Extending the value of a CRIS with Research Data Management

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Agenda

• Research Data Management
• Requirements for CRIS
• Pure as a CRIS system
• The Pure RDM Solution
• Case Studies
  – University of Groningen (Datasets)
  – University of Canberra (Data Management Plans)
Introduction - Current Landscape

• Funders, associations, and institutes increasingly require data sharing

3. Metrics on data
   Monitoring and reporting on institutional data
   • Benchmark
   • Rank Evaluate
   • Manage
   • Preserve

1. Lab data
   • Research data must be FAIR:
     • Discoverable
     • Accessible
     • Reusable
     • Reproducible

2. Open data: data publicly available

Institution

Research

Design
   Find Topic
   Identify gaps
   Plan & Fund

Execute

   Discover data, people, methods & protocols
   Prepare, reproduce, re-use & benchmark
   Collect, analyze & visualize

Publish

   Store & Share
   Link to publication

Link to publication

Prepare, reproduce, re-use & benchmark

Collect, analyze & visualize

Discover data, people, methods & protocols

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What do you need?

• CRIS provide extensive functionality for the management, reporting, and showcasing of the research data

• Value of CRIS lies in focus put on:
  i. Data quality
  ii. Data Interoperability
     • Use of common standards and protocols for data exchange
     • Support for different types of research data
     • Data model mapping
  iii. System Integrations
How does Pure support you?

- Focus on 5Cs of data quality
- Integrations with external (and internal) systems
  - Support (and import) of different content types
  - Enrich and relate content
  - Register and store your data
- Support for standard formats (CERIF, Dublin Core, OpenAire) and data exchange protocols such as OAI-PMH
Expanding the value of Pure for RDM

- Need different integrations to ensure that all pieces of the RDM ecosystem are present and tied together
  - Digital Commons- IR for archiving of data, workspaces for research collaborations
  - Data Monitor- specialized RDM tool to find, enrich and import datasets
University of Groningen: Datasets

- Project centered on discovery, import, linking and registration of research data (datasets)
  - In 12 months, datasets increased from 600 to 3000
- In Data Monitor: datasets cleaned up and enriched
- In Pure: curation and correct assignment of datasets
- Introduction of a common standard for metadata, compliant with the OpenAIRE guidelines.
The Pure RDM Solution

- Integration between Pure, Digital Commons and Data Monitor provides an end-to-end solution for research administrators

- Additional integrations to external specialized (and open source) systems can then be implemented in Pure
University of Canberra: Data Management Plan

• The integrated workflow: architectural view
UCanberra: from award to RDMP

from award to RDMP
UCanberra: from award to project to dataset

from award to project in Pure

from project to active dataset in DCD
UCanberra: from active to published dataset
UCanberra: from published dataset to record in Pure

Data Monitor integration

In this configuration page you can set up integration with Data Monitor to automatically source Dataset content.

What is the Data Monitor integration

Enabling the integration with Data Monitor will automatically create Dataset content (associated with relevant Persons and Organisations) in Pure. Relations with Research Outputs will also automatically be created, where available.

Enabling the Data Monitor integration below will turn on the 'Data Monitor - Import Datasets' job, and set it to run on a weekly basis. The settings can be changed in the 'Administrator > Jobs > Cron Job Scheduling' menu.

Data Monitor integration

Turn on the Data Monitor integration to source existing and future Dataset content.

Turn off the Data Monitor integration to pause the integration and prevent new Dataset content being populated in Pure.
Lesson Learned and Next Steps

• Research data is distributed over a large number of data repositories
• Not all data is structured
• Workflows are multiple and strongly dependent on the process that needs to be completed

What next?

• Work together with the community to find and develop an optimized solution
• Our goal is to reach a point in which connections between Pure and external systems can easily be set up
Any Questions?

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