A PID for everything

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What is a persistent identifier?

persistent identifier

an organization
made a promise
to keep it alive

globally unique
string

(known as PIDs to their friends)

How PIDs work (in a nutshell)

PIDs are typically backed by a **registry** that indicates what item is being identified. Different kinds of PIDs have varying degrees of descriptive metadata.

PIDs today are often expressed as **URLs**, and the registry indicates where that URL should ultimately resolve. That PID will always point to the correct item even if the item's location changes.

What kind of stuff gets a PID?

Journal articles. via Crossref (https://crossref.org)

People. via ORCID. (https://orcid.org)

Data, software, and other stuff. via DataCite. (https://datacite.org)

Research organizations. via ROR. (https://ror.org)

And others.

For the real answer see FREYA deliverable 3.1 : https://www.project-freya.eu/en/deliverables/freya_d3-1.pdf

. . . but what can PIDs *do*?

PIDs Disambiguate

Robin Dasler

ORCID iD

https://orcid.org/0000-0002-4695-7874

Print view ?

Also known as

RH Dasler, RL Dasler, RL Howard, Robin Howard

Other IDs

ResearcherID: N-9035-2013

PIDs Link

References

Abd Ellah and Abouelmagd, 2016   N.H. Abd Ellah, S.A. Abouelmagd
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Abouelmagd et al., 2016   S.A. Abouelmagd, F. Meng, B.-K. Kim, H. Hyun, Y. Yeo
Tannic acid-mediated surface functionalization of polymeric nanoparticles
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Ahmed et al., 2016   S. Ahmed, S. Annu, S.S. Yudha
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Article   Download PDF   View Record in Scopus
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PIDs make research FAIR

Findable
- (meta)data are assigned a globally unique and persistent identifier

Accessible
- (meta)data are retrievable via an identifier using a standardized protocol
- metadata are accessible, even when the data are no longer available

Interoperable
- (meta)data use a formal, accessible, shared, and broadly applicable language knowledge representation.
- (meta)data include qualified references to other (meta)data

Reusable
- meta(data) are described with a plurality of accurate & relevant attributes
- (meta)data are associated with detailed provenance

Good start, but we want more

By connecting everything, you can see the true power of PIDs

Researchers, institutions, publications, datasets, and more are already interconnected in real life, and this can be reflected and tracked through PIDs
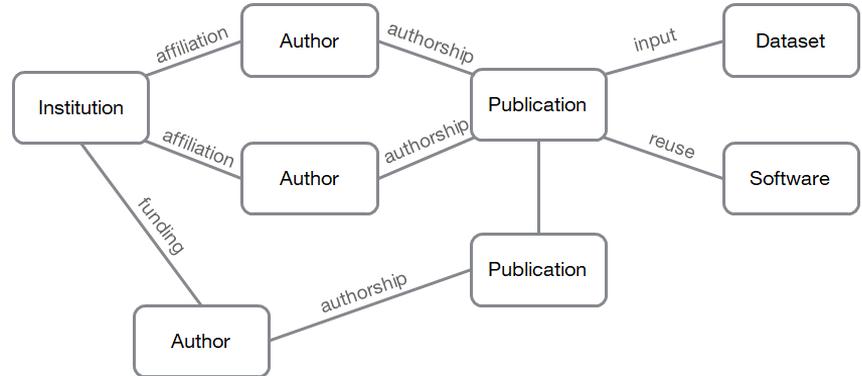
And what can you do?

Step 1: Give PIDs to your stuff

It's hard to connect things when we don't know they exist.
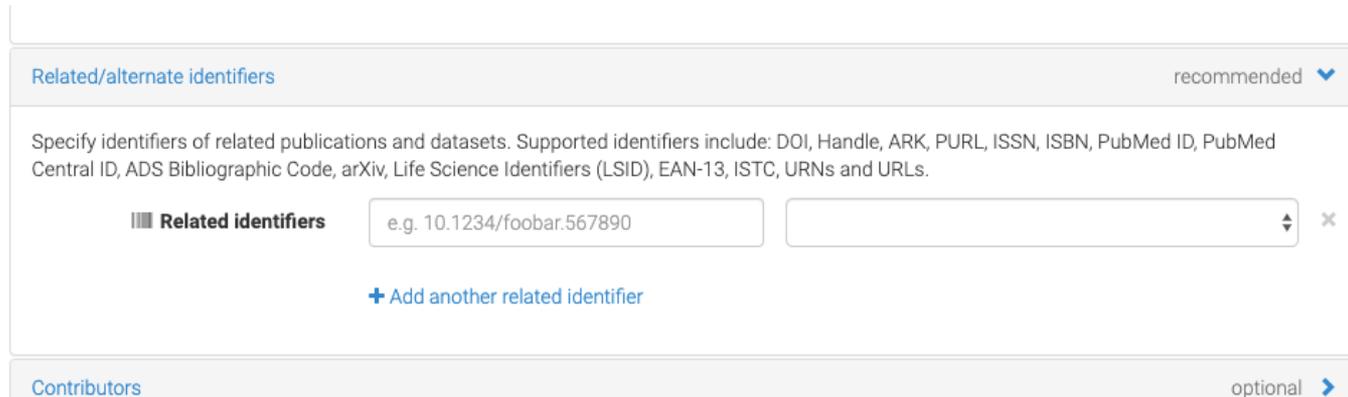
So get an ORCID iD for yourself → https://orcid.org

Give DOIs to your data and software → https://datacite.org,
https://guides.github.com/activities/citable-code/

Put your reports and white papers into a repository that gives out PIDs →
https://repositoryfinder.datacite.org or your institutional repository

Step 2: Tell your PIDs about your other PIDs

Include relevant related PIDs in the metadata for your software, dataset, and paper PIDs, even if your repository says they're optional.
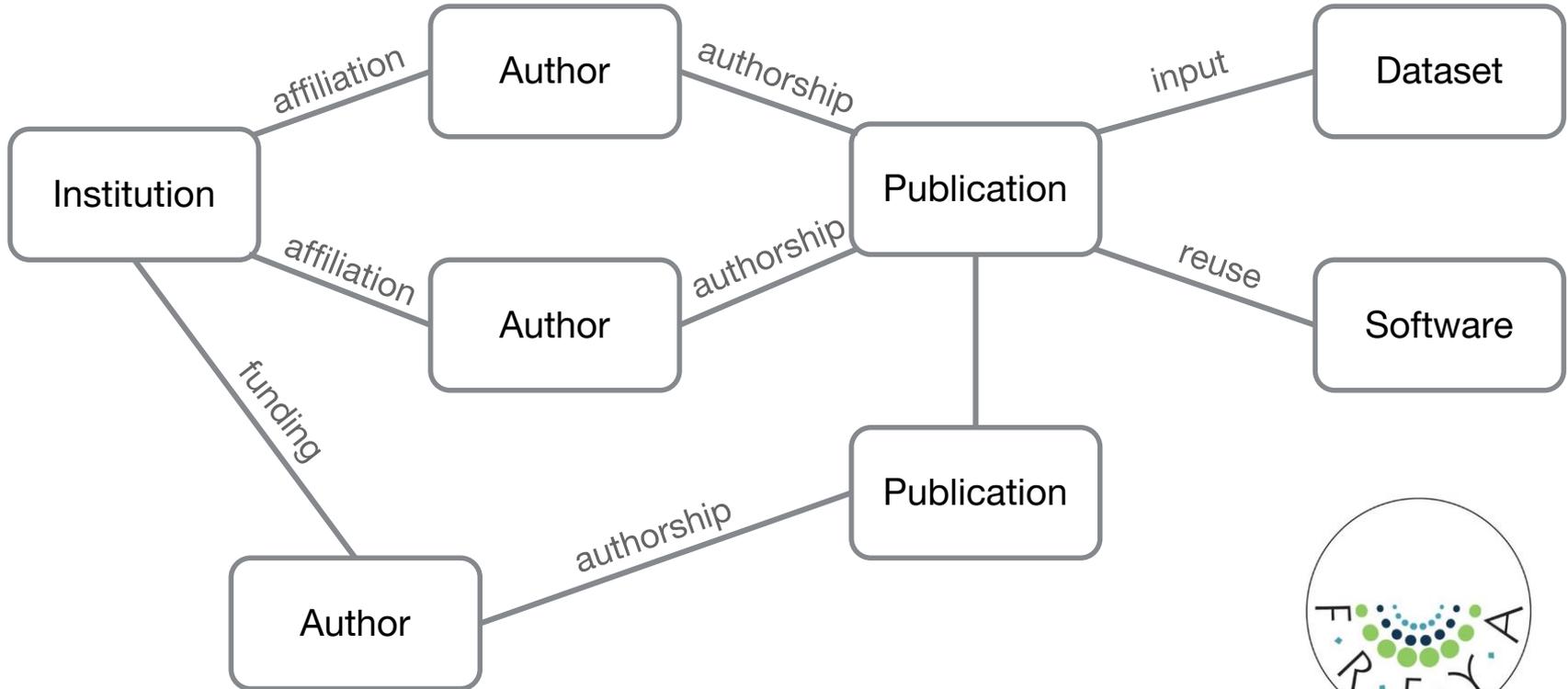
In Zenodo (for example), it looks like this:

Step 3: Share these connections with the community

DataCite Members (data repositories)

Deposit metadata

Include fields:

`RelatedIdentifier`

`relatedIdentifierType` like DOI

`relationType` usually `isReferencedBy` or `isSupplementTo`

Event Data Hub by Crossref and DataCite

DataCite Event Data
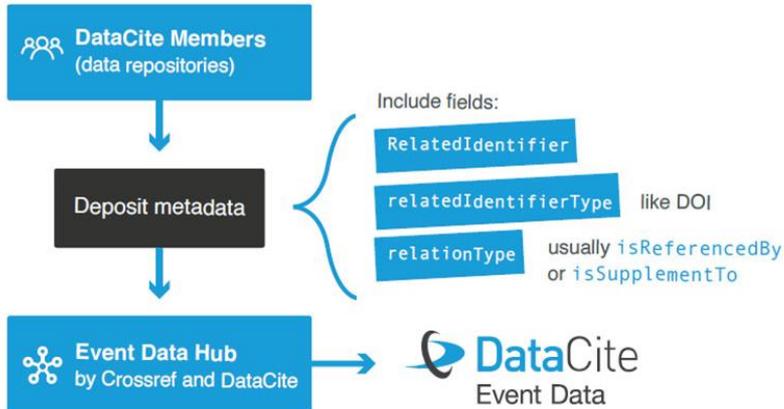
Interested in using this information? Find out more at: https://support.datacite.org/docs/eventdata-guide

This all feeds into project FREYA

And allows you to answer new questions today!