

maDMP4LS: integration of DMP OPIDoR in the French infrastructure landscape

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Machine Actionable DMPs for Life Sciences



A wealth of information for the involved parties:

- Researchers
- Bioinformatic platforms
- DMP hosts
- Funders

How to exploit this information ?

Objective: transform the DMP file into a machine actionable data structure and integrate it in the French bioinformatics landscape.

- Located at the IRISA lab in Rennes
- Bioinformatic facility, giving access to informatic tools to researchers.
- Part of IFB
- Several solutions:
 - Cluster
 - Web portal to access tools from Galaxy
 - Virtual environments using Genostack
- Cesgo tools for collaboration

<https://www.genouest.org/>
<https://www.cesgo.org/fr/>

Online tool allowing drafting of DMPs

Based on DMP Roadmap 

Adapted to meet the French community needs:

- Research Outputs support (July 2019)
- Easy use of templates
- Edition features
- Compliance with GDPR
- Growing community and ecosystem

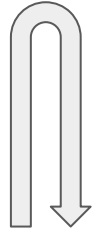
DMP : 5735
Templates : 37
Users : 6400



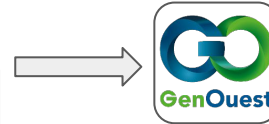
The screenshot shows the 'Rédiger' (Draft) tab of the DMP OPIDoR online tool. The interface is in French and includes a navigation bar at the top with links: Informations générales, Produits de recherche, Modèle choisi, Rédiger, Partager, Demande d'assistance conseil, and Télécharger. The main content area is divided into three sections, each with a 'tout développer' (expand) and 'tout réduire' (collapse) link. The first section, 'Description des données et collecte des données ou réutilisation de données existantes', contains three expandable fields: 'Description générale du produit de recherche', 'Est-ce que des données existantes seront réutilisées ?', and 'Comment seront produites/collectées les nouvelles données ?'. The second section, 'Documentation et qualité des données', contains two expandable fields: 'Quelles métadonnées et quelle documentation (par exemple mode d'organisation des données) accompagneront les données ?' and 'Quelles seront les méthodes utilisées pour assurer la qualité scientifique des données ?'. The third section, 'Exigences légales et éthiques, code de conduite', contains two expandable fields: 'Quelles seront les mesures appliquées pour assurer la protection des données à caractère personnel ?' and 'Quelles sont les contraintes juridiques (sensibilité des données autres qu'à caractère personnel, confidentialité, ...) à prendre en compte pour le partage et le stockage des données ?'.

Demo steps

2. Get the project informations



3. Get the project going

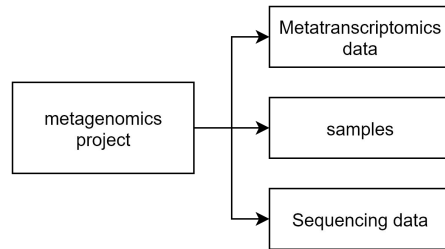


1. Fill the DMP

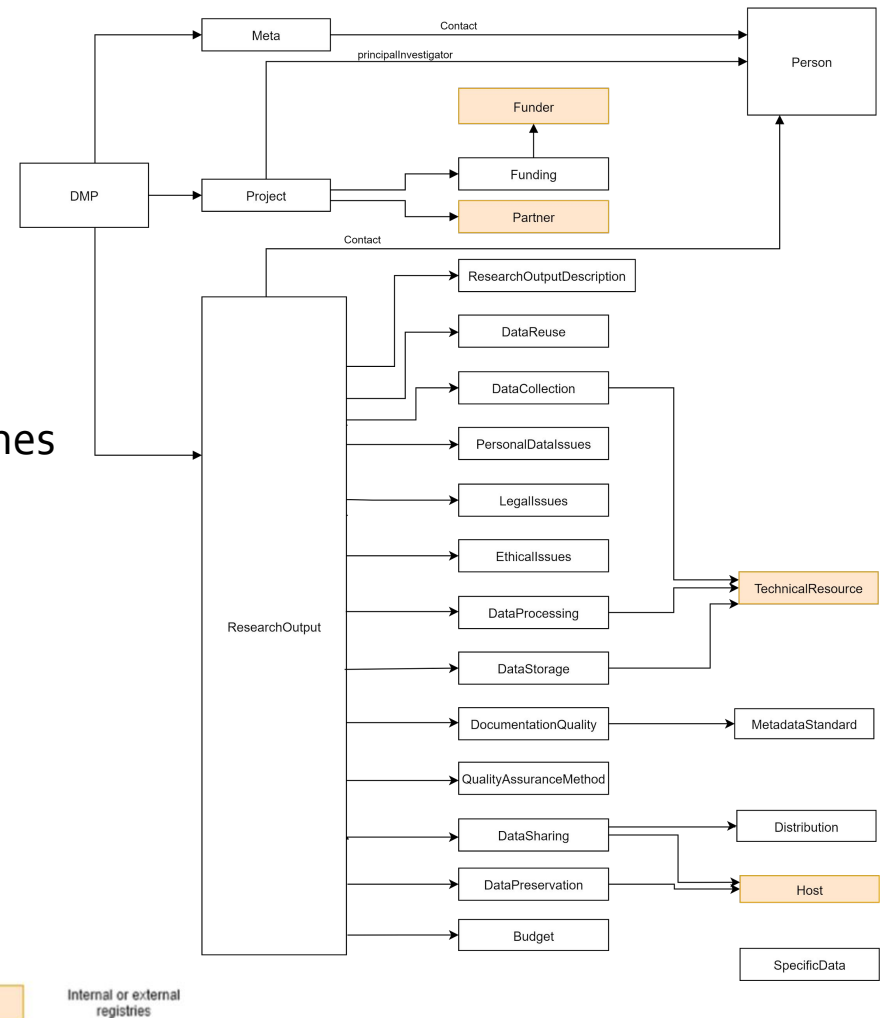
Model overview

Top-level entries :

- Meta : metadata on the project
- Project : info about the project
- researchOutput : one or several outcomes of the project



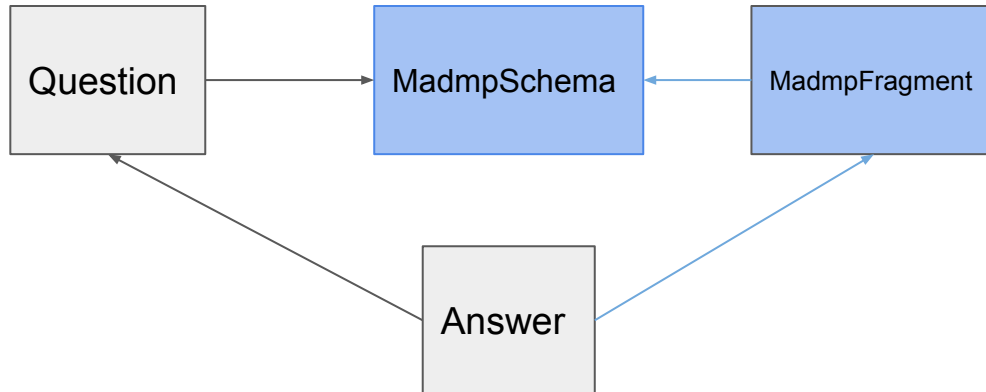
research outputs examples



Internal or external
registries

Implementing the new structure

- Maintain the roadmap Plan structure
 - allows compatibility with “legacy” plans & the production of “non-structured” DMPs
- New answer format : Structured
 - Choice between Form Templates



Implementing the new structure

Forms are dynamically built from JSON Templates

Ex: DataSharing Form

```
"reusability": {  
  "type": "string",  
  "description": "Potentiel de réutilisation des données et",  
  "label@fr_FR": "Potentiel de réutilisation",  
  "label@en_GB": "Reusability",  
  "tooltip@fr_FR": "Potentiel et/ou limite de réutilisation",  
  "tooltip@en_GB": "Potential and/or limits of data resusab",  
  "example@fr_FR": "Réutilisation pour de futures recherche",  
  "example@en_GB": "Reuse for future research or other purp",  
  "form_label@fr_FR": "Potentiel de réutilisation",  
  "form_label@en_GB": "Reusability"  
},  
"..."
```

Reusability

ex: Reuse for future research or other purposes (education, innovation, reproduction/transpa



Implementing the new structure

Forms can call to others templates

Ex: Project Form

```
"funding": {
  "type": "array",
  "table_header@fr_FR": "Financier : identifiant du financement",
  "table_header@en_GB": "Funder: funding identifier",
  "items": {
    "type": "object",
    "class": "Funding",
    "properties": {
      "dbid": {
        "type": "number"
      }
    },
    "template_name": "FundingStandard",
    "required": [
      "dbid"
    ]
  },
  "minItems": 1,
  "description": "Source(s) de financement d'un projet ou d'une activité",
  "label@fr_FR": "Sources de financement",
  "label@en_GB": "Funding",
  "form_label@fr_FR": "Indiquer les sources de financement du projet",
  "form_label@en_GB": "Indicate the funding of the project"
},
```

Indicate the funding of the project

Funder: funding identifier	Actions
Agence Nationale de la Recherche : ANR-20-THIA-0012	 

Create

Implementing the new structure

Ex: Project Form

Sub forms open in
a modal window

The screenshot displays the DMP OPIDoR web application interface. A modal window is open, allowing users to enter project details. The background shows the main application menu with options like 'Tableau de bord', 'Créer des plans', 'DMPs publics', 'Modèles de DMP', 'Aide', and 'Plus'. The user is logged in as 'DMP Administrator'.

Funders

Funder name	Agence Nationale de la Recherche
Identifier	http://dx.doi.org/10.13039/501100001665
Identifier type	DOI

Data policy

Title	Plan données de la recherche du CNRS
Identifier	https://www.cnrs.fr/sites/default/files/pdf/Plaquette_PlanDDOR_Nov20.pdf
Identifier type	URL

Sélectionnez une valeur de la liste ou saisissez une nouvelle.

Grant Identifier

ANR-20-THIA-0012

Funding status

Sélectionnez une valeur de la liste.

Planned

Close Sauvegarder

Next steps

2. Get the project informations



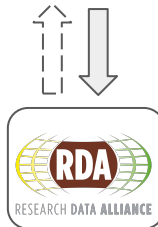
1. Fill the DMP



3. Get the project going



5. Bidirectionnall data transfer



4. Export and Import to and from RDA format

6. DMP integration in SEEK

