

OpenAIRE - SWH SPECS

<https://hedgedoc.softwareheritage.org/fc4e-wp6-t6-3-specs-template?edit>

Component	OpenAire software metadata deposit
Category	RSAC
Contact person	Paolo Manghi
Email address	paolo.manghi@openaire.eu
Contributors	Paolo Manghi, Thanasis Vergoulis
Version	1.0
Data	

Overview

This component implements an API and connectors between OpenAIRE and Software Heritage to support archival, reference, description and citation of research software artifacts leveraging the CodeMeta standard, and the Software Heritage intrinsic identifiers (SWHID).

Objectives

#	Short description
1	Archival: To trigger the archival of software artifacts which are already included in OpenAIRE (since they have been identified based on their mentions in research articles) but missing from SWH. SWHIDs will be acquired for the respective software artifacts.
2	Reference: To maintain and expose the SWHIDs for all the software artifact records maintained by OpenAIRE, where applicable.
3	Description: To deposit missing software artifact metadata in SWH and to retrieve software artifact descriptions from SWH to be included in the respective OpenAIRE records.
4	Citation: To export citation information in BibTex and codemeta.json.

Out of Scope

#	Short description
1	To export citation information in CSL or other alternative citation formats.

Requirements

User stories

#	Description of the user story	Reference
1	A researcher that examines a software artifact record in OpenAIRE can then find the archived source code from	https://hedgedoc.softwareheritage.org/fc4e-wp6-t6-3-specs-template#212-Use-case-OpenAIRE

User stories	
	<i>SWH exploiting the connection and vice versa.</i>
2	A researcher that examines a software artifact record in OpenAIRE can find in the metadata the respective SWHID. https://hedgedoc.softwareheritage.org/s/fc4e-wp6-t6-3-specs-template#222-Use-case-OpenAIRE
3	A researcher that examines a software artifact record in OpenAIRE can find metadata coming from SWH and vice versa. https://hedgedoc.softwareheritage.org/s/fc4e-wp6-t6-3-specs-template#232-Use-case-Describe-software-on-OpenAire
4	A researcher exports citation information for a desired software artifact record in OpenAIRE in Bibtex or codemeta format. https://hedgedoc.softwareheritage.org/s/fc4e-wp6-t6-3-specs-template#242-Use-case-Cite-software-on-OpenAIRE

User requirements				
#	Short description	Priority	Feasibility	Reference
1	Functionality (e.g., API endpoint) to get the source code related to an OpenAIRE software artifact record	M	2	Ticket TBD
2	Functionality (e.g., API endpoint) to get the SWHID of a given OpenAIRE software artifact record	M	4	Ticket TBD
3	Functionality (e.g., API endpoint) to get the extended metadata records for a given SWH software artifact record	M	3	Ticket TBD
4	Functionality (e.g., API endpoint) to get the extended metadata records for a given OpenAIRE software artifact record	M	3	Ticket TBD
5	Functionality (e.g., API endpoint) to get the citation information of a given OpenAIRE software artifact record	M	3	Ticket TBD

- Priority: H=High, M=Medium, L=Low
- Feasibility: marking between 1 - 5, 5 is easy to implement and 1 is very difficult

Functional requirements			
#	Short description	Priority	Reference
1	Trigger archival of an OpenAIRE software artifact record on SWH.	H	Ticket TBD
2	Retrieve metadata from SWH to OpenAIRE.	H	Ticket TBD
3	Retrieve metadata from OpenAIRE to SWH.	H	Ticket TBD
4	OpenAIRE software artifact citation information to be available in SWH.	H	Ticket TBD
5	SWH software artifact citation information to be available in OpenAIRE	H	Ticket TBD

- Priority: H=High, M=Medium, L=Low

Non-functional requirements			
#	Short description	Priority	Reference
1	Offer documentation pages for the API/connectors component	M	Ticket TBD
2	Tutorial for users	L	Ticket TBD

- Priority: H=High, M=Medium, L=Low

Specifications

Architectural design	
<Provide a high-level architectural design diagram of the component/service>	

Functional specifications			
#	Short description	Priority	Reference
1	API endpoint to trigger archival of an OpenAIRE software artifact record on SWH. Its response will contain the acquired SWHID.	H	TBD
2	API endpoint to retrieve metadata from SWH to OpenAIRE.	H	TBD
3	API endpoint to retrieve metadata from OpenAIRE to SWH.	H	TBD
4	API endpoint offer OpenAIRE software artifact citation information to SWH	H	TBD
5	API endpoint to offer SWH software artifact citation information to OpenAIRE	H	TBD

- Priority: H=High, M=Medium, L=Low

Service specifications			
#	Short description	Priority	Reference
1	<Provide a short description of service specifications>	[H M L]	<JIRA issue number> or <URL to external reference>
...			

- Priority: H=High, M=Medium, L=Low

Operational specifications			
#	Short description	Priority	Reference
1	<Provide a short description of operational specifications>	[H M L]	<JIRA issue number> or <URL to external reference>
...			

- Priority: H=High, M=Medium, L=Low

Integration with EOSC Core components			
#	Short description	Priority	Reference
1	<Provide a short description of operational specifications>	[H M L]	<JIRA issue number> or <URL to external reference>
...			

- Priority: H=High, M=Medium, L=Low

External references

External references - subcomponent name		
#	Short description	Reference
1	<Provide a short description of external reference>	<url>
...		

External references - SWH		
#	Short description	Reference
1	<Provide a short description of external reference>	<url>
...		