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Trial by proprietary software

*By John Sullivan
Executive Director*

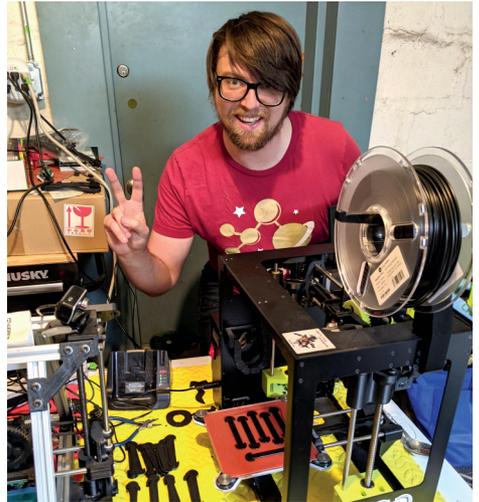
“At a remote eviction hearing... in Collin County, Texas, the court granted landlords the right to evict five people who didn't or couldn't dial into the [Zoom] hearing.”

(Source: u.fsf.org/341)

There has been so much to worry about during the COVID-19 pandemic, even just within the category of technology policy. At the FSF, our role is to worry specifically about the impact of software on

human freedom. Software can be a tremendous tool for solving social and scientific problems, but only when the terms of its distribution and use allow everyone to inspect how it works, share copies of it, modify it for their own purposes, and share those improvements or tweaks with others.

Unfortunately, with the shutdown of in-person institutions around the world, people have turned to the proprietary software companies that had the sales and marketing resources to quickly insert themselves



FSF Web developer Michael McMahon poses with 3D printers being used in the HACKERS and HOSPITALS initiative (see page 10).

as “solutions.” Among these institutions are courts of law, many of which have been conducting some proceedings over Zoom. While Zoom is a “service,” it also requires those using it to run nonfree software on their local devices – either the official client application, or downloaded nonfree JavaScript when connecting via a Web browser.

While Zoom’s software itself doesn’t cost an individual any money to use, it raises two clear categories of concern: requiring people to agree to Zoom’s arbitrary demands as a condition for access to justice, and the state’s public endorsement of Zoom.

First, for a person to use Zoom, they ostensibly have to agree to Zoom’s terms of service. Having to agree to a contract with a private company in order to access public services is immediately objectionable. It puts that company in the position of being an actual gatekeeper for our rights under the law. The fact that they can change their terms at any time makes the situation even worse.

Right now, they make users promise not to aid any effort to reverse engineer Zoom software – something which is ethical and legal when done cleanly. Similarly to a celebrity’s rider, they also require assent to an assortment of ridiculous provisions. Don’t you dare put a Zoom trademark in a picture frame! It’s not allowed, if you want to use

Zoom. The idea that a company can require that you mind their trademarks in such specific ways in order to have the right to explain why you shouldn’t lose your home is horrifying.

Second, for the state to require use of Zoom is for it to promote and subsidize that company. This promotion influences public perception of videoconferencing tools, a business area that depends heavily on network effect (people will use the tools that most other people they know are already using). If the state is going to promote a platform, it should be one that all citizens – and their businesses – can use and build on. The money spent every month on Zoom contracts could instead be spent improving free software, on the foundation of some very capable free platforms that already exist for this purpose, like Jitsi Meet and BigBlueButton. The state’s choice of Zoom sends the wrong social message and misappropriates public resources. Further, the state has an obligation to preserve its own autonomy, which it by definition cannot do when it cannot see the source code or choose from multiple providers to fix or improve the software.

Whether videoconferencing is acceptable for court proceedings at all is a separate and important topic. Even free software wouldn’t address

the fact that videoconferencing requires a sufficiently capable Internet connection and a sufficiently powerful computer with a camera, neither of which everyone has access to. Other issues, like how personal data is handled by the service, also need to be considered, separately from what software is used. But no matter what, if there is videoconferencing, people should never be required to run nonfree programs to participate. We should not accept opaque, proprietary software as infrastructure for our democracy.

It is asking a lot to say that people should refuse to use Zoom for a court date, since they could face serious repercussions. If anyone is able to take such a stand, the FSF will amplify their story and help make it count.

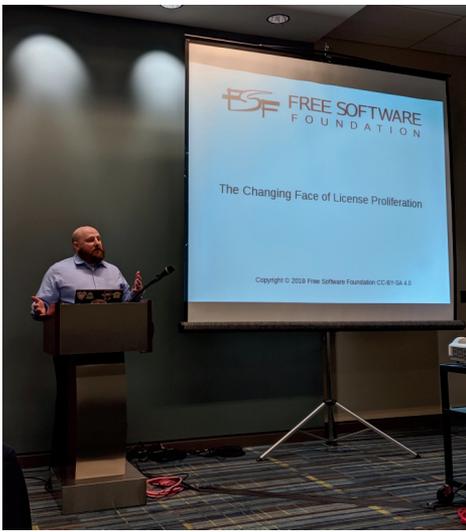
When localities anywhere in the world do the right thing, we can highlight their work and help share how they did it. As an individual, even without a court date, you should write letters to your local officials, and then share those letters on libreplanet.org so others can reuse them and add to them. The FSF will be working hard with you on these challenges through the pandemic and beyond. We know that if we don't do this together, user freedom won't get the public hearing it needs.

And if you do have to attend a Zoom court date, please consider putting a framed copy of the Zoom logo on the wall behind you. 🙏

Copyleft at thirty-five *By Donald Robertson, III* *Licensing and Compliance* *Manager*

Thirty-five years ago, the Emacs General Public License brought about the age of copyleft. It was a revolutionary concept, for the first time ensuring that once software was released freely, it would always remain free. Copyleft licenses achieve this by turning copyright law on its head, requiring that distributions of the software, or modified versions of it, be released under the same terms. These terms guarantee that everyone is free to run, study, modify, and share the work or their own modifications to it.

This novel concept was further developed in the GNU General Public License (GPL), enabling the enduring success and growth of the GNU operating system, which in turn supported the rise of the Internet. Keeping everyone on a level playing field incentivized sharing and collaboration, which led to the incredible world of free software we see today, as well as other massive projects like Wikipedia. While it's easy for us to see how this is a boon for society, over the years, there have



Donald Robertson speaks at the FSF Continuing Legal Education seminar in Raleigh, North Carolina, in October 2019.

been those who opposed copyleft, pushing for lax licenses that would allow proprietary developers to take what the free software community creates and lock it away. As most large software companies have come to embrace free software in their products, the push for lax licenses has become even more pronounced.

So what does copyleft look like today, over three decades after its creation? And what does the future hold for it?

Copyleft is still incredibly popular. Developers widely choose to protect the rights of users, with thousands of packages licensed under the GNU family of licenses alone. Legal professionals are also still developing new copyleft licenses, with varying degrees of success. Even

where a GNU license doesn't exactly fit their client's needs, they still want to gain the benefits that copyleft provides. Other communities concerned with ethical technology are increasingly looking to copyleft licensing as a tool for social change – providing a starting point from which to talk to them about the importance of the four freedoms (see: u.fsf.org/2zo).

But popularity alone doesn't mean the success will continue. Fads can come and go, although something lasting for thirty-five years could hardly be called a fad! Those who want to integrate free software into their own locked-down proprietary systems will continue to call for the demise of copyleft, but the future of copyleft lies in the structure of the concept itself.

At its core, copyleft is a tool to perpetuate freedom, and in doing so, copyleft also perpetuates itself. When users enjoy the benefits of the sharing community that copyleft creates, they are nudged to appreciate the concepts, and want to give back and share in the same way. When the license ensures that you have access to the source code, it enables you to study it, modify it, and extend it. When access to source code is left up to the whims of a distributor, it shrinks the potential community that can build upon that software. When software is locked up in proprietary

cages, the future is very dim for that software indeed. In contrast, by its very nature, using copyleft begets more copyleft users and developers.

That doesn't mean we can just sit back on our laurels. Copyleft created a world of free software, but to interpret that as a sign that it's no longer necessary would be a big mistake. There will always be those who try to hoard software, hoping to stifle the world copyleft created. We all need to keep working together, sharing our software, and asking that others also share in freedom. We hope that the next thirty-five years are as vibrant and productive as the last. 🍷

True privacy and security depend on free software

By Greg Farough

Campaigns Manager

For all of the assurances you might receive from proprietary software companies that they respect your right to privacy, it is impossible to guarantee that your online communications are actually private without free software. Among technical users, it's common knowledge that privacy is dependent on strong encryption. However, the complex connection between software freedom, encryption, and privacy can be a little difficult to explain in the course of our individual activism, and is due for a more in-depth explanation.

Encryption is about keeping secrets secret, whether that means messages between you and a loved one, sensitive documents, or an entire hard drive. It also isn't only for those with something to hide: making strong encryption part of standard practice increases the safety of all those who really do need it by making it a normal thing to do. When your personal information is at stake, it's all the more important that encryption technology be based on free software. Even the most "benign" proprietary programs have a long history of mistreating their users, and a single "snitch" or backdoor in a proprietary encryption program in some cases could cost lives. At the FSF, we advocate for software freedom in any and all situations – and in some cases, your safety may depend upon it.

Free encryption software is most crucial for whistleblowers and other activists: as he mentions in his LibrePlanet 2016 keynote (see: u.fsf.org/snow), Edward Snowden could not have exposed the United States government's overreaching surveillance without the use of free software. Would we have the thousands of documents Snowden leaked today if they were saved with BitLocker, a proprietary disk encryption program that sends its master keys to Microsoft? The developer of a proprietary disk

encryption program like this one could point to as many “independent” studies of their program as they like, but this does nothing to change the fact that when it comes to privacy, verification of the source code is fundamental. In order to verify a safe transfer of information, the software has to be free if it is to be trusted.

Taking your first steps with message and disk encryption isn’t as difficult as it seems, and can be a great way to promote free software with those who aren’t familiar with it. One good way to get started is to follow the FSF’s Email Self-Defense Guide (see: u.fsf.org/1df), which will walk you through the creation of a GPG key and your first encrypted messages to friends. You can think of your GPG key as a matching lock and key that you can use to make sure your files are read only by the people you want – even if that’s only yourself.

To take the next step, try finding a “cryptoparty” in your area. These are simple, informal, nontechnical meetings that help people get started on topics that can seem unapproachable, including the proper way to exchange GPG keys with a colleague. Attending one of these meetings might be your gateway to discussing free software and security issues with a friend who is alarmed by their email provider scanning their

messages. (Or, if you want to organize your own cryptoparty, the libreplanet.org wiki is a great place to announce it and find resources!)

Perhaps because it has the potential to be so empowering, strong encryption is under continual threat. It’s a topic frequently targeted by legislators, particularly those working as part of oppressive governments. The proposed EARN-IT Act of 2020 (see: u.fsf.org/30m) recently introduced into the United States Congress is one such effort, and is one that those in the US should oppose in letters to their representatives. This is only one such example, and it’s up to all of us to watch for similar government encroachments. The safety of our secrets might depend on it. 🙄

Updates from the FSF tech team

By Andrew Engelbrecht

Senior Systems Administrator

The FSF tech team is always at the free software community’s service, even when we’re working mostly from home due to COVID-19. We’re constantly maintaining and improving the infrastructure that you depend on, while simultaneously launching and supporting new FSF projects. We’re a small team in a small organization, but we like to think that together, we pack a powerful punch. This update is our

opportunity to share some of the work we've done for the FSF and the broader free software community so far this year.

In preparation for our annual LibrePlanet conference, we created a new speaker registration and scheduling system using Drupal Webforms, views, other modules, and code to integrate the schedule into the conference Web site. This saved the campaigns team many headaches by simplifying version control and collaborative editing.

Because of the pandemic, we held LibrePlanet fully online this year. It was a difficult last-minute transition, and we put in many hours to get the remote streaming and recording systems to work, but luckily we were able to deliver good results. We ran technical operations from our downtown Boston office, and allowed speakers to give their talks from their remote locations. We used GStreamer and Icecast to capture and stream Jitsi Meet sessions. You can read more about the setup at u.fsf.org/31j, and you can now enjoy the videos and audio recordings at media.libreplanet.org.

Following this success, we created a Jitsi Meet server as our latest associate member benefit. FSF members can create rooms and send channel invite codes to their friends for fully free videoconferencing. We

have received positive feedback about the stability so far, even with many simultaneous users, so we encourage you to try it out (see u.fsf.org/33s for more information).

We're also still researching forge software to help people collaborate on free code, art, text, and other types of projects in freedom (see: u.fsf.org/305), and we should come to a decision about which forge platform to run soon. We're also looking into improving our single sign-on (SSO) system, with the goal of adding two-factor authentication to the forge. You can learn more about our progress at u.fsf.org/33p.

We have upgraded our member and donor portal, my.fsf.org, which is powered by CiviCRM, to a new version of Trisquel. We're also working on modernizing the fsf.org Web site, and we'll be upgrading our GNU MediaGoblin instance to the newly released version.

The winter fundraiser cycle worked out nicely technologically, and the Upcycle Windows 7 campaign was a success, thanks in part to our technical work on the petition system (see: u.fsf.org/upcycle).

We've also replaced our old email servers, and organized their customization to make them easier to maintain, improve, and migrate in the future. We're now DKIM signing emails from @fsf.org addresses in

order to demonstrate that they come from us, and we've changed how we deliver to some email providers, improving our delivery rate. This work will help deliver email more effectively to current and prospective free software supporters.

Along with these improvements, we added a KVM server to our "gnuhopec" stack, which allows us to run more virtual machines in the newer cluster. We've migrated a few virtual machines from older hardware due to failing disks in our RAID arrays, so it's good have the extra space and the reliability of Ceph's distributed storage.

When we switched to a remote office in March, the transition was mostly seamless given our already existing technical infrastructure. One big change we made was to start using Mumble for meetings and team chats, which has great audio quality and reliability compared to SIP

(voice over IP), which we are now using less frequently. We continue to make use of IRC, email, and our own Jitsi Meet instance for much of our work, because they're effective tools when used with great client software.

While we're proud of everything we've achieved, I also want to highlight the work of all free software contributors. Your work is empowering, and it highlights the goodwill that we have for each other in our community. If you're interested in a great learning experience, we encourage you to apply for a tech team internship, with support for sysadmin roles and GNU package work. If you'd like to chat with the FSF tech team, other FSF staff, and community members, join us in #fsf on irc.freenode.org, or on our member forum. Happy hacking! 🐧

Building a framework for a free online classroom

By Devin Ulibarri

Free Software Activist & Sugar Labs Oversight Board Member

The world has changed drastically in the past few months due to the ongoing crisis of the novel coronavirus. As a musician, educator, and a free software advocate, I was very worried because education, in particular, has been impacted: college students have been

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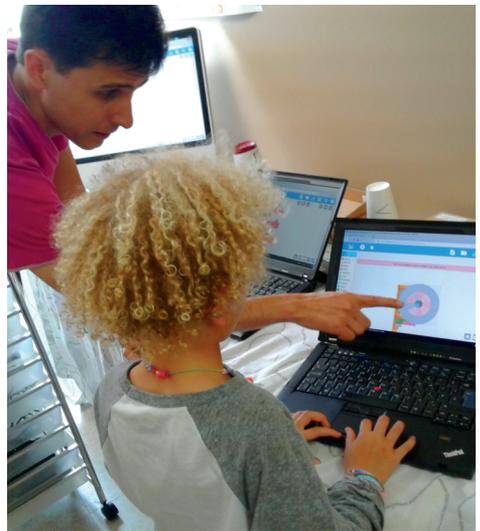
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sent home, day cares have been closed (leaving parents to juggle their work responsibilities with childcare), and public schools have closed their campuses and continued their educational services online.

The shift has been abrupt, so policy makers have not had much time to review the potential risks (or benefits) of software options. Many administrators and teachers are basing their tech decisions solely on pervasive marketing campaigns, bringing about Zoom's surge in popularity. More importantly, decision-makers have failed to see the long-term implications of such a decision on students' freedom and privacy.

As a teacher, videoconferencing suddenly became a core part of my work, and I was concerned about how I would communicate with my students without using nonfree software. I tested Jitsi Meet years ago, but it was not suitable for an online classroom at that time. However, LibrePlanet 2020, the FSF's first conference held entirely online (see u.fsf.org/31j), came just in time to demonstrate that the program had improved enough to use with my students. At first, some parents asked if we would use Zoom, but I politely asked them to try Jitsi Meet instead, and explained the rationale for doing so.

Merely having a free classroom is not enough; I also feel responsible for



Devin Ulibarri working with one of his Music+Code students prior to the pandemic.

educating parents, in particular, and plan to run some online events to touch base again on why our school chose Jitsi Meet instead of Zoom. I understand the luxury position I am in, being in charge of a small private school: I'm free to make policy choices that public school teachers cannot. So I am trying to broaden the availability of freedom beyond myself and my own students, and do what I can to educate others. For instance, recently, our music students performed for the mayor of Malden, Massachusetts, via Jitsi Meet. It was the first time he had used it, and this gave me the opportunity to explain the reasons behind our choice.

Finally, it's important to remember that the importance of bringing free software to students

goes beyond nonfree software's habitual invasion of privacy. If we are really entrusting the future to the younger generation, we need to empower them with the four freedoms, not pigeonhole them to take the world as it is handed to them. Every moment that a student is in the classroom is an opportunity to create a sense of empowerment.

When classrooms use free software, and when the rationale for such an arrangement is clearly made, students receive the message: "We want you to be able to fully participate in a democratic society. In today's society, this starts by allowing you to learn and choose how your software works."

The FSF has taken actionable

Free software responds to the COVID-19 crisis

Read more at u.fsf.org/spring2020

While the COVID-19 pandemic may have driven most of us into quarantine in our homes, it hasn't caused any break in free software activism. Along with the deadly effects of the novel coronavirus, we've watched our communities risk further incursion of nonfree videoconferencing software and the attendant privacy violations – and we've fought back.



HACKERS and HOSPITALS:
Bringing the free software
community together to fight
COVID-19

*By Michael McMahon
Web Developer*

Read at u.fsf.org/hackhosp

This initiative used the LibrePlanet wiki page to gather free software and free culture designs for 3D printers, sewing machines, and more, to help provide desperately needed medical supplies for local hospitals.

steps toward freeing education, last year providing coding classes via fully freed laptops to two schools in Boston (see: u.fsf.org/2xu). Similar workshops are likely to follow in the future, as well as other education-related activities.

Please stand with the FSF and insist on free software in the classroom! When you do, send a

message to campaigns@fsf.org about your experience. For those interested in classes in music, art, and/or programming which do not require the use of nonfree software, you may contact me at info@mapflc.com. 🐧



Freeing videoconferencing, one village at a time: A story from Spain

By Javier Sepulveda

Owner and Proprietor, Valenciotech

Read at u.fsf.org/jitsispain

When the pandemic drove his children's education online, activist Javier Sepulveda reached out to their schools and local GNU/Linux activists to provide ready access to the free software videoconferencing program Jitsi Meet.



An introduction to GNU Health Embedded

By Sean O'Brien

Founder, Yale Privacy Lab and PrivacySafe

Read at u.fsf.org/healthemb

This project adds flexibility to the free software GNU Health hospital information system by adding this program to portable free hardware devices, making it even more valuable in fighting health emergencies, including pandemics.



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