The Power of Persistent Identifiers

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persistent identifier

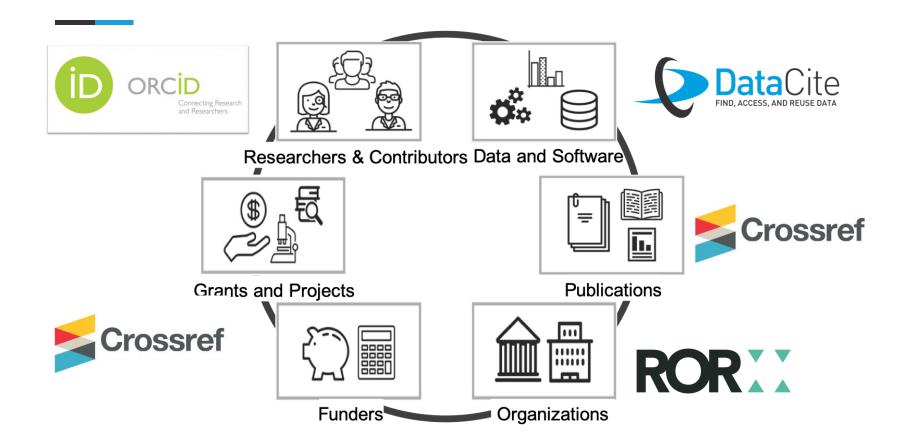
an organization made a promise to keep it alive globally unique string

PIDs can make research FAIR

| Data silvara be | 1 - 1 (meta) auta di e designica di Brosani, dinique di a persistenti dell'internation (pers) |
|-----------------|---|
| Findable | F2. data are described with rich metadata |
| | F3. metadata clearly and explicitly include the identifier of the data it describes |
| | F4. (meta)data are registered or indexed in a searchable resource |
| Data should be | A1. (meta)data are retrievable by their identifier using a standardized communications |
| Accessible | protocol |
| | A1.1 the protocol is open, free, and universally implementable |
| | A1.2 the protocol allows for an authentication and authorization procedure, where |
| | necessary |
| | A2. metadata are accessible, even when the data are no longer available |
| Data should be | I1. (meta)data use a formal, accessible, shared, and broadly applicable language for |
| Interoperable | knowledge representation. |
| | I2. (meta)data use vocabularies that follow FAIR principles |
| | 13. (meta)data include qualified references to other (meta)data |
| Data should be | R1. meta(data) are richly described with a plurality of accurate and relevant attributes |
| Reusable | R1.1. (meta)data are released with a clear and accessible data usage license |
| | R1.2. (meta)data are associated with detailed provenance |
| | R1.3. (meta)data meet domain-relevant community standards |
| | |

Data should be F1. (meta)data are assigned a globally unique and persistent identifier (DOI)

PIDs enable connections



PIDs for people, places, things



Persistent identifiers for people include ISNI and ORCID's

Persistent identifiers for places include GRID and ROR



Persistent identifiers for things include Crossref and Datacite



ROR



ROR is a community-led project to develop an open, sustainable, usable, and unique identifier for every research organization in the world.



https://ror.org/

PIDs for research outputs

DataCite



Non-profit membership organization working with 1900+ repositories in the world to provide DOIs for data and other research outputs.

Connecting research, identifying knowledge.



DataCite's mission is to be the world's leading provider of persistent identifiers for research. Through our portfolio of services, we provide the means to create, find, cite, connect, and use research. We seek to create value and develop community - driven, innovative, open, integrated, useable and sustainable services for research.



EXAMPLE OF A DOI



https://doi.org/10.15138/33bv-s284



Resolver service Prefix Suffix (unique namespace) (resource)

- A DOI name is made up of a prefix and a suffix separated by a forward slash.
- A DOI prefix always starts with '10.' and continues with a number. Each DataCite member organization is assigned its own unique prefix(es), and decides its own suffix format.
- A DOI is always associated with a metadata description of the object as well as to a digital location, such as a URL, where all the details about the object are accessible.

Types of research outputs



- 1. Research datasets and collections, associated workflows, software, images, and models
- 2. Grey literature such as theses, dissertations, reports, unpublished conference papers, newsletters, preprint journal articles, technical standards, and specifications for which the institutional repository is the primary publication point.

Repositories



Definition: a repository is a service operated by research organizations, where research materials are stored, managed and made accessible.

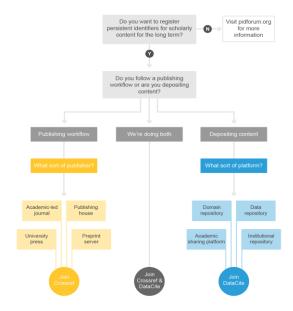
DataCite Fabrica Support ADMIN -DataCite / Members / TU Delft Library / Repositories 4TU.Centre for Research Data

Info Settings Prefixes DOIs





DataCite and Crossref





Crossref is a membership organisation for scholarly publishers providing services to help the scholarly community find, cite, link, assess and re-use published content.



Datacite is a membership organisation working with the respository community to register DOIs for a range of content and provides services to create, find, cite, connect, and use research.



DataCite Membership



Direct Membership:



DataCite Membership



Consortium Membership:



Create and Manage DOIs



DataCite membership allows you to create and manage DOIs for all of your repositories.

Members can create DOIs via our APIs or via our web platform, known as DOI Fabrica.

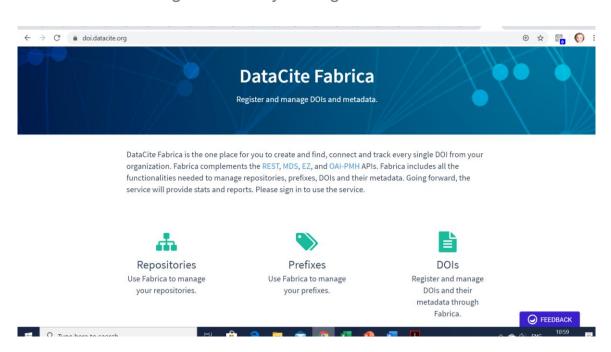
- → Our primary API is a REST API that supports JSON (https://support.datacite.org/docs/api)
- → DOI Fabrica provides a manual interface to create as many DOIs as you need

DOI web interface



One-stop service to create and manage DOIs for your organization

- 1.Tools to create, manage, and find DOIs and metadata
- Statistics on DOI activities
- 3. Link checker information
- 4. Maintain organization information



Impact





1. DataCite DOIs make your research outputs discoverable.

- A DOI makes your research outputs uniquely identifiable.
- Metadata you register with DataCite is in a central location, harvestable by anyone.
- Metadata for your research outputs appear in other search engines.

2. DataCite services make it easy to do research data management.

- Our services are easy to use.
- You can get started right away.
- We connect you to the DataCite member community, full of passionate people who've done this before.
- Our metadata schema is extensive and well-regarded, so crosswalks and conversions are readily available.



3. DataCite services help you demonstrate impact.

- A DOI enables easy tracking of your research outputs.
- DataCite services make institutional reporting simple.
- DataCite services support data citation.

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