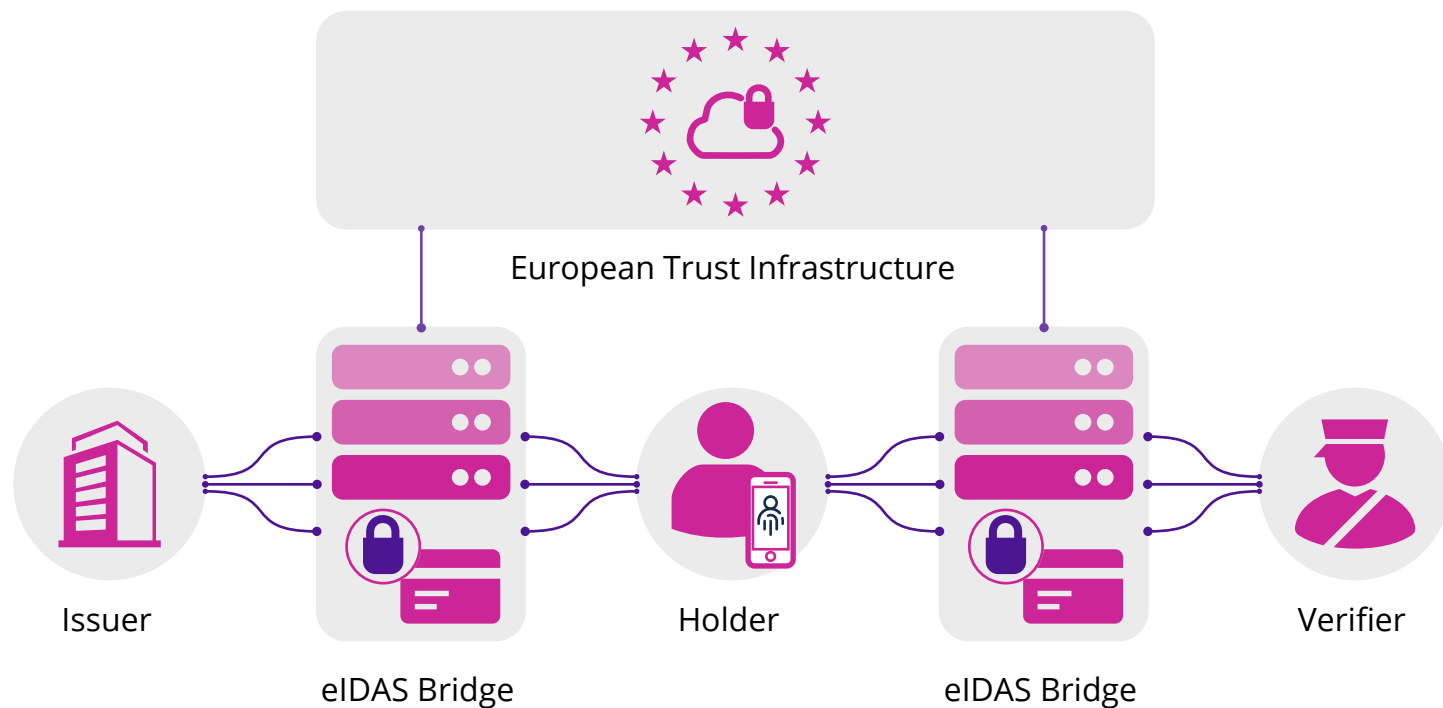# eIDAS Bridge & Interoperability

Problem

A core assumption within standard SSI architectures is that the verifiers have an existing mechanism which forms the basis of trust with the identity of an issuer; i.e. how do I know I can trust an issuer if all I know about them is their DID? The eIDAS Bridge fills this gap by using the existing European trust infrastructure formed by the estabishment of the eIDAS regulations to solidify the relationship between issuers and verifiers.

European Trust Infrastructure

Issuer   eIDAS Bridge   Holder   eIDAS Bridge   Verifier

Solution

The eIDAS Bridge is an API component, designed for use by both issuers and verifiers, that exposes qualified signature and validation functionality. By creating a standardized interface to issue and verify Verifiable Credentials (VCs) we are laying the goundwork to for individuals or organizations to make legally-binding claims in the form of W3C conforming VCs with eIDAS compliant CAdeS signatures. This gives verifiers a mechanism to relate a credential's issuer back to a legal entity, and uses existing trust stystems to establish confidence in the assertions made in Verifiable Credentials.

Functionality

The eIDAS Bridge exposes the following functionality to link Verifiable Credentials to facilitate the connection between eIDAS compliant signatures and Verifiable Credentails.

- Issue eIDAS credentials
- Verify eIDAS credentials
- Import certificates

Why interoperability?

A focus on specifications and interoperability ensures that users who create Verifiable Credentials with an eIDAS seal can be confident their credential is verifiable by other parties, regardless of which eIDAS Bridge provider they are using to verify with. The set of tools developed by Off-Blocks , Sphereon, and eSSIF-Labs members to enable interoperability and standardization include:

- Standardized api definition
- Test suite and example credentials
- Signature suite definition
- Independent implementations to test against

Off-Blocks

Off-Blocks provides a platform (both mobile and web) designed to replace traditional electronic signing solutions. We put SSI in the hands of individuals and organizations by enabling them to sign any digital object (pdf document, images, video) using a publically resolvable, user controlled, digital identity (DID). The addition of the eIDAS Bridge to our solution will enable these signing identities to be further strengthened through the use of associated assertions, in the form of Verifiable Credentials, which have been certified by eIDAS verifiable legal entities. This merges the system of trust built by the eIDAS regulations with the core functionality of Off-Blocks.

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