



Library Research Data Management Services

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Research Data Services Ecosystem

- ❑ Research management systems (eg Research Master)
- ❑ Publication repositories and Current Research Information Systems (eg DSPace CRIS)
- ❑ Dataset management systems (Figshare, Mendeley data, WikiData, Dataverse, PimCore)
- ❑ National Services –eg ARDC – Australian Research Data Commons (ANDS)
- ❑ External Discovery systems
- ❑ Data warehouses
- ❑ External identity services
 - ❑ OrCID
 - ❑ DOI
 - ❑ Handle
- ❑ Local Identity information systems (HR, SAML, OpenID Connect)



Open data standards

The IFLA and the IT section has been engaged in open data interchange standards since the inception of library automation.

- Cataloguing standards (MARC, etc)
- Authorities, Classification standards , Linked data
- National research ontologies (usually linked to funding) – eg Field of Research (FoR)

Data standards

- Licensing (Creative Commons)
- Metadata standards for archiving – METS (Metadata Encoding and Transmission Standard)
- Metadata for sharing/education - SCORM & EdX
- Case report forms (CRFs)

The role of Open Source

The virtues of open source:

1. Scrutiny
2. Deployment flexibility
 1. Host on-prem (“Roll your own”)
 2. Host in the cloud managed by yourself
 3. Host by a service provider
3. *Reduced cost*
4. Open in data as well as source

CRIS

Current Research Information Systems

Linking Researchers to

Publications

Funding

Departments

Datasets

Storing datasets in Amazon S3

The screenshot displays the Research UNE website interface. At the top, the logo for the University of New England (UNE) is visible on the left, and the text "Research UNE" is centered. Below the header is a navigation menu with links for Home, Research Outputs, Theses, Researcher Profiles, Collections, Guidelines, and Help. A search bar is located on the right side of the header.

The main content area features three primary navigation options: "Submit your research" (with an upload icon), "Find a Researcher Profile" (with a group of people icon and a count of 3420), and "Explore all Research Outputs" (with a document icon and a count of 27816).

Below these options are three columns of research output listings:

- Most Viewed:** Lists items such as "FRETLIN Popular Education 1973-1978 and its Relevance to Timor-Leste Today" (2,454 views), "The effect of EFL teachers' Technological Pedagogical Content Knowledge (TPACK) on EFL teaching in Saudi Arabian Secondary Schools" (1,436 views), and "Botanical Investigation of New South Wales 1811-1888: An examination of the means by which botanical knowledge of the area now known as New South Wales was gained and recorded during the seventy years from the publication of Robert Brown's Prodrromus florae Novae Hollandiae to the second year after the completion of George Bentham's Flora Australiensis" (1,384 views).
- Most Downloaded:** Lists items such as "The value of information from commercial livestock in genetic improvement programmes" (11,820 downloads), "Botanical Investigation of New South Wales 1811-1888: An examination of the means by which botanical knowledge of the area now known as New South Wales was gained and recorded during the seventy years from the publication of Robert Brown's Prodrromus florae Novae Hollandiae to the second year after the completion of George Bentham's Flora Australiensis" (4,792 downloads), and "Body temperature as a remote measure of health in sheep" (3,204 downloads).
- Recent Submissions:** Lists items such as "Accelerating the impact of financial literacy training programmes on household consumption by empowering women" (2021), "Examining the Impact of ABRACADABRA on Early Literacy in Northern Australia: An Implementation Fidelity Analysis" (2014), "Protecting Pollinators. Jodi Helmer. Island Press. Washington DC. 2019. ix + 220 pages. Price AU\$48.45 (paperback). ISBN: 9781610919364" (2020), and "Detection and distribution of haematophagous flies and lice on cattle farms and potential role in the transmission of Theileria orientalis" (2021).

Open source platforms

DSpace CRIS – Institutional Repository

Archivematica – Systematic preparation of items for archiving in open standards

PIMCORE – Data management system/Plans

Open Journal System – journal management and publishing

Zotero – Reference management system

Dataverse – Dataset management

Figshare – Dataset management

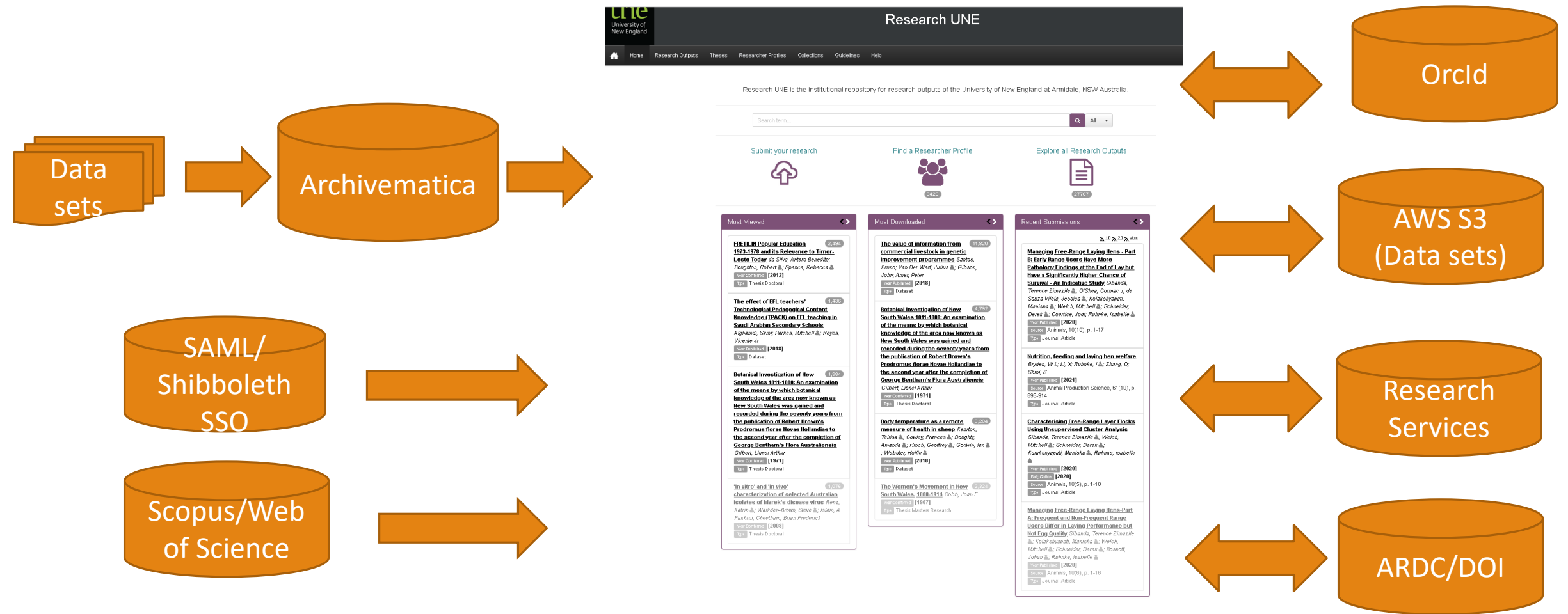
All that glistens is not gold

“Free is not necessarily “Open”

- Who owns your data sets?
- Who owns the content owns the client – “free” is not necessarily “open”
- Monopolies do not in the long term act in the interests their clients.



University of New England (Australia)



Where next?

- Integration
- More integration
- Even more integration
- Artificial Intelligence

Thank you everyone!!!

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Resources:

Open Data Handbook

<http://opendatahandbook.org/>

Research Data Alliance

[https://rd-
alliance.github.io/metadata-
directory/standards/](https://rd-alliance.github.io/metadata-directory/standards/)

UNESCO

[https://en.unesco.org/themes/buildin
g-knowledge-societies/oer](https://en.unesco.org/themes/building-knowledge-societies/oer)