

Federation: Decentralized Social Networking and Services

Penguicon

2021Apr25 @ 11:00 UTC-4

Virtual



der.hans

CDE

Object Rocket, a rackspace company

<https://www.ObjectRocket.com/>

ObjectRocket

<https://www.objectrocket.com/careers/>

Rackspace Technologies

<https://rackspace.jobs/>

Upcoming Conferences and Presentations

- Penguicon: Online Privacy, Security and Password Management @ 15:00 UTC-4
- [GeekBeacon Fest](#) - cfp open now
- [SeaGL](#) - organizing now, cfp opens soon
- List of Some Upcoming and Previous Talks and Publications
 - <https://www.LuftHans.com/talks>



Social Media / Fediverse

- FLOX_advocate on Mastodon
 - https://floss.social/@FLOX_advocate
- LuftHans on PLUME
 - <https://fediverse.blog/~LuftHans>
- LuftHans on Freenode IRC
 - usually in #SeaGL, #PLUGaz and #LOPSA



Converging my talks

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?

coalition of decentralized, digital, social spaces

many providers

no centralized authority

interact with other services

run your own

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

"users are in control"

What are Social Networks?

- services aimed at helping people share data, experiences and thoughts

What are Centralised Social Networks?

- spyware building exploitable psychological profiles of you



Fediverse for Community



Mastodon microblogging

The image shows the Mastodon website homepage and a mobile app interface. The website features the Mastodon logo (a blue elephant head) and the text "Social networking, back in your hands". Below this, it says "Follow friends and discover new ones among more than 4.4M people. Publish anything you want: links, pictures, text, video. All on a platform that is community-owned and ad-free." There are two buttons: "Get started" and "How it works".

The mobile app interface shows a search bar, a home feed with posts from users like @Satoshi Kojima and inFakelName (ACAB, Vibe), and a notifications panel on the right. The posts include text, images, and hashtags like #おはようございます and #mastodon.

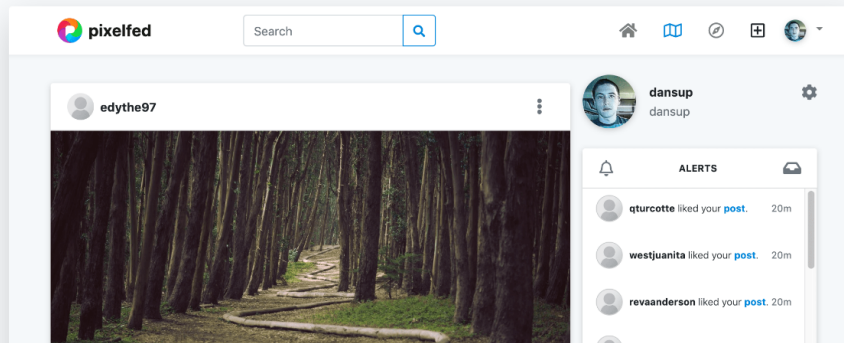
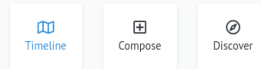
Pixelfed photo sharing



Join

Photo Sharing. For Everyone.

A free and ethical photo sharing platform.



PeerTube video sharing



Free software to take back control of your videos



Search for PeerTube videos and channels



PeerTube, developed by Framasoft, is the free and decentralized alternative to video platforms, providing you over 400,000 videos published by 60,000 users and viewed over 15 million times



[What is PeerTube?](#)



[See the instances list](#)

Example Federation Services

- Mastodon - MicroBlog
- PixelFed - Image Sharing
- Pleroma - MicroBlog
- Nextcloud - Personal Cloud Services
- PeerTube - Video Sharing
- Plume - Blogging
- Diaspora - Social Blogging
- Friendica - Social Blogging
- Matrix - Chat

Why Federate

- avoid monoculture
 - "I think nobody, not even Mastodon's development team, wants a monoculture."
 - Christopher Lemmer Webber (ActivityPub, MediaGoblin, Penguicon Guest of Honor)
- choose instance for themes and fandoms
- choose instance for enforced guidelines
- choose instance without enforced guidelines
- cooperative competition
- you can 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

Federation Protocols

- SMTP
- IRC
- XMPP
- OStatus
- Diaspora
- Activity Streams
- Pump.io
- [ActivityPub](#)
- Matrix
- Enterprise File Sync and Share

ActivityPub

- W3C standard
- Used by many Fediverse projects:
 - Mastodon - MicroBlog
 - PixelFed - Image Sharing
 - Pleroma - MicroBlog
 - Nextcloud - Personal Cloud Services
 - PeerTube - Video Sharing
 - Plume - Blogging
- 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

Internal Only

- business
- school / college / university
- medical provider
- club

Disadvantages of Self-Host

- requires technical skills
- not everyone can afford to self-host
- moderation is a lot of work
- 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 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

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 Features

- follows
- likes
- blocks
- filters
- content warning
- direct messages
- hosted instances

Fediverse Services: Micro Blogging

- Mastodon
- Pleroma
- GNU social

Fediverse Services: Social Blogging

- [Diaspora](#)
- [Friendica](#)

Fediverse Services: Image Sharing

- PixelFed

Fediverse Services: Media Sharing

- [MediaGoblin](#)
- [PeerTube](#)
- [FunkWhale](#)

Fediverse Services: Blogging

- [Plume](#)
- [WriteFreely](#)

Fediverse Services: Chat

- IRC
- Matrix

Fediverse Services: Other

- [NextCloud](#) - Cloud Services ++
- [GetTogether](#) - Event Sharing
- [Hubzilla](#) - Decentralized Identity
- [Lemmy](#) - Link Sharing

Participate in the Fediverse

- create an account
 - follow some people
 - firehose

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](https://twitter.com/codesections) - [@codesections@fosstodon.org](https://fosstodon.org/@codesections)
 - Is web federated?
- actions
 - create an account and have fun :)

Thanks

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

Resources

- [Mastodon founder, Eugen, on decentralization](#)
- [Mastodon abuse and harassment design and features](#)
- [listing of accounts to follow for topics](#)
- [Mastodon fork that experiments w/ features](#)
- [LibreLounge podcast](#)
- [The Federation](#)

Resources Extras

- [Freenode IRC network](#)
- [debian IRC](#)
- [Mastodon instance chooser](#)
- [Semi-cateragized list of some Mastodon instances](#)
- [Moderators are people too](#)
- [Mastodon Elevator Pitch](#)

Credits

- [DJ Sundog](#) - on not reusing personally identifying information
- [Wikipedia](#) - definition of Fediverse
- [Penguicon Plague Penguin](#)
- [Penguicon Dancing Penguins](#)
- Prayitno - [Welcome.jpg](#) - CC BY 2.0