

The ResearchLink Initiative: The nexus between data, publications, and grants

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Abstract

ResearchLink is ANDS' coordinated effort to facilitate connectivity between research data and core elements of the research ecosystem, in particular publications, grants and researchers. In this talk, the authors highlight the national and international directions in this area such as ORCID, DataCite, working groups in Research Data Alliance, and ANDS international collaboration for establishing a sustainable interoperability platform for research data.

Background

Between 2010 and 2013, ANDS pursued a data connections strategy¹ to improve data discovery, data evaluation, and data re-use. A number of infrastructure projects have been completed and strategic alliances formed to enable standard references for datasets, researchers, research projects, locations, research fields, and scientific concepts. Work continues to realise the benefits of this infrastructure by embedding these standard referencing approaches into contemporary scholarly practice.

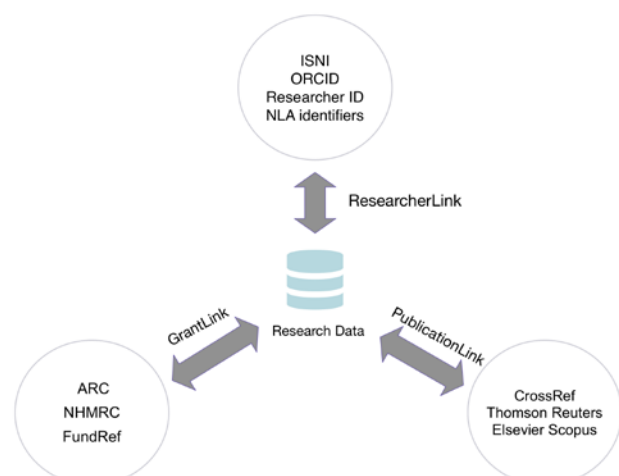
With new directions in research impact assessment, data sharing and open access publications, Australian research funders increasingly focus on reporting the outputs of funded research (both data and publications). Accordingly the ANDS infrastructure that facilitates linking between data, grants, and publications becomes more relevant and strategic. The current ResearchLink initiative focuses on that nexus between data, grants, and publications which is at the heart of the scholarly enterprise.

ResearchLink

The ANDS ResearchLink initiative aims to enable and facilitate an unprecedented insight into the significance of research data through its relationship with grants and publications and indeed a fresh perspective on the research itself. Of course ANDS is not alone in this initiative and the authors will report on the status of activities from research organisations around the world.

The initiative has three main components:

- **ResearcherLink:** engagement with major national and international identifier providers to facilitate linking researchers to research data.
- **PublicationLink:** collaboration with publishers, repositories and research institutions to improve data citation and create a link between research data and other scholarly works.
- **GrantLink:** establishing sustainable connections between publically funded projects and research data.



¹ <http://ands.org.au/guides/data-connections.html>

ResearcherLink

Identifying the contributors (researchers or research institutions) to research datasets presents many challenges across global research infrastructure. Researchers may use variations of their name, some names are common, and author disambiguation will be an obstacle when researchers collaborate across multiple universities and research domains. A common practice to solve this problem is to use author identifiers. There are a number of established global solution providers such as VIAF, ISNI and ORCID that mint globally unique identifiers for researchers.

At the national level, ANDS has worked with the National Library of Australia (NLA) to extend its existing VIAF-linked infrastructure to harvest party information (people and groups) from Australian research institutions². As part of the ResearcherLink initiative, ANDS continues to promote author identifiers by collaborating with ORCID -- a non profit international organisation that creates and maintains unique identifiers for researchers.

As part of this presentation, the authors will describe the uptake of ORCID by national and international publishers, funding agencies, and research organisations. In particular the authors will report on the conclusions of the ORCID Roundtable summit to be held in Canberra on July 28 which includes representatives from the ARC, NHMRC, University Research Office Directors, and University Librarians.

PublicationLink

Publications are the engine room of the research enterprise. As research data shapes to also become a first class output of research, the link between publications and data also becomes essential, so that both data and publications might be discoverable, reusable and credible.

While the connection between research data and publications is essential in research information systems, the scale of the available information is overwhelming for a single research institution to create, manage and maintain. At the time of writing this article, CrossRef has 60 million³ publications in its registry, while data objects potentially number in orders of magnitude greater. Persistent identifiers (such as DOI) become a crucial engineering element in this vast global information system that links publications and data. Challenges remain in linking datasets to publications, including promoting the academic culture of data sharing and citation as well as logistical and conceptual challenges of referencing and archiving dynamic data.

In this presentation, authors will report on collaborative international developments in this area by the Alfred P. Sloan foundation⁴ as well as by the Research Data Alliance and World Data System who plan an open data-publications reference information system⁵. The presentation will also report on the progress of existing initiatives including the ANDS collaboration on the Thomson Reuters Data Citation Index as well as latest directions to address citation of dynamic data.

GrantLink

The relation between grants and datasets is an important component in promoting discoverability of research data as well as in assessing the wider outputs, outcomes, and benefits of research. Enabling researchers to find data derived from high impact research projects promotes reuse and credibility of research data; in addition, the funding agencies have a new focus on open access for publications, and similar trend can be expected for research data.

In this presentation, the authors will discuss the national and international capabilities for linking grants and datasets, and report on recent collaborations such as FundRef⁶, ANDS – DRYAD⁷ collaboration and activities as part of the Research Data Alliance working group for enabling registries interoperability⁸.

² <http://ands.org.au/guides/ardc-party-infrastructure-awareness.html>

³ http://www.crossref.org/01company/crossref_indicators.html

⁴ <http://dataconservancy.org/dc-ieee-portico-awarded-grant-to-link-publications-with-data/>

⁵ <http://www.icsu-wds.org/community/working-groups/data-publication/services>

⁶ <http://Crossref.org/fundref>

⁷ <http://Datadryad.org>

⁸ <https://rd-alliance.org/group/data-description-registry-interoperability.html>

About Authors

Adrian Burton: Adrian is the Director, Services at the Australian National Data Service (ANDS). His portfolio responsibilities span ANDS IT services, ANDS skills agenda, and ANDS policy agenda. Part of this role is to oversee both the ANDS Online Services and National Service partnerships which provide identifier services for Australian eResearch groups. Adrian's research interest formerly included South Asian Linguistics.

Amir Aryani: Amir is a project manager at the Australian National Data Service (ANDS) located at the Australian National University (ANU). He has more than fifteen years of Information Technology experience across the full software development life cycle. He has completed his PhD in the field of software evolution at the school of computer science, RMIT university, and he has peer-reviewed publications in fields of Software Engineering, Software Evolution and Maintenance, Domain-Based System Analysis, eResearch and Data Mining.