

omigroup / omigroup Public

<> Code

Issues 38

Pull requests

Discussions

Projects 2

...

XR3ngine Response - Proposed OMI Interfaces #6

mrhegemon started this conversation in Ideas



mrhegemon on Apr 13, 2021

Open Metaverse Interoperability - XR3ngine Response - Proposed OMI Interfaces

Repo:

<https://github.com/xr3ngine/xr3ngine>

<https://github.com/OMI-Open-Metaverse-Interoperability>


Compatibility

We need some sort of compatibility tool to track and test between XR apps and browsers

Package / Version Manager - Tagging (flags/scopes?) system on/off

Permission tree - "Public" Content vs. Private

Package Systems

- **XRPackage** - Love XRPK and looked at Webaverse tools deeply  **Webaverse Integration** [EtherealEngine/etherealengine#38](#)
- Love <https://web.dev/web-bundles/>

Home servers

A "home base" for personal data and authorization rights

Not required or faceless UX - Guest mode for - easy/auto sign up

List of tech that could be adapted to this need:

- CHAPI wallet
- Solid

- Crypto Wallet
- Matrix homeserver
- Mastodon instance

Tokenized / Tracked / Smart Assets

NFTs

DiDs + XR Wallet

Chat / World Log

Matrix is an awesome standard

Identity / Accounts

See XR Wallet below

DiDs - <https://www.w3.org/TR/did-core/> Add DiDs to everything. Just do it.

Social

- We have built an instrgram / clubhouse style React UX - Needs Fediverse 2.0 features - currently very traditional architecture <https://github.com/xr3ngine/xr3ngine/tree/dev/packages/social>
- Activity Pub + Streams working groups have momentum to enhance and extend right now - Amy (Rhioro), Chris Weber - w3c technical architecture - social web
- We probably need to extend friends list and profile - currently out of activity pub scope - <https://www.w3.org/TR/activitypub> - <https://www.w3.org/TR/activitystreams-core>

World Index / Search

Rely on existing search index standards

Create an easy to parse API

Data Shapes

Great starts on shapes that can already be used - **CCG UWallet Interop**

Standardize schema on **JSON-ld** <https://www.w3.org/TR/json-ld/>

Payment

- Lean on existing systems **Web Payments** (XR3 using chargebee)
- Crypto - Webaverse / Metamask

XR Wallet / XR Pass Roadmap

Pass portal presentation

<https://docs.google.com/presentation/d/1TYTRz7NC4BvUpRzyelfeqgfGQJxWH3O7ZCr3LEgdw4U/>

This is a top-level / tracking epic for the XR Pass / XR Wallet (or whatever we decide to call it), that provides authentication, decentralized user profile storage, (and in the future, digital signature, encryption).

Relevant Repos:

- [digitalbazaar/credential-handler-polyfill](#): Credential Handler API polyfill
- [Minimal Demo Verifier](#)
- [Minimal Demo Wallet](#) **CHAPI**
- [Minimal Demo Issuer](#)
- OLD Pull Request
 - [Integrate CHAPI Wallet as an auth method by dmitrizagidulin · Pull Request #369 · xr3ngine/xr3ngine](#)

**Specs:**

- ☐ Specify a way for a CHAPI request to suggest a wallet to the user (if the user does not have one yet), and provide a callback uri to return from wallet registration.
- ☐ Specify the format of an XR Pass authentication credential.

xr3ngine (front end):

- ☐ Wire up just-in-time account provisioning (registration for a wallet, creation of a storage user account, see above) when appropriate (on a purchase or when user wants to modify their avatar/settings)
- ☐ Implement wallet-based sign-in (would work cross-domain, on any compliant xr3ngine server).
- ☐ Modify User Profile UI to load (and save) their profile from their decentralized storage (that was).

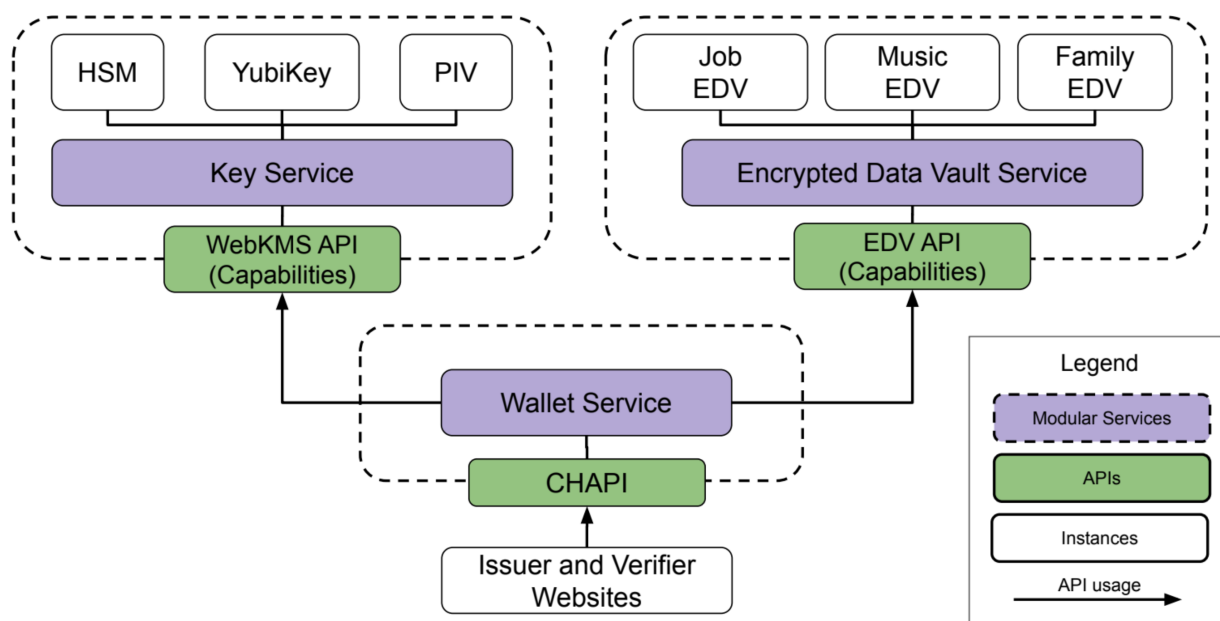
xr3ngine (back end):

- ☐ Have server generate its own DID and signing keys on installation
- ☐ Provide a proxy API for account provisioning (front-end would call the xr3ngine account provisioning API, which would in turn create a user storage account on the storage server)
- ☐ Implement a storage quota system (user can have X custom avatars for free, but beyond that should pay for more storage, etc) that serves as gatekeeper to the storage server.

DevOps:

- ☐ Register a domain for storage server
- ☐ Set up a VPS (on AWS or DigitalOcean) to host life-server in multi user mode (as a decentralized storage and wallet provider).
- ☐ Set up SMTP email server on storage server (for wallet account recovery)
- ☐ Set up exception monitoring on storage server
- ☐ Set up error log aggregation on storage server

A Simple Wallet Architecture

**MORE DETAILS**

[XR-Wallet Integration Plan](#)




XR3 system target - LOGIN with Wallet

<https://github.com/xr3ngine/xr3ngine/pull/369/files#diff-be698190a091e06a0bd4948a593057cd175c748008868a35bc7a5a9106b5891cR60>

Inspirations and Related Efforts

- Hubs
- JanusXR
- Webaverse

- Jel
- Cryptovoxels
- Neons  [Headless Instance / Server](#) Neos-Metaverse/NeosPublic#178

 1

0 comments

Category

**Ideas**

Labels

None yet

1 participant

