



DMP ASSISTANT

ALISA ROD AND SHILOH WILLIAMS

OTTAWA DATA CHAMPIONS RDM WORKSHOP SESSION

OCTOBER 24, 2022

OUTLINE

- **What is a DMP?**
- **Why write a DMP?**
- **Data management in the research workflow: the research data lifecycle**
- **DMP Assistant**
- **Examples: What content goes into a DMP?**

WHAT IS A DATA MANAGEMENT PLAN (DMP)?

- Documentation explicitly outlining the tools, methods, and procedures for managing your research data
- A plan for active data collection and future data sharing or preservation
- A “living” document to be updated over the course of a research project

WHY WRITE A DMP?

- It's useful!
- Funder requirements:
 - [Tri-Agency RDM Policy](#): “For certain funding opportunities, **the agencies will require data management plans (DMPs)** to be submitted to the appropriate agency at the time of application, as outlined in the call for proposals; in these cases, the DMPs will be considered in the adjudication process.”
 - International: many funding agencies have required data management planning for some time now (e.g. NSF, NIH, in the United States)
- REB/ethics review requirements:
 - Align with compliance and privacy

THE RESEARCH DATA LIFECYCLE



Source: Research Data Lifecycle by [LMA Research Data Management Working Group](#) is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](#).

<https://alliancecan.ca/en>



Digital Research
Alliance of Canada

Alliance de recherche
numérique du Canada

[About](#) ▾ [Membership](#) ▾ [Services](#) ▾ [Funding Opportunities](#) [Initiatives](#) ▾ [Latest](#) ▾ [Contact](#)

The Digital Research Alliance of Canada (the Alliance) serves Canadian researchers, with the objective of advancing Canada's position as a leader in the knowledge economy on the international stage.

[Discover the Alliance](#)

- Our Services
- Advanced Research Computing
- Research Data Management**
- Research Software

The Digital Research Alliance of Canada (the Alliance) serves Canadian researchers, with the objective of advancing Canada's position as a leader in the knowledge economy on the international stage.

Discover the Alliance

- About
- Membership
- Services**
- Our Services
 - Advanced Research Computing
 - Research Data Management**
 - FRDR
 - DMP Assistant
 - Learning and Training
 - Glossaries
 - Training Resources
 - External Training Resources Library

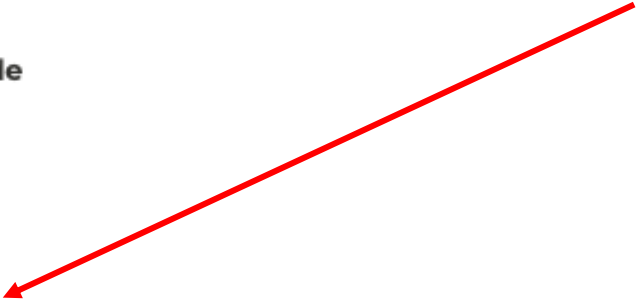
Research Data Management


What is RDM?

Research Data Management (RDM) is one of the four key elements of Canada's digital research infrastructure (DRI). It encompasses the processes applied throughout the lifecycle of a research project to guide the collection, documentation, storage, sharing, and preservation of research data, and allows researchers to find and access data.

RDM Services We Provide

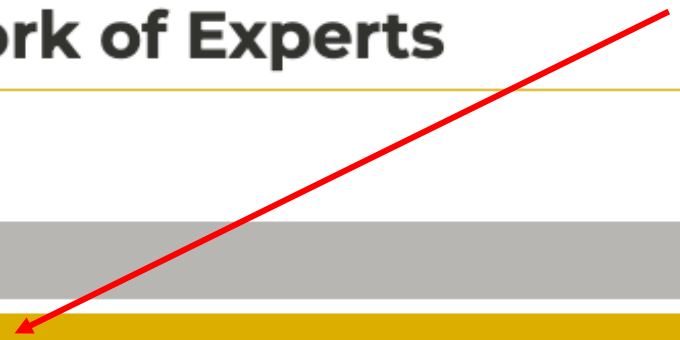
- [FRDR](#)
- [DMP Assistant](#)
- [Learning & Training](#)
- [Network of Experts](#)
- [Publications \(Zenodo\)](#) ↗



- About
- Membership
- Services**
- Our Services
- Advanced Research Computing
- Research Data Management**
- FRDR
- DMP Assistant
- Learning and Training
- Glossaries
- Training Resources
- External Training Resources Library
- Institutional Contacts
- Network of Experts**
- Publications (Zenodo) 

Network of Experts

- Curation Expert Group 
- Data Management Planning Expert Group** 



Data management planning is recognized as one of the key pillars of research data management, and data management plans (DMPs) are increasingly required by funders, including the Canadian Tri-Agencies as outlined in their [Research Data Management Policy](#). The Data Management Planning Expert Group (DMPEG) works to promote and nurture a strong data culture in Canada, and to support researchers and institutions in their data management planning needs.

The DMPEG develops and makes available guidelines, best practices and training resources in support of data management planning writ large, as well as guidance materials for the Alliance national DMP service, [DMP Assistant](#), including the standards underlying the structure and management of, and content for, DMP templates and exemplars. The DMPEG's work ultimately

- facilitates the sharing of research administrative information across research organizations and agencies;
- improves coordination among local and national research service organizations; and
- reduces administrative burden on researchers.



The **DMP Expert Group** works to:

- Promote & nurture a strong data culture in Canada
- Support researchers & institutions in their data management planning needs.
- Develop & make available guidelines, best practices and training resources in support of data management planning
- Develop guidance materials for the national DMP platform, [DMP Assistant](#)



Existing resources developed by the **DMPEG** include:



- **Brief Guides & Primer**

- [Intro to DMPs](#)
- [How to create and effective DMP](#)
- [DMP Primer](#)

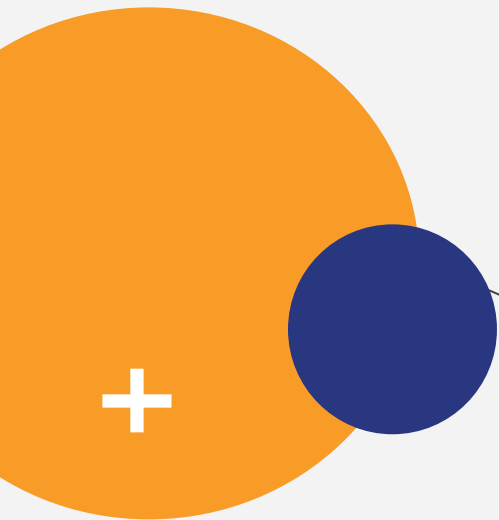
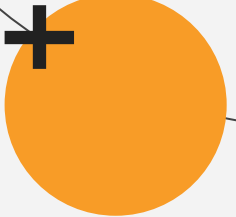
- **Tutorial videos**

- Introduction to DMPs
- Introduction to DMP Assistant
- Managing DMPs with DMP Assistant

- **DMP Exemplars**

- **And More!**

<https://alliancecan.ca/en/services/research-data-management/network-experts>



+ Upcoming **DMPEG** developed resources include:

- **DMP 101+ training video**
- **Updated Institutional Administrator Guide**
- **DMP Exemplars**
 - 10+ new exemplars
 - Spanning a range of research disciplines and methodologies

<https://portagenetwork.ca/network-of-experts/dmp-expert-group/>



About

Membership

Services

Our Services

Advanced Research Computing

Research Data Management

FRDR

DMP Assistant

Learning and Training

Glossaries

Training Resources


External Training Resources Library

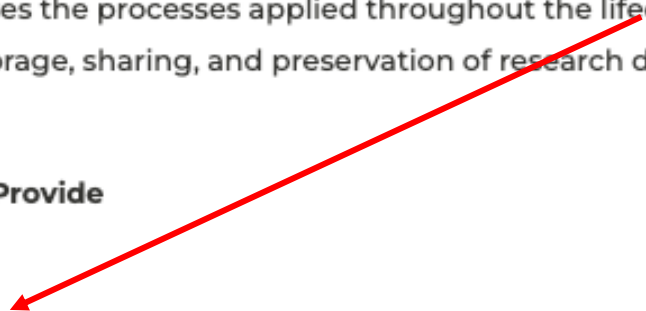
Research Data Management

What is RDM?

Research Data Management (RDM) is one of the four key elements of Canada's digital research infrastructure (DRI). It encompasses the processes applied throughout the lifecycle of a research project to guide the collection, documentation, storage, sharing, and preservation of research data, and allows researchers to find and access data.

RDM Services We Provide

- [FRDR](#)
- [DMP Assistant](#)
- [Learning & Training](#)
- [Network of Experts](#)
- [Publications \(Zenodo\)](#) 



+ DMP Assistant



- Hosted by the **University of Alberta Library** and supported by the **Digital Research Alliance of Canada**
- **National, freely available, bilingual** DMP tool to help researchers manage their data
- **Develops a DMP** by prompting researchers to consider and answer key data management questions, supported by best-practice guidance and examples.

<https://alliancecan.ca/en/services/research-data-management/dmp-assistant>



Digital Research
Alliance of Canada

Alliance de recherche
numérique du Canada



UNIVERSITY OF ALBERTA
LIBRARY





DMP Assistant

Researchers can:

- **Create project plans**, using a generic or an institution-, discipline-, or methodology-specific template;
- **See guidance** appropriate to the particular template they are using;
- **Collaborate** with multiple researchers on a plan;
- **Connect** to local guidance and support for data management at their academic institutions.



+ DMP Assistant

Institutions can:

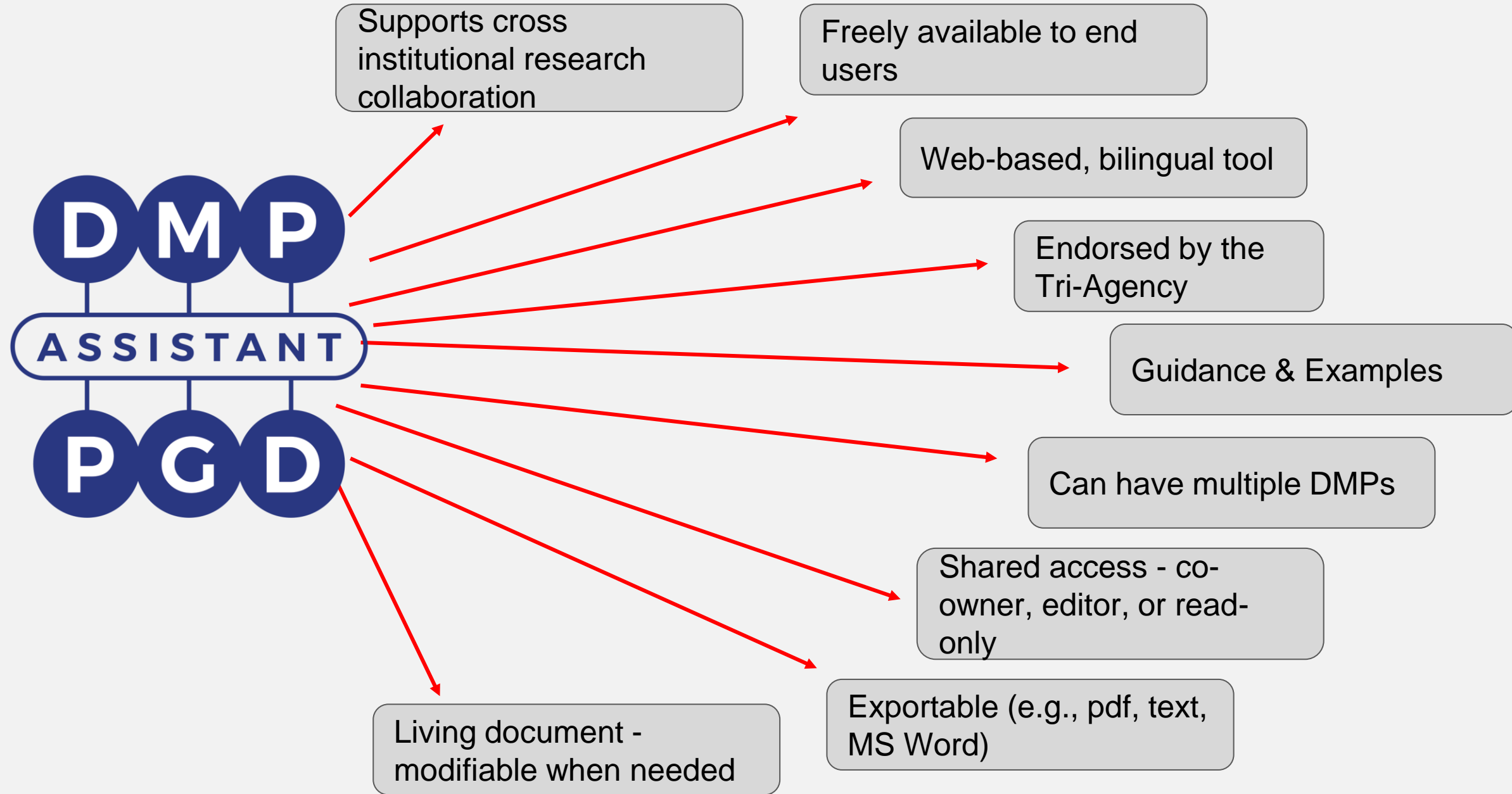
- **Customize** the default Portage template for their institution;
- Create **institution-specific** templates and guidance;
- View information about DMP Assistant **usage** at their institution.



+ A **DMP Assistant Steering Committee** provides essential guidance, support and direction including on the development of **new proposed features** such as:

- **API Integration** with other systems (e.g., grants, ethics)
- **Reviewing & Evaluating** DMPs
- Building a **DMP Repository** with DMP Assistant integration
- **DMP Versioning**
- Leveraging the power & potential of **PIDs**
- Improving machine-actionability > **maDMPs**

DMP Assistant Key Features



DMP Assistant



Welcome to DMP Assistant.

The **DMP Assistant** is a national, online, bilingual data management planning tool developed by the **Digital Research Alliance of Canada (the Alliance)** in collaboration with host institution **University of Alberta** to assist researchers in preparing **data management plans (DMPs)**. This tool is freely available to all researchers, and develops a DMP through a series of key data management questions, supported by best-practice guidance and examples.

DMPs are one of the foundations of good research data management (RDM), an international best practice, and increasingly required by institutions and funders, including the Canadian Tri-Agencies as outlined in their [Research Data Management Policy](#).

Getting started:

- [Brief Guide – Data Management Plans](#)
- [Brief Guide – Create an Effective Data Management Plan](#)
- [Primer – Data Management Plan](#)
- [How to Manage Your Data](#)
- [Tutorial Videos:](#)
 - [Introduction to Data Management Plans \(DMPs\)](#)
 - [Introduction to DMP Assistant](#)
 - [Managing DMPs with DMP Assistant](#)
- [Webinars:](#)
 - [Support Your Research with DMP Assistant 2.0](#)
 - [Support Your Research with Data Management Planning](#)

For more resources and training materials spanning the entire research data life cycle, see the [Portage Network Training Resources](#).

The DMP Assistant was adapted from the [Digital Curation Centre \(DCC\)](#)'s [DMPonline](#) tool, and uses the DMP Roadmap codebase developed by DCC and the [University of California Curation Center \(UC3\)](#).

[Sign in](#) [Create account](#)

* **Email**

* **Password**

[Forgot password?](#)

Remember email

[Sign in](#)



Upon signing in, you can either access an existing DMP

DMP ASSISTANT My Dashboard Create plans Reference - Help

UNIVERSITY OF ALBERTA LIBRARY

Notice: Signed in successfully.

My Dashboard

The table below lists the plans that you have created, and that have been shared with you by others. You can edit, share, download, make a copy, or remove these plans at any time.

Q Search

Project Title	Template	Edited	Role	Test	Visibility	Shared	Actions-
Portage DMP Exemplar - "Mixed Methods"	University of Alberta Template	03-03-2021	Owner	<input type="checkbox"/>	Private	Yes	Actions-
Test	Portage Template	03-03-2021	Owner	<input type="checkbox"/>	Private	No	Actions-
Test for migration to 2.0	University of Alberta Template	02-03-2021	Owner	<input type="checkbox"/>	Private	No	Actions-
My plan (Portage Template)	Portage Template	05-11-2020	Owner	<input type="checkbox"/>	Private	No	Actions-
My plan (University of Alberta Template)	University of Alberta Template	01-10-2019	Owner	<input type="checkbox"/>	Private	No	Actions-
My plan (Portage Template)	Portage Template	13-09-2019	Owner	<input type="checkbox"/>	Private	No	Actions-
My plan (Portage Template)	Portage Template	16-04-2019	Owner	<input type="checkbox"/>	Private	No	Actions-
My plan (University of Alberta Template)	University of Alberta Template	29-08-2018	Owner	<input type="checkbox"/>	Private	No	Actions-
My plan (University of Alberta Template)	University of Alberta Template	17-11-2017	Owner	<input type="checkbox"/>	Private	No	Actions-
My plan (Portage Template)	Portage Template	28-09-2017	Owner	<input type="checkbox"/>	Private	No	Actions-

View all 1 2 Next Last

[Create plan](#)

Or create a new one

You can 'copy' or 'clone' an existing DMP for similar projects or funder requirements

DMP ASSISTANT My Dashboard Create plans Reference - Help

UNIVERSITY OF ALBERTA LIBRARY

Notice: Signed in successfully.

My Dashboard

The table below lists the plans that you have created, and that have been shared with you by others. You can edit, share, download, make a copy, or remove these plans at any time.

Q Search

Project Title	Template	Edited	Role	Test	Visibility	Shared	Actions-
Portage DMP Exemplar - "Mixed Methods"	University of Alberta Template	03-03-2021	Owner	<input type="checkbox"/>	Private	Yes	Actions-
Test	Portage Template	03-03-2021	Owner	<input type="checkbox"/>	Private	No	Actions-
Test for migration to 2.0	University of Alberta Template	02-03-2021	Owner	<input type="checkbox"/>	Private	No	Actions-
My plan (Portage Template)	Portage Template	05-11-2020	Owner	<input type="checkbox"/>	Private	No	Actions-
My plan (University of Alberta Template)	University of Alberta Template	01-10-2019	Owner	<input type="checkbox"/>	Private	No	Actions-
My plan (Portage Template)	Portage Template	13-09-2019	Owner	<input type="checkbox"/>	Private	No	Actions-
My plan (Portage Template)	Portage Template	16-04-2019	Owner	<input type="checkbox"/>	Private	No	Actions-
My plan (University of Alberta Template)	University of Alberta Template	29-08-2018	Owner	<input type="checkbox"/>	Private	No	Actions-
My plan (University of Alberta Template)	University of Alberta Template	17-11-2017	Owner	<input type="checkbox"/>	Private	No	Actions-
My plan (Portage Template)	Portage Template	28-09-2017	Owner	<input type="checkbox"/>	Private	No	Actions-

View all 1 2 Next Last

Create plan

Actions ▾

- Edit
- Share
- Download
- Copy
- Remove

Select a template to use when creating a new plan:

Create a new plan

Before you get started, we need some information about your research project to set you up with the best DMP template for your needs.

* What research project are you planning?

mock project for testing, practice, or educational purposes

* Indicate the primary research organisation

- or - No research organisation associated with this plan or my research organisation is not listed

Which DMP template would you like to use?

- ✓ Portage Template
- Portage CRDCN Template for Accessing Data from Research Data Centres
- Portage CRDCN Template for Research Data Centres and External Analysis
- Portage Template for Advanced Research Computing
- Portage Template for Arts-Based Research
- Portage Template for Interdisciplinary Health Software/Technology Development
- Portage Template for Mixed Methods (Surveys & Qualitative Research)
- Portage Template for Neuroimaging in the Neurosciences
- Portage Template for Open Science Workflows
- Portage Template for Qualitative Health Sciences Research
- Portage Template for Research in History and the Humanities
- Portage Template for Studying Molecular Interactions
- Portage Template for Systematic Reviews
- Portage Template for Water Quality Research
- University of Alberta Template

We found multiple DMP templates corresponding to your primary research organisation



DMP Templates

There are **13** discipline and methodology-specific templates...so far!

- Advanced Research Computing
- Arts-Based Research
- Interdisciplinary Health Software/Technology Development
- Mixed Methods (Surveys & Qualitative Research)
- Qualitative Health Sciences Research
- CRDCN: Accessing Data from Research Data Centres
- CRDCN: Research Data Centres and External Analysis
- History and the Humanities
- Neuroimaging in the Neurosciences
- Open Science Workflows
- Studying Molecular Interactions
- Systematic Reviews
- Water Quality Research

https://assistant.portagenetwork.ca/public_templates

Each DMP has study level information associated with it



DMP ASSISTANT My Dashboard Create plans Reference Help

UNIVERSITY OF ALBERTA LIBRARY

Portage DMP Exemplar - "Mixed Methods"

Project Details | **Plan overview** | Write Plan | Share | Download

*** Project title**
Portage DMP Exemplar - "Mixed Methods"

Visibility

- Private: restricted to me and people I invite.
- Public: anyone can view.
- Organisation: anyone at my organisation can view.
- Test: mock project for testing, practice, or educational purposes.

Funder
[Empty text box]

Grant number
12345

Project abstract
This is a fictional exemplar data management plan focusing on mixed methods research (survey & interviews/focus groups). This exemplar DMP was developed in February 2020 by James Doiron (Co-chair, Portage DMP Expert Group) for educational and guidance purposes. For these purposes, the premise of the project being described is that the study topic of interest is

ID
8675309

Principal Investigator
[Empty text box]

You can choose from a range of visibility settings - from public to private

You can choose to answer questions within any given section at any time...

The screenshot shows the DMP Assistant interface. At the top left is the 'DMP ASSISTANT' logo. Navigation links include 'My Dashboard', 'Create plans', 'Reference', and 'Help'. The University of Alberta Library logo is prominently displayed. A breadcrumb trail shows 'University of Alberta'. The main heading is 'Portage DMP Exemplar - "Mixed Methods"'. Below this is a dark blue navigation bar with tabs for 'Project Details', 'Plan overview', 'Write Plan' (which is active), 'Share', and 'Download'. Under the 'Write Plan' tab, there are links for 'expand all | collapse all' and a progress indicator '22/22 answered'. A list of sections follows, each with a plus sign on the right:

- Data Collection (6 / 6)
- Documentation and Metadata (3 / 3)
- Storage and Backup (2 / 2)
- Preservation (3 / 3)
- Data Sharing and Reuse (4 / 4)
- Responsibilities and Resources (4 / 4)

Dedicated space as well as guidance customized guidance is provided for each question...

Documentation and Metadata (3 / 3)

What documentation will be needed for the data to be read and interpreted correctly in the future? This includes study-level documentation, data-level description, and any other contextual information required to make the data usable by other researchers.

B *I* [List Icon] [List Icon] [Link Icon] [Table Icon]

Survey data will be collected within [REDCap](#), a secure electronic data capture and management software hosted by the Women & Children's Health Research Institute (WCHRI) at the University of Alberta. REDCap features include the ability to develop and export a data dictionary which will outline all codes and variables within the survey. Key documentation related variables will be automatically populated within the survey data including time and date stamps and other key information to support data management and analytic activities.

All qualitative interviews will include summary information including: data collector, location of interview, and the date that the interview was conducted. Additionally, qualitative interviews will have accompanying field notes containing key contextual information and metadata.

File naming documentation will be developed and implemented. Components of file names will include as needed: file version (raw, edit, master, analytic), date (ie., dd/mm/yyyy), and any applicable key contextual information, (e.g., geographical location, interviewer initials or code).

Save

Guidance **Comments**

UAlberta

Your documentation may include study-level information about:

- who created/collected the data
- when it was created
- any relevant study documents
- conditions of use
- contextual details about data collection methods and procedural documentation about how data files are stored, structured, and modified.

A complete description of the data files may include:

- naming and labelling conventions
- explanations of codes and variables
- any information or files require to reproduce derived data.

More information about data documentation is available at the [UK Data Archive](#)

You can easily add collaborators to your DMP, with different permissions settings...

ASSISTANT
UNIVERSITY OF ALBERTA LIBRARY

Portage DMP Exemplar - "Mixed Methods"

Project Details | Plan overview | Write Plan | **Share** | Download

Set plan visibility

Public or organisational visibility is intended for finished plans. You must answer at least 0% of the questions to enable these options. Note: test plans are set to private visibility by default.

- Private: visible to me, specified collaborators and administrators at my organisation
- Organisation: anyone at my organisation can view
- Public: anyone can view

Manage collaborators

Invite specific people to read, edit, or administer your plan. Invitees will receive an email notification that they have access to this plan.

Email address	Permissions	
mitchelldoiron@hotmail.com	Owner	
jdoiron@ualberta.ca	Co-owner ↕	Remove

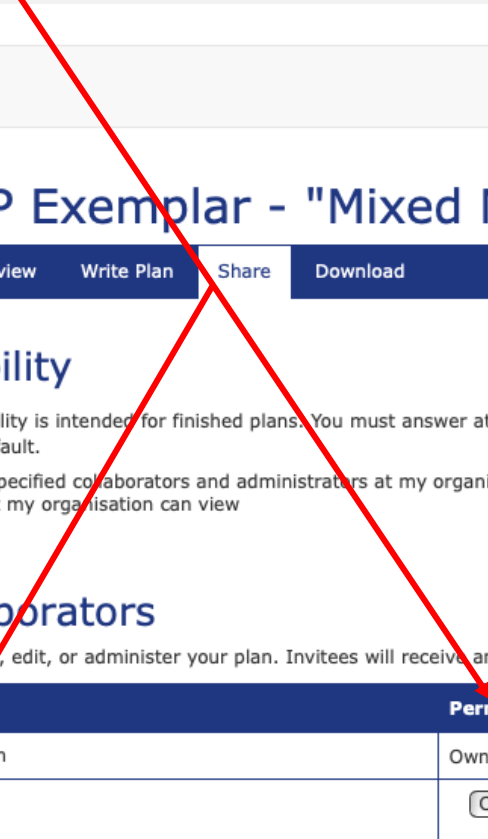
Invite collaborators

* **Email**

* **Permissions**

- Co-owner
- Editor
- Read only

Submit



A range of options are available both for formatting and downloading your DMP...

The screenshot shows the 'DMP ASSISTANT' interface for the 'Portage DMP Exemplar - "Mixed Methods"'. The top navigation bar includes 'My Dashboard', 'Create plans', 'Reference', 'Help', and 'Language'. The main content area has tabs for 'Project Details', 'Plan overview', 'Write Plan', 'Share', and 'Download'. Under the 'Download' tab, the 'Download settings' section includes 'Optional Plan Components' with checkboxes for 'project details coversheet' (unchecked), 'question text and section headings' (checked), and 'unanswered questions' (checked). A dropdown menu for file format is open, showing options: 'csv', 'html', 'pdf' (selected), 'text', and 'docx'. Below this is the 'PDF formatting' section, which includes 'Font' settings (Face: 'Arial, Helvetica, Sans-Serif', Size: '10 pt') and 'Margin (mm)' settings (Top: '25', Bottom: '20', Left: '12', Right: '12'). A 'Download Plan' button is located at the bottom of the settings area. Two red arrows point from the top right towards the 'Download' tab and the file format dropdown menu.

DMP General guidelines

Begin by providing a description of your research project, its focus, and purpose

Avoid extensive use of discipline specific jargon - your DMP should be easily understood by anyone!

Provide clarification for any acronyms used


Do not leave sections or questions blank

Provide rationale for decisions made - help others understand *why* you have made a decision

Your DMP is a living document - update it as needed!

DMP guidance resources

Creating an effective DMP ([English](#)/[French](#))



Brief Guide

CREATE AN EFFECTIVE DATA MANAGEMENT PLAN

This brief guide presents a general framework for creating an effective data management plan (DMP) to help you plan and organize your research and to meet research funder requirements.

To prepare your DMP, visit the [Portage DMP Assistant tool](#).

GENERAL GUIDELINES


- Begin by providing a description of your research project, its focus, and purpose.
- Avoid the extensive use of discipline specific jargon - your DMP should be easily understood by anyone.
- Provide clarification for any acronyms used.
- Do not leave sections or questions blank.
- Provide rationale for decisions made - help others understand why you have made a decision.
- Your DMP is a living document - update it as needed!

DATA COLLECTION


- Include descriptions of how you will collect data, including from where and in what format(s).
- Provide an estimate of the amount of data you will collect (e.g., MBs/GBs/TBs).
- Describe any software and/or platforms that will be used for data collection.
- Clearly explain how you will both store and transfer data.
- Explain how you will organize your data, including details relating both to file naming and versioning.

DOCUMENTATION AND METADATA

- Describe what information will be needed for others to understand or reuse your data.
- Describe how you will consistently capture documentation throughout the project.
- Choose a metadata standard suited to your discipline and/or chosen data repository or provide rationale for creating your own.



Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0)
Portage Network | portage@carl-abrc.ca | portagenetwork.ca



Brief Guide

STORAGE AND BACKUP

- Provide an estimate of storage space needed during the active phases of your research - remember to take into account file versioning, backups, and data growth.
- If needed, follow the 3-2-1 backup rule: 3 copies of your data, on 2 different storage media, with 1 located offsite.
- State a data backup schedule, automatic being most ideal.
- Describe how collaborators or research team will be able to access, modify, contribute, and work with your data.

PRESERVATION


- Not all data that you create necessarily needs to be preserved - consider such things as the value of your data, funding requirements, etc., and decide which, if any, should be preserved. Consult with experts in your Library as needed.
- Consider optimal file formats (preferably non-proprietary) for supporting long-term preservation.

SHARING AND REUSE

- Consider the appropriate sharing of your data, including any funding, ethical and/or confidentiality requirements.
- Explain what uses can be made of your data through licenses like Creative Commons.
- Consult with colleagues or librarians to choose an appropriate data repository or search re3data.org to find one.
- Choose a repository that assigns permanent identifiers to datasets (e.g., DOI) to enhance discoverability, accessibility, and citability.
- If applicable, describe how you will ensure file integrity, anonymization and de-identification.

RESPONSIBILITIES AND RESOURCES

- Identify data stewardship roles and responsibilities of project members and other organizations during and after the project.
- Estimate and describe any required resources and costs for data management and long-term access to your data.



Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0)
Portage Network | portage@carl-abrc.ca | portagenetwork.ca

DMP Sections: Data Collection

Include descriptions of *how* you will collect data, including from where and in what format(s)

Provide an estimate of the amount of data you will collect (e.g., MBs/GBs/TBs).

Describe any software and/or platforms that will be used for data collection

Explain how you will organize your data, including details relating both to file naming and versioning

Clearly explain how you will both store and transfer data

DMP Sections: Documentation & Metadata

Describe what information will be needed for others to understand or reuse your data.

Describe how you will consistently capture documentation throughout the project.

Choose a metadata standard suited to your discipline and/or chosen data repository, or provide rationale for creating your own.

DMP Sections: Storage & Backup

Provide an estimate of storage space needed during the active phases of your research - remember to take into account file versioning, backups, and data growth!

State a data backup schedule, automatic being most ideal.

Describe how collaborators or research team will be able to access, modify, contribute, and work with your data.

DMP Sections: Preservation

Not all data that you create necessarily *needs* to be preserved - consider such things as the value of your data, funding requirements, etc., and decide which, if any, should be preserved. Consult with experts in the Libraries as needed!

Consider optimal file formats (preferably non-proprietary) for supporting long-term preservation. Optimally preserved data are easily accessible and use by anyone, without requiring proprietary software to do so.

DMP Sections: Sharing & Reuse

Consider the appropriate sharing of your data, including any funding or confidentiality requirements.

Explain what uses can be made of your data through licenses like [Creative Commons](#).

Consult with colleagues or librarians to choose an appropriate data repository or search [re3data.org](#) to find one.

Choose a repository that assigns permanent identifiers to datasets (e.g., DOI) to enhance discoverability, accessibility, and citability.

If applicable, describe how you will ensure file integrity, anonymization and de-identification.

DMP Sections: Responsibilities & Resources

Identify data stewardship roles and responsibilities of project members and other organizations during and after the project.

Estimate and describe any required resources and costs for data management and long-term access to your data.

DMP Sections: Ethics & Legal Compliance

Describe if there are any legal, ethical, and intellectual property issues when managing and sharing your data.

Explain how you will comply with any applicable privacy legislation and laws, including funding and institutional requirements.

Describe how you will ensure your data are securely managed after the project is completed including the secure management of sensitive data and in accordance with any ethical obligations

DMP exemplars

Discipline and/or methodology focus	Title & Link
<p style="text-align: center;">Digital Humanities</p>	Belgians and French in the Prairies
	Soundscape Study
	Women's Print History Project (1750-1830)
	Historical Canadian Census Data
<p style="text-align: center;">Mixed Methods (surveys & qualitative interviews)</p>	Mixed Methods Fictional Exemplar
<p style="text-align: center;">Natural Sciences</p>	Ecohydrology Research Group
	Computational Reproducibility in High-Performance Computing
<p style="text-align: center;">Social Sciences</p>	People, Places, Policies & Prospects: Affordable Rental Housing for Those in Greatest Need
	Usage of Academic Profile Websites

DMP exemplars

Discipline and/or methodology focus
Digital Humanities
Mixed Methods (surveys & qualitative interviews)
Natural Sciences
Social Sciences



Data Management Plan Exemplar #3: Mixed Methods

Fictional Exemplar

Data Collection

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

We will be collecting surveys which will then be exported into tabular format.

We will also be conducting both semi-structured interviews and focus groups that will produce both digital audio and text (transcriptions) based data.

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?

Our file formats will exist both in non-proprietary and proprietary formats. The non-proprietary formats will ensure that these data are able to be used by anyone wishing to do so once they are deposited and made openly available.

Surveys will exist in .csv (non-proprietary), MS Excel, & SPSS (both proprietary) formats. For more information regarding SPSS see: [SPSS Wikipedia https://en.wikipedia.org/wiki/SPSS](https://en.wikipedia.org/wiki/SPSS)

Interviews & focus groups data will exist in .mp3 (non-proprietary), MS Word & NVivo (both proprietary) formats. For more information regarding NVivo see: [NVivo Wikipedia https://en.wikipedia.org/wiki/NVivo](https://en.wikipedia.org/wiki/NVivo)

Any survey data deposited for sharing and long-term access will be in .csv format so that anyone can use them without requiring proprietary software.

The final de-identified versions of the interviews and focus groups transcripts will be exported into a basic non-proprietary text format for deposit, long-term preservation and access.

If data are collected using laptops or mobile devices, please explain how you will securely store and transfer the data.

Laptops are not being used for any data collection, though encrypted digital voice recorders (DVRs) will be used to collect both interviews and transcripts. Interviews and focus group digital audio files will not be stored on the DVRs, only collected and then securely transferred to the project's cloud based virtual research environment space via a secure FTP (File Transfer Protocol).

2

nk
-1830)
h-Performance Computing
s: Affordable Rental



FUNDER REQUIREMENTS: EXAMPLE

- [CIHR Operating Grant : Clinical Trials Projects](#) (July 2022 deadline)
 - Applications **must incorporate** all the following key design elements. The maximum length for each plan is 3 pages in English and 4 pages in French.
 - Data Governance plan: Strategy for how data will be stored, linked and shared, as appropriate. Research data managed by the clinical trial team must be as FAIR as possible – Findable, Accessible, Interoperable, and Reusable – and the data governance plan must outline how the FAIR principles will be applied.

FUNDER REQUIREMENTS: EXAMPLE

CIHR Network Grants in Skin Health, Bone Health, and Muscular Dystrophy

- **Data Management Plan (Mandatory):** the data management plan (DMP) should describe how the network will manage research data generated as part of its activities. DMPs should describe what data are expected to be collected, created, linked to, acquired or recorded; how data will be documented, formatted, protected, and preserved; where data will be deposited, and whether and how data will be shared within and outside of the network; and ethical, legal and commercial constraints the data are subject to.
- Applicants are encouraged to use [DMP Assistant](#) to create their DMPs.

CONTENT OF A DMP: TYPE OF DATA TO BE COLLECTED

- What types of data will you collect, create, link to, acquire and/or record?
- 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?
- What conventions and procedures will you use to structure, name and version-control your files to help you and others better understand how your data are organized?

CONTENT OF A DMP: TYPE OF DATA TO BE COLLECTED

- The project involves the collection of MRI data. However, given that we will use exclusively participants that are recruited as part of a larger project, we will have access to participants' clinical data (for patients) and scores at a series of neuropsychological assessments (both patients and controls). As much as possible we will use open and/or non-proprietary formats for our data and its accompanying materials. The MRI data will use NIfTI open file format, the physiology data will use the *.csv format and the preprocessing and analysis scripts will be written in *.txt format. The MRI DICOM data will be converted in Nifti file format and .json metadata files that will be then organized according to the BIDS standard.
- The BIDS standard will be used to structure the entirety of the data: MRI and physiological.

CONTENT OF A DMP: SHARING AND REUSE

- What data will you be sharing and in what form? (e.g. raw, processed, analyzed, final).
- Have you considered what type of end-user license to include with your data?
- What steps will be taken to help the research community know that your data exists?

CONTENT OF A DMP: SHARING AND REUSE

- Anonymized datasets, processed data and metadata will be deposited in a domain-specific public repository. If the domain-specific repository does not have features that enable FAIR data (Findability, Accessibility, Interoperability, and Reusability), the data will be deposited in the Borealis Dataverse, which allows for making the data FAIR. To ensure the data underlying any articles from this study are as FAIR as possible, and to allow for reproducibility and re-use, we intend to license the data using a Creative Commons Public Domain (CC-0) license.

GENERAL TIPS

- Your peers are your reviewers
- DMP Assistant is specifically mentioned in FOs
- The more rigorous your data management practices, the easier to write a robust and compelling DMP
- Rely on and mention institutional resources in your DMP.
 - [Felicity Taylor and RDM Team at uOttawa!](#)

THANKS!
QUESTIONS?