

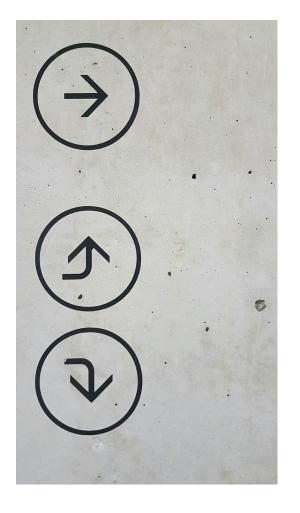
meose FAIR-IMPACT

Expanding FAIR solutions across EOSC

Exposing trustworthy information from thematic repositories: **FAIR-IMPACT** contribution to FAIR assessment practices

> 24-01-2024 **Robert Huber Robert Ulrich**





Guidelines for repositories and registries on exposing repository trustworthiness status and FAIR data assessments outcomes

Development of guidelines and mechanisms improving connections between repository registries and discovery portals, repository trustworthiness mechanisms (e.g. CoreTrustSeal) and FAIR digital object assessments. The aim is to enable seamless discovery of repositories (including their trustworthiness) and datasets (including their FAIRness).

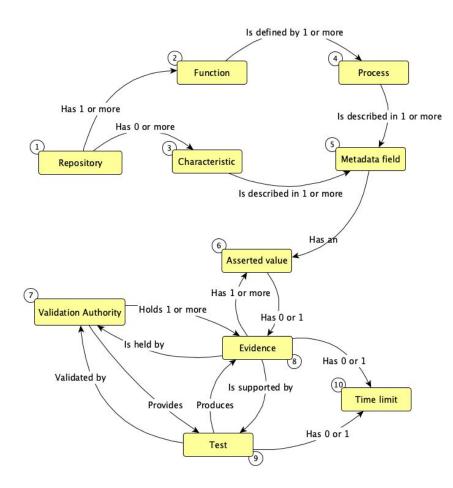




Transparency & Standards

Data regarding FAIRness shall be provided following open technical standards and community recommendations such as RDF (with a focus on DCAT) and RDA outputs as to digital objects, (meta)data services & registries to foster interoperability and harmonization.



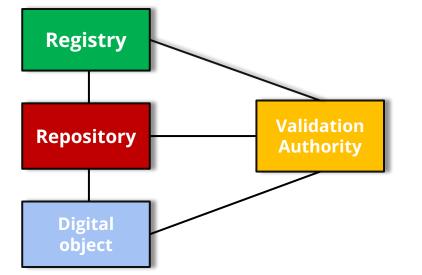


Evidence & Assessment

(Meta)data services providing information about their functions and activities should include evidence and links to authoritative third parties, such as CoreTrustSeal, enabling validation and assessment by human and automated processes.



Linking & Aggregation



As information varies in terms of level of detail, contexts, and time, it should be linked across different services and data providers to foster discovery and aggregation by registries, assessment tools etc. to provide additional value and insights to users.



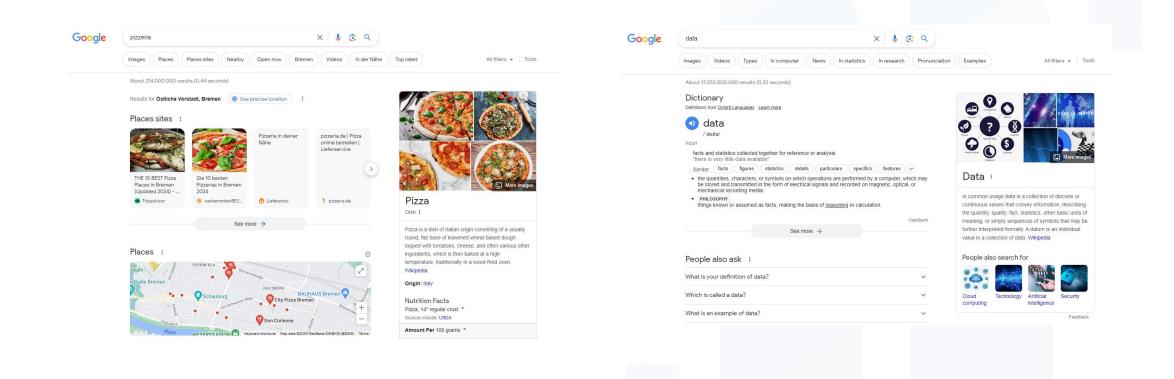


Prototype

Its purpose is to transform the concepts into a tangible representation that allows to validate and understand limits and feasibility. Its goal is to collect feedback and ideas for added values from stakeholders and to revise and improve the initial concept . The envisioned demonstrator will start with the embedded organisations in FAIR Impact, but its scope is planned to be expanded later on. Maybe including you? Stay tuned!

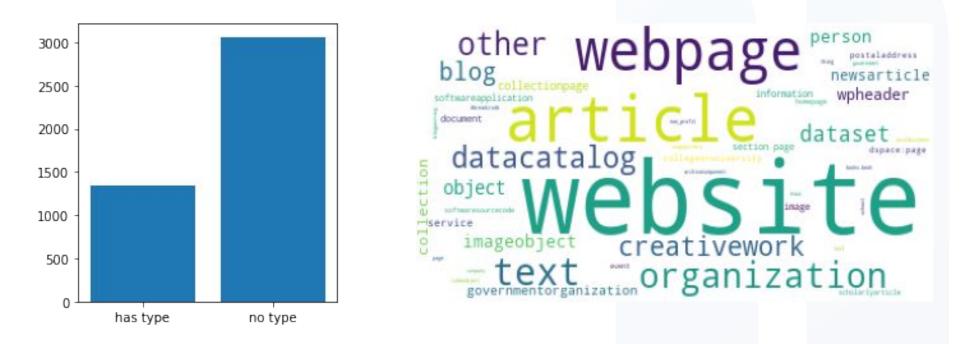


Exposing data repository information





Identities of re3data repositories



Dublin Core type; Schema.org type, OpenGraph or microdata type



Exposing repository identity and metadata

DCAT-AP Catalogue: "A catalogue or repository that hosts the Datasets or Data Services being described."

Standards & Linking:

• Dublin Core

<meta name="DC.type" content="dcat:Catalog" />

- DCAT
 - RDFa, Signposting

<link rel="describedby" href=<u>https://doi.pangaea.de/dcat</u>
type="application/ld+json " profile="http://www.w3.org/ns/dcat# ">

Schema.org

EXAMPLE 1

ex:catalog

a dcat:Catalog ;

dcterms:title "Imaginary Catalog"@en ; dcterms:title "Catálogo imaginario"@es ; rdfs:label "Imaginary Catalog"@en ; rdfs:label "Catálogo imaginario"@es ; foaf:homepage <http://dcat.example.org/catalog> ; dcterms:publisher ex:transparency-office ; dcterms:language <http://id.loc.gov/vocabulary/iso639-1/en> ; dcat:dataset ex:dataset-001 , ex:dataset-002 , ex:dataset-003 ;



Exposing repository capabilities (services)

DCAT

EXAMPLE 60

ex:EEA-CSW-Endpoint rdf:type dcat:DataService

accerms:type <nttp://inspire.ec.europa.eu/metadata-codelist/SpatialDataServiceCategory/infoCatal
dcterms:accessRights <http://publications europa eu/resource/authority/access-right/PUBLIC> ;
dcterms:conformsTo <http://www.opengis.net/def/serviceType/ogc/csw> ;

acterms:description The EEA public catalogue of spatial datasets references the spatial datasets used by the European Environment Agency as well as the spatial datasets produced by or for the EEA. In the latter case, when datasets are publicly available, a link to the location from where they can be downloaded is included in the dataset's metadata. The catalogue has been initially populated with the most important spatial datasets already available on the data&maps section of the EEA website and is currently updated with any newly published spatial dataset."@en ; dcterms:identifier "eea-sdi-public-catalogue" ;

dcterms:issued "2012-01-01"^^xsd:date ;

dcterms:license <https://creativecommons.org/licenses/by/2.5/dk/> ;
dcterms:spatial [

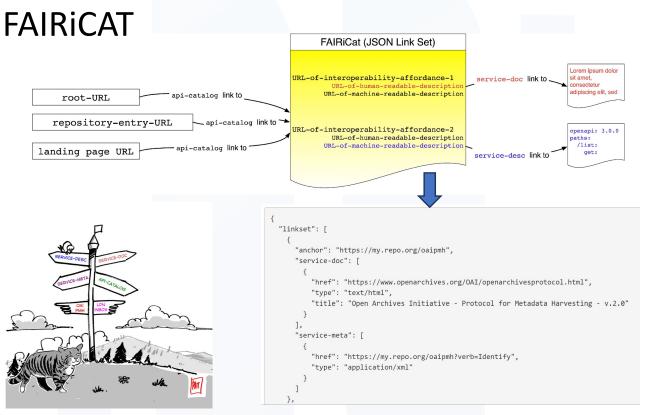
rdf:type dcterms:Location ;

dcat:bbox "POLYGON((-180 90,180 90,180 -90,-180 -90,-180 90))"^^gsp:wktLiteral ;
.

];

dcterms:title "European Environment Agency's public catalogue of spatial datasets."@en ; dcterms:type <http://inspire.ec.europa.eu/metadata-codelist/ResourceType/service> ; dcterms:type <http://inspire.ec.europa.eu/metadata-codelist/SpatialDataServiceType/discovery> ; dcat:contactPoint ex:EEA ;

deat-ondpointDecoription thttps://odicococoropa.ou/ontologue/onv/ong/csw?service=CSW&request=Ge
dcat:endpointURL <http://sdi.eea.europa.eu/catalogue/srv/eng/csw> ;



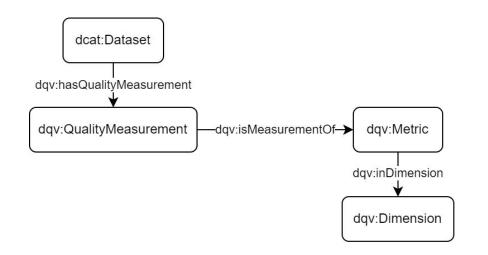
https://signposting.org/FAIRiCat/



Exposing FAIR metrics & results

Standards & Linking:

DCAT + DQV (Data Quality Vocabulary)



EXAMPLE 42

ex:genoaBusStopsDataset
dqv:hasQualityMeasurement ex:genoaBusStopsDatasetCompletenessMeasurement .

ex:genoaBusStopsDatasetCompletenessMeasurement a dqv:QualityMeasurement; dqv:computedOn ex:genoaBusStopsDataset; dqv:isMeasurementOf ex:completenessWRTExpectedNumberOfEntities; dqv:value "0.6833333"^^xsd:decimal ; prov:wasAttributedTo ex:myQualityChecker ; prov:generatedAtTime "2018-05-27T02:52:02Z"^^xsd:dateTime ; prov:wasGeneratedBy ex:myQualityChecking





Exposing FAIR metrics & results

- FAIR metrics
 - RDF (DQV)
 - Content negotiation / suffix /signposting

https://f-uji.net/metrics/0.5.ttl

FAIR assessment results
RDF (DQV)

https://f-uji.net/result/560.ttl

<https://f-uji.net/>

a prov:SoftwareAgent ;
rdfs:label "F-UJI FAIR Assessment Tool" ;
owl:versionInfo "2.2.5" .

<urn:f-uji:assessement_activity:560>
a prov:Activity ;
prov:wasAssociatedWith <https://f-uji.net/> ;
prov:used "https://f-uji.net/result/560" .

<https://f-uji.net/result/560> a prov:QualityMetadata, dcat:Dataset ; prov:generatedBy <urn:f-uji:assessement_activity:560> ; dqv:hasQualityMeasurement "frsc:FsF-A1-02M_score", frsc:FsF-A1-02M-1_score .

frsc:FsF-FAIR_score
 a dqv:QualityMeasurement ;
 dqv:isMeasurementOf fmet:FsF-FAIR ;
 qb:dataSet <https://f-uji.net/result/560> ;
 dqv:computedOn <https://doi.org/10.17863/CAM.14473> ;
 dqv:value 8.125000e+1 .







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