

The Future of e-Infrastructures

 20th June

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Dataspace

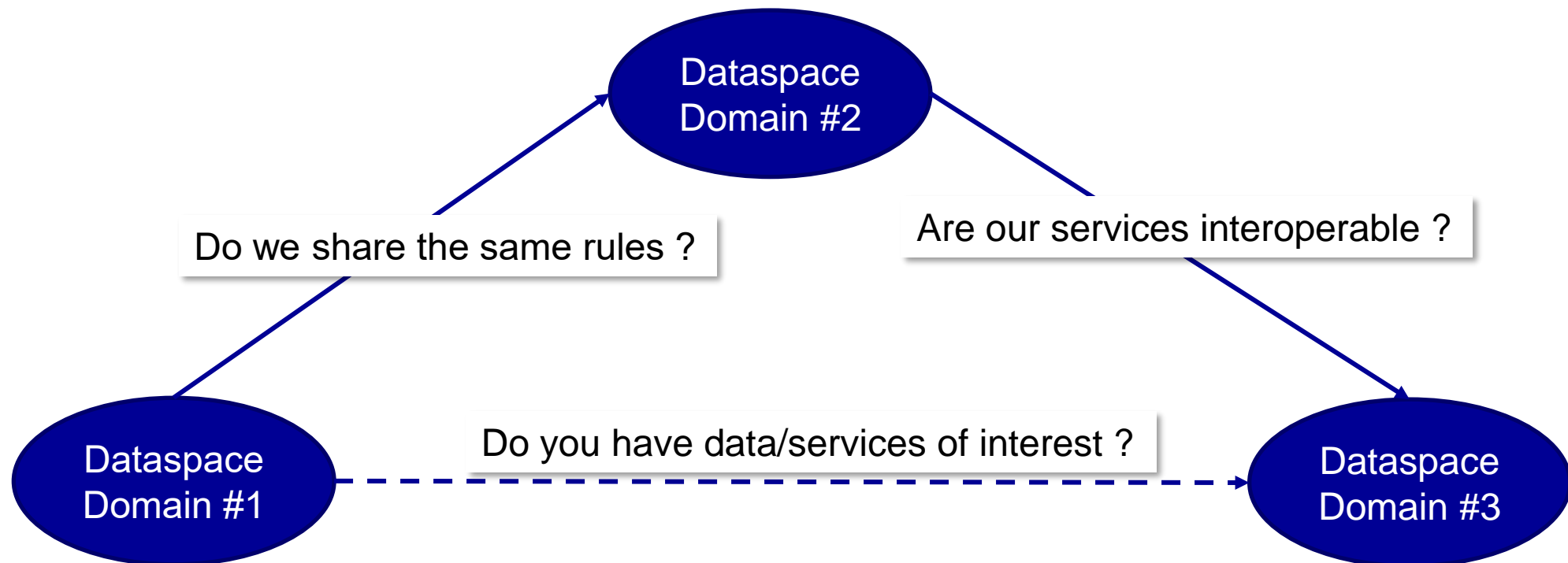


- To build a Dataspace, we need:
 - A **governance** which can be operationalised.
 - **Infrastructures** adopting the governance.
 - **Parties** adopting the **governance**, using the **infrastructures** *“to access and use data in a fair, transparent, proportionate and/non-discriminatory manner with clear and trustworthy data governance mechanisms.”*[1]
- Problems/Opportunities:
 - Sharing data is not new and there are 1000’s of existing setups that could qualify as “dataspace”
 - They are not discoverable
 - Governance and infrastructure interoperabilities are hard - if not impossible - to assess
 - Scaling is expensive

[1]: <https://joinup.ec.europa.eu/collection/semic-support-centre/data-spaces>

Gaia-X proposals

- Federated catalogues 📖 for Services and Products.
- A worldwide-ready 🌍 governance based on European values 🇪🇺.
- Easy customisation and extension 🗝 of the governance per domains, verticals, local markets, ...
- 📏 interoperability measurement **across** dataspace $d = distance(D1, D2)$



Gaia-X solutions

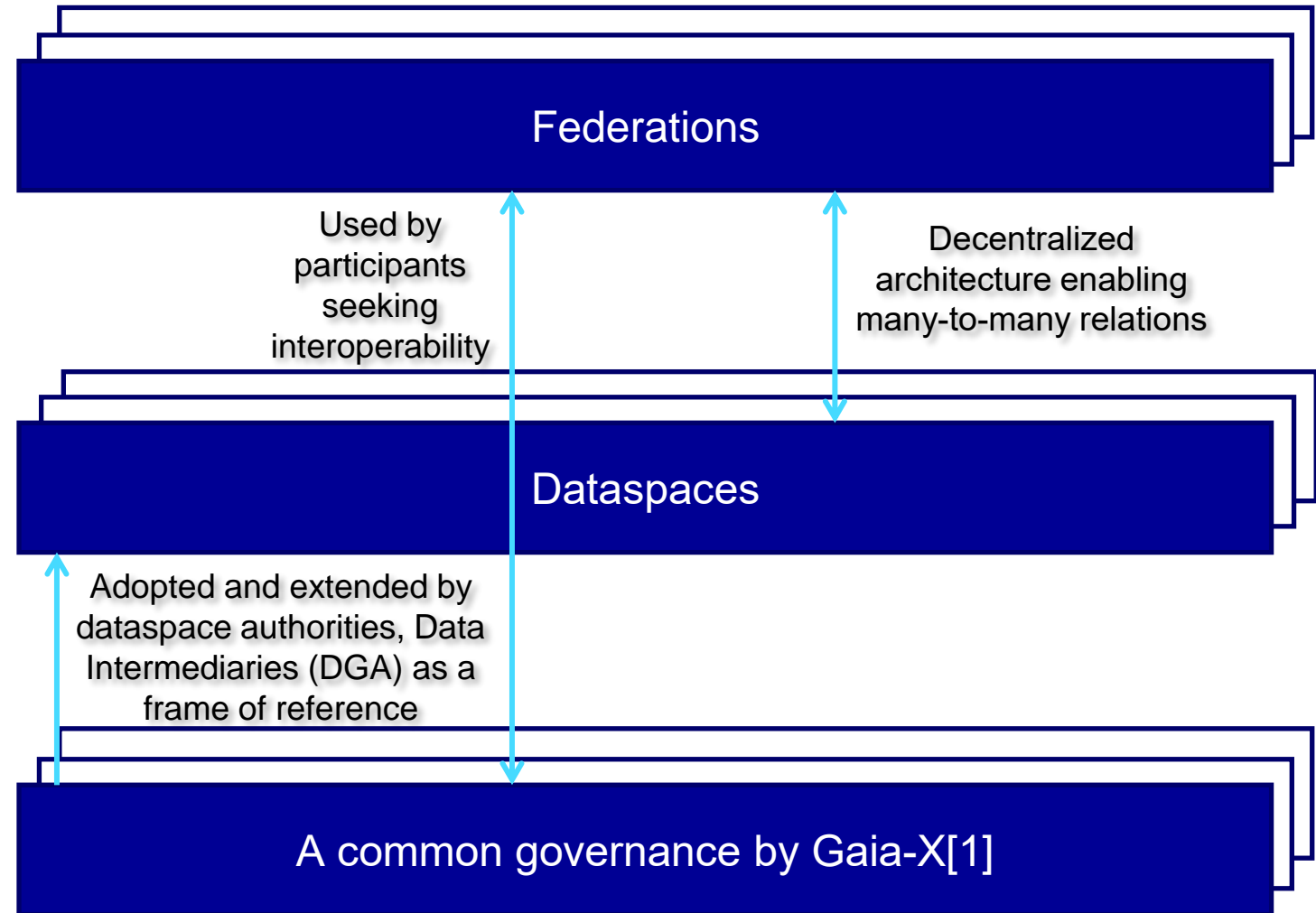


The use of **linked-data** to describe parties, products, services and their associated **policies**,

encapsulated into Verifiable Credentials to build a **decentralized knowledge graph**.

The use of an **ontology** for implementing the **governance** and the **semantic interoperability** of the descriptions.

Minimalistic technical requirements to implement the exchange of credentials in and across **dataspaces** and **federations**.



[1]: polic rules developed by Gaia-X association members in line with other EU initiatives (iShare, X-Road)

[2]: NIST SP. 500-332: Cloud Federation Reference Architecture

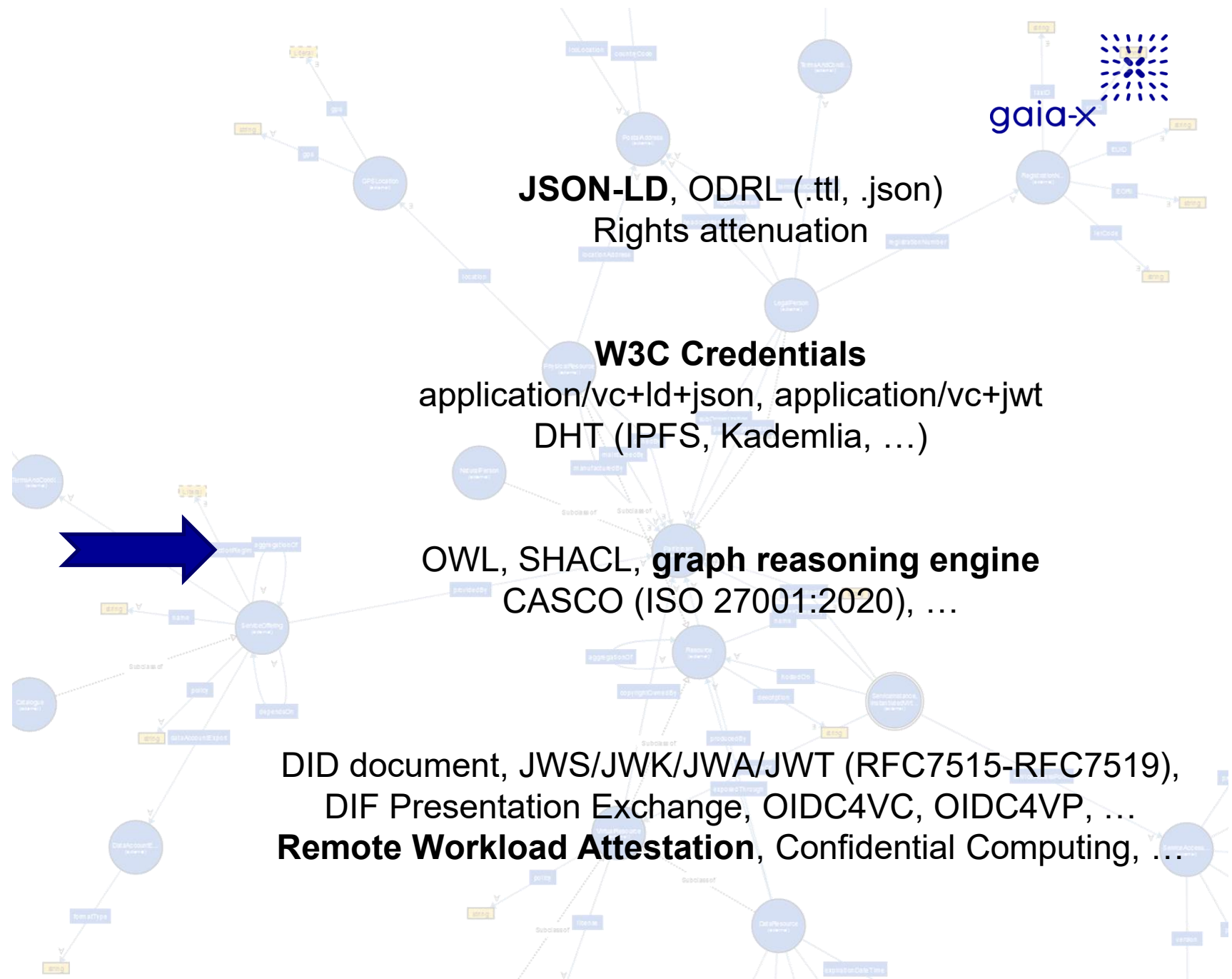
Gaia-X solutions

The use of **linked-data** to describe parties, products, services and their associated **policies**,

encapsulated into Verifiable Credentials to build a **decentralized knowledge graph**.

The use of an **ontology** for implementing the **governance**, its **lineage** and the **semantic interoperability** of the descriptions.

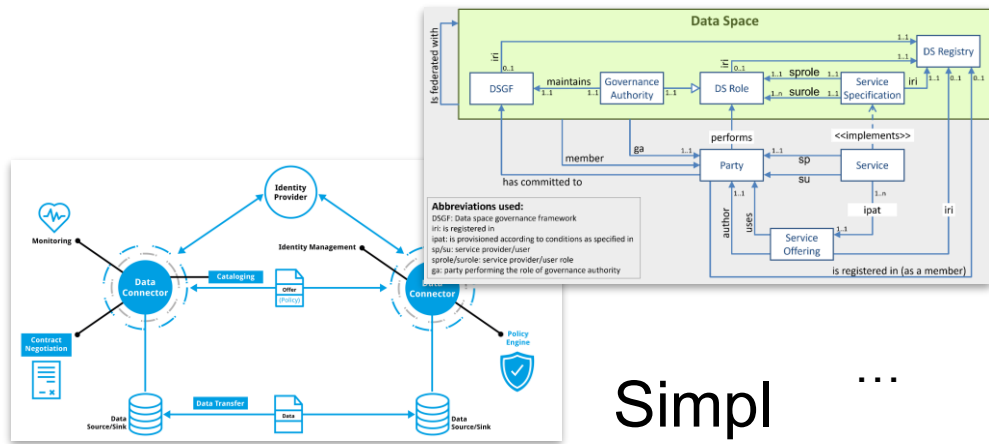
Minimalistic technical requirements to implement the exchange of credentials in and across **dataspaces** and **federations**.



Example of integration



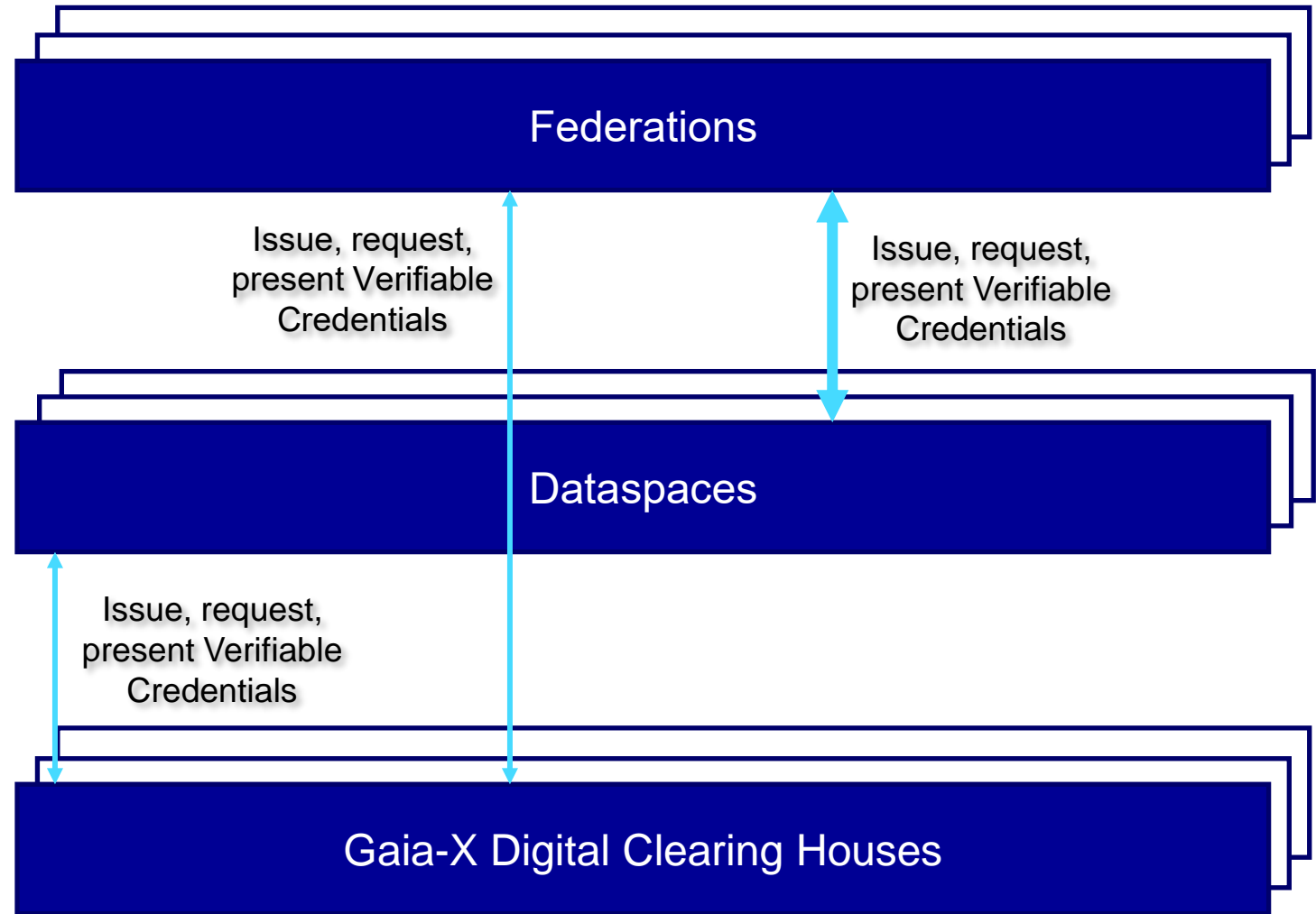
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Simpl ...

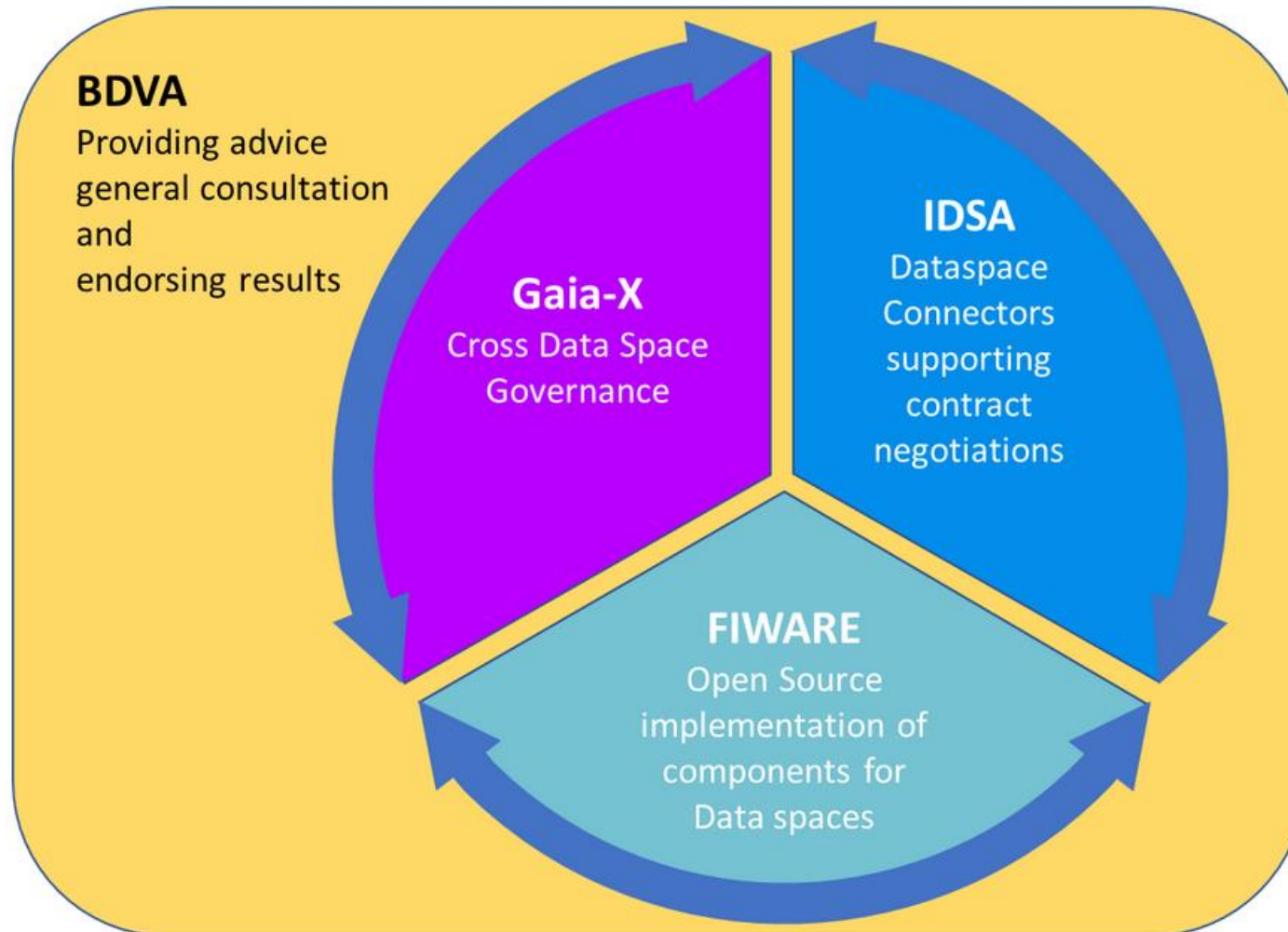


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Data Spaces Business Alliance

Technical Convergence document



QUESTIONS ?



Tech-X - Gaia X Technical Overview

527 vues • il y a 1 mois



Speaker: Pierre Gronlier, CTO Gaia-X Technical overview of the Gaia-X specifications # 2023 with a scenario driven approach, ...



Intro | Scenario | Dataspace 2/3 | Functional requirements | Prerequisites | Gaia-X Ontology | Gaia-... 10 chapitres

Youtube: [#gaiax](#) [#CTO](#) [#tech](#)