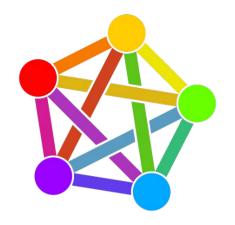
The Fediverse



An introduction to the Fediverse.

Logo By Eukombos [CC0], from Wikimedia Commons

Introduction:

- Bob Murphy
- System administrator in New Jersey
- Long-time Linux user, long time Fediverse denizen.
- @murph@fosstodon.org
- https://identi.ca/murph

Overview

- The fediverse is a collection of protocols, servers, and users.
- Together they form networks that can communicate together.
- Users can exchange short messages, blog-style posts, music, and videos throughout.

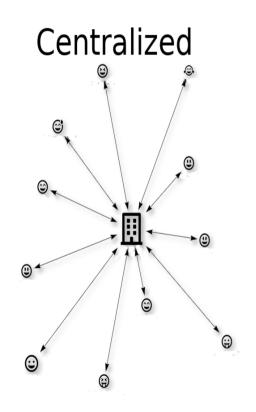
Some history

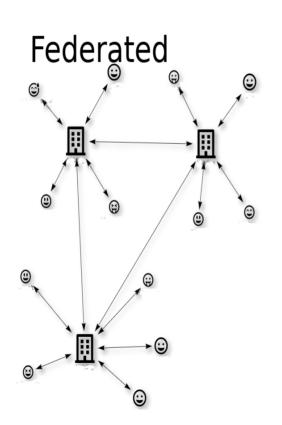
- In 2008, Evan Prodromou created a twitter-like service called identi.ca. It used the Ostatus protocol.
- In about 2012, he changed his service to use a new protocol, pump.io. He released the status.net protocol to the FSF, renamed as GNU/social. The fediverse continued along for several years.
- March 2016, Eugen Rochco (Gargron) created Mastodon, which used GNU/social with a tweetdeck-like interface. This gained some popularity.
- 2018, ActivityPub, a new protocol was accepted as a standardized protocol. Most fediverse platforms have adopted it. Authored by Evan P., Christopher Lemmer-Weber and others, it expanded upon the previous into a better protocol.

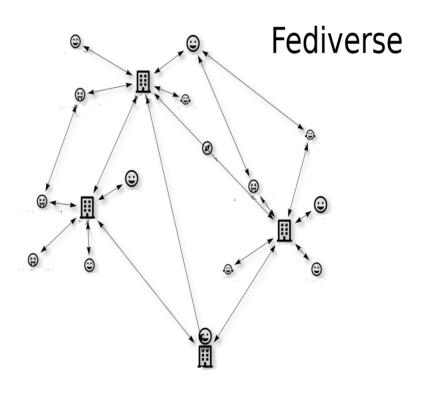
Federation

- Most services are run by a single company or organization A single silo that your data is trapped in, the only way to share with others is to have them join that service.
- Federation allows users of different services to inter-operate with one another, without creating an account for each shared resource. (Largely)
- System operators can block other instances in case of egregious issues, and users can likewise block users or instances to improve their experience.

Illustration of federation





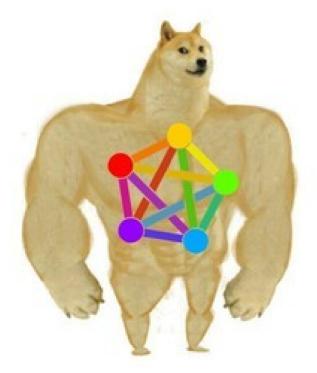


Differences in failures:

- .club domain was taken out due to DNS issues
 - Some fediverse instances were unavailable
 - Most other instances were still running
- Facebook had BGP issues.
 - All Facebook services offline
 - Hard to resolve due to dependencies on name resolution
 - Media and many others lost minds (Fediverse laughs)

Decentralization > Centralization

Server down? You can use another one.



Server down? Sorry we need... m.. 5 hours to fix it.



Services available (partial)

- Mastodon, pleroma, misskey
- Pixelfed
- Lemmy
- Write.as, read.as
- Peertube
- Funkwhale
- Mobilizon, gettogether.community

Microblogging

Image hosting

Link aggregator

Blogging

Video Hosting

Audio Hosting

Event planning

Hosting

- Join an instance
 - https://joinmastodon.org/
 - https://Fediverse.party/
- Create your own instance
 - Bare metal
 - VPS
 - Container

- Hosted Mastodon
 - https://masto.host/
 - Various levels
 - Starting at 6euro
 - They maintain it

Requirements

- CPU
 - With docker: 2x1.8GHz
 - 2900 users
 - Without: 4x3.4GHz
 - 1800 users

It depends!

- Your mileage may vary
 - \$5-20 /month ?

How the timelines work:

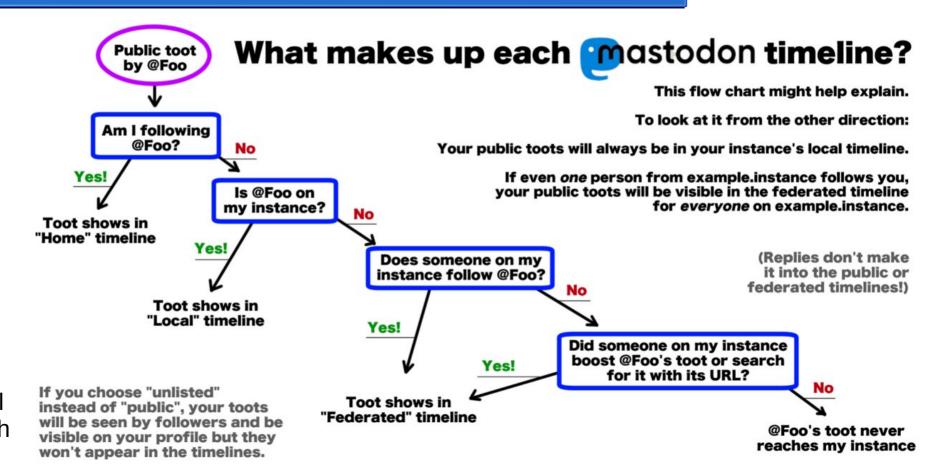
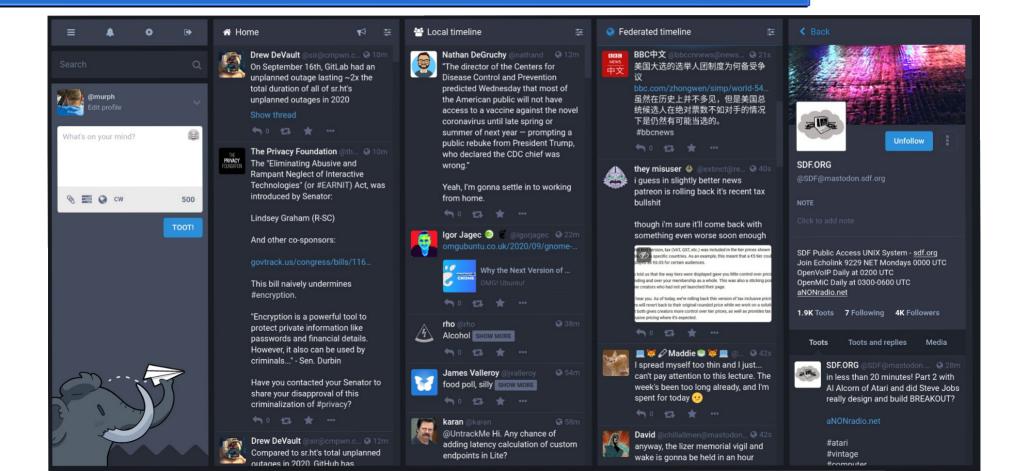
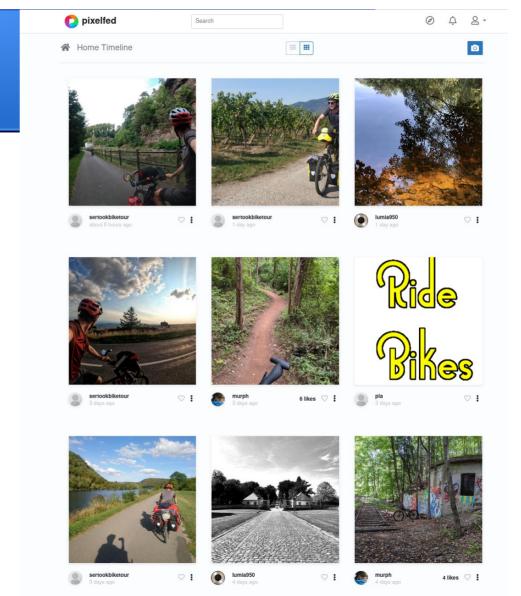


Chart by:
@cassolotl
@dev.glitch
.social/

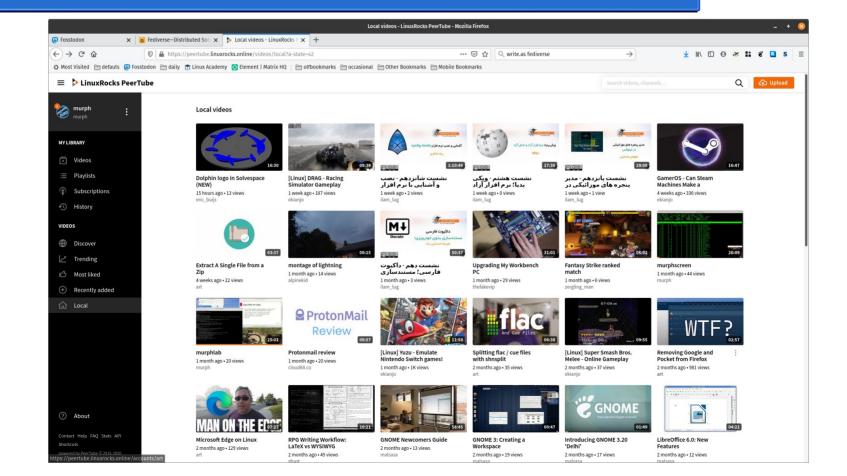
Example: Mastodon



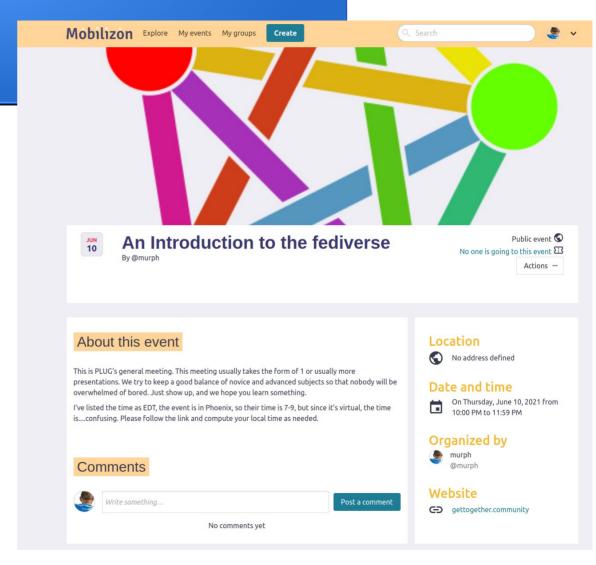
Example: Pixelfed



Example: Peertube



Example: Mobilizon



Conclusion:

- The Fediverse is a way to use the web in a more individual way, either by choosing an instance with a community that suits your needs, or running your own server, and making it exactly the way you want.
- It avoids the advertising, algorithms, and other unpleasantries that plague some other social networks.

Where to learn more:

A few links to find more about the Fediverse:

- General info:
 - https://fediverse.party
 - https://feneas.org
- News about the Fediverse:
 - https://wedistribute.org
- Which instance to join (assuming you don't want to spin up your own just yet):
 - https://fediverse.party/en/portal/servers
- Tool to visualize networks, communities on the Fediverse:
 - https://www.fediverse.space
 - https://kumu.io/wakest/fediverse
- Stats, monitoring service, and list/map of the known Fediverse:
 - https://fediverse.network
 - https://the-federation.info

this slide shamelessly stolen from Mauricio Uribe (with permission) https://mxuribe.com

Thank you.

 I'll be happy to entertain any questions, or further demonstrate what I can on the fediverse.

- Contact information:
 - https://identi.ca/murph
 - @murph@fosstodon.org https://fosstodon.org/@murph