Interoperability and the DMP Common Standard

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Recommending FAIR practices for DMPs, with an emphasis on "I" RDA 15th Plenary April 6, 2020





California Digital Library/UC3



Founded by the University of California in 1996

UC3 program is concerned with maintaining, preserving, and adding value to digital research data throughout its lifecycle

Areas of focus for UC3:

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





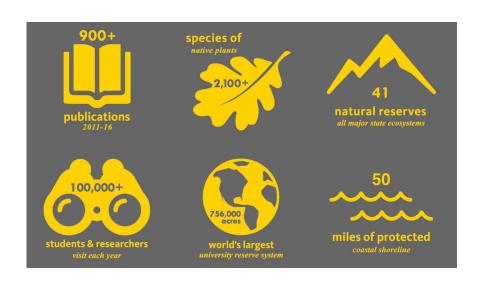
The FAIR Island project

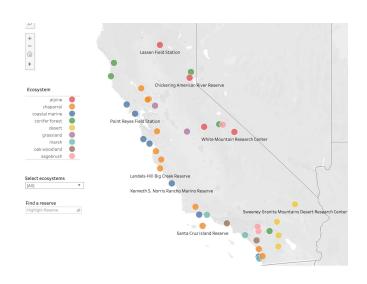
Develop optimal data policies and technical infrastructure necessary to create an environment where all data and knowledge collected on the Tetiaroa field station is curated and made openly available as quickly as possible.





UC Natural Reserve System









UCNRS Reservation Management System (RAMS)

- Access to NRS reserves is by permission only
- RAMS system facilitates the permitting & tracking of research
- Includes metadata regarding things such as:
 - Samples generated
 - Methods utilized
 - Team members and their affiliations
- Big existing problem in tracking outcomes and following up on publications resulting from time on reserves

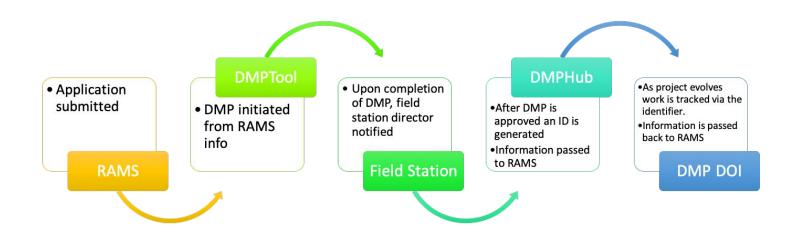


Reserve Application Management System





RAMS/DMPTool workflow







Using a Common Standard compliant API

To facilitate exchange of data between DMPTool & RAMS, we are utilizing the RDA Common Metadata Standard for DMPs.

This presented a great first use case for us to test out the DMPTool (& Roadmap) implementation of the standard.

Building on prior work mapping the Common Standard to the DMPTool, the next step was to develop a common standard compliant API and map in fields from the RAMS database. This allowed us to easily leverage the DMP Common Standard across both systems.

Upon implementing the Common Standard we found there were ways we needed to extend the standard in order to fit this use case.





Incorporating ROR and FundRef

We are currently adding organization identifiers to the DMPRoadmap codebase, specifically ROR and FundRef.

Our idea of how to somehow incorporate these into the Common Standard schema:

```
"affiliation": {
   "name": "University of California, Berkeley",
   "abbreviation": "UCB",
   "region": "United States",
   "affiliation_id": {
      "type": "ror",
      "identifier": "https://ror.org/01an7q238"
   }
}.
```

This could then:

- Be added to the contact and contributors as affiliation
- Replace the current name and funder_id on the funding object as funder





How to extend the schema

We added extended attributes to convey information that its required for our system but outside the scope of the schema.

For example, the DMPTool API requires that a DMP template identifier be specified along with some other information specific to the caller's system when creating a new DMP.

Ideally the schema would provide guidance on how best to include this type of information. This will allow systems adopting the Common Standard schema follow similar patterns.

```
"extension": [{
   "dmptool": {
      "template": { "id": "123" }
   },
},
```





What's coming for DMPRoadmap/DMPTool?

- May
 - Common Standard compliant API
 - Ability to export DMPs as Common Standard compliant JSON
 - Ability to define project level contributors on your DMP
 - Ability to specify project start and end dates on your DMP
 - ROR, Fundref, ORCID integration
- June
 - Funder review workflow
 - New template question types for Re3Data, Ethics and more
 - Minting an identifier for your DMP once it is approved and complete
- August
 - Ability to define multiple datasets for your DMP





Get involved!

www.fairisland.org

Call for community input

Research Data Management Advisor, position announcement





Thank you!

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