



Webwallet for research use case

Trust & Identity Incubator Final Demo

Demo, Online

02 May 2024

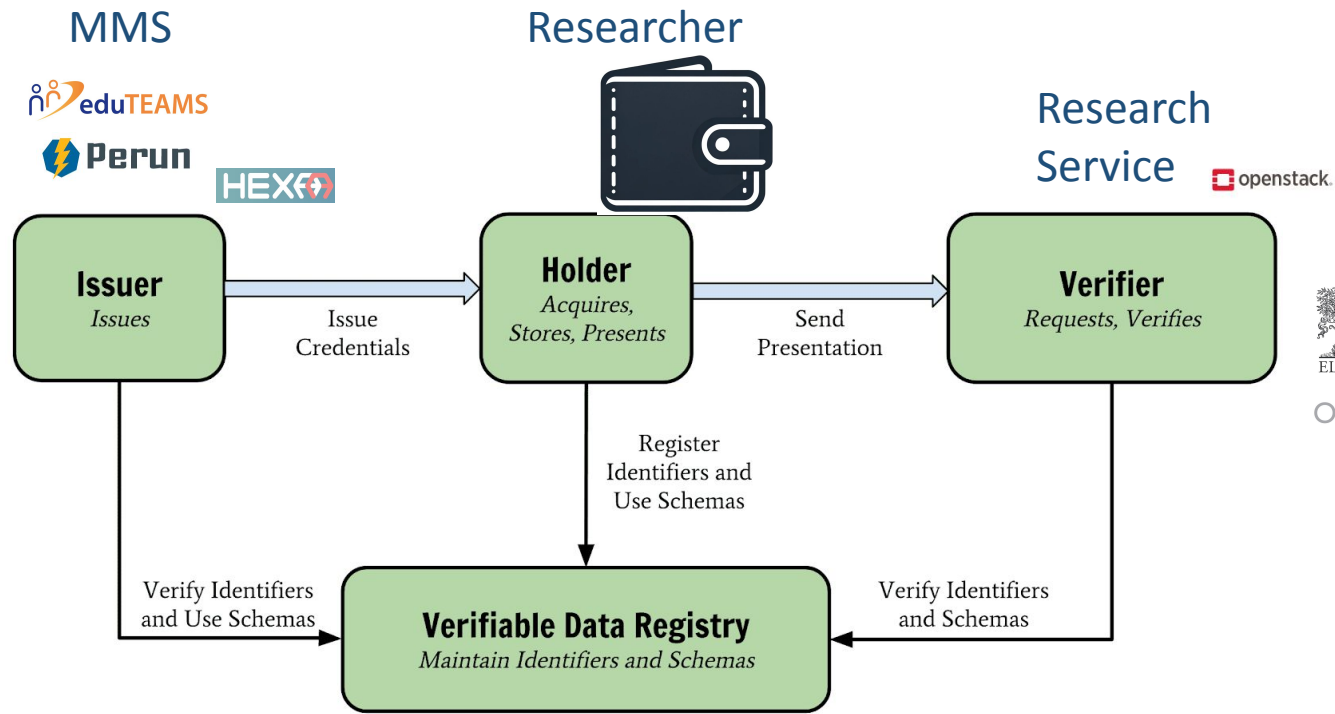
Public (PU)

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 investigate the usability of webwallet in the context of research use cases



Use case



MMS



Researcher



Research Service



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

wwWallet

Credentials

View all of your credentials, and use the 'Add new credentials' card to add more

- Verifiable ID: A National Verifiable ID which can be used for authentication purposes
- EUROPEAN HEALTH INSURANCE CARD
- University Degree Credential: A European Diploma issued by the University of Athens
- Verifiable Credential: Add New Credential

1

wwWallet

Credentials → Bachelor

View all the information about the chosen credential

- University Degree Credential: A European Diploma issued by the University of Athens
- Bachelor
- 2025. május 2. 15:24:49
- Doe
- John
- 1990-07-01
- Informatics and Telecommunications
- 6
- 8.1

3

National Verifiable ID Issuer

Consent

The following credentials have been found. Please review their



Details of authorization

Client wwwwallet.ww4.hex

Expiration 1 year

eDiplomas

DEMO

Personal Identifiable Information

Please review the following personal identifiable information (PII) that has been retrieved for you by the National Authentication Service.

First Name	John
Last Name	Doe
Social Security Number	032429484252432
Tax Identification	432432432423

By continuing, you acknowledge that the information is correct and that you agree with its use for the retrieval of your University Degrees.

Back Confirm and Proceed

2

EHIC Issuer

DEMO

Consent

The following credentials have been found. Please review their details and select the one you want to receive.

Select

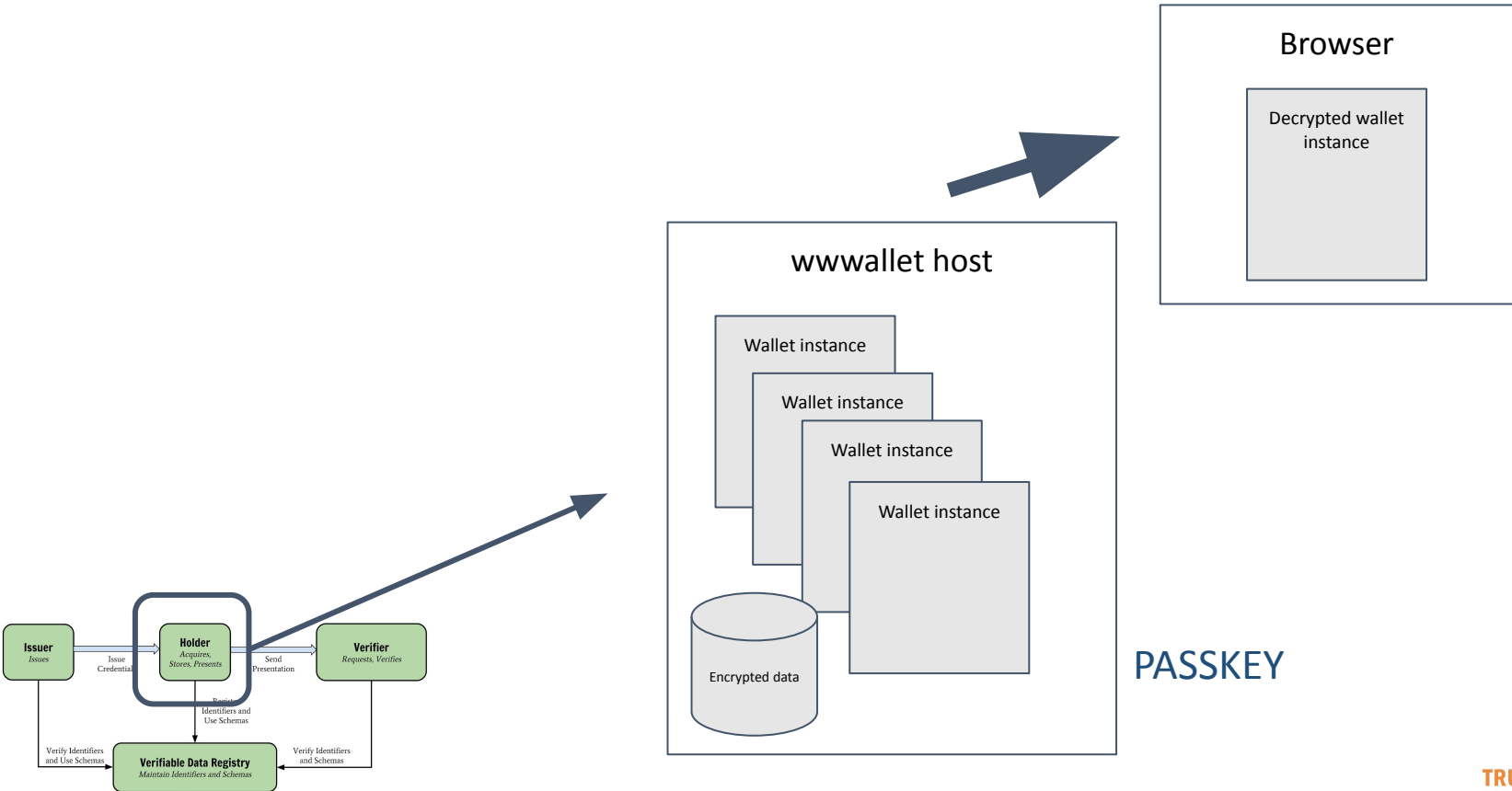


Details of authorization

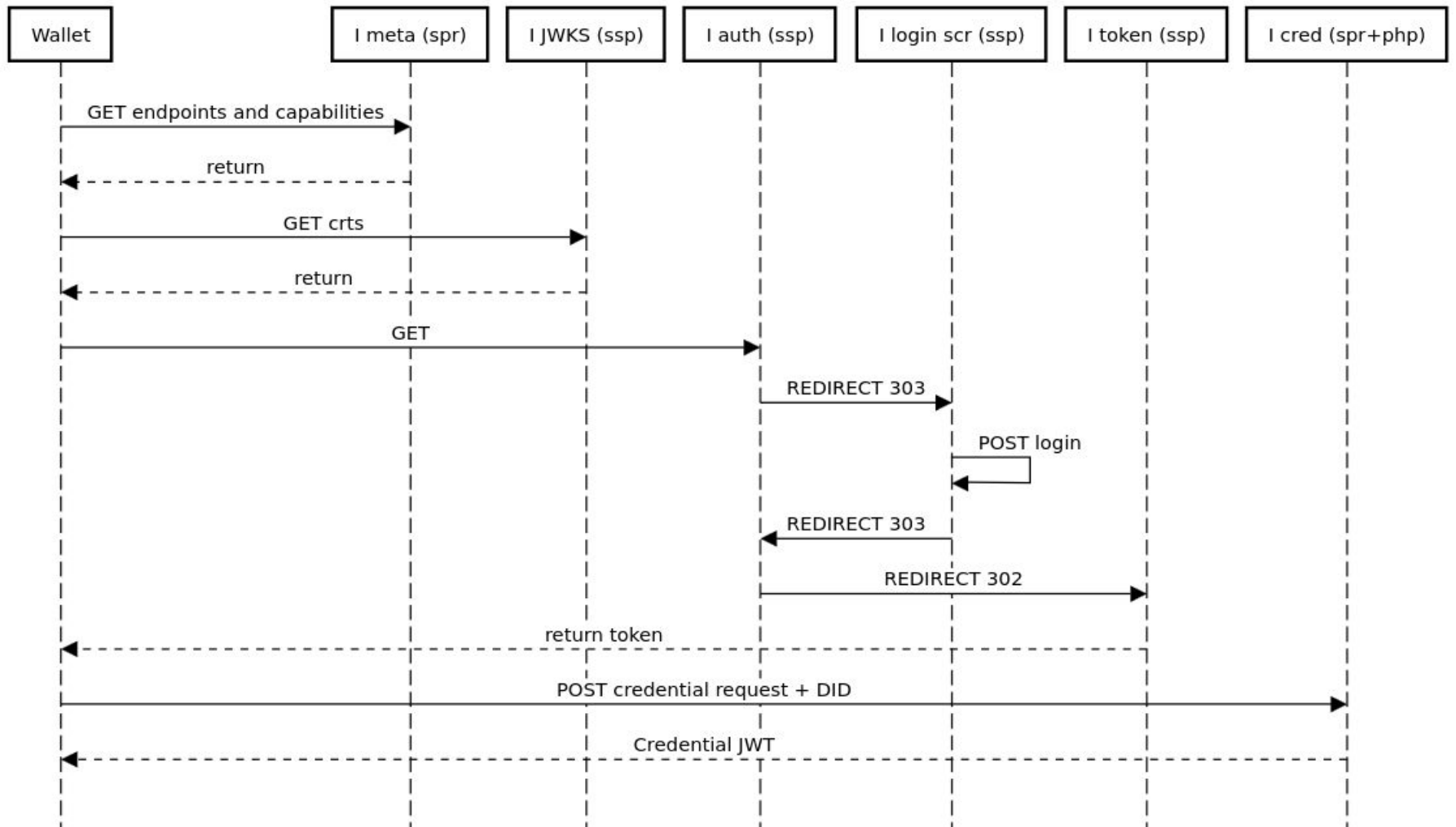
Client wwwwallet.ww4.hex

Expiration 1 year

Architecture



webwallet+spruce+ssp flow





Welcome to wwWallet

- i** Learn about **PRF Compatibility** regarding browser/OS support and discover wwWallet via our **Launchpad** and **Sample Scenarios**
- i** Make sure that your **datetime** 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



 **Unsupported platform**

It seems like you are using a browser or operating system that does not support the features used in this application.

The application is known to work with the following:

- ✔ Chrome, Edge, Opera or Brave on Windows
- ✔ Chrome, Edge, Opera or Brave on MacOS
- ✔ Chrome, Edge, Opera or Brave on Android
- ✔ Chrome or Brave on GNU/Linux

Code developed

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



Thank You

www.geant.org



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