

# Research Software Workshop: guidelines and metrics for metadata curation (co-located with RDAP20)

Workshop's live notes

24 March 2023

Dear participants,

Welcome to the Research Software workshop, a co-located event with the RDA plenary. Organized by the FAIR-IMPACT European project, with the contribution of the FAIRCORE4EOSC European project. During this workshop we will be:

- Identifying what we have - what is the current landscape of guidelines and metrics for Research Software;
- Discussing what we need - what are the needs that can be provided by infrastructures and research support staff;
- Planning how we create adapted guidelines and metrics to the current reality and how we improve the scholarly ecosystem.

We hope to receive valuable feedback which will impact the three expected deliverables by the two European projects:

- FAIR-IMPACT: D4.4 - Guidelines for recommended metadata standard for research software within EOSC
- FAIR-IMPACT: D5.2 - Metrics for automated FAIR software assessment in a disciplinary context

We strive that this process will be as transparent as possible and will yield a result which will be useful for the community and for the service providers that handle research software or act in the scholarly ecosystem.

We invite you to prepare for the session by reviewing this document and be acquainted with the following publications:

- [the SIRS report recommendations](#), Presentation on YouTube:
  - ▶ EOSC Software Infrastructures for Research Software: J. B. Gonzalez Lopez (CERN)
- the [FAIR4RS principles](#) Webinar on YouTube
  - ▶ FAIR Principles for Research Software FAIR4RS WG

- the [CodeMeta initiative vocabulary](#) & How to create CodeMeta file with the codemeta-generator tool: [Chapter 3: how to create a codemeta.json file from scratch](#)

Thank you for your precious time and help to improve the assessment framework.

Kind regards,

RS workshop organizing committee

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## General Information

### Links

-  Zoom: anonymized
-  Slack: Invite link: anonymized
-  This document: anonymized
- FAIR-IMPACT Website: <http://fair-impact.eu/>
- FAIRCORE4EOSC Website: <https://faircore4eosc.eu/>
- Event page:  
<https://fair-impact.eu/events/fairimpact-events/research-software-workshop-guidelines-and-metrics-metadata-curation>
- FAIR-IMPACT Twitter page:
- FAIRCORE4EOSC Twitter page:
  - RS workshop hashtag: #RS\_workshop\_RDAP20
- CodeMeta links:
  - The repository: <https://github.com/codemeta/codemeta>
  - The crosswalk directory with all mappings:  
<https://github.com/codemeta/codemeta/tree/master/crosswalks>
  - The Software Heritage post about using CodeMeta:  
<https://www.softwareheritage.org/2020/03/18/codemeta-community/> (from 2020)
  - The codemeta governance model: <https://github.com/codemeta/governance>
  - The CodeMeta generator tool to create a codemeta.json file:  
<https://codemeta.github.io/codemeta-generator/>
  - Software Heritage documentation of the metadata indexer  
<https://docs.softwareheritage.org/devel/swh-indexer/metadata-workflow.html#implementation-status>

## Participation Guidelines

- In full: Add RDA P20 CoC
  - **Code of Conduct**
    - We do not tolerate harassment in any form.
    - All communication should be appropriate for a professional audience.
    - Be kind to others. Do not insult or put down other participants.
    - Behave professionally in all communication channels (Slack, Zoom, Notes, etc.)
    - We want to promote open but respectful discussion around our themes. Please be mindful of the language and tone that you use, as participants will have differing points of view and lived experiences.
    - Attendee Procedure For Reporting Harassment
  - Privacy Policy
    - Social Media Policy
    - Intellectual Property Policy
      - Documents produced during the workshop (including but not limited to session notes, blog posts, Collaborative Ideas and presentations) will be shared after the event under a [CC-BY 4.0](https://creativecommons.org/licenses/by/4.0/) license. Please be mindful of what personal information you are willing to share in these.

## Guidance

(Taken from the CW, SSI workshop)

- 🌻 Be kind. Be understanding. Be inclusive.
- 🚫 Please **do not Tweet** or share publicly any links to the Zoom room
- 👍 Please **do Tweet** otherwise using the hashtag [#RS\\_workshop\\_RDAP20!](https://twitter.com/RS_workshop_RDAP20)
- 📹 the workshop will be recorded and the videos will be made available on the FAIR-IMPACT YouTube channel after the event (activities in breakout rooms will not be recorded).
- 😊 Turn on your video if you don't mind sharing your face (or off if you do!).
- 🤫 Keep yourself muted when not speaking to minimise background noise.
- 👤 General chat in the slack should be prioritized over the zoom chat.
- 📝 In this document, please:
  - Feel free to add notes during the workshop in their associated sections.
  - Note that many people may be using the collaborative note-taking documents at the same time, so please be patient and understanding if there is a lag or a lot of movement going on at once.
- 🗣️ Do not aggressively speak over others or overly dominate the conversation in a group session, be inclusive of everyone.

## References

### Guidelines

#### [Full collection](#)

1. Software Heritage guidelines:  
<https://www.softwareheritage.org/howto-archive-and-reference-your-code/>
2. HAL deposit guide : Morane Gruenpeter, Jozefina Sadowska, Estelle Nivault, Alain Monteil. Create software deposit in HAL: User guide and best practices. [Technical Report] Inria; CCSD; Software Heritage. 2022. ([hal-01872189v2](#))
3. Curated Archiving of Research Software Artifacts: Lessons Learned from the French Open Archive (HAL) on IJDC <https://doi.org/10.2218/ijdc.v15i1.698>
4. SIRS report
5. M2.15 Assessment report on 'FAIRness of software' (Version 1.1). Zenodo.  
<https://doi.org/10.5281/zenodo.4095092> (separating software objects and services, in this report we discuss only software objects which are research results)([YouTube link](#))

### Metrics

#### Internal workshop documents

- Introduction (presentation is available as part of [10.5281/zenodo.8075097](https://doi.org/10.5281/zenodo.8075097))
- **Metadata landscape:** Gruenpeter, Morane. (2023, March 24). An overview of the metadata landscape & descriptive metadata curation. Research Data Alliance - Plenary 20th (co-located event) (RDA P20), Gothenburg, Sweden. Zenodo.  
<https://doi.org/10.5281/zenodo.7771642>
- **FAIR4RS presentation:** Chue Hong, Neil. (2023, March 24). An overview of FAIR4RS and existing tools to assess FAIRness of software. Zenodo.  
<https://doi.org/10.5281/zenodo.7805608>
- Session A activity
- Session B activity

## Agenda

Time (CET)	Programme	
9.00- 9.30	Introduction and overview of the workshop	
	An overview of the current landscape of metadata vocabularies and tools to support descriptive metadata curation ( <a href="#">Morane Gruenpeter, Software Heritage</a> )	
	An overview of FAIR4RS and existing tools to assess FAIRness of software ( <a href="#">Neil Chue Hong, Software Sustainability Institute</a> )	
	Outline the specific goals and objectives of the workshop for the RDA community, including the aim to collect existing guidelines, identify gaps and extend interoperability	
	Share workshop participants profiles - on Roll call	
	Workshop activities explanation and questions	
9.45-10.45	Session A: Descriptive metadata - curation tools and workflows <ul style="list-style-type: none"> <li>- Onsite: Morane Gruenpeter</li> <li>- Online: Paula Martinez</li> </ul>	Session B: Metrics for FAIR Research Software <ul style="list-style-type: none"> <li>- Onsite: Neil Chue Hong</li> <li>- Online: Mike Piddy</li> </ul>
10.45-11.15	Coffee break	
11.15 -11.30	Report back from parallel session	
11.30 - 12.00	Plenary - Workshop conclusion	

## Roll Call / Participants

- Add your name (+ORCID), institution, country, job title (we will anonymize your name and institution if we disseminate this document. We will also anonymize your comments on this document)
- Please tell us if you want to be listed as a contributor to the workshop results deposit

## Introduction

[9.00-9.30]

Introduction and overview of the workshop:

- Background and goals of the workshop as it relates to [the European projects FAIR-IMPACT and FAIRCORE4EOSC](#)
- General overview of the current landscape of guidelines and metrics for research software, [highlighting the SIRS report recommendations](#), the [FAIR4RS principles](#) and the [CodeMeta initiative vocabulary](#)
  - An overview of the current landscape of metadata vocabularies and tools to support descriptive metadata curation ([Morane Gruenpeter, Software Heritage](#))
  - An overview of FAIR4RS and existing tools to assess FAIRness of software ([Neil Chue Hong, Software Sustainability Institute](#))
- Outline the specific goals and objectives of the workshop for the RDA community, including the aim to collect existing guidelines, identify gaps and extend interoperability
- Share workshop participants profiles - Creating or maintaining metadata

## Ice-Breaker

Are you familiar with the following acronyms, publications or projects?

- [the SIRS report recommendations](#),
- the [FAIR4RS principles](#)
- FAIRCORE4EOSC
- FAIR-IMPACT
- the [CodeMeta initiative vocabulary](#)

Share your acronym: any acronym you think the workshop participants should know about

Name / anonymous	SIRS	FAIR4RS	FAIRCORE4EOSC	FAIR-IMPACT	CodeMeta	Share your acronym 
	Y	Y	Y	Y	Y	SWHID
	Y	Y	N	Y	Y	
	Y	Y	Y	N	Y	
	N	Y	N	N	N	
	N	N	Y	Y	N	
	Y	Y	N	N	Y	
	Y	Y	N	Y	Y	
	N	Y	N	N	Y	ReSA
	N	N	N	N	N	
	N	Y	Y	N	N	
	N	Y	N	N	N	
	N	Y	Y	Y	Y	ASCL
	N	Y	Y	Y	N	
	N	Y	Y	N	Y	
	N	N	Y	Y	N	
	Y	Y	Y	Y	N	
	Y	Y	N	N	Y	ARDC

Name / anonymous	SIRS	FAIR4RS	FAIRCORE4EOSC	FAIR-IMPACT	CodeMeta	Share your acronym
	N	Y	Y	Y	Y	NFDI
	y	y	n	y	n	
	N	Y	N	Y	Y	CFF
	N	Y	N	Y	Y	
	n	Y	n	n	Y	
	Y	Y	Y	Y	Y	RSD
	N	N	N	N	N	
	N	N	N	Y	N	
	N	Y	Y	Y	Y	
	n	n	n	y	n	
	Y	Y	Y	Y	Y	ARDC
	N	Y	Y	Y	N	
	N	Y	N	Y	N	SR
	N	Y	N	N	Y	
	Y	Y	Y	Y	Y	RSD
	Y	Y	Y	Y	Y	SWHID
	N	Y	Y	Y	Y	
	N	Y	N	N	Y	RSD
	N	Y	N	N	N	
	N	Y	Y	Y	Y	
	Y	Y	Y	Y	Y	
	Y	N	Y	Y	Y	
	Y	N	Y	N	N	
	N	N	N	N	Y	RSD

Name / anonymous	SIRS	FAIR4RS	FAIRCORE4EOSC	FAIR-IMPACT	CodeMeta	Share your acronym 
	N	N	N	N	N	
	N	N	N	N	N	
	Y	Y	N	N	Y	LJ
	N	Y	Y	Y	N	

## Q & A

Question for Metadata landscape overview:

- Q:
  - A:
- Q:
  - A:
- Q:
  - A:
- Q:
  - A:

Question for An overview of FAIR4RS and existing tools to assess FAIRness of software:

- Q:
  - A:
- Q:
  - A:
- Q:
  - A:
- Q:
  - A:

## Session activities

[9.30-10.45]

## Groups

Group	Title	Lead	Notes 	Location
A.1	Descriptive metadata - curation tools and workflows	Morane		Onsite
A.2	Descriptive metadata - curation tools and workflows	Paula		Online
A.3				
B.1	Metrics for FAIR Research Software	Neil		Onsite
B.2	Metrics for FAIR Research Software	Mike		Online
B.3				

## Report back from parallel session

[11.15-11.30]

Each group to report back in writing here:

### Session A groups

Group A.onsite

Group A.online
<p>[Add reporting here]</p> <p>Which terms</p> <p>And highlighted challenges</p> <p>Lessons learned</p>

## Session B groups

Group B.onsite

[Add reporting here]

Group B.online

Trusted Repositories

- measures or presence of provenance

Community Standards

[Add reporting here]

## Workshop conclusion

[11.30-12.00]

Plan how we create adapted guidelines and metrics to the current reality and how we improve the scholarly ecosystem

- Summarize the main points covered during the workshop
- Lead open discussion with the task leads from the FAIR-IMPACT projects and Work Package 6 Research Software lead from the FAIRCORE4EOSC project.
- Discuss next steps for participants to continue contributing in the Research Software space in Open Science.

## Feedback form

- Feedback form sent to participants

## RS workshop organizing committee

Committee (**FAIR-IMPACT/FC4E/RDA SSC IG**):

- Chair: Morane Gruenpeter (Inria/Software Heritage)
- Neil Chue Hong (SSI)
- Sabrina Granger (Inria/Software Heritage)
- Elena Breitmoser (EPCC, University of Edinburgh)
- Mike Priddy (DANS)
- Mario Antonioletti (EPCC)
- Paula Martinez (ARDC/ReSA)
- Tom Honeyman (ARDC)
- Julia A Collins (CU/CIRES National Snow and Ice Data)
- Rita Meneses (Trust IT)