Webwallet for research use case

Trust & Identity Incubator Final Demo

Demo, Online

02 May 2024

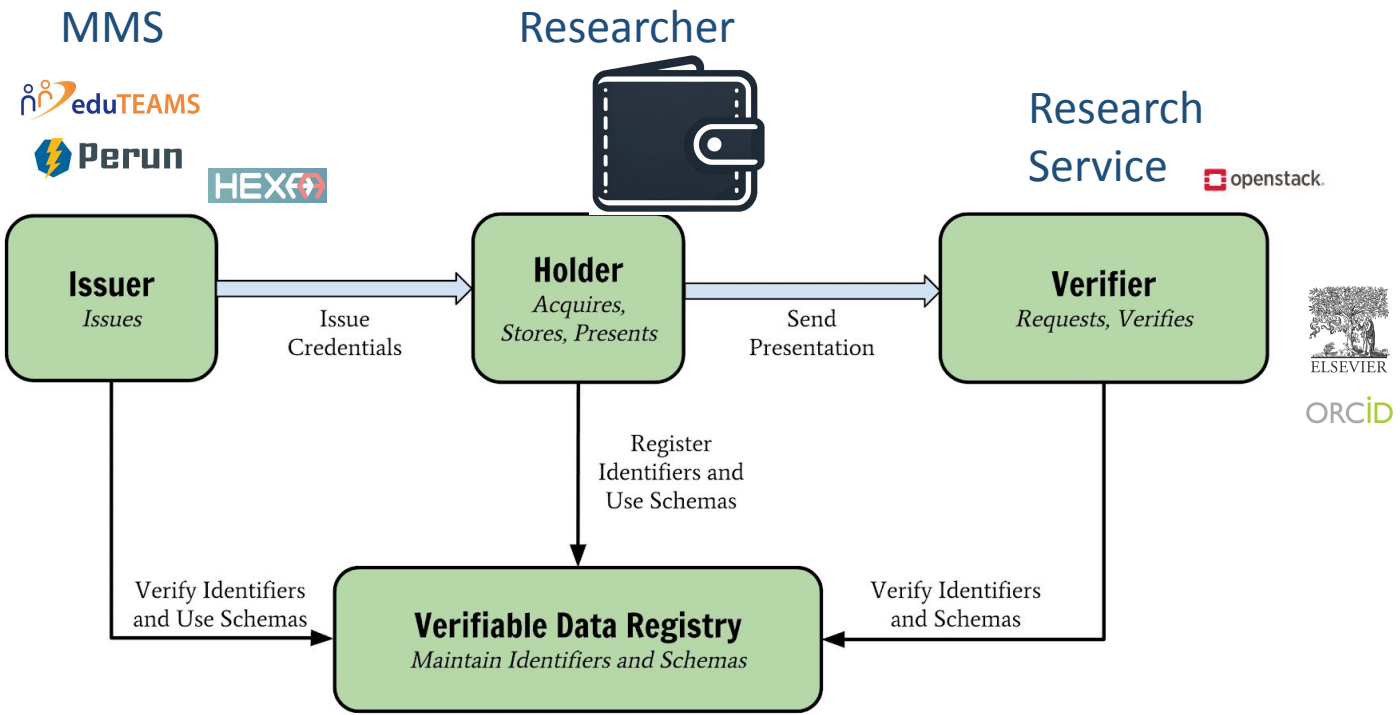
Public (PU)

GN5-1

Background of the work

- Europe is working towards a wallet-based identity ecosystem
  - The Architecture and Reference Framework (ARF) serves as a basis for the implementation of the proposal for the European Digital Identity Framework
- The initial assumption was that all interactions will be handled via an app on a mobile phone.
  - While this may suffice for many users, it will leave out groups that cannot or will not use such devices. In addition, it creates a dependency on the vendors of the devices and the software they run on
  - users may not be willing to store and aggregate work related data on a personal device
  - accessibility
- A first version of a web wallets has been developed as part of the eDiplomas Wallet Ecosystem activity
- This activity will investigated the usability of webwallet in the context of research use cases

Use case


MMS
Researcher
Research Service
eduTEAMS
Perun
HEXO
openstack
Issuer
Issues
Issue Credentials
Holder
Acquires, Stores, Presents
Send Presentation
Verifier
Requests, Verifies
ELSEVIER
ORCID
Register Identifiers and Use Schemas
Verify Identifiers and Use Schemas
Verifiable Data Registry
Maintain Identifiers and Schemas
Verify Identifiers and Schemas
eduGAIN
VOPerson
eduPerson

Work done

✅ Deployed wallet multiple times and exchanged credentials across deployments

In - alpha heavily impacted our ability to work with

✅ Create Ansible deployment script for wallet ecosystem

😀 Various code and documentation changes made to SpruceID and SSP were accepted upstream

TODO links

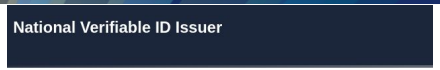
😀 Tested various passkey implementations, that seems to work well

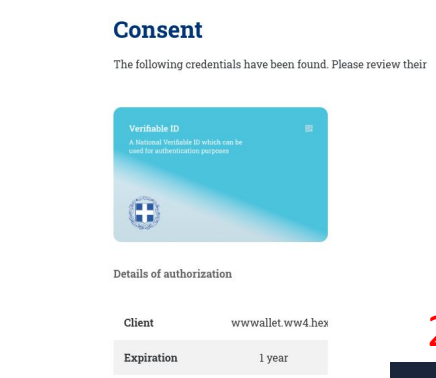
😀 Hacked SpruceID Issuer, *many* incompatibilities noted in interpretation of specifications

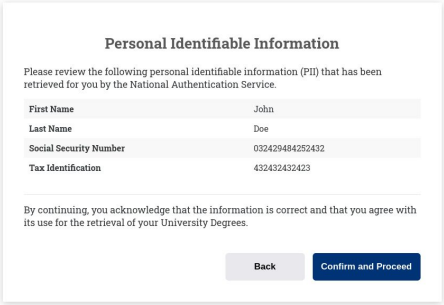
⛔ Selective disclosure not implemented

⛔ SaToSa RP implementation not testable

GUI overview







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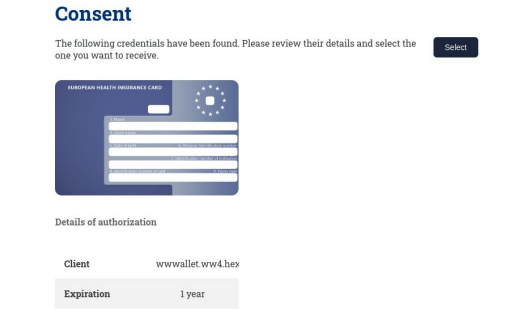

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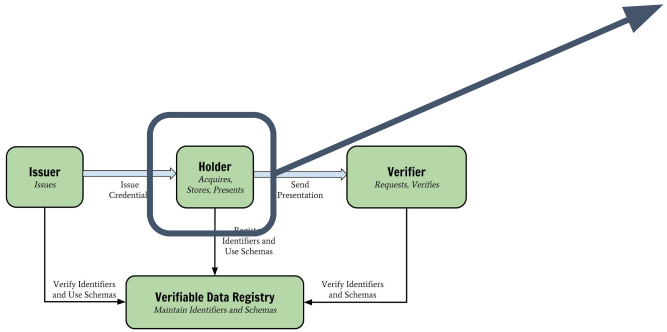
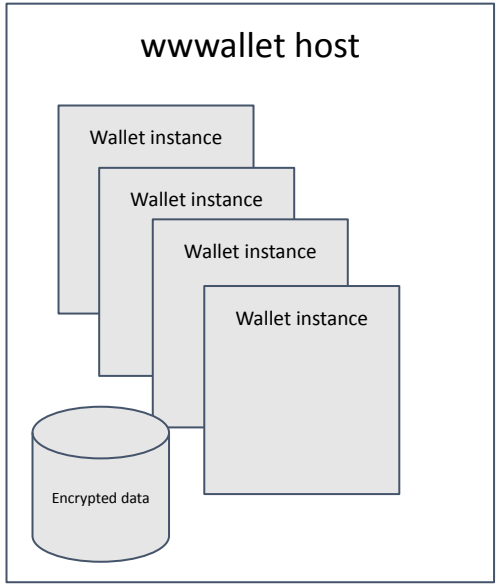
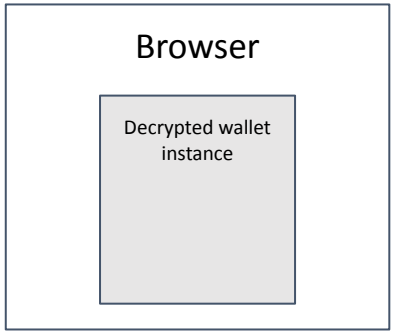
Architecture







PASSKEY

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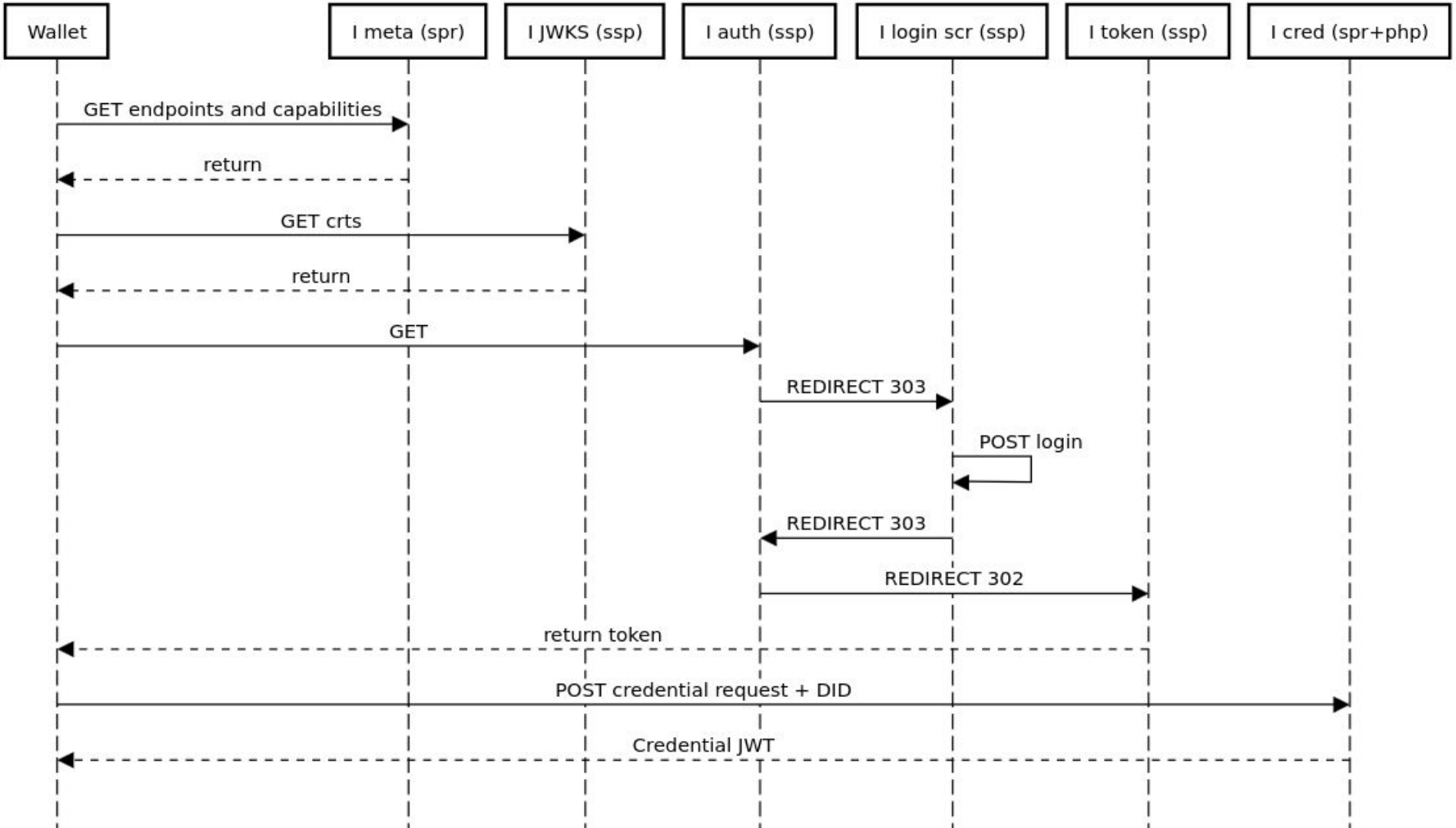
webwallet+spruce+ssp flow



Welcome to wwWallet

Learn about PRF Compatibility regarding browser/OS support and discover wwWallet via our Launchpad and Sample Scenarios

Make sure that your date/time settings and timezone are correctly set and accurate.

Login

Username

mheder

Password

••••••••••••••

Login

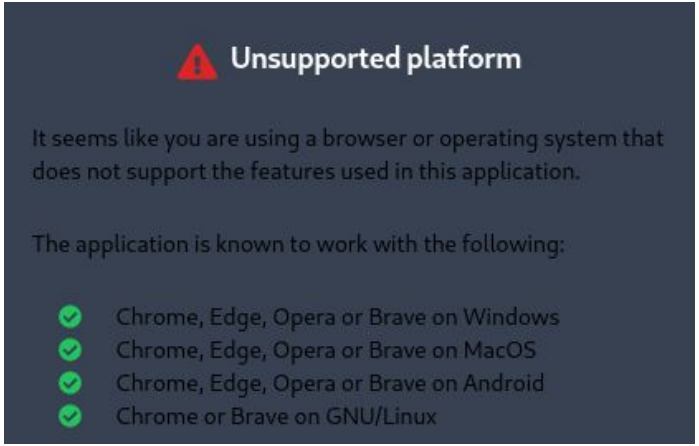
OR

Login with passkey

New here? Sign Up

Activity results

- general direction is promising
- wwwallet is in development
  - convincing PoC
- limited browser compatibility
  - details of passkey protocol
- only tested with auth code flow
- data vocabulary for research TBD



Code developed

- spruceID improvements; Simplesaml improvements; php proof-of-concept; ansible; https://gitlab.software.geant.org/TI_Incubator/wwwallet-playbook

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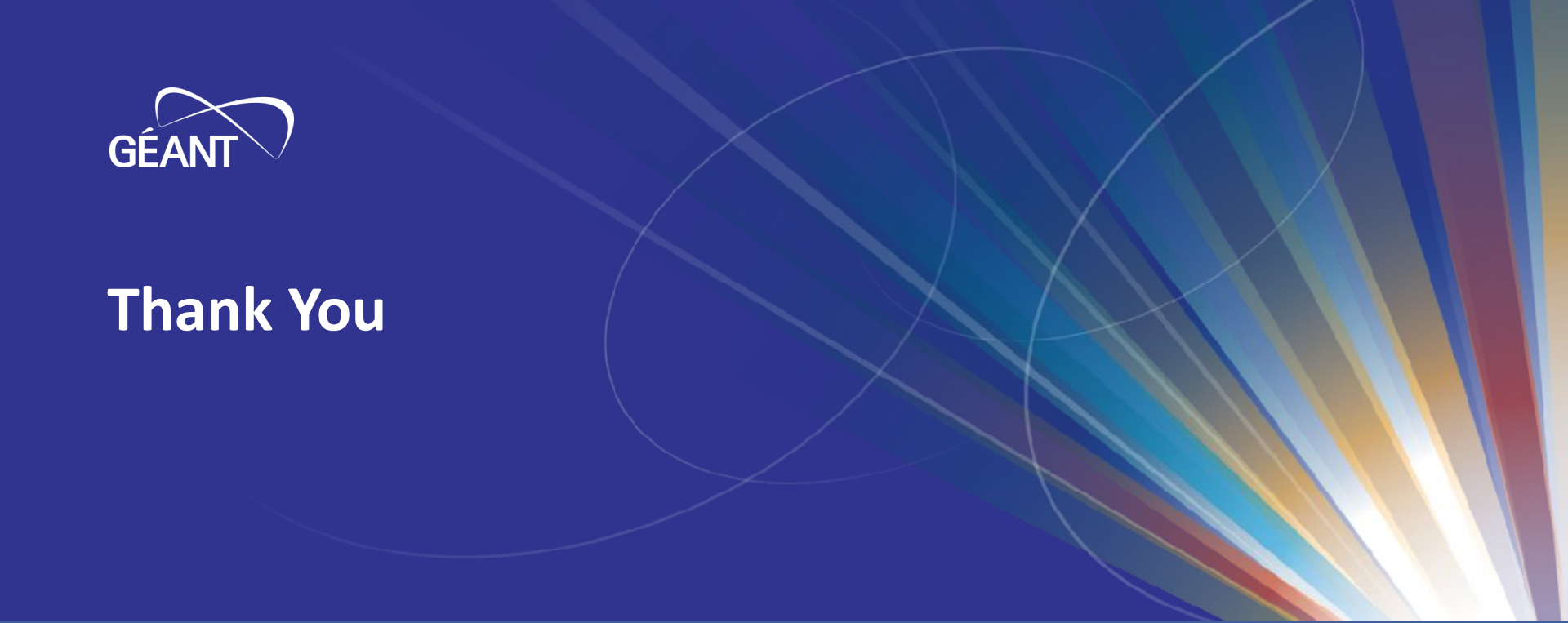

Thank You

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