

# Degoogling your life, a never ending story

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# Privacy? BORING! I have nothing to hide!

Your **bank statements**

Your **religion** or **political preference**

Your **private life!**

# My story

Started approximately **10 years** ago

**Using and contributing to** privacy-preserving initiatives

A **never ending** story!

# Overview

## Awareness

My 7 acts for privacy!

How to degoogle: let's get started!

Summary



# Awareness: surveillance by Big Tech & governments

**News articles** about Google reading your e-mails [1]

Global surveillance disclosures by **Edward Snowden** [2]

**TED Talks** from Glen Greenwald and others [3]

[1] Gmail does scan all emails, new Google terms clarify (The Guardian)

[2] U.S., British intelligence mining data from nine U.S. Internet companies in broad secret program (The Washington Post)

[3] Why Privacy Matters (Glen Greenwald)

# Time to freak out 🤪

**Why** does Big Tech and governments read and access all *my* data?

Both **violate** my **Human Rights** [1] and since 2016 also the **EU's GDPR** [2]

A **classic response** on this:

*If you have nothing to hide, why should you care then?*

[1] United Nations Declaration of Human Rights (UDHR) 1948, Article 12 (UN)

[2] GDPR by the European Union (2016)

# Everyone has *something* to hide

- Bank statements
- Private pictures you send to your loved ones
- Political or sexual preference
- Religion
- ...



*If you have nothing to hide, please send me an e-mail with this information attached 😊*

# Affected services over the past 10 years

1. **E-mail:** GMail
2. **Contacts:** integrated with Big Tech services
3. **Calendar:** Google Calendar
4. **Collaboration tools:** Office, Teams, Zoom, Onedrive, Google Drive
5. **Messaging:** Facebook, Messenger, WhatsApp, Snapchat
6. **Browser:** Chrome works really well, but *again* a Google product
7. **Social Media:** Facebook, Twitter, LinkedIn
8. **OS:** Windows, Android, etc.

# What can we do about this?

Finding **alternatives** of course! However, you have to find them first...

I found a lot of alternatives on **privacytools.io**, now replaced by  
**privacyguides.org**

You have to **try things**, there's no perfect solution for everyone



# The guide to restoring your online privacy.

Massive organizations are monitoring your online activities. Privacy Guides is your central privacy and security resource to protect yourself online.




[Start Your Privacy Journey](#)

[Recommended Tools](#)





## Recommendations

### Privacy Tools






## Internet Browsing

-  Tor Network
-  Desktop Browsers
-  Mobile Browsers






## Operating Systems

-  Android
-  Linux
-  Qubes OS
-  Router Firmware

## Providers

-  Cloud Storage
-  DNS Resolvers
-  Email Services
-  Search Engines
-  VPN Services

## Software

-  Calendar and Contact Sync
-  Data and Metadata Redaction
-  Email Clients
-  Encryption Software
-  File Sharing and Sync

# Privacy Tools




If you're looking for a specific solution to something, these are the hardware and software tools we recommend in a variety of categories. Our recommended privacy tools are primarily chosen based on security features, with additional emphasis on decentralized and open-source tools. They are applicable to a variety of threat models ranging from protection against global mass surveillance programs and avoiding big tech companies to mitigating attacks, but only you can determine what will work best for your use case.



If you want assistance figuring out the best privacy tools and alternative programs for your workload/use-case, start a discussion in our [Reddit](#) or [Matrix](#) communities!


For more details about each project, why they were chosen, and additional tips or tricks we recommend, click the "Learn more" link in each section, or click on the recommendation itself to be taken to that specific section of the page.

## Tor Network

 [Tor Browser](#)

 [Orbot \(Smartphone Tor Proxy\)](#)

 [Snowflake](#) 

[Learn more](#) 

## Desktop Web Browsers

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# Act #1: stop reading my e-mails!

Ditch GMail for a privacy-safe alternative

**ProtonMail** was my go-to alternative,  
because of its encryption and fight for privacy



**Encryption** is the **last safeguard** against evil actors,  
even if they are *friendly now* [1,2]

[1] Apple Maps could serve advertising to users in 2023 (AppleInsider)

[2] Apple already scans iCloud Mail for CSAM, but not iCloud Photos (9to5mac)

# Act #1: stop reading my e-mails!

GMail-to-ProtonMail-transfer took more than **7 years!**

Later, I replaced ProtonMail by **mailbox.org**

because ProtonMail uses proprietary APIs and clients.



Privacy is a never ending story, I need to **switch easily** between providers.

# Act #1: stop reading my e-mails!

Mailbox.org uses **standard protocols** e.g. SMTP, IMAP, and POP3.

I can use *any* client with PGP encryption.

I only use **Open Source** e-mail client such as

K9-Mail, GNOME Evolution, or Thunderbird

**Open Source** allows me and others to **audit and verify** the code.



# Act #2: stop reading my calendar & contacts!

Your calendar & contacts contain a **huge amount of data** about you

Dropped default apps for a **non-Google Open Source apps**

such as Simple Mobile Tools apps, F-Droid, K9-Mail

Synchronization through **standard protocols** such as CalDAV and CardDAV.

# Act #2: stop reading my calendar & contacts!

Selfhosted@home with the **Radicale** CalDAV/CardDAV server.

Selfhosting puts **me in control** of who can read my calendar & contacts.

**Managed** (free as in freedom) CalDav/CardDAV servers exist, but you need to **trust** the administrator. Examples: **Disroot**, **mailbox.org**, **Nubo**

# Act #3: stop being involved in my teams!

All Big Tech companies offer competing office tools to edit text files, spreadsheets, slides, ... Most of them have **business subscriptions**

They also offer video conferencing tools, cloud storage, e-mail, ... for ***seamless* collaboration**

All of them aim for a **vendor lock-in** which makes it hard to move from one provider to the other

# Act #3: stop being involved in my teams!

**Open source** software uses free formats and standards which allows you to use any tool you want, **without vendor lock-in**

**Selfhosting** is possible and puts you in **control over the data, but also the costs** as Big Tech cannot force a subscription on you

# Act #3: stop being involved in my teams!




Tool	Alternative
Text	NextCloud, LibreOffice Writer
Spreadsheets	NextCloud, LibreOffice Calc
Slides	NextCloud, LibreOffice Impress
Videoconferencing	NextCloud, Jitsi, mailbox.org
Instant Messaging	NextCloud, Matrix, Mattermost
E-Mail	NextCloud, mailbox.org
Calendar & Contacts	NextCloud, Radicale, mailbox.org



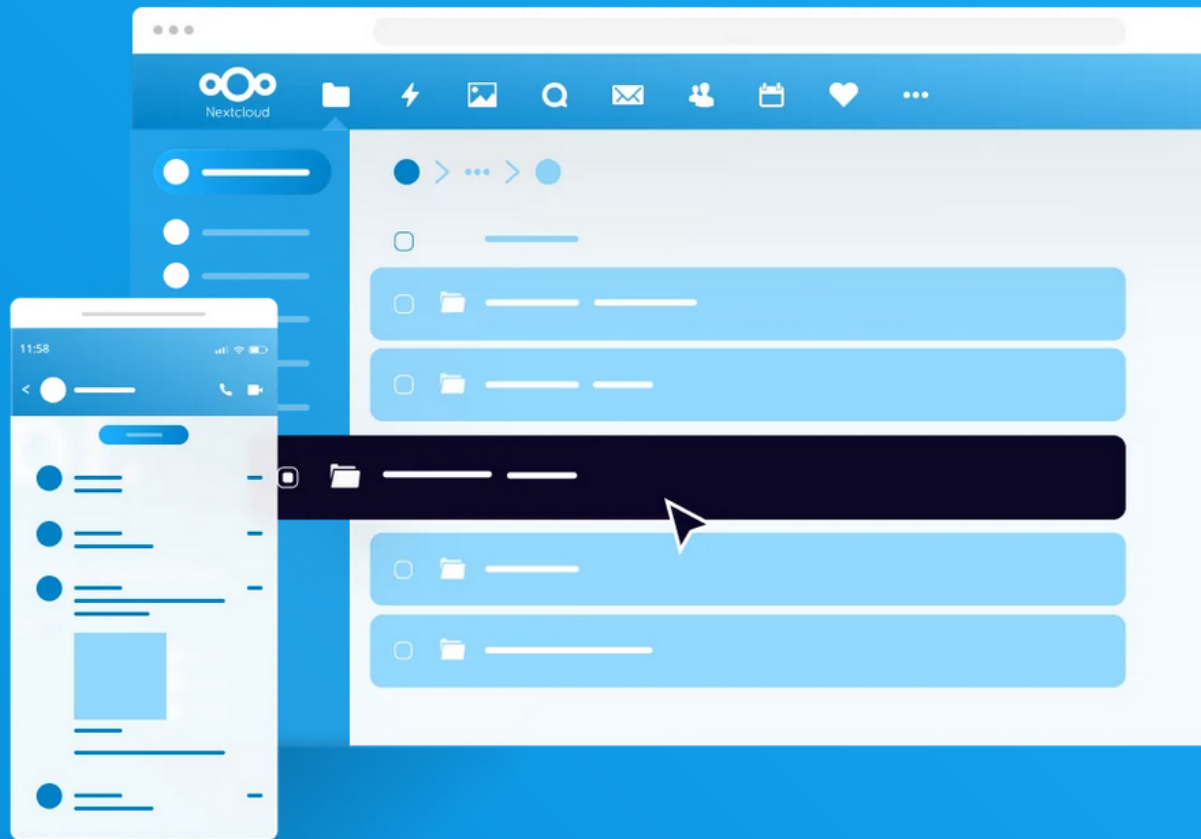
# Regain control

over your data

Remote collaboration made easy

-  On-premises or cloud
-  Customizable and scalable
-  No data leaks to third parties

Try Nextcloud now 



# Act #4: stop reading my messages!

Facebook, Messenger, and WhatsApp are **great tools for messaging, but also for surveillance...**

WhatsApp offers **E2EE encryption**, but still **harvests your contacts and other metadata**. Others have no encryption, the government can get a court order for all your private messages [1].

[1] Facebook turned over chat messages between mother and daughter now charged over abortion (NBCNews)



[matrix]

## An open network for secure, decentralized communication

Learn More

### *Imagine a world...*

*...where it is as simple to message or call anyone as it is to send them an email.*

*...where you can communicate without being forced to install the same app.*

*...where you can choose who hosts your communication.*

*...where your conversations are secured by*

### **This is Matrix.**

Matrix is an open source project that publishes the [Matrix open standard](#) for secure, decentralised, real-time communication, and its Apache licensed [reference implementations](#).

Maintained by the non-profit [Matrix.org Foundation](#), we aim to create an open platform which is as independent, vibrant and evolving as the Web itself... but for communication.

# Act #4: stop reading my messages!

**Matrix** is my preferred messaging *network* with **Element** as *client*

- **E2EE encryption**: last safeguard
- **Decentralized**: hard to apply censorship
- **Selfhosting**: I'm in control
- **Standardized protocols**: multiple servers and clients exist
- **Bridges**: optional access to IRC, Telegram, and others
- **Videocalls**: integrated Jitsi for video calls

[matrix]

# Act #4: stop reading my messages!

I selfhost@home my **Matrix Synapse** server and deploy my own version of the Element client

**Harder for anyone to get my data** without my knowledge [1]

since they have to come to me to get it instead of a Big Tech company

[1] Belgische Kamer neemt gewijzigde dataretentiewet aan (Tweakers.net)

[Discover](#)[Guides](#)[Try Matrix](#)[Clients](#)[Bots](#)[SDKs](#)[Bridges](#)[Hosting](#)

## Matrix Hosting

### Element Matrix Services

**ems**[ems.element.io](https://ems.element.io)

- Hosted Homeservers
- [Hosted Integrations including Slack, IRC, Github bridging](#)

Brought to you by the creators of Matrix, who have been running the biggest homeserver in the network since 2014. Every homeserver comes with a custom instance of Element.

### etke.cc

[etke.cc](https://etke.cc)

- Setup of hosted Homeserver on any hosting by your choice

### Ungleich.ch

**[zero carbon matrix]<sup>≠</sup>**[matrix.zerocarbon.shop](https://matrix.zerocarbon.shop)

- Hosted Homeservers

Service provided by [ungleich.ch](https://ungleich.ch) in their own datacenter in Linthal, Switzerland. They use an old building, second-hand servers, passive cooling and are directly plugged into an on-site hydroelectric power plant!

### Ossrox

[ossrox.org](https://ossrox.org)

- Hosted Homeservers

# Act #5: stop tracking me on the Web!

**Google** has a **monopoly** (>60%) on the **Web** with their Google Chrome/Chromium browser [1]

Google develops '**Blink**', a **browser engine** used by *all* browsers except for Firefox, Safari, GNOME Web, etc.

*This website only works in ~~Microsoft Internet Explorer~~ Google Chrome*

[1] Browser Market Share (Backlinko.com)

# Act #5: stop tracking me on the Web!

**Firefox** is my favorite for browsing the Web.

- **Anti-tracking:** builtin anti-tracking features
- **Independent browser engine:** not based on Blink
- **Plugins:** uBlock Origin, Cookies Autodelete, ClearURL, NoScript



Mozilla worked already with Facebook & Google.



# Act #6: stop feeding them with your life!

Social Media is **the way to know a person**, stalking is really common on social media.

Technology behind Social Media tries to keep you entertained, which is really **bad for your health and social life** [1].

[1] Facebook en ik (Tim Verheyden)

# Act #6: stop feeding them with your life!

I used Facebook *a lot* and I still use Twitter, but only for work. I finally removed my Facebook account last year.

Recently, I **moved my Social Media to Mastodon** after Elon Musk tried to acquire Twitter [1].

[1] Elon Musk to buy Twitter in \$44 billion deal (CNN Business)



Follow friends and discover new ones

With an account on [fosstodon.org](https://fosstodon.org) you'll be able to follow people on any Mastodon server and beyond.

Username [@fosstodon.org](https://fosstodon.org)

E-mail address

Password

Confirm password

Why do you want to join? \*

This will help us review your application

☐ I agree to the [server rules](#) and [terms of service](#) \*

REQUEST AN INVITE

### Discover users

Browse a profile directory and filter by interests



### See what's happening

Browse a live stream of public posts on Mastodon

E-mail address

Password

LOG IN

[Trouble logging in?](#)

**FOSS**TODON  
<https://fosstodon.org>

Fosstodon is an English speaking Mastodon instance that is open to anyone who is interested in technology, particularly free & open source software. [Learn more »](#)

ADMINISTERED BY:

 Fosstodon  
[@fosstodon](#)

SERVER STATS:

22.1K  
users

3.19K  
active \*

# Act #6: stop feeding them with your life!

**Mastodon** is a decentralized Social Media network

- **Decentralized:** hard to apply censorship
- **Selfhosting:** I'm in control
- **Standardized protocols:** multiple servers and clients exist
- **Federated:** access to PeerTube, PixelFed, etc.



I use a managed instance **fossotodon.org**

# Act #7: stop using proprietary OSes

Proprietary operating systems **cannot be trusted at all.**

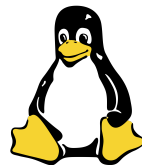
- **Microsoft Windows:** ads, location, diagnostics, usage
- **Google's Android:** ads, location, diagnostics, usage
- **Apple's iOS/macOS:** diagnostics, usage



# Act #7: stop using proprietary OSes

Switched to a Linux-based OS which provides:

- **Free as in Freedom:** do what you want
- **Open Source:** code audit possible
- **Free as in Beer:** no licenses



# Act #7: stop using proprietary OSes

## Current setup

- **Desktops:** Fedora Workstation
- **Servers:** Alpine Linux
- **Containers:** Alpine Linux
- **Single Board Computers:** Alpine Linux or postmarketOS
- **Phones:** LineageOS



# Act #7: stop using proprietary OSes

## Future setup

- **Desktops:** Alpine Linux
- **Servers:** Alpine Linux
- **Containers:** Alpine Linux
- **Single Board Computers:** Alpine Linux or postmarketOS
- **Phones:** postmarketOS





# Small. Simple. Secure.

Alpine Linux is a security-oriented, lightweight Linux distribution based on musl libc and busybox.

## ALPINE NEWS

- 2022-08-09 [Alpine 3.13.12, 3.14.8, 3.15.6 and 3.16.2 released](#)
- 2022-07-19 [Alpine 3.13.11, 3.14.7 and 3.15.5 released](#)
- 2022-07-18 [Alpine 3.16.1 released](#)
- 2022-07-14 [Alpine Linux edge signing keys rotated](#)
- 2022-05-23 [Alpine 3.16.0 released](#)
- 2022-04-04 [Alpine 3.12.12, 3.13.10, 3.14.6 and 3.15.4 released](#)
- 2022-03-28 [Alpine 3.12.11, 3.13.9, 3.14.5 and 3.15.3 released](#)
- 2022-03-23 [Alpine 3.15.2 released](#)
- 2022-03-17 [Alpine 3.12.10, 3.13.8 and 3.14.4 released](#)
- 2022-03-16 [Alpine 3.15.1 released](#)

## git LATEST DEVELOPMENT

- 2022-09-30 [community/py3-lazy: upgrade to 1.5](#)
- 2022-09-30 [community/dendrite: upgrade to 0.10.0](#)
- 2022-09-30 [main/llvm15: don't build zstd support in bootstrap](#)
- 2022-09-30 [scripts/bootstrap.sh: add llvm15](#)
- 2022-09-30 [community/go: bump pkgrel to trigger rebuild wi...](#)
- 2022-09-30 [community/go: skip tests which use GCCGO](#)
- 2022-09-30 [community/go: set GOMAXPROCS=1 to fix OOM e...](#)
- 2022-09-30 [community/go: bootstrap via gccgo](#)
- 2022-09-30 [community/nextcloud23: upgrade to 23.0.9](#)
- 2022-09-30 [community/nextcloud: upgrade to 24.0.5](#)



postmarketOS

[blog](#) [faq](#) [wiki](#) [src](#) [merch](#)

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[donate](#) [edge](#)

# A real Linux distribution for phones

and other mobile devices

For [Linux](#) enthusiasts

Latest news: [v22.06 SP2](#)

## ABOUT

We are sick of not receiving updates shortly after buying new phones. Sick of the walled gardens deeply integrated into Android and iOS. That's why we are developing a sustainable, privacy and security focused free software mobile OS that is modeled after traditional Linux distributions. With privilege separation in mind. Let's keep our devices useful and safe until they physically break!

[Where can I download the latest release? >](#)

[Which devices run postmarketOS? >](#)

[How do I port my device? >](#)



# Overview

Awareness

My 7 acts for privacy!

**How to degoogle: let's get started!**

Summary

# How to degoogle: battle plan

1. **Effort:** how far do you want to go?
2. **Threat level:** Edward Snowden or not?
3. **Threats:** list possible privacy threats

# How to degoogle: find alternatives

Replace the identified threats by alternatives. Tool overviews:

- My slides at [dylanvanassche.be](https://dylanvanassche.be)
- [privacyguides.org](https://privacyguides.org)
- [dasprive.be](https://dasprive.be)
- [privacytools.io](https://privacytools.io)

# How to degoogle: evaluate

*It's not because they are friendly today, they are still tomorrow...*

**Re-evaluate your choices** on a timely basis!

Using **Open Source tools** and **standardized protocols**

makes switching straight forward (**no vendor lock-in**)

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# Summary: 3 rules of degoogling

1. There's always an alternative to Big Tech if you want to come out your comfort zone
2. Privacy-friendly technology of today may not be so friendly anymore in the future
3. Standardized protocols and open source tools makes it easier to switch



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