



Enabling exchange of X.509 signed personal data using VC



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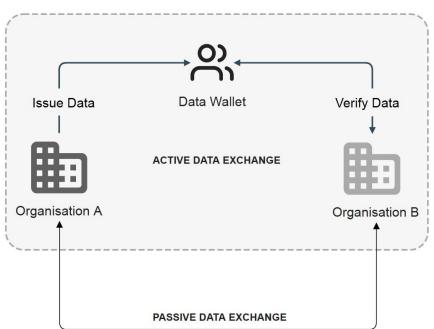
ESSIF-LAB

iGrant.io platform: For access to right data



iGrant.io platform: B2B solution offering

DATA INTERMEDIARY SERVICES



DATA REG. COMPLIANCE

USER PREFERENCE MANAGEMENT

DATA WALLET



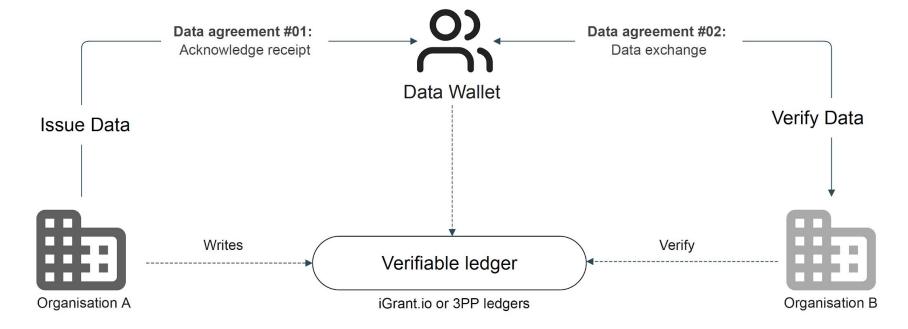
Transition existing X.509 certificate signed documents to verifiable credentials to bridge the gap between existing PKI infrastructure and SSI





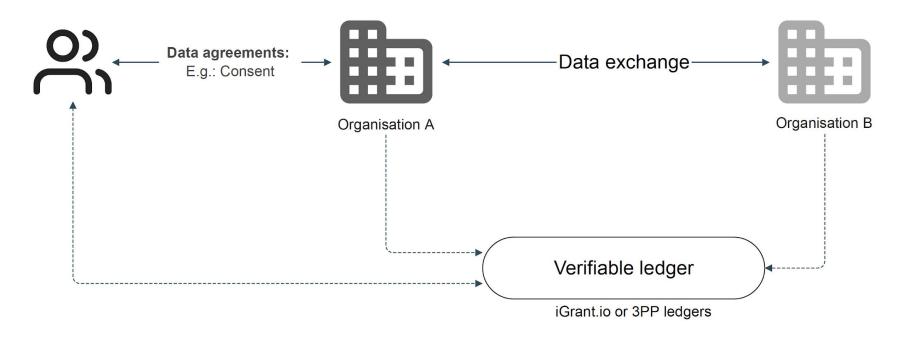
Data Wallet Demo: https://www.youtube.com/watch?v=YrS5RNHhBqI

iGrant.io: Active data exchange w/ data agreements

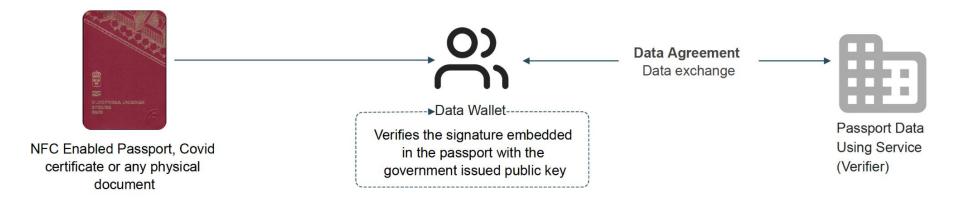




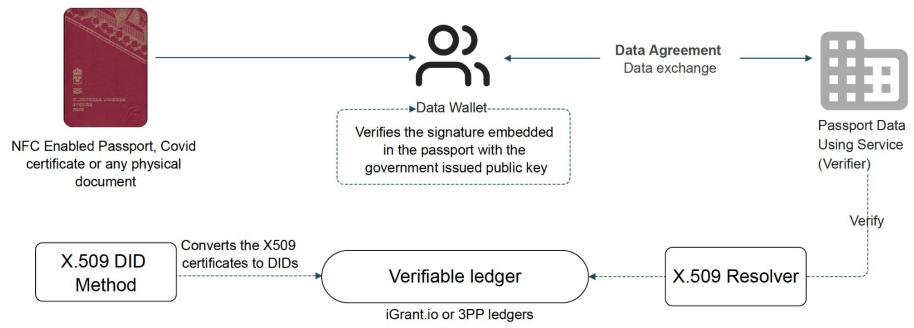
iGrant.io: Passive data exchange w/ data agreements



Physical certificate, e.g. NFC enabled passport



Physical certificate, e.g. NFC enabled passport using DID verification



Open questions/Current challenges

- Where can we get the public keys of government passports that could be used commercially? Is there a "web-of-trust" system for passport authorities within EU, globally? E.g. <u>ICAO Master list</u>
- Existing physical identifiers are designed for full disclosure.
 - How do we enable selective disclosure for physical identifiers?
 - How do we enable zero knowledge proofs for existing physical identifiers when converted to verifiable credentials?
- What is the best way for the verifier to verify the issuer of the data?

References

- did:mydata for data agreements: Specification
- Decentralising PKI with DIDs
 - WIP: did:x509
 - https://github.com/spruceid/ssi/issues/117
 - X509 certificates to DID
- W3C Vaccination Certificate Vocabulary https://w3c-ccg.github.io/vaccination-vocab/

Demo videos:

Data Wallet Demo: https://www.youtube.com/watch?v=YrS5RNHhBql

Documentations:

- Sustainable data exchange whitepaper
- https://docs.igrant.io/docs/
- https://igrant.io/whitepaper.html



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