

# Data Management Planning 101

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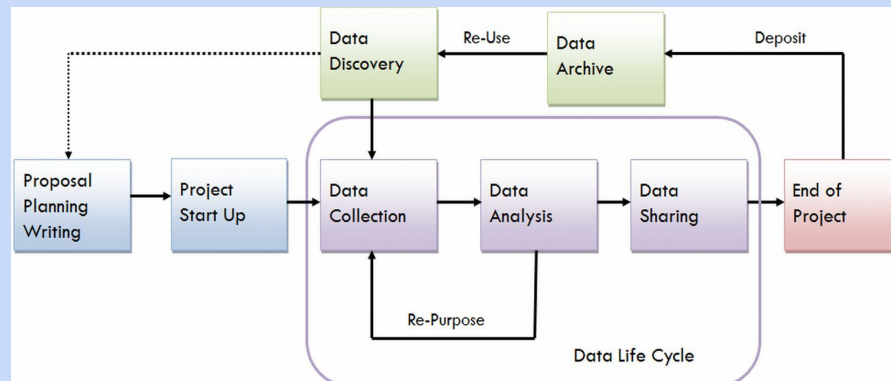
*October 16, 2019*

# What *is* a data management plan?

## A DMP:

- Is a formal document clearly articulating the strategies and tools you will implement to effectively manage your data
- Speaks to the management of data both **during** the active phases of your research and **after** the completion of the research project.

A DMP helps  
articulate & guide  
data management  
*throughout* your  
research project!



# FAIR Principles

**FAIR** is a set of guiding principles focused towards making data:

- **Findable** data are assigned a unique persistent identifier (e.g., DOI) & are indexed in a publically accessible repository or data portal
- **Accessible** data are easily retrieved by both humans/machines
- **Interoperable** data utilize such things as a controlled vocabulary, common programming language, and metadata standards allowing for machine actionability
- **Reusable** data have metadata and data that are rich at both study & variable levels, compliant with 'FAI', include license agreements and are citable



**\*Key Reading:**

Wilkinson, M. D. *et al.* The FAIR Guiding Principles for scientific data management and stewardship. *Sci. Data*3:160018 doi: 10.1038/sdata.2016.18 (2016).

# FAIR Principles: Key Resource

**go-fair.org** (<https://www.go-fair.org/fair-principles/>)

- Initiatives
- Implementation Networks
- Detailed information across the FAIR principles
- Fields of Action
- Resources!



GO FAIR Initiative Implementation Networks FAIR Principles Fields of action Resources

## Resources

Home > Resources

### Resources

- > RDM Starter Kit
- > GO FAIR Materials
- > GO FAIR Workshop Series
  - > Metadata for Machines Workshops
  - > Germany goes FAIR Workshops
- > Papers & Publications
- > Videos
- > Certification
- > Glossary
- > FAQ

This page is dedicated to resources that you might find useful in your FAIR endeavours. We have collected interesting papers & publications, webinars, tools and more for your information and use:

- Starter Kit for Research Data Management
- GO FAIR Materials
- GO FAIR Workshop Series
- Papers & Publications
- Webinars
- Videos
- Certification
- Glossary
- FAQ

**Please note:** The resources presented here are being provided for informational purpose only; they do not constitute an endorsement or an approval by the GO FAIR International Support & Coordination office of any of the services or opinions of the organization or individuals. GO FAIR bears no responsibility for the accuracy, legality or content of the external site or for that of subsequent links. Contact the external site for answers to questions regarding its content.

# OCAP Principles

The First Nation Principles of OCAP are a set of standards that establish how First Nations data should be collected, protected, used or shared:

- **Ownership:** refers to the relationship of First Nations to their cultural knowledge, data & information - a **community/group collectively owns information** in the same way that an individual owns his/her personal information
- **Control:** affirms that **First Nations communities have rights in seeking control over all aspects of research** - from start to finish - that impact them. This extends to control of resources and review processes and management of information.
- **Access:** First Nations must have access to **information and data about themselves and their communities** regardless of where it is held, and have the **right to manage and make decisions** regarding access to their collective information.
- **Possession:** Refers to the physical control of data - the **mechanism by which ownership can be asserted and protected.**



"OCAP® is a registered trademark of the First Nations Information Governance Centre (FNIGC)"  
[www.FNIGC.ca/OCAP](http://www.FNIGC.ca/OCAP)

# OCAP Principles: Key Resource

## First Nations Information Governance Centre

(<https://www.FNIGC.ca/>)

- Fundamentals of OCAP online training program
- FNIGC data online
- First Nations Data Centre (data by request)
- OCAP certification for research projects (coming soon!)
- First Nations surveys (i.e., regional health, early childhood, education, labour, oral health)
- FNIGC online library (coming soon!)



The screenshot displays the FNIGC website with a navigation bar at the top containing links: Home, About, Our Work, Data Access, Media Room, News, and OCAP. A search bar is also present. The main header features the FNIGC logo and the text 'First Nations Information Governance Centre' and 'Le Centre de gouvernance de l'information des Premières Nations'. Below this, a red banner highlights 'OCAP®' with a link to 'HOME / OCAP®' and social media icons for Twitter, Facebook, and YouTube. The main content area is titled 'The First Nations Principles of OCAP®' and includes sections for 'What is OCAP®?', 'What do the four "OCAP®" principles mean?', and 'Ownership' and 'Control' principles. A sidebar on the right promotes 'The First Nations Information Governance Centre presents our newest online course: The Fundamentals of OCAP®' with a 'LEARN MORE & REGISTER' button. Below this, it mentions 'THE FIRST NATIONS DATA CENTRE' as a new data-access service. At the bottom, there is a 'Latest Tweets' section with two tweets: one about co-hosting the FNIGC First Nations Data Governance Strategy Summit in Calgary, and another offering condolences to the family and friends of Sayisi Dene Elder.



# Why are DMPs important?

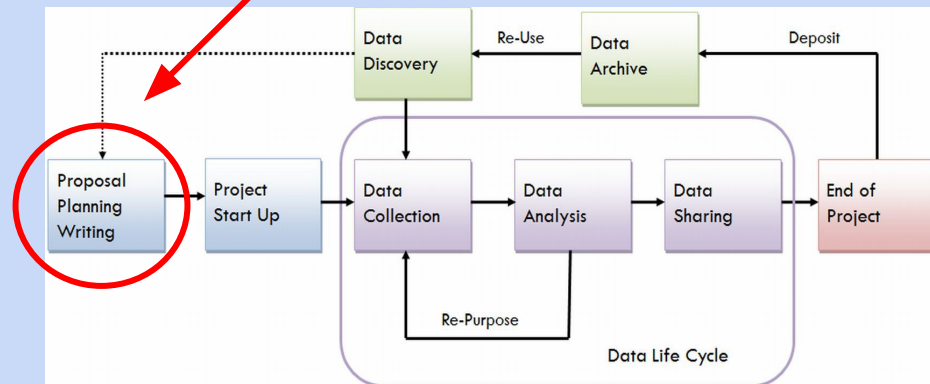
**DMPs help you to:**

- **Set out consistent data management strategies** *prior* to starting research
- **Identify strengths & weaknesses** in current practices and to integrate effective data management practices into your research
- **Prepare data** for future reuse, preservation and sharing
- **Meet requirements** of both funders and institutions
- **Reduce the overall cost of research** by increasing project efficiencies

# When should I start creating a DMP?



Like Jeff said, a DMP should be developed as early in the research process as possible!



Every research project should ***begin*** with the creation of a DMP, as it will be used to guide the research process.

**Remember:** A DMP is a *living document* that can be updated throughout the research process



# What are the key components of a DMP?

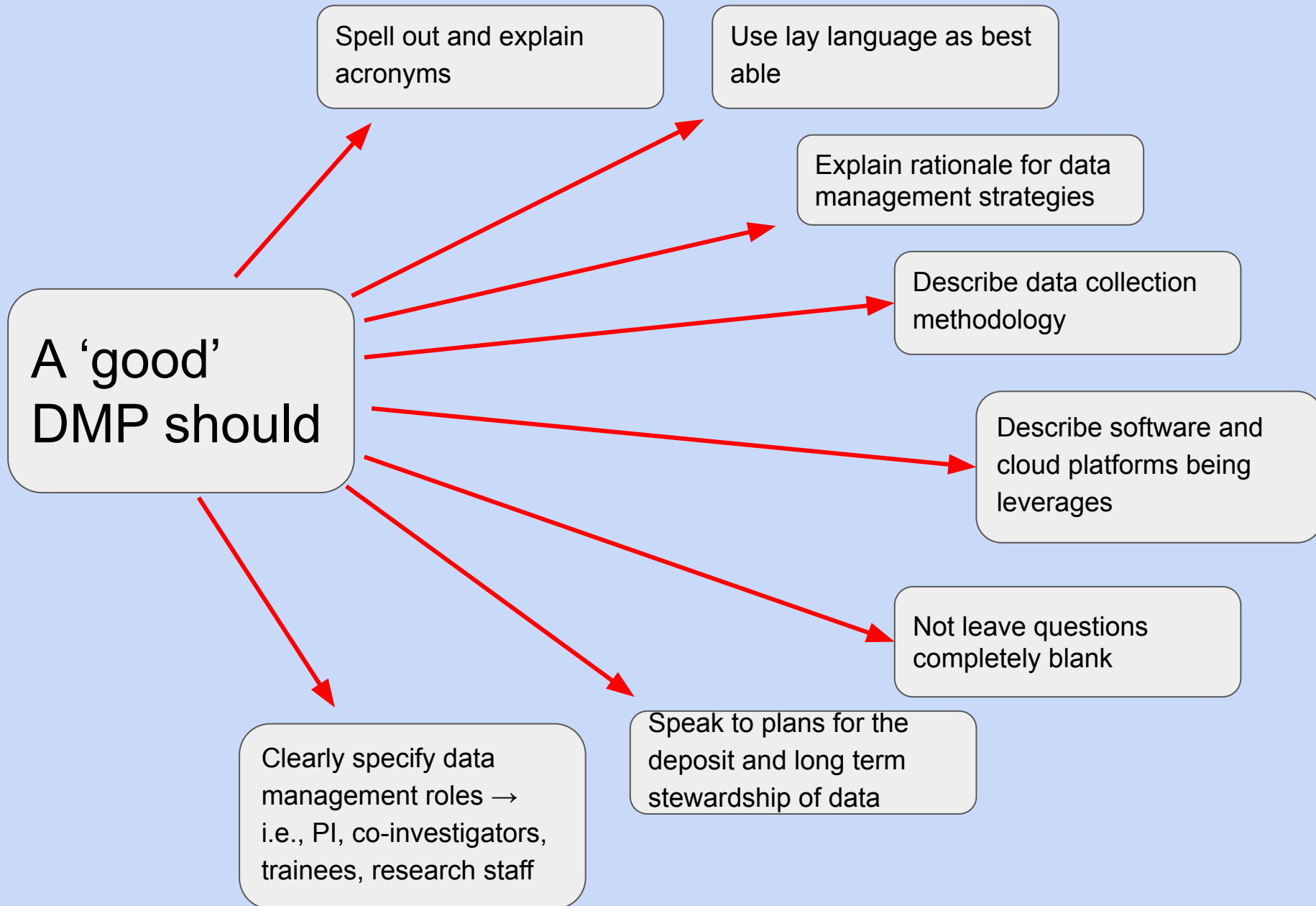
A DMP should include information relating to:


- Data collection
- Storage and backup
- Preservation
- Sharing
- Responsibilities and resources
- Ethics and legal compliance

Don't forget about  
documentation and  
metadata!!




# What makes a 'good' DMP?





**portage**

SERVICES PARTAGÉS POUR LES DONNÉES DE RECHERCHE  
SHARED STEWARDSHIP OF RESEARCH DATA

[Home](#) [Contact Us](#) [Français](#) 

[Training Resources](#)

[Communities of Practice](#)

[How to Manage Your Data](#)

[Infrastructure Platforms](#)

[Network of Experts](#)

[About Portage](#)

## THE PORTAGE NETWORK

Is dedicated to the shared stewardship of research data in Canada through:

- Developing a national research data culture
- Fostering a community of practice for research data
- Building national research data services and infrastructure

Launched in 2015 by the [Canadian Association of Research Libraries](#), Portage works within the library community to coordinate expertise, services, and technology in research data management, seeking to collaborate with other research data management stakeholders.

**Research data culture** represents widely shared values and principles for digital data management.

**A community of practice for research data** consists of stakeholders working collaboratively to ensure data are accessible to address complex research issues.

Research data management activities span sectors, domains, and jurisdictions, necessitating nationally coordinated research data management services and infrastructure.

> [Read more](#)


## DMP Assistant

[Sign In](#)

If you have an existing account with DMP Assistant or previous version of DMP Builder.

[Sign Up](#)

New to DMP Assistant? Sign up today.



FRDR  
DFDR  
FEDERATED RESEARCH DATA REPOSITORY  
DÉPÔT FÉDÉRÉ DE DONNÉES DE RECHERCHE

## NEWS

JULY 31, 2019

[Portage Progress Report for the Period of April – June 2019](#)

JULY 31, 2019

# DMP Assistant Key Features



**DMP Assistant** is a bilingual tool for preparing data management plans (DMPs). The tool follows best practices in data stewardship and walks researchers step-by-step through key questions about data management.

Step 1

Sign up with DMP Assistant

Step 2

Sign in and select a template under Organizations. The Portage template is the default.

Step 3

Answer the questions that are relevant to your work. Guidance and examples are provided.

Step 4

Revisit the tool throughout your research to review or revise your answers.

## Sign in



If you have an existing account with DMP Assistant or previous version of DMP Builder.

## Sign up



New to DMP Assistant? Sign up today.

Please note that we are currently working on single sign-in authentication. For now, please create a new DMP Assistant account. You will have the option to link your DMP Assistant account to your campus ID when that feature becomes available.

Upon signing in, researchers can either access an existing DMP.....

## My plans

The table below lists the plans that you have created, and any that have been shared with you by others.

These can be edited, shared, exported or deleted at anytime.

Filter plans		Filter	
Name	Select an action		
James' Test DMP	Edit Share Export Delete		

Create plan

.....or create a new one



Each DMP has study level information associated with it

## James' Test DMP

### Plan details

### University of Alberta Data Management Questions

### Share

### Export

This page gives you an overview of your plan. It tells what your plan is based on and gives an overview of the questions that you will be asked.

[Edit plan details](#)

Plan name	James' Test DMP
ID	1008928
Grant number	-
Principal Investigator/Researcher	James Doiron
Plan data contact	-
Description	This is a test DMP

This plan is based on:

Institution	University of Alberta
-------------	-----------------------

[Answer questions](#)[Export](#)

Researchers can choose to answer questions within any given section at any time <sup>U</sup>

## James' Test DMP

0/22 questions answered

### Tips

Not all questions will apply to all research projects. Researchers are encouraged to answer the questions relevant to their work.

Researchers should revisit the tool throughout their research to review or complete their responses.

Plan details

University of Alberta Data Management Questions

Share

Export

**Data Collection** (6 questions, 0 answered)

+

**Documentation and Metadata** (3 questions, 0 answered)

+

**Storage and Backup** (2 questions, 0 answered)

+

**Preservation** (3 questions, 0 answered)

+

**Data Sharing and Reuse** (4 questions, 0 answered)

+

**Responsibilities and Resources** (4 questions, 0 answered)

+

Export

Plan details

University of Alberta Data Management Questions

Share

Export

Data Collection (6 questions, 0 answered)

What types of data will you collect, create, acquire and/or record?

B

I

A

A

Guidance

Share note

UAlberta Guidance

Examples: Images, audio, video, text, tabular data, modeling data, spatial data, instrumentation data

Save

Not answered yet

What file formats will your data be collected in? Will these formats allow for data re-use, sharing and long-term access to the data?

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A

Guidance

Share note

UAlberta Guidance

Proprietary file formats which require specialized software or hardware to use are not recommended, but may be necessary for certain data collection or analysis methods.  
  
Using open file formats or industry-standard formats (e.g. those which are widely used by a given community) is preferred whenever possible.

Save

Plan details

University of Alberta Data Management Questions

Share

Export

Data Collection (6 questions, 0 answered)

+

Documentation and Metadata (3 questions, 0 answered)

+

Storage and Backup (2 questions, 0 answered)

+

Preservation (3 questions, 0 answered)

-

Which data are selected for preservation and access will depend on potential reuse value, whether there are obligations to either retain or destroy data, and the resources required to properly curate the data and ensure that it remains usable in the future. In some circumstances, it may be feasible to preserve all versions of the data (e.g. raw, processed, analyzed, final), but in others, it may be preferable to only keep only selected data (e.g. transcripts instead of audio interviews).

B

I

A

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Guidance

Share note

UAlberta Guidance

Which data are selected for preservation and access will depend on potential reuse value, whether there are obligations to either retain or destroy data, and the resources required to properly curate the data and ensure that it remains usable in the future. In some circumstances, it may be feasible to preserve all versions of the data (e.g. raw, processed, analyzed, final), but in others, it may be preferable to only keep only selected data (e.g. transcripts instead of audio interviews).

Save

Not answered yet

Share note with collaborators

**B** *I* A A    **Save**

## Add collaborator

Permissions:

- ✓ Co-owner
- Edit
- Read only
- Add collaborator**

Editors can contribute to plans. Co-owners have additional rights to edit plan details and control access.

From here you can download your plan in various formats. This may be useful if you need to submit your plan as part of a grant application.

Select what format you wish to use and click to 'Export'.

Format

**Export****Settings (Using default PDF formatting values)**

# Short tutorial video

[https://libcasts.library.dal.ca/Portage/DMP\\_Assistant/](https://libcasts.library.dal.ca/Portage/DMP_Assistant/)



# Discussion

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