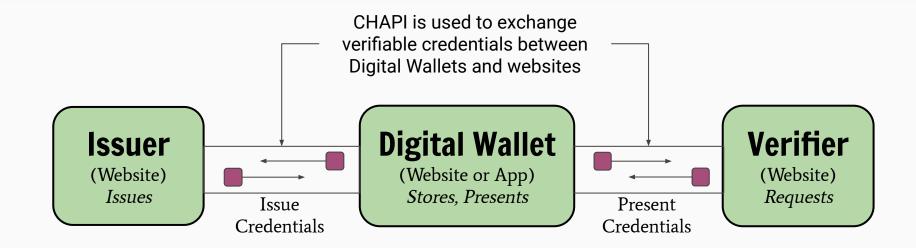
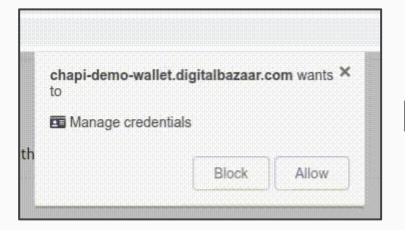
2022 FedCM CG + CHAPI Credential Handler API

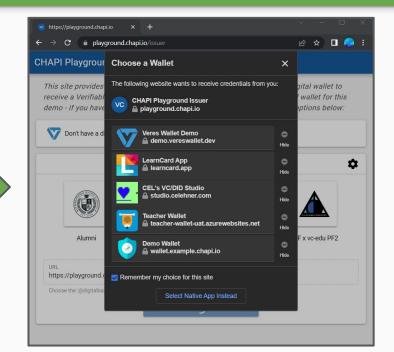
CHAPI in One Picture



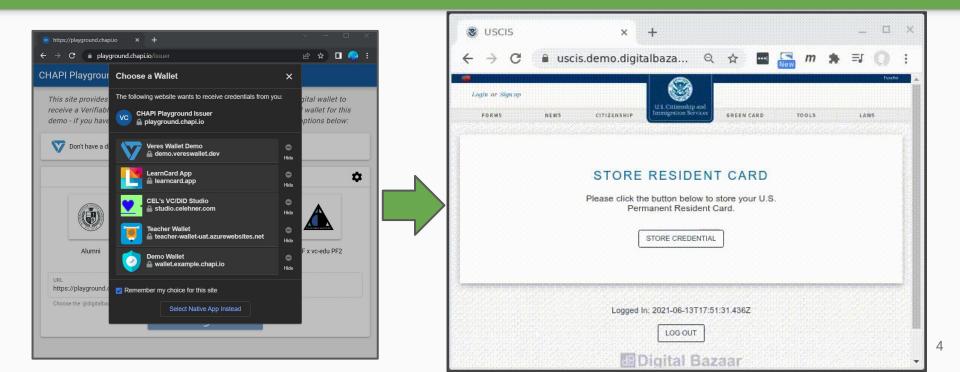
Analogue: FedCM APIs are used to exchange identity claims between IdPs and websites.

Digital Wallet Registration

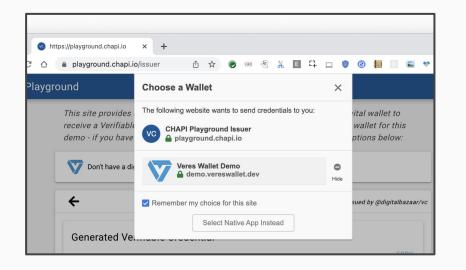


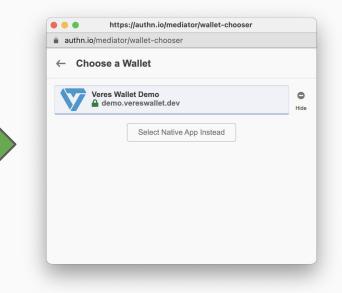


Digital Wallet Selection



Degrades when 3rd-party cookies unavailable





Interoperability Overview CHAPI and VC-API







81 Combinations Demonstrated

17 different Issuers

14 PlugFest participants 3 from the broader VC-API community

8 different wallets

5 web wallets 3 native mobile apps



Goals and Non-Goals

• Goals

- Explore commonalities between FedCM and CHAPI UX
- Explore benefits of FedCM APIs that replace 3rd party cookies
 - CHAPI uses 3rd party cookies, but downgrades to a 1st party window if needed
- Replace parts of CHAPI polyfill with FedCM APIs (if it leads to a better UX)
- Non-Goals
 - "Standardize" Verifiable Credentials and Decentralized Identifiers APIs
 - Solve generalized sharing of data between Websites/Apps (e.g., Web Share)

Discussion

FedCM Issue #374

TL;DR; Wallet selection in CHAPI is built with iframes and third party cookies. This is an exploration if

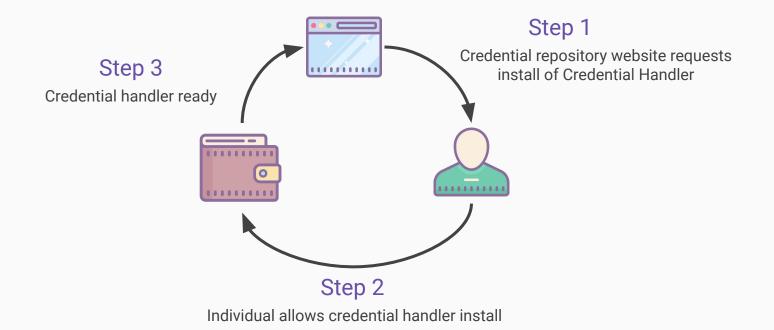
FedCM can help preserve it.

https://github.com/fedidcg/FedCM/issues/374

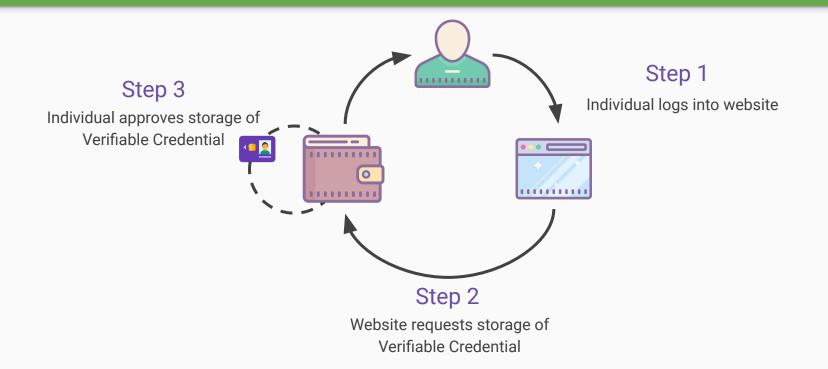
Appendix

CHAPI Details

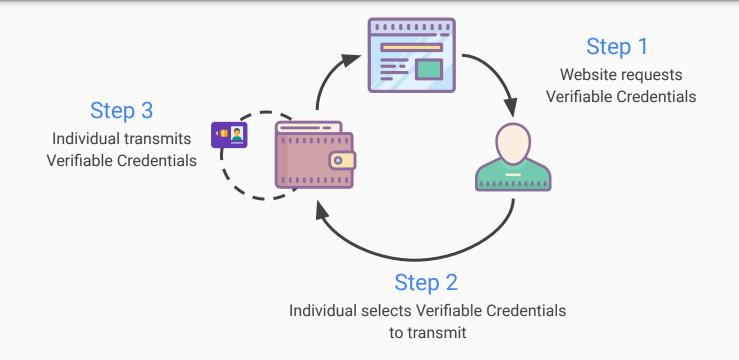
Credential Handler Registration



Verifiable Credential Storage



Verifiable Presentation Request



CHAPI Timeline

- 2014 Identity Credentials protocol proposed
- 2017 <u>Web Payments Handler</u> written by Dave Longley
- 2017 <u>CHAPI Specification</u> created by Dave Longley
- 2017 CHAPI adopted as W3C CCG Work Item
- 2020 DHS SVIP Interop (6 companies interop)
- 2022 JFF Interop (17 companies interop)

Related Specifications and Code

Demo site: https://playground.chapi.io/issuer

Developer Documentation: <u>https://chapi.io/</u>

CHAPI Polyfill: https://github.com/credential-handler/credential-handler-polyfill

CHAPI Specification: <u>https://w3c-ccg.github.io/credential-handler-api/</u>