



RESEARCH **DATA ALLIANCE**

Active Data Management Plans: What are the actions that we need to realize them?

Active DMPs IG and DMP Common Standards WG

Agenda

Part 0 - Getting to know each other

Part 1 - Introduction for newcomers, status update, and meeting objectives (max. 10 min)

Part 2 – Community updates (max 30 min)

DMP Tool updates by Becky Grady

OSTrails by Elli Papadopoulou

Maintenance of the recommendation for maDMPs by Marek Suchanek

New WG on common API for DMP Platforms by Tomasz Miksa

Part 3 – Discussion

Part 4 - Wrap up and next steps (max 10 min)



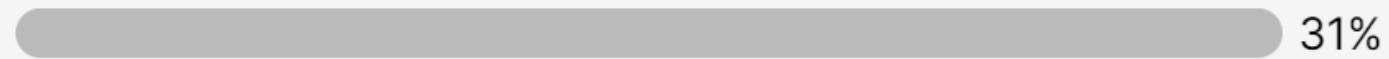
<https://tinyurl.com/rda-dmp>

What is your experience with DMPs?

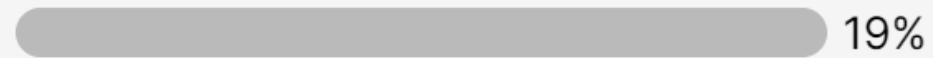
Other



I review them



I had to write one



I require them from others



None

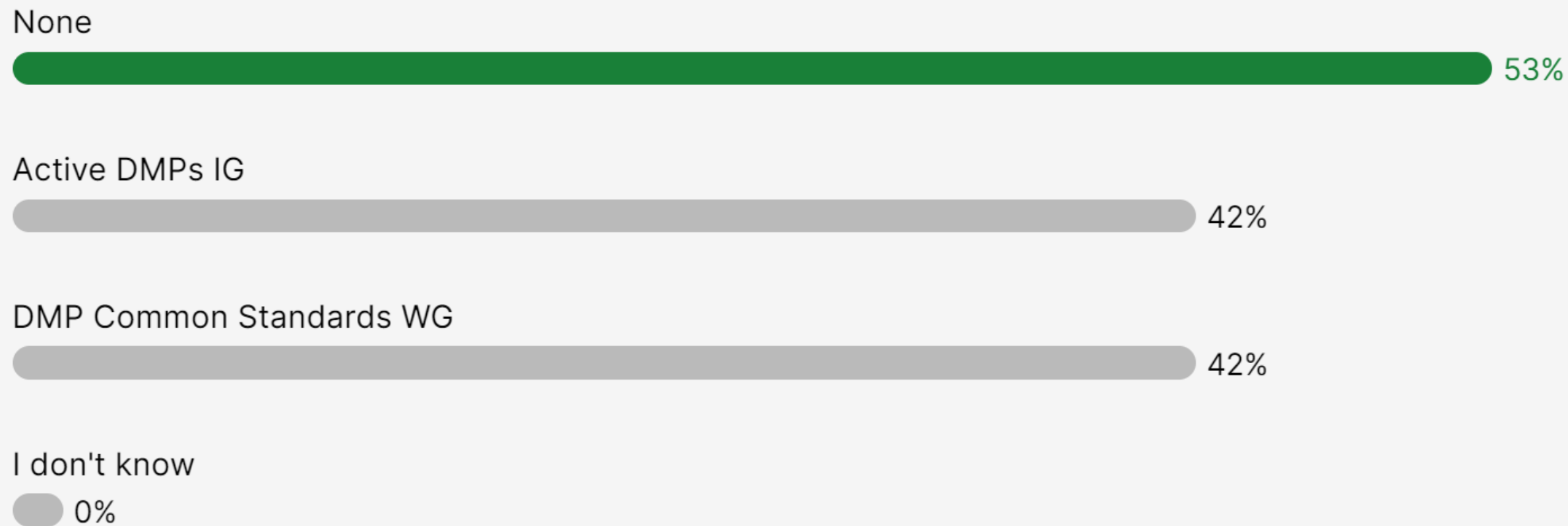


What is your background?





Are you a member of...



How familiar are you with machine-actionable DMPs?

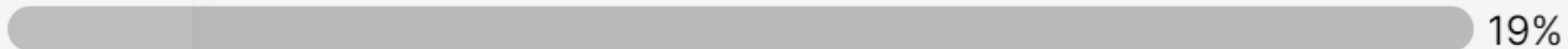
Co-created them



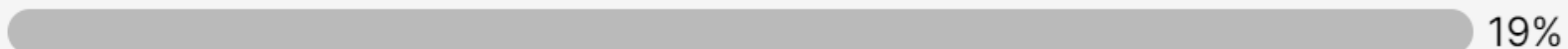
I use them



I have seen some presentations, but that's it



I would like to use them



Never heard of



Other



What do you expect from this meeting? Why did you pick this session?

MaDMP 10

DMPs 6

Update 3

Common Standard 3

Future 3



Anonymous

Learn more about DMPs



Anonymous

Fight with others



Anonymous

Align practices



Anonymous

Do you plan any extensions to the maDMP Common Standard?



Anonymous

discuss opportunities for vertical interoperability



Anonymous

what are APIs for maDMPs



Anonymous

Learn from each other

What do you expect from this meeting? Why did you pick this session?

MaDMP 10


DMPs 6

Update 3


Common Standard 3

Future 3


LEARN FROM EACH OTHER

 Anonymous


what are the specifications of maDMPs

 Anonymous


Discuss next version of the Common Standard

 Anonymous


To learn updated/current status of active DMPs

 Anonymous


See what MA Dmps can be used to host as service provider

 Anonymous

I work with DMPs, interested to learn more about the use and future of them

 Anonymous

Give updates from DMP service and hear from other providers

 Anonymous

Too much free time, didn't know how to spend it

What do you expect from this meeting? Why did you pick this session?

MaDMP 10

DMPs 6

Update 3

Common Standard 3

Future 3

- Too much free time, didn't know how to spend it
- Anonymous
Hear updates on maDMPs
- Anonymous
I hope to hear about the possibilities for actionable DMPs
- Anonymous
learn about maDMPs
- Anonymous
To learn about active DMPs
- Anonymous
Move DMP standards development forward
- Anonymous
To hear what others are doing in this space. Connect with colleagues
- Anonymous
how to integrate with maDMPs usefully
- Anonymous
Moving maDMPs forward.
- Anonymous
What's been done and what's planned
- Anonymous
Learn and share

Part 1

Introduction for the newcomers

Active DMPs IG and DMP Commons WG

What's the difference?

Active DMPs IG

Mother of all DMP groups :)

All topics related to DMPs can be discussed

Triggered and will trigger new groups

DMP Common Standard WG

Focus on machine-actionable DMPs











Maintains official RDA Recommendation on maDMPs

Salzburg Manifesto on maDMPs



<https://activedmps.org>

Ten Principles for machine-actionable Data Management Plans

	1 Integrate DMPs with the workflows of all stakeholders in the research data ecosystem
	2 Allow automated systems to act on behalf of stakeholders
	3 Make policies (also) for machines, not just for people
	4 Describe—for both machines and humans—the components of the data management ecosystem
	5 Use PIDs and controlled vocabularies
	6 Follow a common data model for maDMPs
	7 Make DMPs available for human and machine consumption
	8 Support data management evaluation and monitoring
	9 Make DMPs updatable, living, versioned documents
	10 Make DMPs publicly available

<https://doi.org/10.1371/journal.pcbi.1006750>

Data Management Plans (DMPs)

	Data Officer	<i>Who is responsible for the data management and the DMP of the project (name/email address)?</i>
I	Data Characteristics	
I.1	Description of the data	<i>What kinds of data/source code will be generated or reused (type, format, volume)? How will the research data be generated and which methods will be used? How will you structure the data and handle versioning? Who is the target audience?</i>
II	Documentation and Metadata	
II.1	Metadata standards	<i>What metadata standards (if any) will be in use and why? (see Digital Curation Centre)</i>
II.2	Documentation of data	<i>What information is needed for the data to be findable, accessible, interoperable and re-usable (FAIR) in the future? Is the data machine-readable? How are you planning to document this information?</i>
II.3	Data quality control	<i>What quality assurance processes will you adopt? How will the consistency and quality of data collection be controlled and documented? (This may include processes such as repeat samples or measurements, standardised data capture, peer review of data or representation with controlled vocabularies.)</i>
III	Data Availability and Storage	
III.1	Data sharing strategy	<i>How and when will the data be shared and made accessible? What repository will you be using? What persistent identifier will be used?</i>
III.2	Data storage strategy	<i>What data are to be preserved for the long-term, and what data will not be stored? How and where will the data be stored and backed up during the research? How and where will the data be stored after the project ends? For how long will the data be stored? Are there any costs that need to be covered for storage? At what point during or after the project will the data be stored? Are there any technical barriers to making the research data fully or partially accessible?</i>

**Directorate for Engineering
Data Management Plans Guidance for Principal Investigators**

updated: November 2018

The Directorate for Engineering (ENG) supports research covering a broad spectrum of communities of investigators, and each community has its own best practices. ENG is aware of the need to provide flexibility to programs, principal investigators (PIs), and reviewers in assessing the quality of individual Data Management Plans (DMPs) from various communities. Therefore, guidance has evolved to accommodate changing community standards and expectations. ENG relies on the merit review process to determine which DMPs best serve each community.

The following guidance is to assist ENG investigators, reviewers and Program Officers in developing and evaluating effective, complete, and competitive DMPs. It is important to recognize that while all DMPs should address the five categories of information as specified in the PAPPG, they should not be generic. Each DMP should appropriately identify the data, metadata, samples, software, algorithms, curricula, documentation, publications, and other materials generated in the course of the proposed research. Moreover, the DMPs should describe how these materials will be disseminated, made accessible, and archived while incorporating the best practices and standards for the proposed research. DMPs are subject to peer review. Please contact your specific Program Officer if you have any questions related to DMPs in the program context.

PAPPG and NSF-WIDE REQUIREMENTS

All proposals must include a supplementary document of no more than two pages labeled “Data Management Plan.” as described in [PAPPG Chapter II.C.2.i](#). The DMP is NOT part of the 15-page Project Description. *Proposals that do not include a Data Management Plan will be returned without review.*

You may request funds to cover costs of publication, page charges, or preparation of data as a direct cost in your budget proposal, which is evaluated as part of the merit review process. Any costs associated with implementing the DMP should be explained in the Budget Justification.

Some NSF Program Solicitations may contain specific and/or additional instructions that deviate from this guidance and/or provide exceptions to the two-page limit. Instructions in the solicitation take precedence over this guidance. Please check solicitations carefully for this information.

DATA MANAGEMENT PLAN (DMP) CONTENT

The DMP should clearly articulate how the investigators plan to manage and disseminate both the physical and digital data generated by the project, taking advantage of emerging information

DMPs vs maDMPs

Traditional DMP

<administrative_data>

<question>Who is responsible for the DMP?</question>

<answer>Moritz from our university.</answer>

</administrative_data>

```
"contributor" : [ {  
  "contributor_id" : {  
    "identifier" : "0000-0002-5164-2690",  
    "type" : "orcid"  
  },  
  "mbox" : "moritz.staudinger@tuwien.ac.at",  
  "name" : "Moritz Staudinger",  
  "role" : [ "Data Manager" ]  
}
```

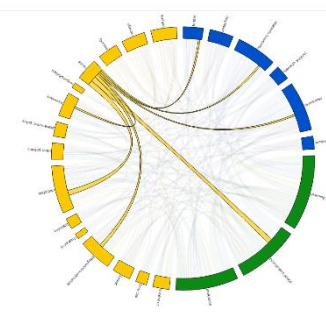
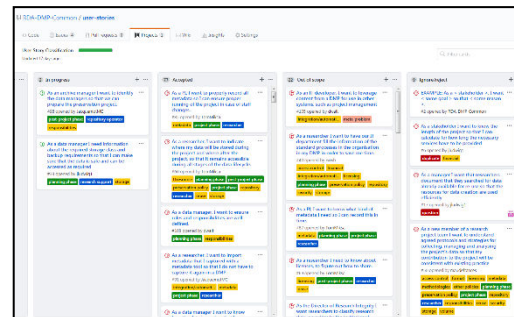
maDMPs use PIDs and controlled vocabularies.

Example shows that Moritz is the one responsible for data management.

Scoping maDMPs by DMP Common Standards WG

- Goals
 - identify stakeholders at each lifecycle stage
 - define which information they **provide**
 - define which information they **expect**
 - *As a <stakeholder>, I want <goal> so that <reason >.*
 - *As a **researcher**, I want to **inform repository operator** on the amount of data in the planning phase, so that they provide **information on costs**.*

Example of what we did together at RDA!



RDA DMP Common Standard for Machine-actionable Data Management Plans

The Challenge:

Data Management Plans are free-form text documents describing the data that is used and produced during the course of research activities. They specify where the data will be archived, which licenses and constraints apply, and to whom credit should be given, etc. The workload and bureaucracy often associated with traditional DMPs can be reduced when they become machine-actionable.

Produced by: DMP Common Standards WG

<https://www.rd-alliance.org/groups/dmp-common-standards-wg>

RDA DMP Common Standard for Machine-actionable Data Management Plans

Recommendations of the RDA DMP Common Standards WG
Tomasz Miksa, Paul Walk, Peter Neish

Purpose

This application profile is meant for exchange of machine-actionable DMPs between systems. It is independent of any internal data organisation used by these systems. The application profile does not prescribe how information must be presented to the end user and does not enforce any specific logic on how this information must be collected or used. The application profile is an information carrier and the full machine-actionability can only be achieved when systems using the application profile implement appropriate logic.

This application profile is intended to cover a wide range of use cases and does not set any business (e.g. funder specific) requirements. It represents information over the whole DMP lifecycle, that is, it can express planned actions, as well as actions already performed.

The application profile is NOT intended to be a prescriptive template or a questionnaire, but to provide a re-usable way of representing machine-actionable information on themes covered by DMPs.

Overview

Figure 1 presents concepts used within the application profile. Each concept is further broken down into specific fields (not depicted). The full application profile specification can be found [online](#). Below we outline main concepts used within the application profile that are depicted in Figure 1.

DMP - Provides high level information about the DMP, e.g. its title, modification date, etc. It is the root of this application profile.

Project - Describes the project associated with the DMP, if applicable. It can be used to describe any type of project: that is, not only funded projects, but also internal projects, PhD theses, etc.

Funding - For specifying details on funded projects, e.g. NSF of EC funded projects.

Contact - Specifies the party which can provide information on the DMP.

Contributor - For listing all parties involved in the process of data management described by

Figure 1: Overview of the application profile for the machine-actionable DMPs.

maDMPs - documentation

🔗 Properties in 'dmp'

Name	Description	Data Type	Cardinality	Example Value
contact	Contact person for a DMP	Nested Data Structure	1	
contributor	To list people that play role in data management related to this DMP, e.g. responsible for performing actions described in this DMP.	Nested Data Structure	0..n	
cost	To list costs related to data management. Providing multiple instances of a 'Cost' allows to break down costs into details. Providing one 'Cost' instance allows to provide one aggregated sum.	Nested Data Structure	0..n	
created	Date and time of the first version of a DMP. Must not be changed in subsequent DMPs.	DateTime	1	2019-03-13 13:13
dataset	To describe data on a non-technical level.	Nested Data Structure	1..n	

NOT a questionnaire!
NOT a template!

Most fields are optional!

Adoptions (selected)



Part 2

Status updates

DMP Tool updates by Becky Grady



Machine-Actionable DMP Tool

RDA Plenary

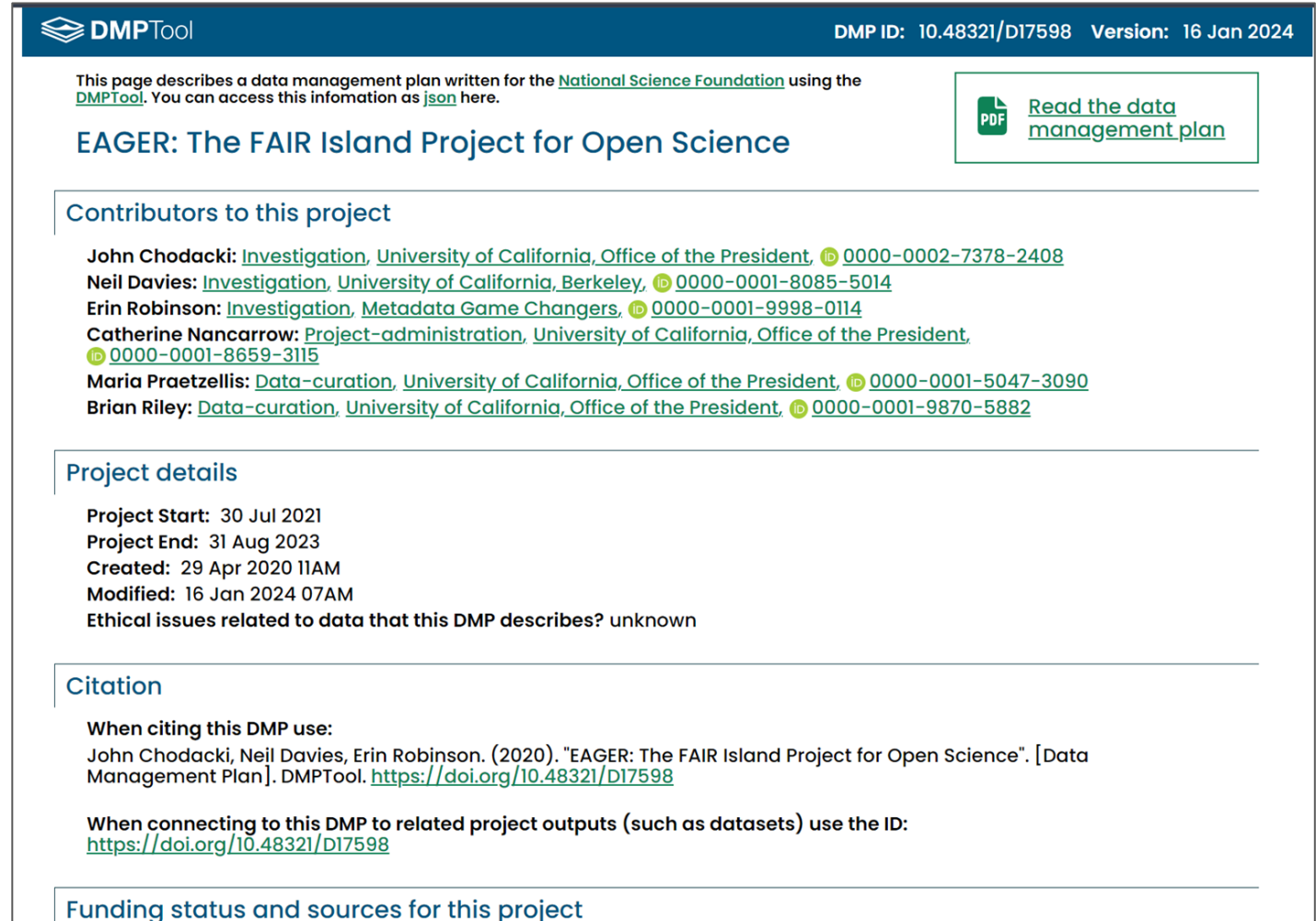
Active DMPs IG and DMP Common Standards WG

November 14th 2024

Becky Grady, Sr Product Manager for Data Management Planning | California Digital Library

Many parts of DMP already machine-actionable

- DMP-ID (DOI)
- Version history of registered plans
- Downloadable as JSON
- Open API
- RORs
- Funder Registry IDs
- ORCIDs
- re3data
- Licenses (spdx)
- RDA Metadata Standards



The screenshot shows a DMPTool interface with a dark blue header. The header contains the DMPTool logo, the DMP ID '10.48321/D17598', and the version '16 Jan 2024'. Below the header, there is a text block stating that the page describes a data management plan for the National Science Foundation, with a link to the JSON file. A 'Read the data management plan' button with a PDF icon is visible. The main content is divided into sections: 'Contributors to this project' listing John Chodacki, Neil Davies, Erin Robinson, Catherine Nancarrow, Maria Praetzellis, and Brian Riley with their respective ORCID IDs and roles; 'Project details' showing start and end dates, creation and modification times, and ethical issues; 'Citation' providing a citation template and a link to the DMP; and 'Funding status and sources for this project'.

Goal is to make entire DMP machine-actionable

Eventual goal is to:

- Allow all functionality within the DMP Tool to be done through the API
- Offer more machine-actionable question types for templates
- Support integrations and interoperability with other relevant systems with full plan in JSON, API or upload



API Documentation

https://github.com/CDLUC3/dmsp_api_prototype/wiki/API-Overview

Pilot project for machine actionable plans

MAP >>>>>>
Pilot

Machine Actionable Plans

- Working with partner institutions in pilot project on Upload feature to add existing DMPs to the tool
- Use plan metadata to find and link to related works
- Have institutions build integration prototypes for working with maDMSPs
- [Project Website](#)

Rebuilding the tool to offer machine functionality



- Outdated technology in current site is difficult to update
- New data model for templates, questions for machine actionability
- Rethink model of DMPs in response to feedback
- Read more here: [blog post about DMP Tool rebuild](#)
- Major changes:
 - Project-level to contain multiple DMPs
 - More flexibility in creating templates with PIDs, structure questions
 - Designing around a living document

Making DMPs active, structured documents

Project > Plan

[← Back](#)

Coastal Ocean Processes of North Greenland

This plan is based on the "Arctic Data Center: NSF Polar Programs" template provided by National Science Foundation (nsf.gov) - (ver: 6, pub: 2024-04-01).

Adjust plan details

We have copied this from your project but you can adjust the details for **this plan only**

Funder for this plan National Science Foundation (nsf.gov)	Adjust for this plan
Members for this plan Jennifer Frost (PI), Amelia Snow (Other)	Adjust for this plan
Research outputs for this plan 3 outputs	Adjust for this plan

Roles and responsibilities

✓ 1 of 1 question(s) answered

[Update](#)

Types of data produced

...

Status

Last Updated
July 5 2024

Published Status
Draft

DOI
Not Published

Visibility Settings
Not Published

Download
[Download this plan as a PDF](#) ↓

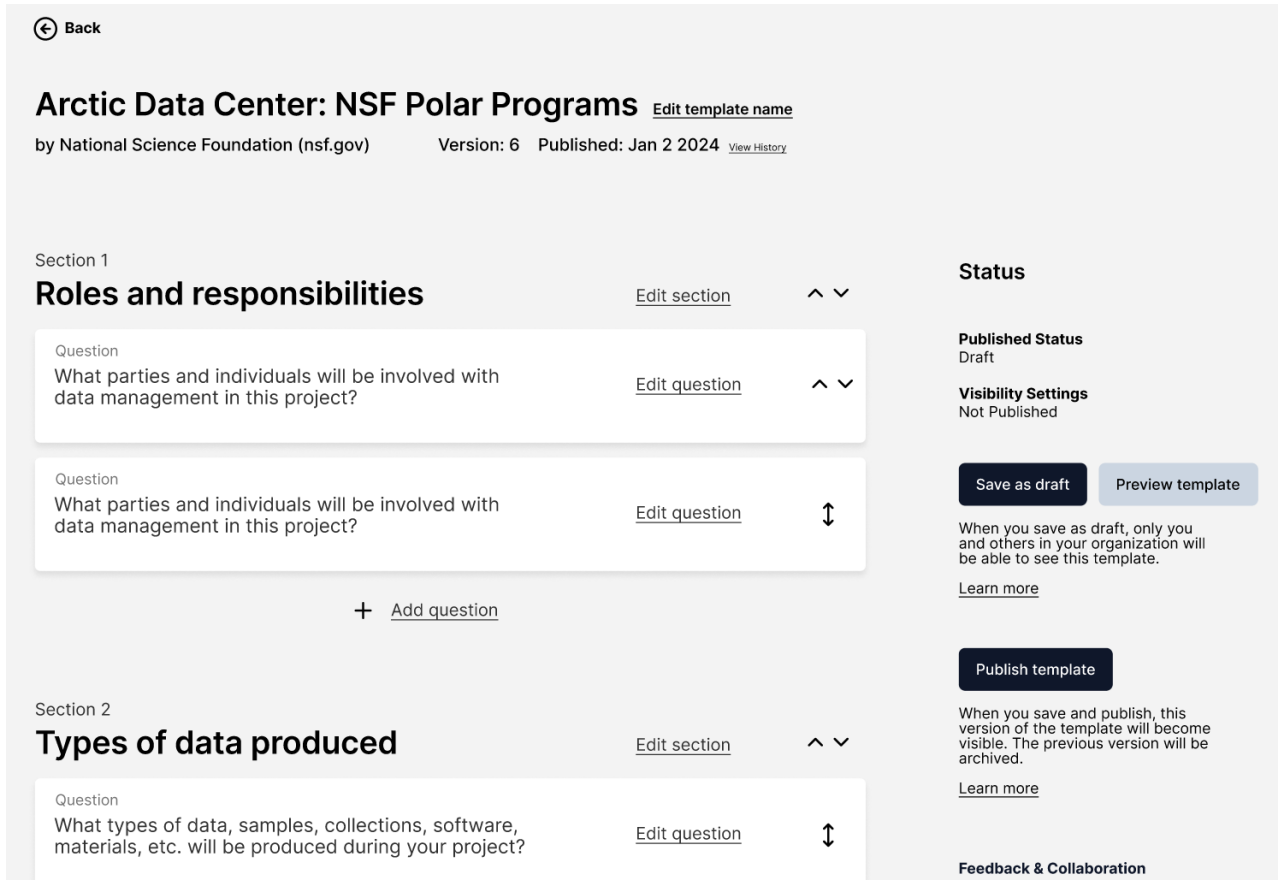
When you save as draft, only you and people with shared access will be able to see this plan. [Learn more.](#)

[Mark as complete](#)

Plan Changes

- Project level to contain multiple DMPs
- Publishing status visible at all times, not just at the end
- Upload DMP created elsewhere
- Change project/plan details after creation
- Mark complete without publishing publicly
- Find related works

Making DMPs active, structured documents



The screenshot shows a web interface for editing a DMP template. At the top left is a 'Back' button. The main title is 'Arctic Data Center: NSF Polar Programs' with an 'Edit template name' link. Below the title, it says 'by National Science Foundation (nsf.gov)', 'Version: 6', and 'Published: Jan 2 2024' with a 'View History' link. The interface is divided into two sections: 'Section 1: Roles and responsibilities' and 'Section 2: Types of data produced'. Each section contains a list of questions with 'Edit question' links and expand/collapse icons. A '+ Add question' button is located between the sections. On the right side, there is a 'Status' panel with 'Published Status' (Draft) and 'Visibility Settings' (Not Published). It includes 'Save as draft' and 'Preview template' buttons, followed by explanatory text and a 'Learn more' link. Below that is a 'Publish template' button with another explanatory text block and 'Learn more' link. At the bottom of the right panel is a 'Feedback & Collaboration' section.

Template changes

- Copy from existing templates, previously created Sections
- Additional structure question types (e.g. ORCID lookup, repository selector) to support more form-style questions when relevant
- Separate question text from question requirements
- Additional formatting options for questions and setting questions as require

Future API improvements in rough priority order

API can do now	Planning (Size)
Create and register a new DMSP with a narrative PDF and structured metadata	Create a DMSP with narrative in structured format, not PDF (L)
Retrieve published DMSPs by organization or DMP ID	Retrieve and work with unpublished DMSPs (L)
Update all metadata on a DMSP	Update just parts of the metadata on a DMSP (M)
Get the funder and Template ID for a DMSP	Get the text of questions and sections from a template ID (S)
Partially tombstone a DMP ID (change title to “Obsolete”)	Fully Tombstone a DMSP following DOI standards (S)
Get created, updated, and registered timestamps to be able to regularly pull DMSPs and check for updates	Add Comment and Feedback functionality to the API (M)

Challenges we're facing

- Limiting technical complexity, effort
 - Removing planned features for the sake of time
 - Managing dev team across time zone and organizations
 - Dealing with frequent word processing, formatting, export problems
- Finding related datasets and software, not just papers
- Balancing what we think we need for maDMSPs vs convenience features users ask for
- Maintaining current site while developing new one
- Making the tool more complex when it can already be confusing
- Offering limited individual set-up or integration support due to small team
- Getting funders to use structured question types instead of narrative

Extensions to common standard

- Contributor affiliation, identifier
- Repository host identifier (re3data)
- Research facility used
- Related output DOI attachments
- Additional funder identifiers
- DMP visibility setting
- Version history
- Narrative in DMP
- Pending outputs (future)
- Question requirements, guidance (future)

```
"dmphub_narrative": [  
  {  
    "title": "My excellent DMP",  
    "sections": [  
      {  
        "title": "Data Collection",  
        "description": "Lorem ipsum ...",  
        "questions": [  
          "question": "What is your favorite color and why?",  
          "answer": "Green"  
        ]  
      }  
    ]  
  }  
]
```

Example narrative format in JSON

Thank you!

Reach out with questions, feedback: becky.grady@ucop.edu

Steps towards FAIRness, interconnectivity and machine actionability across research phases

by Elli Papadopoulou, Athena Research Center / OpenAIRE

Active DMPs Co-Chair



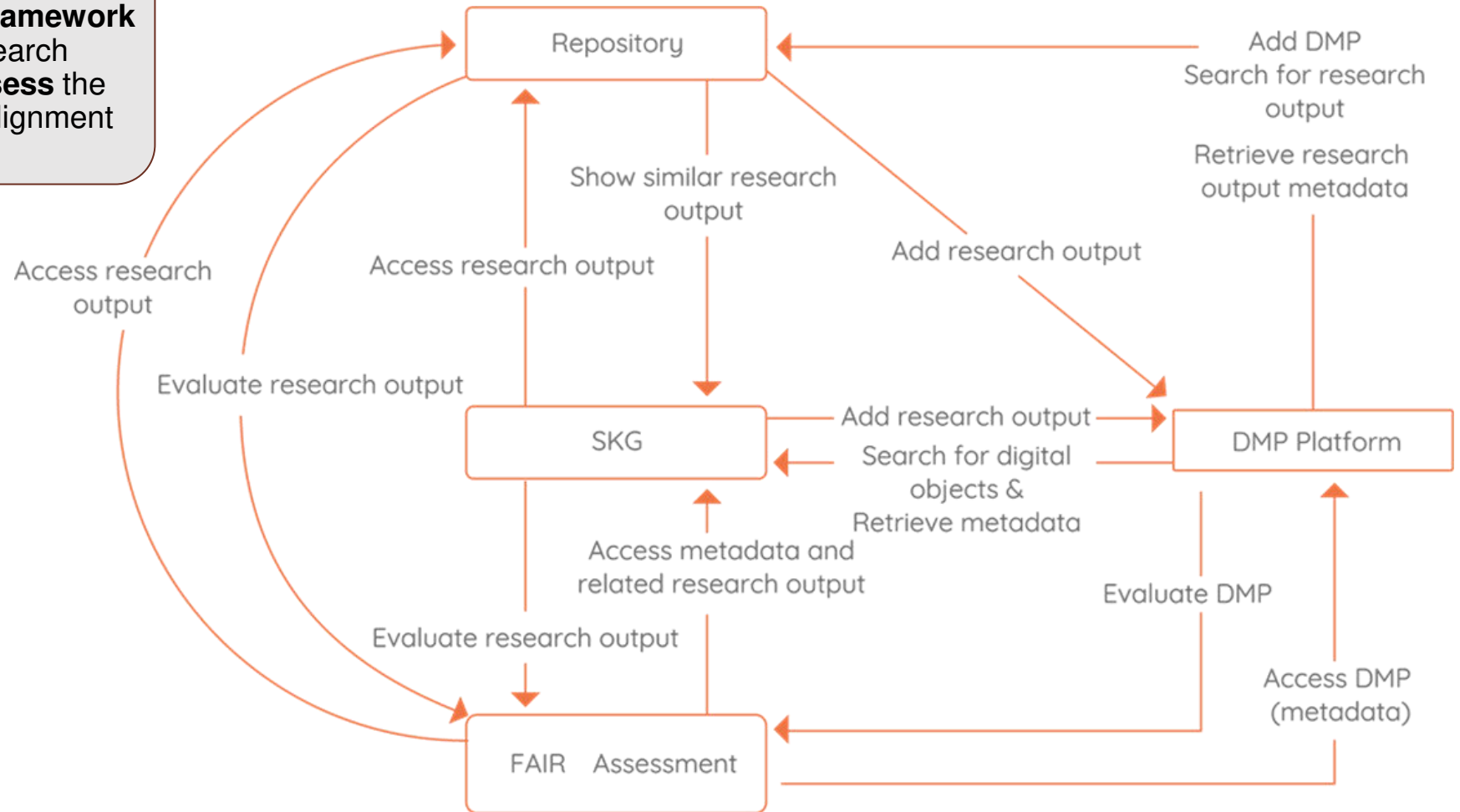
PTA Framework

A high-level, tool-independent framework that outlines how researchers, research managers, funders **plan-track-assess** the management of digital objects in alignment with the FAIR principles.

PLAN: Focuses on enhancing Data Management Plans' creation and integration with SKGs and other services.

TRACK: Aims to improve monitoring and quality of research outputs' FAIRness using Scientific Knowledge Graphs (SKGs).

ASSESS: Emphasizes comprehensive evaluation tools for DMPs and FAIR research outputs, ensuring compatibility with SKGs and other services.



Pilots - Interoperability Reference Implementations

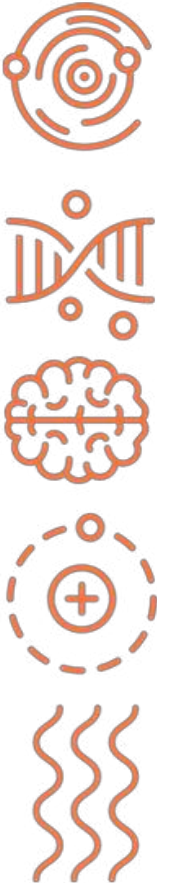
Fit-For-Purpose

15 national - 8 thematic - 1 paneuropean

- **Co-design** the interoperability frameworks (more than 70 tools) : our starting point for DMPs is the **RDA DMP Common Standard**
- **Implement** changes on local services to align with proposed IFs: Common API, extensions to maDMPs, crosswalks between metadata schemas



Find out more details in
our Newsletter!





Walking the pathways together



Maintenance of the RDA DMP Common Standard for maDMPs

Marek Suchánek

DMP Common Standard (DCS) Maintenance

Issue Title	Author	Label	Projects	Milestones	Assignee	Sort
19 Open 26 Closed						
preservation_statement in dataset is insufficiently described	#75 opened 19 hours ago by steinbeck					1
Currency Code	#74 opened on Sep 29 by mabablu					
full_example.ttl contains invalid U+200B characters	#68 opened on Jan 7, 2022 by crmgall					
Descriptions for date fields clashes with examples and what the type is called	#67 opened on Oct 5, 2021 by hmpf	quick-fix-possible				2
Timestamps are without timezone in examples	#66 opened on Oct 5, 2021 by hmpf	quick-fix-possible				1
add conformsTo to maDMP specification	#62 opened on May 12, 2021 by TomMiksa					
How to address the different types of datasets, besides sensitive data	#61 opened on May 7, 2021 by Elpapado					
Dataset - Distribution definitions. Properties "issued" and dataset_id	#56 opened on Jan 22, 2021 by JacquemetMC					
Host description	#55 opened on Dec 4, 2020 by JacquemetMC	enhancement				6
How to express if something is planned	#46 opened on Jul 7, 2020 by TomMiksa	decision enhancement				6
List of pending adoptions	#44 opened on Jun 26, 2020 by TomMiksa					1
Datasets with multiple and no (yet) IDs	#34 opened on May 28, 2020 by MarekSuchanek	decision				5
Dealing with changes in identifiers over time, adding provenance for local IDs	#33 opened on May 27, 2020 by t325	decision duplicate				4
How to add funder template specific extensions needs be worked out	#30 opened on May 27, 2020 by hmpf	decision duplicate				1
Add specification for how to extend the schema	#27 opened on Mar 10, 2020 by briri	decision				18
Add support for organization information	#26 opened on Mar 10, 2020 by briri	enhancement				
"creator" field should be added to "dataset"		enhancement				

Add specification for how to extend the schema #27

Open briri opened this issue on Mar 10, 2020 · 18 comments

briri commented on Mar 10, 2020

We are currently converting our API over to use this Common Standard metadata schema. We have a few scenarios where we also need to convey information that its required for our system but outside the scope of this schema.

It would be good if the schema provided guidance on how best to include this type of information. So that systems adopting the Common Standard schema follow similar patterns.

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

We will be using the following structure to accomplish this:

```

{
  "dmp": {
    "title": "My new DMP",
    ...
    // the rest of the common standard attributes
    ...
    "extended_attributes": [
      "dmptool": { "template_id": "123" },
      "abc": { "reserve_id": { "type": "doi", "identifier": "https://dx.doi.org/10.9999/999xyz" } }
    ]
  }
}

```

Apologies if this has already been discussed and I just missed it in the documentation somewhere.

briri mentioned this issue on May 27, 2020

How to add funder template specific extensions needs be worked out #30

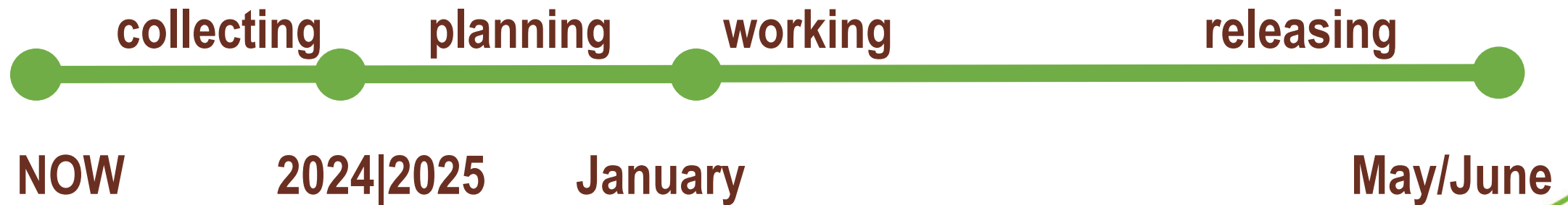
DMP Common Standard (DCS) Maintenance

- Maintenance of the DCS
 - Small changes relevant to the whole community
 - Done within the RDA DCS WG
 - Based on the issues submitted
 - Currently 19 issues & 4 PRs open
 - For example, how to handle extensions?
 - Legacy issues to be resolved
 - Representation of DCS, discrepancies with DCSSO, contributing/sustainability



DMP Common Standard (DCS) Maintenance

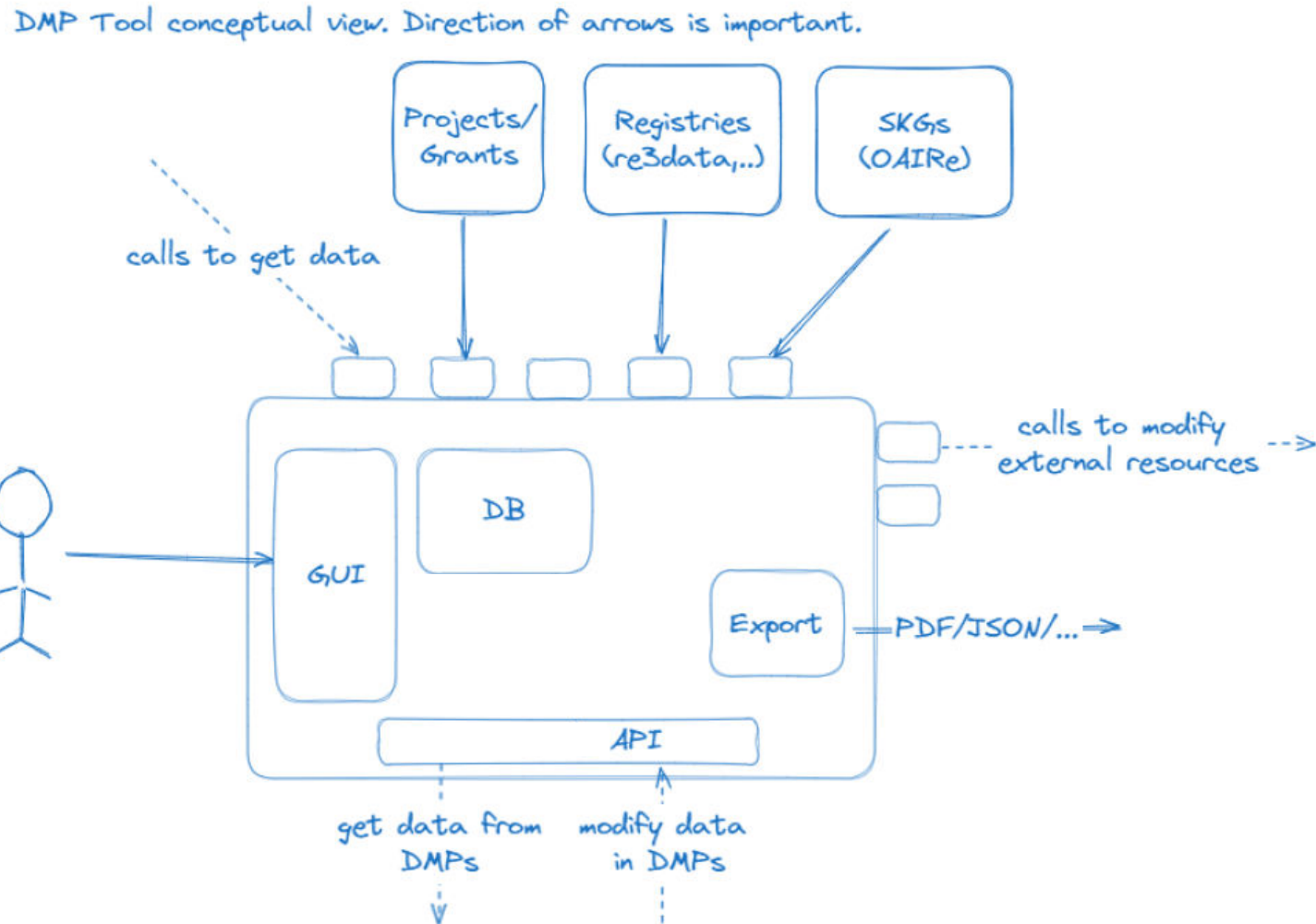
- Timeline for finalizing the maintenance mode
 - End of 2024 = collecting issues @ GitHub (new + refresh)
 - January 2025 = consolidating issues (discussing, deciding, planning)
 - May/June 2025 = releasing a new DCS version



New WG on common API for DMP Platforms

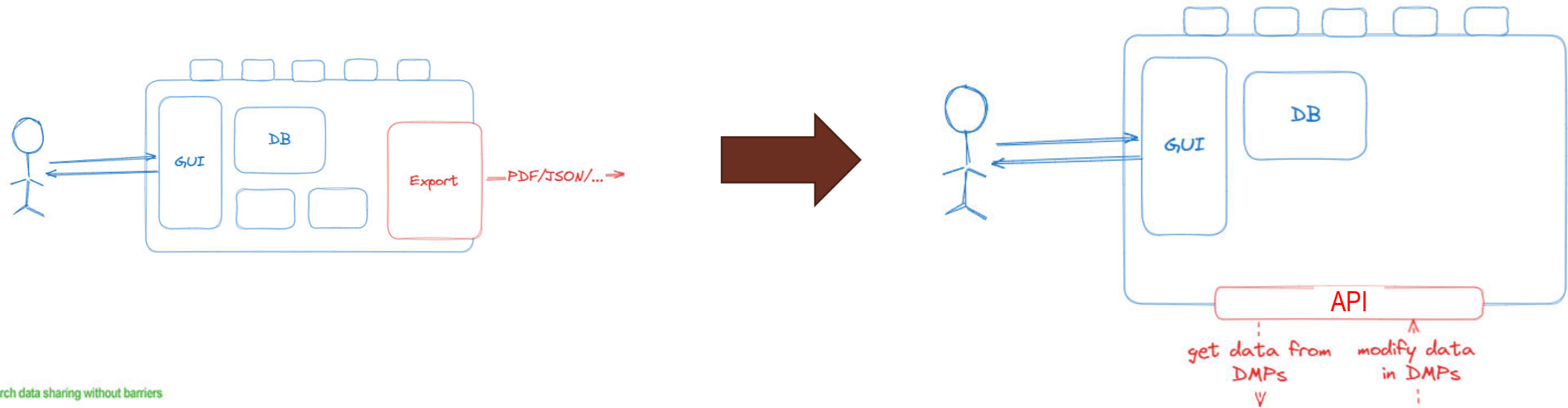
by Tomasz Miksa

Anatomy of any DMP software



DMP Tools -> maDMP platforms

- Common API
 - To query live maDMPs
 - Full or partially
 - To update maDMPs
 - E.g. the dataset was deposited in a repository



Common maDMP API

PUT /madmp Modify maDMP information

GET /madmp Get the maDMP

PUT /madmp/object/identifier Modify the maDMP object identifier

This access point is used to change the object identifier of the maDMP. It is necessary to send the mandatory maDMP values as a parameter and values for the identifier changes in the body. The change is made only if the RDM service has the right to change the specific identifier. Only changeable identifiers can be modified.

Parameters

Name	Description
identifier * required	The maDMP property DMP identifier
string (query)	<i>Example</i> : https://doi.org/10.1371/123
created * required	The maDMP property created using the relevant ISO 8601 Date and Time compliant string
string(\$date-time) (query)	<i>Example</i> : 2022-02-23T09:01:57
modified * required	The maDMP property modified using the relevant ISO 8601 Date and Time compliant string
string(\$date-time) (query)	<i>Example</i> : 2022-02-23T10:01:57

Request body application/json

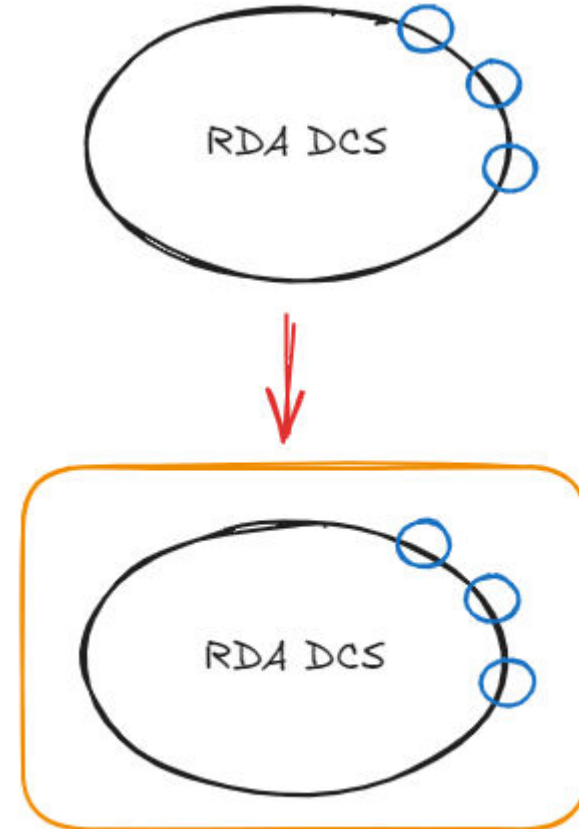
Scheme for changing the identifier

Example Value | Schema

```
{
  "atLocation": "/DMP-23/Dataset-1",
  "specializationOf": "dataset:identifier",
  "value": "hdl.handle.net/11353/10_923628"
}
```

<https://app.swaggerhub.com/apis/e11938258/InDMP/1.0.0>

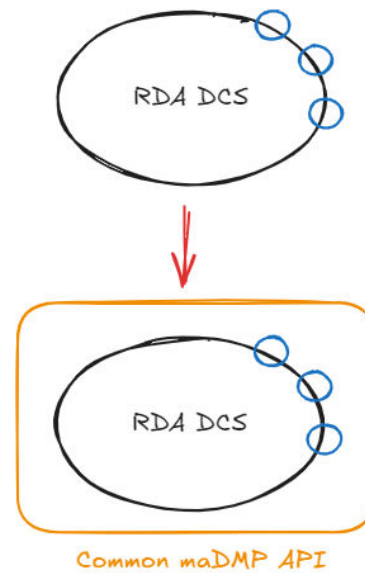
<https://repositum.tuwien.at/handle/20.500.12708/139785>



Common maDMP API

Things to discuss in the new WG

1. CRUD operations
2. Level of granularity: export maDMP vs GET dmp/dataset/1/distribution/A/license
3. AAI - who can execute which methods?
4. evolving identifiers - for example, as data moves, identifier of a dataset changes, how do we track this? extension to profile needed?
5. Serialization - is JSON still the default implementation? How should it look like so that it is convenient for Java and python programmers?
6. Role of ontologies?
7. ...



Next steps

- Submit a proposal for the new WG
 - Already in touch with the RDA Tiger
 - Select chairs for the new WG
- Do the work!

- Contact : Tomasz.Miksa@tuwien.ac.at

Part 3

Discussion

- Any questions to the speakers?
- Any other ideas on what we could tackle together?

Discussion

What do you think about the things you have just heard about?

Is there anything else regarding DMPs that you would like to share with others?

Are there other topics relevant for the Active DMPs IG?

Part 4

Wrap up



Salzburg Manifesto on machine actionable Data Management Plans (maDMPs)

Over the past several years, our collaborative work has focused on building a robust ecosystem for machine-actionable Data Management Plans (maDMPs)¹ and our common goal is to transform data management by converting text-based DMPs into a format that machines can read and process. Embracing machine-actionable maDMPs isn't just a step forward in research data management; it's a leap towards a future where stakeholders experience heightened efficiency, streamlined collaborations, and accelerated innovation.

By adopting maDMPs, stakeholders empower themselves with a dynamic tool that not only simplifies data management processes but also opens up possibilities for cutting-edge automation, robust integrations, and real-time verification. This transformation isn't just about conforming to a new standard; it's about unleashing the potential for groundbreaking advancements and establishing a collective legacy of seamless, data-driven progress within the research community. Through our joint efforts and collaboration, we have established an open science-focus

Want to become a supporter?

Join us in shaping a brighter future! Stand with the DMP manifesto and be a catalyst for positive change in data management planning.

 [Support DMP Manifesto](#)

Staying in touch and useful links







INTEREST GROUP

Active Data Management Plans IG

Group Stage: recognised-and-endorsed

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Members

-  [Robyn Peterson](#)
-  [Magdalena Drafiova](#)
-  [Pedro Sobral](#)
-  [Kristina Hettne](#)
-  [Laura Vilela Rodrigues Rezende](#)
-  [Yvonne Vise](#)

Group Details

Status: recognised-and-endorsed

Group Focus: Data Management

Chair(s): David Giaretta, Kevin Ashley, Tomasz Miksa, Elli Papadopoulou, Maria Praetzellis

The proposed activity of this group is to act as a nucleus for discussing requirements for and identifying developments needed to support active (i.e. able to evolve and be monitored) data management planning. Working groups will be proposed to carry out work on specific areas of interest. Currently research data management plans (DMP), created at the proposal stage of a project, do not evolve and cannot be monitored in any detail. The DMP should begin at the planning stage for any dataset, evolving through its entire lifecycle and is therefore fundamental to ensuring that data is appropriately managed, archived, preserved...

<https://www.rd-alliance.org/groups/active-data-management-plans/>








WORKING GROUP

DMP Common Standards WG

Group Stage: recognised-and-endorsed

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Members

-  [Magdalena Drafiova](#)
-  [Pedro Sobral](#)
-  [Scout Calvert](#)
-  [Elisha Wood-Charlson](#)
-  [Xiaoran Zhou](#)
-  [Johanna Laiho-Kauranne](#)
-  [Athina Papadopoulou](#)

Group Details

Status: recognised-and-endorsed

Group Focus: Data Management

Chair(s): Marek Suchánek, Peter Neish, Tomasz Miksa

In a nutshell This group produced a recommendation on machine-actionable DMPs. recommendation: <https://doi.org/10.15497/rda00039> full documentation: <https://github.com/RDA-DMP-Common/RDA-DMP-Common-Standard> To get more information on the activities; check slides from our meetings – they include information on adoptions, ongoing activities, etc: <https://www.rd-alliance.org/node/56938/outputs> read our papers: <https://github.com/RDA-DMP-Common/RDA-DMP-Common-Standard/blob/master/docs/links.md#publications> In case of any questions, please do not hesitate to contact group chairs. We are always happy to help! Original charter The need for establishing this working group was articulated during the 9th plenary meeting in Barcelona during the Active DMPs IG session. The discussion was framed by a white paper by Simms et al. on machine-actionable data management plans...

[View more](#)

<https://www.rd-alliance.org/groups/dmp-common-standards-wg/>

Publications about maDMPs

- [Tomasz Miksa, Simon Oblasser, and Andreas Rauber. Automating research data management using machine-actionable data management plans. ACM Transactions on Management Information Systems, 13\(2\), dec 2021.](#)
- [Tomasz Miksa, Paul Walk, Peter Neish, Simon Oblasser, Hollydawn Murray, Tom Renner, Marie-Christine Jacquemot-Perbal, João Cardoso, Trond Kvamme, Maria Praetzelis, Marek Suchánek, Rob Hooft, Benjamin Faure, Hanne Moa, Adil Hasan, and Sarah Jones. Application profile for machine-actionable data management plans. CODATA Data Science Journal, 20\(1\):32, October 2021](#)
- [Raffael Foidl, Lea Salome Brugger, and Tomasz Miksa. Automating Evaluation of Machine-Actionable Data Management Plans with Semantic Web Technologies. In DaMaLOS - 2nd Workshop on Data and Research Objects Management for Linked Open Science : Co-located at the International Semantic Web Conference ISWC 2021. PUBLISSO, November 2021.](#)
- [Tomasz Miksa, Maroua Jaoua, and Ghaith Arfaoui. Research Object Crates and Machine-actionable Data Management Plans. In DaMaLOS - First Workshop on Data and Research Objects Management for Linked Open Science : Co-located at the International Semantic Web Conference ISWC 2020. PUBLISSO, November 2020.](#)
- [João Cardoso, Leyla Jael Garcia Castro, Fajar Ekaputra, Marie-Christine Jacquemot-Perbal, Tomasz Miksa, and José Borbinha. Towards semantic representation of machine-actionable Data Management Plans. In DaMaLOS - First Workshop on Data and Research Objects Management for Linked Open Science : Co-located at the International Semantic Web Conference ISWC 2020. PUBLISSO, 2020.](#)
- [Simon Oblasser, Tomasz Miksa, Asanobu Kitamoto: Finding a Repository with the Help of Machine-Actionable DMPs: Opportunities and Challenges. IDCC 2020](#)
- [Tomasz Miksa, Stephanie Simms, Daniel Mietchen, Sarah Jones \(2019\) Ten principles for machine-actionable data management plans. PLOS Computational Biology 15\(3\): e1006750.](#)
- [Tomasz Miksa, Peter Neish, Paul Walk, Andreas Rauber: Defining requirements for machine-actionable Data Management Plans. iPres 2018](#)
- [Tomasz Miksa, João Cardoso, José Luis Borbinha: Framing the scope of the common data model for machine-actionable Data Management Plans. BigData 2018: 2733-2742](#)
- [Asztrik Bakos, Tomasz Miksa, Andreas Rauber: Research Data Preservation Using Process Engines and Machine-Actionable Data Management Plans. TPDL 2018: 69-80](#)