# The PCLinixOS magazine

Volume 202

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ICYMI: Malicious
Ads Injected Into
Al-Powered Bing Chat

GIMP Tutorial:
Create A Smoke Effect

PCLinuxOS Recipe Corner: Beef & Spicy Sausage Foldovers

Repo Review: VokoscreenNG

Filen: Generous
End-To-End Encrypted
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What The !#@% Is A Passkey?

Repo Review: Zim

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### The **PCLinuxOS** magazine

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## From The Chief Editor's Desk

As I write this, it's Halloween Eve. Until the kids came along, I was never a fan of Halloween as an adult. As a kid, it was one of the best days of the year that I looked forward to.

But ever since the kids came along, I get caught up in their excitement, to the point that I also dress up in a costume as we take the kids around the neighborhood to snag their Halloween "booty."

I now have a couple of "old" costumes that I cycle through. I have a Minions costume. Specifically, it's Stuart. I also have a Jack Skellington costume. This year, I bought another costume to add to the mix. This year, I'm a ghoul in tattered gauze, with a light up mask. (Sorry, but I don't have any pictures of me in it yet.)

Ryan is going this year as "Ghost Face" from the Scream movies. Lexi finally has a real reason to dress up like Wednesday Addams, instead of trying to periodically mimic her looks throughout the year (which she does).

Before the kids came along though, I always shunned Halloween. In my mind, it's a day for kids to be kids. And maybe part of it is that I was always consumed with more "adult" matters, and really couldn't afford the mental detour that celebrating Halloween required.



I wasn't a Halloween "Scrooge." I always handed out candy to the Trick or Treaters that came to my door. But when it came to dressing

up and actually celebrating Halloween, that just wasn't in the cards for me.

Man, how things change when kids enter the picture. I now look forward to it, but probably not as much as the kids do. But for me, it's a nearly complete reversal for how I used to feel about Halloween.

\*\*\*\*\*\*

My kids are both involved in Cub Scouts. We (my wife and I) are the monthly "hiking chairs" for our Cub Scout Pack. That means that we arrange the monthly hikes through the outdoors in our area. In an effort to spur increased participation in our monthly hikes, we decided to turn each hike into an outdoors "scavenger hunt." The Scouts are given a list of things to find along the trail. These could be things like various types/kinds of trees, signs of wildlife, and other notable features along our monthly hike. That means that "we" have to go do the hike ourselves, in advance of the "official" hike. Then, we make up a "scavenger hunt" list that we pass out to the Cub Scouts of things to find along the trail. Those who complete the hike and the list are granted access to the "treasure chest," which is filled with all sorts of items that might be of interest to a Cub Scout. They are items that they can use on campouts, or in other areas of their Cub Scout journey (no toys here).

As we were "scouting" the October hiking trail, I saw (and took the photo of) the leaf nestled in the rotting tree stump along the trail. That is the image that I've used for the cover of this issue, as it seemed to be a fitting tribute to the onset of fall.

\*\*\*\*\*\*

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





**Help PCLinuxOS Thrive & Survive** 

## DONATE TODAY



## Screenshot Showcase



Posted by tuxlink, on October 3, 2023, running KDE.

# ICYMI: Malicious Ads Injected Into Al-Powered Bing Chat

by Paul Arnote (parnote)



The Lifehacker website has a great article about setting up a "dead man's switch." Are you not familiar with a dead man's switch? It's where, should you not respond to some "stimulus," the dead man's switch activates and notifies those you choose that something might have happened to you. Julian Assange was rumored to have one so that, should anything happen to him, the entire contents of WikiLeaks would be released ... including items not yet previously released. The uses for a dead man's switch could be to close your accounts, notify relatives, or to grant access to your accounts to those you designate. While most of us are

reluctant to face our own mortality, when you think about it, dead man switches make sense in today's information-overload environment.

Google Bard gets expanded search and share features, according to an article on TechRepublic. People with personal Google accounts may check Bard content with Google Search, connect Bard to Google services such as Maps, YouTube, Gmail and Drive and continue a shared Bard chat.

A video on Lifehacker shows how to change a setting on the Google Chrome browser to help keep it from prematurely draining your laptop's battery. Open a new tab, and type chrome://flags on the address bar. Next, type battery on the search bar within that window. Now, change the "experimental" feature to Enabled, and restart your browser window. This hack works on all versions of Google Chrome since version 108.





Image by Gerd Altmann from Pixabay

Malicious advertisements are now being injected into Microsoft's AI-powered Bing Chat responses, promoting fake download sites that distribute malware, according to an article on BleepingComputers. Bing Chat, powered by OpenAI's GPT-4 engine, was introduced by Microsoft in February 2023 to challenge Google's dominance in the search industry. By offering users an interactive chatbased experience instead of the traditional search query and result format, Bing Chat aimed to make online searches more intuitive and userfriendly. In March, Microsoft began injecting ads into Bing Chat conversations to generate revenue from this new platform. However, incorporating ads into Bing Chat has opened the door to threat actors, who increasingly take out search advertisements to distribute malware. Furthermore, conversing with AI-powered chat tools can instill unwarranted trust, potentially

#### **ICYMI: Malicious Ads Injected Into AI-Powered Bing Chat**

convincing users to click on ads, which isn't the case when skimming through impersonal search results.

**Google and Mozilla have patched a zero-day exploit** in Chrome and Firefox, respectively, according to an article on TechRepublic. The zero-day exploit was being used by a commercial spyware vendor. The zero-day exploit could leave users open to a heap buffer overflow, through which attackers could inject malicious code. **Any software that uses VP8 encoding in libvpx or is based on Chromium** (including Microsoft Edge) might be affected, not just Chrome or Firefox.

NASA's OSIRIS-REx sample collection from asteroid Bennu exceeded expectations in material quantity, slowing the curation process, according to an article from SciTechDaily. Advanced analysis methods are underway, with a more detailed examination planned for the coming weeks. Oh, and to add an element of "cool" to the whole asteroid Bennu news, the "team" that helped return the samples to Earth included Queen guitarist Brian May, who also holds a PhD in astrophysics. Check out the article from USA Today.





Google will make it harder for spammers to land in your email inbox, the company said, according to an article from CNBC. Google will require emailers who send more than 5,000 messages per day to Gmail users to offer a one-click unsubscribe button in their messages. Furthermore, Gmail may not deliver messages from senders whose messages are frequently marked as spam and fall under a "clear spam rate threshold" of 0.3% of messages sent.

Google launched Android 14 on October 4, coinciding with its Pixel launch event — where it unveiled the new Google Pixel 8 and Google Pixel Watch 2, among other gadgets, according to an article on TechRadar. The new features include: a customizable lock screen which will give you much greater control over its style and utility, emergency SOS via satellite (most likely on newer handsets that possess the hardware to support it), improved battery life, notification flashes, more user control over apps' file access, and regional preferences. Expect it to take a little while. On my Pixel 5, the download for Android 14 is 877MiB, and took in excess of an hour and a half to download and apply.

A new Linux security vulnerability dubbed Looney Tunables has been discovered in the GNU C library's ld.so dynamic loader that, if successfully exploited, could lead to a local privilege escalation and allow a threat actor to gain root privileges, according to an article on The Hacker News. Tracked as CVE-2023-4911 (CVSS score: 7.8), the issue is a buffer overflow that resides in the dynamic loader's processing of the GLIBC\_TUNABLES environment variable. Cybersecurity firm Qualys, which disclosed details of the bug, said it was introduced as a code commit made in April 2021. The GNU C library, also called glibc, is a core library in Linux-based systems that offers foundational features such as open, read, write, malloc, printf, getaddrinfo, dlopen, pthread\_create, crypt, login, and exit.



Brave has some hidden features that can significantly improve your browsing experience, according to an article on Lifehacker. Enable them, and you can paste in blocked fields, save your laptop's battery, remove tracking information from copied URLs,

#### **ICYMI: Malicious Ads Injected Into AI-Powered Bing Chat**

and even access a reader mode. The article lists five hidden Brave features you should definitely know how to use.

In an article from Forbes, Microsoft CEO Satya Nadella said that Microsoft can't compete with Google and that the search engine's market share is so large the internet has basically become the "Google web" on October 2, 2023, during more than three-and-ahalf hours of testimony in Google's antitrust trial, according to multiple news organizations.

An article on PCWorld asks the "unanswerable" question: **so, how many websites are there?** The number of websites on the Internet is constantly changing as new websites are created and old ones become inactive. The best we can do is guess, and that number can change in an instant. Most publications that try to answer this



question cite Siteefy as an authoritative source. According to Siteefy, there are 1.13 billion websites on the Internet, 18% of which are active. That means there are roughly 200 million active websites at the time of writing.

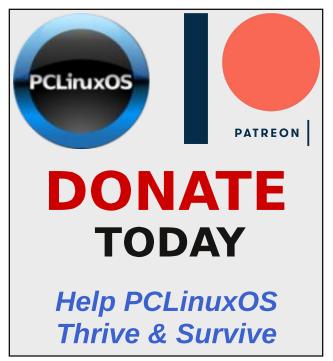


Credit: NASA

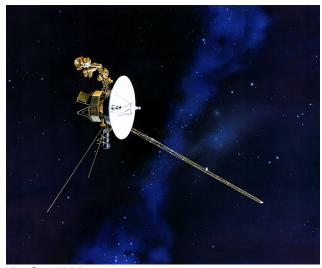
If we resided on a different planet, how would we know whether there is life on Earth? This bold experiment found out, according to an article from Nature.com. Thirty years ago, astronomer Carl Sagan convinced NASA to turn a passing space probe's instruments on Earth to look for life — with results that still reverberate today.

An article from Lifehacker reveals that you can hide faces you may not be prepared to deal with emotionally in Google Photos "Memories" feed. Whether it's a failed romantic interest or a pet (cat/dog/fish/frog/turtle/etc.) that you recently lost, this article will tell the Google Photos app to "skip" over including those images in the "Memories" feed until such time that you're better "equipped" to handle those images.

It may sound like science fiction from "The Lord of the Rings." An enemy begins attacking a tree. The tree fends it off and sends out a warning message. Nearby trees set up their own defenses. The forest is saved. But you don't need a magical Ent from J.R.R. Tolkien's world to conjure this scene. Real trees on our Earth can communicate and warn each other of danger — and a new study explains how, according to an article from The Washington Post. **The study** 



found injured plants emit certain chemical compounds, which can infiltrate a healthy plant's inner tissues and activate defenses from within its cells. A better understanding of this mechanism could allow scientists and farmers to help fortify plants against insect attacks or drought long before they happen.



Credit: NASA

NASA's intrepid Voyager twins, Voyager 1 and Voyager 2, launched in 1977, continue unprecedented their explorations interstellar space, according to an article on Space Daily. But as they reach farther distances from Earth-more than 15 billion miles for Voyager 1 and 12 billion for Voyager 2-keeping them operational requires strategic forethought. That "forethought" comes in the way of a couple of software updates being sent to the interstellar satellites.

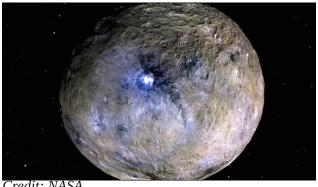


Google has announced new, real-time scanning features for Google Play Protect that make it harder for malicious apps employing polymorphism to evade detection, according to an article from BleepingComputer. This represents a significant step toward enhancing safety for all Android users and aims to decrease malware infections on the platform. Can all Android users finally say "about time?"

Astronomers have intercepted a mysterious and ancient radio signal that's traveled from the farthest reaches of the cosmos — for an astonishing eight billion years, more than half the lifespan of the universe — before finally reaching the Earth, according to an article from Futurism. The signal is what's known as a fast radio burst (FRB), and the astronomers' findings, published in the journal Science, indicate that this is the most powerful ever observed. So powerful, in fact, that the FRB released, in less than a millisecond, the same amount of energy that our Sun emits in 30 years.







Credit: NASA

A dwarf planet called Ceres could offer some amazing insights into our quest to discover alien life within our solar system, according to an article from BGR. The small planet is located near Mars (it's in the asteroid belt), and a new study showcases that the dwarf planet has an extensive amount of organic material present on the planet.

Do we live in a computer simulation like in **The Matrix?** A proposed new law of physics backs up the idea, according to an article from Phys.org.

A new organocatalyst has proven to efficiently and quickly deconstruct multiple **polymers** — in around two hours, according to an article from Phys.org. Such polymers include those used in materials such as safety goggles (polycarbonates), foams (polyurethanes), water bottles (polyethylene terephthalates) and ropes or fishing nets (polyamides), which together comprise more than 30% of global plastic production. Until now, no single catalyst has been shown to be effective on all four of these polymers.

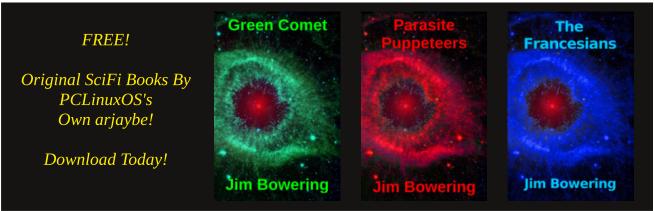
#### **ICYMI: Malicious Ads Injected Into AI-Powered Bing Chat**



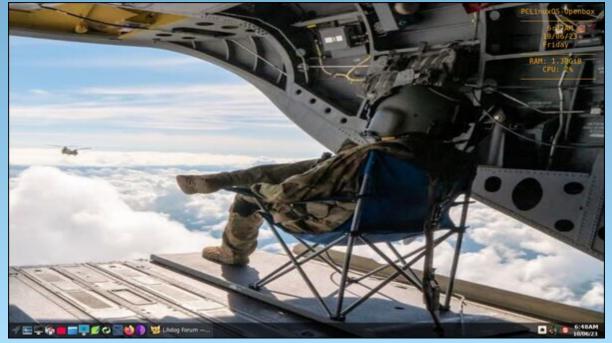
China is stealing technology secrets -- from AI to computing and biology, "Five Eyes" intelligence leaders warn in a CBS News 60 Minutes report. "Yes, absolutely, all countries spy. Our countries spy. All governments have a need to be covertly informed. All countries seek strategic advantage. But the behavior we're talking about here goes well beyond traditional espionage. This scale of the theft is unprecedented in human history. And that's why we're calling it out," says Mike Burgess of Australia, one of the members of the "Five Eyes" group.

Countries rise, and countries fall. An article on The Dial explores what happens when an internet domain outlives the country it was designated for, as in the case of Yugoslavia.

They cracked the code to a locked usb drive worth \$235 million in bitcoin. Then it got weird, according to an article on Wired. Stefan Thomas lost the password to an encrypted USB drive holding 7,002 bitcoins. He obtained them back in 2011 when BitCoin first came about, and was selling for less than \$1 each. One team of hackers believes they can unlock it — if they can get Thomas to let them.



## Screenshot Showcase



Posted by astronaut, on October 6, 2023, running openbox.

## PCLinuxOS Recipe Corner



#### **Beef & Spicy Sausage Foldovers**

Serves 6

#### **INGREDIENTS:**

1/2 lb lean (at least 80%) ground beef
1/2 lb bulk spicy Italian pork sausage
1 package (1 oz) Old El Paso™
 taco seasoning mix
1 can (14.5 oz) diced tomatoes
 with green chilies, undrained
4 1/2 cups Original Bisquick™ mix
1 cup boiling water
1 cup shredded Mexican cheese blend (4 oz)
3/4 cup sour cream
3/4 cup Old El Paso™ Thick 'n Chunky salsa
Fresh cilantro sprigs, if desired

#### **DIRECTIONS:**

Heat oven to 400F. Grease a large cookie sheet with shortening or cooking spray.

In a 10-inch skillet, cook beef and sausage over medium-high heat 5 to 7 minutes, stirring occasionally, until thoroughly cooked; drain. Stir in taco seasoning mix and tomatoes. Reduce heat to medium; cook 5 minutes, stirring occasionally.

Meanwhile, in a large bowl, stir Bisquick mix and boiling water with a fork until dough forms. On a surface sprinkled with Bisquick mix, roll dough in Bisquick mix to coat; knead 20 times. Divide dough into 6 balls, about 1/2 cup each. Roll or pat each ball into a 7-inch round.

Stir cheese into beef mixture. Spoon about 1/2 cup beef mixture onto half of each round. Moisten the edge of the round with water. Fold round over beef mixture; press edge with fork to seal. Cut 3 small slits in the top of each crust to allow steam to escape. Carefully move to cookie sheet with spatula.

Bake for 20 to 22 minutes, or until light golden brown. Serve each fold-over with 2 tablespoons each sour cream and salsa. Garnish with cilantro.

#### TIPS:

Make an extra batch and freeze. These foldovers are great to reheat for lunch and make a welcome change from the typical brown bag sandwich.

Short on time? Grab some grands butter biscuits and roll 2 of them out for each fold-over instead of using the Bisquick Mix as described above.

#### **NUTRITION:**

Calories: 650 Carbs: 66g Fiber: 2g Sodium: 2550mg Protein: 22g



## GIMP Tutorial: Create A Smoke Effect

#### by Meemaw

I'm still looking for fun projects to do in GIMP! I came across this video from Logos By Nick on YouTube, and it's a cool effect.

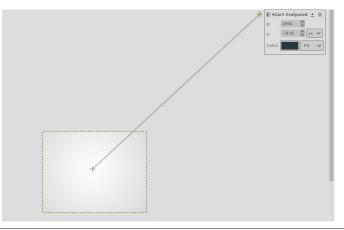
The first thing you need is some smoke brushes for GIMP. I downloaded this set from deviantart. You need to sign on in order to download files. This is an .abr file, which means it's a brush set designed for Photoshop, but it will work in GIMP. Place the file in home/yourusername/.config/GIMP/2.10/brushes , and the brushes will show up in GIMP.

Open a new document in GIMP. Nick recommends at least 1280 x 1000. Fill it with black. Import the photo you want to use. You could probably use a photo with a background but his didn't, so I removed the background from mine as well. We've done a couple of projects on removing the background from a photo, so I'm pretty sure you know how to do it. Scale it if it is too big. Whatever face you use needs to be close to centered in the page.

The next step is to convert your photo to grayscale: **Colors** > **Desaturate** > **Desaturate**. He chose Luminance as the Mode, but use whatever you want to make the photo look best (center, top).



Add a new layer with white fill. Choose the Gradient tool with the FG to BG gradient chosen. Change it to radial gradient as well. You actually want the white in the center, so either change the foreground and background around or reverse your gradient. You want just a hint of dark, so zoom out and drag from the center out way far.



Set your layer opacity down so you can just see the photo on the lower layer. If you can go to 90% and see it, that's fine. I went down to 75%.



Add a layer mask to the top layer. It needs to be White (full opacity). Now we're going to use the smoke brushes to add a smoky effect to our photo. It will uncover parts of the photo that you want to see. Make your brush black, and choose one from the Brushes dialog. This set has seven brushes., and you should use more than one and arrange them around your photo to vary your effect. Each one you use will uncover part of your photo (next page, top left).

If you have all the smoke you think you need, you can use a very soft brush to uncover more if you want - if you uncover too much, you can change the brush color to white and use another

#### **GIMP Tutorial: Create A Smoke Effect**



smoke brush. Play with the brushes to get the result you want. I used the soft brush to emphasize the camera.



Cool! Now, just in case you want to use this on something else, you can change the background to transparent using these steps:

If you put your photo on a separate layer from your black background, you need to right click on your photo layer and choose **Merge Down**.

On your smoke layer, right click the layer mask and choose **Apply Layer Mask**.

On your smoke layer, choose **Alpha to Selection**, then delete the layer.

Now, simply press the **Delete** key. The background will be gone and you'll have your smoke effect on a transparent background. You can crop it, if you want, and export it as a png (or any file format that handles transparency).





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## What The !#@% Is A Passkey?

#### by Jacob Hoffman-Andrews

**Electronic Frontier Foundation** 

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This is part 1 of 2 in a series on passkeys.

A new login technique is becoming available in 2023: the passkey. The passkey promises to solve phishing and prevent password reuse. But lots of smart and security-oriented folks are confused about what exactly a passkey is. There's a good reason for that. A passkey is in some sense one of two (or three) different things, depending on how it's stored.

First off: is a passkey one of those little plastic things you stick in your USB port for two-factor authentication? No, that's a security key. More on security keys in a minute. A passkey is also not something you can type in; it's not a password, passcode, passphrase, or a PIN.

A passkey is approximately 100-1400 bytes of random data[1], generated on your device (like your phone, laptop, or security key) for the purpose of

logging in on a specific website. Once the passkey is generated, your browser registers it with the website and it gets stored somewhere safe (for instance, your password manager). From then on, you can use that passkey to log in to that website without entering a password. When you go to a website's login page, you'll have the option to "Sign in with a passkey." If you choose that option you'll get a confirmation prompt from your password manager, and will be logged in after confirming. For all this to work, there needs to be passkey support in the website, your browser, your password manager, and usually also your operating system.

You can create many passkeys: each passkey unlocks a single account on a single website. For multiple accounts on a single website, you can have multiple passkeys for that website. For instance, if you have a social media account for personal use and one for business, you would have different passkeys for each account.

You can usually have both a password and a passkey on your account[2], and can log in with either. Logging in with a passkey is generally faster, since your password manager will offer to do it in a single click, instead of the multiple clicks that logging in with a password usually takes. Also, logging in with a passkey typically lets you skip traditional two-factor authentication (SMS, authenticator app, or security key).

Why is it safe for passkeys to skip traditional two-factor authentication? Passkeys build in a second factor. Each time you use the passkey to log in, your browser or operating system may ask you to re-enter your device unlock PIN. If you use a fingerprint or facial recognition to unlock your device, your browser might instead request you re-enter your fingerprint or show your face, to confirm that it's really you asking to log in. That gives two factors of authentication: the device that stores your passkey is something you have, and it's accompanied by something you know (the PIN) or something you are (a fingerprint or a face).

#### **Storage and Backup**

A passkey stored on just one computer or phone isn't that useful. What if you want to log in from a different device? What if your device falls in the toilet? There are at least three solutions here and they're very different, which is part of why passkeys are in practice three very different things.

\* Solution 1: Passkeys are stored in the password manager, which encrypts

- \* Solution 1: Passkeys are stored in the password manager, which encrypts them, backs them up to the cloud, and helps you copy them onto all of your devices.
- \* Solution 2a: Passkeys are created and stored in a physical security key that you plug in via USB[3]. To log in on a different device, you plug in the security key when prompted. Passkeys created this way can't be copied. Only recently-made security keys support this.
- \* Solution 2b: Passkeys are created and stored on a high-security chip built into your computer or phone (for instance, a TPM or Secure Enclave, available on most devices made in the last few years). Like solution 2, these passkeys can't be copied.

Solutions 2a and 2b are less convenient (and solution 2a costs a little bit of money, to buy a security key). But they offer a higher level of security against someone stealing your devices. With solution 1, someone who steals your computer might be able to copy the passkeys if your password manager is unlocked.

Also, solutions 2a and 2b don't really solve the "device falls in toilet" problem. If you're using one of those solutions, you should have multiple passkeys stored on different devices as backup. Alternatively you may wind up relying on email-based account recovery.

If you're using solution 1, you trust your password manager to keep your passkeys secure. Also note that password managers generally won't let you export a copy of your passkeys for offline backup.



#### How do passkeys prevent phishing?

Each passkey contains a record of which domain name the passkey was created for. If someone sends you a link to a login page on a lookalike domain name, you may be fooled but your browser will not, since browsers can easily check for an exact match. So your browser will not send the passkey to the lookalike domain name and you'll be safe.

However, so long as you still have a memorized password in addition to your passkey, a lookalike site could tell you your passkey isn't working and you need to enter the password instead. If you do enter the password, the phishing attack will succeed. So phishing is still possible, but someone who typically logs in on a given site with a passkey is more likely to get suspicious when asked to enter a password instead, which provides some protection even if it's not complete protection.

#### **Should I use passkeys?**

Like all security and privacy topics, the answer is "it depends." But for most people, passkeys are a good idea. If you're already using a password manager, generating long unique passwords for each website, and always using the autofill features to log in (i.e. not copy-pasting passwords), passkeys will provide a slightly higher level of security with significantly more convenience.

If you're not already using a password manager, passkeys will be a tremendous increase in security (and will also require you to start using a password manager).

For sites where you are using two factor authentication (2FA), passkeys will be much more convenient, and may be more secure. SMS or authenticator app 2FA methods are vulnerable to phishing attacks, since a fake site can ask you for the one-time code and pass it along to the real site along with your phished password. Passkeys are more secure than SMS or authenticator app 2FA because they aren't vulnerable to phishing; your

browser knows exactly which site goes with which passkey, and isn't tricked by fake websites.

Security key 2FA also isn't vulnerable to phishing, so switching from security key 2FA to a passkey is mainly a matter of convenience; it means one less step during login, and one less password to remember. If you store your passkeys on a security key (protected with a PIN or biometric), you'll achieve similar results as security key 2FA. If you store your passkeys in a password manager instead, that's slightly less safe, because anyone who gains access to your password manager can use your passkeys, without needing physical access to your security key.

As of late 2023, passkey support is very uneven, particularly for syncing. For instance, Adam Langley says "Windows Hello doesn't sync at all, Google Password Manager can only sync between Android devices, and iCloud Keychain only works on Apple devices." Even once those problems are solved, cross-ecosystem syncing (for instance between iOS and Windows) will remain a big problem. Third-party password managers 1Password, Bitwarden, and Dashlane have passkey support and can sync across ecosystems. But they don't necessarily support all platforms yet (for instance, 1Password doesn't fully support passkeys on Android as of October 2023). If you want to try out passkeys on a throwaway account, you can create one on passkeys.io or webauthn.io.

If you like being an early adopter, go ahead and give passkeys a try. You may run into stumbling blocks along the way and have to fall back to that embattled ancient tool, the password.

[1]: A cryptographic public/private key pair.

[2]: This is true in 2023, though if passkeys see wide adoption, some websites might let you sign up by generating a passkey, and never have a password at all.

[3]: Or, less commonly, connect via NFC or Bluetooth Low-Energy (BLE)



## Passkeys & Privacy

by Jacob Hoffman-Andrews
Electronic Frontier Foundation
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This is part 2 of 2 in a series on passkeys.

In our previous article we described what a passkey is: a few hundred bytes of data stored in your password manager, security key, or elsewhere, which allows you to log in to a specific website without a password. The good news is that passkeys are quite well designed from a privacy point of view, even though they give a little more information to websites than a plain old password.

#### **Cross-site Tracking**

One of the most important attributes for passkeys is that they shouldn't enable cross-site tracking. In other words, if you create a passkey on site A, and create a different passkey on site B using a different name, email address, and IP address, the two sites shouldn't be able to correlate the separate identities, even if they're sharing information behind the scenes.

Passkeys satisfy this requirement. Each passkey you create is unique, though there are some small caveats to be aware of.



If you store your passkey in a security key or TPM, websites can request the make and model of your device (depending on whether the browser allows it). Usually this only identifies a broad category of common devices. For instance, Chrome's policy on security keys "expects" each distinct make and model to represent at least 100,000 devices. In the past, some manufacturers shipped security keys where each one had a uniquely identifying make and model, which was a major privacy flaw. It's possible other manufacturers will make the same mistake, but it's likely that browsers would block such flawed devices. In general, consumer-facing websites should avoid

requesting make and model information, since this feature is intended primarily for companies managing their internal login infrastructure. If you store your passkey in a password manager, websites can learn which password manager you are using.

Similarly, some security keys may implement a "signature counter" for passkeys stored on them. A good implementation should ensure that the signature counter is maintained separately for each site, but some security keys keep a single signature counter for all passkeys. That can be used across unrelated sites to try and correlate your identity by looking for similar values of

that signature counter. You can ask the manufacturer of your security key how they handle signature counters.

#### **Biometrics**

When using a passkey your phone or computer might prompt you to use a fingerprint or facial recognition. This step is to demonstrate to your device that it's really you. Your fingerprint, face, or unlock code isn't sent to the website. Instead, your browser tells the site that "user verification" was successful. This will generally only happen if you already use a fingerprint or facial recognition to unlock your device. If you prefer not to use biometrics at all, you can use your screen unlock PIN or pattern instead.

#### **Shared accounts**

For accounts that you share with someone else, passkeys change the privacy situation slightly. With passwords, a website doesn't know whether it's you or your friend typing in the password. With passkeys, you'll most likely need to generate two passkeys for the account: one for you and one for your friend. Each of you can log in using your own passkey, but the site will know which passkey is logging in.

#### Lost or stolen device

If you store passkeys on a security key, someone who has physical access to your security key

can list all the passkeys, including which sites they belong to. Some security keys have a setting to require a PIN before listing the passkeys, in addition to the normal requirement to enter a PIN before logging in with a passkey.

If you store passkeys in a password manager, someone who has physical access to your device and can unlock your password manager will get a list of all the sites for which you have passkeys and passwords - not to mention getting the ability to log in to those sites! If you have a secret account and need to protect against someone with physical access to your devices, passwords may be a better option; just be sure to also use incognito / private browsing mode, and be aware that phishing is still a risk.

#### **Cloud accounts**

For most people, the most convenient password manager will be the one built into their operating system: Windows Hello, Google Password Manager (on Android and ChromeOS), or iCloud Keychain. To use them, you'll have to be logged in with your Microsoft, Google, or Apple account. If you're not already logged into one of those cloud accounts, logging in may prompt you to share a pile of additional data, like your browsing history and bookmarks. In general you can turn off those extra "sync" features but it requires a little extra attention.

You can also use a third-party password manager, which won't try to sync all your extra data in addition to your passwords.

#### Conclusion

For most purposes, passkeys will represent a significant improvement in security at nearly zero cost to privacy. As described in the previous article, there are still significant growing pains in the passkey ecosystem, but they will likely be resolved in the near future.



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## Repo Review: VokoscreenNG

#### by Cg\_boy

VokoscreenNG is an advanced, yet easy to use screen recording application with many features. It provides multiscreen recording support, webcam integration, time scheduled recording, a built-in video player and more. It is a new and rewritten version of an older screen recording application known simply as Vokoscreen, and seems to provide much improved performance.

The interface is reasonably easy to use, although perhaps a little confusing at first to navigate. From the left side panel, you can access the main screen recording page, camera options, mouse cursor options, screenshot page, keyboard shortcuts, and video player page. You can navigate through the tabs at the top to access different settings on the current page. The controls at the bottom of the screen allow you to start, stop, and pause recording, play back the last recorded video, take a screenshot, and open the output folder. VokoscreenNG also provides a system tray icon from which you can easily start and stop recording, and enable a few other options (center, top).

From the main tab on the screen recording page, you can set the capture area to be fullscreen, a selected window, or a custom defined area. You can also select which monitor to record, if you have multiple. There are also screen



magnification options available, as well as a recording countdown timer. An information panel on the right shows you how long you've been recording for, and how much disk space is being consumed.

The next tab allows you to choose the audio inputs (microphones or built-in audio), along with the audio codec you wish to use. At the video settings tab, you can set the frame rate, output format and codec, and compression setting. VokoscreenNG supports x264 and VP8 for codecs, and numerous different video formats. You can also set the mouse cursor to be invisible in videos (top, right).

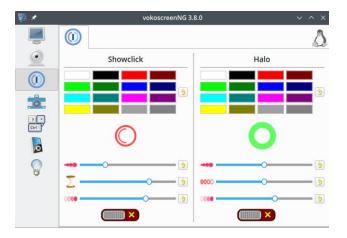
From the fourth tab, you can access various settings, such as the default video output directory path, set a free disk space limit, choose to minimize the application when recording starts, and even enable a dark mode.



VokoscreenNG also allows you to change all the application keyboard shortcuts. The default keyboard shortcut to start and stop recording is CTRL+SHIFT+F10. VokoscreenNG gives you the ability to enable a timer to start recording at a specified time, and also stop recording after a certain time has elapsed. Once you've set the time at which you want it to start recording, you need to check the Start the timer checkbox to begin.

On the camera page you'll find options for enabling webcam support. You can select your webcam from the dropdown box, and the resolution for the camera window to display. This will open a small separate window in the corner of the screen displaying the live webcam output, allowing you to include yourself in screen recordings. You can adjust the size and magnification of the camera box if necessary. There are also a few options to let you remove

the window frame, flip the camera video, and change some color settings.



VokoscreenNG also gives you the option to enable a colored halo around the mouse cursor and to highlight mouse clicks while screen recording — a useful feature perhaps for those creating tutorial videos. You can change the color of the halo, as well as the size and opacity. VokoscreenNG has a built-in video player as well, allowing you to instantly playback screen recordings you've just made.

#### **Summary**

All in all, I found using VokoscreenNG to be a pleasant experience, with no real bugs or problems evident. Screen recording performance was quite good, providing smooth video without stuttering. If you need a simple to use, yet feature rich screen recorder, VokoscreenNG is an excellent choice.



## PCLOS-Talk Instant Messaging Server



Sign up TODAY! http://pclostalk.pclosusers.com

## Screenshot Showcase



Posted by bones113, on October 14, 2023, running KDE.

## PCLinuxOS Forum Family & Friends: Alistair Einstein Izzard

#### by Alistair Einstein Izzard

#### How old are you?

I'm 57 Years old. I was born in Birmingham, England.

#### What is your marital status?

I have a girlfriend, Tracy. We have been together just over a year

## Do you have any children or grandchildren? If so, how many of each?

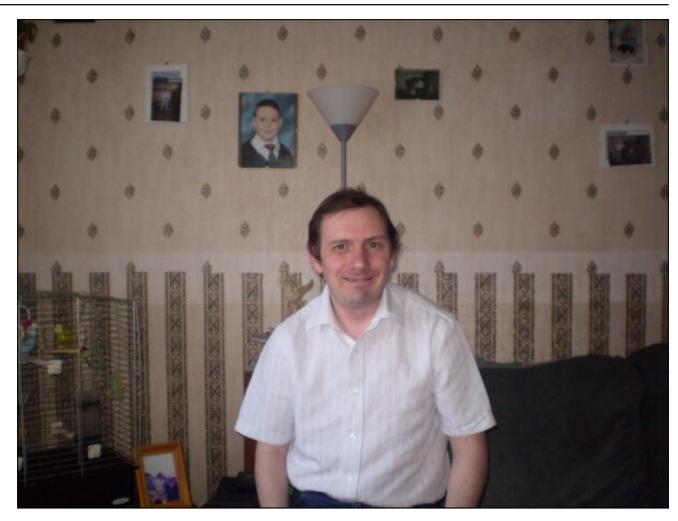
I have 2 children, all grown up now, both boys, well men now, Scott who is 45, son of my exwife, and Damien who is 28.

## Do you have any pets, and if so, how many and of what type?

Tracy and I have 2 cats, Missy and Spike. They are very mischievous.

## Are you retired or working, and for how long and at what?

I'm unemployed and off sick. I have had depression and anxiety and other health issues that keeps me from working.



What is the area you live in like? Weather, Serenity, Scenery, etc.

I live on the Isle of Wight, a small island off the south coast of England. I also live in a town called Hemel Hemstead which is a town 20

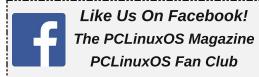
miles from London. There is a big difference between the two places, one is a beautiful island with places of natural beauty, and the other is Hemel hehe. It's nice there, too. On the island you are no further than 7 miles (11.2Km) from the nearest beach.

#### **PCLinuxOS Forum Family & Friends: Alistair Einstein Izzard**



## Are you handy with your hands, and do you have any hobbies?

My hobbies are pretty much Linux and computers, although I do dabble with electronics and mechanics. I collect "Boomboxes" and have over 100 at last count. It's something I loved when growing up. I still use cassettes.



#### What is your education level?

My education was to A-level in maths and physics, I didn't go to further education, and started work at 16 years of age.

## Do you like to travel, go camping, go fishing, etc.?

I love to travel when finances allow. I loved to go camping back in the day with the family. Nowadays, I prefer more creature comforts.

## What caused you to try Linux and join this forum?

Short answer. Windows 95. I was looking in my local magazine store and saw a Linux magazine. I forgot which one but it had a CD-ROM of Slackware on the cover. I bought the magazine. I was fed up of windows crashes, especially as I had been used to the stability at that time of older OS's like TRS-DOS for the TRS-80 model I. (My first entry to computers in 1980) model II and III because I used to go into my local Tandy store where I used to "play" on the demo machines. I was hooked on computers from then on. Anyway I got the magazine and read the instructions, I had to use 2 floppy disks, one for boot, the other root, using a DOS-based program to get the images to both floppies. The boot disk booted the root disk, which had drivers for the CD-ROM, which then booted Slackware. Installed Slackware, and then found other distros. RedHat which had Doom and Gnome/KDE 1 (Slack was KDE) and then Mandrake.

Mandrake was Red Hat on steroids, It used a GUI installer which you could move about the sections. You could jump back or forward to any section of the installer. This is when I learned about the "other" repo for Mandrake, one that was being populated with packages that made Mandrake useful, Media codecs.. DVD-CSS and all the "cool" stuff. The curator of these programs was a certain Texan by the name of Texstar. A few years passed (2003) and on the front of the magazine was a "LiveCD," some

little known distro in our circles called PCLinuxOS.

So I popped that in my drive, and it found all my hardware. I was impressed, I installed and been a user off and on ever since. I actually joined the Forum twice, once before the attempted coup and again after. I was thrown off the first time. Since then I have made community ISO's based on Trinity and Openbox, and I even did an Enlightenment one, but wasn't very good at that one.

## What do you like about PCLinuxOS? Are there any changes you'd like to see with PCLinuxOS?

I like most things, the awesome forum members, the boring stability I seem to get (very rarely I'll have an issue). It's the best little distribution on the planet, and I've used Arch BTW. I'm looking forward to what we can do for PCLinuxOS. 20 years coming soon!







## PCLOS-Talk Instant Messaging Server



Sign up TODAY! http://pclostalk.pclosusers.com

## Screenshot Showcase



Posted by cH1.@R3, on October 3, 2023, running KDE.

## Filen: Generous End-To-End Encrypted Cloud Storage

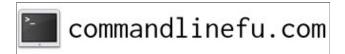
#### by Paul Arnote (parnote)

It's rare to find someone in computing circles who has **not** heard of Dropbox. If you're one of "those" people, Dropbox is a cloud-based file sharing program. Simply place files into the dedicated Dropbox folder (usually in your /home directory), and the files will be available on all of your other devices that also have Dropbox installed. The files will also be available to any other user with whom you've invited (or given access to).

The "free" Dropbox account grants you 2GiB of storage space, and that has been a constant since they first appeared on the scene 15 years ago, back in 2008. "Upgrade" options for Dropbox do exist, but the "next tier" of storage space available is 2TiB, with nothing smaller available. As you can imagine, the 2TiB of storage is rather expensive for individual users ... but wouldn't be such a big issue for corporate users and IT departments. For personal accounts, the 2TiB plan will set you back \$9.99 per month, or roughly \$120 per year. Business plans are even more expensive. You have to admit that there's a HUGE gap between the 2GiB free accounts and the 2TiB paid accounts.

Dropbox hasn't been free of controversy or its share of criticisms. In fact, there's a whole Wikipedia page devoted to listing all of those controversies and criticisms.

Here at The PCLinuxOS Magazine, we have used Dropbox ever since I became the magazine's editor back in 2009. We use it to share necessary files between those of us who do the magazine production and layout every month. It is handy for that purpose, since "we" are spread out all across the globe.



#### **New Kid On The Block: Filen**

Back in June, PCLinuxOS Forum Global Moderator cH1.@R3 posted information about Filen in the PCLinuxOS forum. Being an AppImage, it was easy to try out. Then, Texstar packaged it and put it in the PCLinuxOS repository (so you can now install it to your PCLinuxOS computer via Synaptic).

From the beginning, Filen "beat" Dropbox at their own "game." Probably the first thing users will notice is that Filen offers up 10GiB of storage space for its "free" customers. That's five times the amount of storage space provided by Dropbox for its free account users.

Filen uses military grade AES-GCM 256 bit encryption. All your files will be stored in Tier IV ISO 27001 certificated high security data centers distributed in Germany. All your data is client-side encrypted with your own key on your device before it is sent to the servers. Your key or password never leaves your device! They also tout "zero knowledge technology." That means that neither Filen, as a service provider, nor any government agency or service agency will have access to your files. This provides absolute privacy and security for your files.

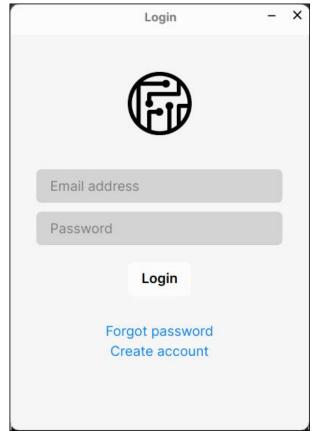
With one of Europe's highest privacy standards, Filen will keep your data safe. All of your files will be stored in Tier IV ISO 27001 certificated high security data centers located in Germany. Data protection is deeply rooted in German law and in their General Data Protection Regulation. The minimum requirements already offer a solid foundation, but Filen has raised privacy to another level.

If 10GiB of storage isn't enough for you, Filen also offers paid plans. The "Pro I" plan offers up to 200GiB of storage, for €1.99 per month. The "Pro II" plan offers up to 500GiB of storage for €3.99 per month. The "Pro III" plan offers up to 2TiB of storage for €8.99 per month. With the exchange rates being what they currently are, the U.S. dollar amount is pretty much

the same (€1.99 = \$2.10 U.S.). You can also "stack" your Filen plans. So, if you purchase (for example) two 200GiB "Pro I" plans, you will have 400GiB of cloud storage available for your use.

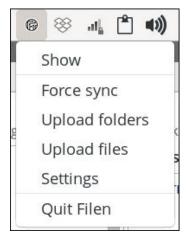
You can also use Filen to share files between ALL of your devices. Just like with Dropbox, there is an app for Filen in both the iOS AppStore and the Google Play Store.

#### **Setting Up & Using Filen**

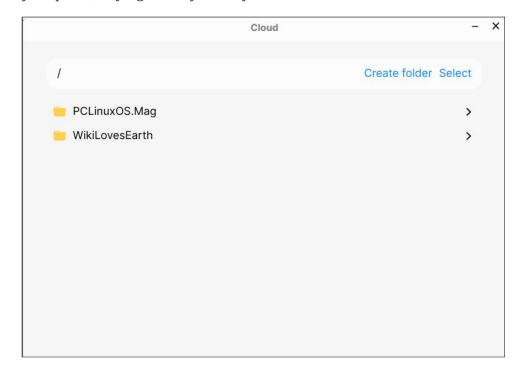


When you first launch Filen, you will be presented with a window that looks like the one above. If you already have a Filen account, you can enter your email address and password. Otherwise, you can click on "Create account" to set up a Filen account.

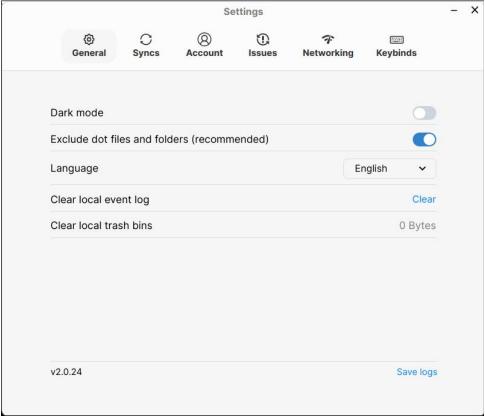
#### Filen: Generous End-To-End Encrypted Cloud Storage



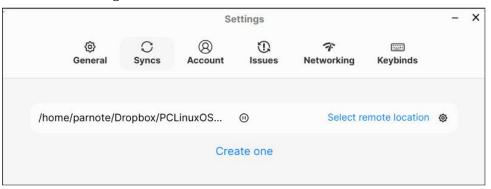
Normally, Filen sits quietly and unobtrusively in the notification area of your panel, staying out of your way until it is called into action.



If you already have a Filen account, once you log in you will see the files already synced in your Filen account.



Selecting "Settings" from the menu (after clicking on the icon in your notification area) brings up the window shown above. The first "selection" is "General." Here, you can choose whether you want to use "Dark mode," whether to exclude dot files and folders, the language that Filen uses, clear the local event log, or clear the local trash bins.

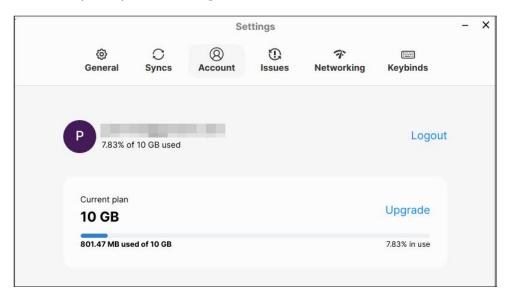


#### Filen: Generous End-To-End Encrypted Cloud Storage

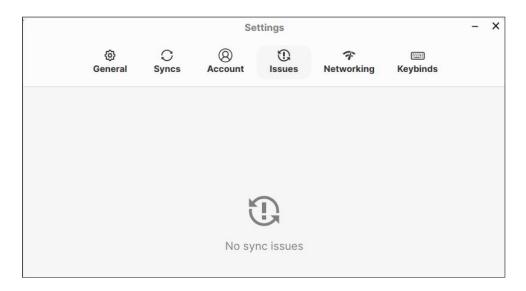
Moving across the "tabs" at the top of the Settings window, the second one is called "Syncs." You should see any files you already have synced to your Filen account here, if you are either successfully signed in, or if you have previously uploaded files to your Filen account.

If you look very close, in the middle of the line that shows the path of the directory that I'm syncing with, there's a small "pause" button. If you missed it, I couldn't blame you. I missed it too the first time I looked for how to "un-pause" the syncing of files.

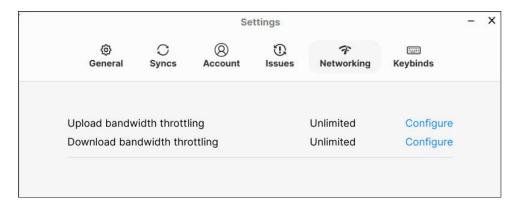
And, this brings up one really nice feature of Filen. Unlike with Dropbox, where you place items to upload to the Dropbox cloud servers in the "specially marked" Dropbox directory, Filen allows you to upload any directory or file(s) on your computer. All you have to do is select the file(s) or directory that you want to upload to the Filen cloud server.



Under the "Account" tab, you'll get all sorts of handy-dandy information about your Filen account. Here, you'll find information on how much of your storage space is currently being used, both textually and graphically. There's also a "link" to log out of your account, as well as a "link" to upgrade your free Filen plan to a paid plan (and then THAT paid plan would be reflected here, I presume).



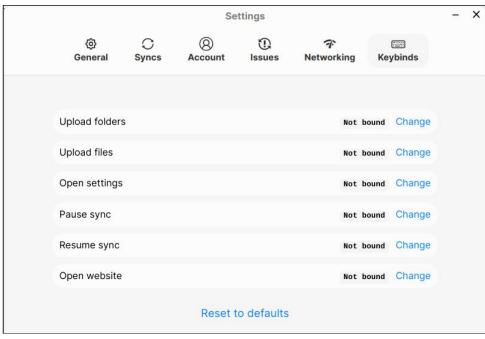
The "Issues" tab would be where you would go to see if there are any issues with the syncing of your files with the Filen cloud server. Hopefully, your results will be similar to that depicted in the graphic above.



The "Networking" tab might not have much interest to many users, unless they are wanting to throttle how much bandwidth is utilized by the client-side Filen app to sync files to the Filen cloud servers. For personal users using the free account, I can't see this being an issue. I can, however, see this being an issue for a multiuser enterprise, to help ensure that the syncing of files with the Filen cloud server isn't consuming an inordinate amount of bandwidth. Otherwise, other things that require internet

#### Filen: Generous End-To-End Encrypted Cloud Storage

bandwidth (like video streaming or video meetings) might not have sufficient bandwidth to properly display.



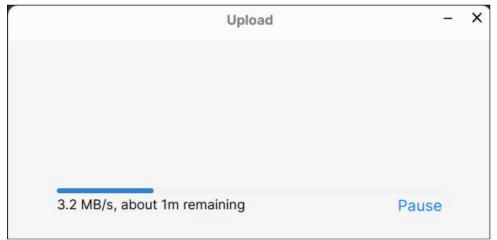
The last tab is the "Keybinds" tab. Out of the box, Filen doesn't come with any keybindings. If you wanted to, you could assign keybindings to these six options in Filen. I haven't assigned any because I'm dubious about the benefit. It's just as easy to point and click, for no more often than I'm syncing files with the Filen cloud servers. But, you might have a different "use scenario" than I do, so they may be of some benefit to some users.







# Upload - X Creating folder structure.. (8/67)

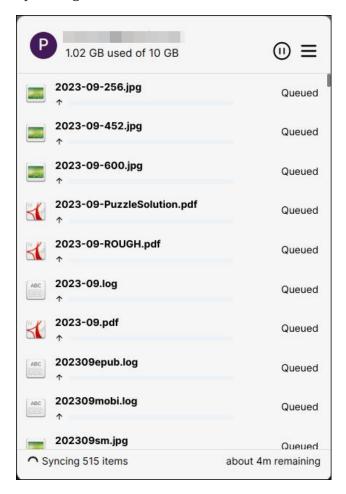


Once you select some files to upload to the Filen cloud servers, you should see the Upload window appear. In the first screenshot above, Filen is setting up the folder structure for the uploaded files in the Filen servers. In



#### Filen: Generous End-To-End Encrypted Cloud Storage

the second screenshot above, you can see the progress bar for the uploading of the selected files.

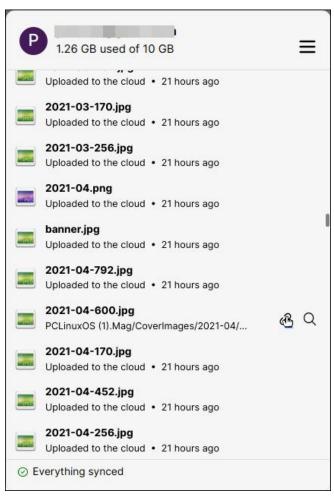


The window above shows the syncing of files between my computer and the Filen cloud servers as it's happening.

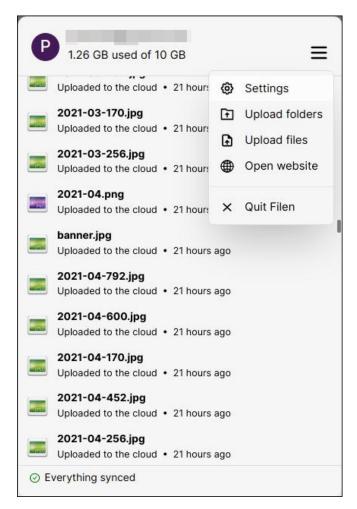


PCLinuxOS Magazine Page 27

#### Filen: Generous End-To-End Encrypted Cloud Storage



Once the sync with the Filen cloud servers is complete, your window (use "Show" from the context menu of the Filen icon that's in the notification area of your panel) should look something like mine above. Move your mouse cursor over the file you want to share, and two additional icons will appear to the right of the filename. The one we're really interested in is the one that looks like a chain link. Click it, and the public URL for the selected file will be copied to your clipboard. Then, it's just a matter of sharing the URL with the person you want to send the file to. You could do this either via an email or a chat window. As long as the recipient has the URL, they can access the file for as long as it still exists in your Filen account.



When you "Show" the file sync window, you might have noticed the 3-bar menu at the upper right corner of the window. When you click it, you gain access to Filen's settings dialog box, you can choose to upload files or folders, quit Filen, or ... and more importantly ... you can access your files on the Filen website. There are some features of Filen that, at this time, can ONLY be accessed from the website interface.

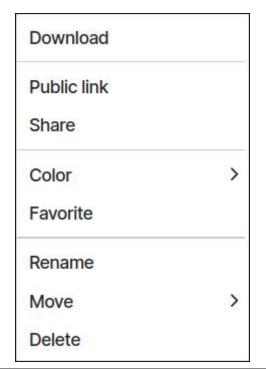


#### Filen: Generous End-To-End Encrypted Cloud Storage



All of your files and folders should be listed in the Filen web interface.

Hover your mouse cursor over one of the items listed in the web page, and you will notice a three dot ( ... ) menu to the right edge of the browser window. Clicking it will cause the menu shown to the left to open. From here, you can get a public link to the file or folder, change the color scheme, mark a file as a favorite, rename a file, move a file to a different folder, or delete a file.





But if you select "Share" from the three dot menu, you can also share the selected files and/or folders (directories) with any other Filen user, much as you can do with Dropbox. Now, anytime you update the file(s) or directories by adding or deleting files, those files or directories will also be updated for the other Filen user you enter in this window. This is exactly how the magazine production staff uses Dropbox, so it's nice to see that this feature is available under Filen. We use it this way to support collaborative editing and to share files effortlessly with one another when we're in the midst of laying out the magazine every month.

#### **Summary**

Filen appears to be a more than adequate replacement for Dropbox. Or, you can run them both concurrently. I currently have my Dropbox folder set to sync with Filen, so I have my files backed up both in Dropbox and Filen.

One thing I \*really\* like about Filen is that they offer 5X the FREE storage space that Dropbox offers. Their "paid plans" are cheaper than Dropbox, and they offer incrementally better "tiers" of storage space, instead of making that HUGE leap from 2GiB to 2TiB.

One thing I would love to see with Filen is the ability to share files from the command line. More than likely, this is just the "tinkerer" in me being wishful. But with the ability to share files or directories from the command line, that opens up the possibilities of being able to also make a Thunar Custom Action that takes care of the file sharing, all without even having to use anything else, like the Filen desktop client or the Filen web page. If this option does exist, then I'm unaware of it.

I feel confident that with Filen, my files and my data are safe from prying eyes and those who might try to exploit my data for their own criminal/personal gain.

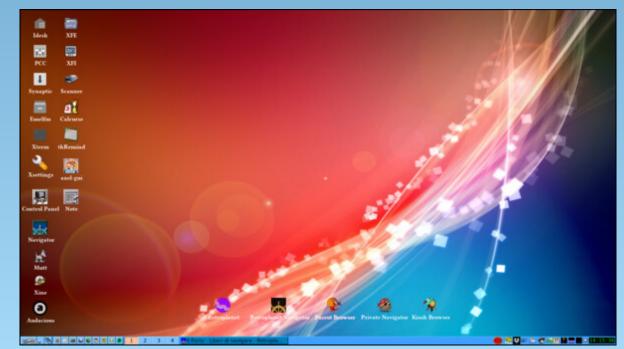




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## Screenshot Showcase



Posted by francesco\_bat, on October 29, 2023, running icewm.

## Repo Review: Zim

#### by David Pardue (kalwisti)

When I prepare an article for our community magazine, I follow an old-school approach; I gather information from an assortment of online sources, taking notes with pen and paper. Then I try to organize my notebook sheets in a logical way before creating an outline and typing my rough draft in a word processor. As an experiment, I have begun to explore the world of digital note-taking to see if it might be more efficient and flexible for my workflow.

#### The Growth in Note-Taking Apps

My search took me down the rabbit hole. In the past few years, there has been a veritable explosion in the note-taking industry. The notetaking tools market is projected to reach a value of \$1.35 billion by 2026. A multitude of applications are available. Most of them are commercial, peddle the usual monthly subscription model, and want to lock users into the vendor's ecosystem for the longest time possible. In addition, there can be concerns with the privacy and reliability/data loss proprietary apps. For an overview and comparison -- by no means exhaustive -- see the "Encyclopedia of Note Taking Apps" (https://noteapps.info/). Its dataset currently covers thirty-five apps, only five of which are open-source. Zim is not listed but it is under consideration to be added to the website.

One factor spurring growth in the digital note-taking space is the concept of Personal Knowledge Management (PKM). PKM is a structured system to organize your thoughts, notes and files. A popular methodology of PKM is called the Second Brain (also known as Building a Second Brain [BASB]). Second Brain is a marketing term which describes a method of organizing your digital life and supposedly unlocking your creative potential. This concept has been developed by Tiago Forte, a guru of digital organization. Forte's book, Building a Second Brain (Profile Books, 2023), describes this methodology. He also offers a pricey online BASB course.

From a historical perspective, one of the oldest examples of PKM is the commonplace book. Commonplace books originated in ancient Greece and Rome as a way to compile knowledge, a tool to record and digest information. A commonplace book resembles a scrapbook filled with many different items: quotes, notes, proverbs, aphorisms, poems, observations, etc. Entries are often arranged by subject and category. Famous examples of commonplace books include Marcus Aurelius' Meditations, which began as a private collection of notes and quotations, Erasmus of Rotterdam's rhetoric textbook *De copia* (1512), and

philosopher John Locke's book *A New Method of Making Common-Place-Books* (1676). Commonplacing was adopted by a variety of intellectuals; Thomas Jefferson kept a commonplace book, and authors like Ralph Waldo Emerson, Mark Twain and Virginia Woolf used this technique. In Arthur Conan Doyle's Sherlock Holmes stories, Holmes keeps numerous commonplace books which he sometimes uses for his research.

When discussing PKM, it is easy to get carried away with an elusive search for the "ultimate" note-taking app and system, with the most features and customization. However, we should remember that PKM is just an aid to our work, not the work itself. Note-taking apps do not magically make us smarter; as researcher Andy Matuschak observes, "The goal is not to take notes -- the goal is to think effectively."

#### Why Use Zim?

Based on my reading, I decided to try Zim because it met my desired criteria: a FOSS program; stable and reliable; my data remains local; files are stored in plain text format; and notes are saved using a standard file and folder structure (rather than being stuck in some proprietary database).



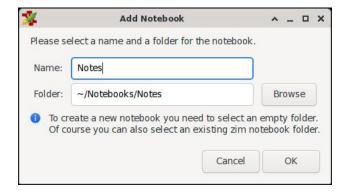
Zim is a mature project with an eighteen-year track record, first released in 2005. Zim's developer is Jaap Karssenberg, who works as a System Engineer at ASML (a semiconductor company). He holds a Master of Science in applied physics (2006) as well as a B.A. in philosophy (2007). Karssenberg became involved with the open-source community while he was a university student. His first programming language was Perl. He uses Zim daily for his projects, so he has an incentive to actively maintain it. I found two brief interviews with J. Karssenberg. The earliest one is bilingual (Spanish-English) from October "Entrevista Jaap Karssenberg, el desarrollador de Zim" (https://tinyurl.com/5af6snbb). The Ubuntu Weekly Newsletter (155 [Aug. 9 - 15, 2009]) also published a brief article, "Zim and Development": Art of Wiki https://tinvurl.com/8ee9u7xv

#### A Quick Overview of Zim

Zim is cross-platform: Linux, Windows 10, macOS (High Sierra [10.13] to Monterey [12]). It is a graphical text editor used to maintain a collection of wiki pages. Wiki is the Hawaiian word for 'quick' (pronounced "we-key" rather than "wick-ee"). Wikis were inspired in part by Apple's HyperCard; the first public wiki was created by programmer Ward Cunningham in 1995. Another way to describe Zim is as a notetaking tool designed to help you maintain a collection of notes in the form of personal wiki pages. In other words, you can have many notes and link them to each other in meaningful ways.

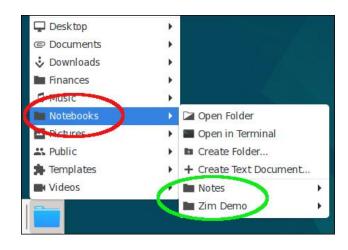
Wikis are very useful for storing information (e.g., thoughts, to-do lists, a journal, recipes, interesting quotes, a sysadmin notebook) and building a knowledge base. Another advantage of wikis is that they have little inherent structure, thus allowing structure to emerge according to your needs.

When you first start Zim, it asks you to specify a folder for your notebooks and the name of a notebook. I accepted the app's default suggestions (although you may change them if you wish):

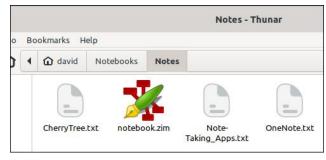


"Notebooks" in Zim's terminology are just folders that contain Zim pages, attachments, and folders with more Zim pages. Zim's design decision of creating a folder structure to match the notes structure ensures that even if Zim disappears, my structure will still exist, with my attachments in context to the notes. All my notes do not end up in one large, jumbled folder.

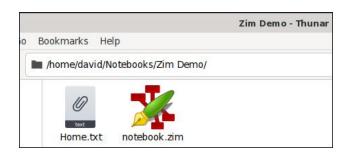
The screenshots below illustrate this principle. Within my Zim **Notebooks** folder, there are two subfolders: **Notes** and a temporary / test folder named **Zim Demo** (right, top):



The **Notes** folder contains three Zim pages (with their data stored in plain text files):

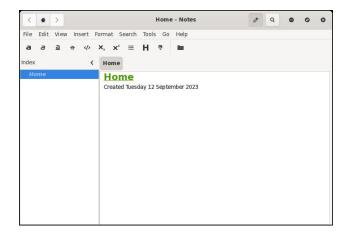


The **Zim Demo** folder contains only one Zim page:



Repo Review: Zim

On its first run, Zim's UI looks a bit sparse. There are a few items in the toolbar; the left panel displays your file structure. In the main window (on the right side), you have a standard text editor:

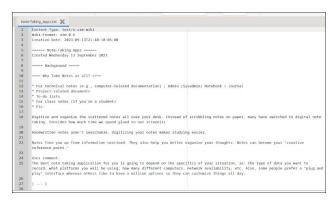


Despite its basic appearance, Zim is powerful and comes with an assortment of plugins that expand its capabilities (accessed via the Edit menu > Preferences > Plugins tab). For example, there is a useful Table of Contents plugin:

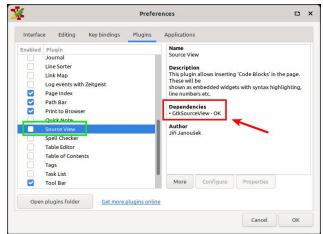


The Table of Contents has hyperlinks to the sections / subsections of the page, and clicking on its header bar will collapse it.

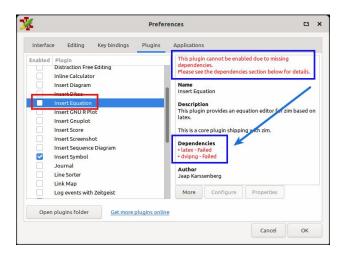
(In case you are curious, this screenshot shows the underlying text format of the Zim page pictured above:



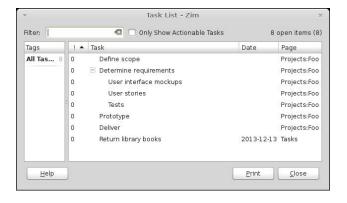
Some plugins require installing dependencies; Zim will indicate whether the additional packages are present on your system:





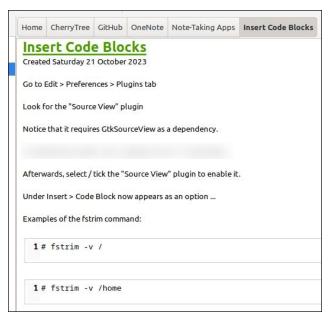


Other helpful plugins include a Task List, a Table Editor and one called Source View (which allows you to insert code blocks in the page), the last two shown on the next page:



Although I do not have space for screenshots of them all, approximately twenty-five other plugins are available. Worthy of mention are the Spell Checker, Insert Screenshot and Insert Equation (which requires you to use LaTeX markup for equations). If you are not familiar with LaTeX, you can use Yassine Lagrida's "Online LaTeX Equation Editor"





http://latexeditor.lagrida.com/) which is free and does not require installing anything; it uses your web browser, a visual editor and JavaScript to generate LaTeX markup for math formulas / equations.

Each Zim page can contain links to other pages within the project, URLs, simple text formatting, and embedded images. Another handy feature is the ability to export your notes in HTML format to publish them as web pages. (In fact, Zim's website was written in Zim.)

I would like to mention one Zim setting which confused me at first because I did not know the term "CamelCase words." Camel case means writing phrases without spaces or punctuation and with capitalized words. Common examples include "YouTube", "iPhone" and "eBay".

In some wiki markup languages, camel case is used for terms that should be automatically linked to other wiki pages. Zim follows this behavior by default; words in camel case have links created on the fly as you type them (results highlighted below):

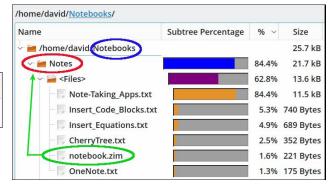


If you want to disable this behavior, go to the Edit menu > Preferences > then click on the Editing tab to bring it forward. Look for the option Automatically turn "CamelCase" words into links and uncheck / deselect it (top, right):



A possible drawback for some users is that Zim does not offer a one-stop mobile solution for note storage, since it lacks a native client for Android and iOS (i.e., for smartphones and/or tablets). However, if you wish, your Zim data can be synced to cloud storage services such as Dropbox, Google Drive or Microsoft OneDrive.

You will probably want to work with your Zim notebooks across more than one computer. If so, it is very simple to copy -- or back up -- your Zim data. All content is located in ~/Notebooks, so just copy the top-level folder of the Notebook (i.e., the one with the notebook.zim file in it) and transfer it to your other PC. On my system which uses Zim's default settings, the relevant folder is named **Notes**.





**Repo Review: Zim** 

#### Additional Resources

These two web-based tutorials provide a good starting point for learning more about Zim:

The Zim User Manual: https://zim-wiki.org/manual/Start.html

Kidwell, Brendan. "Getting Work Done in Zim." 4 Dec. 2013.

https://www.glump.net/content/getting-work-done-in-zim/getting-work-done-in-zim.html

If you prefer video presentations, the clearest tutorials I found are below:

Done on Linux. "Zim Done on Linux." YouTube, 28 Feb. 2021. (21 min., 59 sec.) https://www.youtube.com/watch?v=FJVmLF\_Z 7qQ

Pandora's way. "Zim: Ultimate Note Taking Guide in 26 Minutes." YouTube, 6 May 2022. (26 min., 17 sec.) https://www.youtube.com/watch?v=qa5wa7Am vRE

#### **Summary**

Zim is an impressive tool if you need to take organized notes and like wiki-style documenting. It is a real desktop app that is reliable, fast, consumes minimal resources and is ready to use out of the box. Your notes stay on your own computer, under your control rather than being "siloed" in some corporate cloud. Zim's plain-text file format offers a degree of

future-proofing -- as does its simple note hierarchy of files and directories. I have read comments from longtime Zim users that the program has never corrupted or lost a note, and that it has boosted their productivity. If you decide to try Zim, I hope that it will enhance your digital life.



The PCLinuxOS Magazine

Created with Scribus

## Screenshot Showcase



Posted by jogurtmen, on October 27, 2023, running Mate.

## PCLinuxOS Recipe Corner Bonus



#### Baked Eggs With Salsa - Shakshuka

Serves: 4

Shakshuka is a Tunisian dish of tomatoes, onions, pepper, spices, and eggs. It's usually eaten for breakfast or lunch, but it's tasty anytime. It is similar to the Latin American breakfast dish huevos rancheros.

#### **INGREDIENTS:**

4 eggs
1/4 cup or 1 stalk of green onions, chopped
1/4 cup of cheddar cheese
1 cup of mild salsa
Salt and pepper to taste
Olive oil or spray to grease the pan

#### **DIRECTIONS:**

Preheat your oven to 400 degrees F or 200 degrees C.

Spray a medium size cast iron pan with cooking spray or spread oil or butter around it.

Add the salsa to the bottom of the pan and make 4 small wells by pressing the salsa down with a spoon.

Crack the eggs in, season with salt and pepper. Spread the green onions over the top.

Place in the oven and bake for 10 minutes, or until the eggs are set.

Remove and sprinkle the cheese over the top.

Serve and enjoy your baked eggs with salsa.

#### TIPS:

Try adding some diced tomatoes, some diced onions and minced garlic to taste.

The eggs go so well with toast or an English muffin. Do not forget your morning coffee or tea, as well.

Serve on rice for dinner with some avocado slices, YUMMY!!

#### **NUTRITION:**

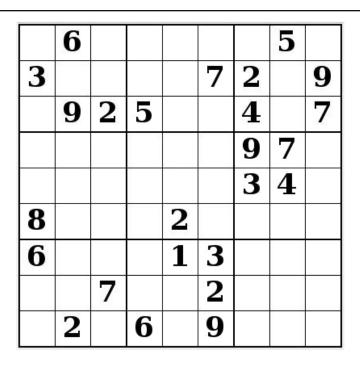
Calories: 209 Carbs: 13g Fiber: 3g

Sodium: 654mg Protein: 8g





## PCLinuxOS Puzzled Partitions



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

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

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

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

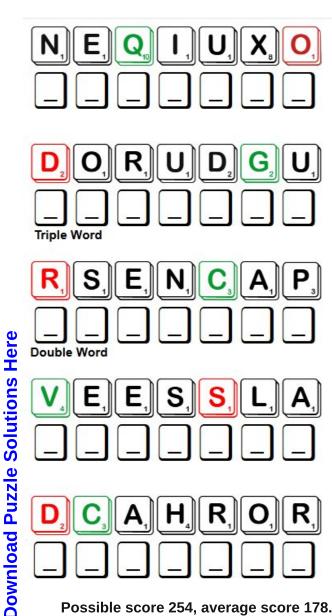


#### **SCRAPPLER RULES:**

- 1. Follow the rules of Scrabble®. You can view them here. You have seven (7) letter tiles with which to make as long of a word as you possibly can. Words are based on the English language. Non-English language words are NOT allowed.
- 2. Red letters are scored double points. Green letters are scored triple points.
- 3. Add up the score of all the letters that vou used. Unused letters are not scored. For red or green letters, apply the multiplier when tallying up your score. Next, apply any additional scoring multipliers, such as double or triple word score.
- 4. An additional 50 points is added for using all seven (7) of your tiles in a set to make your word. You will not necessarily be able to use all seven (7) of the letters in be able to use all seven (7) of the letters in your set to form a "legal" word.
- your set to form a "legal" word.

  5. In case you are having difficulty seeing the point value on the letter tiles, here is a list of how they are scored:

  0 points: 2 blank tiles
- 1 point: E, A, I, O, N, R, T, L, S, U
- 2 points: D, G 3 points: B, C, M, P
- 4 points: F, H, V, W, Y
- 5 points: K 8 points: J, X 10 points: Q, Z
- 6. Optionally, a time limit of 60 minutes should apply to the game, averaging to 12 minutes per letter tile set.
- 7. Have fun! It's only a game!



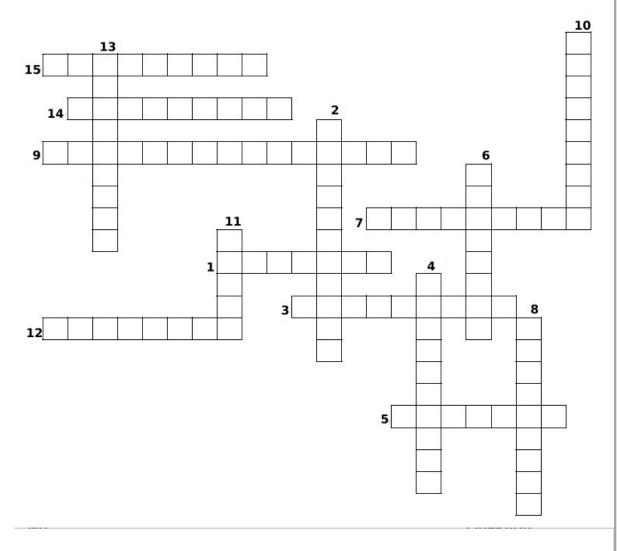
Possible score 254, average score 178.

## November 2023 Word Find Nature in the Fall

J F J A O I S B S W E P Y I T H X E J J H P C L J N C C A R F C T H I C K E T B O M X W W F U S K T I X D G D K U M Y L K D O H M O E S R E W O L F N U S I U J C G C M O V P F B Z O D Z B L R C M S S E E R T E L P A M V K F O V I D E X B X K P E E T N E C S E D I R I N Q K N E W O N H X E B E E P Z OIUCEROMACYSLNKFMLOCRVWWNDGRIV S X N B I V L U C S L O O T S D A O T F Y U D C G K D O Z C N B J D B D R A H C R O Z Y C Z N E E R G R E V E P L P D L O K Y F T J U O C Y M C I T S U R M F T O I N J J I W H O P D O R N E D L O G K F H M X N K N M N P P G H I F G A Y S H N K C Z A H E I U W O O D L A N D S S V P N G B A B Q T E A O K A T U U J E A S K L A T S N R O C J J T D F L L J E N R SHITESTUNTSEHCPPGTBTORNLLZVYOV M C U U T P B U S M I V S S Y S N A C E P X D M I L T G C E N T Z U S T R P M X M S P R S X R I G V X C Q Y N L U M E S PAOMFLAAUNRAPPLEORCHARDMGROONT I P J W Y X M S C K A E Z Y G N Y Z L M A E Y V L T U S I M H N W I O V B D P F V L D O I Z O D R G K J B P E K C S P O K I V S S V L R V E A G E W N T K A X Y R F T L A G F C W O CKBTBPEUNFSEDQODRAYENIVLVZTOPN C P R E H V S O H O S M L J U O J V P P U N K E E G J V N V C M Y R R D V G V U L L K E J I D I F X X J A I S A T E J P UUHICNFBOYHLFEOLNSBTCMOHDCVRTM T P K A Z S A N W G I G Z C I U D O G V C O R O K A N E I E T Z Y E K I I T S P H M L N J O G Z X U N K O D Z E G D S G J Y Q C B M A N I P T V S W E A T E R W E A T H E R J R U L IDBZUOBONOVEMBERTAKMIGRATIONAL H F X L Q M K U N E N M J U N D E R G R O W T H H M Q R D V X V W L Y D T R A N Q U I L R B E C S L E R R I U Q S U U I V Q P R E F I N O C M O X O N I U Q E C M S P O R D N I A R

APPLE ORCHARD **AUTUMNAL EQUINOX BRAMBLES CHESTNUTS CONIFER** CORNSTALKS **DECIDUOUS DEWDROPS EQUINOX EVERGREEN** FALLING LEAVES **GOLDENROD GOURDS** HARVEST MOON **HIBERNATION HICKORY** IRIDESCENT JUNIPER LEAF CARPET LEAVES LUMINOUS MAPLE TREES **MIGRATION** MOSS COVERED **NOVEMBER ORCHARD PECANS PINECONES** PUMPKIN PATCH **RAINDROPS** RUSTIC REDWOOD **SQUIRRELS SUNFLOWERS SWEATER WEATHER SYCAMORE** THICKET **TOADSTOOLS** TRANQUIL UNDERGROWTH **VINEYARD** WISTERIA WOODLANDS **XEROPHYTE** 

## November 2023 Crossword Nature in the Fall



- 1. An area of land devoted to the cultivation of fruit or nut trees.
- 2. The process of becoming inactive to save energy that helps some animals survive the winter months.
- 3. The hard, egg-shaped part of the pine tree that opens and releases seeds.
- 4. A fungus with an umbrella-shaped fruiting body, especially one thought to be inedible or poisonous.
- 5. Any of numerous, cone-bearing chiefly evergreen trees or shrubs.
- 6. Any of a genus of usually prickly shrubs of the rose family including the raspberries and blackberries.
- 7. The process of people or animals traveling to a new place to live, usually in large numbers.
- 8. A plant with groups of small yellow flowers that grow along the stems of the plant.
- 9. The time when the Sun is exactly above the Equator and day and night are equal length.
- 10. Plants that have foliage that persists and remains green throughout the year.
- 11. A squash-like plant with a hard, colorful skin: more decorative than edible.
- 12. A plantation of grapevines, especially one producing grapes for winemaking.
- 13. Any of several deciduous trees yellow-brown in autumn; with hard wood and edible nuts in a prickly bur.
- 14. A plant adapted to live under conditions of small available moisture.
- 15. Plants that shed or lose foliage at the end of the growing season.

**Download Puzzle Solutions Here** 

## Mixed-Up-Meme Scrambler

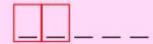


THUCE

**GARCHE** 

TRIMPE

**TEQUS** 









When the player married the beauty queen in center field, it was ...

11

**Download Puzzle Solutions Here** 

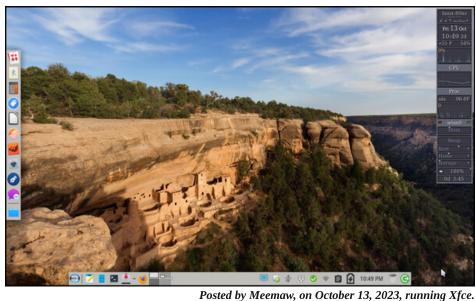
## More Screenshot Showcase

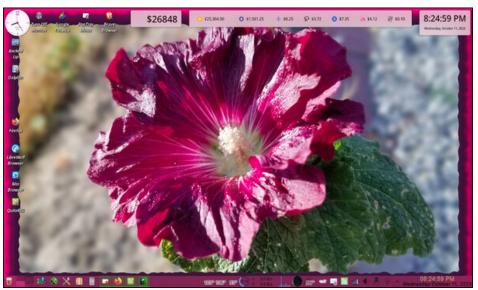


Posted by luikki, on October 10, 2023, running KDE.



Posted by parnote, on October 11, 2023, running Xfce.





Posted by seaplane\_tux, on October 11, 2023, running KDE.