

Machine actionable Software Management Plans (maSMP) mit RDMO

11. Treffen der RDMO-Community am 28. Februar 2024

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<https://doi.org/10.17617/2.3571422>



Software Management Plan (SMP)

- SMP = DMP, aber für Forschungssoftware
- Besonderheiten von Forschungssoftware nicht in DMP-Vorlagen abgedeckt, z.B.
 - Kuratierung ist aufwendiger
 - Metadaten sind homogener
 - Mehr Vorerfahrungen bei spezifischen Lizenzen
 - Genauere Versionierung ist wichtiger, usw.
- MPDL [SMP-Katalog für RDMO](#) seit November 2022
- maSMP ähnlich wie maDMP

maSMP

The screenshot shows the Zenodo page for the 'machine-actionable Software Management Plan Ontology (maSMP Ontology)'. The page is dated June 28, 2023, and includes an 'Open Access' button. The title is 'machine-actionable Software Management Plan Ontology (maSMP Ontology)'. The authors listed are Giraldo Olga, Geist Lukas, Quiñones Nelson, Solanki Dhvani, Rebholz-Schuhmann Dietrich, and Castro Leyla Jael. The description states: 'We have defined a metadata model in the form of an ontology representing the necessary metadata elements for a maSMP. The metadata model includes entities involved in software management planning, such as an SMP itself, software source code, software release, documentation, authors and their relations. We are reusing terms mainly from schema.org and from DCSO, with some few additions of our own.' There is an 'Acknowledgments' section mentioning funding from the European Union's Horizon 2020 programme and the Deutsche Forschungsgemeinschaft (DFG). A file named 'maSMP_ontology_v1.owl' (53.2 kB) is listed for download. The 'Citations' section shows 'No citations.' and a search bar.

Giraldo Olga, Geist Lukas, Quiñones Nelson, Solanki Dhvani, Rebholz-Schuhmann Dietrich, & Castro Leyla Jael. (2023). machine-actionable Software Management Plan Ontology (maSMP Ontology) (1.0.0). Zenodo. <https://doi.org/10.5281/zenodo.8089518>, CC BY 4.0.

The screenshot shows the Zenodo page for the 'Workshop machine-actionable Software Management Plans'. The page is dated June 27, 2023, and includes a 'Report' button and an 'Open Access' button. The title is 'Workshop machine-actionable Software Management Plans'. The authors listed are Giraldo, Olga; Cardoso, João; Martin del Pico, Eva; Gaignard, Alban; Geist, Lukas; Grossmann, Yves Vincent; Psomopoulos, Fotis; Papadopoulou, Elli; Solanki, Dhvani; Castro, Leyla Jael. The description states: 'Workshop machine-actionable Software Management Plans. Organizer: Semantic Technologies team at ZB MED Information Centre for Life Sciences. Place: Cologne. Date: 2023.05.31. Participants/Authors of this report: Olga Giraldo 1[0000-0003-2978-8922], João Cardoso 2[0000-0003-0057-8788], Eva Martin del Pico 3[0000-0001-8324-2897], Alban Gaignard 4[0000-0002-3597-8557], Lukas Geist 1[0000-0002-2910-7982], Yves Vincent Grossmann 5[0000-0002-2880-8947], Fotis Psomopoulos 6[0000-0002-0222-4273], Elli Papadopoulou 7[0000-0002-0893-8509], Dhvani Solanki 1[0009-0004-1529-0095], Leyla Jael Castro 1[0000-0003-3986-0510]'. A list of 7 institutions is provided: 1 ZB MED Information Centre for Life Sciences, 2 RDA DIMP Common Standards Working Group, 3 BSC-CNS, 4 CNRS, 5 Max Planck Digital Library, 6 Centre for Research and Technology Hellas, 7 ATHENA Research Center / OpenAIRE.

Giraldo, Olga, Cardoso, João, Martin del Pico, Eva, Gaignard, Alban, Geist, Lukas, Grossmann, Yves Vincent, Psomopoulos, Fotis, Papadopoulou, Elli, Solanki, Dhvani, & Castro, Leyla Jael. (2023). Workshop machine-actionable Software Management Plans. Zenodo. <https://doi.org/10.5281/zenodo.8087357>, CC BY 4.0.

Metadata model for machine-actionable Software Management Plans

maSMPs Public

Unwatch 6 Fork 2 Star 1

main 3 Branches 0 Tags

Go to file Add file Code

lfgarcia Add DOI to profiles ✓ 9ca3f4e · 2 weeks ago 144 Commits

.github/workflows	Use workflow rather than webpage	9 months ago
code	Update directory name without special characters	4 months ago
docs	Add DOI to profiles	2 weeks ago
schema	Update README.md	2 weeks ago
.gitignore	Remove profiles (next version) and TTL as widoco cannot b...	2 months ago
CITATION.cff	Update CITATION.cff to 2.1.0 version	2 months ago
LICENSE	Add CC-By license	2 years ago
README.md	Add DOI to profiles	2 weeks ago

About

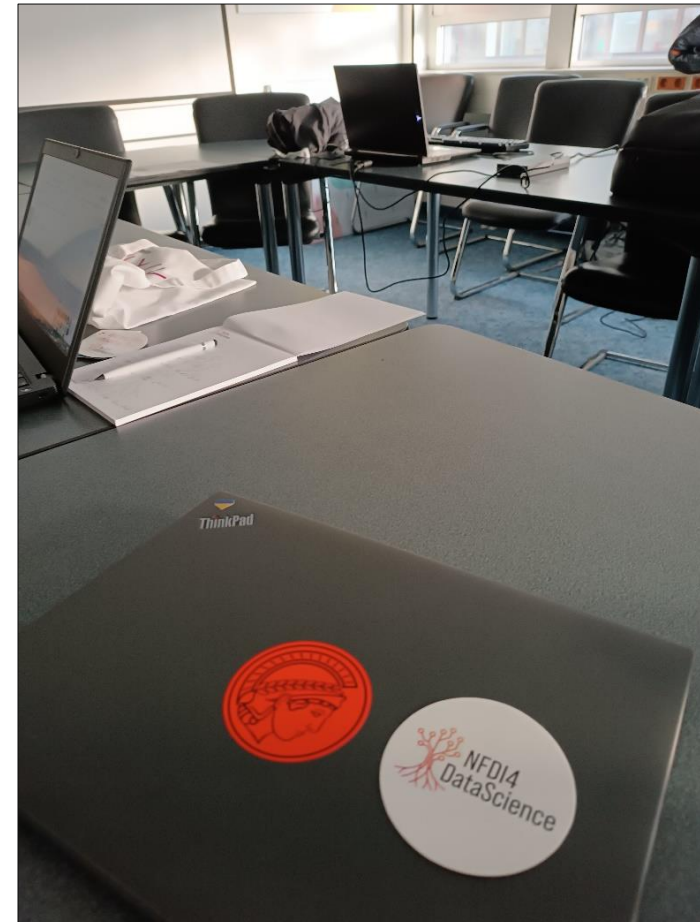
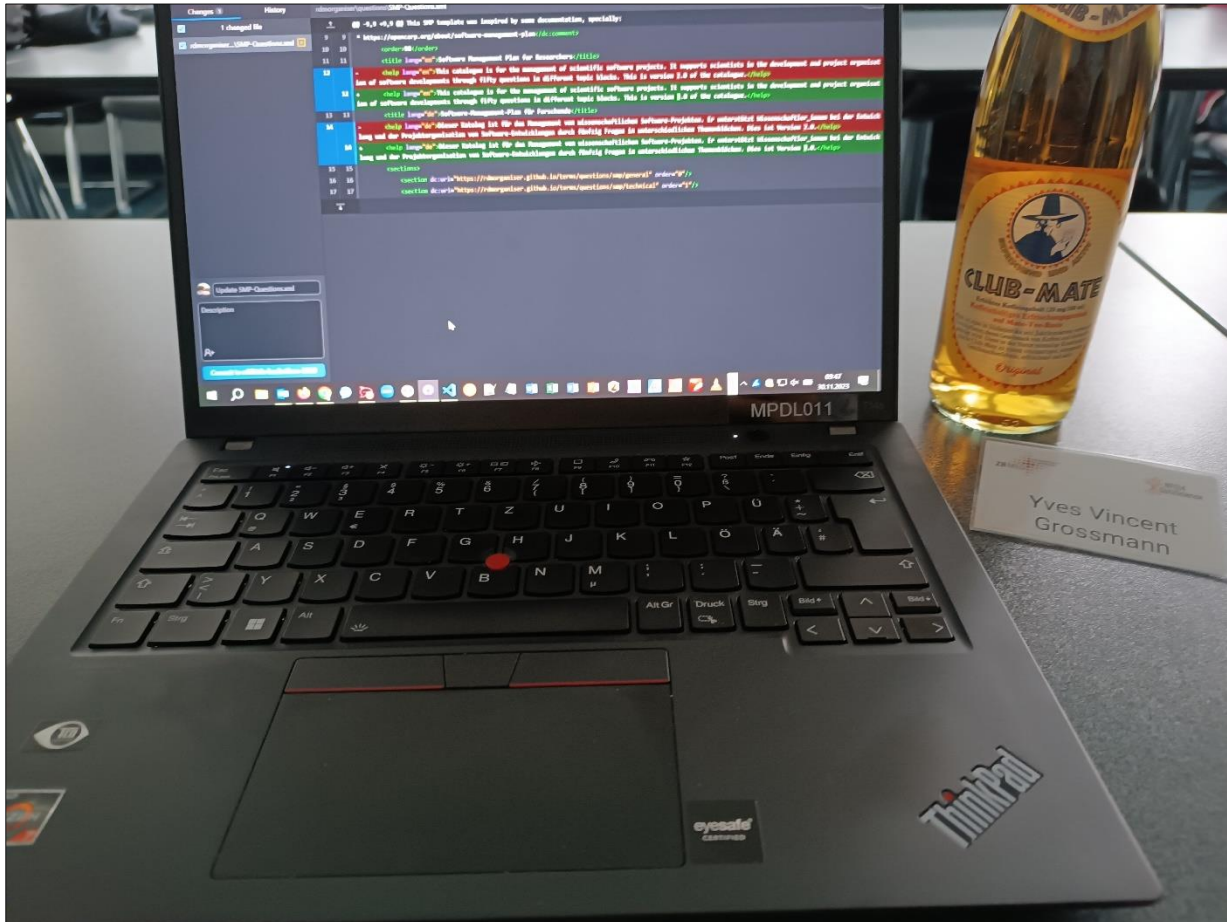
Metadata model for machine-actionable Software Management Plans

metadata vocabulary smp schemaorg bioschemas

Readme View license Cite this repository Activity Custom properties 1 star 6 watching 2 forks Report repository

<https://github.com/zbmed-semtec/maSMPs> und <https://doi.org/10.4126/FRL01-006444988>

NFDI4DS Hackathon 2023 an der ZB Med



Ergebnisse des Hackathons

property	description	range	recommendation	example	Question	Comments	RDMO URI
TYPE: CreativeWork->OutputManagementPlan							
alternateName	An alias for the item.	Text	MANY optional				
name	Name of this mng plan	Text	ONE minimum				
author	Authors of this mng plan	Person or Organization	MANY minimum				
contributor	Contributors to this mng plan	Person or Organization	MANY optional				
datePublished	Date of first broadcast/publication	Date or DateTime	ONE minimum				
headline	Headline or subtitle of the article.	Text	ONE optional				

Castro, L. J., et al. (2023). Metadata crosswalks for software management plans at NFDI4DS hackathon maSMP 2023, <https://doi.org/10.5281/zenodo.10275895>, CC BY 4.0.

Five Minutes to Write a Software Management Plan – A Machine-actionable Approach to Simplify the Creation of SMPs

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December 2023

Abstract

The Software Management Plan (SMP) is a relevant tool for handling research software. Despite benefits for research (e.g., low barrier for researchers, promotion of good practices), SMPs are not yet used across the board. A semi-automated approach can solve this problem. In the following document, we discuss a possible workflow for creating machine-actionable SMPs using various tools. This approach was developed during an NFDI4DataScience hackathon at the German National Library of Medicine (ZB Med) - Information Centre of Life Sciences on maSMPs at the end of 2023.

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1

Castro, L. J., et al. Five Minutes to Write a Software Management Plan – A Machine-actionable Approach to Simplify the Creation of SMPs. Zenodo, 2023, <https://zenodo.org/doi/10.5281/zenodo.10374838>, CC BY 4.0.

SMP-Katalog v3.0

Neue Features:

- [DLR-Application Classes](#) eingeführt
- Skalierung des Katalogs je nach Umfang der Software
 - Klasse 0 = 9 Fragen
 - Klasse 1 = 32 Fragen
 - Klasse 2 = 48 Fragen
 - Klasse 3 = 51 Fragen

 RDMO for MPG

In which application class is the software categorised?

The application classes are essentially based on the "DLR Software Engineering Guidelines" (<https://doi.org/10.5281/zenodo.1344612>), p. 7-8. Depending on the selection in this questions a selection of different questions is provided below.

[Click here for more information on the application classes for research software](#)

- Application class 0: The focus of the software is on personal use in conjunction with a small scope. The distribution of the software within and outside the own institution is not planned.
- Application Class 1: The software is only develop within a narrow scope. It is to be further developed and used beyond personal purposes.
- Application Class 2: The software is intended to ensure long-term development and maintainability. It is the basis for a transition to product status.
- Application Class 3: For the software it is essential to avoid errors and to reduce risks. This applies in particular to critical software and that with product characteristics.

SOMEF-Plugin

[Software Metadata Extraction Framework:](#)
Ein Tool zum automatischen Extrahieren
relevanter Software-Informationen aus
Readme-Dateien

The screenshot shows the GitHub repository page for 'rdmo-plugins-somef'. At the top, it indicates the repository is public and has 1 branch and 0 tags. The current branch is 'main'. Below this, there is a commit by 'MyPyDavid' with the message 'feat: include import project form'. A list of files is shown, including a folder 'rdmo_plugins_somef' and files like '.gitignore', 'CITATION.cff', 'LICENSE', 'NOTICE', 'README.md', and 'pyproject.toml', each with its corresponding commit message.

File	Commit Message
rdmo_plugins_somef	feat: include import project form
.gitignore	Initial commit
CITATION.cff	initial add rdmo-somef-plugin
LICENSE	Initial commit
NOTICE	initial add rdmo-somef-plugin
README.md	docs: update readme
pyproject.toml	initial add rdmo-somef-plugin

<https://github.com/rdmorganiser/rdmo-plugins-somef>

The screenshot shows the 'Import from Github' dialog box. It contains a text input field for the repository URL, which is filled with 'https://github.com/rdmorganiser/rdmo'. Below the input field are two buttons: 'Import from Github' and 'Cancel'. Below the dialog box, there is a table titled 'Import from https://github.com/rdmorganiser/rdmo' with columns for 'Question', 'Current answer', and 'Imported answer'. The table contains several rows of data, each with a checkbox in the rightmost column.

Question	Current answer	Imported answer	
What is the title of the software project?		RDMO - Research Data Management Organiser	<input checked="" type="checkbox"/>
Which research field(s) does this software belong to?		data-management-plan, django, dmp, python, rdmo, research-data, research-data-management	<input checked="" type="checkbox"/>
What is the intended use of the software? How will your software contribute to research?		A tool to support the planning, implementation, and organization of research data management. RDMO is a tool to support the systematic planning, organisation and implementation of the data management throughout the course of a research project. RDMO is funded by the Deutsche Forschungsgemeinschaft (DFG).	<input checked="" type="checkbox"/>
How do you track the different tasks and use cases?		https://api.github.com/repos/rdmorganiser/rdmo/issues	<input checked="" type="checkbox"/>
Will there be a specification document (briefly) outlining the most important requirements?		http://rdmo.readthedocs.io/	<input checked="" type="checkbox"/>
Are there institutional requirements for software development?		Code of Conduct ===== In the interest of fostering an open and welcoming environment, we as con	<input checked="" type="checkbox"/>

.cff-Plugin

.cff = [Citation File Format](#) ist ein maschinenlesbares Format für die Zitation von Software

The screenshot shows the GitHub repository page for 'rdmo-plugins-cff'. At the top, the repository name is followed by 'Public' and interaction buttons for 'Watch' (4), 'Fork' (0), and 'Star' (1). Below this, the repository structure is shown with a 'main' branch, '1 Branch', and '0 Tags'. A search bar and 'Add file' button are present. The commit history shows an initial commit by 'jwindeck' 2 months ago. The file list includes 'rdmo_plugins_cff', '.gitignore', 'LICENSE', 'MANIFEST.in', 'NOTICE', 'README.md', and 'pyproject.toml'. The right sidebar contains an 'About' section with no description, and a 'Releases' section with no published releases.

rdmo-plugins-cff Public

Watch 4 Fork 0 Star 1

main 1 Branch 0 Tags

Go to file Add file Code

About
No description, website, or topics provided.

- Readme
- Apache-2.0 license
- Activity
- Custom properties
- 1 star
- 4 watching
- 0 forks

Report repository

Releases
No releases published

<https://github.com/rdmorganiser/rdmo-plugins-cff>

maSMP in RDMO

