The Hermine Project

Automating open source compliance



June 15th, 2023



Why Hermine?



Context

FOSS is everywhere

... and a **concern for any IP lawyer**, not only FOSS lawyers

Many **needs are common** across organisations

Context

In the open source ecosystem:

- many tools to produce SBoMs
- that can sometimes apply predefined rules
- but no project could really embrace the complexity of a complete FOSS Compliance Policy

Objectives



Goal

Ease application of FOSS compliance policies

- \rightarrow For any organisation: foundations, companies, ...
- \rightarrow Unique solution for all: lawyers, compliance officers, ...
- → Interface with existing Open Source tools

Goal

Hermine answers 2 main questions:

- 1) Can I use that component in this product?
- 2)What obligations must I fullfil to distribute that component?

The spirit

Efficient and pragmatic

+

Limit legal uncertainty

→ Each organisation decides on the **level of risk** it considers acceptable.

Licence analysis database

Provide a framework to **work on** and **share** legal licence analysis.

Still, users have **complete privacy** over:

- → their own interpretation of the licences
- → their own open source policies

How?



INPUT

Organisation level

FOSS Compliance Policy

Project level

List of dependencies (SBoM)

Business Context

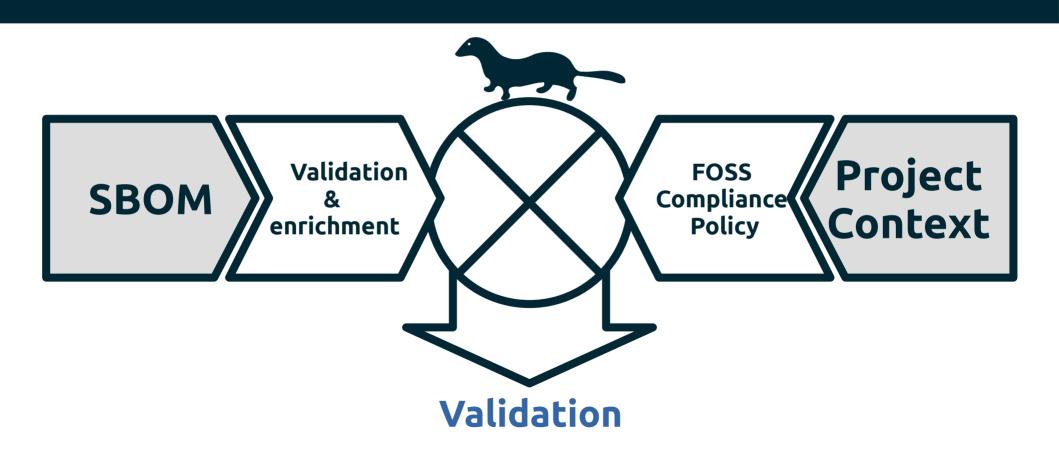
Dependency level How it is distributed

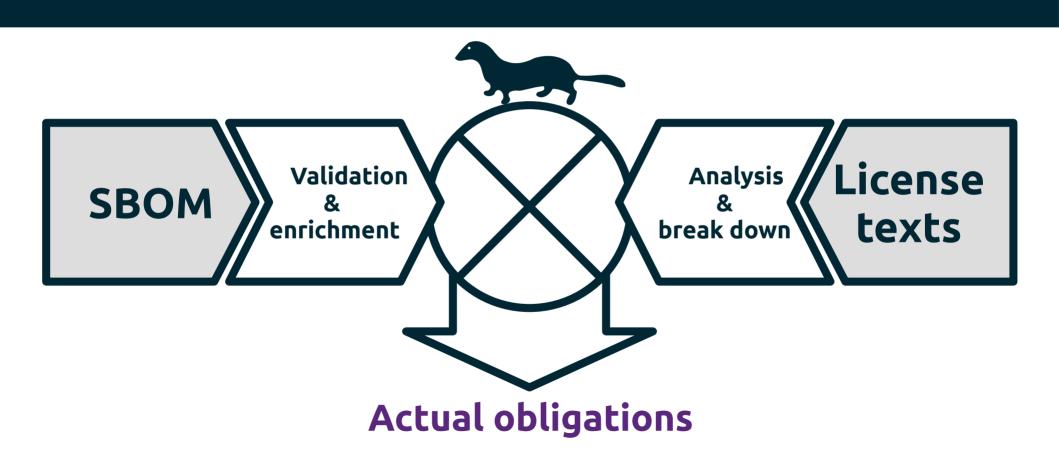
If it was modified

How it is linked to the main program

OUTPUT

- 1) Dependencies licences validation with respect to context
- 2) List of resulting obligations





Project Organisation

- Started by six, end-user, partner companies in a semi-formal context.
- 3 committees (legal, technical, steering)
- Code under AGPL-3.0-only, Data under OdbL-1.0













Technical implementation

- Python / Django framework
- REST API (DRF)
- BDD agnostic but PostgreSQL prefered

Code: https://gitlab.com/hermine-project/hermine

Doc: https://hermine-foss.org/

Where we are + Roadmap



Already here

Main features:

- Licence analyis for contextual validation
- ORT/SPDX import
- Role management
- 5 step validation with choices storage(curations, etc.)
- Resulting obligations
- Component / products catalog

Being implemented for next step (1.0)

- Data sharing (licences interpretation)
- Deployement automation
- Better UX/UI
- Better documentation
- Global Hardening / testing

Next?

Interested ? Come join us!

Curious? Come chat with us

Join us at the breakout session this afternoon

Annex: Screenshots



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5 obligations

5 obligations

3 obligations

first

Allowed depending on context

Always allowed

previous

<u>Ala</u> Licenses

ClArtistic

CNRI-Jython

CNRI-Python

Search

∆16 459 Licenses			
SPDX ID	License name	Policy status	# of obligations
CDLA-Sharing-1.0	Community Data License Agreement Sharing 1.0	Not reviewed yet	
CECILL-1.0	CeCILL Free Software License Agreement v1.0	Never allowed	7 obligations
CECILL-1.1	CeCILL Free Software License Agreement v1.1	Never allowed	7 obligations
CECILL-2.0	CeCILL Free Software License Agreement v2.0	Never allowed	7 obligations

CECILL-1.1	CeCILL Free Software License Agreement v1.1	Never allowed	7 obligations
CECILL-2.0	CeCILL Free Software License Agreement v2.0	Never allowed	7 obligations
CECILL-2.1	CeCILL Free Software License Agreement v2.1	Never allowed	7 obligations
CECILL-B	CeCILL-B Free Software License Agreement	Always allowed	8 obligations
CECILL-C	CeCILL-C Free Software License Agreement	Allowed depending on context	8 obligations
CERN-OHL-1.1	CERN Open Hardware Licence v1.1	Not reviewed yet	

CERN Open Hardware Licence v1.2 CERN-OHL-1.2 Not reviewed yet

CERN-OHL-P-2.0	CERN Open Hardware Licence Version 2 - Permissive	Not reviewed yet
CERN-OHL-S-2.0	CERN Open Hardware Licence Version 2 - Strongly Reciprocal	Not reviewed yet
CERN-OHL-W-2.0	CERN Open Hardware Licence Version 2 - Weakly Reciprocal	Not reviewed yet

Clarified Artistic License

CNRI Jython License

CNRI Python License

Mozilla Public License 1.0



Main characteristics of this license SPXD identifier: MPL-1.0 6 Copyleft: Weak copyleft Choice of law: California law Choice of venue: Federal Courts of Review status: Checked Actually FOSS: FOSS - deduced the Northern District of California. FOSS policy status: Patent Grant: Yes with venue lying in Santa Clara Allowed depending on context County Ethical clause: No Disclaimer of Warranty: Full clause Restricted to non-commercial use: No Limitation of Liability: Full clause

Mentions

Mentions

Mentions

Communication

IPManagement

Communication

TechnicalConstraints

Concerned components

Active

Active

Active

Passive

Passive

Active

Passive

Licenses involved in this release

Preserve IP mentions in Source code

License and copyright notices in documentation

Display copyright and licence in Program

No use of names for endorsement

Libraries must stay libraries

Respect trademarks

Patent Peace

LGPL-2.1-or-later MPL-2.0

List of generic obligations to follow

In core?	Generic name	Lead	Metacategory	Passivity	Components
Not in core	License agreement does not attempt to limit rights given by upstream	Legal	LicenseAgreement	Passive	Concerned components
Not in core	Inability to Comply Due to Statute or Regulation	Legal	IPManagement	Active	Concerned components
Not in core	Weak Copyleft	Legal	IPManagement	Active	Concerned components
Not in core	Providing CSC to end user	DevQA	ProvidingSourceCode	Active	Concerned components
Not in core	Indemnification of contributors	Legal	LicenseAgreement	Active	Concerned components
Not in core	License Agreement must exclude other contributors for additionnal terms	Legal	LicenseAgreement	Active	Concerned components

DevQA

DevQA

DevQA

Legal

DevQA

Communication

Communication

Top 50 Most used components

Туре	Name	Number of usages	Description	Funding opportunity
npm	debug	6	small debugging utility	
npm	ms	6	Tiny milisecond conversion utility	
npm	supports-color	4	Detect whether a terminal supports color	\$ ==
maven	org.javassist/javassist	3	Javassist (JAVA programming ASSISTant) ma	
npm	p-limit	3	Run multiple promise-returning & async fu	S==
maven	jfree/jcommon	3	JCommon is a free general purpose Java cl	
npm	escape-string-regexp	3	Escape RegExp special characters	S==
npm	p-locate	3	Get the first fulfilled promise that sati	S ===
npm	find-up	3	Find a file by walking up parent director	\$==
npm	minimatch	3	a glob matcher in javascript	S==
npm	semver	3	The semantic version parser used by npm.	