

#### Who am I

#### Hein-Pieter van Braam

(But please call me "HP")

Free software enthusiast

(Co)Founder of two Godot related companies

- Prehensile Tales b.v.
- Ramatak Inc.

Treasurer of The Godot Foundation

Gigantic nerd

Founder of Notabug.org

Personal blog: https://blog.tmm.cx



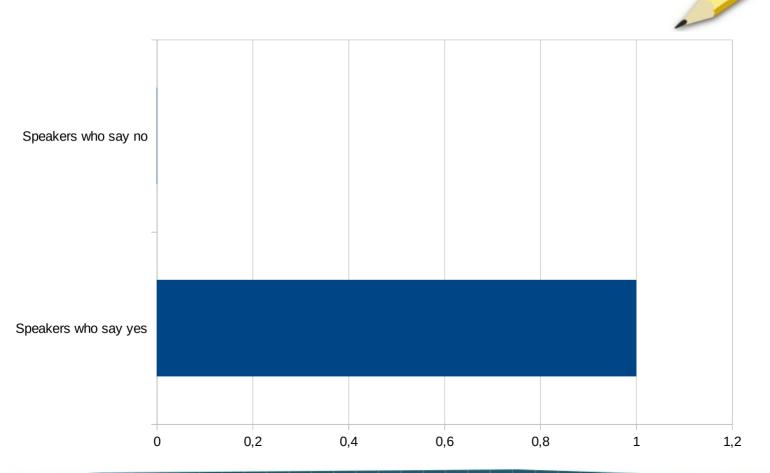
### What is this presentation about?

- Can you run a business on entirely FOSS software?
- Should you run a business on entirely FOSS software?
- Are you mad?
- What does it mean to do this?
- How to do this.



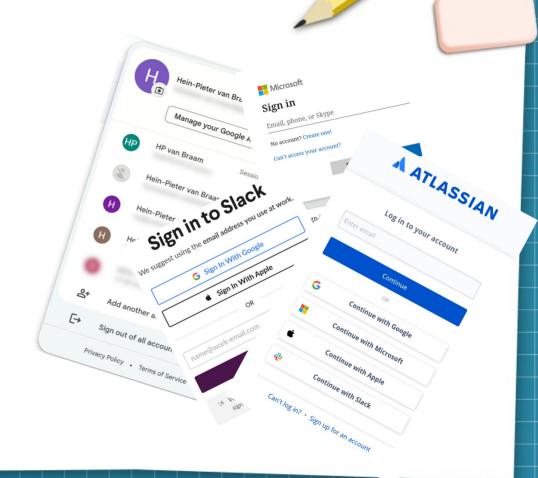
- A lesson in managing large numbers of servers
- A lesson in starting flame wars about configuration management systems.





# Why would you though?

- For users juggling many accounts is confusing.
- **Someone** has to fix issues when they arise.

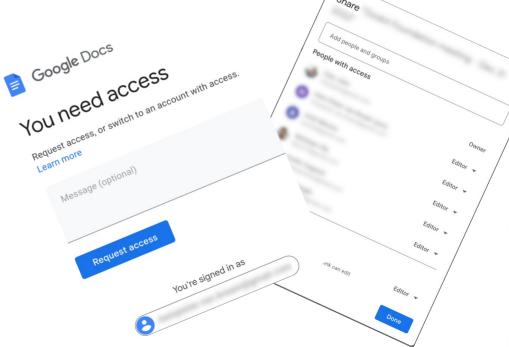




Giving people correct access is hard.

• Removing access at the right time is even harder.

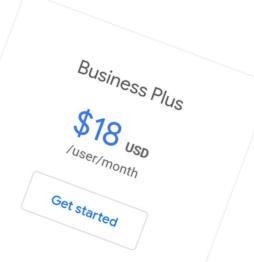
NDAs and compliance issue!

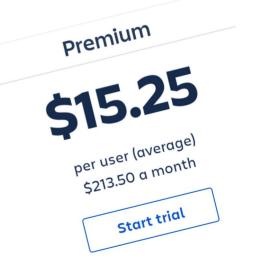


#### But you can do that with SaaS!

- Single Sign On and centralized access control is usually only available at the higher price tiers.
- If a single SaaS provider offers all you need it might also work.







#### So, this is all about money then?

- The common wisdom is: "it is more expensive to DIY!"
  - I do not believe this is true, at least not for my companies.
- "It is only free if you your time is free"
  - Supporting users with mismatched accounts is not free.
  - Failing in compliance could be very far from free.

#### So what is it about?

- Control of my data.
- Unsurprising costs.
- Peace of mind with regards to access control.
- Make the workday just a little bit better for my users.
- Using FOSS makes me feel warm and fuzzy inside.
- Being part of a community of users rather than a customer.

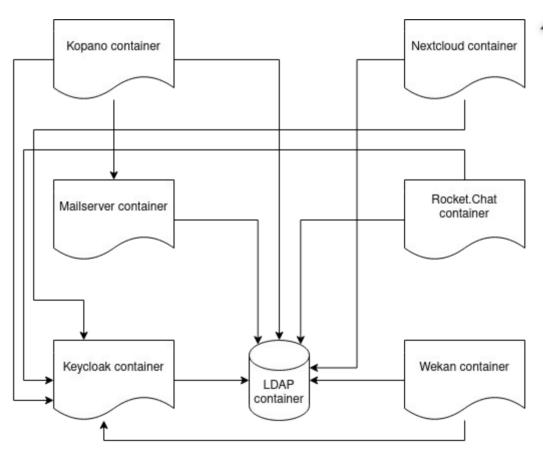
## But isn't this like... Super hard?

- You certainly have to study some things:
  - DNS.
  - Basic understanding of a web server.
  - Basic understanding of the Linux CLI.



Perception postsrsd Kopano MariaDB Kopano-Spooler Wekan Spamassassin postfix Kopano-Server Kopano-Search OpenDKIM Kopano-Gateway Kopano-Webapp saslauthd Kopano-Dagent Wekan MongoDB Z-push Rocket.Chat Keycloak ONLYOFFICE Nextcloud Rocket.Char MongoDB LDAP Keycloak PostgrSQL Nextcloud MariaDB

## Reality



## Alright! Alright! What do we do?

- Keep things simple
- Trust upstream



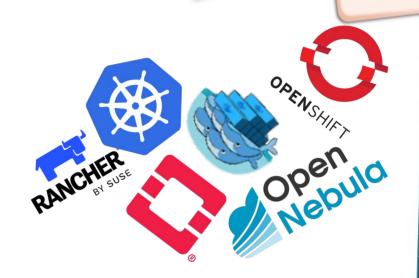
## Keeping things simple

- There are many super great configuration management solutions out there.
  - But they also one more system to manage.
- I don't think the overhead is worth it. (for a small number of servers)
- Can easily be done later if necessary.



Keeping things simple

- Many amazing pieces of software to manage whole infrastructures.
  - For our purposes we don't need it.



## Keeping things simple

- To be clear; all these projects are great.
- Please don't @ me.



#### Use simple software

- Use what is supplied by the OS:
  - Podman / Podman-compose.
  - Systemd.
  - Wireguard.
  - Git.
- Use a recent OS
  - LTS/Enterprise Osses are great for large deployments.
  - Upgrading your servers every 12 18 months isn't that big of a deal.



#### Use preexisting containers

- The vast majority of projects you might want to use have wellsupported containers.
- Upstream often prefers their containers for support purposes.

#### Backup / Disaster Recovery

- There's very little configuration on each host.
- All data is in /var/lib/containers and /etc.
- Borg backup to the rescue!
- Downtime for a catastrophe about as long as the length of your DNS TTL and copying of the old data.
- Could be an hour or two but is a rare occurrence. (has not happened to me at all)
- We're talking small business here, if it goes down in the middle of the night nobody will be working.









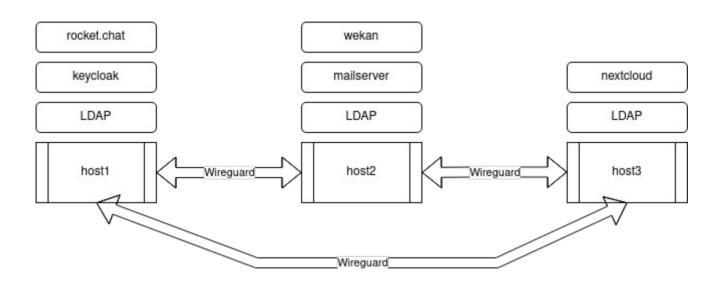
#### Introducing Megacorp.icu

- Just your garden variety non-evil company.
- They kindly let us demo their environment for you.
- Megacorp has 9 totally real employees that were not Al generated.





#### Basic architecture





(Or demo, whichever term you prefer)



#### Conclusions, such as they are

• I'm assuming the demo went like, *super* well so...

- Not only can you run a small(ish) business on FOSS, it makes sense to do so.
  - User experience consistency.
  - Predictable and controllable cost.
  - Significantly less time spent on access control.
  - Less time lost on wrong access control.

#### Megacorp.icu Github Project

Maybe this could be a (non-evil) community?

https://github.com/megacorp-icu



#### Questions?

(and plug)

For access to the containers and configs see https://github.com/megacorp-icu

Ramatak is looking for developers experienced in any of the following:

- The Godot engine
- Mobile platforms (iOS, Android)
- Rendering APIs (Metal, OpenGL, Vulkan)

RAMATAK

Is this is you? Send an email to jobs@ramatak.com!

#### Software used in the demo

- Cyrus SASL (https://cyrusimap.org/sasl)
- Fedora GNU/Linux (https://getfedora.org)
- Keycloak (https://keycloak.org)
- Kopano (https://kopano.io)
- MariaDB (https://mariadb.org)
- NextCloud (https://nextcloud.com)
- Nginx (https://nginx.org)
- ONLYOFFICE (https://onlyoffice.com)
- OpenDKIM (http://www.opendkim.org)
- OpenLDAP (https://openIdap.org)

- Podman (https://podman.io)
- Postfix (https://www.postfix.org)
- PostgreSQL (https://postgresql.org)
- Redis (https://redis.io)
- Rocket.chat (https://rocket.chat)
- Spamassassin (https://spamassassin.apache.org)
- Systemd (https://systemd.io)
- Wekan (https://wekan.github.io)
- Wireguard (https://wireguard.com)

And many, many crucial infrastructure projects too numerous to mention.

