

# Software Package Data Exchange® (SPDX®)

- A standard format for communicating the components, licenses and copyrights associated with a software package.
- Key pillar in Linux Foundation's Open Compliance Program which comprises:
  - Tools, Self-Assessment, SPDX, Rapid Alert System, Training, Community





## The Need

Our suppliers aren't giving us complete licensing information for open source packages.

I don't mind vetting our code, but I'm sure this imported package has been analyzed a dozen times before.

Every customer wants a bill of materials in a different form.





software out



## The SPDX Document

**Document Information** 

**Creation Information** 

**Package Information** 

File Information

**Licensing Information** 

**Review Information** 

**SPDX Version and Licensing** 

How and when created

Package identification, copyright and licensing

File by file identification, copyright and licensing

Text of licenses that are not in SPDX License List

Log of 3<sup>rd</sup> party reviews

File is in RDF/XML or tag value form and can be converted to/from spreadsheets.



## **SPDX License List**

License Identifier	Descriped Everyties	Full name of License
AFL-3.0	Recognized Exceptions	
r = 0.0		Academic Free License 3.0
AGPL-3.0		(GNU) Affero General Public License v3
APL		Adaptive Public License
ASL-2.0		Apache License, 2.0
APSL-2.0		Apple Public Source License 2.0
Artistic-2.0		Artistic license 2.0
AAL		Attribution Assurance License
BSD-4-Clause		BSD 4-clause "Original" or "Old" License
BSD-3-Clause		BSD 3-clause "New" or "Revised" License
BSD-2-Clause		BSD 2-clause "Simplified" or "FreeBSD" License
BSL-1.0		Boost Software License 1.0
CATOSL-1.1		Computer Associates Trusted Open Source License 1.1
CC-BY-1.0		Creative Commons Attribution 1.0
CC-BY-NC-1.0		Creative Commons Attribution Non Commercial 1.0
CC-BY-ND-1.0		Creative Commons Attribution No Derivatives 1.0
CC-BY-SA-1.0		Creative Commons Attribution Share Alike 1.0
CC-BY-NC-ND-1.0		Creative Commons Attribution Non Commercial No Derivatives 1.0
CC-BY-NC-SA-1.0		Creative Commons Attribution Non Commercial Share Alike 1.0
CC-BY-2.0		Creative Commons Attribution 2.0
CC-BY-NC-2.0		Creative Commons Attribution Non Commercial 2.0
CC-BY-ND-2.0		Creative Commons Attribution No Derivatives 2.0
CC-BY-SA-2.0		Creative Commons Attribution Share Alike 2.0
CC-BY-NC-ND-2.0		Creative Commons Attribution Non Commercial No Derivatives 2.0
CC-BY-NC-SA-2.0		Creative Commons Attribution Non Commercial Share Alike 2.0



- 300 Licenses (including common exceptions)
  - Standardized license names
  - Exact text of licenses
  - Available on SPDX® websiteURLs won't change
- License Matching Guidelines
  - For matching licenses against those included on the SPDX License List
- License Templates
  - Denote license text which is optional or replaceable per the license matching guidelines



#### License List

- Internal: TI, Wind River, MicroFocus, HP, Siemens
- Tools: Black Duck, FOSSology, nexB, Protecode
- Community: OSI, Debian, Composer, Bower, NPM

#### Format

- Internal/Partners: TI, Wind River, Alcatel Lucent, Siemens
- Tooling: Wind River, Black Duck, Source Auditor, FOSSology/ UNO, Yocto, TripleCheck, SPDX OSS

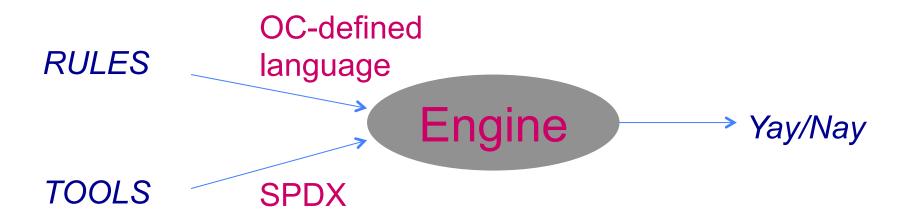
## Tagging Files

U-Boot, Wind River



# SPDX Fit with Open Chain

- Supports Best Practices / Certification
  - Avoids re-inventing format, license list and tooling
- Supplier Self Check
  - Enables while allowing OC to remain neutral on tooling
- Invites pre-built community





# **Participants**

**Open Source Organizations** 

**End-Users** 

**Integration & Services** 

**Device OEMs** 

**Applications** 

**OS Distributions** 

**Systems** 

Semiconductor Vendors

























Alcatel-Lucent (















CANONICAL



















Participation is from a range of organizations and across various roles



## Getting involved...

#### See:

- http://www.spdx.org
- Mailing lists, meetings, wiki

#### Contact:

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