





FAIR Digital Object Ecosystem Testbed: Facilitating FAIR Digital Object usage

An ecosystem for integration testing and demonstrating FAIR Digital Object handling. Andreas Pfeil, Thomas Jejkal, Sabrine Chelbi, Rainer Stotzka

The FAIR principles facilitate reuse of research data. up 80% of research time is dedicated to to data pre-processing and reuse. FAIR Digital Objects are representations of research data, consisting at least of a persistent ID Finding, accessing, reusing & making (PID) and a record containing machine-actionable interoperable is difficult. Many of those tasks information about the research (meta-)data. could be automated, if the necessary information were available. Data Metadata Testbed: set of services to test the Resolve, create, update PIDs. integration of all required services and PIT Following PID Information Types to check feasibility. Service WG Recommendations. Info-Record: Version, ... Easy to set up for every-body Search PID by record Search on everyday computers using content. Index docker containers. PID X PID Y Enables federated Implementing generic use Message-× × × × notification of PID cases like creating, updating, broker retrieving and searching PIDs. activities. Indexer Create and manage collections. The API recommendation was Collection Used for identification of gaps in developed by the Research Data Registry specifications and concepts, and for Collections WG. demonstrating feasibility.

Identified gaps under examination:

- Unspecified types:
 How to improve machine-actionability?
- Rules for (generic) profiles:
 Known structure vs flexibility
- Flexible communication:
 Notifications about updates and indexing



The testbed is in constant development.

We are inviting you to try it out and give feedback! For example via e-mail or Github:

Download the testbed now. https://github.com/kit-data-manager/testbed4inf

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