

Fall '24 – Intro to VTLUUG!

who we are, what we have done, and what we want to
do

~rsk

Virginia Tech Linux and Unix Users Group

10/22/2024

1. who we are

1.1. what even is a LUUG?



1. who we are

- ▶ VTLUUG (formally “The Linux and Unix Users Group at Virginia Tech”) is an informal gathering of *nix enthusiasts. Membership restrictions are nonexistent – if you come to meetings, hang out in our IRC/Matrix, or just generally act as a friend of the club, you’re one of us.

1.1. what even is a LUUG?



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- ▶ over our 27-year history, we have been known to:

1.2. host installfests



1. who we are



Figure 1: a picture from our 2012 installfest

1.3. give talks



1. who we are

- ▶ there are generally at least five or six student talks a semester
 - ▶ in more active years, we were clearing 10-12
 - ▶ some recent (ish) talks given:
 - ▶ eBPF for the Linux Kernel
 - ▶ making a networked on-board dev framework for the BeagleBone
 - ▶ Qubes / NixOS
 - ▶ these aren't high-stakes: tell us about a project you're working on, or some new tech you're into!
- ▶ we've had visiting talks from Facebook (multiple times), Virginia Cyber Range, several professors, etc.

1.4. play with servers



1. who we are

The LUUG has been fortunate enough to acquire, over the years, a sizeable infrastructure. We have

- ▶ colocation in Whittemore, with a gigabit uplink and at least half a rack to ourselves
- ▶ at least seven physical host machines of varying power
- ▶ sweet ansible + docker setups for easily making new Virtual Machines and spinning up containerized apps
- ▶ free allocation access to the ECE /22 IPv4 range
- ▶ (hopefully) a bunch of wannabe sysadmins ready to break stuff

1.5. engage in general technical mischief 1. who we are

```
2024-03-02 17:20:03 +echarlie I will say, the file upload vuln in that article you shared pretty much convinces me that running a homeserver is fucking stupid. we killed linx.li because people were using it to sell drugs and stuff, and DHS came knocking
```

Figure 2: one time we ran a file upload service, and Homeland Security got involved

```
2023-08-16 23:22:35 kurisu oh good eduroam works
2023-08-16 23:23:48 kurisu team 2 figure out how to run solidworks on a 2012 debian shitpad
2023-08-16 23:30:58 kurisu https://www.solidworks.com/support/system-requirements <-- brb jumping off slusher tower
2023-08-16 20:04:46 +redacted kurisu: im gonna let you in on a secret technique
2023-08-16 20:05:13 +redacted we had a vtluug guy who basically kept buying and returning the same laptop through best buy to run freshman software
2023-08-16 20:05:40 +redacted he would basically take an image of the laptop, return it, then deploy the image on the new laptop, and do that for a whole ass semester
2023-08-16 20:05:59 +redacted an alternative option would be to request a loaner from SWART
2023-08-16 20:06:07 +redacted but you'll need to have a broken laptop or invoice for that
2023-08-16 20:06:35 +redacted but you see they don't actually check whether or not your laptop is broken, they just need a ticket # from a repair center or an order #
2023-08-16 20:08:05 +redacted there's nothing really stopping you from writing ur own fake dell/lenovo/samsung/microsoft/fujitsu support tickets and using that as evidence
2023-08-16 20:08:12 +redacted then you get a 3 week loan
2023-08-16 20:08:26 +redacted you can also request another 3 week extension once, no questions asked, so technically 6 weeks
2023-08-16 20:08:40 kurisu would the public boxes in newman/torg work?
2023-08-16 20:08:43 +redacted after that they get suspicious and ask for an update on your laptop ticket
2023-08-16 20:09:12 +redacted but you could easily do the method i described above, and have "backordered parts" (this is especially a popular excuse with microsoft hardware)
2023-08-16 20:09:27 +redacted or you could say "my laptop came back and it's DOR, i need to ship it again" and request another loaner
2023-08-16 20:09:31 kurisu heh
```

Figure 3: an unnamed chatter telling me how to get a windows laptop for freshman engineering software

1.6. spread the good word



1. who we are



Figure 4: the LUUG is very much pro libre, open-source, and open-data.

2. what we have done

2.1. Infrastructure



2. what we have done

VTLUUG hosts the following services

- ▶ our website, vtluug.org
- ▶ FreeIPA user management, an account on which grants you access to
 - ▶ acidburn, our Debian shell server
 - ▶ @vtluug.org email
 - ▶ NFS drive access
 - ▶ LDAP OpenID bridge
 - ▶ a git server
 - ▶ static “tilde” web hosting @ [vtluug.org/users/~\\$username](http://vtluug.org/users/~$username)
- ▶ search.vtluug.org, a metasearch engine
- ▶ matrix.vtluug.org, a matrix homeserver

2.1. Infrastructure



2. what we have done

- ▶ element.vtluug.org, a matrix client
- ▶ irc.vtluug.org, TheLounge WebIRC client
- ▶ wiki.vtluug.org, gobblerpedia.org, hokieprivacy.org
- ▶ bash.vtluug.org, a quote database
- ▶ a syncthing file transfer relay/proxy
- ▶ an Iodine portal, to proxy network traffic through DNS. lets you use the internet at places with public Wi-Fi without signing up.
- ▶ probably more stuff that I forgot (this list is plenty long anyway)

2.2. Infrastructure and (You)



2. what we have done

- So what does this mean for the average (prospective) member?
- ▶ we host personal VMs/VPSs if members request them, entirely for free
 - ▶ you can have a *.vtluug.org subdomain, if you want
 - ▶ stick whatever you want on the NFS share (so long as it's at least *mostly* legal)
 - ▶ anything that can run as a docker container can be hosted immediately, no questions asked
 - ▶ we can help you turn your thing into a docker image, if you want. just ask!
 - ▶ something that requires its own VM/machine is fine too, just ask an officer for sysadmin permissions

2.2. Infrastructure and (You)



2. what we have done

- ▶ you can be a sysadmin (aka root on all our boxes) so long as you
 - ▶ act within the bounds of reasonability. taking everything down on accident because your `rm -rf` slipped is **fine**, snooping people's IRC sessions isn't
 - ▶ don't make trouble for the club. a tor intermediate relay is fine, your illegal warez site is not. remember, we run off the university network.
- ▶ don't be scared to ask, though!

2.3. people



2. what we have done

- ▶ The club has cumulatively helped hundreds of students install linux through installfests, and over the years has made contacts with a lot of faculty at VT. A few of them are VTLUUG alumni!
- ▶ we are, at this point, entrenched in the university for better or worse. if student org clout is ever necessary, we have it.

**3. what should we do
next?**

3.1. the cliché answer is...



3. what should we do next?

It's up to you! We have plenty of infrastructure and campus clout to throw around.

If you're looking for some ideas...

3.2. project ideas I've had



3. what should we do next?

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- ▶ update the wiki a lot
- ▶ spread around imposing propaganda to increase public notoriety

3.3. talk ideas



3. what should we do next?

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 - ▶ typst: LaTeX for Rust-huffing zoomers
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 - ▶ The Exploding Whale Incident: Docker/Container internals
 - ▶ Carcinisation of the Linux Kernel (Rust for Linux)

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 - ▶ Carcinisation of the Linux Kernel (Rust for Linux)
- ▶ from (You)
 - ▶ do anything interesting lately? working on any projects? we'd love to hear about it

4. in closing



4.1. please join the matrix!

Clubs can't survive without active channels for communication outside of meetings. To serve this purpose, LUUG has:

- ▶ the vtlug-g and vtlug-announce-g mailing lists
 - ▶ you should absolutely join these, but chatting it up on a listserv is less popular with the youth now than it was in 2003
- ▶ an IRC channel
 - ▶ from 2009 to today, the LUUG has had used #vtlug on the OFTC.net IRC server as an informal place to chat and coordinate
 - ▶ when was the last time you saw an undergrad with their IRC client open in class?



4.2. please join the matrix!

- ▶ a Matrix space (as of last week)
 - ▶ LUUG hosts a Matrix homeserver and frontend client
 - ▶ the homeserver accepts registration with the token ‘gohokies’
 - ▶ Element has close to the UI/UX of Discord, without any of the anti-freedom
 - ▶ it’s very comfy on both desktop and mobile, and just needs chatters
 - ▶ shameless bribe: if you sign up on your phone now, I’ll make you a LUUG FreeIPA account