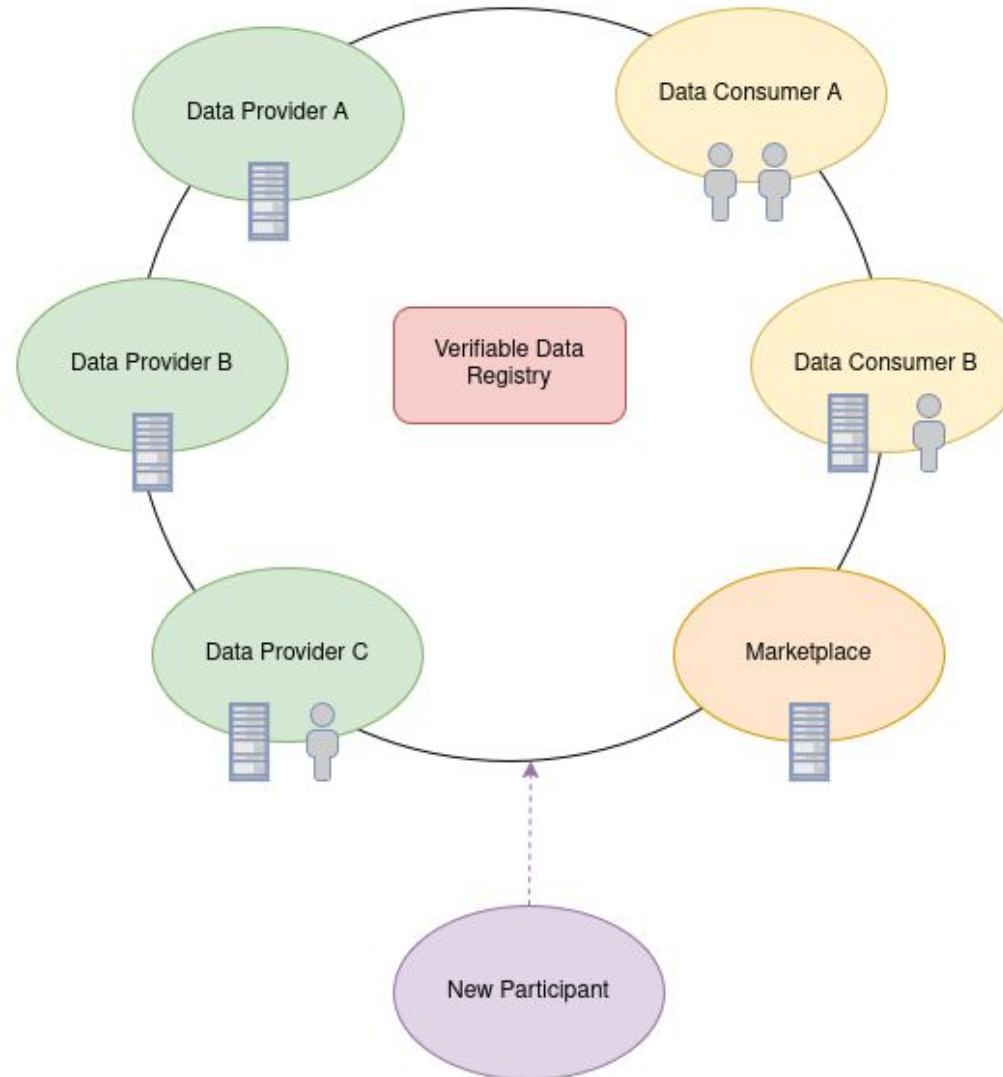


Data Space Onboarding with Gaia-X Credentials

Stefan Wiedemann - Senior Software Engineer



The Problem



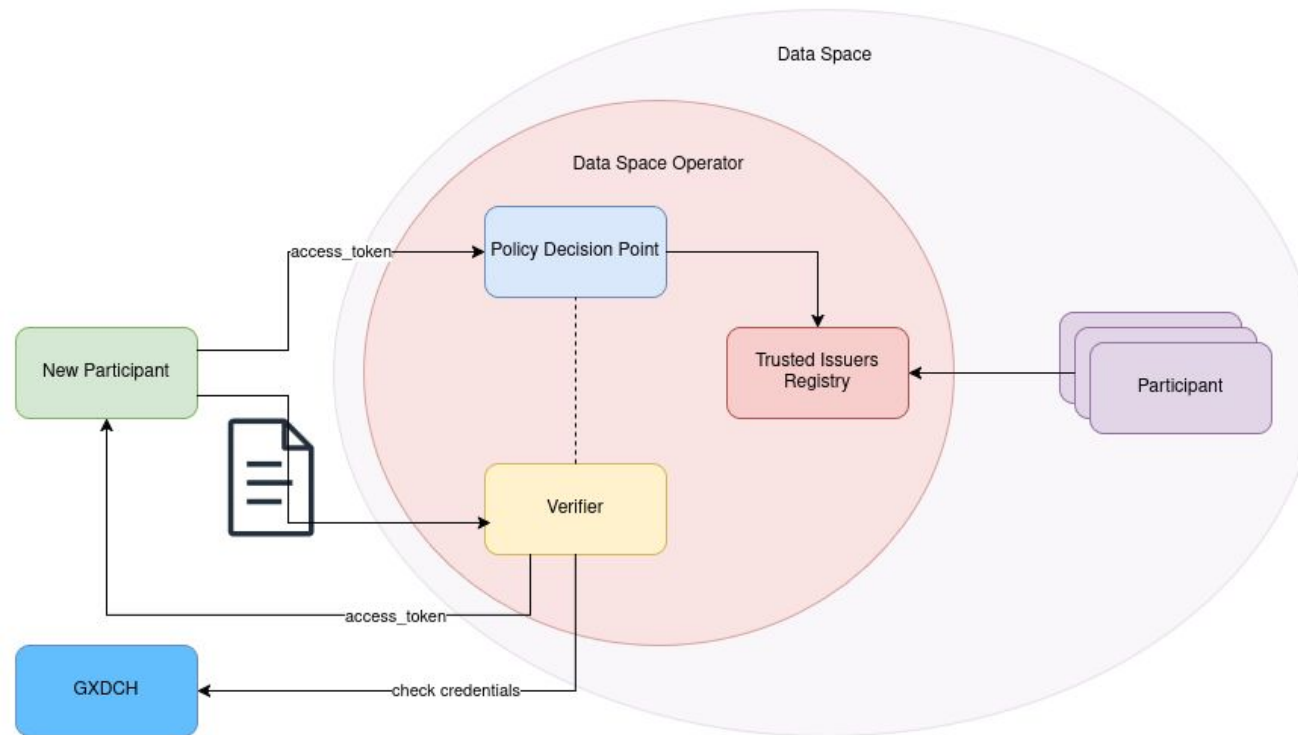
The Problem

- Entry rules for the Data Space fulfilled?
- Terms and Conditions?
- Signed Contracts?



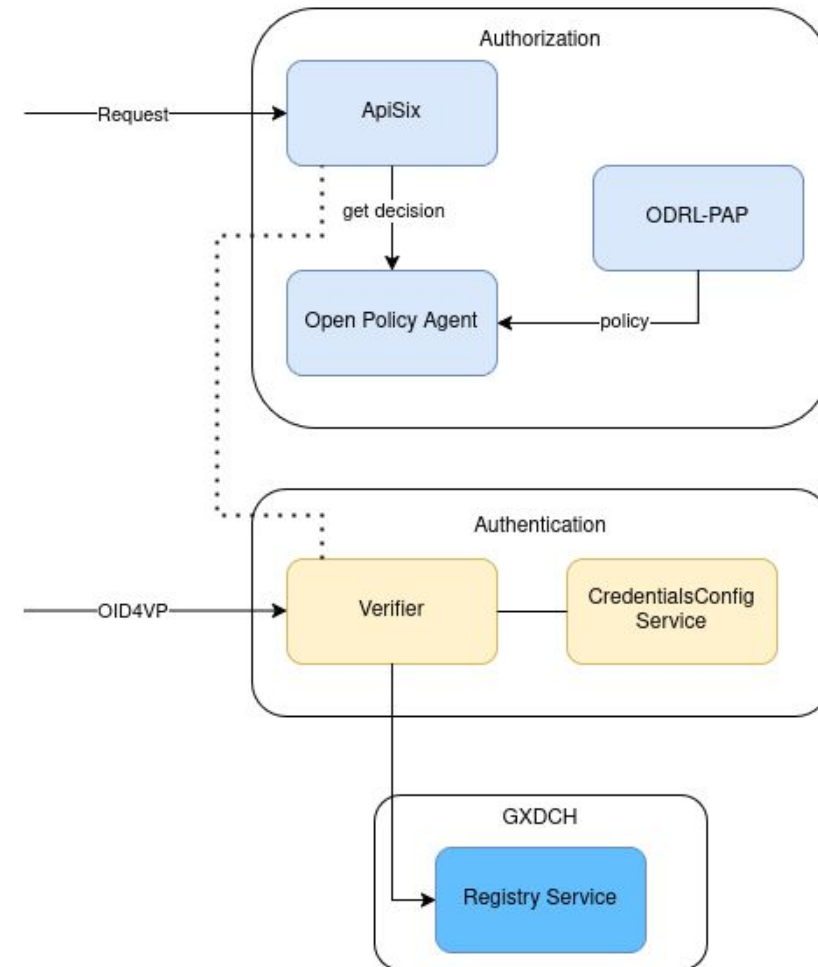
Solution

- Verifiable Credentials to prove claims about the participant
- Gaia-X/Digital Clearing Houses as source of trust, certifying the compliance
- ODRL to define and enforce entry rules
- OID4VP to exchange credentials and enable self-service onboarding



Solution

- Authentication via OID4VP
 - check issuers of Compliance Credentials at GXDCH
 - verify signature of Credentials and Compliance
 - return JWT
- Authorization using PxP architecture
 - ApiSix as PEP
 - OpenPolicyAgent as PDP
 - ODRL-PAP as PAP, translating the ODRL into Rego



Next Steps

- extend Examples for TrustAnchorCredential/ParticipantCredentials(according to [IAM-24.07](#))
- add UI for onboarding capabilities
- provide examples using real wallets(f.e. EUDI Wallet)
- extend with additional Credentials, potentially from other trusted sources



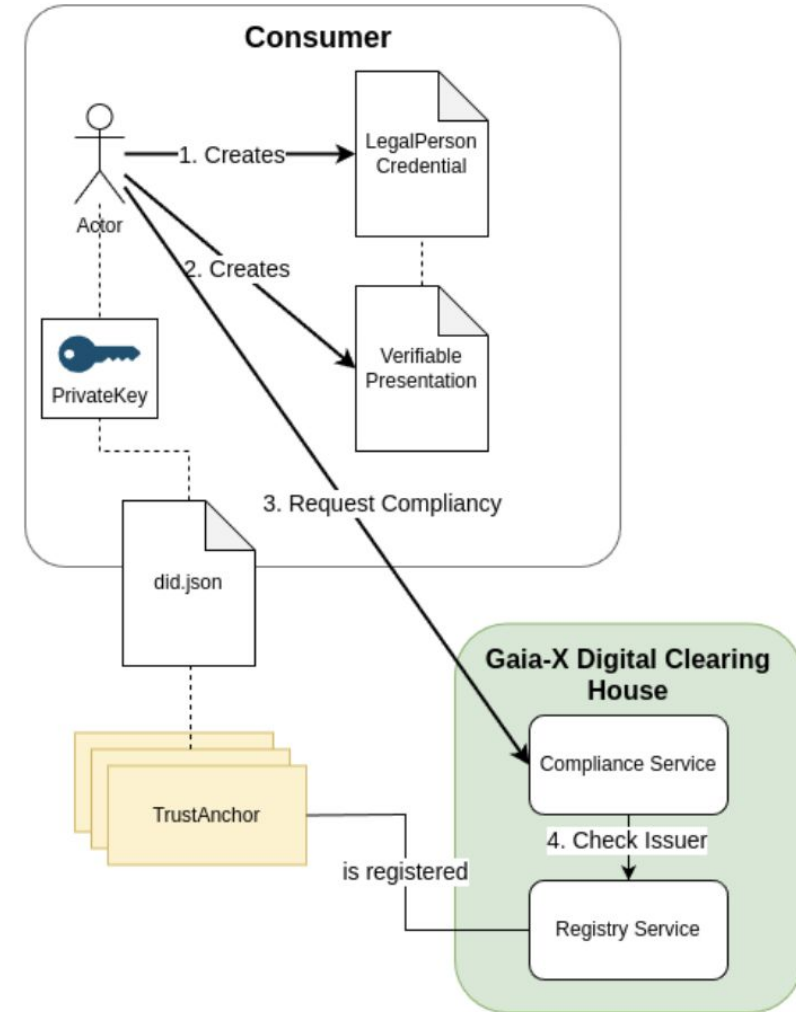
Thanks!

Stefan Wiedemann

Annex: detailed flows

Gaia-X Onboarding integration

0. (Creates compliant did:web)
1. Actor creates a [LegalPersonCredential](#), signed with the Organization's Key
2. Actor creates a VerifiablePresentation, containing the Credential, signed with the Organization's Key
3. Actor sends VP to the [Compliance Service](#)
4. Compliance Service validates contents, verifies the Issuer
5. Returns a ComplianceCredential



Gaia-X Onboarding integration

6. Create VerifiablePresentation with LegalPersonCredential and ComplianceCredential
7. Present VP to the Verifier
8. Check Issuer at GXDCH Registry
 - Verify Credentials
 - Check that both required Credentials are present
9. Return JWT

