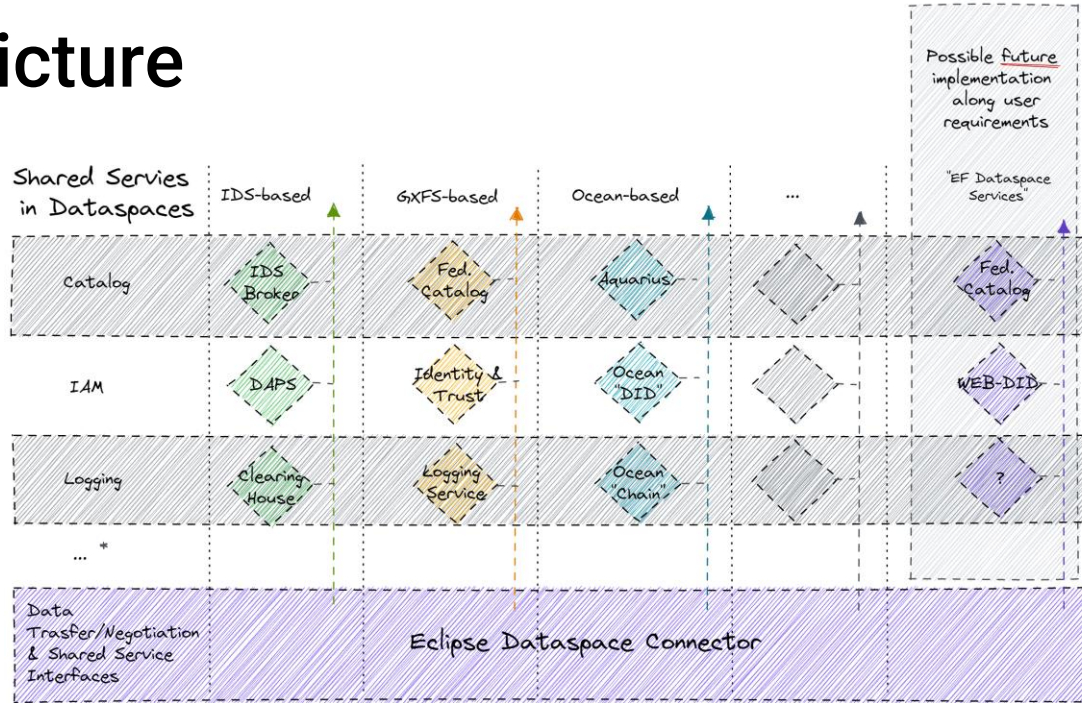# Eclipse Dataspace Connector – A peek into the future…

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The Big Picture

Possible future implementation along user requirements

Shared Servies in Dataspaces

	IDS-based	GXFS-based	Ocean-based	...	"EF Dataspace Services"
Catalog	IDS Broker	Fed. Catalog	Aquarius		Fed. Catalog
IAM	DAPS	Identity & Trust	Ocean "DID"		WEB-DID
Logging	Clearing House	Logging Service	Ocean "Chain"		?
... *					
Data Trasfer/Negotiation & Shared Service Interfaces	Eclipse Dataspace Connector				

= provide extensions and (potentially **) supported by EDC

*   Examples for other shared services could be the contracting service of GXFS or the AppStore of IDSA

** EDC is committed to support IDSA and Gaia-X based Dataspaces. The support of other specifications depends on contributions to the OSS by other organizations

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Status-Quo Recap

- *Official Eclipse Foundation Project since 06/2021*
- *8 Committers, 29 Contributors, and growing community*
  - *> 250 Pull-Requests*
- *Extensible Architecture using Java SPI*
- *Running code with essential features*
  - *Data Transfer incl. State Machine and Negotiation*
  - *Shared Service Interfaces*
- *Onboarding experience and customizable samples*

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Milestones and Cadence

- *Milestones planned for ~6 to 8 weeks*
  - *Future milestones describe an outlook on features to be considered*
  - *Milestones are subject to change due to the nature of OSS and agile development*
- *Transparent process on Github which enables participation*
- *Triage of Features and Issues based on user requirements and sponsors[*]*
  - *Everyone is able to influence priorities and address features*

[*] In terms of participation and contribution

What's next

- *DataPlane Enhancement*
- *Contract Negotiation Enhancement*
- *TransferProcessManagement Enhancement*
- *Healthcheck*
- *SQL-based AssetIndex Extension*

Hardening
Code Quality Improvement
Test Coverage
Documentaton

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What's next

- *Data Management API*
  - *Assets & DataAddress*
  - *Policies & Policy Templates*
  - *Contract Definition and Negotiation*
  - *TransferProcess*

For more information, see #542

What's next

- *Policy Engine Enhancement*
  - *Validation of Constraints (ODRL, IDS, Others)*
  - *Provide required Hooks for Obligations*
  - *Provide Policy Management APIs*
  - *Allow Extensions for UCS*

Make use of the new capabilities of the DPF and ControlPlane

Alignment with Gaia-X

- *Fulfillment of the mandatory and further criteria*
  - *Support Gaia-X compliant self-description*
  - *Gaia-X Registry Extension and support VC*
- *Stay up-to-date with GXFS-DE project to provide extensions*
  - *Waiting for something to be published*
  - *Evaluation of interfaces and initiation of integration*
- *Work closely with AISBL committees and working groups to ensure interoperability*
- *Alignment with lighthouse projects to meet their requirements for using Gaia-X.*

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Alignment with IDSA

- *Already supporting IDS-based massages and policy definitions*
  - *Support of essential services (DAPS)*
  - *Maintaining IDS-Serializer and CodeGen tools*
- *Support new RAM 4.0 release with feedback of our partners*
- *EDC is part of the IDS Open Source Landscape*
- *Work closely with IDSA committees and working groups to ensure interoperability*

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Roadmap Eclipse Dataspace Connector

Development

Milestone 2 – around 13.02.2022

DataPlane Enhancement (Azure, http, (Ftp))

Contract Negotiation

TransferProcessManagement Enhancement

Healthcheck

SQL-Database Systems Extension

Management API definition

Milestone 3 – around 03.04.2022

Management API implementation (main)

Policy Engine Enhancement

Streaming DataPlane Extension

(dynamic) Self-Description Endpoint

Folder structure improvement

Gaia-X VC

Milestone 4 – around 29.05.2022*

Protocol negotiation

Gaia-X Registry Extension

Gaia-X Self-Description Extension

IDS RAM4.0 - scoping

Publish EDC "official release v .1"

"App" - scoping

Milestone 5 – around 17.06.2022

"App" integration and routing

"Data-protocol" negotiation

Infrastructure information exposing - scoping

Control API implementation (enhanced)

...

Milestone 6 – 6-8 weeks after summer break

Compatibility to GxFS-DE (Alpha) - scoping

Infrastructure information exposing implementation

...

Hardening
Reliability
Code Quality
Test coverage
Documentation
...

- - - → Part of every Milestone

*8 weeks due to public holiday and vacation season over easter days => right before HMI '22

Communication

EDC-Conference 31.01.2022 (remote)

Gaia-X Hackathon (?)

EDC-Hackathon (Vienna or Amsterdam)

Gaia-X Hackathon (?)

HMI - Showcase (?)

EDC-Conference xx.06.2022 (remote/hybrid)

Gaia-X Hackathon (?)

EDC-Hackathon (Dortmund)

Whitepaper - Dataspaces with EDC

EF external project website

LinkedIn - Profile

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Get updates and contribute

Scoping features and discussions

- https://github.com/eclipse-dataspaceconnector/DataSpaceConnector/discussions

Implementation details and issue definition

- https://github.com/eclipse-dataspaceconnector/DataSpaceConnector/issues

Project and Backlog overview

- https://github.com/eclipse-dataspaceconnector/DataSpaceConnector/projects/1

Mailing list:

- https://accounts.eclipse.org/mailing-list/dataspaceconnector-dev

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Further information and contact

General project information:

- *https://projects.eclipse.org/projects/technology.dataspaceconnector*

Github-Repository:

- *https://github.com/eclipse-dataspaceconnector/DataSpaceConnector*

Communication Collateral:

- *https://github.com/eclipse-dataspaceconnector/Collateral*

YT-Channel:

- *https://www.youtube.com/channel/UCYmjEHtMSzycheBB4AeITHg*

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