Self-Hosting and Digital Sovereignty:
A Cursory Review

By Mars Uribe

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Who Dat?

- Hi, I'm Mars Uribe
  - Online handle: mxu (or mxuribe)

- Technology professional, digital philosopher, enthusiast of silliness

- Perhaps spent far too long in corporate America

- Learn more at MarsUribe.net

Agenda

1. The What: Define Self-hosting, Digital Sovereignty
2. The Why: What are the benefits?
3. The Who: Who can do it?
4. The How: Ways and Means
5. Calls to Action: What YOU can do next
6. Other Resources

The What:
Define Self-hosting, Digital Sovereignty

The What

Essentially...
Self-hosting is where YOU...
...use software/technology...

The What

But… "Self-hosting is where YOU…use software/technology")
...Seems **too simplistic**

The punchline *could be* that self-hosting is software/technology that **does not use YOU**!

Instead, we'll say...

Self-hosting is where **YOU**…

...use software/technology…

...and, where **YOU** have more freedom, control, sovereignty!

Party or Dinner host...hosting guests

Self-hosting is kinda like that!
It can be fun and entertaining!

The What

Digital sovereignty is about authority and principles…

It is more so about YOUR authority and YOUR freedoms.

"Digital sovereignty...refer to the ability to have control over your own digital destiny – the data, hardware and software that you rely on and create."

World Economic forum
January 10, 2025
Source: https://www.weforum.org/stories/2025/01/europe-digital-sovereignty/

Quite an increased level of activity lately with regards to digital sovereignty in other parts of the world – especially Europe!
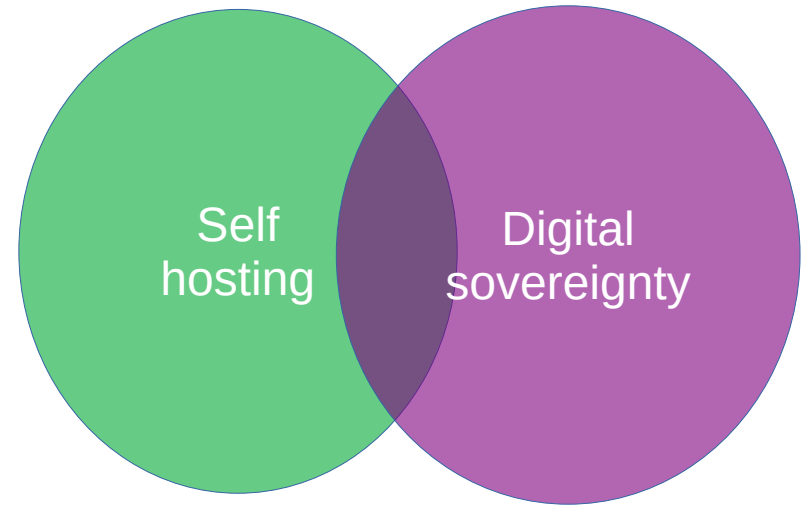
The What

"Self-sovereign doesn't mean self-built. It doesn't mean doing everything yourself. It means having ownership without captivity, portability without friction, and interoperability without central dependence."

Robert Mao
July 27, 2025

Self hosting

Digital sovereignty

The What

Remember…

Self-hosting is where **YOU** use software/technology…
...and, where **YOU** have more freedom, control, sovereignty… ***Its about YOU!!!***

So, you mean, like…?

Locally installed or remotely-available apps?	Yes… Either or both!
Only regular websites/web apps, right?	Not just websites/apps… Can also be non-web, non-typical services too!
Apps for use by one user or by several/many?	Yes… Either or both!
Only includes free (no cost) software?	Can be free cost (gratis), but can also include paid services… Can exist in a pay-per-service model!

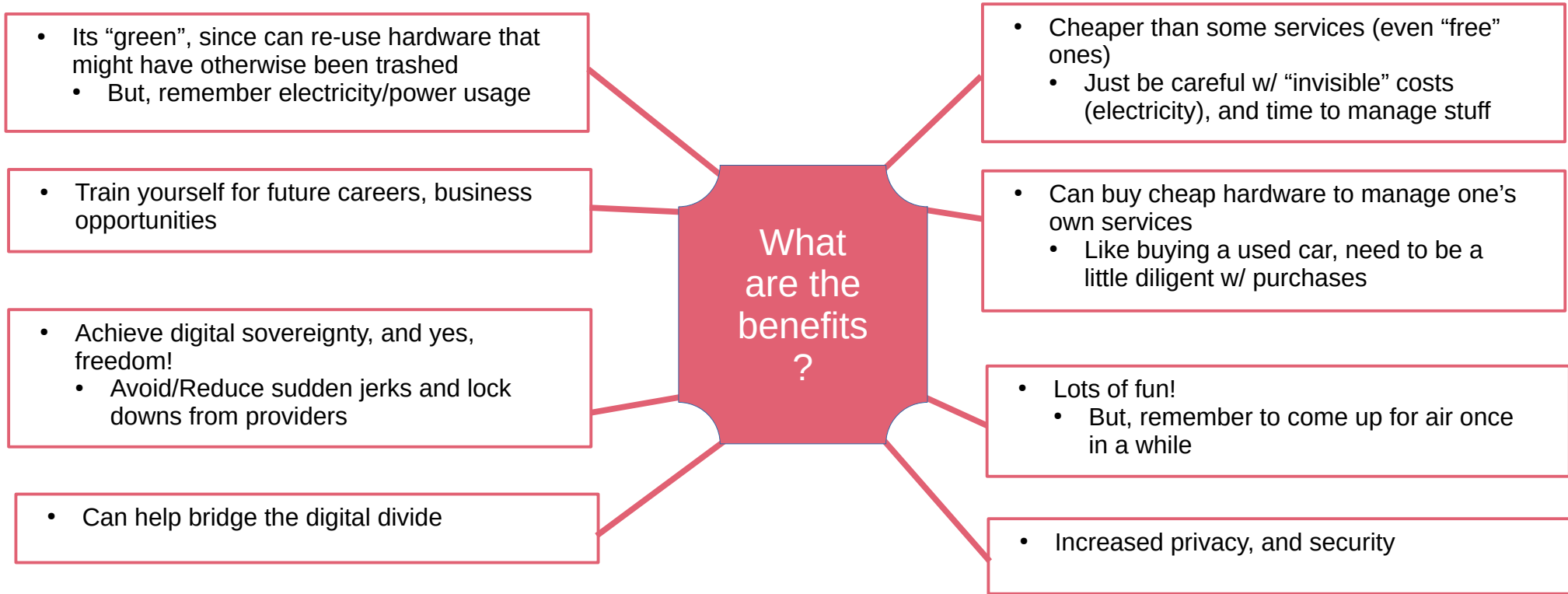Farmer...growing food for yourself, friends, family

Self-hosting is kinda like that too!
Self-sustenance and sovereignty!

Public domain
Source: https://www.loc.gov/resource/fsa.8a08519/

The Why:
What are the benefits?

The Why

- Its "green", since can re-use hardware that might have otherwise been trashed
  - But, remember electricity/power usage

- Train yourself for future careers, business opportunities

- Achieve digital sovereignty, and yes, freedom!
  - Avoid/Reduce sudden jerks and lock downs from providers

- Can help bridge the digital divide

What are the benefits?

- Cheaper than some services (even "free" ones)
  - Just be careful w/ "invisible" costs (electricity), and time to manage stuff

- Can buy cheap hardware to manage one's own services
  - Like buying a used car, need to be a little diligent w/ purchases

- Lots of fun!
  - But, remember to come up for air once in a while

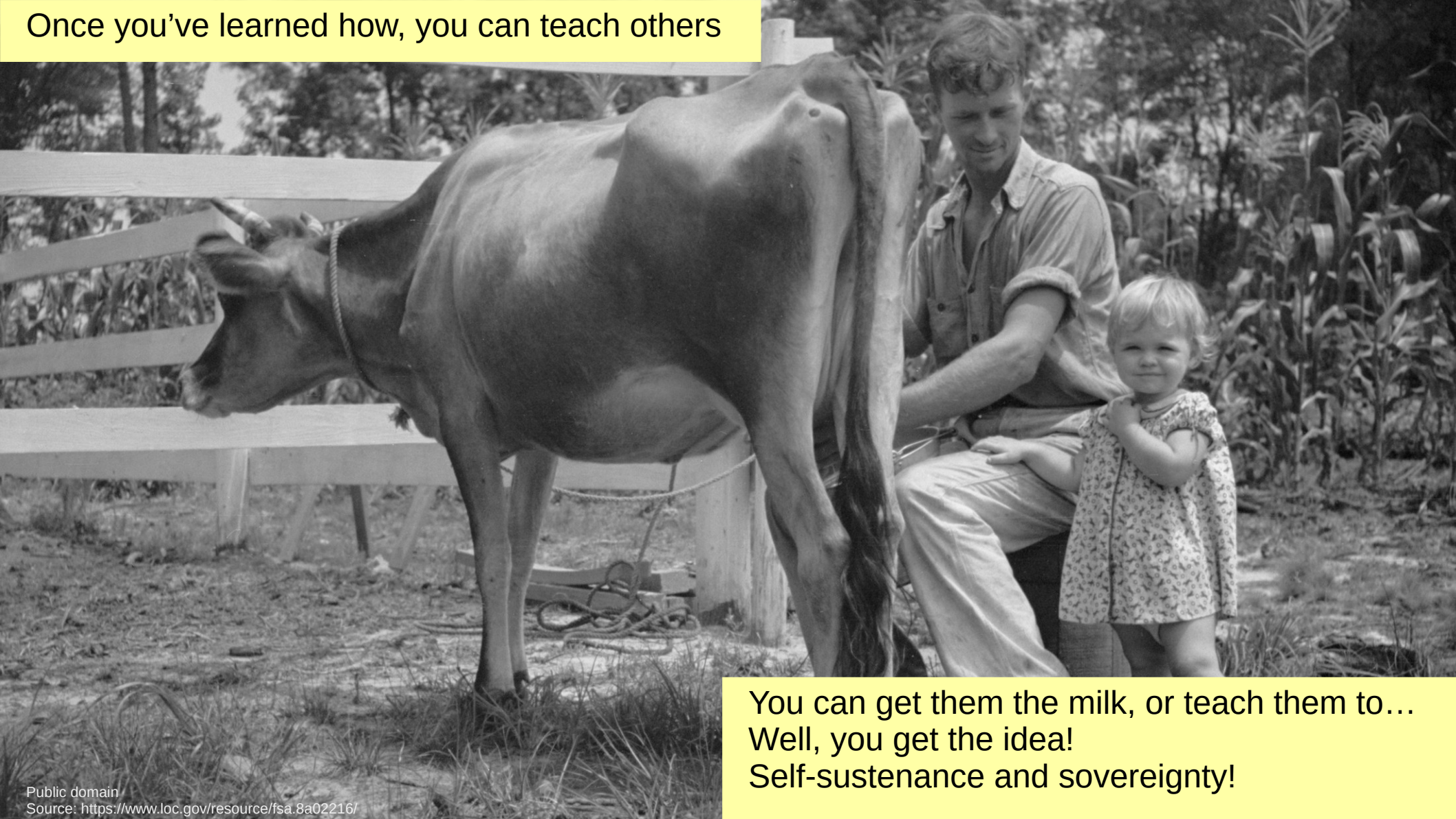- Increased privacy, and security

The Who:
Who can do it?

The Who

- If you know tech, or are willing to learn/play...then, you can do it
- You can pay someone else to do it for you – either an individual or an organization
- You can form or join a collective/guild
- You can mix and match, or transition back and forth across all of the above too!

Once you've learned how, you can teach others

You can get them the milk, or teach them to…
Well, you get the idea!
Self-sustenance and sovereignty!

The How:
Ways and Means

The How

- Start slow, maybe simple and/or single services at first, and then expand (if even needed)

- Computers are cheaper nowadays...and the cheapest ones are the ones you (or your friends, family) already have!
  - Also shout out to Microsoft for loads of computers that will flood the used computer market, since they "can't" run Windows 11

- There's also the mini PC revolution

- Recycling isn't just about aluminum cans...Refurbished computers need love too!

The How

- By the way, you have backups setup, right?
- I mean, a real backup strategy, which has been tested, right?
- **No, seriously, BEFORE you start...**
  - **Have a backup and restore plan!**
  - **Have a backup and restore plan!**
 - **Have a backup and restore plan!**

The How

- Research plenty before installing software
- If you have a choice, install using containers, if not, then maybe virtual machines, then finally onto "bare metal" ...its only a suggestion, and not always an inflexible rule
- Don't feel you need to use tools, services that big hyperscalers like Google, Amazon, etc. use – e.g. Kubernetes, etc. – since most likely you don't need them...yet, or at all
- You can treat your computers like pets or cattle – your choice!

The How

You can host many services on plenty of different devices
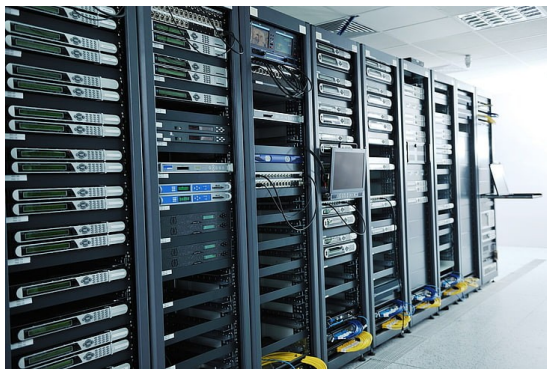
Calls to Action:
What YOU can do next

Calls to Action

For developers and makers…

- Consider creating more and better/flexible apps (for self-hosting)

- If anyone knows/works at an ISP, ask them: why no self-hosting!?! ISPs should cater to self-hosters

- Blog about self-hosting, share, learn, contribute to projects, and engage with the community!

"We envision a new kind of computing ecosystem… We call this idea malleable software—a software ecosystem where anyone can adapt their tools to their needs with minimal friction…"

Malleable Software
June 2025
https://www.inkandswitch.com/essay/malleable-software/

Calls to Action

For users…

- Consider playing with and exploring apps, and then promoting and sharing tips
- Blog about self-hosting, share, learn, contribute to projects, and engage with the community!

"Tech independence is not depending on any particular company or software... The only tools you need are the common open source basics... Learn a few of these basic tools, and you can run your own private server on any computer forever, for the rest of your life…"

Tech Independence
Derek Sivers
https://sive.rs/ti

Calls to Action

Have I mentioned yet about having a backup and restore plan yet?

No, seriously, have a backup and restore plan BEFORE you start!

Other Resources

- **Email newsletter**:
  - Ethan Sholly's "Self-Host Weekly" [https://selfh.st/tag/weekly/]
- **Video**:
  - DB Tech's numerous videos tutorials [https://www.youtube.com/dbtechyt]
- **Podcasts**:
  - Joe Ressington's "2.5 Admins" Show [https://2.5admins.com/]
  - Jupiter Broadcasting's "Self Hosted" Show [https://selfhosted.show/]
  - Noah Chelliah's "Ask Noah" Show [https://www.asknoahshow.com/]
  - James Sundquist's "Linux Prepper" Show [https://podcast.james.network/public/@linuxprepper]
  - The DAM Software Podcast Show [see link on other side]

- **Websites**:
  - The popular "Awesome Selfhosted" Github ReadMe list [https://github.com/awesome-selfhosted/awesome-selfhosted]
  - "Open Source Alternatives to Proprietary Software" [https://www.opensourcealternative.to/]
- **Service providers**:
  - PikaPods (paid) app hosting [https://www.pikapods.com/]
  - Fosstodon (paid) Mastodon instance on the Fediverse [https://fosstodon.org]
  - Digital Asset Management [https://damconsulting.llc/]
  - Immich Photo (paid) hosting [https://pixelunion.eu/]
  - Encrypted Photo (paid) hosting, etc. [https://ente.io/]

Thanks so much!!! ❤️

Reach Out > MarsUribe.net