

## Data Description Registry Interoperability Working Group

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research data sharing without barriers rd-alliance.org

## **Summary of the Problem**

**Problem:** finding related datasets across registries is not a trivial task by simple keyword search

## **Impact**

- Researchers: Not easy to find related works
- Registries/ Repositories: Difficult to disambiguate and connect datasets



## **Highlights of the Deliverable**

- DDRI Participants: ANDS, Dryad, CERN, DataPASS, da-ra, Thomson Reuters, VIVO Cornel, DANS, DataCite and Data Curation Unit (DCU)
- Deliverable: a proposed model for connecting datasets on the basis of co-authorship or other collaboration models such as joint funding and grants.



## **Impact of the Deliverable**

The proposed model has been adopted by ANDS and implemented as **Research Data Switchboard** – an open source software platform.

### **Use Cases:**

- Repositories: finding connected datasets across multiple platforms
- Universities: finding datasets by their researchers
- Researcher: finding similar datasets connected by coauthorship and joint funded grants



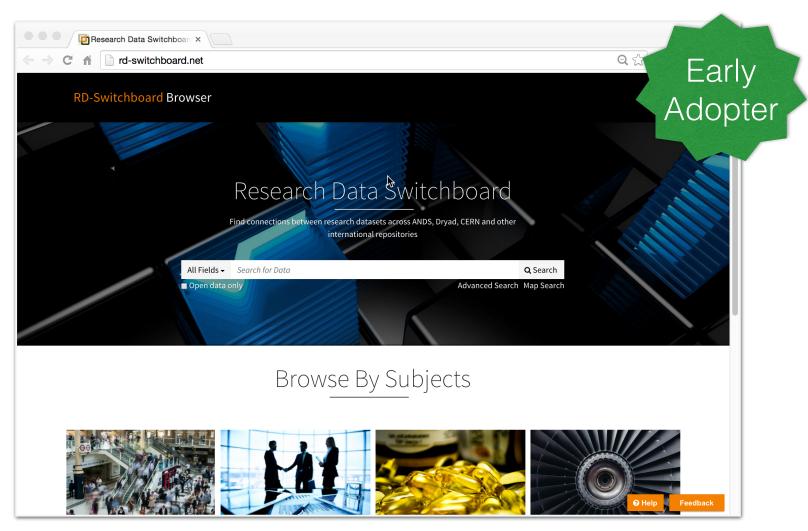
## **Endorsements/Adopters**

- Australian National Data Service
  - http://rd-switchboard.net
- NCI National Computational Infrastructure
  - Connecting Australian research data across multiple platforms
- University of Sydney (Australia)
  - Connecting datasets by the researchers from the University of Sydney



# RD-Switchboard Browser Developed using ANDS Software





http://rd-switchboard.net



Early Adopter

Mission: World-class, high-end computing services for Australian research and innovation

#### What is NCI:

- Australia's most highly integrated e-infrastructure environment
- Petascale supercomputer + highest performance research cloud + highest performance storage in the southern hemisphere
- Comprehensive & integrated expert service internat. vanguard
- National/internationally renowned support team

### NCI is national and strategic:

- Driven by national research priorities and excellence
- Engaged with research institutions/collaborations and industry
- A capability beyond the capacity of any single institution
- Sustained by a collaboration of agencies/universities (\$11+M p.a.)

### NCI is important to Australia because it:

- Enables research that otherwise would be impossible
- · Enables delivery of world-class science
- Enables interrogation of big data, otherwise impossible
- Enables high-impact research that matters; informs public policy
- Attracts and retains world-class researchers for Australia
- Catalyses development of young researchers' skills













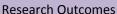
Communities and Institutions/ Access and Services

**Expertise Support** and Development

**HPC Services** Virtual Laboratories/ **Data-intensive Services** 

Integration

Compute (HPC/Cloud) Storage/Network Infrastructure













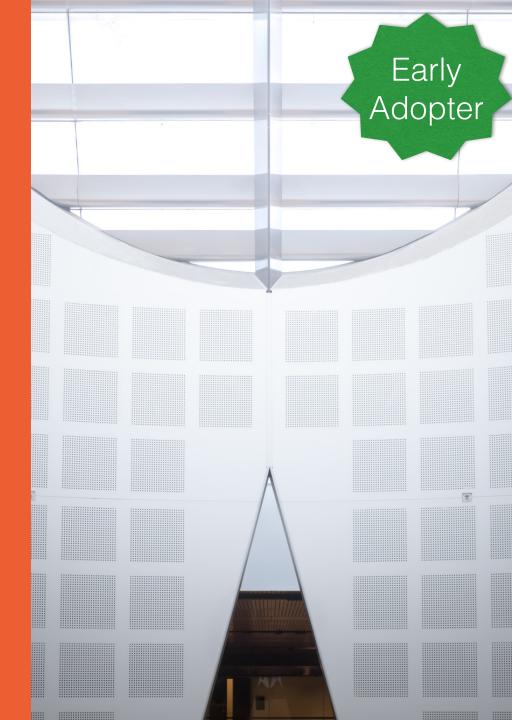
## The University of Sydney

As Australia's first university our reputation spans more than 160 years. In 2014, we were ranked in the top 0.3% of universities worldwide. Across 16 Faculties we taught more than 33,000 undergraduate and 19,000 postgraduate students, including 10,800 international students from more than 145 countries.

The Australian Federal Government's Excellence in Research for Australia (ERA) initiative rated our research at "above and well above world standard across 21 (of 22) broad discipline areas.

These disciplines include earth sciences, agricultural and veterinary sciences, mathematical sciences, engineering, biomedical and clinical health sciences, psychology and cognitive sciences, law and legal studies, language and communication, history and archaeology, and philosophy and religious studies.





## **Next Steps and Contact Information**

- Further development of the open source solution
- Continue working with early adopters and group participants
- For more information: amir.aryani@ands.org.au

