WP 8.2: SSHOC Certification Support

CTS repositories and FAIR data objects

Relations and dependencies

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DARIAH annual event
14th October 2020

This project is funded from the EU Horizon 2020 Research and Innovation Programme (2014-2020) under Grant Agreement No. 823782

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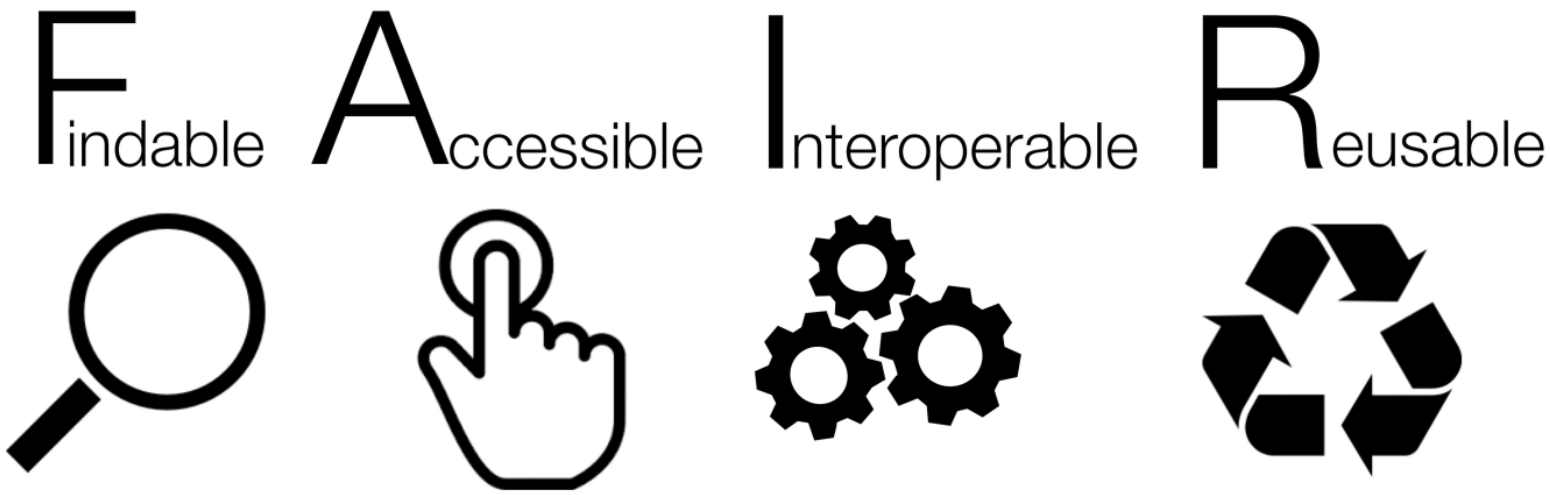
What about FAIR Data

The main objectives of Trusted Digital Repositories is to preserve and disseminate well documented and accurate research data, *formatted and packaged to suit it's designated community i.e. FAIR Data.*



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What is FAIR DATA?

Data and supplementary materials have sufficiently rich metadata and a unique and persistent identifier.

FINDABLE

Metadata and data are understandable to humans and machines. Data is deposited in a trusted repository.

ACCESSIBLE

Metadata use a formal, accessible, shared, and broadly applicable language for knowledge representation.

INTEROPERABLE

Data and collections have a clear usage licenses and provide accurate information on provenance.

REUSABLE

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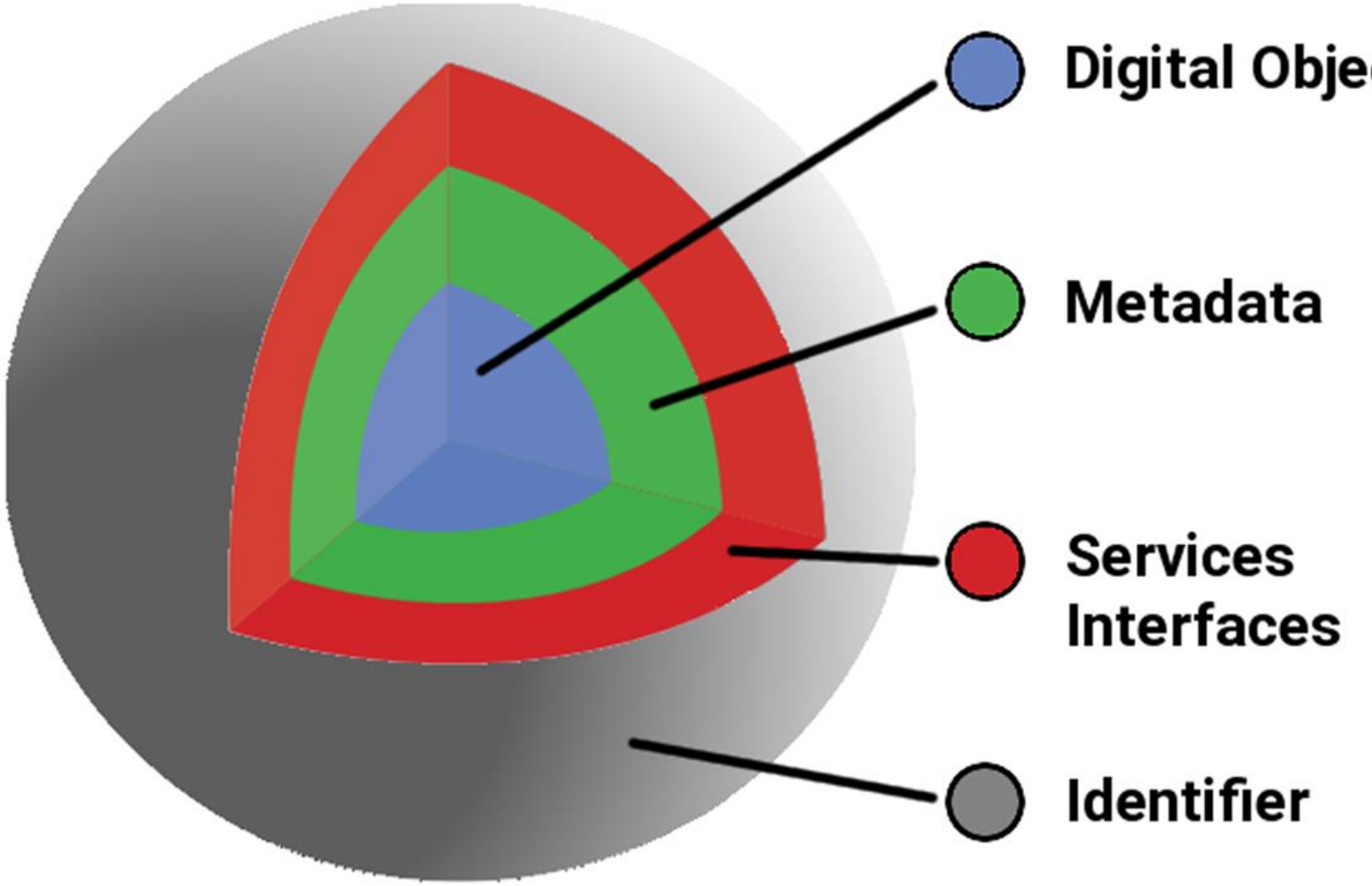
FAIR Data Object



Schwardmann, U., 2020. Digital Objects – FAIR Digital Objects: Which Services Are Required?. *Data Science Journal*, 19(1), p.15. DOI: http://doi.org/10.5334/dsj-2020-015

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Persistent IDentifiers

Can I trust the data you supply is correct and verifiable?

"A persistent identifier is a long-lasting reference to a digital resource. Typically it has two components: **a unique identifier**; and **a service that locates the resource over time even when it's location changes**.

The first helps to ensure the provenance of a digital resource (that it is what it purports to be), whilst the second will ensure that the identifier resolves to the correct current location."

From the Digital Preservation Handbook

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FAIRsFAIRs Data Object Assessment Metrics:

Listed on the next page are the fifteen minimum viable metrics proposed by FAIRsFAIR for the systematic assessment of FAIR data objects. They are based on indicators proposed by the *RDA FAIR Data Maturity Model Working Group and WDS/RDA Assessment of Data Fitness for Use checklist*, and on prior work conducted by *FAIRdat* and *FAIREnough*.

In the FAIR ecosystem, FAIR assessment must go beyond the object itself. **FAIR enabling services and repositories are vital to ensure that research data objects remain FAIR over time**.

Automated testing depends on clear, machine assessable criteria. Some aspects (rich, plurality, accurate, relevant) specified in FAIR principles still require human mediation and interpretation.

Until domain/community-driven criteria such as schemas and usage elements have been agreed, the tests must focus on generally applicable data/metadata characteristics.

Anusuriya Devaraju, Robert Huber, Mustapha Mokrane, Linas Cepinskas, Joy Davidson, Patricia Herterich, Herve L'Hours, Jerry de Vries, Angus Whyte. (2020, July 10). FAIRsFAIR Data Object Assessment Metrics (Version 0.3). Zenodo. http://doi.org/10.5281/zenodo.3934401

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Identifier	Name
FsF-F1-01D	**Data** is assigned a globally unique identifier. (GUID)
FsF-F1-02D	**Data** is assigned a persistent identifier. (PID)
FsF-F2-01M	**Metadata** includes descriptive core elements (creator, title, data identifier, publisher, publication date, summary and keywords) to support data findability.
FsF-F3-01M	**Metadata** includes the identifier of the data it describes.
FsF-F4-01M	**Metadata** is offered in such a way that it can be retrieved by machines.
FsF-A1-01M	**Metadata** contains access level and access conditions of the data.
FsF-A2-01M	**Metadata** remains available, even if the data is no longer available.
FsF-I1-01M	**Metadata** is represented using a formal knowledge representation language.
FsF-I1-02M	**Metadata** uses semantic resources.
FsF-I3-01M	**Metadata** includes links between the data and its related entities.
FsF-R1-01MD	**Metadata** specifies the content of the data.
FsF-R1.1-01M	**Metadata** includes license information under which data can be reused.
FsF-R1.2-01M	**Metadata** includes provenance information about data creation or generation.
FsF-R1.3-01M	**Metadata** follows a standard recommended by the target research community of the data.
FsF-R1.3-02D	**Data** is available in a file format recommended by the target research community.

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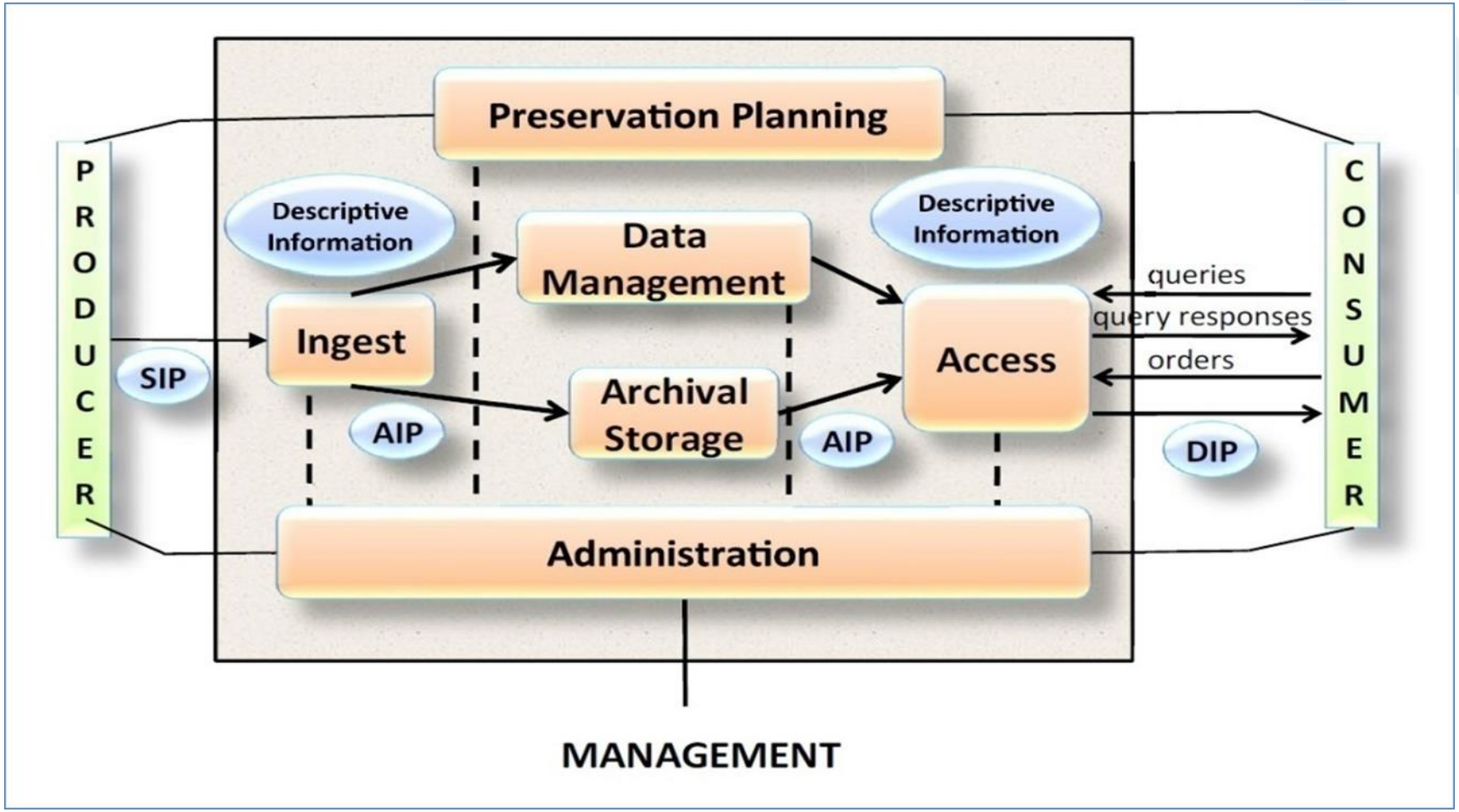
OAIS Model



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Open Archival Information System

OAIS must “ensure that the information to be preserved is **Independently Understandable** to the Designated Community [...] without needing special resources such as the assistance of the experts who produced the information” (p. 3:1)

From OAIS Reference Model (ISO 14721)

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