Repository for machine-actionable DMPs

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Introduction

• DMPs are static documents usually in the form of PDFs
• MaDMPs in JSON format allow automatic processing
• Official RDA recommendation
• We have developed a novel prototype of a maDMP repository
Challenges

- MaDMPs contain nested objects and arrays
- Storing maDMPs in a database can be inflexible and inefficient
- Tools should provide both a user-friendly interface and full flexibility
Main Features

- Submitting maDMPs as JSON
- Hiding fields for other users on submission
- Automated assignment of (Datacite) DOIs
- Powerful search
  - field-wise search
  - combined search
  - full-text search
Hiding fields with JSONpath expressions

Hide fields

Specify a list of fields to hide from other users. Enter any valid jsonpath expression excluding the implicit prefix `$dmp`.

For example: `modified,contributor.mbox,project[*].description`

![Preview](image)

- title: "DMP with hidden fields"
- description: "DMP describing more than one dataset"
- created: "2018-07-23T10:10:23.6"
- modified: "2019-02-22T15:10:56.9"
- project:
  - contact:
    - mbox: "TMiksa@sba-research.org"
    - name: "Tomasz Miksa"
  - contact_id:
    - identifier: "https://orcid.org/0000-0000-0000-0000"
    - type: "orcid"
- language: "eng"
- ethical_issues_exist: "no"
Searching for maDMPs: full text

Corona data analysis tool mDMP
Identifier: 10.5281/zenodo.3749779
Author: Lucas Berent

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Hypertree Decompositions for Query Optimization in Postgres
Identifier: 10.5281/zenodo.3758507
Author: Alexander Seiber

World Development Indicators Visualization DMP
Identifier: https://doi.org/10.5281/zenodo.3757903
Author: Ghaith Arlasai

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Identifier: https://doi.org/10.5281/zenodo.3757903
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Life Expectancy Analysis and Prediction
Identifier: https://doi.org/10.5281/zenodo.3759717
Author: Matias Jesus

Calculation of nice ("sunny") days based on small privately owned solar thermal collector systems
Identifier: https://doi.org/10.5281/zenodo.3759448
Author: Roland Mehter

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Analysis of multilayer perceptron on hypothyroid dataset using Weka DMP
Identifier: https://doi.org/10.5281/zenodo.3757964
Author: Mamur Beintaccc
Searching for maDMPs: specific fields
Searching for maDMPs: combined conditions
Use Cases

- Finding similar maDMPs
- Efficiently searching large amounts of maDMPs
- Publishing maDMPs with some fields hidden to the public
Resources

- Github repository: https://github.com/lucasberent/mapleDocs
- Web page: https://lucasberent.github.io/mapleDocs/