

An Open-source Chat Platform for Independent Research: Matrix at EPFL

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What's the Problem?

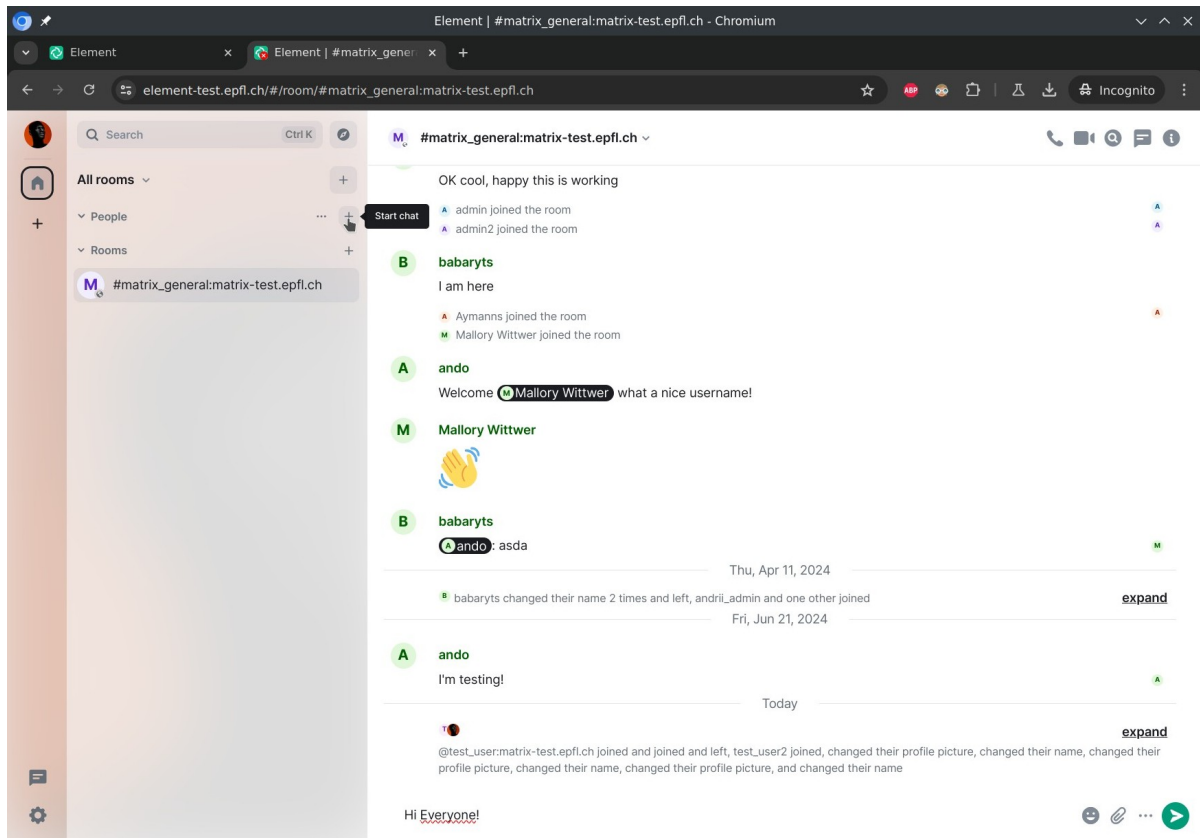
- before 2024
- open-source software vs. closed-source software
 - inspect/review
 - use
 - modify
 - open-source community works a lot like research
- trusted provider vs. untrusted provider
 - on-prem vs. cloud
 - price hike
 - privacy/data security

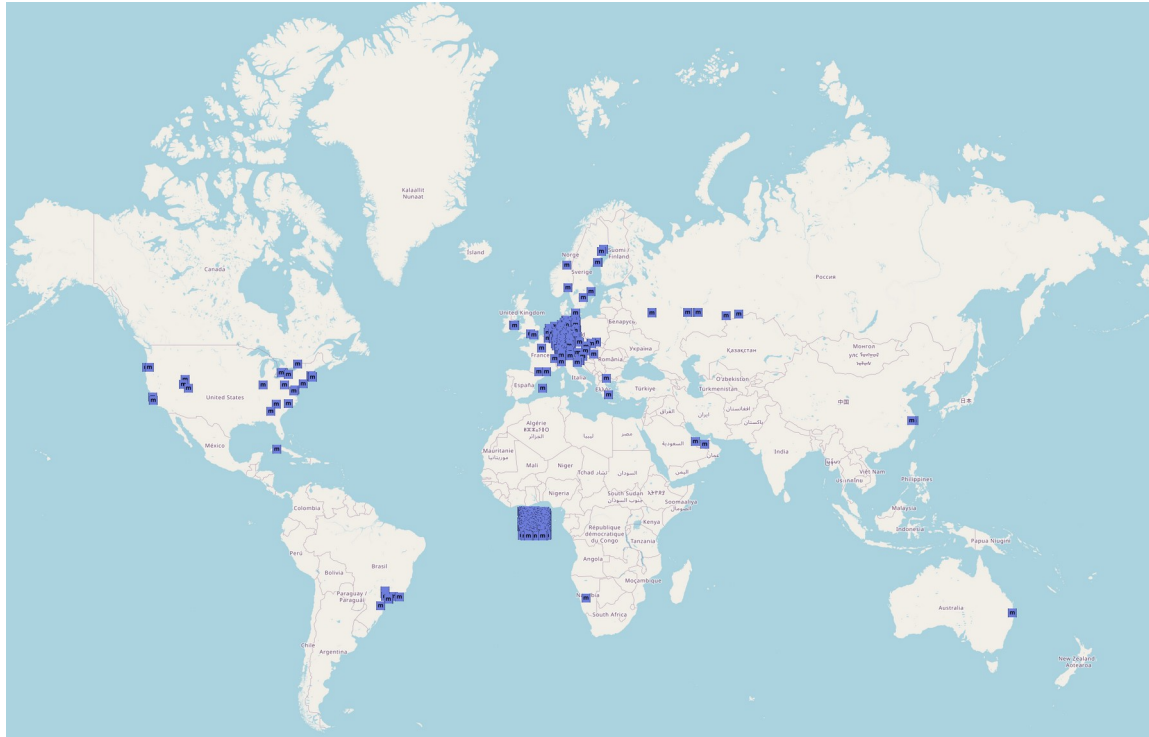
What's the Problem?

- after 2024
- safeguarding independent research
 - "controversial" research topics
 - digital sovereignty
- protecting our communities
 - trustworthiness
 - availability

matrix.epfl.ch

- in August 2023, Edward Andò spun up **matrix.epfl.ch**
- shortly after, Andrii Babarytskyi and I joined as administrators
- 350+ daily users
- 1.3K+ registered users
- on-prem, end-to-end encryption - and federated!





<https://maptrix.derhagen.eu/>

Problem Solved!

Thank you for your attention 🙌

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**How to Run a Grassroots
Platform in Academia**

List of Ingredients

- institution-wide problem
- motivated people with the skillset to address it
 - as in any team ideally with a *diverse* skillset
- supportive community
- open-minded institution

Step 0: Do Your Homework

- check whether somebody else is already looking into it
- not only a technical problem
- mid- to long-term endeavour
- make sure your unit is on board

Step 1: Spin It Up

- read the docs
- get the required resources
- write a lot of e-mails to support
- if necessary: get legal/DPO on board
- helpful: insight into your institution's tech stack

Step 2: Onboard your First Users

- identify potentially supportive units
- convince them that you address one of their needs
- academics tend to be collaborative by nature

Step 3: Grow your Community

- drink a lot of coffee with people
- give presentations at relevant events
- make the network effect work in your favour
- academics also tend to be curious by nature

Step 4: Make it Official

- some form of institutionalised support is *not* optional
- the platform *will* go under
 - big incident
 - person leaving
 - some other shenanigan
- responsibility towards your users
- very real stress

Catch-22

- prove that you address a real need
- hard numbers → grow your community as much as possible
- in the meantime, no official support
- keep it manageable → community must not grow too much

➡ needs to grow *and* not grow at the same time

Catch-22 (the *other* one)

- the platform needs to be
 - reliable
 - scalable
- the users need to
 - have a good experience
 - continue to flock in
- looks like there's no *need* for official support!

➡ needs to be going just great *and* looking like it's in dire need of help

Step 4: Make it Official

- we actually don't know how to do that (yet)
- but we're working on it
- getting back to you next year 🙏

The Ugly...

- operating on the edge of reason a cliff
- in case of problems you're (almost) on your own
 - supportive community
 - IT support *up to the boundary of your platform*

... the Bad...

- a big responsibility
- can be frustrating at times
- can be *stressful* at times
- not the same access to the rest of infrastructure as actual IT

... and the Good

- a lot of fun
- lots of opportunities to meet people from all over campus
- great community
- better understanding of internal politics
- more appreciation of the hard work of internal IT