



# UCVDCC PHASE 1 DEMO DAY

2021-04-21

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# Agenda



- ✓ SecureKey and TrustBloc
- ✓ TrustBloc objectives (w3c, DIF, Aries)
- ✓ Why this work is important
- ✓ CHAPI and Demo 1
- ✓ DIDComm and Demo 2
- ✓ Test Suites
- ✓ What's Next

# SecureKey + TrustBloc



- ✓ SecureKey Technologies has been in the federated identity and authentication space for 10+ year
  - ✓ Concierge and Connect.Gov
  - ✓ BC Services Card and SecureKey Connect
  - ✓ Verified.Me and TrustBloc
- ✓ TrustBloc is a standards focused open source project for SSI
  - ✓ Implements and integrates to Open/Standard APIs and data models.
  - ✓ Platform for developing SSI solutions for customers and industry.
  - ✓ Platform for exploring SecureKey principles on SSI components.

# TrustBloc Project



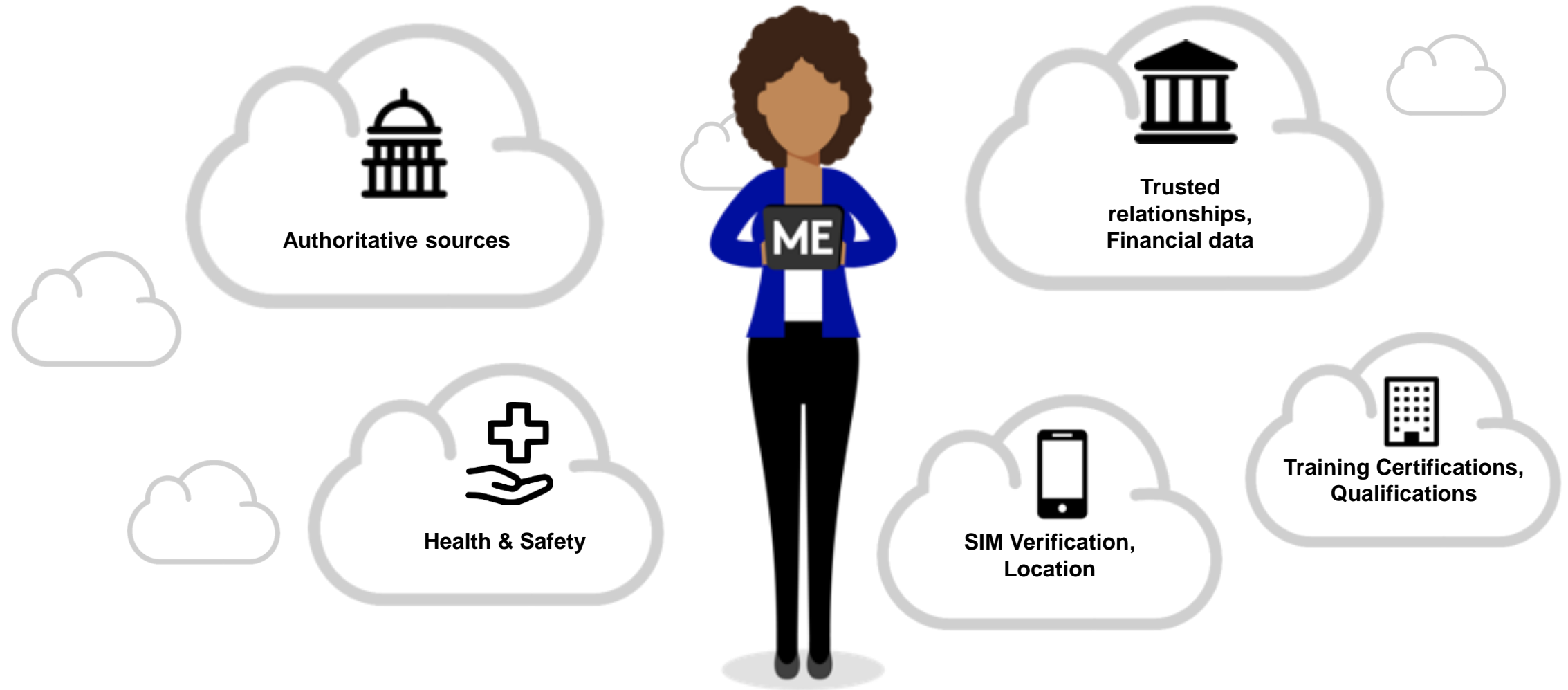
- ✓ What Standards and open specs?
  - ✓ W3C and CCG (DIDs, Verifiable Credentials, vocabularies...)
  - ✓ DIF (Sidetree, Presentation Exchange, ...)
  - ✓ Hyperledger Aries (Exchange Protocols, Mediators,...)
  - ✓ IETF (GNAP)
  
- ✓ Golang based implementations
  
- ✓ Concepts and Projects:  
<https://trustbloc.readthedocs.io/en/latest/>
  
- ✓ Join us on GitHub  
<https://github.com/trustbloc>

# Why this work is important



- ✔ Supports a cloud wallet, browser wallet, and native mobile wallet.
- ✔ Multiple sources can be used in a single transaction, including selective disclosure.
- ✔ Ability to share protected attributes, limiting unauthorized disclosure.
- ✔ Ledger independence.
- ✔ Enables real-time claims in addition to stored claims for provenance and accuracy.
- ✔ Enables Financial Institutions with their strong customer authentication and trust relationship to act as a 'Safety Deposit Box' for their customer's digital identity assets.
- ✔ Usable across all platforms without the need for a physical device.
- ✔ Enables 7x24 bi-lingual customer support including call center.

# Proving you are you, digitally



# Value of Interoperability



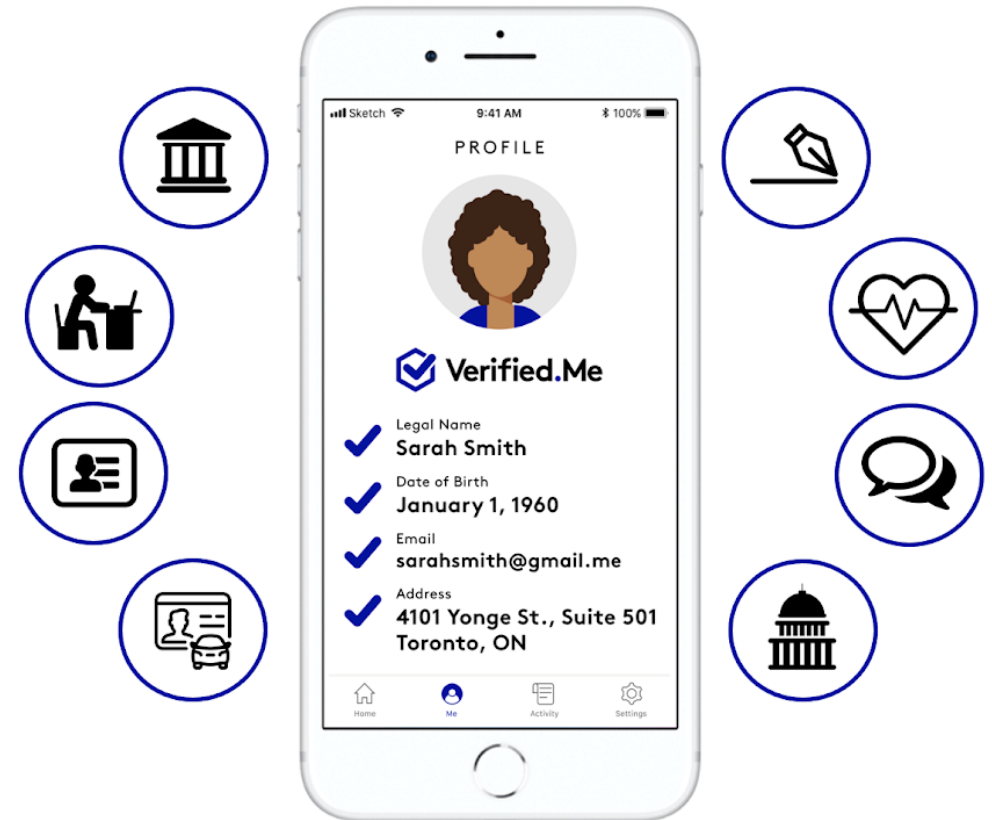
Enables Networks of Trust:

- ✓ Digital assets can now easily cross trust domains.
- ✓ Increases personal protection and data reliability.

Reduces solution costs, leveraging:

- ✓ 'Utility' infrastructure like wallets and ledgers.
- ✓ Common 'vocabulary' for data.

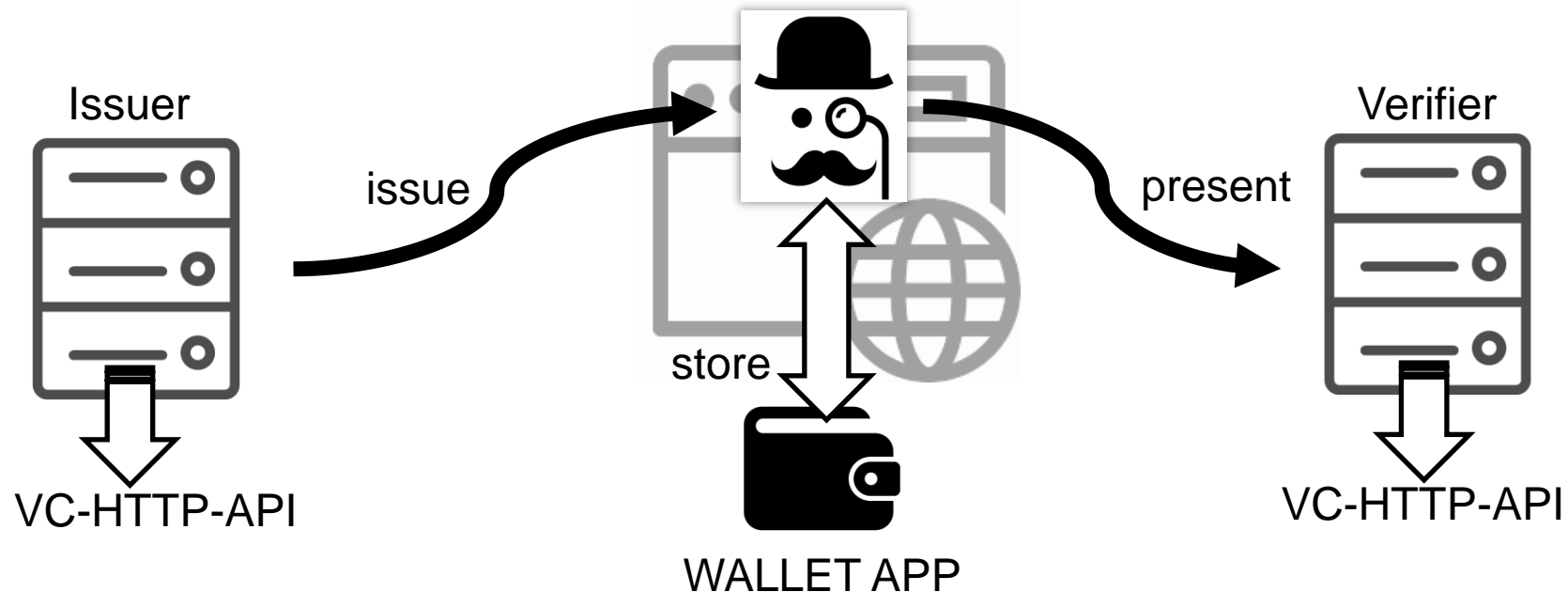
Reduced risk of vendor lock.



# Exchange through CHAPI



- ✓ Credential Handler API, W3C community draft specification.
- ✓ Allows 2 web apps to communicate through the browser.
- ✓ Meant to be part of the browser (simulated with JavaScript).





# Demo 1: Flight Check-in



## 1. Check-in Prep

The screenshot shows the Taylor Chartered Flight website. The header includes the Taylor logo and navigation links for Home and Information. The main heading reads "Fly with Taylor Today! Anywhere within the Tri State Area for an affordable price." Below this, a section titled "Flight Check-In: Digital ID Verification and Proof of Vaccination" states: "We will be asking for the Digital Credentials for the following:"

Requirement	Details
Taylor Charter Flights Booking Reference	Your booking reference obtained when you purchase your ticket
TSA REAL ID	A TSA Real ID compliant identity credential, including: <ul style="list-style-type: none"><li>Passport</li><li>US Permanent Resident Card</li></ul>
Vaccination Proof	For the safety of our crew and fellow guests, we require a proof of vaccination against COVID-19. We only require the date of the vaccination not the full certificate. <a href="#">See the list of approved issuers</a>
Browser-Linked Wallet	If your <a href="#">Digital Wallet Service provider</a> is linked to your browser, use this option to continue in browser
Mobile Wallet	

A green button labeled "Proceed in Browser" is visible at the bottom of the requirements section.

## 2. Wallet Login

The screenshot shows the TrustBloc mobile app login screen. It features a "Log In" section with fields for "Email Address" and "Password", and a "Log In" button. Below this is a "Forgot Your Password?" link and an "Or Log In with" section containing icons for Apple, Google, and a bank.

## 3. Request Review + Consent

The screenshot shows the "Requested Credentials" screen in the TrustBloc mobile app. It lists three credentials: "U.S. Permanent Resident Card" (Verified Credential), "Taylor Chartered Flights" (Booking Reference Number), and "COVID-19 Vaccination" (Verified Credential). Each credential has a right-pointing arrow. At the bottom are "Decline" and "Share Credentials" buttons.

The screenshot shows the "Requested Information" screen in the TrustBloc mobile app. It displays "COVID-19 Vaccination" (Verified Credential) and "What's Being Shared" information: Vaccination Date (2021-04-02), Vaccination Location (RCSJ-Mega), and Product Name (Pfizer). Below this is a "What's Not Being Shared" section with fields for Name, Date of Birth, and Lot Numbers. A "Back" button is at the bottom.

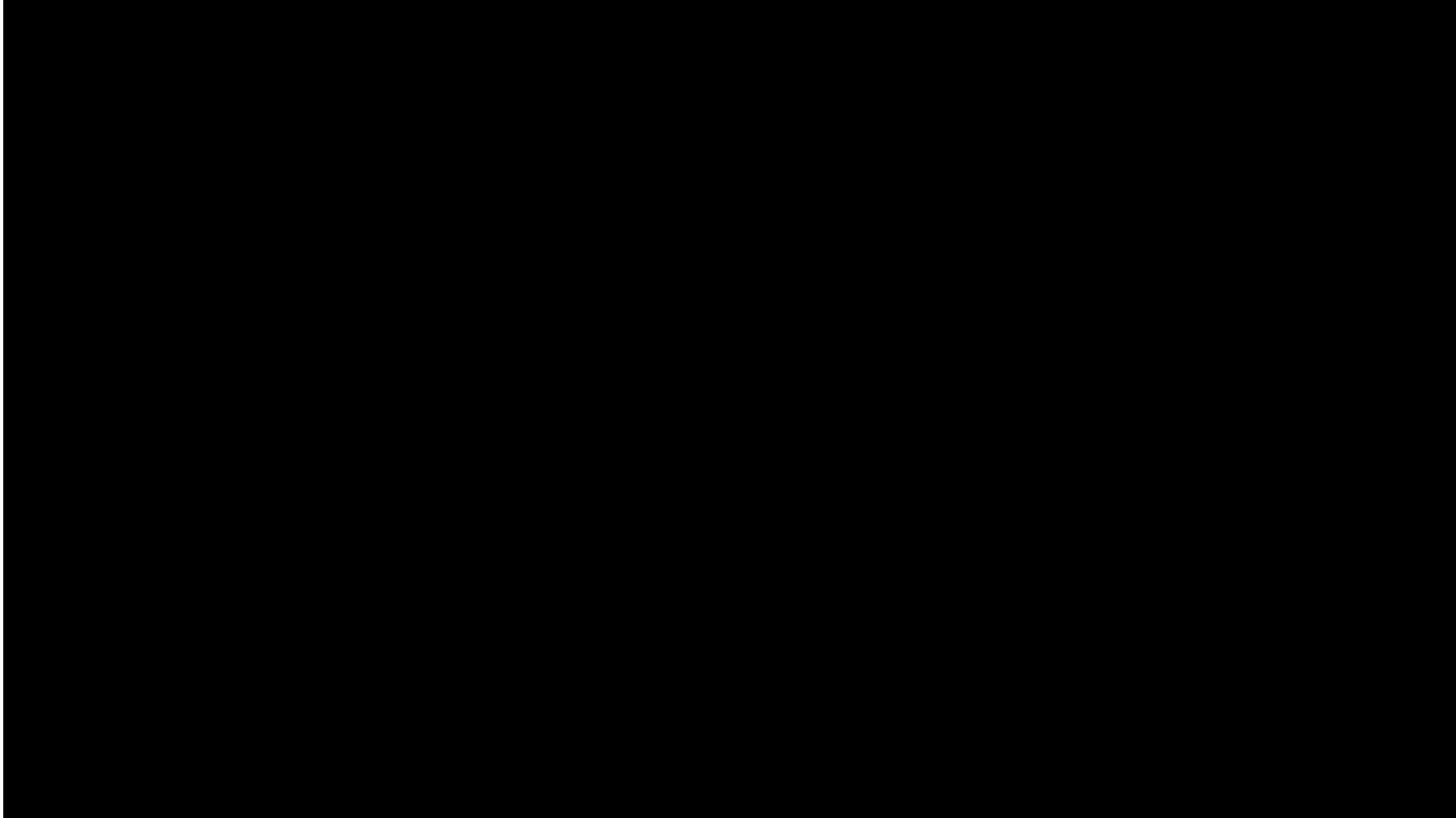
## 4. Confirmation Screen

The screenshot shows the Taylor Chartered Flight confirmation screen. It features a green "Check-In Successful" message. Below this, it states "Your Information is collected by Taylor Airlines:" and displays the following information:

BOOKING REFERENCE:	
Booked By	Taylor Chartered Flights
Booking Ref No.	959178
REAL ID:	
Country of Birth	Bahamas
Date of Birth	1958-07-17
Given Name	Pasteur
USCIS #	Louis
999-999-999	
VACCINATION INFO:	
Vaccination Location	NZ
Type	VaccinationEvent

At the bottom are two buttons: "Get Your Boarding Pass" and "Choose your seat Selection".

# Demo 1: Flight Check-in Video

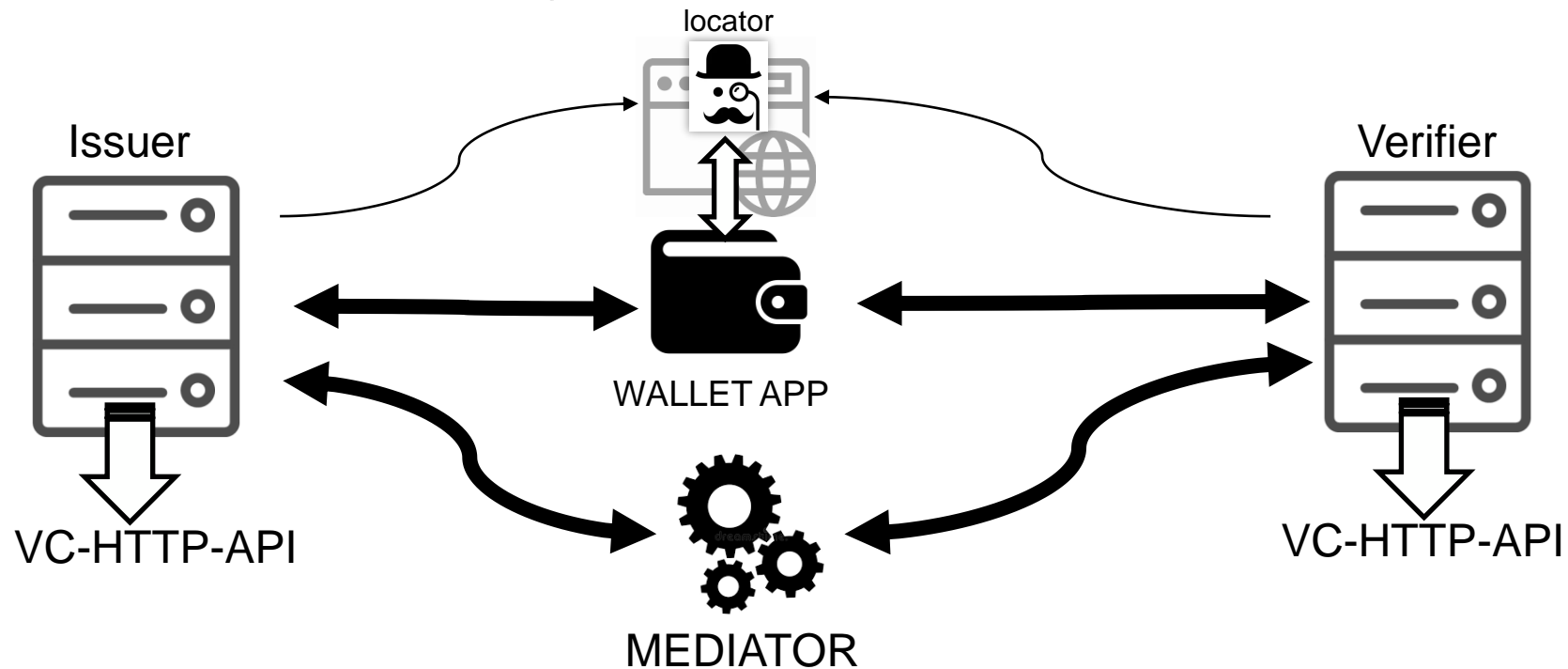


<https://youtu.be/5cl8KrF4xuM>

# Exchange through DIDComm



- ✓ DID Communication protocol: Aries/DIF open specification.
- ✓ Allows cloud apps to communicate over secure channels.
- ✓ End-to-end authentication and encryption based on DIDs.
- ✓ Supports communication through Mediators.



# Demo 2: Aries + DIF Protocols



Exchanges a “stored” driver’s license credential, a real-time Credit Report, and a real-time attestation as to how the DL credential was verified at issuance.

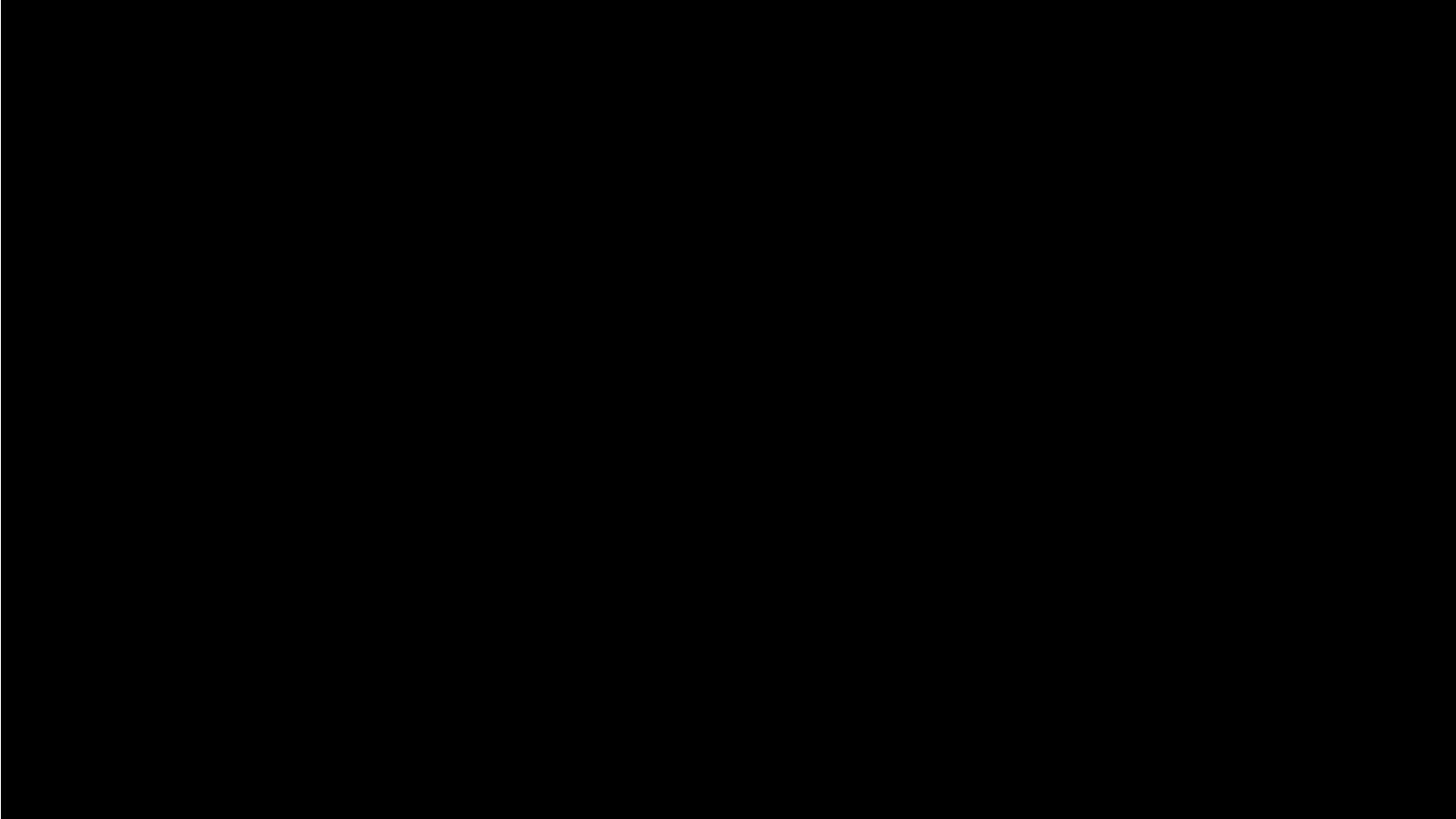
Uses:

- ✓ TrustBloc systems based on Aries RFCs.
- ✓ DIDComm protocol for system to system (agent-to-agent) communication.
- ✓ Messages defined in Hyperledger Aries RFCs.

Demo 2A: DIDComm issuance of Driver’s License, DIDComm connection to Credit Bureau, DIDComm presentation and real-time data transfer to Verifier.

<https://youtu.be/kAp86MN9y-0>

# Demo 2



# Test Suites



## W3C VC-HTTP-API

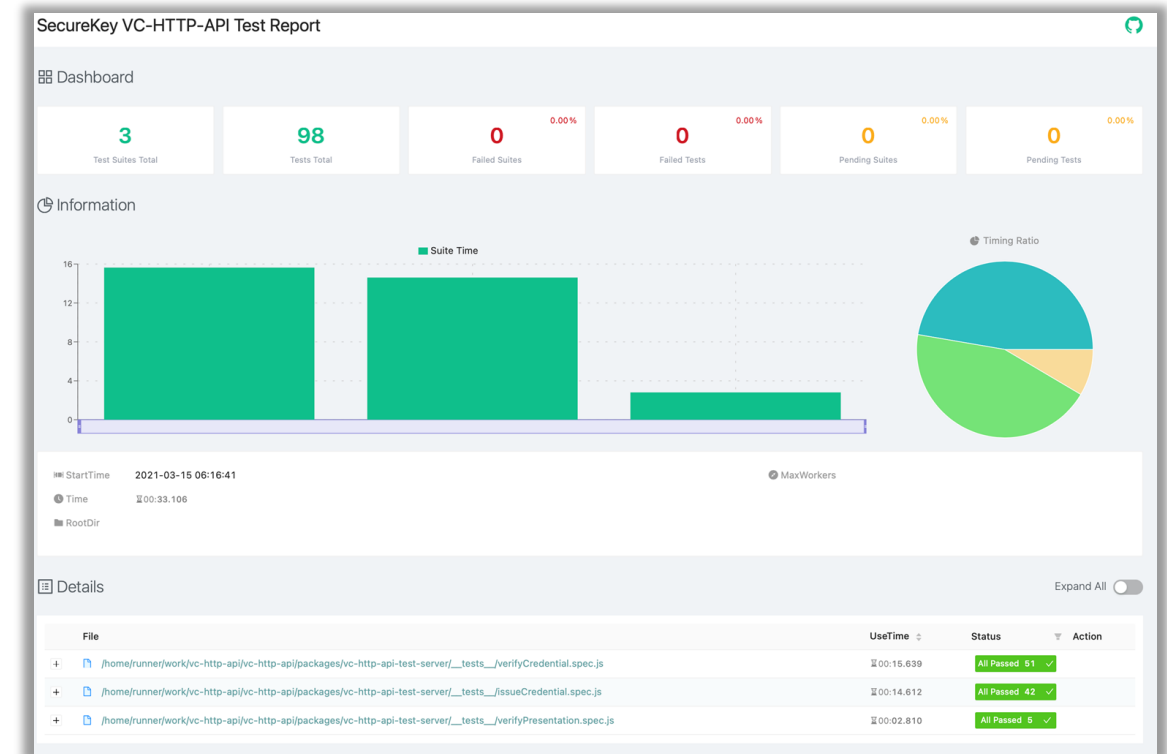
✓ <https://w3c-ccg.github.io/vc-http-api/test-suite/securekey/index.html>

- ✓ Includes BBS+ signature suite tests
- ✓ Includes RevocationList2020 tests

## CHAPI Automated Test Results

✓ <https://github.com/trustbloc/chapi-interop-test-suite>

- ✓ Digital Bazaar ← *Original test authors*
- ✓ DanubeTech
- ✓ Transmute
- ✓ MATTR (in flows)



# What's Next



### Permanent Resident Card

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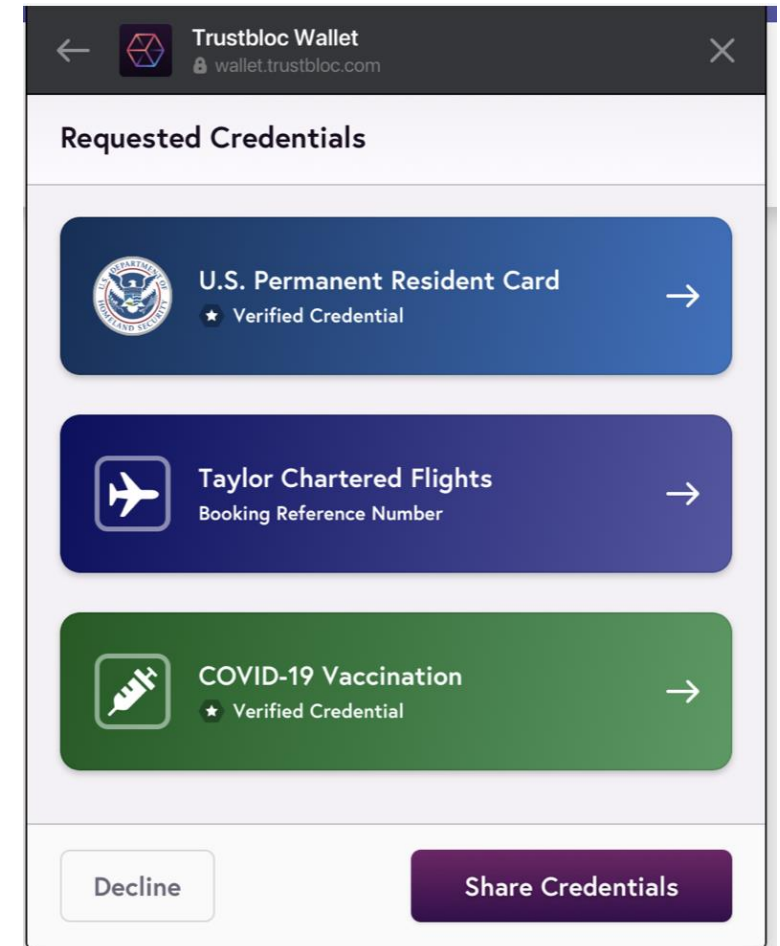
[Add to wallet](#) Or scan QR code in mobile wallet

[Learn more about Verified Credentials](#)

A square QR code with a circular seal in the center. The seal features an eagle with wings spread, perched on a shield, with the text "U.S. DEPARTMENT OF HOMELAND SECURITY" around it.

## More Interop!

- Aries Interop Profile v2 (BC / ISED)
- Improved UI (Web and Mobile)
- W3C and DIF





# Thank-you

