



FAIR Digital Object Fabric IG



Endorsed



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Achievements

- *Collection of project shares (reports from groups implementing FDOs)*
- *“FAIR DOs for pedestrians”:
Collection of elevator pitches and introduction materials (in progress)*



Aims and objectives

A FAIR Digital Object is a representation of research data and other digital assets that contains all information required for FAIRness. The IG aims at providing a communication and discussion platform for experts as well as novices exchanging experiences about the implementation and application of FAIR Digital Objects.




What's next?

Extension of the collections

- *Project Shares:*
<https://www.rd-alliance.org/group/fair-digital-object-fabric-ig/wiki/monthly-meetings>
- *Intro materials:*
<https://www.rd-alliance.org/group/fair-digital-object-fabric-ig/wiki/rda-ig-fair-digital-object-fabric>



@resdatall





IG FAIR Digital Object Fabric

Discussing the FAIR DO Concept

P20

22 March 2023



Agenda

Collaborative notes:

https://docs.google.com/document/d/1GnuHDnVkCkLZxPR-uf28vqm0Jv_qvnQ0vUfwsMMmfBs/edit

Agenda:

- Introduction to IG FAIR Digital Object Fabric [Rainer Stotzka]
- Lightning talks
 - Bigflow: an end-to-end collaborative data flow system [Zhihong Shen]
 - FAIR DO Applications: Achievements and Challenges [Nicolas Blumenröhr]
 - FNDO: FAIR non-data objects [Daniel Katz]
- Collection of controversial issues and discussion [Maggie Hellström]
- Summarizing results, defining next steps





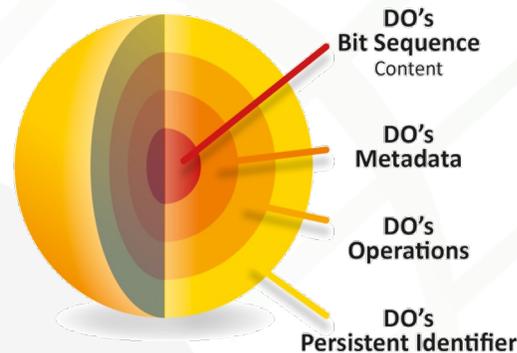
FAIR Digital Object: Concept

FAIR Digital Object:

Representation of research data and other digital assets that contains all information required for FAIRness

- Data content
- Referenced and identified by a persistent ID
- Has properties described by metadata, e.g. type

- **General concept**
- **Long-lasting & sustainable**
- **Technology agnostic**
- **Interoperability and harmonization**
- **Bridges between research data repositories, disciplines, etc.**



- Seamless inclusion of legacy data
- Data has a type
- Operations can be connected to the types

How to implement ?





FAIR Digital Object: Example Implementation



The representation contains at minimum an **Identifier** and an **Information Record** with the following properties:

- Identifier: *unambiguously assigned*, e.g. a PID
- Information Record: well and *unambiguously defined structure* containing a *minimum of information* entries or links pointing to the information:
 - identifier,
 - definition of the structure of the information record, e. g. profile,
 - type of the data,
 - link to the data, e. g. a PURL

PID Information Record

| PID | PID Profile | Type | Location URL | ... |
|-----|-------------|------|--------------|-----|
|-----|-------------|------|--------------|-----|





IG FAIR Digital Object Fabric

Charter:

<https://www.rd-alliance.org/group/data-fabric-ig/case-statement/fair-digital-object-fabric-ig-charter>

Coordination and communication platform:

- Exchanging experiences about the implementation and application of FAIR Digital Objects
- “FAIR DOs for pedestrians”:
Collect of elevator pitches and introduction materials
- Bridge with the work in the FAIR Digital Object Forum <https://fairdo.org/> and others

A word cloud graphic with various terms in green and blue. The most prominent words are 'DEVELOPER SUPPORT' and 'COORDINATION'. Other visible words include 'COLLECT IMPLEMENTATION CASES', 'ACTIONABILITY', 'SHARE EXPERTISE', 'ALIGN RDA EFFORTS', 'COMMUNICATION/DISCUSSION', 'CLARIFY SPECIFICATIONS', 'SHARE BEST PRACTICE', 'OVERLAPS', 'MAKE FDOS CONCRETE', 'INTERDISCIPLINARITY', 'INFORMATION EXCHANGE', 'FAIR SEMANTIC LOOKUP SERVICES', 'INTEROPERABILITY', 'TEMPLATES FOR IMPLEMENTATION', and 'METADATA FOR SEMANTIC ARTEFACTS'.

OVERLAPS MAKE FDOS CONCRETE
COLLECT IMPLEMENTATION CASES
DEVELOPER SUPPORT
ACTIONABILITY TEMPLATES FOR IMPLEMENTATION METADATA FOR SEMANTIC ARTEFACTS
SHARE EXPERTISE COORDINATION
ALIGN RDA EFFORTS COMMUNICATION/DISCUSSION
CLARIFY SPECIFICATIONS
SHARE BEST PRACTICE





Aim: Exchanging Experiences



Coordination and communication platform

- Regular meetings: every fourth Thursday of the month, UTC 15:00 – 16:00

15 Project shares

- Project presentations
- Discussion

Collection of information:

- Publications
- RDA Recommendations & Outputs
- Plenary sessions
- Components: Software & Services
- Workshops

<https://www.rd-alliance.org/group/data-fabric-ig/wiki/rda-ig-data-fabric-fair-digital-objects>

Aim: Bridge with FAIR Digital Object Forum

- People in the IG, WGs, SC, TAC
- Joint WG ?





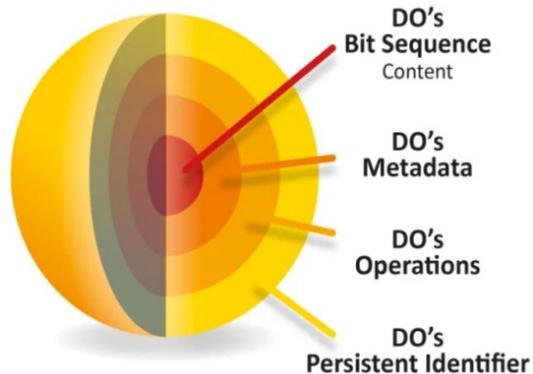
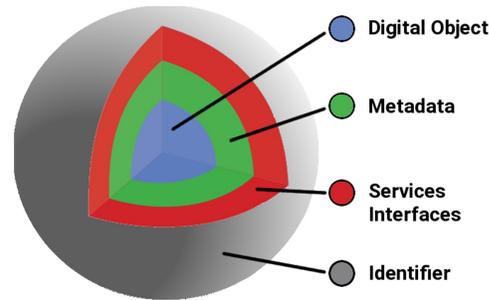
Aim: “FAIR DOs for Pedestrians”

Collect and create elevator pitches and introduction materials

- Started in mid 2022
- Collection of materials in

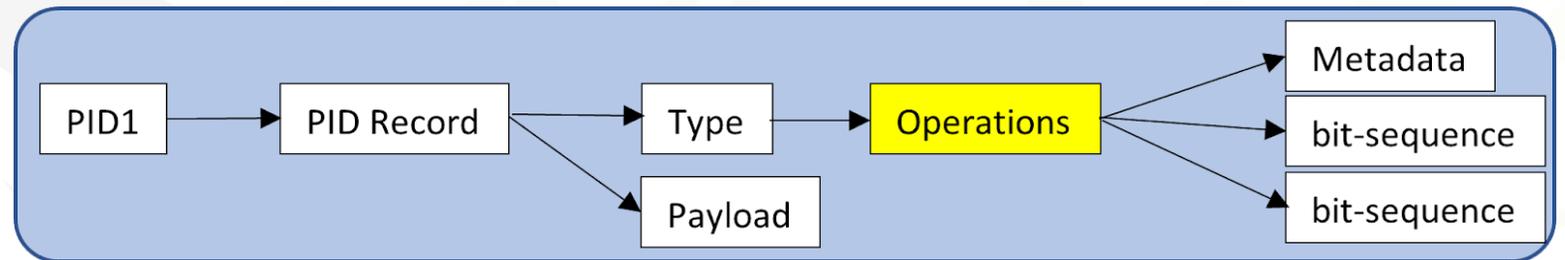
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- FAIR DO elevator pitches
- Tutorials and presentations
- Pictures



PID Information Record

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Acknowledgements:

This research has been supported by

- NFDI-MatWerk (DFG – n. 460247524),
- NFDI4Ing (DFG – n.442146713),
- NFFA-Europe-Pilot (EU H2020 – n. 101007417),
- the research program ‘Engineering Digital Futures’ of the Helmholtz Association of German Research Centers, and the
- Helmholtz Metadata Collaboration Platform.