



Documenting mapping community practices 24 November 2023

Research Software use case with codemeta / HAL crosswalk

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Agenda:

- Brief presentation of CodeMeta
- CodeMeta crosswalks
- CodeMeta crosswalk for HAL



CodeMeta Initiative

- CodeMeta the answer for specific metadata to describe Source
 Code
- A subset of schema.org and specific field proposal to be include by schema.org
- An academic community discussing software metadata
- A crosswalk table mapping the metadata landscape

https://codemeta.github.io/



CodeMeta crosswalks

CodeMeta to other Schema

- https://github.com/codemeta/codemeta/tree/master/crosswalks or https://codemeta.github.io/crosswalk/
- No governance
- No metadata or readme
- List of CSV files available on github
- Individual Initiative everybody are free to participate
- Some are not yet done like Dublin Core for example



CodeMeta crosswalks

FAIRECORE4EOSC context WP 6 CodeMeta for infrastructures in progress API and Connectors Between Software Heritage and

- Scholarly repositories: InvenioRDM (CERN) / DataVerse -(KNAW-DANS)
- Publishers: Dagstuhl (LZI) / Episciences (INRIA)
- Aggregators: swMATH (FIZ) / OpenAire (OPENAIRE)



CodeMeta and HAL

HAL French national open repository for open science

- since 2017 collaboration to create a new item research source code
- core metadata sharing with other item in Hal: title, author, keywords, classification...all compliant with schema.org
- specific metadata for source code: code repository, licence, operating system, language...
 based on CodeMeta

Why crosswalk?

- HAL2CodeMeta: increase citation, interoperability, findable, reusable
- CodeMeta2HAL: connexion with Software Heritage using SWHID for deposit



CodeMeta crosswalk for HAL

Make with CSV file : CodeMeta | HAL | XML-TEI | Bibtex

New fields created

Code Repository

Licence

Operating System

Programmation Language

New properties for existing field

Role for describe function of contributor (Designer, Maintainer, Developer, documentation etc.)

New referentiel for Licence : SPDX (https://spdx.org/licenses/)

Exemple of codemeta provide by HAL: uri/codemeta https://hal.science/hal-04056972/codemeta



CodeMeta crosswalk for HAL

Hackathon between expert

HAL developer => Yannick Barborini

Software Heritage => Morane Gruenpeter

Inria's Librarians => Estelle Nivault, Jozefina Sadowska, Alain Monteil

When necessary Roberto Di Cosmo as expert software

Crosswalk sharing inside CCSD for Episciences => Benefit for FAIRCORE4EOSC WP 6.2

No governance for maintaining/updating the mapping

Mappings only use in HAL System for minimal required fields

Not directly available

Next step:

CodeMeta 3.0

Finish the crosswalk for XML-TEI and RDF

Include more fields from CodeMeta to HAL: funder, isPartof,...

Open and sharing the crosswalk with meta-metadata (title, Id, authors, description...)?

Questions can be sent to gt-logiciel-ies-swh@inria.fr







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