

# Summary of Breakout Session: FAIR and Trusted Collections

**Author: Keith Russell**

## Context of engagement

The breakout session to discuss FAIR and Trusted Collections was described in these terms: The FAIR principles have received world wide recognition as a very useful way of thinking about the connecting and sharing of a range of research outputs, including data, software, methods, algorithms and publications. The principles support the forming of these materials into meaningful collections that allow maximum reuse both by humans and machines across a range of disciplines. In this break out we would like to discuss where there are gaps and opportunities in making research outputs more FAIR and delivered on a trusted platform. We would like to identify possible priorities and actions that the ARDC can take with the Australian community to make this process more seamless, effortless and sustainable

Framing questions used in the session were:

- Where do you see key gaps in making research outputs more FAIR and delivered on Trusted Infrastructure?
- Where do you see that ARDC could play a role in the coming five years to make more research outputs more FAIR and delivered on Trusted infrastructure?

Sessions took place in NSW, ACT, VIC, QLD, SA, WA

## Themes arising

Participants see value in creating and making collections of related research outputs (data, software, tools, algorithms, publications) FAIR and view that ARDC can play a valuable role in this space. A number of recurring themes and suggestions for activities that ARDC can undertake were:

(+ More of this, - Less of this, # Differently)

## Things that the ARDC should do more of or new things:

- + Bringing together persons and organisations in order to connect up disparate existing collections, for example by facilitating the development of community standards to enable outputs to be connected and interoperable. This would include encouraging and developing vocabularies and ontologies for collections and web services.
- + Sharing solutions and platforms to manage, analyse and safely share sensitive data. There is a range of data that can't be made openly available but is of huge value for research. It would be

extremely valuable to have systems, tools, procedures and approaches in place so researchers will be able to analyse sensitive data in an appropriate manner.

- + Automation of data management and sharing, providing a seamless rich pass through of outputs with associated (provenance) information. It should be easy to get research outputs with rich information from the researchers' working space to a published space or state. This would make the boundary between the working space (platform) and repository more fluid. This should include linking to containerised software running in a reliable place to enable the rerun of analyses.
- + Not all data can be open, investigate platforms that will encourage collaboration over the data rather than giving direct access to the data. These platforms can be of value to business, policy makers and others outside academia and enable generating impact out of the research and translating research outcomes.
- + Continue work on culture change to raise awareness for the value of sharing research outputs and making these more reusable. Provide underlying technology and standards to support this, like data citation metrics and metrics of data reuse.
- + Continue work with policy makers on the value of making research outputs FAIR and Open. Work with them on getting more standard wording and approaches around data ownership and consistency around retention and disposal.
- + Promote international certification schemes to get more Australian repositories certified as a Trusted Data Repository. Develop resource kits and facilitate exchange around this topic.
- + Continue to develop skills across the sector with the sector to support making research outputs more FAIR.

## Differently:

# We need to be able to trust the longevity of storage. Develop models that provide long term storage and archival space for outputs, road test these and share the results. It would be useful to have a value proposition on the value in keeping research outputs so an institution, infrastructure provider, funder or policy maker understands the importance of long term preservation.

# Infrastructure and Platforms developed by or through ARDC should make research outputs FAIR and Trusted or require it.