

What makes a useful collection record?

Who should read this?

This document is intended for people who are creating descriptions of research data collections for Research Data Australia. It will aid thinking for both manual and automated creation of research data collection descriptions.

What makes a useful collection record?

The usefulness of Research Data Australia ultimately depends on the quality of the metadata that underpins it and the information it displays. Research Data Australia is intended to display information to enable:

- discovery of research data collections
- determination of value of research data collections
- access to of research data collections, and
- re-use of research data collections.

These four use-cases provide a good framework to shape your thinking about the collection records you create for Research Data Australia and the information you include in them. Metadata you send to Research Data Australia should include sufficient information to support these use-cases.

Information to enable discovery

This kind of information is analogous to some types of information found in library catalogues; for example:

- subject information telling library users that the library holds a book of interest to them
- author metadata to help library users find books by particular authors.

In Research Data Australia this kind of information helps researchers find research data that:

- relates to a geographical area of interest
- relates to a research discipline of interest
- can be connected to research data already held by the researcher and thus complement or enhance it
- is generated by another researcher whose work is of interest.

Many other useful forms of searching and browsing are possible if the necessary information is present on Research Data Australia.

Information to enable discovery may include metadata that describes research data at the object level as well as the level of whole collections.

Some of this information can be extracted from other systems. For example, a university's human resource management, grant management or research management systems may be the best sources of information regarding researchers, research grants, or research projects. Some information may need to be generated manually if these options are not possible.

Information to enable determination of value

This kind of information helps researchers decide if they want to access and/or re-use research data they find on Research Data Australia. It is useful to think of this kind of information as the context for research data. The more context that is provided, the better a researcher will be able to make that decision.



Examples of this include information that:

- describes the design of the experiment or the instrument involved
- identifies or links to information about the researcher, the research team, or the research institution involved in the creation of the data
- identifies or links to information about the research program or research grant
- points to publications that have flowed from the research data.

Information that enables re-use of research data can also aid determination of the value of a collection of research data. This type of information is discussed in more detail below.

Information to enable access

The library catalogue metadata analogy used above can be extended to information that enables access to research data. This is information that describes a book's location on a library shelf and thus helps a library user locate it.

In Research Data Australia, this is information that enables researchers to get access to research data that interests them. It may be:

- a direct link to open-access data
- a link to a data store that has some kind of access control, and possibly restricted access
- contact information for the data curator as a first step in gaining access to the data
- information that identifies the research data collection, and confirms that it is the correct collection.

This information may describe research data at the object level, at the collection level, or both.

Information to enable re-use

This kind of information helps researchers to re-use data they have accessed through Research Data Australia. It varies greatly with the type of data and the research discipline, but some possible might include:

- column titles or headings in tabular data
- information about the instrument settings and calibration for the run that generated the data
- information about any reagents used
- information about the system of measurement used (For example, in the case of temperature, this might be degrees Centigrade, degrees Kelvin, or degrees Fahrenheit.)
- information about any rights restrictions placed on the data.

Information to enable re-use may describe research data at both object and collections levels.

Minimum metadata content requirements

The minimum metadata that institutions should provide to Research Data Australia about research data collections is specified in [Minimum metadata content requirements \(http://ands.org.au/resource/metadata-content-requirements.html\)](http://ands.org.au/resource/metadata-content-requirements.html). These requirements are formulated to support the use cases described in this Guide.

For further information

- ANDS Content Providers Guide (<http://ands.org.au/guides/content-providers-guide.html>)
- Metadata -Awareness Level Guide (<http://ands.org.au/guides/metadata-awareness.html>)



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