

Open Science Fair 2021
Virtual Conference
September 23, 2021
Lightning Talks, Session B

re3data COREF -
Developing a Conceptual
Model for User Stories for
the Registry of Research
Data Repositories

re3data.org
REGISTRY OF RESEARCH DATA REPOSITORIES

OSFair2021



re3data
coref

Visit the project blog:
coref.project.re3data.org

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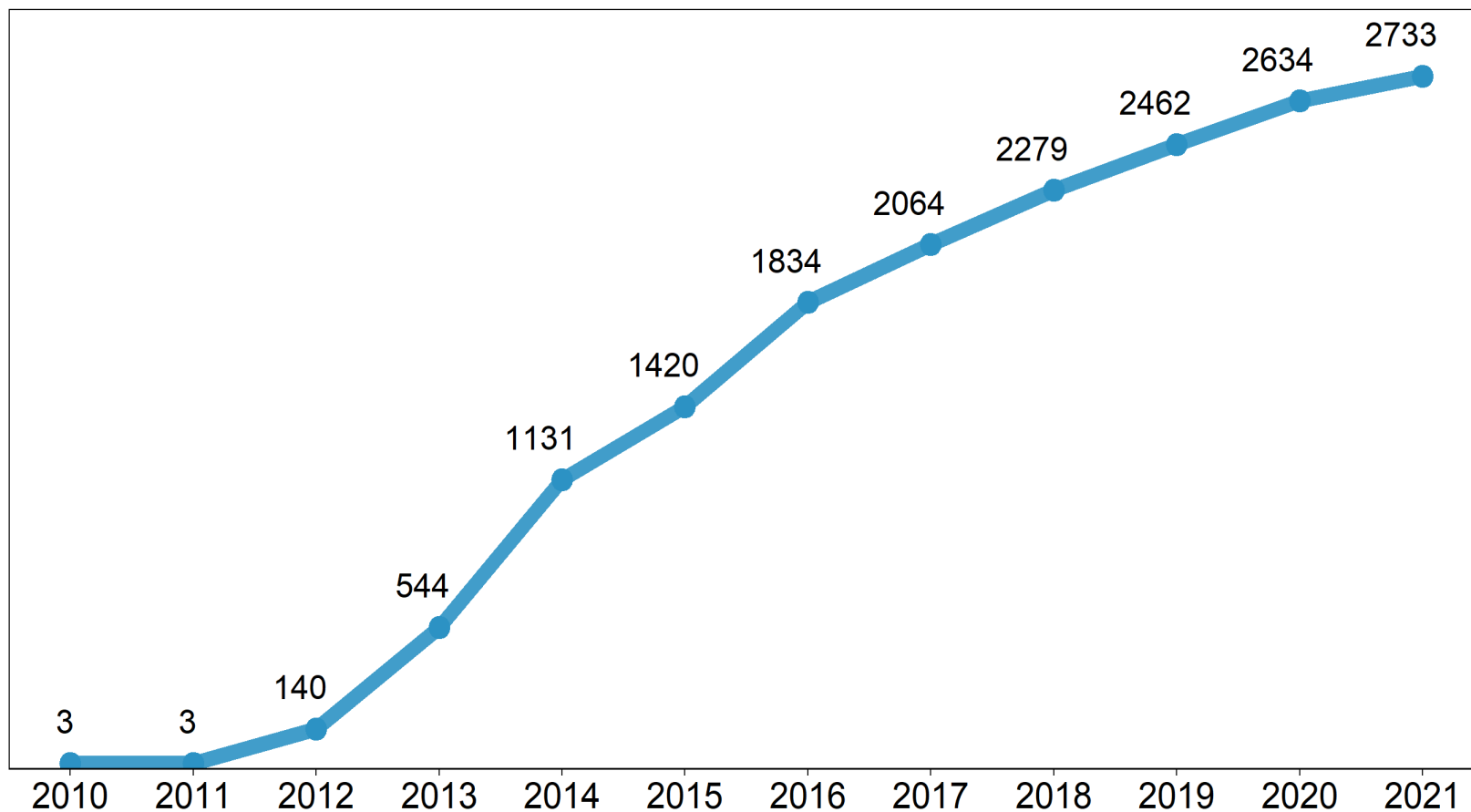
[Yi Wang](#) (Karlsruher Institut für Technologie (KIT))

[Michael Witt](#) (Purdue University, United States)

The Team:



Number of repositories indexed in re3data per year:



September 2021:
More than **2700**
research data
repositories

Global Registry of
Research Data
Repositories

re3data.org
REGISTRY OF RESEARCH DATA REPOSITORIES

Search...


Search

across all
research
disciplines

... presents **repositories and portals** for the
permanent storage and **access** of research data
sets to researchers, funding bodies, publishers
and scholarly institutions.

...promotes a culture of **sharing**,
increased access and **better
visibility** of research data

re3data Origins

- 2012-2015: **DFG-funded project** (Humboldt University, Karlsruhe Institute of Technology, Helmholtz Open Science Office)
- 2013: Merge with **DataBib** (new partner: **Purdue University**, new **International Editorial Board**)
- 2015: Official partner service of **DataCite**
- 2020-2022: Current DFG-funded project → 
- Technical maintenance and development of the service is financed and managed by **Karlsruhe Institute of Technology (KIT)** and **DataCite**

Registration Workflow

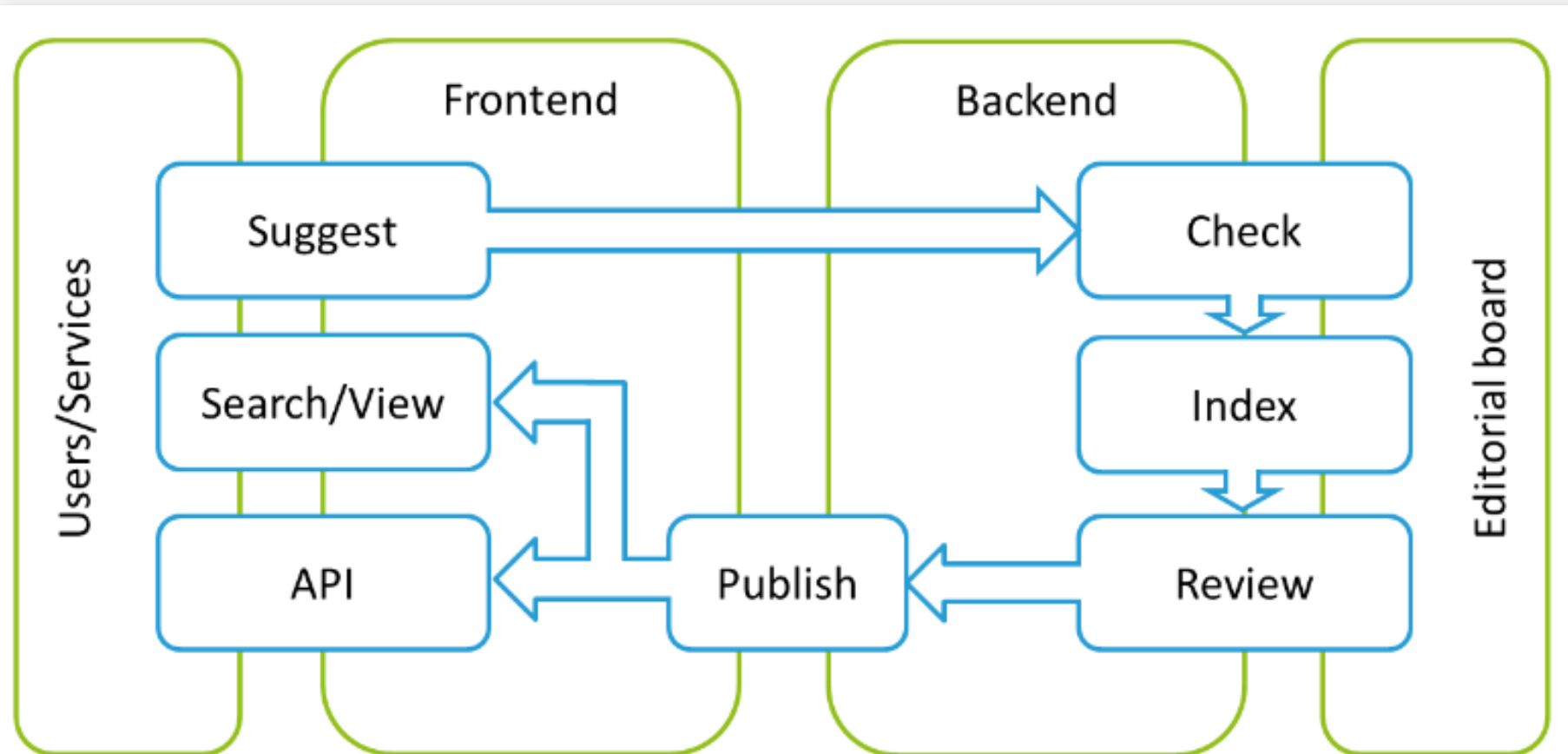


Figure 1: Research Data Repository Registration Workflow of re3data.org

re3data coref

COMMUNITY DRIVEN OPEN REFERENCE FOR
RESEARCH DATA REPOSITORIES



Main project goal:
Positioning re3data as a
central reference for
research data repositories.

- Provide **customizable and extendable core repository descriptions** that are **persistently identifiable** and can be appropriately **referenced and cited**.
- Update and expand the **metadata schema**.
- Develop further options for **automated data exchange** (M2M) between re3data and other services.
- Improve the **(re-)use** of re3data, its API and metadata. Build **new widgets** that take recent requirements of stakeholders into account.
- Provide more functions for **monitoring and recommendation**, for example of repositories that enable FAIR data practices (cooperation with EU project [FAIRsFAIR](#)).
- All the above activities are carried out according to a **new conceptual model** for re3data.



Funding organisation:

Funded by

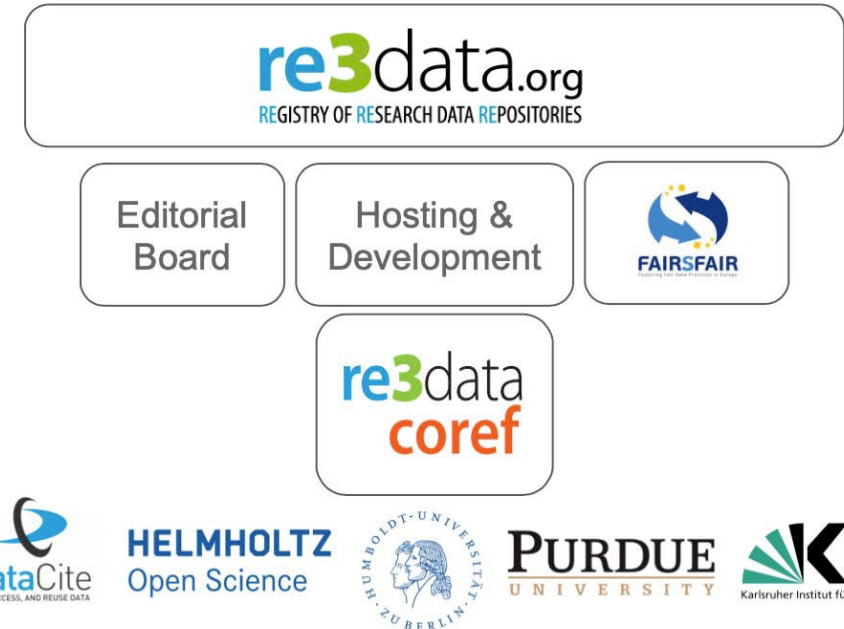


Deutsche
Forschungsgemeinschaft
German Research Foundation

re3data COREF Project

- 36 Months, started in January 2020
- Berlin School of Library and Information Science at the Humboldt-Universität zu Berlin
- DataCite - International Data Citation Initiative e. V.
- Helmholtz Association's Open Science Office at the GFZ German Research Centre for Geosciences
- KIT Library at the Karlsruhe Institute of Technology
- The project partners actively participate in national and international initiatives on research data management (DINI, RDA).

Funded by: **DFG** Deutsche
Forschungsgemeinschaft



Visit the project blog:
coref.project.re3data.org

re3data Conceptual Model for User Stories: Most common use cases

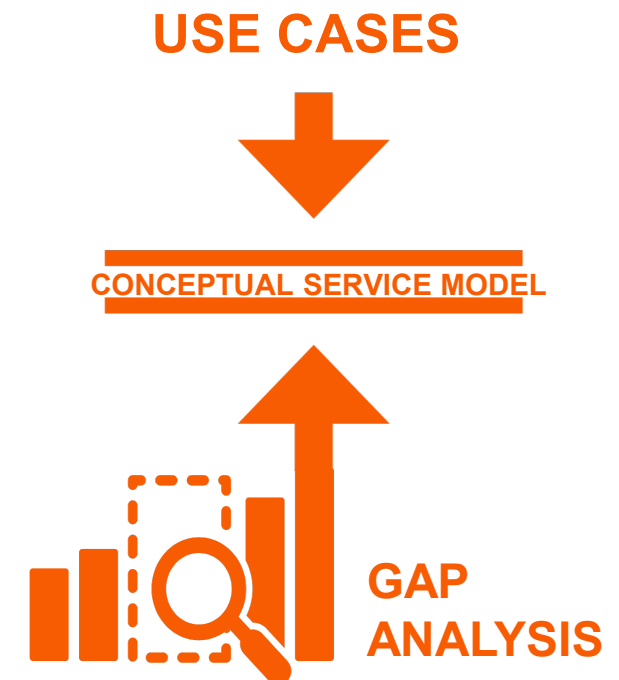
1. Search and discovery of research data repositories
2. Reuse re3data metadata
3. Administrate re3data metadata
4. Reference re3data metadata

Feedback was collected via a **survey** and **workshops** with 21 stakeholders to identify relevant **use cases** and **requirements**.

Read the report:

<https://doi.org/10.48440/re3.013>

Download the model:
<https://doi.org/10.48440/re3.012>



Use Case: Search and Discover Research Data Repositories

Existing

- Researchers: Find an appropriate RDR to deposit and find data sets
- Information Specialists: Recommend RDR to researchers and other end users

Future

- Search for RDR via predefined subsets of criteria (profiles)

Use Case: Reuse re3data metadata

Existing

- Registries/Databases/Discovery Systems: Enrich metadata of their own services
- Publishers/Funders/Organizations: Create lists of recommended RDR
- Funders/Organizations: Monitor the RDR landscape
- Access to re3data metadata via API or web interface

Future

- Provide a list of recommended RDR based on predefined subsets of criteria (profiles)

Use Case: Administrate re3data metadata

Existing

- End users: Suggest changes to RDR entries via the web interface

Future

- Administration of RDR entries in re3data should be attributable via ORCID
- Enable repository operators to edit RDR entries via an authenticated process
- Implement ROR IDs to support the addition of standardized organizational metadata for RDR
- Enable certification agencies to enrich entries through a quality-assured, automated process via an API

Use Case: Reference re3data metadata

Existing

- Researchers: Refer to an RDR to attribute the location of research data
- Repository Operators: Refer to the RDR of an organization so that the service gets credit and higher visibility
- Registries/Databases/Publishers/Discovery Systems: Uniquely identify an RDR for referencing

Revision of the metadata schema: New Version 3.1

- **Schema Revision Step 1** – Version 3.1 introduces two major changes:

“certificate”: Version 3.1 will expand descriptions of repository certification. References to a document outlining details of the certificate as well as certification start and end date will describe the certification status in greater detail.

“profile”: The new property *profile* provides the opportunity to identify a subset of repositories indexed in re3data pre-defined by a third party based on community-developed criteria. Each profile has to provide a URL outlining the selection criteria.

UPCOMING:

- **Schema Revision Step 2** – Version 4.0 (towards the end of the project)
- Mapping re3data metadata to **schema.org**
- **RDF** implementation

Version 3.1 of the Metadata Schema:
<https://www.re3data.org/schema>

Quality & Transparency: Making research data quality assurance visible

- Analysis of **data journal** guidelines (sample of 142 data journals and 173 guideline documents)
- **Survey on data quality management at research data repositories** (330 complete responses)
 - Results will be considered in the **update of the metadata schema** to provide information on quality assurance standards and measures for research data repositories
- Review of the re3data **editorial process**
- Building a **Model of Trust for metadata editing**
- Implementing the usage of **authority files** (ORCID)



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THANK YOU!



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