Building off the RDA Common Standard for Networked DMPs



UC3 Product Manager

Research Data Mgmt - DMP Tool - FAIR Island

RDA 16th Plenary

November 12, 2020





California Digital Library/UC3



CDL founded by the University of California in 1996

University of California Curation Center (UC3) is CDL's program concerned with maintaining, preserving, and adding value to digital research data throughout its lifecycle **UC3 areas of focus**:

- Research data management
- Data publication and data metrics
- Persistent identifiers
- Digital preservation
- Data/software skills training



NSF Dear Colleague Letter: Effective Practices for Data

"The purpose of this Dear Colleague Letter (DCL) is to describe — and encourage — effective practices for managing *research* data, including the use of persistent identifiers (IDs) for data and machine-readable data management plans (DMPs)."

NSF 19-069, May 20, 2019



Implementing Effective Data Practices:

Stakeholder Recommendations for Collaborative Research Support

September 23, 2020

bit.ly/PID-DMP-RECS













Modeling connections via the PID Graph





PIDs for DMPs

Generating identifiers for DMPs create an unbreakable link between a data plan to the project outputs and allows access to DataCite's supporting services such as Event Data to facilitate connections via the PID Graph.



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DataCite Work

Partnering with DataCite:

- To provide support for DMPs/output management plans in the upcoming updated
 DataCite metadata scheme
- To create visualizations of the key connectors between the DMP with other scholarly content (data, software, etc.) and with other PIDs (funder IDs, grant IDs, ORCIDs) via activities with the PID Graph.
- This work, along with best practices for metadata corresponding to a DMP ID, will be released in January 2021











Building a Networked DMP





DMPRoadmap & DMPTool

Platform for DMP creation and guidance with the goal of facilitating the creation of effective DMPs reflecting today's best practices

Harness community development efforts

Create next-generation, machine-actionable DMPs

















Features that network Research Activities

DMPTool (via DMPRoadmap) currently supports PIDs within a DMP:

- RORs for research organizations
- Funder Registry IDs for funders
- ORCiDs for DMP creators and collaborators
- DMP IDs (in test environment only)

<u>API</u> exchanges information about DMPs that are compliant with RDA Common Standard Metadata Schema

Ability to export plans as RDA compliant JSON





Next up for Networked DMPs

Support for multiple dataset/output description

Adding additional PIDs (RRIDs)

Integrations and pilots

Additional hooks into the PID ecosystem so we can effectively track outputs:

- Data repositories (Dryad, Zenodo, Figshare, BCO DMO)
- Publishers
- Field Stations





Real-life pilot project that allow us to test our assumptions





FAIR Island Project

Develop optimal data policies and technical infrastructure necessary to create an environment where all data and knowledge collected by field stations managed by the University of California is curated and made openly available as quickly as possible.





FAIR Island Project Partners









Build your Data Management Plan















Where to Learn More

- Networked DMPs on the DMPTool Blog
- Implementing Effective Data Practices: Stakeholder Recommendations for Collaborative Research Support
- May 2019 Dear Colleague Letter on Effective Practices for Data
- Machine-actionable data management plans (maDMPs (2017 Rio Journal)
- <u>Ten principles for machine-actionable data management plans</u> a 2019 paper published in PLOS Computational Biology
- FAIR Island Project



Thank you!

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