

Re-decentralizing
the Internet
with BSD

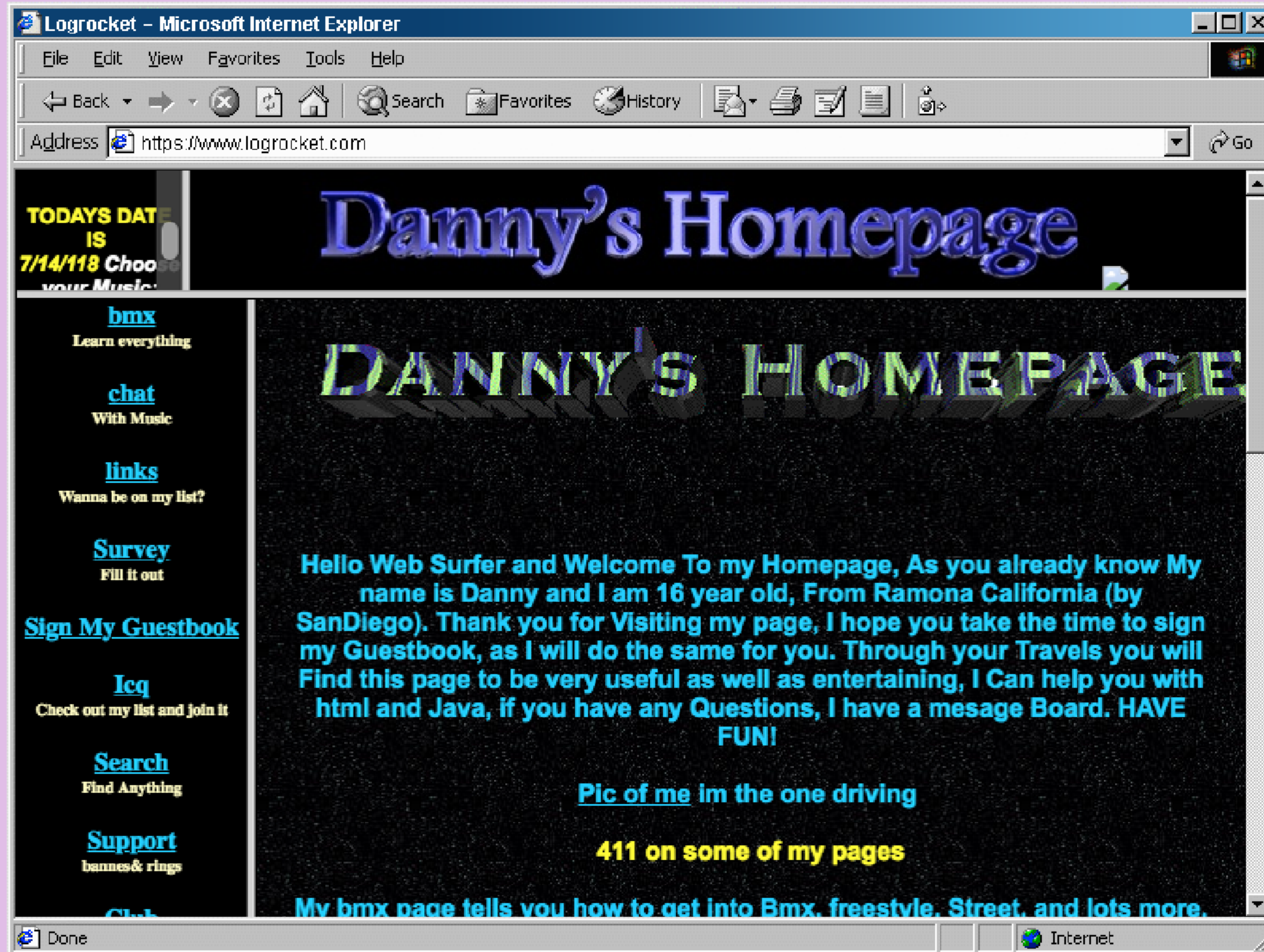
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Why (re-)decentralize?

Tim Berners-Lee's vision

A collection of
sovereign states,
not a world empire

A creative, chaotic,
exciting place



Distant Skies

A Crystalis Fan Site



Story



Characters



World



Walkthrough



ABOUT CRYSTALIS



▶START CONTINUE
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'Crystalis' is an Action-RPG for the Nintendo Entertainment System. It was released in Japan in April of 1990 and in the United States the following July. It was praised by critics at the time for its graphics and gameplay and it inspired a devout, if somewhat small, fan following. In Japan the game was called ゴッド・スレイヤー はるか天空のソナタ or *God Slayer: Sonata of the Distant Sky*.



Swords



Armor & Shields



Items



Spells



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Haunted history

Why do we celebrate Halloween?

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- Dreaming of a NASCAR salary cap

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If you have the Shockwave plug-in - [CLICK HERE](#)

The problems

Centralization of
everything

People nowadays rarely
host their own websites
or services anymore

And when they do...

Hi! I am Christos.



Online peasantry

Not much existence
outside of a handful of
algorithmically socially
engineered platforms

"1.6 billion people log in to
Facebook daily"

- Social media: Facebook (including Instagram etc.), Twitter
- E-commerce: Amazon
- Messaging: Whatsapp (i.e., Facebook) et al.
- Movies: Netflix et al.
- Forums: Reddit
- Almost everything else: Google

I know, I know...

You are not
representative
of how most people
use the internet

Bigger than ever in terms of
size, but looks and feels
smaller with every passing year

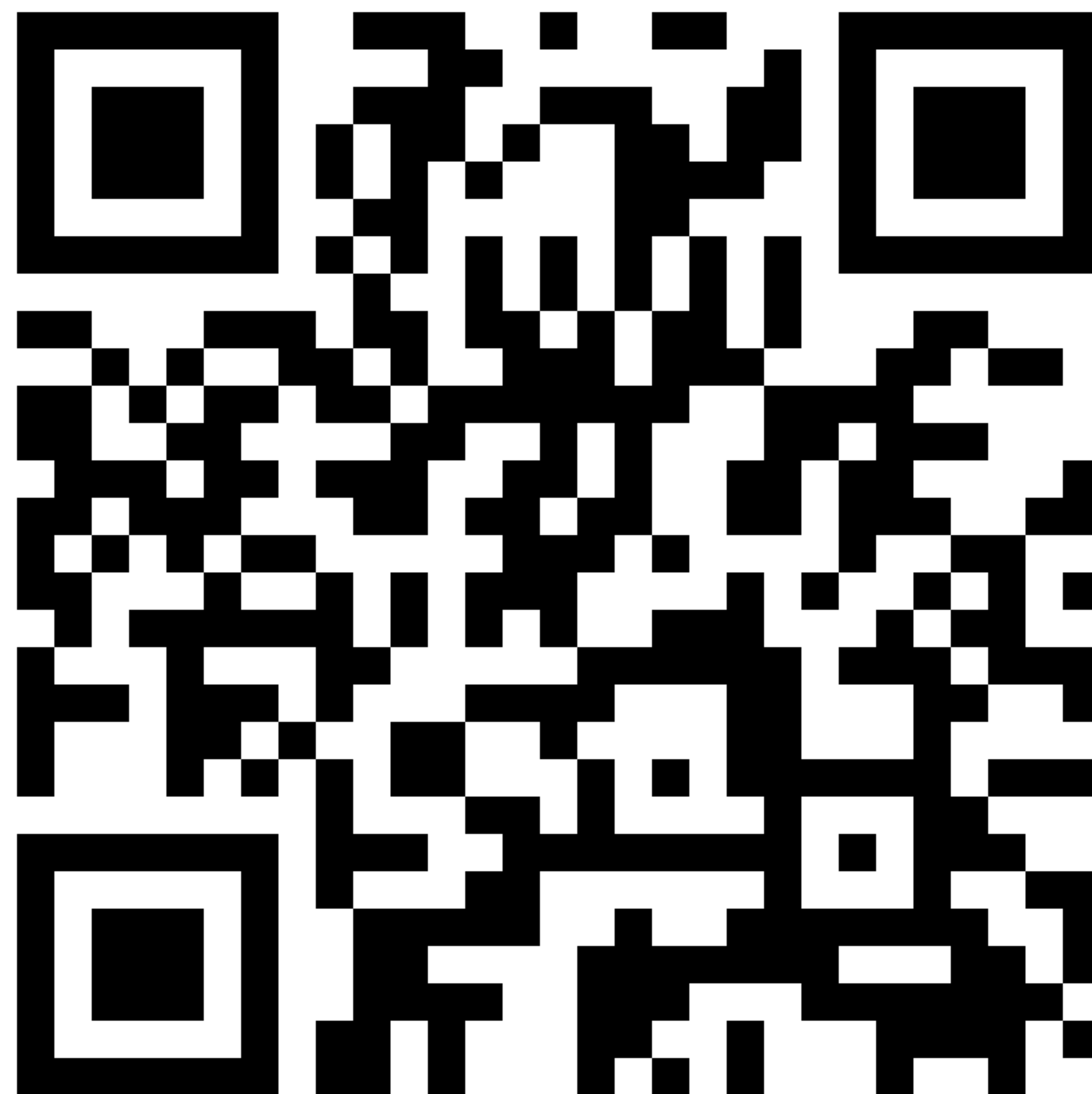
A handful of companies
own private data of
billions of people

Corporatization of the internet

Uniformity

Social media

<https://margiolis.net/en/w/socialmedia/>



The solutions

Quit

But my networking effects?!

- Webrings
- RSS
- Links pages
- Mailing lists
- Forums
- Federated systems (e.g., ActivityPub, XMPP, ...)
- Word of mouth

GeoCities

 **NEIGHBORHOODS**

 [GeoAvenues](#)

 [Great GeoShops](#)

 [Visit Virtual Offices](#)

Search GeoCities

GO

Visit These

Neighborhoods



[Area51](#) Science fiction and fantasy

[Athens](#) Education, literature, poetry, philosophy

[Augusta](#) Golf and the finer side of the fairways

[Baja](#) Four-wheeling, SUVs, off-roading, adventure travel

[BourbonStreet](#) Jazz, Cajun food, Southern culture

[Broadway](#) Theater, musicals, show business

[CapeCanaveral](#) Science, mathematics, aviation

[CapitolHill](#) Government, politics, and lots of strong opinions

[CollegePark](#) University life, from academics to extracurriculars

[Colosseum](#) Sports and recreation

[EnchantedForest](#) A neighborhood for and by kids

[Eureka](#) Small businesses, home offices

[FashionAvenue](#) Top designers, beauty and fashion

[Heartland](#) Families, pets, hometown values

Federated Social Media?

This is a BSD conference.
Where is the BSD part in
all this?

User-friendly tools
and services
running on BSDs

Why BSD?

- Stability, security, efficiency
- Jails
- ZFS
- bhyve
- pf
- OpenSMTPd
- httpd
- ...

Different BSDs are suitable
for different purposes

It's simple

- A domain name
- A server (VPS, self-host)

My (current) setup

- VPS in the Netherlands for ~5 EUR/month
- OpenBSD 7.7
- Web server: httpd
- Email server: smtpd, dovecot
- Git server


```
# mkdir -p -m 700 /etc/ssl/private
# mkdir -p -m 755 /var/www/acme
# cat >/etc/acme-client.conf
authority letsencrypt {
    api url "https://acme-v02.api.letsencrypt.org/directory"
    account key "/etc/ssl/private/letsencrypt.key"
}

domain example.org {
    domain key "/etc/ssl/private/example.org.key"
    domain certificate "/etc/ssl/example.org.crt"
    domain full chain certificate "/etc/ssl/example.org.pem"
    sign with letsencrypt
}
^D
# mkdir -p /var/www/htdocs/example.org
# cat >/etc/httpd.conf
server "example.org" {
    listen on * port 80
    root "/htdocs/example.org"
    location "/.well-known/acme-challenge/*" {
        root "/acme"
        request strip 2
    }
    #block return 301 "https://example.org$request_uri"
}

server "example.org" {
    listen on * tls port 443
    root "/htdocs/example.org"
    tls {
        certificate "/etc/ssl/example.org.pem"
        key "/etc/ssl/private/example.org.key"
    }
    location "/.well-known/acme-challenge/*" {
        root "/acme"
        request strip 2
    }
}
^D
# acme-client -v example.org
# httpd -n
# rcctl restart httpd
# crontab -e
0 0 * * * acme-client -v example.org && rcctl reload httpd
```


Ideas

- Online presence: Website
- Video sharing: PeerTube
- Communication: XMPP, IRC, Email
- Git server

Caveats

It costs time (and some money)

Great idea.

But... how will my grandma do that?

The real challenge

How to re-make this
the mainstream?

Conclusion

Thank you!