



Using the PID Graph to augment the information in your CRIS System

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The FREYA project



Persistent Identifiers (PIDs) for the European Open Science Cloud (EOSC) with a focus on

- New PIDs (e.g. organizations, instruments)
- **PID Graph**: Connections between PIDs
- **PID Forum**: Training and Outreach
- **PID Commons**: Sustainability

Website: www.project-freya.eu



FREYA project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 777523.





PID Graph is driven by User Stories

At the beginning of the FREYA project we collected more than 40 user stories that can't be really addressed with currently available services.

As a university administrator, I want to get a list of all datasets and software published by our researchers, so that I can get a comprehensive view of our research outputs

If possible, can I also get all the data and software citations for these outputs.

And, please, also the funders and grants that supported these outputs.



Addressing the User Story

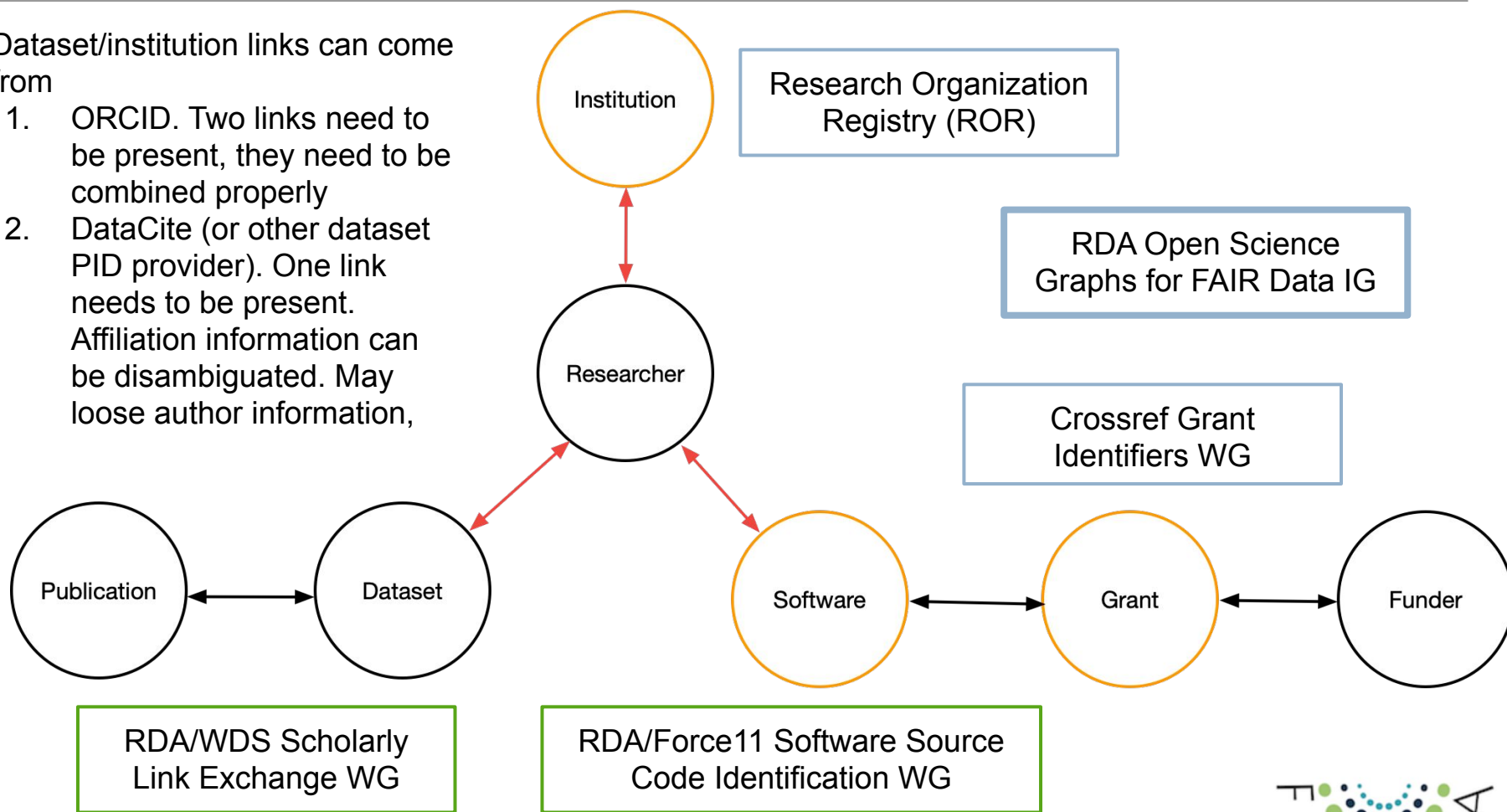
As a university administrator, I want to get a list of all datasets and software published by our researchers, so that I can get a comprehensive view of our research outputs

- Ask researchers
- Collect information yourself
- Get information from your CRIS provider
- Get information from the PID Graph

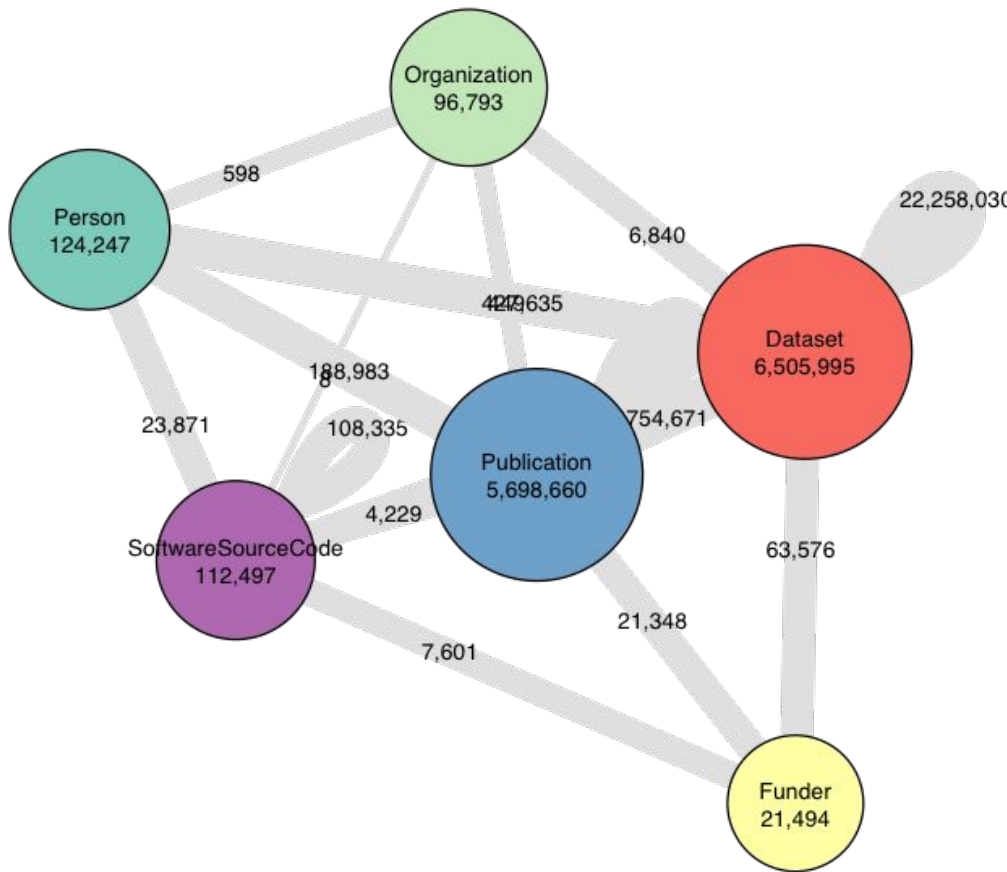
PID Graph for User Story

Dataset/institution links can come from

1. ORCID. Two links need to be present, they need to be combined properly
2. DataCite (or other dataset PID provider). One link needs to be present. Affiliation information can be disambiguated. May lose author information,



PID Graph is powered by GraphQL



<https://api.datacite.org/graphql>

PID Graph uses GraphQL to enable complex queries of the federated graph provided by FREYA partners

Jupyter Notebook

Fenner, M. (2019, June 30). FREYA PID Graph Key Performance Indicators (KPIs) (Version 1.1.0). DataCite.

<https://doi.org/10.14454/3BPW-W381>

ROR Affiliation Identifiers supported in DataCite Metadata since August 2019

 This data center is not currently reporting usage information.

 <https://doi.org/10.7916/d8-y4tc-r078>  Cite

Minutes, 1974-12-06. Neo-Confucian Studies, seminar 567, 1974-1975

(:Unav)
Work published 2017 via Columbia University

 This data center is not currently reporting usage information.

 <https://doi.org/10.7916/d8-ce6n-b052>  Cite

Minutes, 1974-12-06. The Art of Africa, Oceania and the Americas, seminar 509, 1974-1975

(:Unav)
Work published 2017 via Columbia University

 This data center is not currently reporting usage information.

 <https://doi.org/10.7916/d8-d600-ja56>  Cite

Affiliations	
☐ Imperial College London	12,229
☐ Old Dominion University	848
☐ Centre for Ecology and Hydrology	624
☐ University of Iowa	187
☐ University of Kentucky	172
☐ Utah State University	160
☐ DataCite	114
☐ Bank of Canada	104
☐ National Marine Fisheries Service	95
☐ International Institute of Tropical Agriculture	90

Research Outputs associated with Imperial College London via their ROR ID in PID Graph

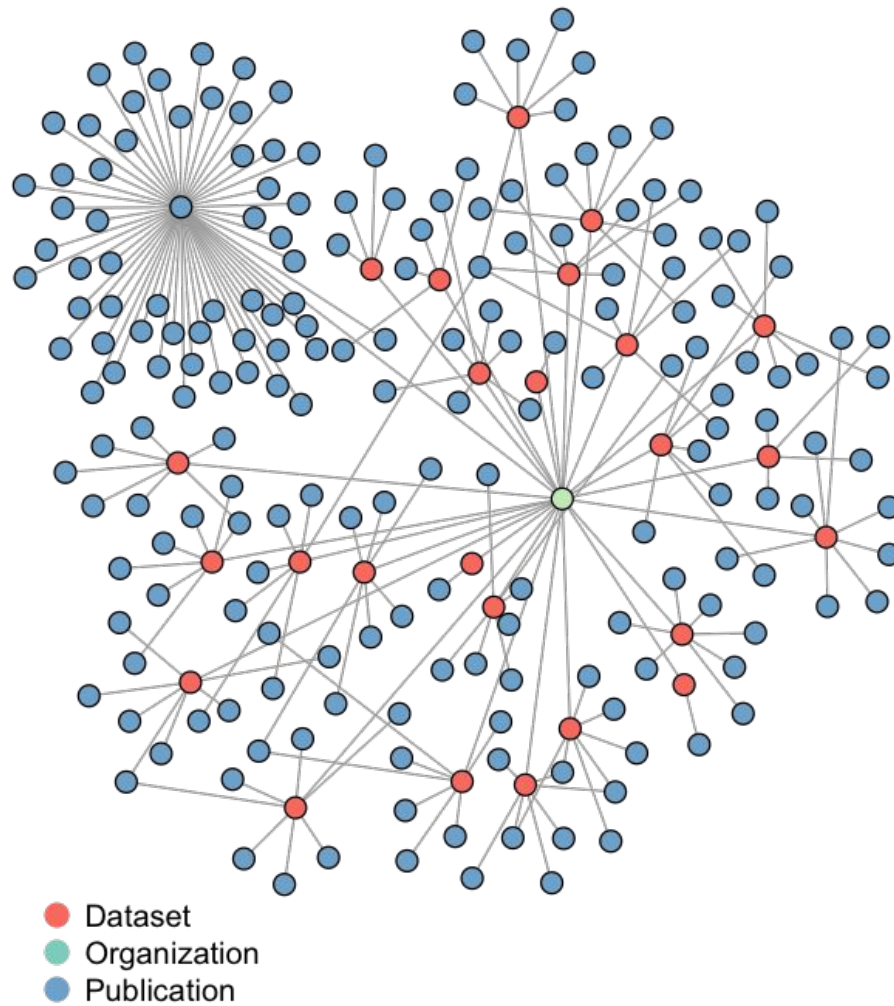
Publication	6,577
Dataset	5,240
Collection	395

All research outputs were published in Imperial College institutional repositories.

The publications are all PhD theses from Imperial College London graduates.



PID Graph of (Subset) of Research Outputs associated with Imperial College London via their ROR ID





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Open Science Graphs for FAIR Data IG

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IG

Group details

Status: In Group Revisions

Chair (s): Wouter Haak, Martin Fenner, Amir Aryani, Paolo Manghi

TAB Liaison: Christine Kirkpatrick

 Not yet endorsed

Mission

The goal of the Open Science Graphs Interest Group (OSG IG) is to build on the outcomes and broaden the challenges of the Data Description Registry Interoperability (DDRI) and Scholarly Link Exchange (Scholix) RDA Working Groups to investigate the open issues and identify solutions towards achieving interoperability between services and information models of Open Science

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Open Science Graphs: Requirements

1. Relevant use cases
2. Relevant corpus of scholarly outputs
3. Openly available metadata for scholarly outputs describing relations to other outputs, researchers, institutions, grants, etc.
4. Technology for building and querying the graph, and for combining graphs from different sources
5. Clients and tools to access the graph
6. Coordination between the various Open Science Graph activities
7. Community adoption

