Federation: Decentralized Social Networking and Services with Privacy

~~Ghibli Fest~~
GeekBeacon Fest
2022Feb18 @ 15:00
https://gbfest.org/

der.hans (https://floss.social/@FLOX_advocate)
Database Support Manager
Object Rocket, a rackspace company
https://www.ObjectRocket.com/

Yes, I'm hiring :)

Rackspace Technologies
https://rackspace.jobs/

Upcoming Conferences and Presentations

- https://www.LuftHans.com/talks

Upcoming Talks and Events

- GeekBeacon Fest
  - Privacy and Data Ownership Panel in 2 hours
- LinuxFest Northwest in April
  - Fediverse: Decentralized Social Networking and Services
  - Intro to jq: grep for JSON
- SeaGL
  - organizing now for November 4-5 conference

Social Media / Fediverse

- FLOX_advocate on Mastodon
  - https://floss.social/@FLOX_advocate
- LuftHans on Libera.chat IRC
  - usually in #SeaGL, #PLUGaz and #LOPSA

A Fediverse quote for the privacy panel

DJ Sundog posted from the toot-lab

> In its usual unanimous fashion the sundogistani parliament has passed a non-binding resolution to recommend to all sundogistani citizens and allies a basic strategy for protecting one's personally identifying information by simply refusing to ever give the same personally identifying information twice.

https://toot-lab.reclaim.technology/@djsundog/106105219776161556
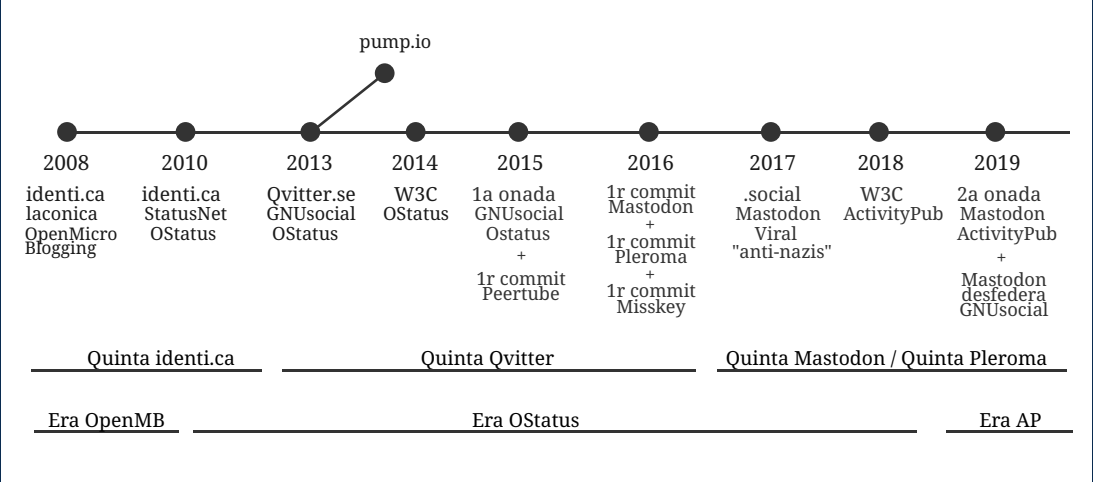
What is the Fediverse?

Fediverse

    coalition of decentralized, interopable, digital, social spaces

Features/Options

- many providers with local control

- no centralized authority

- interact with other services

- run your own

- unfiltered timeline

History Mapping

Sample Services

- Social Network

- Microblogging

- Image Sharing

- Video Sharing

- Book club

- Blogging

- File Sharing

- Audio Hosting

- Link Aggregator

- Event and Group Management

- Live Video Streaming

Building the Fediverse

Service

specific type of Fediverse service, .e.g. Mastodon or PixelFed

Instance

The particular domain an account is on, e.g. https://FLOSS.social/ or https://FOSStodon.org/ Mastodon insances or https://PixelFed.social/ PixelFed instance

What are digital social networks?

- online communities where people share experiences, thoughts, whatever

What are centralised social networks?

- spyware building exploitable psychological profiles of you

What are centralised social networks?

- spyware building exploitable psychological profiles of you
  - even if you don't have an account

Fediverse for Community

Enjoy Mastodon

Join Mastodon Microblogging

Mastodon Description

Mastodon description from Wikipedia

> Mastodon is a decentralized social media platform where users are in control. It is Free
> Software that any individual or organization can run on their own infrastructure while
> connecting to a global network, allowing communities effective self-government. It comes with
> better publishing capabilities and robust anti-abuse tools.

https://en.wikipedia.org/wiki/Mastodon_(software)

users are in control

Pixelfed Photo Sharing
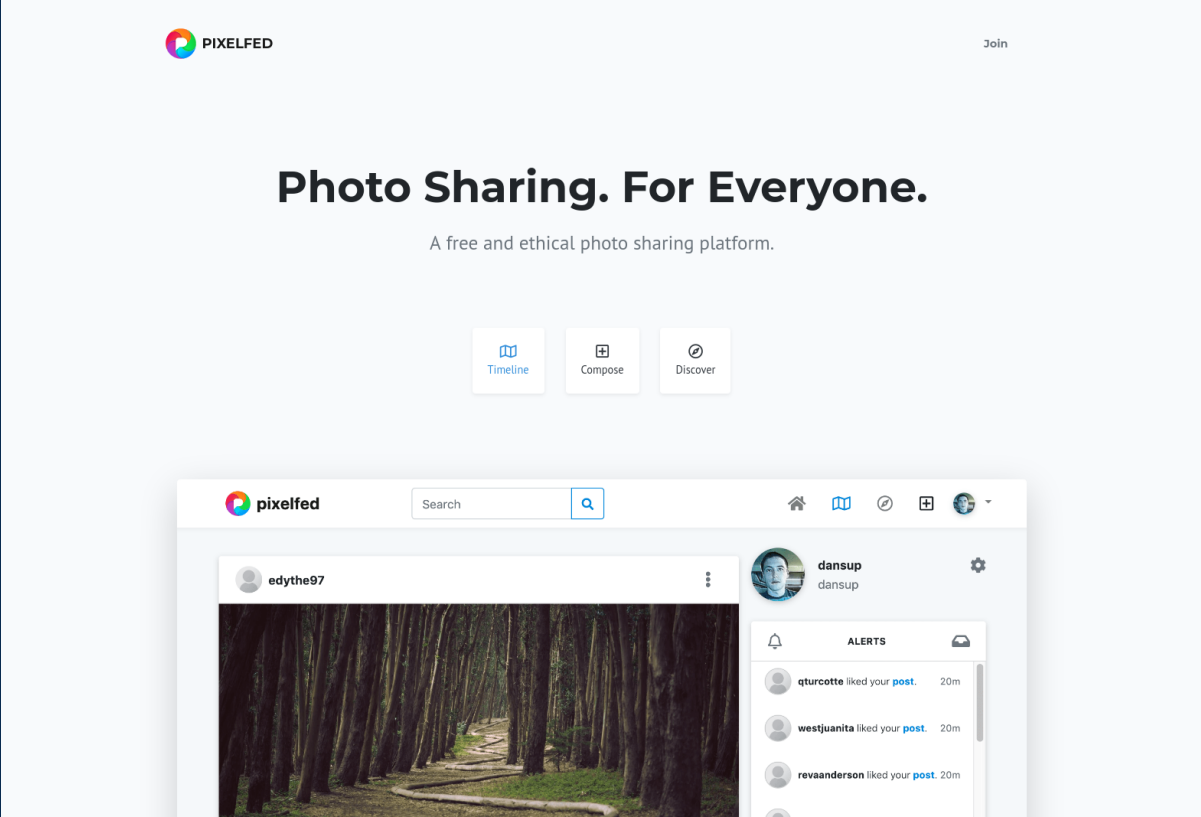
PeerTube Video Sharing

Privacy and Security in Your Hands

- Firefox containers

- data liberation

- hide your social graph

- opt-out of search engine indexing

- be aware of RSS feed

- few companies on the Fediverse

Choice

- ☐ client choice
- ☐ "Move to a different account"
- ☐ "Delete account"

Privacy in the Fediverse

Ever go outside?

Public Space or Private Garden?

Filtering Your Fediverse: Mastodon

- Mastodon just got a grant to add more filtering options
- follow requests
- filter by keyword or account name
- drop vs hide
- expirable filters
- muting vs blocking
- keyword, user, instance
- hide CW and hide all media
- mute conversation
- lock account
- public feed

Filtering Your Fediverse: PixelFed

- muted and blocked accounts not included in suggested posts, discover page, followed hashtags or your network timeline

- private account

    - When your account is private, only people you approve can see your photos and videos on pixelfed.

- opt-out of search engine indexing

Moderation For Your Fediverse

- local instance moderators

- local instance rules

- instance-wide block, filters

- local-only posting

- reporting problems to moderators, local and remote

  ◦ The account is from another server. Send an anonymized copy of the report there as well?

Posting Moderation for Your Fediverse

- Public: Everyone can see

- Unlisted: Everyone can see, but not listed in public timeline

- Followers Only: only show to followers

- Direct Message: visible only to those in the message and instance admins

- Local Only: can't be forwarded off the instance

Accessibility in the Fediverse

- Fediverse software projects generally make a public effort towards accessibility

- ex: Mastodon posts are 500 characters, but they allow much longer image descriptions

- ex: Mastodon community generally encourages image descriptions for the visually impaired

Why Federate

- avoid monoculture
  - "I think nobody, not even Mastodon's development team, wants a monoculture."
    - Christine Lemmer Webber (ActivityPub, MediaGoblin, Penguicon Guest of Honor)
- choose instances for
  - themes and fandoms
  - moderation team
  - instance size
  - has enforced guidelines
  - doesn't have enforced guidelines
- run your own instance

Free Software for Federation

- Is Free Software required to be a federated service?

History of Federation

- email
- IRC
- web
- RSS
- XMPP/Jabber
- Status.net
- Diaspora
- MediaGoblin
- identi.ca
- Social WG
- ActivityPub - W3C standard

Federated Protocols

- SMTP

- IRC

- XMPP

- OStatus

- Diaspora

- Actvity Streams

- Pump.io

- ActivityPub

- Matrix

- Enterprise File Sync and Share

ActivityPub

- W3C standard

- Used by many Fediverse projects:

  - Mastodon - MicroBlog

  - Pleroma - MicroBlog

  - PixelFed - Image Share

  - Nextcloud - Personal Cloud Services

  - PeerTube - Video Sharing

  - Plume - Blog

- cooperative competition

Advantages of Group Self-Hosting

- choose your moderators

- choose your retention

- choose your filtering levels

- feature forks

  ○ local only posts (Mastodon fork)

- require accessibility

- security

- privacy

- adult content

- internal only

Why Internal Only?

- business

- school / college / university

- medical provider

- club

Disadvantages of Self-Hosting

- moderation is a lot of work

- not everyone can afford to self-host

- services using other people's computers are `'free'`

Methods of Self-Hosting

- use a pi or old laptop on home connection

- use phone with 4G or 5G

- pay a service like masto.host, yourownnet or Spacebear

- install service on virtual host at cloud provider

- talk your roommate into hosting it :)

Welcome to the Fediverse

Choosing an Instance

- not a permanent decision

- local rules

- theme or purpose of instance

- number of users

- moderators

- instance admins

- instance funding

The Fediverse is what we make with it.

Welcome to the Fediverse: Bad Actors and Disagreements

- freedom isn't free
- We don't have to get along, but it is an option.
- instance and account blocks
- moderation tools

Federated Instance As Walled Garden

- Fediverse isn't necessarily Free as in Freedom

Fediverse Services

Micro Blogging

- Mastodon
- Pleroma
- GNU social

Social Blogging

- Diaspora
- Friendica

Blogging

- WriteFreely
- Plume

# Fediverse Services: Media Sharing

- PixelFed

- PeerTube

- FunkWhale

- Owncast

- MediaGoblin

Fediverse Services: Other

- IRC - Chat

- Matrix - Chat

- Nextcloud - Personal Cloud Services

- GetTogether - Event Sharing

- Mobilzon - Event and Group Management

- BookWyrm - Book Club

- Hubzilla - Decentralized Identity

- Lemmy - Link Sharing

Participate in the Fediverse

- create an account
  - follow some people
  - firehose
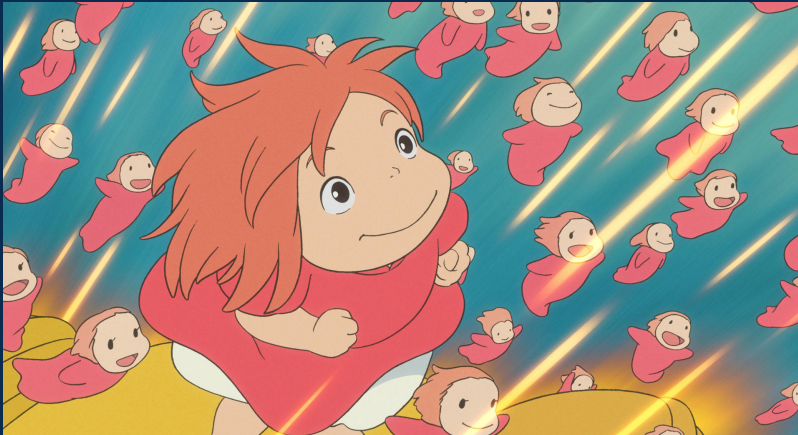
You Can Build the Fediverse

- instance moderation

- development and documentation

- W3C

- weekly Social CG meetings

- donate to your instance

- Outreachy internships

Fediverse Adjacent

- IndieWeb

Homework

- contemplations
  - "Twitter is in the outrage business; Mastodon isn't a business" - @codesections@fosstodon.org
  - Is web federated?

- actions
  - create an account and have fun :)

Thanks and Q&A

We don't have to get along, but with Federation it is an option :).

The Fediverse is what we make with it.

Resources for getting started

- Trunk: a topic organized listing of Mastodon accounts to follow

- FediFollows: a topic organized listing of Mastodon accounts to follow

- Semi-catergorized list of some Mastodon instances

- Moderators are people too

- Mastodon instance chooser

Resources

- Mastodon founder, Eugen, on decentralization
- Mastodon abuse and harassment design and features
- Mastodon Elevator Pitch
- Mastodon fork that experiments w/ features
- LibreLounge podcast
- The Federation

Articles Fediverse and Adoption

- Towards a Greater Federated Architecture

- Immer mehr Behörden nutzen soziales Netzwerk Mastodon

Service Welcome or Home Pages

- Mastodon - MicroBlog - https://www.JoinMastodon.org/

- PixelFed - Image Share - https://pixelfed.org/

- Pleroma - MicroBlog - https://pleroma.social/

- Nextcloud - Personal Cloud Services - https://nextcloud.com/

- PeerTube - Video Sharing - https://joinpeertube.org/

- Plume - Blog - https://joinplu.me/

- Diaspora - Social Blog - https://diasporafoundation.org/

- Friendica - Social Blog - https://friendi.ca/

- Matrix - Chat - https://matrix.org/

- BookWyrm - Book Club - https://bookwyrm.social/

- FunkWhale - Audio Hosting - https://funkwhale.audio/

- Mobilzon - Event and Group Management - https://joinmobilizon.org/en/

- Owncast - Live Video Streaming - https://owncast.online/

Credits

- DJ Sundog - not reusing personally identifying information

- Wikipedia - definition of Fediverse

- fedi-timeline.svg - https://documents.lleialtat.cat/LleialTec/Fediverse/historia/fedi-timeline.svg

- GeekBeacon_Fest_mast.png - GeekBeacon community banner

- Screenshot_2021-04-25_Mastodon.png - Screenshot of JoinMastodon.org

- Screenshot_2021-04-25_Pixelfed.png - Screenshot of PixelFed.org

- Screenshot_2021-04-25_JoinPeerTube.png - Screenshot of JoinPeerTube.org

- Prayitno - Welcome.jpg - CC BY 2.0

- Studio Ghibli images - https://www.ghibli.jp/gallery/