

Principles and pragmatics of as open as possible: persistent identifiers as the interface between research information commons and closed systems

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Presentation outline

- Scenario: National level research information priorities
- Concept: PID as interface between RI commons and closed systems
- Proposal: From black hole to 'open enough'
- Example-1: peer review
- Example-2: RAiD, complex object

National level research information priorities

Scenario: strategic analytics

At a national level, we need to:

- Understand strengths and weaknesses--set priorities
- Deliver support in relation to research ambitions and social relevance
- Compete among institutions for talent and funding

This is increasingly achieved with a comprehensive aggregation and analysis of FAIR research information.

National level research information priorities

Scenario: data privacy

There is a moral and practical balance to be struck between:

- Privacy and security of information about individuals who contribute to research.
- The reputation and credibility of the organisations tasked with safeguarding that information.
- The expectations of open science (e.g. discoverability)

National level research information priorities

Scenario: monitoring open science

Open science brings transparency and accountability to research. It boosts the credibility of decision taking and management by offering the widest possible range of research information, and the deepest possible understanding of how research is working.

Reporting and evaluation of research can be simplified, automated and improved using the PID infrastructures and CRIS network that we already have.

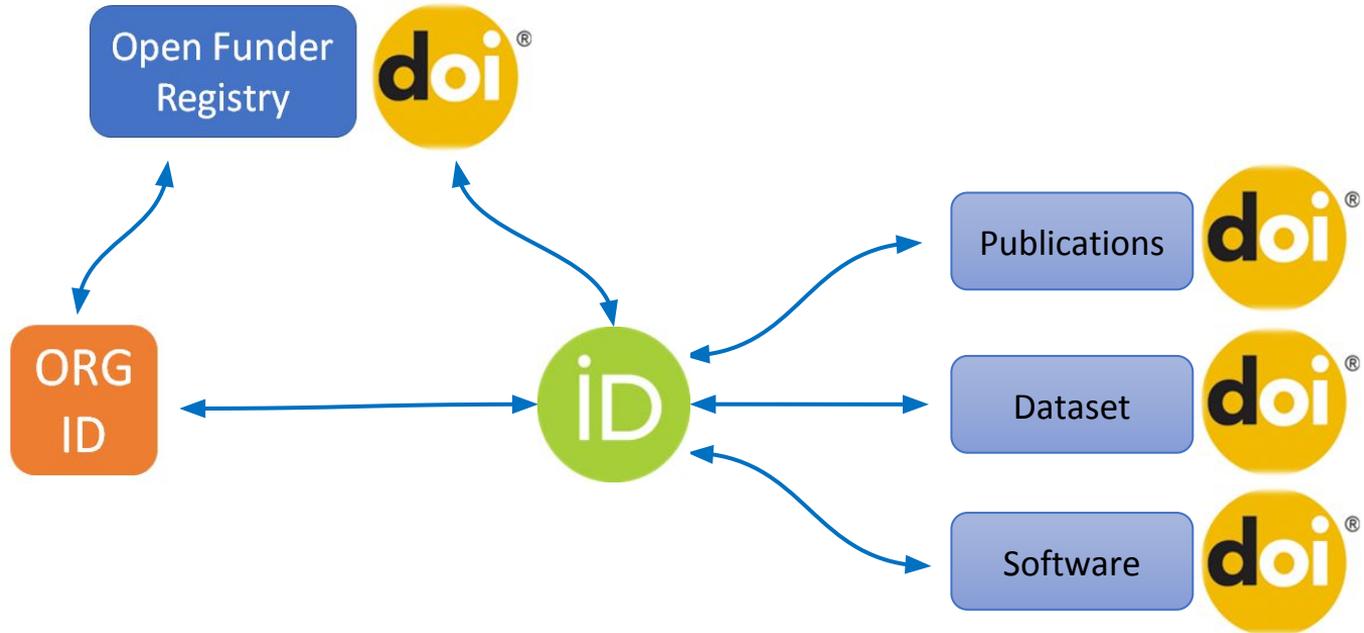
Persistent identifiers as interface

- Linked together, PIDs each, individually provide a *configurable* interface^[2] to the network of linked researchers, outputs and resources
- With delegated agency^[1] PIDs have the capacity to enact machine operations on our behalf (e.g. provenance, associations, access, etc.)
- Access to a PID does not necessarily imply access to the objects themselves, including a researcher's identity (ORCID/author consent)

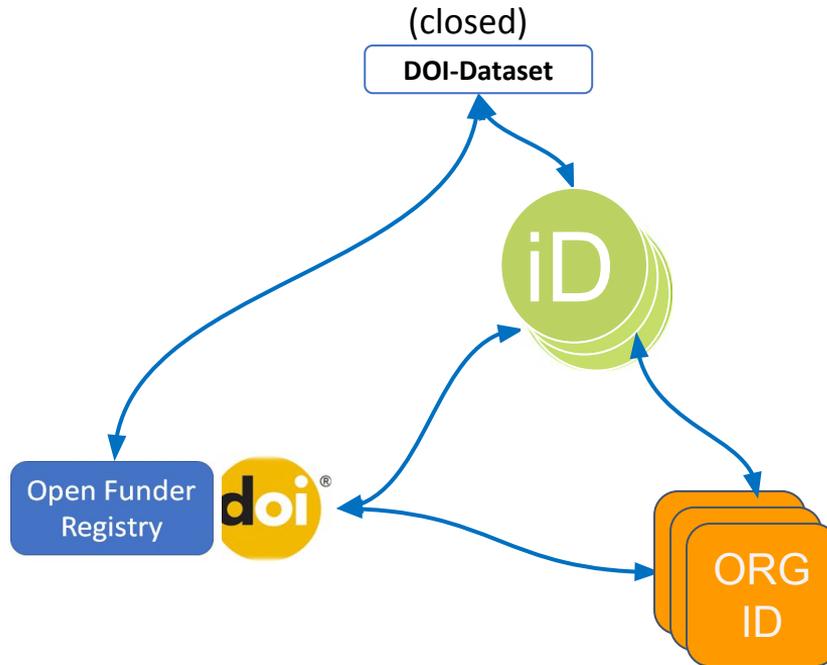
[1] Latour, Bruno. 1992. "Where Are the Missing Masses? The Sociology Of a Few Mundane Artifacts." In *Shaping Technology/Building Society: Studies in Sociotechnical Change*, edited by Wiebe E. Bijker and John Law. MIT Press.

[2] Rijcke, Sarah de, and Anne Beaulieu. 2011. "Image as Interface: Consequences for Users of Museum Knowledge." *Library Trends*

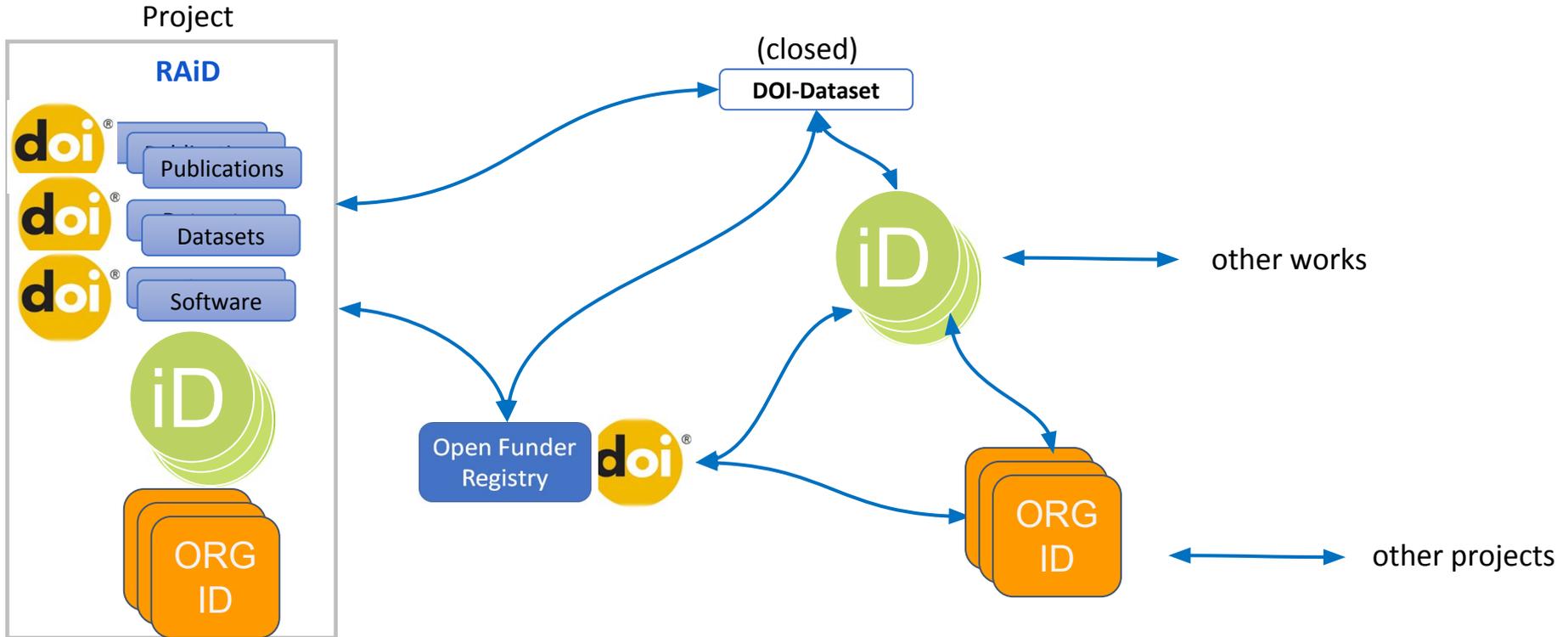
PID as interface: Researcher-centric network



PID as interface: Closed dataset, open PID



PID as interface: Closed dataset, open PID



Proposal: From black hole to 'open enough'

- Use of PIDs to establish minimum threshold at which a research object's existence is openly knowable, while retaining the possibility of making access to its content conditional
- FAIR principles

Example-1: Peer review

Peer review is a classic example of ‘as open as possible, as closed as necessary’.

- Reviewers contribute to the ‘health’ of their discipline
- Review has traditionally been an ‘invisible’ contribution
- Double blind peer review requires that most information about the review be closed
- Open peer review is growing rapidly

Ultimately, journals, funders and employers **NEED** to know about such activities...

Example-1: Peer review citation - closed

▼ Peer review (1)

↑↓ Sort

▼ review activity for [The Journal of Neuroscience](#)(1)

journal, The Journal of Neuroscience and eNeuro support the mission of the Society for Neuroscience. The open-access journal eNeuro embodies an emerging scientific vision that offers a new experience for authors and readers, and the highly cited Journal of Neuroscience publishes papers on a broad range of topics of general interest to those working on the nervous system.

Review date	Type	Role	Actions
2017	review	reviewer	<input type="checkbox"/> show details view

Example-1: Peer review citation - open

▼ Peer review (1) Sort

▼ review activity for [F1000Research\(1\)](#)   

journal, F1000Research

Review date	Type	Role	Actions
2017-08	review	reviewer	 hide details view 

Review identifier(s): DOI: [10.5256/f1000research.13189.r24792](https://doi.org/10.5256/f1000research.13189.r24792)

Convening organization: F1000Research(London, United Kingdom)

Review subject: The new alchemy: Online networking, data sharing and research activity distribution tools for scientists
[version 1; referees: 1 approved] journal-article F1000Research.
DOI: [10.12688/f1000research.12185.1](https://doi.org/10.12688/f1000research.12185.1)

Example-2: RAiD, compound object identifier



<https://www.raid.org.au/>

Example-2: RAiD, compound object identifier

The Research Activity Identifier (RAiD) is a PID for a cluster of entities associated with an activity (think project...) and represents the cluster as a 'compound object'

- It can be used to group other PIDs (such as ORCID iDs or DOIs)
- It can represent long term projects, short term projects, sub-projects and single experiments.
- It can be integrated into data management records of any type where they provide a method to trace all of the researchers, institutions, outputs, tools and services that are used in a project

The RAiD provides a top-level “signpost” that can be used to signal connections between entities without exposing confidential information.

FAIRness is necessary, but not sufficient for 'open'.

PIDs help to make things **Findable**.

A CRIS should be **Interoperable**.

The information linked to a PID can support **Access** and **Reuse**, if it contains:

- Source data - the location and nature of the system/profile that hold the info
- Rights information - access restrictions defined
- Negotiation - ability or request or determine access electronically or manually

“Let’s use the open identifier systems we already have effectively, consistently, and to mutual benefit.”

<https://orcid.org/blog/2018/06/07/mapping-pid-landscape>

Learn how open PIDs help map the research landscape in this post by
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