



IPHONE APPS

A smorgasbord of apps...

- Authy
 - Arc Search
 - Windy
 - Rise
 - Can of Soup
-



Fun and profit through...

SELF HOSTING

Contents

- Motivation
- Applications
- Underlying hardware
- Network architecture
- Hypervisor

Motivation

- Reduce the amount of data in the hands of big tech vendors
- Don't lose stuff
- Don't be dependent on vendors' proprietary formats / technology
- Balance privacy, security and convenience
- Don't piss off the wife

Applications

- Home Assistant – unified control of all smart devices
- Photoprism – self-host photos from all sources
- NextCloud – file sharing, collaboration
- PiHole – block ads across your whole network

Hardware

- Low-cost, low power consumption, low noise
- Assume stuff will break



Hardware - Compute

- Fanless mini-PCs

Hardware - Storage



- 4-bay hard disk enclosure
- 4 x 4TB drives
- USB 3.0 connection
- ZFS managed
 - RAID-like protection against disk failure
 - Non-destructive writing

Network

- Verizon FIOS 1GB
- OPNSense router running on QOTOM fanless PC
- PiHole network-wide ad-blocking
- Mullvad VPN for all traffic (except TV streaming)
- Unifi Ubiquiti Wi-fi access points
- Segregated VLANs for computers, phones, guests and devices
- Wireguard VPN for remote management - locked to my devices
- NGNIX Proxy Manager to expose selected services



Managed switch

UPS
(power backup)

2 Servers

Disk enclosure

Crate of old cables
"just in case"



Hypervisor

- Proxmox cluster runs multiple virtual machines (demo)
- Automated daily offsite backup of all critical files (Backblaze B2)