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)

Discover → Research question → Undertake research → Collect data → Data management plan → Publish & Archive → Discover

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

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
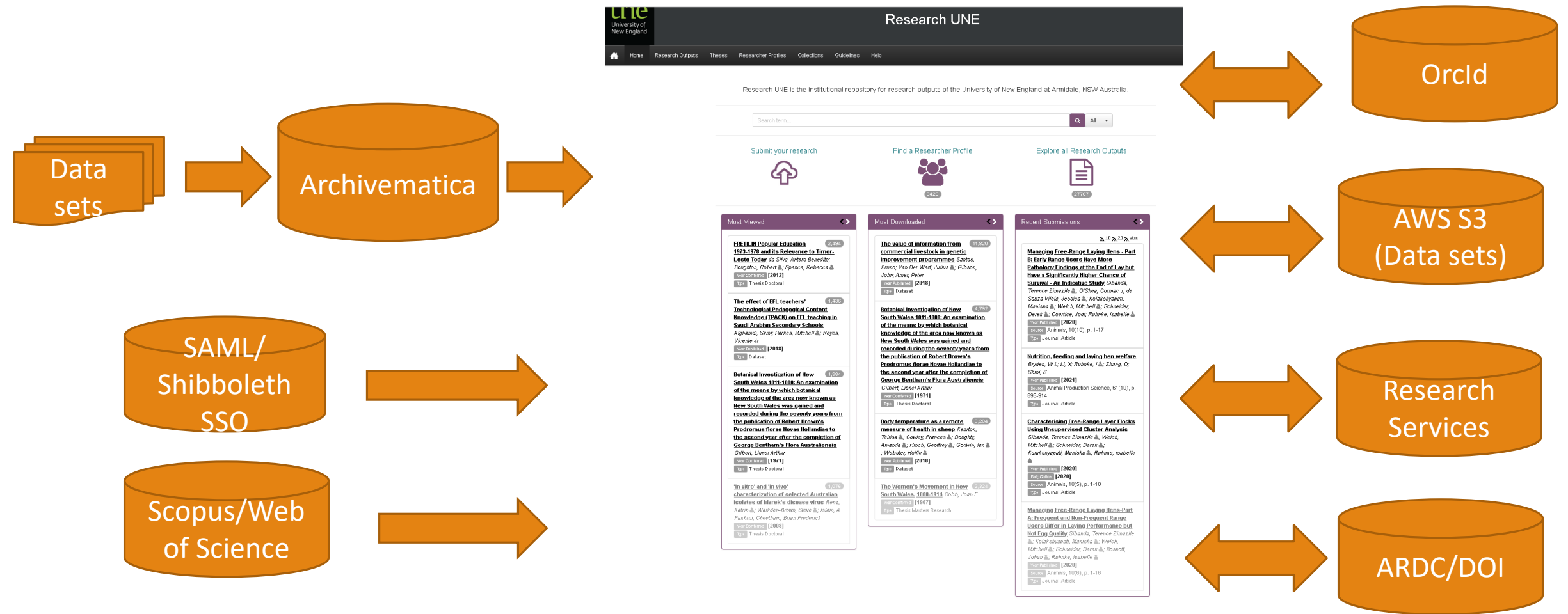
Figshare – Dataset management

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/

UNESCO
https://en.unesco.org/themes/building-knowledge-societies/oer