And, without a doubt, all of those Zoom meetings would seem to really drag on and on and on for what seemed like an eternity. Well, leave it to a 4th grade student to figure out how to ditch out on a Zoom call, as reported on Reddit. It’s actually kind of funny, too.
First, quickly disable your video (Alt+V) and audio (Alt+A). Then, quickly rename your “window” to “Reconnecting...”. To the less tech savvy people in your meeting, it will appear as if you’re having internet connection issues.

It’s probably not going to fool everyone, but it may just allow you to break away from yet another [boring] Zoom meeting. Your more tech savvy users ... probably not so much.

**British Museum Offers Viewing For 4.5 Million Objects**

![Image of British Museum objects]

Of course, due to the coronavirus pandemic, the British Museum is closed to in-person visits. As much of a bummer that might be, it shouldn’t stop you from taking a look at its collection. Especially since nearly 4.5 million objects in its collection are viewable online, from the comfort of your desk or sofa.

There are a couple of ways to view the online collection. First, if you know what you are wanting to look at, just click on the “Search” button, then type in what it is you’re looking for. Second, if you’re not sure what you’re looking for, you can click on the “Collections” menu item at the top of the page, followed by clicking on “Collections Online.” The page that appears will break down the collection into broad categories. Follow those and dig through deeper parts of the collection. You will also be provided some highlights from each collection to help get you started.

So, do you want to view the Parthenon Sculptures (image above)? Or would you like to view the Rosetta Stone? Use those as search terms in the search box. If you’d rather just browse, click on the “Galleries” section under the “Collections” menu item, and you can browse through the museum’s collections that have been put online.

You don’t have to let some tiny virus keep you from exploring the wonders of the past. Plus, you won’t have to put up with any other people, either. And, it’s GREAT for social distancing. While it’s true that it probably won’t replace seeing the items in person, you can still quench your thirst for knowledge, discovery and exploration by seeing the massive collection of the British Museum online.

**Lenovo To Sell Thinkpads With Fedora 32 Pre-Installed**

![Image of Lenovo laptops]

Coming very soon, according to Fedora Magazine, Lenovo will begin selling ThinkPad laptops pre-installed with Fedora Workstation 32. Lenovo will be starting with three models of ThinkPad laptops: ThinkPad X1 Gen8, ThinkPad P53, and ThinkPad P1. Gen 2 (left to right in image above). This pilot program, Lenovo’s Linux Community Edition, may be expanded to other laptop models as time goes on.

If you purchase a ThinkPad laptop from Lenovo’s site, you can choose Fedora 32 Workstation to be pre-installed as the operating system when you order it.

From Fedora Magazine:

“*The Lenovo team has been working with folks at Red Hat who work on Fedora desktop technologies to make sure that the upcoming Fedora 32 Workstation is ready to go on their laptops. The best part about this is that we’re not bending our rules for them. Lenovo is following our existing trademark guidelines and respects our open source principles. That’s right—these laptops ship with software exclusively from the official Fedora repos! When they ship, you’ll see Fedora 32 Workstation.*”

It’s nice to see computer manufacturers starting to embrace Linux as an operating system option for their customers. Dell has been offering some of its computers pre-installed with Ubuntu as the operating system for a while now.

I have used a number of Lenovo ThinkPad laptops in the past with PCLinuxOS installed. They have always performed admirably. They are well built, rugged, and usually packed with useful features.

Pricing has not yet been determined for the laptops preloaded with Fedora 32 Workstation.
Hacker Retrieves User Data From Tesla MCU Units

Let's see a show of hands. How many of you can afford to own a Tesla motor vehicle?

Yep. That's what I thought. I'm right there with you. The prices haven't trickled down to levels where us mere mortals can afford them ... new or used. Quality certainly commands a price, but in the case of a Tesla motor vehicle, it's one that the vast majority of us cannot afford.

One of the luxury features of the Tesla line of motor vehicles is its MCU, or Media Control Unit. Tesla's MCU makes it possible for owners of Tesla motor vehicles to stream Netflix or YouTube videos, find/connect to wifi, store phone numbers and contacts, run Spotify, and a whole host of other "fancy" things for a motor vehicle.

Well, according to an article on Ars Technica, one hacker who describes himself as a Tesla enthusiast and tinkerer, obtained 13 Tesla MCUs to "explore." He purchased 12 of them from eBay, and one was given to him by a friend.

From the Ars Technica article:

"Each one of the devices stored a trove of sensitive information despite being retired. Examples included phone books from connected cell phones, call logs containing hundreds of entries, recent calendar entries, Spotify and Wi-Fi passwords stored in plaintext, locations for home, work, and all places navigated to, and session cookies that allowed access to Netflix and YouTube (and attached Gmail accounts).

All 13 of the devices showed that their last location was at a Tesla service center, an indication that they were removed by an authorized Tesla technician. Tesla service stations remove MCUs for several reasons. Most commonly, it's to replace a faulty device or to upgrade to a newer, more advanced device model that improves the vehicle's autopilot."

It's unclear what Tesla's policy is regarding MCU units that are removed or replaced, but it's certain that this isn't what they originally had in mind. Tesla didn't respond to Ars Technica's inquiries regarding the intended fate of removed MCUs.
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by Alessandro Ebersol (Agent Smith)

In 1982, visionary director Ridley Scott (Alien, Gladiator) created a masterpiece, so far ahead of its time, that it was not appreciated right away at its launch. Blade Runner was released in 1,290 theaters on June 25, 1982. That date was chosen by producer Alan Ladd Jr. because his previous highest grossing films (Star Wars and Alien) had a similar opening date (May 25) in 1977 and 1979, making the 25th of the month his “lucky day”. Blade Runner grossed reasonably well at the box office over the opening weekend; earning $ 6.1 million during its first weekend in theaters. The film was released alongside other major sci-fi and fantasy releases, such as The Thing, Star Trek II: The Wrath of Khan, Conan the Barbarian and ET the Extraterrestrial. It was nothing short of a big dog fight.

The film made $ 26 million in its season in the summer of 1982 - not bad, but not enough to make it into the summer's top 10. And it certainly wasn't enough to make a profit (the summer box office was dominated by two films, "ET - the Extraterrestrial" and "Rocky 3"). Against a budget of $ 28 million, it was a moderate flop. Of course, after Star Wars, audiences expected easier science fiction, a simpler struggle between good and evil, and not the metaphysical questions the film raised. It had action, no doubt, but it was very cerebral. And, dark. A decadent and hopeless future.

Time passed, and, Blade Runner became a cult classic

One of the first examples to prove the power of home video, after gaining an international audience of followers, finally found its audience on VHS and DVD. Since then, it has been celebrated as one of the greatest science fiction films of all time.

Thanks to the VHS/DVD exhibition, the film had several versions, re-releases, a definitive director version, and a sequel in 2017. But, why did I mention the film Blade Runner? The Blade Runner game was recently re-released, and it works perfectly on current operating systems and current computers.

Blade Runner would only be a hit years after its release

The game, like the movie, was beyond its time

We arrived at the Blade Runner game, created by Westwood studios, and distributed by Virgin Interactive, which was in a long period of development, partly because of Blade Runner's IP proprietary rights, and, for several technical aspects.

Generally movie-based games are a disappointment, but this game in particular is not. On the contrary, Blade Runner, the game, is a unique piece.

The Development

The initial idea for a Blade Runner video game adaptation came from The Blade Runner Partnership (composed of Bud Yorkin and Jerry Perenchio of Tandem Productions). They originally approached Electronic Arts, Sierra and Activision, before Virgin Interactive agreed to move the project forward. However, the rights of the film were distributed to several entities, each with a different aspect, making the production of the game complex from a copyright perspective. The Ladd Company had US distribution rights for the film, Run Run Shaw had international distribution rights, and The Blade Runner Partnership had all ancillary rights, and were the guarantors of the title. They had taken control of the film when it exceeded its budget and schedule at the end of production. As a result, the separation of rights took several years before Virgin was in a position to actually start development. They finally hired Westwood Studios to work on the game, but even with the rights guaranteed and the game in pre-production, there were still legal issues.
To circumvent legal problems, the game's creative team, led by Louis Castle (co-founder of Westwood studios and creative director of Blade Runner), decided to create not a story true to the film, but a story in the film universe, a side-story, so to speak. And, due to several problems, in the production of the film, key people in the making of the film, did not want to participate in the game. Ridley Scott, the director, did not want to have any involvement with the game, nor did Harrison Ford, who at the time (1997) was very upset with the whole production (the production of the 82 film was very tumultuous). So how would the team create the world of Blade Runner, the game? With the assistance of the film's concept art staff, Syd Mead, and production designer Lawrence G. Paull and art director David Snyder. So, with the help of this team, Louis Castle ordered his team that everything created for the game should come from the art of Syd Mead and the designs of Paull and Snyder.

The inventive story of Blade Runner, the game.

As stated above, Louis Castle did not want to adapt the film directly. One reason was the difficulty with copyrights. One company owned the rights to the music, another the rights to worldwide distribution, another to the rights to the film in the United States, and so on. Thus, another original story was created, within the Blade Runner universe.

In this story, the player would not play Rick Deckard (Ford), but another Blade Runner, newcomer Ray McCoy. And, the story would follow Deckard's footsteps, and, it would take place in several well-known Los Angeles 2019 scenarios: The Bradbury building, the pyramids of the Tyrell corporation, Howie Lee street restaurant in Chinatown, the cylindrical police building of Los Angeles, Ray's apartment, among other locations. The story greatly expands the Blade Runner mythos, with Ray visiting other places, not shown in the film (the LA police station is an example).

Finally! Blade Runner On PCLinuxOS!

Luther and Lance, former genetic designers at Tyrell Corporation who are now working to extend their own lives and those of all other replicants. From them, McCoy receives a detailed report containing evidence of Guzza's corruption. Using this information, he blackmails Guzza and forces him to correct the falsified evidence on him (McCoy) and clean his name. They meet in the city's sewers for an exchange, where Guzza is wounded by gunfire from replicants. At this point, the player can flee or kill Guzza.

The game features thirteen different endings, which are influenced by the player's cumulative actions and decisions throughout the story.
500 pages, and beta testers had to play the game 2,500 times to experience all possible variations.

Due to the importance of plot randomness, the NPC's behavior was not scripted. Instead, each NPC is given certain goals to be met, based on whether they are replicant or human. The way in which they fulfill these objectives is handled by the AI system and can change from game to game, as most objectives have several possible methods of achievement. The developers compared this aspect of the game to a simulation game, like SimCity, instead of traditional adventure games like Myst. Castle explains: "These agents are real, goal-oriented artificial intelligences. We don't know exactly what they will do. We gave them behavior, we didn't give instructions. There's a big difference between behavior-based AI and script-based instructions."

"When we told Intel that we were making a 640x480 game, 65,000 colors that emulates true colors, with 16-bit Z-buffer and six-channel CD-quality audio, they said: You can't - the PCI bus doesn't support it.

"So we feel good about ourselves, because we haven't mentioned the 750,000 polygons for the characters yet", Castle said, with a smirk.

Graphically, the game resembles some games of the time, with pre-rendered 3D scenarios, and 3D characters, in this case, with the voxel-plus technique. It's something similar to franchises like Alone in the Dark and Resident Evil. However, in a totally different and exciting way, the scenarios have lighting, and even though they are pre-rendered images, they are animated: fans that roll (and the game has many), and the lights change, blink. There are NPCs walking and spinners in the skies. The rain constantly falls, and it makes puddles on the ground.

The Graphics

The design of the Blade Runner game was extremely ambitious for the time. In contrast to many contemporary games, the game engine included pre-rendered backgrounds and 3D characters, but did not require the use of any 3D hardware accelerator. Designers David Leary and James Walls achieved this through self-developed technology using voxels (pixels with width, height and depth). Castle explains:

"We had to invent a new technology for the characters. We went back to voxel technology and used it as a launch pad. What we are using are not voxels, but a kind of 'voxels plus'. We use voxels to make rotations, transformations and three-dimensional projections that create the character, but in fact we use a very fast polygon rendering engine to render the polygons on the screen. Because we do not need a voxel model that is so dense that every pixel is a voxel, we are able to achieve much higher frame rates with many more polygons on the screen and with many characters."

"Finally! Blade Runner On PCLinuxOS!"

The game environment spends 60 to 65% of the CPU bandwidth, mainly because of the moving camera, but also because eight different characters can appear on the screen at any time - a large number for the technology of the time. Because of this, a powerful CPU was needed to run the game, as the engine had the processor doing all the work in creating the 3D models. However, despite this limitation, the game runs at a minimum of 15 FPS, even on slow systems. The disadvantage of this was that, since the power of processors at that time was limited, the 3D models in the game tended to appear very pixelated, especially up close and without movement, due to the low amount of voxels used to display them. However, if the number of voxels increased to increase the details of the characters, the game would be too slow to play, even on advanced CPUs.

All animations of the game's characters are based on actors with motion capture, with the characters moving in the pre-rendered 3D environment. At the time, any game that attempted 1,000 sequences captured per move was considered cutting edge; Blade Runner had 20,000.

The Music

The rights to the film's original soundtrack could not be guaranteed for the game, so Westwood brought in its composer, Frank Klepacki, to create tracks based on Vangelis' score and also to re-record some of the film's main tracks. Since Klepacki did not have access to the original master recordings, he had to recreate the music by ear.

The Cast

The cast has some actors replaying their roles in the film, such as Sean Young, Joe Turkel, James Hong and Brion James. And, promising young actors (at the time), like Lisa Edelstein (from the House series), as the partner of Detective McCoy, Crystal
Steele, or a young Pauley Perrette (NCIS), as one of the protagonists, and, the late Vincent Schiavelli plays an arms dealer. With a cast of more than 60 actors, the result is impressive. The variety of voices really gives the feeling of being in a big city.

The full list can be seen here.

My Review

I managed to play it, after 23 years, with the re-release made by GOG (which I will talk about later), and I was amazed. The game is a technical marvel, which, even made so long ago, still impresses. It is a point & click adventure, like so many that exist, however, it is so unique, that there is no other game like it. It resembles Star Trek, 25th anniversary, not only for the quality of the production, but the immersiveness, the graphics, the audio, everything, transports the player to the universe of Blade Runner, to that Los Angeles of 2019, always rainy and immersed in fog. The immersion is total, and fantastic. The audio is environmental, that is, according to the player’s position on the screen, certain sounds will be heard, and, moving away from those sounds, they will diminish or disappear.

The interface is very simple, just the mouse, a pointer, which changes color, when passing objects on the screen where the player can interact. The player has a PDA, KIA (Knowledge Integrated Assistant), which keeps the clues that the player finds to solve the crime. These clues must be downloaded to the mainframe of the Los Angeles police station, and the mainframe will process them and respond with other clues for the player to investigate.

During the game, the player must use the ESPER machine to analyze crime scenes, photographs and videos, looking for suspects and clues. The player will also use the standard Blade Runner pistol, the blaster, as there will be situations in which it will be necessary to defend Ray McCoy's life. However, be careful when using it: If you “retire” a human being, it’s game over. Eliminate replicants, fine. Human beings, it’s game over.

My Verdict: Buy it now! Don’t think twice. It is a classic, which now works perfectly on current computers and PCLinuxOS. But ... How did Blade Runner get to us? After 23 years?

Finally! Blade Runner On PCLinuxOS!

The Re-release

Speaking in 2015 about a possible re-release of the game via Steam or GOG.com, Louis Castle explained that the source code and assets were lost when Westwood moved its studio from Las Vegas to Los Angeles, making a relaunch or an HD remaster impossible. Even if the code were found, restoring almost a terabyte of assets, whether for new pre-rendered or 3D real-time scenarios, would cost tens of millions of dollars, making the relaunch as unlikely as a sequel. The Blade Runner partnership and Electronic Arts held the rights to the game for many years at this point.

However, the game would finally arrive on GOG.com on December 17, 2019, following an agreement with Alcon Interactive Group and the website, using ScummVM: Several attempts have been made to reverse engineer the game’s engine. As it is technically complex with voxel graphics for game actors, video backgrounds and random paths, the final project took eight years to complete. The new Blade Runner engine was added to the ScummVM game engine collection on October 13, 2016 and took another three years to be ready for public testing on June 16, 2019 and included in ScummVM version 2.1.0.

I would advise you to use the Windows version, with PlayOnLinux, create a prefix, install GOG Blade Runner on it, and set it up as Windows 7, install Directx9C and you are done.

I believe when this issue is ironed out, we’ll be able to play it natively on PCLinuxOS’s ScummVM.

URL: https://www.gog.com/game/blade_runner
Enjoy! And, good hunting, Blade Runner!
**PCLinuxOS Family Member Spotlight: Hallvor**

**What is your name/username?**

My username is Hallvor, and that also happens to be my real name. The name Halvor is not that uncommon in Norway, but there are only a few people in the entire country with the double l-spelling. One of the others was a well known ski jumper. At least he was well known in Norway...

**How old are you?**
I am 43 years old.

**Are you married, single?**
I am married.

**How about Kids, Grandkids (names and ages)?**
I have three boys: Håkon (18), Vegard (16) and Ivar (14).

**Do you have pets, what is your favorite?**
As I grew up on a farm, we always used to have at least one cat, so I am definitely a cat person, and if I was to have a pet, it would be a cat. But I don’t have any pets now.

**Are you retired, still working and if working, what do you do?**
I am a high school teacher, and have been teaching the last five years. I am teaching history for the senior students, but I also teach a special needs class. Before that, I worked for many years as a social worker.

The schools in Norway are now shut down because of the COVID-19 virus, so I am working from home and doing my best to teach my students online.

**Where do you call home? What is it like? IE: weather, scenery**
That is a difficult question, because I call two places home, and my heart is torn between them. The first is Sykkylvén in the northwest, where I grew up. The scenery is spectacular, combining sea with jagged mountain tops with snow on them all year. Being located on the western coast, winters are quite mild, and the summers never get very warm – and it rains quite a lot.

For the last two decades I have been living just outside Kristiansand, where my wife is from. It has a population of 110,000 inhabitants, is located in the very south of Norway, and about as close as you can come to Denmark on the Norwegian coast, and the ferry to Denmark can be seen on the lower right corner of the image below. There are many rocky shores, pine clad hills and small lakes by the town. Winters are a little colder and more windy than where I grew up, but the climate in the summer is a little warmer, and it rains a lot less than in the northwest.
Where did you go to school and what is your education level?
I studied to be a social worker for three years in the College of Volda. It lies in the northwest, not far from where I grew up. My history studies were mainly taken at the University of Bergen in the course of six years. It earned me the degree of cand. philol, so it corresponds to somewhere between a Masters and a Ph.D.

What kind of things do you like doing? hobbies, travel, fishing, camping?
Different types of martial arts have been a long time hobby of mine from the age of 16. I quit training it about three years ago, having spent the last eight years before that on Muay Thai. I have been struggling to find something to replace that hobby ever since, but do enjoy running and cross country skiing.

I also compete in pistol shooting competitions (mainly 10m air pistol), and have been shooting guns since I was a little kid.

Why and when did you start using Linux?
I had been curious to try it out for a long time before actually trying it. The first time was in 1998. I asked a friend to help me that I knew had some knowledge, but he just brushed me off and said it would be too difficult. An install required floppy disks and quite a bit of command line work. After scratching my head on my own for a little while, I gave up and didn't give it much thought before 2006, when I had problems with instability of my router. I installed Linux based firmware on it and noticed how much better it ran. This made me curious about GNU/Linux on the desktop, because my installation of Windows at the time needed reboots roughly every other day, and the install tended to slow down over time.

The second thing that sparked my curiosity, and would make the transition easier, was that I was already running many types of GNU software on my Windows installation.

I ordered a free CD of Ubuntu, and got it in the late summer of 2006. It was Ubuntu 6.06 «Dapper Drake». It was underwhelming at first, and I bumped into many beginner’s problems that I was unable to solve at the time. So I wiped the install in frustration and installed Windows. I don’t know if anyone has tried to install Windows without an OEM, but hunting drivers online and setting everything up, took a whole day. That reminded me of how easy and flawless the installation of Ubuntu had been, so a few days later, after reading about the stuff that was causing me trouble the first time, I installed it again. I have been using variants of GNU/Linux ever since.

What specific equipment do you currently use with PCLinuxOS?
I am currently using a HP EliteBook 2570p with 6 GiB RAM and 240 GiB SSD. It is not the newest hardware, but it is very rugged and so blazing fast with PCLinuxOS and KDE Plasma that it would be silly upgrading it.

Do you feel that your use of Linux influences the reactions you receive from your computer peers or family? If so, how?
This is a question of several layers. I used to be the guy to call if one of my siblings, nieces of nephews had problems with their computers. After not using Windows for a few years, I no longer had the knowledge of new versions of Windows, so I told them that I hadn’t used Windows for a long time, so the calls stopped coming. From computer peers there has been nothing but curiosity. Some Windows users, Mac OS users and one GNU/Linux user have merely asked me what I am running. My children have grown up with GNU/Linux, so they are OS agnostic, as long as the job gets done.

What would you like to see happen within PCLinuxOS that would make it a better place. What are your feelings?
I have not been distro hopping much, but I have visited quite a few forums, and I must say that the community here is unlike any other I have seen in a GNU/Linux forum. Some are like help desks. Some are like rude help desks. Some try to keep it friendly, and are more or less successful, but only this one looks like a true community, almost like a big family. There are usually advantages and drawbacks to everything, and while some might object and say it is a drawback to chit-chat this much about non-tech stuff, because you don’t learn as much, it is long since documented that we learn more from people we know and like than from people we don’t know as well or dislike. Just think about how little you actually learned from that one teacher you couldn’t stand. . . So I think you can have both a strong, friendly community with a lot of non-tech stuff going on, and still learn as much as anywhere else. Having the developer(s) active on the forum, is also a great advantage that I have missed elsewhere.

I also enjoyed reading The PCLinuxOS Magazine from time to time, even if I wasn’t running PCLinuxOS, especially the howtos.

Finally, I would just like to say thanks for your help and your effort. It is much appreciated.

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

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

by CgBoy

Manuskript is a program designed to assist with the writing of fictional stories and non-fiction papers. It allows you to easily organize all your ideas for plots, characters, and world details, create an outline, and then let you begin writing your first drafts.

When you first launch Manuskript, you need to select which kind of project you want to create, though there isn’t really that much difference between the fiction and non-fiction project types (Non-fiction projects are divided into sections rather than chapters). You can then set how many chapters you want to have, how many scenes per chapter, and a word count goal for each scene. This can all be adjusted at a later stage from the Editor tab.

After creating a new project, you can add in all the general information for the book, such as title, author, genre, etc. Next, you can start writing a main summary of your book, starting with simple one-sentence summaries, moving on to one paragraph, one page, and then eventually writing a full multi-page synopsis.

After that, you can start adding some characters to your story. You can fill in all the important information, such as name, goal, conflict, etc, and then use a slider to adjust the character’s importance in the story. Each character can also have summaries, notes, and other custom detailed information added to them.

Now you can begin developing the main, secondary, and minor plots of your book. When you add a plot, you can set its name, assign characters to it, write a short description and also explain the result of the plot. Then you can define the steps needed for reaching the resolution of the plot, each with their own summary.

After this, you can begin adding various world details, giving each detail a name and description. You can also load in a fantasy world building template by clicking on the little heart icon down at the bottom of the screen (top, right).

From the Outline tab, you can start planning out the whole book by writing some short summaries for each chapter, and then for each scene. Or, if it's non-fiction, then for each section of the paper. You can also set from which character’s point of view each scene will be, and adjust the word count goals.

Finally, after all this planning you can start the actual writing of your book from the Editor tab. When writing fiction in Manuskript, you select a chapter and write for each scene separately. For non-fiction projects you would write for each section separately. Personally, I'm not sure if this is the best method of writing, but that's just my opinion. New chapters and scenes can easily be added or removed from the book using the + and – buttons.
Manuskript has a useful tool accessible from the menu for checking the usage frequency of words and phrases in your book, showing you what words you may have overused. This should help you keep your writing more interesting.

Once you've finished writing your masterpiece, you can export it into a variety of different document formats, such as HTML, OpenDocument, DocX, PDF, and many more. You also have the ability to preview the compiled document before exporting it.

Summary

Manuskript is a great planning and organizing tool for writers, though it definitely seems to be intended more for fiction than non-fiction. I did unfortunately encounter a few bugs though, but the program is still fairly early in development. I'm not really much of a fiction writer myself, so I probably won't be using Manuskript that much, but I can definitely see how useful it could be for some writers.
Drop PNG & JPG For Your Online Images: Use WebP

by Jeff Macharyas
Opensource.com
Reprinted under CC-SA 4.0 License

WebP is an image format developed by Google in 2010 that provides superior lossless and lossy compression for images on the web. Using WebP, web developers can create smaller, richer images that improve site speed. A faster loading website is critical to the user experience and for the website's marketing effectiveness.

For optimal loading across all devices and users, images on your site should not be larger than 500 KB in file size.

WebP lossless images are often at least 25% smaller in size compared to PNGs. WebP lossy images are often anywhere from 25-34% smaller than comparable JPEG images at equivalent SSIM (structural similarity) quality index.

Lossless WebP supports transparency, as well. For cases when lossy RGB compression is acceptable, lossy WebP also supports transparency, typically providing three times smaller file sizes compared to PNG.

Google reports a 64% reduction in file size for images converted from animated GIFs to lossy WebP, and a 19% reduction when converted to lossless WebP.

The WebP file format is based on the RIFF (resource interchange file format) document format. The file signature is `52 49 46 46` (RIFF), as you can see with `hexdump`:

```
$ hexdump --canonical pixel.webp
00000000 52 49 46 46 26 00 00 00       | ... | RIFF,WEBP... |
00000010 1a 00 00 00 30 01 00 00       | ... | ...0... ...... |
00000020 0c 25 04 00 03 70 00 0c       | ... | ...p... ..... |
00000030
```

The standalone libwebp library serves as a reference implementation for the WebP specification and is available from Google's Git repository or as a tarball.

The WebP format is compatible with 80% of the web browsers in use worldwide. At the time of this writing, it is not compatible with Apple’s Safari browser. The workaround for this is to serve up a JPG/PNG alongside a WebP, and there are methods and Wordpress plugins to do that.

**Why does this matter?**

Part of my job is to design and maintain our organization’s website. Since the website is a marketing tool and site speed is a critical aspect of the user experience, I have been working to improve the speed, and reducing image sizes by converting them to WebP has been a good solution.

To test the speed of one of the pages, I turned to web.dev, which is powered by Lighthouse, released under the Apache 2.0 license, and can be found at https://github.com/GoogleChrome/lighthouse.
According to its official description, "Lighthouse is an open source, automated tool for improving the quality of web pages. You can run it against any web page—public or requiring authentication. It has audits for performance, accessibility, progressive web apps, SEO, and more. You can run Lighthouse in Chrome DevTools, from the command line, or as a Node module. You give Lighthouse a URL to audit, it runs a series of audits against the page, and then it generates a report on how well the page did. From there, use the failing audits as indicators on how to improve the page. Each audit has a reference doc explaining why the audit is important, as well as how to fix it."

**Creating a smaller WebP image**

The page I tested returned three images. In the report it generates, it provides recommendations and targets. I chose the "app-graphic" image, which, it reported, is 650 KB. By converting it to WebP, I should save 589 KB, reducing the image to 61 KB. I converted the image in Photoshop and saved it with the default WebP settings, and it returned a file size of 44.9 KB. Better than expected! As the screenshot from Photoshop shows (below), the images look identical in visual quality.

Of course, the open source image editor **GIMP** also supports WebP as an export format. It offers several options for quality and compression profile:
Convert to an image to WebP

To convert images on Linux from JPG/PNG to WebP, you can also use the command-line.

Use cwebp on the command line to convert PNG or JPG image files to WebP format. You can convert a PNG image file to a WebP image with a quality range of 80 with the command:

cwebp -q 80 image.png -o image.webp

Alternatively, you can also use Image Magick, which is probably available in your distribution's software repository. The subcommand for conversion is convert, and all that's needed is an input and output file:

convert pixel.png pixel.webp

Convert an image to WebP with an editor

To convert images to WebP with a photo editor, use GIMP. From version 2.10 on, it supports WebP natively.

If you're a Photoshop user, you need a plugin to convert the files, as Photoshop does not include it natively. WebPShop 0.2.1, released under the Apache License 2.0 license, is a Photoshop module for opening and saving WebP images, including animations, and can be found at: https://github.com/webpshop/WebPShop.

To use the plugin, put the file found in the bin folder inside your Photoshop plugin directory:

Windows x64—C:\Program Files\Adobe\Adobe Photoshop\Plug-ins\WebPShop.8bi

Mac—Applications/Adobe Photoshop/Plug-ins/WebPShop.plugin

WebP on Wordpress

Many websites are built using Wordpress (that's what I use). So, how does Wordpress handle uploading WebP images? At the time of this writing, it doesn't. But, there are, of course, plugins to enable it so you can serve both WebP alongside PNG/JPG images (for the Apple crowd).

Or there are these instructions from Marius Hosting:

"How about directly uploading WebP images to Wordpress? This is easy. Just add some text line on your theme functions.php file. Wordpress does not natively support viewing and uploading WebP files, but I will explain to you how you can make it work in a few simple steps. Log in to your Wordpress admin area and go to Appearance/Theme Editor and find functions.php. Copy and paste the code below at the end of the file and save it.

```php
/// *Enable upload for webp image files.*
function webp_upload_mimes($existing_mimes) {
    $existing_mimes['WebP'] = 'image/webp';
    return $existing_mimes;
}
add_filter('mimes_types', 'webp_upload_mimes');
```

```php
/// * Enable preview / thumbnail for webp image files.*
function webp_is_displayable($result, $path) {
    if ($result === false) {
        $displayable_image_types = array( IMAGETYPE_WEBP );
        $info = getimagesize( $path );

        if (empty($info)) {
            $result = false;
        } elseif (!in_array($info[2], $displayable_image_types)) {
            $result = false;
        } else {
            $result = true;
        }
    }

    return $result;
}
add_filter('file_is_displayable_image', 'webp_is_displayable', 10, 2);
```

If you want to see the thumbnail image preview when you go to Media/Library, you have to add the code below (bottom image) in the same functions.php file. To find the functions.php file, go to Appearance/Theme Editor and find functions.php, then copy and paste the code below at the end of the file and save it.”

WebP and the future

WebP is a robust and optimized format. It looks better, it has a better compression ratio, and it has all the features of most other common image formats. There’s no need to wait—start using it now.
USB4 Is Coming! USB4 Is Coming!

by Paul Arnott (parnote)

One if by land. Two if by sea.

USB 4 is coming!

Widely reported in the technical press, USB4, a.k.a. USB 4.0, should be finding its way to your computing world soon. There is hope for a late-2020 rollout for cables and devices, but sometime in the first half of 2021 is more realistic, given the global manufacturing shutdown prompted by the coronavirus pandemic. You can download the "official" spec information for USB4 here (zip file).

For a little bit of background, in 2017, Intel donated the Thunderbolt 3 specs to the USB Implementers Forum for third-party use. Thunderbolt 3 is significant, due to it sporting 40Gbps transfer speeds. While the standard for Thunderbolt 3 is free to use and implement, the use of the Thunderbolt 3 trademark is not, and still requires certification by Intel before advertising that a device is Thunderbolt 3 compatible. Additionally, the Thunderbolt 3 compatibility is only available if individual manufacturers choose to build it in. And, I have to admit that I had never heard of Thunderbolt until I started to write this article. But then again, I don't spend endless hours perusing new computer systems that I know I cannot afford, either, which is most likely why Thunderbolt never appeared on my radar.

After experiencing the confusing rollout of the USB 3 standard, and its subsequent (and even more confusing) split into USB 3.1 and USB 3.2 "standards," don't hold your breath for anything less confusing with the USB4 rollout. Like most users, I'll withhold judgement. After all, I live in Missouri, who's nickname is "The Show Me" state.

Even the assorted press coverage of USB4 has been confusing, to say the least. So, let's try to break down what's good and what's bad about the upcoming USB4 standard.

**Plenty Of GOOD Stuff**

Through all the confusion surrounding USB4, quite a few good things have emerged about the upcoming USB4 standard.

First of all, the move to USB4 will require the universal use of USB-C connectors. You will still be able to use the older USB-A and USB-B connectors, but only via dongles and adaptors. If you've purchased a top-tier smartphone or tablet lately (such as the Google Pixel 3 or 3a), you've met the USB-C connector. Many later model laptops also have USB-C ports built into them. If you've never used a USB-C connector, you will marvel at how nice they are. There is no longer a "right side up" way to connect. It works whichever way you insert it. Most likely, you'll be like me, wondering why someone didn't think of this before.

Second, USB4 will support up to 100W fast charging on devices that support fast charging. That fast
charging support is the same as that supported by USB 3.1, providing you’re using a 20V charging current at 5.0 amps (volts x amps = watts). This is a far cry faster than USB 1.0’s and 2.0’s standard of 5V/0.5A of 2.5 watts, and USB 3.0’s standard of 5V/0.9A of 4.5 watts. Even my wireless “quick charging” pad for my Google Pixel 3 smartphone (purchased from my wireless carrier) is only 10 watts. Meh! I usually just use the charging cable. It seems to be much faster. Support for the USB-PD (power delivery) standard is required under USB4. This should help alleviate issues of one company’s fast charging cord not being compatible with a device from a different vendor.

Third, the data rates for USB4 can be twice the peak data rates of USB 3.2. The latter peeks out around 20Gbps. USB4 will peak out around 40Gbps. USB4 supports three different maximum speeds: 10Gbps, 20Gbps and 40Gbps. This means that you will have to carefully scan a device’s spec sheet to determine the maximum USB4 speed it supports. For comparison, USB 3.0 has a maximum data transfer rate of 5Gbps, USB 3.1 a maximum data transfer rate of 10Gbps, and USB 3.2 a maximum data transfer rate of 20Gbps.

Fourth, and because of the high data transmission rate, USB4 cables can be used to deliver a video signal to monitors/TVs equipped with a USB4 connection. The new USB4 specification can support DisplayPort 2.0 video (which came out in July 2019), reportedly sufficient to support 4K video. By changing the cable “traffic” from bidirectional to unidirectional, it is capable of supporting up to 8K video.

Fifth, the USB developers FINALLY made the logo actually make sense (bottom of previous column). In the past, the USB developers clouded understanding of exactly what a consumer was buying by using terms like “USB 2.0” or “SuperSpeed USB 3.1.” The new USB4 specifications will specify “USB 40Gbps” to signify a device that has a maximum speed of 40Gbps. The other two designations are “USB 20Gbps” and “USB 10Gbps.”

Sixth, Linux support for USB4 is coming very soon. USB4 support is being added to Linux starting with version 5.6 of the kernel. Linux has a stellar history of early support for all iterations of USB, and the new USB4 standard is no different. The first kernel support for the USB standard came in May, 1999.

Now For The “Not So Good”

It stands to reason that with every new advancement, there are some stinging issues for those who have adopted previous versions. With USB4, this is no different. It sometimes also makes you question some of the decisions of those who made the new “standard.”

Get ready to buy all new USB cables … again! Man, these guys sure know how to go about making a buck! While your USB 3 cables will work, you will need to switch to USB4 cables to fully leverage the power and data transmission capabilities of the new “standard.”

Also get ready to buy a bunch of new adapters and dongles to connect up to your USB4 devices. All USB4 devices use the newer USB-C connectors, and can only connect to your old(er) USB-A and USB-B connectors via adapters and dongles. If you go this route, don’t expect to be able fully utilize the enhanced capabilities of USB4. The capabilities of your fancy, new USB4 device will be hampered by the “weakest link” … those adapters, dongles and “old school” USB ports aren’t designed for use with the newer technology.

But this next one is the biggest possible pitfall for the forthcoming USB4: manufacturers can choose which parts of the “standard” they want to support, except that the USB-PD standard is mandatory. But most of the rest of the standard is left up to the manufacturer to decide what level of support to provide for the standard. Thus, this means that it might be rather difficult to discern which devices, for example, support a data rate of 40Gbps, 20Gbps (same throughput as USB 3.2), or 10Gbps (same throughput as USB 3.1 SuperSpeed). Ignore for the moment that most users are lucky to get 30 Mbps throughput from a USB 3.2 SuperSpeed device, for a wide range of reasons.

It’ll literally be a “buyer beware” situation, where the consumer is responsible for reading spec sheets to determine the maximum throughput rate a USB4 device supports. It’s the same story for being able to control whether a cable connected to a DisplayPort 2.0 port can be toggled between bidirectional and unidirectional. And, it’s the exact same story as to whether or not the Thunderbolt 3 standard/protocol is supported or not.

Conclusion

You would think that a “standard” should be exactly that: a “standard” that ALL manufacturers are required to meet. But, the USB implementation group, run by major technology industry companies, has made it more like a set of “recommendations.” Each manufacturer can decide for themselves, mostly, which parts of the “standard” to implement.

In the end, the real loser is the consumer. By not requiring all manufacturers to adhere to a rigid standard, implementations of USB4 are going to vary widely, and in the end, the end user experience will suffer.
Yes, the capabilities and features of USB4 sound cool and nice on paper, but only if there is more pressure for companies to adhere to the "standard" will the end users benefit. It’s too bad that the end users don’t have any real representation on the committee that decides how this new “standard” is implemented. Get ready for a tidal wave of devices that only partially – and cheaply – support the USB4 standard, leading to not only lackluster performance, but also a general fleecing of the end users who purchase devices that only partially implement the USB4 standard, all for the benefit of companies chasing obscene profits from their poorly implemented devices.

Does your computer run slow?

Are you tired of all the "Blue Screens of Death" computer crashes?

Are viruses, adware, malware & spyware slowing you down?

Get your PC back to good health TODAY!

Get

Posted by francesco bat, May 25, 2020, running Trinity.
What Is Love2D?

by Alessandro Ebersol (Agent Smith)

When you hear Love 2D, and you ask yourself: What is Love 2D? Baby don't hurt me, no more ...

Love 2D, a sensational engine for 2D games

Let's try to answer what Love 2D is: LÖVE (or Love2D) is an open source multiplatform engine for the development of 2D video games. The engine is written in C++ and uses Lua as its scripting language. It is published under the zlib license.

The API provided by the engine provides access to the video and sound functions of the host machine through the SDL and OpenGL libraries, or, since version 0.10, also OpenGL ES 2 and 3. Fonts can be rendered using the FreeType engine. A version of the engine called pILöve was ported specifically to Raspberry Pi.

It also provides basic "sandbox" management of files to prevent access to the entire disc and system from the running games. In other words, the games in Love 2D language are sandboxed, to limit their level of access to the host machine.

LÖVE is still maintained by its original developers. This engine is often found in the compositions of video game development competitions, such as the international competition Ludum Dare.

In July 2018, it was the tenth most used game engine by indie developers on the website itch.io.

Features

These features come with the game engine:

• support for OpenGL GLSL pixel shaders,
• Touchscreen,
• support UTF-8,
• support PNG, JPEG, GIF, TGA and BMP image formats.
• possibility to use the 2D Box2D physics engine (can be disabled, to lighten the library),
• lusocket library for TCP/UDP network communications,
• lua-enet library, another network library that implements Enet, a reliable UDP-based protocol
• native management of blocks created by Tiled.

What can you do with Love2D?

2D games, and there are still 3D capabilities, still incipient, in the engine, but that have a lot of room to evolve.

And, what types of 2D games can be made? Here is a list of examples

Blue Revolver

A new shooting game, bullet hell, built for maniacs and beginners.

For Windows, OS X and Linux.

Inspired by STG's golden age CAVE / Raizing classics, Blue Revolver is built from the ground up to be fast, light and furious. Play as Mae - a technical genius with rabbit ears who runs away from the manic environmental group "Blue Revolver" and shoot through five stages of battles. Snowy mountains, bustling docks, nightmare bases and more await you in your fight-and-flight game - each filled with cruel enemies, violent bosses and thousands of bullets!

Trailer: https://youtu.be/7IP6Qz8G-CM

Steam: https://store.steampowered.com/app/439490/BLUE_REVOLVER/?snr=1_5_1100__1100

Price: $ 14.99
Move or Die

Move or Die is a collective online game or local for up to 4 players with a frantic pace, where the mechanics change every 20 seconds. It is the perfect definition of a game that destroys friendships.

Trailer: https://youtu.be/r4n9C0lZP2Y

Steam: https://store.steampowered.com/app/323850/Move_or_Die/

Price: $14.99

Oh my giraffe

Oh my giraffe is a delicious survival game.

Eat fruits while being chased by lions. Cut the vines so that the fruit bounces off your backside and hits the lions. Don't worry, your flexible neck will allow you to reach everything. And remember, lions sleep at night. This is your chance to swallow as much fruit as possible.

Trailer: https://www.youtube.com/watch?v=xqG994cC1JE

Website: http://www.ohmygiraffe.com

Price: $1.99 Android/iOS, free preview for Linux, Windows, MacOS

How to get started with Love2D?

It's very simple, just install the Love interpreter, in the PC/LinuxOS repos, by apt-get install love, or by Synaptic.

However, the interpreter alone is not enough. You will need an IDE. Love 2D does not have its own IDE's, any text editor can be used.

ZeroBrane Studio

If in doubt, select this one. It is probably the easiest to set up and perhaps the most focused option on Lua and Love 2d out there. With minimal effort, you will get the most functionality, including code highlighting, autocomplete and most impressive, debugging support.

Website: https://studio.zerobrane.com/

IntelliJ IDEA with Lua and Love2D plugins

It is probably not the ideal choice for beginners, as the IDE itself is quite complicated and you need to configure two different plugins to get things up and running. With plug-ins, you get complete autocomplete, syntax highlighting and can run your application directly from the IDE. Unfortunately, you cannot debug.

Website: https://www.jetbrains/idea/

Plugins:
https://plugins.jetbrains.com/plugin/5055?pr=idea
https://github.com/rm-code/love-IDEA-plugin

Sublime Text with the Love2D Package

The sublime text is well named, it is a great text editor that, through the support of packages, can get very close to full IDE's features. It has been the right choice for general purpose text editor for years and is still a very solid option. With the Love2D package, you get syntax highlighting, autocomplete and the ability to run your application directly in the editor.

Website: https://www.sublimetext.com/

Love2D plugin:
https://packagecontrol.io/packages/Lua%20Love

Atom editor

Atom is another editor, with a scope very similar to Sublime Text, probably with even greater extensibility . The Love-IDE extension brings together a collection of Lua and Love2d plugins to give Atom the ability to run within the editor, autofill and syntax highlighting.

Website: https://atom.io/

Love2D plugins: https://atom.io/packages/love-ide
Eclipse

The Eclipse IDE can also be extended to support Lua development using the LDT plug-in. Some people love working on Eclipse, so this may be an option for you. Warning, however, Eclipse is extremely hostile for beginners.

Website: https://eclipse.org/
LDT Plugin: https://eclipse.org/l/d/

Tutorials, where can I find them?

No better place than the Love2d.org wiki: https://love2d.org/wiki/Category:Tutorials

And resources for your games?

Here: https://love2d.org/wiki/Free_Game_Resources

On the website Slant, Love2D is the first in best 2D game engines: https://www.slant.co/topics/341/~best-2d-game-engines

So, what are you waiting for to start your game developer career? Hmm? With PCLinuxOS and Love2D, you have a great start.

A big hug, and, until the next article.

Want to keep up on the latest that’s going on with PCLinuxOS?

Follow PCLinuxOS on Twitter!

http://twitter.com/iluvpclinuxos

Posted by Snubbi, May 8, 2020, running Mate.
Frontier’s Bankruptcy Reveals Why Big ISPs Choose To Deny Fiber To So Much Of America

by Ernesto Falcon, Cory Doctorow, and Katharine Trendacosta
Electronic Frontier Foundation
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Even before it announced that it would seek Chapter 11 bankruptcy, Frontier had a well-deserved reputation for mismanagement and abusive conduct. In an industry that routinely enanges its customers, Frontier was the literal poster-child for underinvestment and neglect, an industry leader in outages and poor quality of service, and the inventor of the industry’s most outrageous and absurd billing practices. As Frontier’s bankruptcy has shown, there was no good reason they—and all old big Internet service providers—couldn’t provide blazing-fast fiber on par with services in South Korea and Japan.

Frontier’s bankruptcy announcement forced the company to explain in great detail its finances, past investment decisions, and ultimately why it has refused to upgrade so many of its DSL connections to fiber to the home. This gives us a window into why ISPs like Frontier—large, dominant, with little-to-no competition—are choosing not to invest in better, faster, and more accessible Internet infrastructure. The reason American Internet lags so far behind

South Korea, Japan, and Norway isn’t because fiber isn’t profitable. It just falls under the old adage “you have to spend money to make money,” an anathema to American ISPs’ entrenched position of prioritizing short-term profit over making lasting investments.

So long as major national ISPs continue to operate with that same short-term mindset, they will never deliver high-speed fiber to the home broadband of their own accord. If they will not do it, then policymakers need to be thinking about incentivizing others to do it.

Why Spend Money Now to Make Money Later When You’re Making Money Now?

Instead of being incentivized to grow a satisfied consumer base by investing in better service and expanding to underserved customers, publicly traded companies’ incentives are dominated by quarterly reporting. They are driven to show larger profits every three months, and that short-term profitability woos big-dollar sources of investment and pleases the analysts whose judgments move the financial markets. This short-termism precludes investments that bear fruit in the future. That is why for years, the telecom sector has invested almost exclusively in programs that pay out in three to five years and neglected anything that pays out over 10 years or more.

This was why Verizon terminated its FiOS efforts more than a decade ago. When Verizon first started to deploy FiOS, and competing with cable companies such as Comcast and Charter, investment analysts criticized the company. They denounced the effort by a phone company to upgrade its old copper network to fiber as a waste of billions of dollars that would be countered by cable companies that could keep pace with early fiber speeds through a series of cheap, incremental upgrades to their coaxial lines. Verizon would have to invest $18 billion to cover just 14 percent of the country with fiber optic while cable companies across the entire country would match the early offerings of FiOS for less than $10 billion.

Investors denounced fiber investment as a waste because Verizon would have to spend millions more on fiber to get the same results as the cable giants would get with cable lines. Of course, these dollars-to-dollars estimates missed the real point: fiber has the\vastly superior maximum speeds, while cable tops out at a tiny fraction of fiber’s possible speed. Even though the superiority of fiber is obvious today, the thinking of big ISPs has not changed.

That blinkered, short-term mindset doesn’t just explain America’s anemic fiber rollout, it also explains so much about Frontier’s bankruptcy. Frontier has filed papers explaining how it intends to escape bankruptcy, and these conclusively show that millions of Americans currently stuck in the DSL Internet slow-lanes could be upgraded to blazing-fast fiber without a dime in government subsidies.

Frontier’s own chart, next page, top left, shows the company's estimate of the profitability of its current fiber assets. Note that the company itself estimates that by 2031 the revenues from fiber would exceed costs and thus deliver increases in profit. Note also that for the first five years, the company would lose money on fiber. Fiber has high upfront costs (like a house), but it pays off handsomely over time. The inability to capitalize on superior investment opportunities because they take too long to mature is the very definition of dysfunctional short-termism.
Frontier’s Bankruptcy Reveals Why Big ISPs Choose To Deny Fiber To So Much Of America

Bankruptcy has forced Frontier to entertain these previously ignored long-term opportunities in its effort to restructure itself and return to business. In Frontier’s chart below, “CAGR Reinvestment” represents projections of increasing their spending into deploying fiber in 2021 with the pay-off coming in 2031. Untethered from the public market’s emphasis on constant profit, Frontier has concluded that investing more in more fiber for more people would generate more profits in 2031 and beyond.

Frontier’s historical calculus for deciding when, where, and how to invest excluded anything with less than a 20% return on investment. That’s the kind of cherry-picking that bankrupt companies can’t afford to engage in, and so now Frontier is eager to earn a 20% return on its infrastructure.

The fact that nearly three million homes could have been profitably served with fiber without government subsidy, yet were not been given fiber is a wake-up call. The only reason we are learning about this now is because Frontier is forced to tell us under bankruptcy law. Bankruptcy is also the only reason Frontier is considering doing it.

When You Have a Monopoly, Why Bother Improving?

The revelations from Frontier’s bankruptcy filings don’t end there. Equally important is how Frontier cultivated, maintained, and abused its monopolies. ISPs like Frontier know exactly where they have monopolies, and therefore know exactly who has no choice and therefore is not worth spending money on.

Frontier’s documents reveal that the company treats its status as the monopoly provider of high-speed Internet access for 1.6 million households as a uniquely identifiable asset. Frontier wants investors to know that it can precisely demarcate its monopoly territories because it wants to show investors where it can get money (to repay its debt and get out of bankruptcy) by charging a captive audience more and delivering less.

The fact that Frontier—and its competitors—treat monopolies as a bankable asset would seem a sign that there should be some oversight. Since the FCC has removed its ability to oversee this industry since 2017 under the so-called Restoring Internet Freedom Order, that oversight will have to be from the states.

Internet access is an essential service that American households cannot reasonably forgo without inflicting real social and economic harms on themselves, even when the pandemic isn’t raging outside their doors.

Clearly, ISPs know they can extract excessive profits from those households until an alternative arrives, which undoubtedly plays a role in Frontier’s and other big ISPs’ opposition to local governments building broadband alternatives for their community. Major ISPs are fond of touting America’s supposed “competitive landscape” as a reason to dismantle net neutrality and ban community broadband, but the truth is they are dependent on unfettered monopolies in order to realize the rate of profit their short-term investors demand.

None of that is a secret, but the dots were never connected quite so explicitly as when Frontier just assured investors, in writing, that it was making a lot of money from more than one million people who have no feasible alternatives, and that this justified “investing” political dollars to block cities from building networks, even where there is no cable internet deployment. Frontier’s bankruptcy documents reveal that these political investments...
Frontier's Bankruptcy Reveals Why Big ISPs Choose To Deny Fiber To So Much Of America

were always viewed as cheaper than the network investments they would otherwise have to make to keep its customers once they were no longer held hostage to its ailing, crumbling, overpriced network.

This Is Standard Industry Practice, Frontier Is Not an Outlier

Giant monopoly ISPs have had decades to bring America's Internet into the 21st century. They have been singularly terrible at delivering decent speed, reliable service, reasonable customer support, or competitive prices. The only thing these companies have demonstrated competence in is making money for their investors. And Frontier's bankruptcy reveals that even that core competence is vastly overrated.

It's long past time we gave up on waiting for Big Telco to do its job. Instead, America should look to the entities with proven track-records for getting fiber to our curbs: small, private, competitive ISPs and local governments. These are the home of the “patient money” that doesn't mind ten-year payoffs for investments in fiber.

Fiber is vastly superior to every other means of delivering high-speed Internet to our homes, schools, institutions, and businesses. Nothing else even comes close (not 5G, either). For more, check out EFF’s own technical report on the relative speeds of different broadband technologies, and learn why we want state governments to guarantee universal, affordable, competitive fiber to the home networks. That’s why we actively support legislation in California to have the state finance a universal open-access fiber infrastructure built by smaller entities.

Policymakers shouldn't assume that the dirty laundry Frontier just aired in its bankruptcy is unique to that one company. Frontier's problem wasn't that it couldn't run a broadband service – it was it couldn't sustain the short-termism that Verizon adopted when it ditched FiOS and that AT&T adopted when it killed its own fiber buildout the second its legal obligations to deliver fiber expired. Frontier's biggest mistake was buying rural legacy networks from AT&T and Verizon, which allowed those companies to offload their neglected networks onto Frontier's lap.

Frontier's bankruptcy is the inevitable consequence of long-term network neglect caused by an emphasis on short term profits.

AT&T and Verizon should be deploying fiber everywhere to compete with cable everywhere. They're not, and they're still profitable on paper, but only because they can paper over their steadily eroded customer numbers because they are making profits through their wireless divisions and their content subsidiaries.

But when tiny 6,000 person rural cooperatives are deploying fiber to the home but your local town is still stuck with slow DSL from a big telephone company, it is not because the company can't make money investing in your community, it is because they have chosen not to, and then lobbied to make it illegal for anyone else to do it.

Posted by muse, May 1, 2020, running Mate.
ms_meme's Nook: Now That You've Gone

Now that you've gone no more crying
Now that you've gone my eyes are drying
Don't feel blue don't feel sad
This old gal is really really glad

The time has come no more excusin'
The time has come no more confusin'
Today downloaded PCLinuxOS
Today installed the very best
Now that you've gone
Now that you've gone away

Now that you've gone I'm not a lyin'
No more of you will I be buyin'
Don't feel blue don't feel sad
This old gal was really really mad

As through the net I go a cruising
No longer you I'll be a usin'
Today downloaded PCLinuxOS
Today installed the very best
Now that you've gone
Now that you've gone away

Windows listen to me while I say
I'm telling you that you're goin' away
I'm saying we must part
No longer will you break my heart
You know I booted you for many a year
Booted night and day
Now you must leave me
And take your gear
Listen while I say
Quick & Easy Beef Bourguignon For Two

INGREDIENTS:
3/4 lb boneless beef sirloin steak, cut into 1 1/2-inch cubes
1/4 teaspoon salt
1/4 teaspoon pepper
2 tablespoons olive oil
1 cup sliced mushrooms
1 slice bacon, chopped
1 small onion, sliced
1 tablespoon tomato paste
1 clove garlic, finely chopped
1/2 teaspoon chopped fresh thyme leaves
1 tablespoon all-purpose flour
1 cup beef broth
1/2 cup dry red wine
1 tablespoon chopped fresh parsley leaves

DIRECTIONS:
1. Season beef cubes with salt and pepper. In a 10-inch nonstick skillet, heat 1 tablespoon of the oil over medium-high heat. Add beef, and cook 2 to 3 minutes, turning frequently, until browned on outsides, but still rare in the middle. Remove from skillet; keep warm.

2. Heat remaining 1 tablespoon oil in the skillet over medium-high heat. Add mushrooms; cook and stir 3 to 4 minutes or until tender and browned. Remove from skillet; keep warm.

3. Reduce heat to medium; add bacon and onion.

Cook and stir for 3 to 4 minutes or until onions are softened and beginning to brown. Add tomato paste, garlic and thyme. Cook and stir for 1 minute. Add flour; cook and stir for 1 minute.

4. Add cooked mushrooms, broth and wine; heat to boiling. Reduce heat to low; simmer 4 to 5 minutes, stirring occasionally, until sauce is slightly thickened. Return beef to skillet; cook 2 to 3 minutes, stirring occasionally, until beef is medium-rare to medium (145F to 160F). Garnish with parsley.

TIPS:
White button mushrooms work well in this recipe, but if you’d like a bigger mushroom flavor, you can use Cremini mushrooms.
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.

**SCRAPPYLER RULES:**
1. Follow the rules of Scrabble®. You can view them [here](#). You have seven (7) letter tiles with which to make as long of a word as you possibly can. Words are based on the English language. Non-English language words are NOT allowed.
2. Red letters are scored double points. Green letters are scored triple points.
3. Add up the score of all the letters that you used. Unused letters are not scored. For red or green letters, apply the multiplier when tallying up your score. Next, apply any additional scoring multipliers, such as double or triple word score.
4. An additional 50 points is added for using all seven (7) of your tiles in a set to make your word. You will not necessarily be able to use all seven (7) of the letters in your set to form a “legal” word.
5. If you are having difficulty seeing the point value on the letter tiles, here is a list of how they are scored:
   - 0 points: 2 blank tiles
   - 1 point: E, A, I, O, N, R, T, L, S, U
   - 2 points: D, G
   - 3 points: B, C, M, P
   - 4 points: F, H, V, W, Y
   - 5 points: K
   - 8 points: J, X
   - 10 points: Q, Z
6. Optionally, a time limit of 60 minutes should apply to the game, averaging to 12 minutes per letter tile set.
7. Have fun! It's only a game!

Possible score 272, average score 190.
PCLinuxOS Word Find: June 2020
Car Types

automobile     buggy
car            cloth top
compact        convertible
coupe          cruiser
dragster       electric car
gas powered    gas-electric
hardtop        hatchback
hearse         hot rod
hum-vee        hybrid
jeep           limousine
minivan        off-road vehicle
patrol car     race car
rag top        roadster
recreational vehicle sedan
soft top       solar powered
sports car     station wagon
stock car      subcompact

sports utility

Download Puzzle Solutions Here
Car Types Crossword

NOTE: Some answers have spaces.

1. a high-performance four-wheel drive car built on a truck chassis.
2. a luxurious automobile sometimes having a partition separating the passenger compartment from the drivers seat.
3. a passenger car with a sloping or truncated rear roofline and generally two doors.
4. a vehicle for conveying a coffin to a church or cemetery.
5. an automobile designed to look like a convertible but having a rigidly fixed, hard top.
6. a closed automobile having two or four doors and a front and rear seat.
7. a roofless or convertible automobile having a single seat in the front for two or three people and a rumble seat or luggage compartment in the back.
8. a vehicle that uses two or more power sources.
9. an ordinary car that has been made stronger and faster so that it can be driven in special races.
10. any type of vehicle which is capable of driving on and off paved or gravel surface, characterized by having large tires with deep, open treads, a flexible suspension, or even caterpillar tracks.
11. an automobile having a folding canvas top.
12. a car with a sloping, hinged rear door that opens upwards.
13. a motorized wheeled vehicle used for camping or other recreational activities.
14. a car that has a long body and rear door with space behind the rear seat.
15. a car having a top that can be folded back or removed.
16. a vehicle that combines the features of a military jeep with those of a light truck.
17. a heavily modified or custom-built vehicle used in drag racing.
18. a vehicle designed primarily for carrying passengers, typically having rear seats that can be removed for loading cargo.

Download Puzzle Solutions Here
Mixed-Up-Meme Scrambler

Avoid RED TAPE!
Only install from a Linux

Use the clues to unmix the letters to make a new word. Remix the letters in the red boxes to solve the puzzle.

Admire
DAEOR

Chews
MOHCSP

Deadly
TXIOC

Mad
AYRNG

Download Puzzle Solutions Here
More Screenshot Showcase

Posted by tbschommer, May 8, 2020, running KDE.

Posted by Old-Polack, May 26, 2020, running KDE.

Posted by talbergor, May 23, 2020, running Mate.

Posted by parnote, May 26, 2020, running Xfce.