Support Your Research with DMP Assistant 2.0!

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March 30, 2021
Agenda

01. Introduction to Data Management Plans (DMPS)
02. Introduction to the DMP Assistant 2.0
03. Walkthrough: Creating a DMP & End User Features
04. Highlights: Institutional Administrator Features
05. Looking Ahead & Questions
Data Management Plans (DMPs)

- A formal document which clearly articulates 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 “living” document that can be modified throughout your project to reflect any changes that have occurred.

Objective: To address issues related to data management prior to starting your research project!
For more information on DMPs:

https://doi.org/10.5281/zenodo.4001010

For more information on DMPs:

https://doi.org/10.5281/zenodo.4004956
DMPs & the Research Lifecycle

RDM - managing data throughout all phases of the research lifecycle through planning, active research, and beyond!

A DMP provides information across key research lifecycle categories:
Why DMPs?

• Because it is **good practice**.
• Because it is **practical**.
• Because it is and/or **will be required**.

Tri-Agency Research Data Management Policy

3.2 Data management plans

All DMPs should describe:

• how data will be collected, documented, formatted, protected and preserved;
• how existing datasets will be used and what new data will be created over the course of the research project;
• whether and how data will be shared; and
• where data will be deposited.
Portage Network of Experts

Network of Experts

- Discovery & Metadata Expert Group
- Preservation Expert Group
- Data Repositories Expert Group
- Sensitive Data Expert Group
- Reuse
  - Finding data
  - Data citation
- Preserve
  - Reformating
  - Archival Storage
- Planning
  - Policies
  - Design Research Data Management
- Collected & Analyze
  - Capture and organize data
  - Active Storage and backup
  - Documentation & metadata
  - File naming & formats
  - Collaborate
- Represent
  - Data sharing
  - Copyright & Ownership
  - Ethics
- Publish
- Curation Expert Group
- DMP Expert Group
- Research Intelligence Expert Group
- National Training Expert Group
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

https://portagenetwork.ca/
Portage DMP Assistant

- Hosted by the University of Alberta Library and supported by the Portage Network.

- A national, open, bilingual data management planning (DMP) tool to help researchers better manage their data throughout the lifespan of a project.

- Develops a DMP by prompting researchers to answer a number of key data management questions, supported by best-practice guidance and examples.

https://assistant.portagenetwork.ca/
Portage DMP Assistant

- Original DMP Assistant was adapted from the Digital Curation Centre (DCC) and their DMPonline tool.
- French user interface originally produced with support from the Université de Montréal Library.
- DMP Assistant 2.0 uses the DMPRoadmap codebase developed by DCC and the University of California Curation Center (UC3).
Portage DMP Assistant

Researchers can:

- Create project plans, using a generic template 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.

https://assistant.portagenetwork.ca/
Portage 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.

[https://assistant.portagenetwork.ca/](https://assistant.portagenetwork.ca/)
DMP ASSISTANT 2.0 LAUNCH!

March 3, 2021
Portage DMP Assistant 2.0!

Version 2.0 has several new features & benefits, including:

- The ability to ‘clone’ DMPs for use in similar projects;
- The ability for institutions to create more flexible DMP templates in terms of institutional customization as well as enhanced template development functions such as cloning, use of phases and themes, and working from a range of new discipline- and methodology-specific templates;
- New usage statistics dashboards for institutional administrators.
Welcome to DMP Assistant.

DMP Assistant has been developed by the Portage Network to help you write data management plans.

Getting started:
- Digital Curation Centre
- UC3: University of California Curation Center
- UK funder requirements for Data Management Plans
- US funder requirements for Data Management Plans
- DCC Checklist for a Data Management Plan
- DMP Assistant equivalent in France
- France funder requirements for Data Management Plans

https://assistant.portagenetwork.ca/
Bienvenue sur l'Assistant PGD.

L'Assistant PGD a été mis au point par le Réseau Portage pour vous aider à rédiger des plans de gestion des données.

Commencer :
- Digital Curation Centre
- UC3: University of California Curation Center
- Exigences des bailleurs de fonds du R.-U. en matière de PGD
- Exigences des bailleurs de fonds des É.-U. en matière de PGD
- Liste de vérification du DCC pour un PGD
- Équivalent de l'Assistant PGD en France
- Exigences des bailleurs de fonds de la France en matière de PGD

https://assistant.portagenetwork.ca/?locale=fr_CA
Upon signing in, you can either access an existing DMP... or create a new one.
NEW in 2.0, you can also ‘copy’ or ‘clone’ an existing DMP for similar projects or funder requirements ...
Each DMP has study level information associated with it:

**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

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

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).
You can choose to answer questions within any given section at any time ...
Dedicated space as well as customized guidance is provided for each question.

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.

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 (e.g., dd/mm/yyyy), and any applicable key contextual information, (e.g., geographical location, interviewer initials or code).

Your documentation may include study-level information about:
- who created/collection 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.
Portage DMP Exemplar - "Mixed Methods"

Data Collection (6 / 6)

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.

For any given question you are able to ‘share notes’ with your collaborators...
You can easily add collaborators to your DMP, with different permissions settings...

Portage DMP Exemplar - "Mixed Methods"

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.

<table>
<thead>
<tr>
<th>Email address</th>
<th>Permissions</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="mailto:mitchelldoiron@hotmail.com">mitchelldoiron@hotmail.com</a></td>
<td>Owner</td>
</tr>
<tr>
<td><a href="mailto:jdoiron@ualberta.ca">jdoiron@ualberta.ca</a></td>
<td>Co-owner</td>
</tr>
</tbody>
</table>

Invite collaborators

- Email

- Permissions
  - Co-owner
  - Editor
  - Read only

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

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 of, or delete these plans at any time.

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Template</th>
<th>Edited</th>
<th>Role</th>
<th>Test</th>
<th>Visibility</th>
<th>Shared</th>
</tr>
</thead>
<tbody>
<tr>
<td>My plan (Portage Template)</td>
<td>Portage Template</td>
<td>05-02-2021</td>
<td>Owner</td>
<td>☐</td>
<td>Private</td>
<td>No</td>
</tr>
<tr>
<td>Mon plan (Modèle Portage)</td>
<td>Portage Template</td>
<td>09-12-2020</td>
<td>Owner</td>
<td>☐</td>
<td>Private</td>
<td>No</td>
</tr>
<tr>
<td>My plan (Portage Template)</td>
<td>Portage Template</td>
<td>03-12-2020</td>
<td>Owner</td>
<td>☐</td>
<td>Private</td>
<td>No</td>
</tr>
<tr>
<td>My plan (University of British Columbia Generic Template)</td>
<td>University of British Columbia Generic Template</td>
<td>27-10-2020</td>
<td>Owner</td>
<td>☐</td>
<td>Private</td>
<td>No</td>
</tr>
</tbody>
</table>

Create plan
Local administrators can view plans at their organization:

Portage Network Plans

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Template</th>
<th>Organisation</th>
<th>Owner</th>
<th>Updated</th>
<th>Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample DMP</td>
<td>Portage Template</td>
<td>Portage Network</td>
<td></td>
<td>24-03-2021</td>
<td>Test</td>
</tr>
<tr>
<td>My plan (Portage Template)</td>
<td>Portage Template</td>
<td>Portage Network</td>
<td></td>
<td>24-03-2021</td>
<td>Test</td>
</tr>
<tr>
<td>Brian’s Plan</td>
<td>Portage Template</td>
<td>Portage Network</td>
<td></td>
<td>23-03-2021</td>
<td>Private</td>
</tr>
</tbody>
</table>
Local administrators can templates at their institution ...

... or create a new institution-specific template.
Local administrators can also customize templates ... and add institution-specific guidance.
DMP Assistant Institutional Customization Guide
Version 1.0

JULY 13, 2016


Developed by members of
the Portage DMP Customization Working Group
New DMP Templates

Portage is pleased to have published five new discipline- and methodology-specific Data Management Plan (DMP) Templates thus far ...

- Advanced Research Computing
- Arts-Based Research
- Interdisciplinary Health Software/Technology Development
- Mixed Methods (Surveys & Qualitative Research)
- Qualitative Health Sciences Research

- Le développement interdisciplinaire de logiciel ou de technologie en santé
- L’information de recherche avancée
- Les méthodes mixtes (enquêtes et recherche qualitative)
- La recherche basée sur les arts
- La recherche qualitative en sciences de la santé
New DMP Templates

... with eight more to come!

- 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

- RCCDR : L'accès aux données des centres de recherche
- RCCDR : Les centres de données de recherche et les analyses externes
- La recherche en histoire et en humanités
- Les études en neuro-imagerie dans les neurosciences
- Les flux de travail en science ouverte
- L'étude des interactions moléculaires
- Les revues systématisques
- La recherche sur la qualité de l'eau
New templates will be available for customization ...

Templates

If you wish to add an organisational template for a Data Management Plan, use the 'create template' button. You can create more than one template, e.g. one for researchers and one for PhD students. Your template will be presented to users within your organisation when no funder templates want to add questions to funder templates use the 'customise template' options below.

Customizable Templates

<table>
<thead>
<tr>
<th>Template Name</th>
<th>Funder</th>
<th>Status</th>
<th>Edited Date</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portage Template</td>
<td>Portage Network</td>
<td>Unpublished</td>
<td>02-03-2021</td>
<td></td>
</tr>
</tbody>
</table>
Five NEW templates have been published in the 2.0 platform:

Templates

If you wish to add an organisational template for a Data Management Plan, use the ‘create template’ button. You can create more than one template if desired e.g., one for researchers and one for PhD students. Your template will be presented to users within your organisation when no funder templates apply. If you want to add questions to funder templates use the ‘customise template’ options below.

Own Templates

<table>
<thead>
<tr>
<th>Template Name</th>
<th>Description</th>
<th>Status</th>
<th>Edited Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portage Template</td>
<td>This is the generic DMP template for Portage.</td>
<td>Published</td>
<td>02-03-2021</td>
</tr>
<tr>
<td>Portage Template for Advanced Research Computing</td>
<td>ARC provides researchers with digital technology, infrastructure and expertise to help them solve research problems that are either too large or too complex to undertake by other means. It includes access to both computational and storage resources, such as multi-core and many-core high performance computing (HPC or supercomputers) systems, distributed high-throughput computing (HTC) environments, large-scale data analysis frameworks (e.g., Hadoop, Spark), visualization and data analysis systems, large-memory systems, data storage, and cloud systems. This template is intended for researchers whose research cannot be conducted on a traditional computer but has to rely on one or more of the advanced research computing resources mentioned above. ARC-based research occurs in a wide range of fields including genomics, molecular dynamics, bioinformatics, neuroscience, biochemistry, quantum chemistry, structural mechanics, astrophysics, energy economics, climate change, machine learning, artificial intelligence, and the humanities.</td>
<td>Published</td>
<td>03-03-2021</td>
</tr>
<tr>
<td>Portage Template for Arts-Based Research</td>
<td>This template will assist you in creating a data management plan for arts-based research (ABR). It is intended for researchers and artists who use artistic processes as research methods (i.e., arts-based methods). ABR is used across disciplines and encompasses diverse understandings of the arts, research, and how they intersect. In this template, ABR is an umbrella term for all the ways the arts are adapted to answer</td>
<td>Published</td>
<td>03-03-2021</td>
</tr>
</tbody>
</table>
NEW templates can be used to create new plans with Portage Network selected as organisation:
Local admin can edit their organisation’s details ...

Organisation details

* Organisation full name
  Portage Network

* Organisation abbreviated name
  Portage

Organization logo

portage

Support

портаж
Local admin can also view the users at their institution:

User accounts
Below is a list of users registered for your organisation. You can sort the data by each field.

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>School or Department</th>
<th>Organisation</th>
<th>Created date</th>
<th>Last activity</th>
<th>Plans</th>
<th>Current Privileges</th>
<th>Active</th>
<th>Privileges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robyn Nicholson</td>
<td><a href="mailto:robyn.nicholson@carlabrc.ca">robyn.nicholson@carlabrc.ca</a></td>
<td></td>
<td>Portage Network</td>
<td>26-10-2020</td>
<td>25-03-2021</td>
<td>4</td>
<td>Organisational Admin</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
NEW Usage Statistics Dashboard

Usage statistics

2193 Total users
1862 Total plans

Statistics on your Users

The graphs display new users and plans for your organisation over the past year. You can download a CSV report for each graph.

* Move the mouse pointer over the bars of a chart to see numbers.

- No. users joined during last year
- No. plans during last year
Administrators can view template usage by number of plans:
Administrators can also run their own custom searches of their usage statistics ...

... by both Users and Plans.
Looking Ahead

The DMP Assistant Steering Committee provides essential guidance, support and direction, including new 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 **PIIDs**
- Improving machine-actionability > **maDMPs**

https://portagenetwork.ca/network-of-experts/dmp-expert-group/
Machine Actionable DMPs

Free-form or “narrative” text documents

Metadata-rich machine-actionable DMPs

Machine Actionable DMPs

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 (DMPs). The white paper is based on outputs from the IOCC workshop held in Edinburgh in 2017 that gathered almost 50 participants from Africa, America, Australia, and Europe. It describes eight community use cases which articulate consensus about the need for a common standard for machine-actionable DMPs (where machine actionable is defined as “information that is structured in a consistent way so that machines, or computers, can be programmed against the structure”)

The specific focus of this working group is on developing common information models and specifying access mechanisms that make DMPs machine-actionable. The outputs of this working group will help in making systems interoperable and will allow for automatic exchange, integration, and validation of information provided in DMPs, for example, by checking whether a provided PID links to an existing dataset, if hashes of files match to their provenance traces, or whether a license was specified. The common information models are NOT intended to be prescriptive templates or questionnaires, but to provide re-usable ways of representing machine-actionable information on themes covered by DMPs.

https://www.rd-alliance.org/groups/dmp-common-standards-wg
DMPRoadmap Around the World!
Thank you!
Questions?

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assistant.portagenetwork.ca

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