

*Immers Space*

Be Connected;  
Not Confined



# Immers Space Libre Software

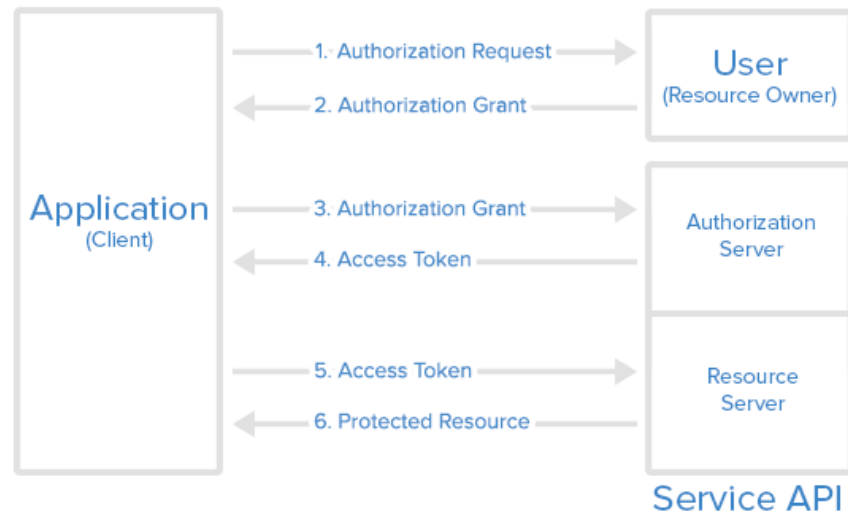
- ❖ immers Server (AGPL v3) <https://github.com/immers-space/immers>
  - Standalone service to connect with a 3D Web experience
  - User accounts, portable identity, and access management via OAuth 2.0
  - Federated social features via ActivityPub
- ❖ immers-client (MIT) <https://github.com/immers-space/immers-client>
  - Client-side library to use in the 3D Web experience to integrate immers server
  - Live streaming updates from immers server to see friends activity instantly
  - Easy high-level conceptual abstractions over ActivityPub apis: e.g. addFriend, sendImage

# Portable Identity Reciprocity

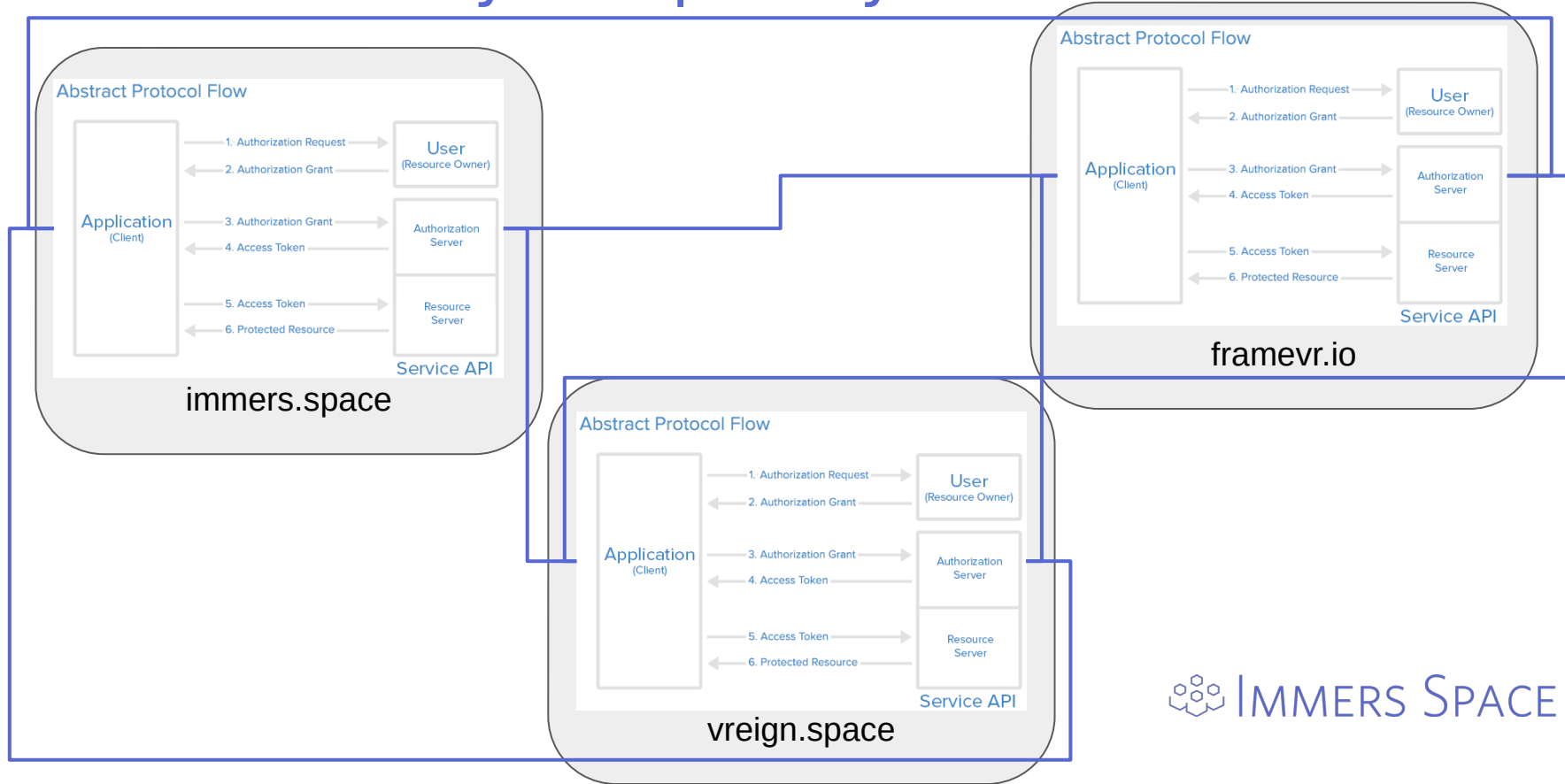
- ❖ Accounts that work everywhere
- ❖ No central identity provider
- ❖ Host your own or join a community
- ❖ Ownership and control over your data
- ❖ Open Web standards: OAuth 2.0 / OpenID Connect



## Abstract Protocol Flow



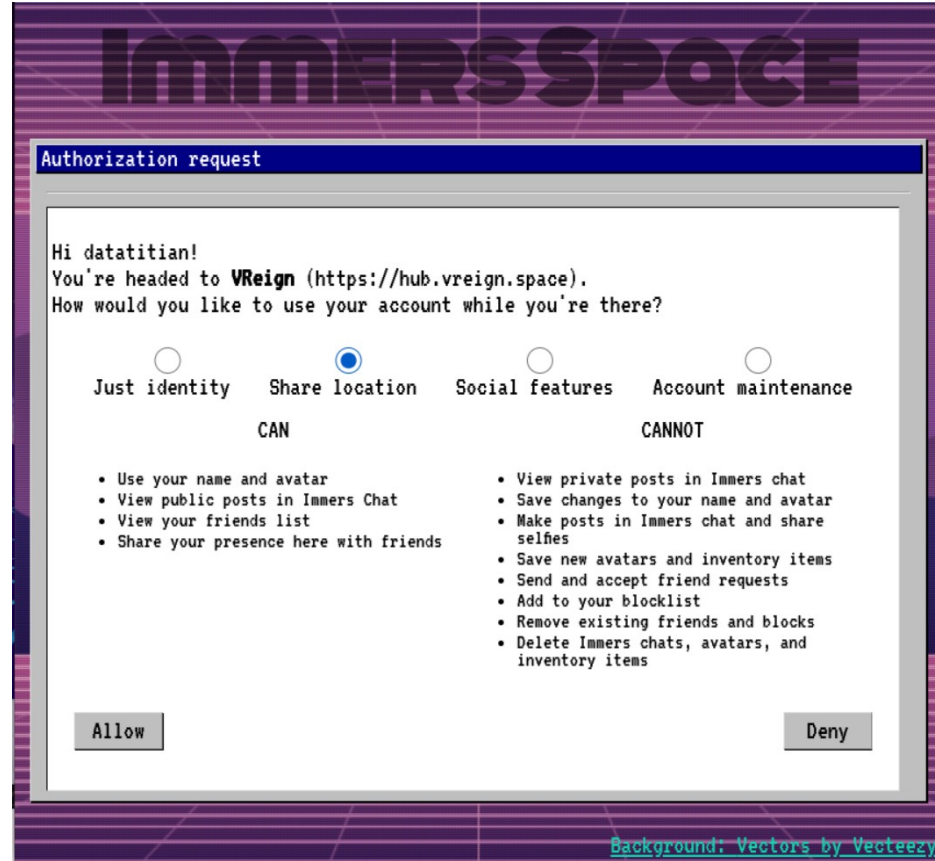
# Portable Identity Reciprocity



# Portable Identity Reciprocity

- ❖ Safely explore new worlds
- ❖ Stay in control of your data

Sites request a permission level, but you can override that request and choose what you're comfortable sharing

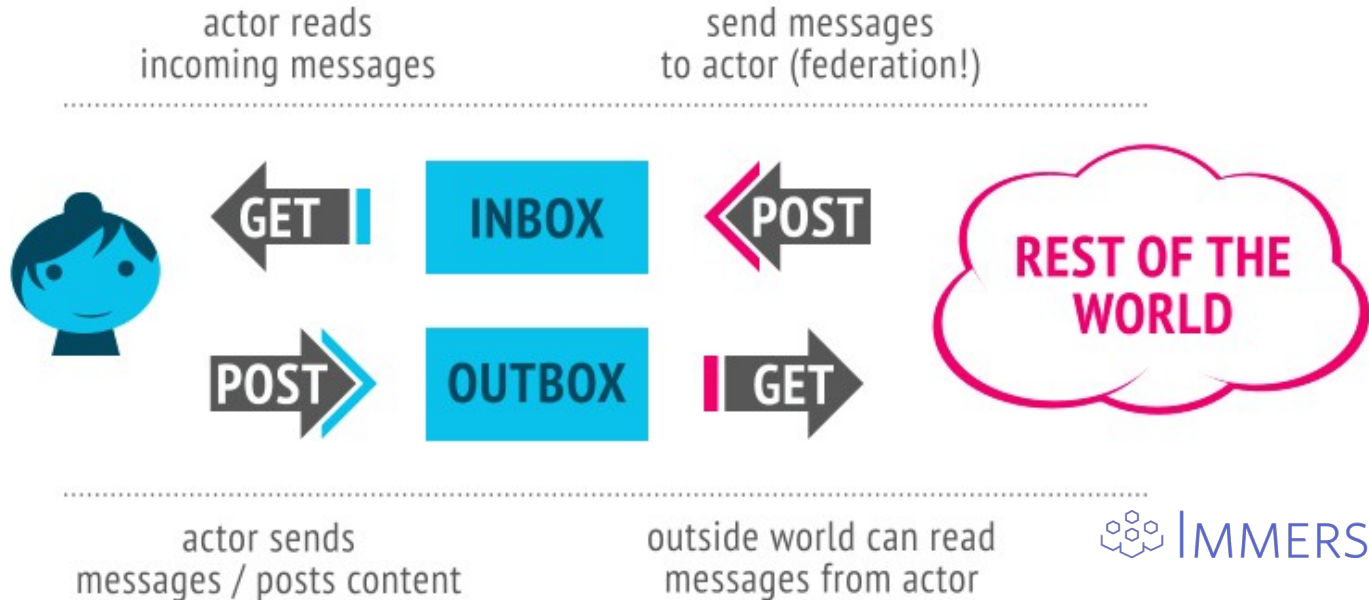




Federated messaging with the interoperable W3C standard for decentralized social media

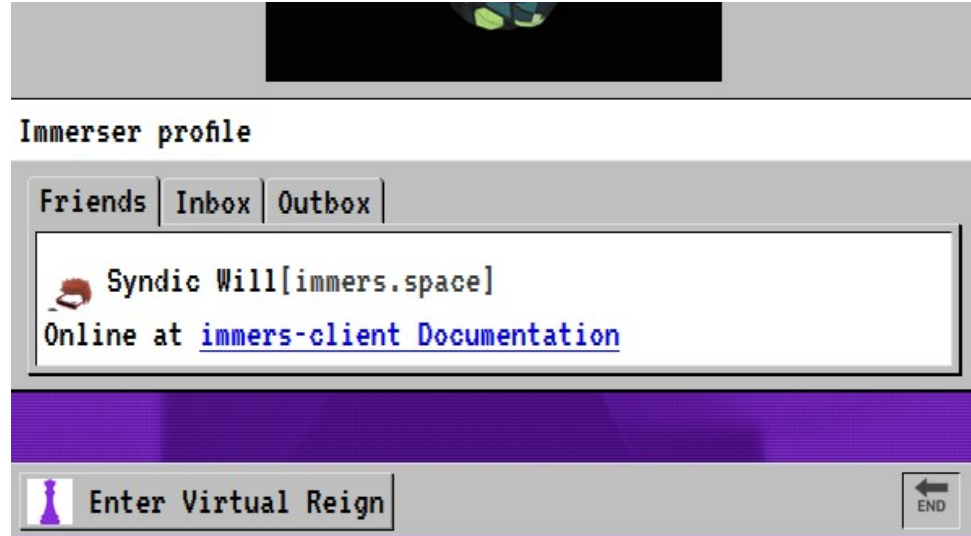
# ActivityPub Basics

1. Common language - ActivityStreams 2.0 Vocabulary
2. Standardized protocol



# Location

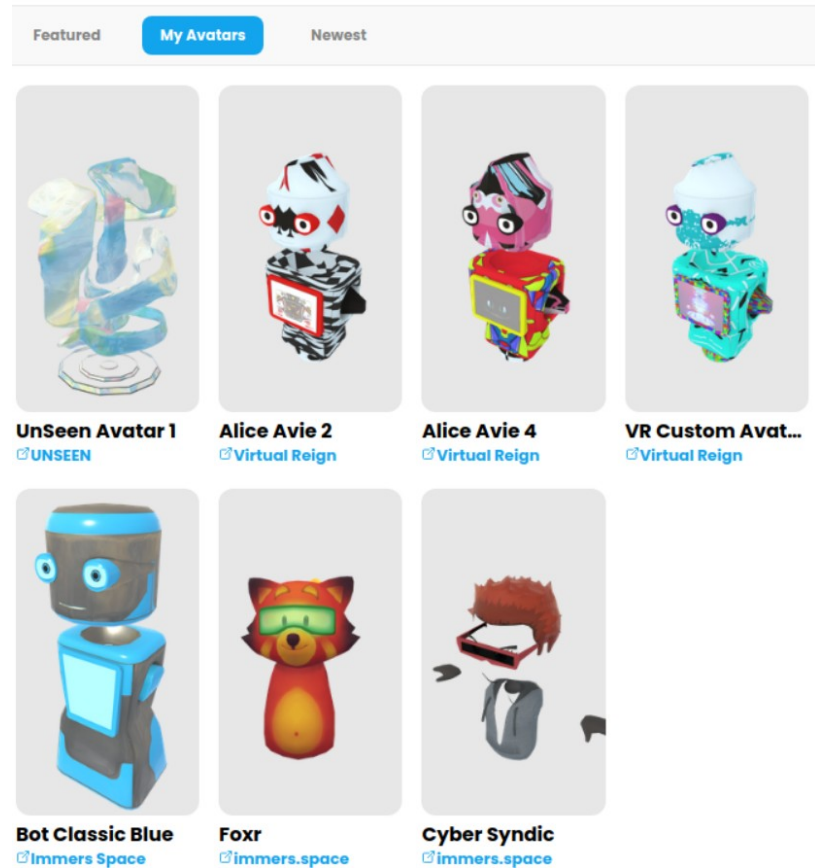
- ❖ “Arrive” and “Leave” standard activity types
- ❖ Include URL with room id
- ❖ Fetch list of friends’ most recent Arrive/Leave activity = friends list with link to join them anywhere in the metaverse
- ❖ Future expansions:
  - “Invite” - actively request specific friends join you in an experience





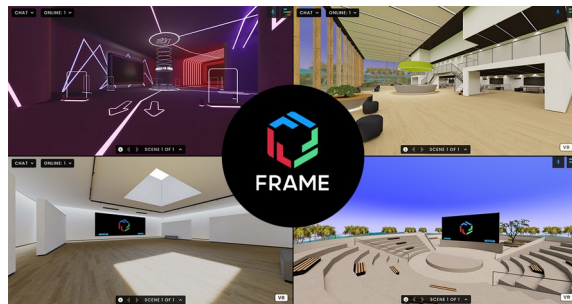
# Collectibles

- ❖ “Add” / “Remove” activities and “Model” objects
- ❖ Collect avatars and other items from immers your visit
- ❖ Build up a persistent collection of owned items that you can use in any immer



# Immers Space Use Cases

- ❖ [nice.freetreasures.shop](https://nice.freetreasures.shop)
  - Verifiable digital collectibles without blockchain
- ❖ Chessboxing
  - A metaverse-spanning game that starts as a chess game on [vreign.space](https://vreign.space) but transports you back and forth to the rhythm punching game Moonrider, using immers identity and messaging to keep track of game state
- ❖ [framevr.io](https://framevr.io)
  - A non-libre professional social WebXR platform that uses Immers Space to provide friends lists and federated logins



# Our Libre Software Business Model

- ❖ DisCO distributed cooperative model
  - Owned equally and governed democratically by workers
  - We do contract metaverse design work to generate revenue
  - The margins from that work fund the development of the Immers Space free software
- ❖ Platform cooperative model: [opencollective.com/immers-space](https://opencollective.com/immers-space)
  - We share the governance of our free software with the people using it
  - Optional monthly membership gives voting power
  - Our bylaws guarantee member rights:
    - Set development priorities
    - Can reject mergers/acquisitions
    - Can reject bylaws changes
- ❖ Protection from (hypothetical) investors
  - Investors barred from BOD / governance
  - Limited investor dividends

# Demo: connect a site to the metaverse with 1 line of code

Follow along: <https://infinite-worlds.glitch.me/>

Source: <https://glitch.com/edit/#!/infinite-worlds>