toolbox and workflows

1 data encryption a in transit b at rest 2 masking identifiers a email (aliases and disposable) b phone numbers c keeping track with cred managers d ip addresses / vpns 3 travel opsec

tools

signal, tresorit, openpgp, onionshare,
cryptpad, temp-mail, notesnook, joplin,
obsidian, syncthing, duckduckgo, proton ag,
filen.ai, textverified, bitwarden, keepass,
mullvad, tor browser, graphene os, linux

data encryption

the process of converting information into a coded format to prevent unauthorized access and ensure data confidentiality.

end to end encryption (e2ee)

a secure communication method that ensures only the communicating users can read the messages, preventing intermediaries from accessing the data.

encryption of data <u>in transit</u>

<u>signal</u>

is open source
is nonprofit
no metadata retention
has usernames
also video / calls, groups, stickers
files up to 100 megabytes

encryption of data <u>in transit</u>

other solutions

email & openpgp friction
tresorit send / wetransfer issues
onionshare
encrypted cloud services

encryption of data <u>at rest</u>

tools

- 1 full disk encryption (+bfu/afu, backups)
- 2 encrypted cloud & data sync
 proton, filen.io, skiff affair
 self-hosted, nextcloud & syncthing
- 3 note taking
 notesnook, obsidian
 joplin
- 4 cryptpad (collaboration / cloud tools) open source, e2ee, solid free plans

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personal identifiers

refer to any information that can be used to identify an individual in digital space.

emails, usernames, ip addresses, phone numbers, links to social media profiles, cookies and tracking ids, device identifiers, payment data, location data, biometric data

masking personal identifiers

email & phone numbers

- 1 aliases
 duckduckgo (+ duck.ai)
 protonpass, anonaddy
- 2 disposable emails temp-mail, guerrilla mail
- 3 phone number masking
 disposable / burner sim card issues
 textverified / online services

masking personal identifiers

keeping track with password / crediental managers

```
1 bitwarden
    open source, e2ee cloud-based & selfhosted,
multiplatform
    browser and android / ios integrations
2 keepass
    foss, several versions
    encrypted, offline
    automatic backup and self-sync plugins
```

masking personal identifiers

ip address, logical locations

- 1 mullvad vpn
 opensource, 5\$ a month, 5 devices
 no-log policy, anonymous account and payment
 some pushback / captcha friction
- 2 tor browser
 foss, onion network layers of anonimity
 slower, captchas, more suspicious

bonus: operating systems

1 graphene os
 hardened & degoogled android os
 web-based / no-root flashing
 less exploits, sandboxing apps, profiles, duress
 google pixel exclusive
2 linux (tails, cubes os, debian)
 free and open source
 UX improved over years, most tools available

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travel <u>opsec</u>

henry!