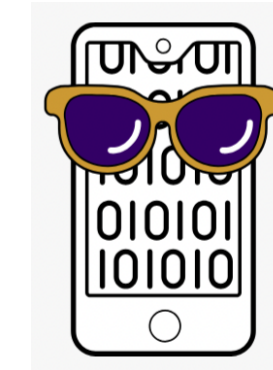
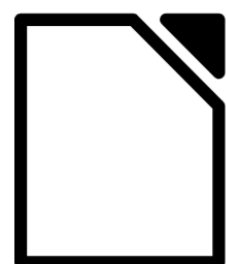
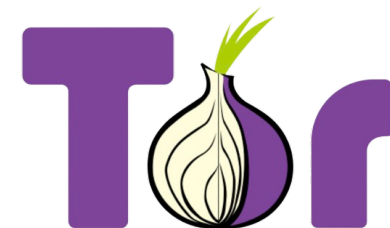




yubico



BASIC ONLINE PRIVACY SETUP



By Keysa Luna • SimplestBitcoinEdu.com

ON PRIVACY

Privacy is necessary for an open society in the electronic age...

We cannot expect governments, corporations, or other large, faceless organizations to grant us privacy out of their beneficence...

We must defend our own privacy if we expect to have any...

The Cypherpunks are actively engaged in making the networks safer for privacy.

Let us proceed together apace.

Onward.

~ From: A Cypherpunk's Manifesto, Eric Hughes, 1993

WHY WE NEED ONLINE PRIVACY

- **Protection of Personal Information:** To safeguard sensitive data such as financial details, health records, and personal communications.
- **Identity Theft Protection:** To reduce the risk of your ID being used for fraudulent activities.
- **Security Against Cyber Threats:** To minimize exposure to cyberattacks, hacking, and phishing attempts.
- **Control Over Personal Data:** To empower you to manage your data, who has access to it and how it is used.
- **Maintaining Autonomy:** To ensure that you maintain control over your online presence and digital footprint.
- **Prevent Tracking:** To disable surveillance and tracking by big tech companies infringing on your autonomy.
- **Disable Data harvesting:** To block big tech from collecting and selling your data.
- **Prevent Manipulation:** To remove targeted advertising based on personal data.
- **Enhance Online Safety:** To protect from harassment, stalking, and other forms of online attack.
- **Protect Freedom of Speech:** To remove censorship, thus allowing you freedom of expression.
- **Prevent Vendor Lock-in:** To allow freedom of choice to switch services when needed or wanted.

SOME NOTES:

- ▶ True digital privacy is almost impossible to achieve. Satoshi is one of the few who have managed it perfectly.
- ▶ This guide is a starting point to *increase* privacy online. Bear in mind, it is *far from perfect*.
- ▶ The services I recommend here are the best I have found and used, based on my research over the past 8 years.
- ▶ That said, things change all the time and there are other good services I have not used, so I highly recommend **doing your own research**.
- ▶ Also, this is just the beginning, the digital privacy rabbit hole runs deep.

Remember:

Freedom isn't free.

Freedom isn't given, it is taken.

NOTES cont:

- ▶ The recommended privacy tools in this section will **enhance the overall safety and security of your digital life.**
- ▶ This is **especially important when using and securing bitcoin**, since hacks and cyber attacks are increasing all the time.
- ▶ Ultimately, I **recommend transitioning away from all Google services**, and any others which require your real identity. There are very few times where this is an actual necessity.
- ▶ Remember, **if it is free, you are the product.**
- ▶ * **An exception is FOSS (free, open-source software) services**, such as Linux, TOR, Wordpress etc. These **do not harvest your data**, are free of advertisements, and instead rely on a combination of donations, grants, volunteer developers, and paid extra services.
- ▶ It is **worth paying for good, open-source, privacy-focused services**. This way the developers receive compensation for their work, and you are no longer the product having your data harvested and served up to relentless advertisers and government agencies.

RECOMMENDED BASIC PRIVACY SETUP

- ✓ VPN
- ✓ PRIVATE BROWSERS
- ✓ EMAIL
- ✓ MESSAGING
- ✓ PASSWORD MANAGER
- ✓ VIRTUAL DEBIT CARDS
- ✓ NOTES
- ✓ OFFICE/DESIGN SUITE
- ✓ CALLS
- ✓ 2-FACTOR AUTHENTICATION
- ✓ PGP KEYS
- ✓ PO BOX with NICKNAME

VPN:

Recommend: **MullvadVPN**

- ▶ Your computer's IP (Internet Protocol) address is used to identify you, track you, and map your online life. Take back your privacy online by masking your IP with a trustworthy VPN.
- ▶ Note: This is not a 100% catch-all solution. You still need to trust the VPN provider not to log use.
- ▶ **\$5/month:** Can use the same account on up to 5 devices.
- ▶ Pay with Lightning at vpn.sovereign.engineering/ (best for privacy) or in the app with bitcoin.



DOWNLOAD at: mullvad.net/en

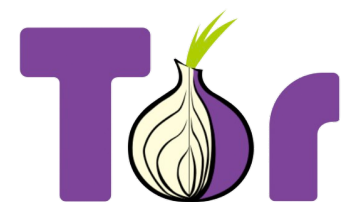
BROWSERS:

Recommend: **Mullvad Browser** and **TOR Browser**

- ▶ For private browsing without tracking, surveillance, or censorship.
- ▶ **Mullvad Browser** is great for daily use. It is a collab between Mullvad VPN and TOR Browser.
- ▶ **TOR Browser** is slower, but it is the browser to use for Robotsats, a peer-2-peer marketplace to buy bitcoin privately.



DOWNLOAD at: mullvad.net/en/browser



DOWNLOAD at: torproject.org/download/

EMAIL:

Recommend: **Proton Mail**

- ▶ Set up a private, pseudonymous email account.
- ▶ Do not use your real name, address, birthday or any other identifying information.



Visit www.proton.me

MESSAGING:

Recommend: **Signal** or **SimpleX**

- ▶ End-to-end encrypted (E2EE) messaging.
- ▶ While you need a phone number to register with Signal, there is an option to just give a handle to people for them to reach you (no need to give out your phone number).



DOWNLOAD Signal at: signal.org/download

- ▶ SimpleX requires no information to sign up or use the app.



DOWNLOAD SimpleX Chat (the most private) at: simplex.chat

PASSWORD MANAGER:

Recommend: **Bitwarden**



- ▶ Bitwarden is a password manager that securely stores and manages your passwords.

DOWNLOAD Bitwarden at: bitwarden.com

VIRTUAL BITCOIN/FIAT DEBIT CARD:

Recommend: **The Bitcoin Company, Pay with Moon, Bitrefill**



- ▶ When you want to spend bitcoin, or buy something pseudonymously, you can buy a pre-paid fiat debit card using bitcoin (or fiat) at:

Visit thebitcoincompany.com

Visit paywithmoon.com

Visit bitrefill.com

NOTES:

Recommend: **Standard Notes** or **Obsidian**



- ▶ **Standard Notes** is a secure, open-source note-taking application that emphasizes privacy and simplicity, offering end-to-end encryption and cross-platform synchronization for your notes.

DOWNLOAD Standard Notes: standardnotes.com/plans



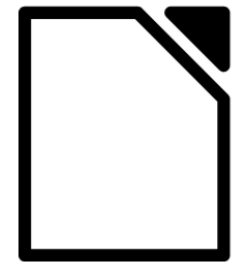
- ▶ **Obsidian** is a powerful knowledge management and note-taking tool that uses a markdown-based system to create a network of interconnected notes, allowing you to visualize and organize your thoughts through a graph view. When used locally, it is very private.

DOWNLOAD Obsidian: obsidian.md

- ▶ Both have free and paid options.
- ▶ Use your pseudonymous Proton email to sign up.
- ▶ You can pay with bitcoin with a virtual debit card (see previous page) for the paid services.

OFFICE SUITE:

Recommend **LibreOffice**



- ▶ LibreOffice is free and open source software.
- ▶ Documents are stored locally on your computer, so be sure to make backups.
- ▶ It does not collect or monetize any of your data.

DOWNLOAD at: libreoffice.org/

DESIGN SUITE:

Recommend **Affinity Designer/Publisher/Photo**

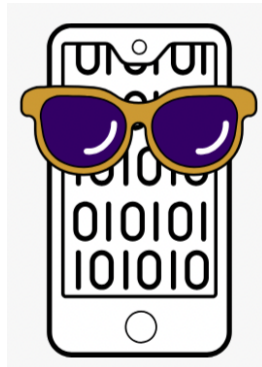


- ▶ Pay for the one-time license and get free upgrades for life.
- ▶ No personal data collection, data sharing or monthly subscription fees.
- ▶ Fully functional offline.
- ▶ Files stored locally, important to backup.
- ▶ Fully private files.

DOWNLOAD at: affinity.serif.com/en-us/

CALLS:

Recommend: **SilentLink**



- ▶ Silent Link's private eSIM is a secure, privacy-focused mobile connectivity solution that allows you to access cellular networks without compromising your personal data or identity.

Visit silent.link

2-FACTOR AUTHENTICATION:

APPS: Recommend **2FAS** on iOS and **Aegis** on Android

- ▶ 2FA is important to use on sites with sensitive personal information.
- ▶ It provides a second layer of protection (your password being the first layer).
- ▶ It is recommended to use a 2FA App rather than SMS 2FA, since phone numbers can be SIM-swapped.



DOWNLOAD 2FAS on iOS



DOWNLOAD Aegis Authenticator on Android

HARDWARE: Recommend **Yubikey**

yubico

Visit yubico.com

PGP/GPG KEYS:

- ▶ As AI becomes more prevalent in daily life, it will likely become impossible to know whether a message you receive is indeed from who you think it's from.
- ▶ Signing messages with cryptographic PGP keys is one way to know for (almost) certain who sent the message.
- ▶ It is beyond the scope of this guide to cover this in detail. Visit gpgtools.org/ for more info.

PO BOX:



- ▶ Keep your home address private by getting a **PO Box** and adding a recipient nickname.
- ▶ This is the best way to receive anything bitcoin-related via mail.
- ▶ While it is perfectly legal to buy bitcoin-related items, hackers regularly steal client information from company databases, and if your real name and address is associated with bitcoin products, you could become a phishing target as the hackers will assume you own bitcoin.

FURTHER PRIVACY RESOURCES

- ▶ bitcoin-only.com/privacy @BitcoinOnly_
- ▶ Bitcoiner.guide/privacy @BitcoinQ_A
- ▶ sethforprivacy.com @sethforprivacy
- ▶ KYCnot.me @kycnot
- ▶ lopp.net/bitcoin-information/privacy @lopp
- ▶ privacytools.io @PrivacyToolsIO
- ▶ restoreprivacy.com @ResPrivacy
- ▶ keepitsimplebitcoin.com @KISBitcoin
- ▶ nbtv.media @naomibrookwell