Introduction to SPDX

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4 March 2016

What is SPDX?

- Standard:
  - A standard format for communicating the licenses and copyrights associated with software packages
- Guiding principles:
  - Human and machine readable
  - Focus on capturing facts; avoid interpretations
- Vision:
  - To help reduce redundant work in determining software license information and facilitate compliance

Using SPDX to describe compliance info

1. Use SPDX License List short identifiers
2. Provide an SPDX document

Use SPDX License List short identifiers

- SPDX License List is a list of (common) open source licenses
- Contains name, identifier, license text, reference URL's, whether OSI approved, and standard headers
- Matching guidelines to help determine if the license text matches the text (and templates for some licenses)
- Backed by an active organization which maintains the license list

Full name	Identifier	OSI Approved
3dfx Glide License	Glide	
Abstyles License	Abstyles	
Academic Free License v1.1	AFL-1.1	Y
Academic Free License v1.2	AFL-1.2	Y
Academic Free License v2.0	AFL-2.0	Y
Academic Free License v2.1	AFL-2.1	Y
Academic Free License v3.0	AFL-3.0	Y
Academy of Motion Picture Arts and Sciences BSD	AMPAS	
Adaptive Public License 1.0	APL-1.0	Y
Adobe Glyph List License	Adobe-Glyph	
Adobe Postscript AFM License	APAFML	
Adobe Systems Incorporated Source Code License Agreement	Adobe-2006	
Affero General Public License v1.0	AGPL-1.0	
Afmparse License	Afmparse	
Aladdin Free Public License	Aladdin	
Amazon Digital Services License	ADSL	
AMD's plpa_map.c License	AMDPLPA	
ANTLR Software Rights Notice	ANTLR-PD	
Apache License 1.0	Apache-1.0	
Apache License 1.1	Apache-1.1	Y
Apache License 2.0	Apache-2.0	Y
Apple MIT License	AML	
Apple Public Source License 1.0	APSL-1.0	Y

Use SPDX License List short identifiers

projects / u-boot.git / blob

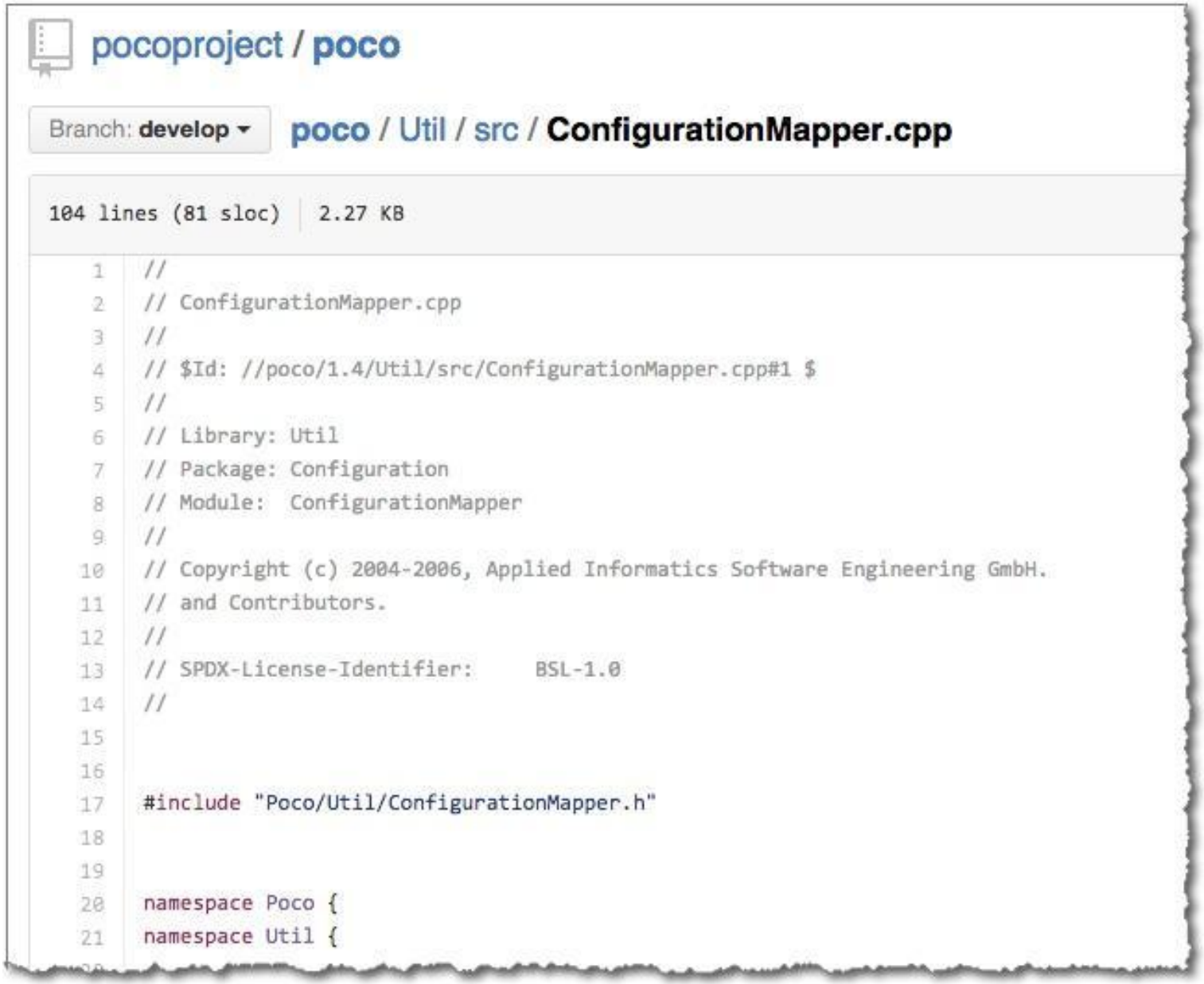
[u-boot.git] / post / post.c

```
 1 /*
 2  * (C) Copyright 2002
 3  * Wolfgang Denk, DENX Software Engineering, wd@denx.de.
 4  *
 5  * SPDX-License-Identifier:     GPL-2.0+
 6  */
 7
 8 #include <common.h>
 9 #include <stdio_dev.h>
10 #include <watchdog.h>
11 #include <div64.h>
12 #include <post.h>
13
14 #ifdef CONFIG_SYS_POST_HOTKEYS_GPIO
15 #include <asm/gpio.h>
16 #endif
17
18 #ifdef CONFIG_LOGBUFFER
19 #include <logbuff.h>
20 #endif
21
22 DECLARE_GLOBAL_DATA_PTR;
```

SPDX


Linaro projects / lng / odp.git / blob
[lng/odp.git] / include / odp.h
1 /* Copyright (c) 2013, Linaro Limited
2 * All rights reserved
3 *
4 * SPDX-License-Identifier: BSD-3-Clause
5 */
6
7 /**
8 * @file
9 *
10 * The OpenDataPlane API
11 *
12 */
13
14 #ifndef ODP_H_
15 #define ODP_H_
16
17 #ifdef __cplusplus
18 extern "C" {

SPDX



pocoproject / poco

Branch: develop ▾ poco / Util / src / ConfigurationMapper.cpp

104 lines (81 sloc) | 2.27 KB

```
1  //
2  // ConfigurationMapper.cpp
3  //
4  // $Id: //poco/1.4/Util/src/ConfigurationMapper.cpp#1 $
5  //
6  // Library: Util
7  // Package: Configuration
8  // Module:  ConfigurationMapper
9  //
10 // Copyright (c) 2004-2006, Applied Informatics Software Engineering GmbH.
11 // and Contributors.
12 //
13 // SPDX-License-Identifier:     BSL-1.0
14 //
15
16
17 #include "Poco/Util/ConfigurationMapper.h"
18
19
20 namespace Poco {
21 namespace Util {
```

SPDX

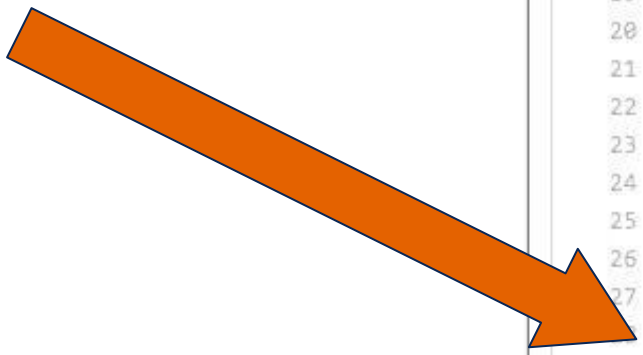
SPDX short license identifiers in Files

- Easy to use, concise format and easy to read
  - Developers detest needing to put 50 lines of boiler plate license before 10 lines of code that implements a function.
- Reliable
  - Use matching guidelines
- Machine-readable
  - Makes it easy to produce an SPDX document
- Guidance on how to use:
  - http://wiki.spdx.org/view/Technical_Team/SPDX_Meta_Tags
  - Will formally be included as part of SPDX 2.1

Branch: **develop** ▾ **poco / LICENSE**

```
1  Boost Software License - Version 1.0 - August 17th, 2003
2
3  Permission is hereby granted, free of charge, to any person or organization
4  obtaining a copy of the software and accompanying documentation covered by
5  this license (the "Software") to use, reproduce, display, distribute,
6  execute, and transmit the Software, and to prepare derivative works of the
7  Software, and to permit third-parties to whom the Software is furnished to
8  do so, all subject to the following:
9
10 The copyright notices in the Software and this entire statement, including
11 the above license grant, this restriction and the following disclaimer,
12 must be included in all copies of the Software, in whole or in part, and
13 all derivative works of the Software, unless such copies or derivative
14 works are solely in the form of machine-executable object code generated by
15 a source language processor.
16
17 THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR
18 IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,
19 FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT
20 SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE
21 FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE,
22 ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER
23 DEALINGS IN THE SOFTWARE.
24
25 ------------------------------------------------------------------------------
26 Note:
27 Individual files contain the following tag instead of the full license text.

29         SPDX-License-Identifier:        BSL-1.0
30
31 This enables machine processing of license information based on the SPDX
32 License Identifiers that are here available: http://spdx.org/licenses/
```



SPDX

What if more than one license applies or you have a choice of licenses?

- Use the license expression syntax
  - Operators allow various combinations, etc.

- See SPDX 2.0 specification, Appendix IV for details

SPDX

What to do?

ahoward / main

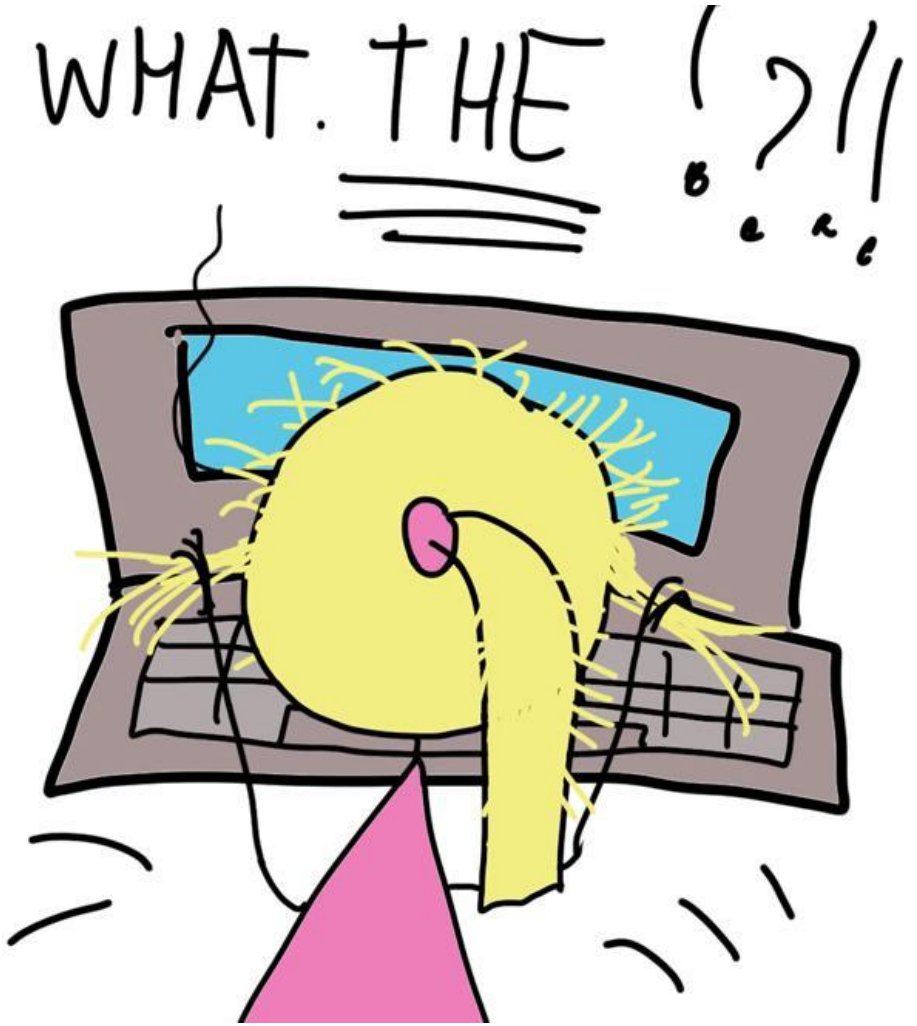
Branch: master ▾ main / LICENSE

2 lines (1 sloc) | 15 Bytes

```
1  same as Ruby's
```

Ruby OR GPL-2.0+

Ruby OR BSD-2-Clause



SOURCE: http://indieberries.blogspot.com/2013/12/cartoon-wifi-signals.html

SPDX

License expression syntax

`AND`	Conjunctive licenses (more than 1 license applies)
`OR`	Disjunctive licenses (choice)
`WITH`	Exceptions (apply an exception to the main license)
`+`	Or later versions of license allowed

Additional SPDX License List Info

- Human and machine readable at http://spdx.org/licenses
- Tools to programmatically access the SPDX License List:
  - RDFa machine readable access
  - JSON file at http://spdx.org/licenses/licenses.json
- For tools support, see the tech report “Accessing SPDX Licenses”
  - http://spdx.org/publications/tool-documentation/accessing-spdx-licenses

SPDX

Using SPDX to describe license information

1. Use SPDX License List short identifiers

2. Provide an SPDX document

Supported SPDX Document Formats

tag:value

```
##-----------------------
## Package Information
##-----------------------

PackageName: time-1.7.tar.gz
PackageFileName: time-1.7.tar.gz
PackageDownloadLocation: NOASSERTION
PackageVerificationCode: dd5cf0b17bfef4284
PackageChecksum: SHA1: dde0c28c74269607369
PackageLicenseConcluded: GPL-2.0+
PackageLicenseDeclared: GPL-2.0+
PackageLicenseInfoFromFiles: GPL-2.0
PackageLicenseInfoFromFiles: GPL-2.0+
PackageLicenseInfoFromFiles: MIT
PackageLicenseInfoFromFiles: LicenseRef-1
PackageLicenseInfoFromFiles: LicenseRef-2
PackageLicenseInfoFromFiles: LicenseRef-3
PackageCopyrightText: NOASSERTION

##-------------------------
```

Tool consumable RDF/XML

```
- <rdf:Description rdf:nodeID="A0">
    <rdfs:comment/>
  - <copyrightText>
      * <I>Copyright</I> (C) 1999 by Randolph Chung &lt;tausq@debian.org&gt;
    </copyrightText>
    <licenseComments/>
    <licenseInfoInFile rdf:resource="http://spdx.org/licenses/GPL-2.0+"/>
    <licenseConcluded rdf:resource="http://spdx.org/rdf/terms#noassertion"/>
    <fileType rdf:resource="http://spdx.org/rdf/terms#fileType_source"/>
    <checksum rdf:nodeID="A1"/>
    <fileName>networking/hostname.c</fileName>
    <rdf:type rdf:resource="http://spdx.org/rdf/terms#File"/>
  </rdf:Description>
- <rdf:Description rdf:nodeID="A2">
    <checksumValue>dc90a437e03f31ab04e7059d8da5f88b28cde77d</checksumValue>
    <algorithm rdf:resource="http://spdx.org/rdf/terms#checksumAlgorithm_sha1"/>
    <rdf:type rdf:resource="http://spdx.org/rdf/terms#Checksum"/>
  </rdf:Description>
- <rdf:Description rdf:nodeID="A3">
    <rdfs:comment/>
    <copyrightText rdf:resource="http://spdx.org/rdf/terms#none"/>
    <licenseComments/>
```

SPDX

… and can translate to spreadsheets

tag:value

```
##-----------------------
## Package Information
##-----------------------

PackageName: time-1.7.tar.gz
PackageFileName: time-1.7.tar.gz
PackageDownloadLocation: NOASSERTION
PackageVerificationCode: dd5cf0b17bfef4284
PackageChecksum: SHA1
PackageLicenseConclud
PackageLicenseDeclare
PackageLicenseInfoFro
PackageLicenseInfoFro
PackageLicenseInfoFro
PackageLicenseInfoFro
PackageLicenseInfoFro
PackageLicenseInfoFro
PackageCopyrightText:

##-------------------
```

Tool consumable RDFa

```
- <rdf:Description rdf:nodeID="A0"
    <rdfs:comment/>
  - <copyrightText>
      * <I>Copyright</I> (C) 1999 by
    </copyrightText>
    <licenseComments/>
    <licenseInfoInFile rdf:resource=
    <licenseConcluded rdf:resource=
    <fileType rdf:resource="http://sp
    <checksum rdf:nodeID="A1"/>
    <fileName>networking/hostname.
    <rdf:type rdf:resource="http://sp
  </rdf:Description>
- <rdf:Description rdf:nodeID="A2"
    <checksumValue>dc90a437e03f3
    <algorithm rdf:resource="http://
    <rdf:type rdf:resource="http://sp
  </rdf:Description>
- <rdf:Description rdf:nodeID="A3"
    <rdfs:comment/>
    <copyrightText rdf:resource="ht
    <licenseComments/>
```

spreadsheets

Home | Layout | Tables | Charts | SmartArt | Formulas | Data | Review

Edit | Font | Alignment | Number

Paste | Fill | Clear | Arial | 10 | Wrap Text | Merge | General

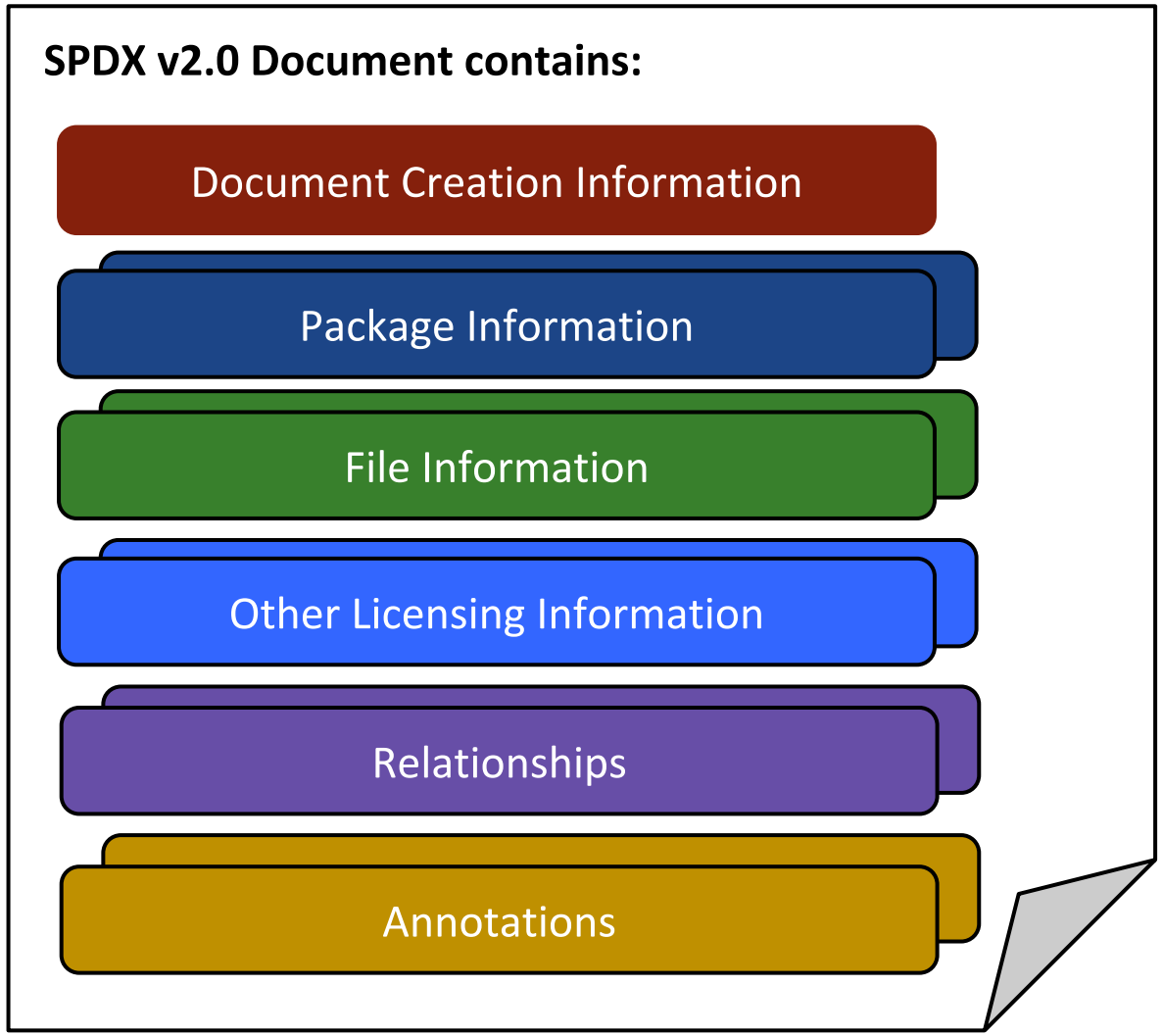
P123

	A	B	C	D	E
1	6.1 File Name	6.2 File Type	6.3 File Checksum	6.4 License Concluded	6.5 License Info in File
2	time-1.7\AUTHORS	OTHER	7951F4CEFFDB030EC617ED DF7BBA22523CC1A67F	NOASSERTION	NONE
3	time-1.7\ChangeLog	OTHER	4A972EE2C972E38B502B228 37C2513ECC2647339	NOASSERTION	NONE
4	time-1.7\configure	OTHER	A54A5E0A7321967322E7E71 A5F0E23B59F2BBB15	LicenseRef-3	LicenseRef-3
5	time-1.7\configure.in	OTHER	63F77F68E8E90B3E6FDDE4 BE3B585B72A0635BBF	NOASSERTION	NONE
6	time-1.7\COPYING	OTHER	075D599585584BB0E4B526F 5C40CB6B17E0DA35A	GPL-2.0	GPL-2.0
7	time-1.7\error.c	SOURCE	97BFD964AAE09D71B7FA89 BD48B2110CB8D3E12D	GPL-2.0+	GPL-2.0+
8	time-1.7\getopt.c	SOURCE	4EEC2F371CDEA3FA5F96A3 7B44B200445609BC75	GPL-2.0+	GPL-2.0+
9	time-1.7\getopt.h	SOURCE	512169AACCCCC1C0FE20D E76AF4A5FF347AACC05	GPL-2.0+	GPL-2.0+
10	time-1.7\getopt1.c	SOURCE	177C2F08AAD7203FA875AE6 3C0EC92FBB3C9F600	GPL-2.0+	GPL-2.0+
11	time-1.7\getpagesize.h	SOURCE	1EF18700B72387BF6322695 BB1AEC2CA5E18CB00	NOASSERTION	NONE
12	time-1.7\INSTALL	OTHER	BD0CE8678F58293AFC2069 E6BA9AB42A6C3E23BC	NOASSERTION	NONE
13	time-1.7\install-sh	SOURCE	C5C249A2DD763530AE65D2 8BC1C64BB754CD0750	MIT	MIT
14	time-1.7\Makefile.am	SOURCE	013F7D712AEFD2409A23107 14257AD77E62CA205	NONE	NONE
15	time-1.7\Makefile.in	SOURCE	8B548F3A4C3719B30E0A5D B65DD53ADBDA180DB0	LicenseRef-2	LicenseRef-2
16	time-1.7\mdate-sh	SOURCE	7A4FCB88FD92B03E9DD69F 04DBA7ED442B33086C	GPL-2.0+	GPL-2.0+
17	time-1.7\mkinstalldirs	OTHER	8BC81B299F7F9A483A21AE3 6C7A5661D832974EF	INTHEPUBLICDOMAIN	INTHEPUBLICDOMAIN
18	time-1.7\NEWS	OTHER	9A94D3FD8BE03E1947B8C4 3DE83211FE4F8EA38C	NOASSERTION	NONE
19	time-1.7\port.h	SOURCE	966E3DC7BAE8B140BEDC52 D8F3AB3A87F1815656	NOASSERTION	NONE

2.0 Doc Info | 3.0 Creation Info | 4.0 Package Info | 5.0 Other Licensing | 6.0 File Info | 7.0 Reviewer Info

SPDX

What makes up an SPDX Document?



SPDX

Document and Creation Information

- ★ SPDX Version (used in creation of SPDX file)
- ★ Data License (Licensing of meta data)
- ★ SPDX Identifier for the document itself
- ★ Name of this Document
- ★ SPDX Document Namespace (URI)
- External SPDX Doc References
- License List Version
- ★ Creator (how was the file created)
  - Manual review (who, when)
  - Tool (id, version, when)
- ★ When was it created
- Comments on creator and document itself

SPDX

Package Information

- Identification
- ★ Formal Name of Package (Full name given by originator and version information)
- ★ SPDX Identifier (unique ID for referencing from elsewhere)
- Package File Name (Name package obtained under (.tar, .rpm, etc.))
- Package Supplier and Originator
- ★ Package Download Location (download URL)
- ★ Package Verification Code and Checksum (SHA1, MD5, SHA256)
- Package Homepage and Source Information
- Licensing for Package
- ★ Declared License- License(s) that has/have been asserted for the package
- ★ Concluded License- License that Creator has concluded
- ★ List of file licenses
- Comments Field (for example, to explain conclusion)
- ★ Copyright Text
- Description of Package (summary and detailed options) and comments about the package

File Information

- Identification
  - ★ File Name
  - ★ SPDX Identifier (for referencing from elsewhere)
  - File Type (source, binary, archive,application,audio,image,text,video,documentation,spdx)
  - Artifact of Project Name, Homepage & URI (project it came from)
  - ★ File Checksum (SHA1, MD5, SHA256)
- Licensing for File
  - ★ Concluded License (license determined by SPDX file creator)
  - ★ License Information in File
  - Comments on License
- ★ Copyright Text
- File Notices
- File Contributor
- File Comments

Other Licensing Information

- Identifier Assigned (unique short form to this document)
- Extracted Text
- Name of License
- Cross References
- Comments

NOTES:

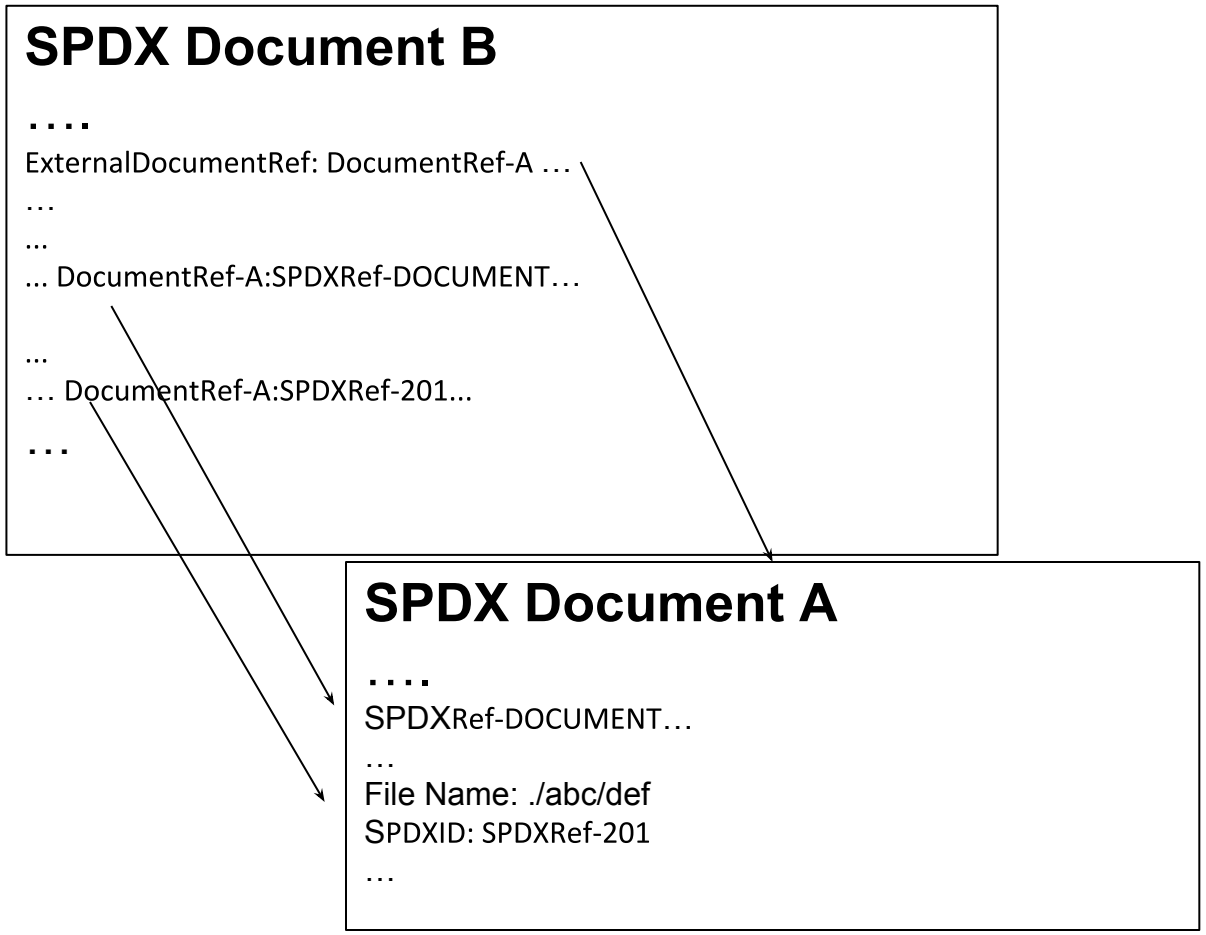
- Provides a way to identify licenses not on the SPDX License List.
- Aim for ~90% coverage with standard short forms license identifiers - NOT exhaustive
- Although there are a lot of licenses “in the wild,” a smaller number covers most projects

Relationships between Elements

Each SPDX Document has a unique identifier

Elements within a document have an identifier unique to the SPDX document (e.g. Document itself, Package, File & License)

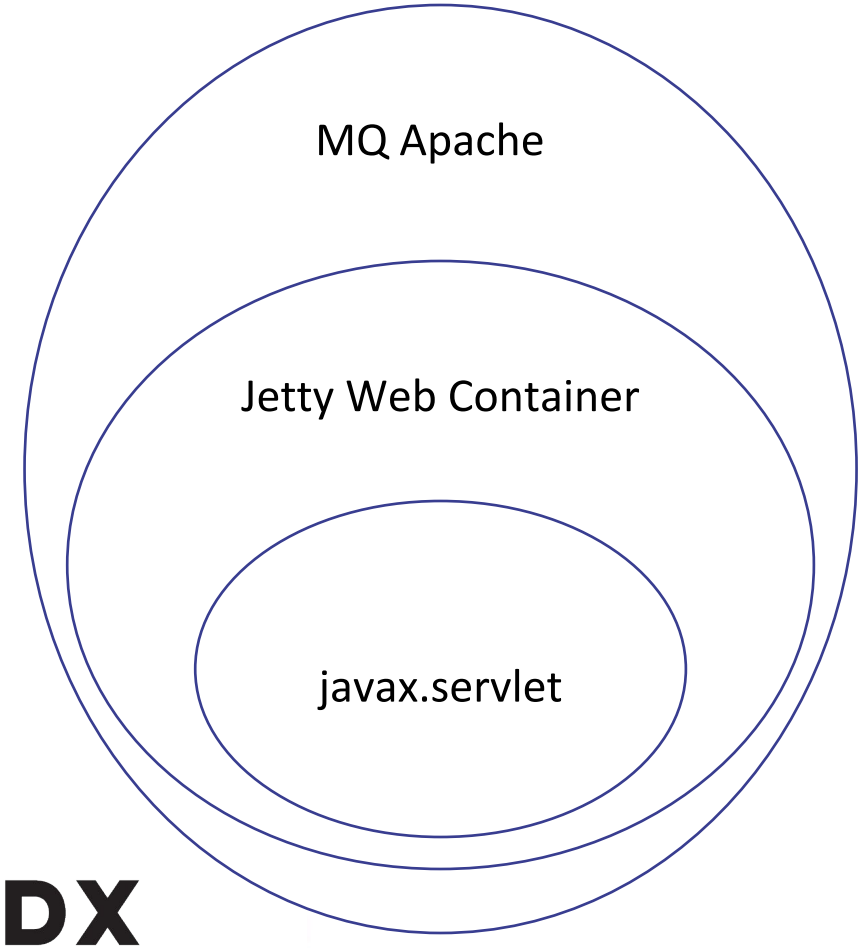
Elements in external documents are referenced using the external document ID followed by the local unique reference.



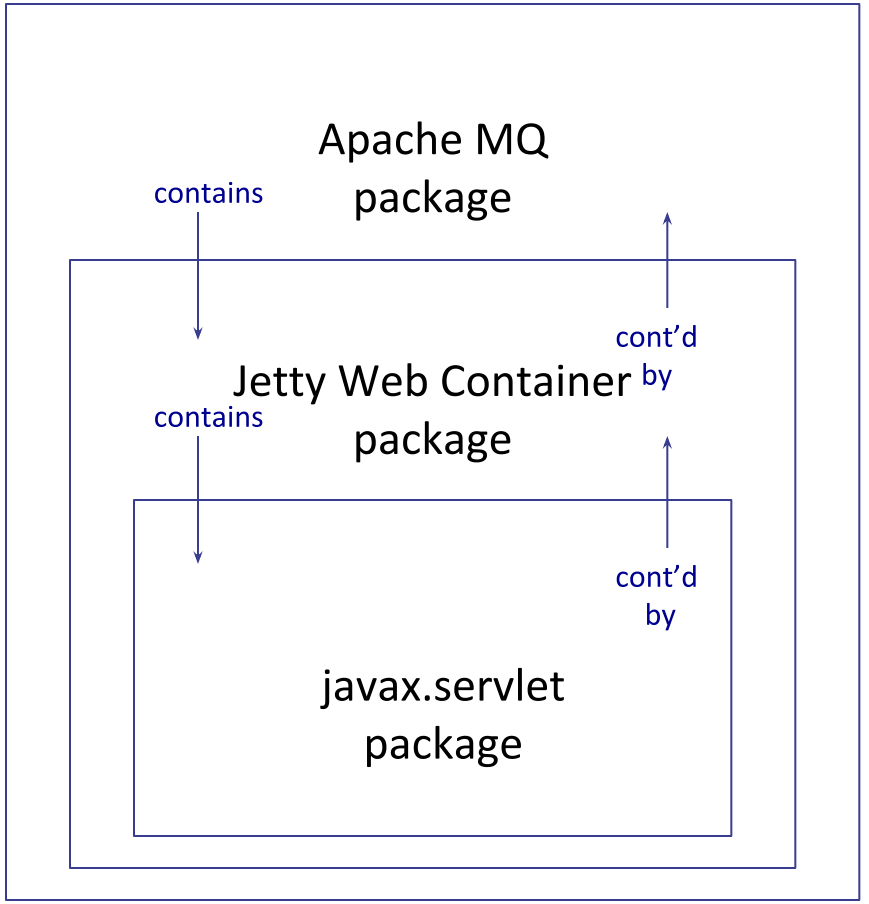
SPDX

SPDX reflects package relationships

Package



SPDX Document



SPDX

Review Information

- ~~Reviewer~~
- ~~Review Date~~
- ~~Review Comment~~

REPLACED BY Annotations

SPDX

Annotations

Annotation allows for comments on **any** SPDX element.

Annotations can provide a change log for any changes made to specific SPDX elements.

Annotations contain:

- annotator (the person, company, or tool which provided the annotation)
- date the annotation made
- type of annotation (review or other)
- SPDX identifier reference (element the annotation refers to)
- comments

SPDX

Provide an SPDX document

Document Creation Information

- 2.1 SPDX Version.
- 2.2 Data License
- 2.3 SPDX Identifier
- 2.4 Document Name
- 2.5 SPDX Document Namespace
- 2.8 Creator
- 2.9 Created

1 per document

1 per package in document

Package Information

- 3.1 Package Name
- 3.2 Package SPDX Identifier
- 3.7 Package Download Location
- 3.8 Package Verification Code
- 3.12 Concluded License
- 3.13 All Licenses Information from Files
- 3.14 Declared License
- 3.16 Copyright Text

File Information

- 4.1 File Name
- 4.2 File SPDX Identifier
- 4.4 File Checksum
- 4.5 Concluded License
- 4.6 License Information in File
- 4.8 Copyright Text

1 per file in each package

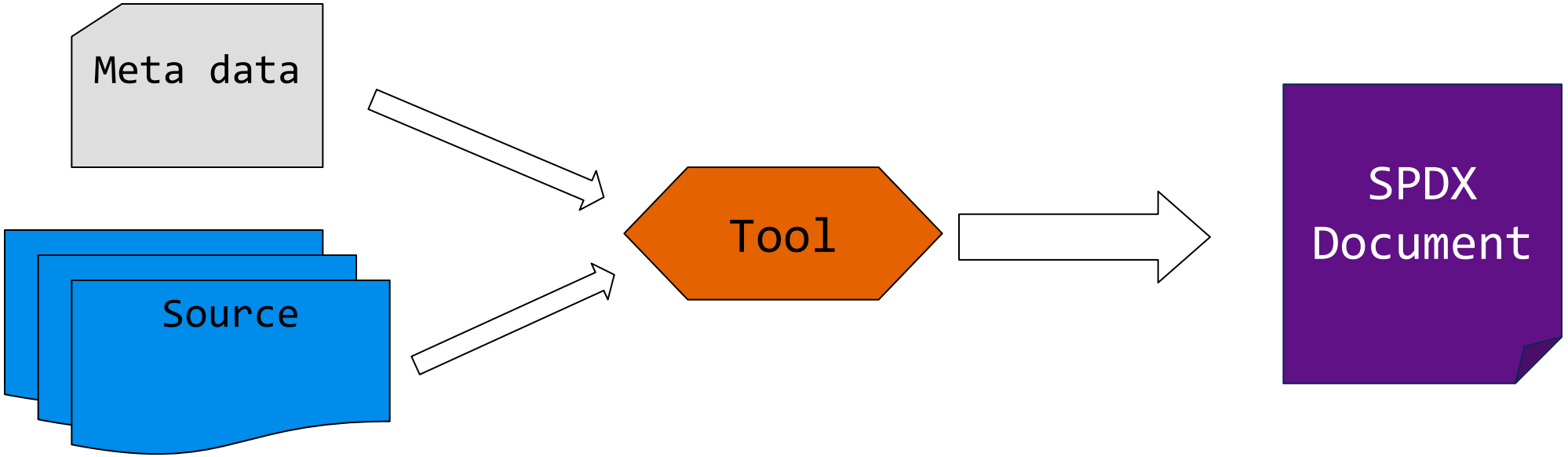
SPDX

Why create an SPDX document?

- Can be very descriptive
  - contains copyrights, relationships, creation, provenance
- Can be easily translated to human readable form
  - e.g., spreadsheet
- Integrates with various open source and commercial tools

- REALLY helps the downstream consumers clearly understand the upstream licensing intent!

Creating an SPDX document



Requires some tooling since the package verification code is generated by file checksums

SPDX

Open Source Tools supporting SPDX

Analysis Tools

- FOSSology
  - Install yourself: http://www.fossology.org/projects/fossology
  - Public instance: https://fossologyspdx.ist.unomaha.edu/
  - 3.0 Preview: http://52.89.71.213/repo/ (testuser/test)
- TripleCheck:
  - Documentation: http://triplecheck.net/download.html
  - Source: https://github.com/triplecheck/triplecheck.github.io
- DoSOCS: produce SPDX, store that info in relational database, extract info on request
  - https://github.com/DoSOCSv2/DoSOCSv2
- Debsources: Debian source database generates SPDX https://sources.debian.net/
- AIRS: Analysis and export tool https://github.com/spdx/airs/

Open Source Tools supporting SPDX

SPDX format validation and translation tools: http://spdx.org/tools

- Java code providing access the SPDX Standard Libraries
- Binary .jar files available: http://spdx.org/spdx-tools/tools-from-the-spdx-workgroup
- Source code available:
  - git.spdx.org – spdx-tools project home
  - https://github.com/spdx/tools - mirror
- Bugs / enhancement ideas can be reported:
  - bugs.linuxfoundation.org – project SPDX/tools
  - Github issues tracking

Contributions welcome!

SPDX

Open Source Tools supporting SPDX

Build system plug-ins:

- Maven plug-in: uses Maven license data to generate SPDX document
  - https://github.com/goneall/spdx-maven-plugin
- Experimental Eclipse plug-in:
  - https://github.com/goneall/SpdxEclipsePlugin

Help and ideas here on getting effective plugin's created for CI loops are very welcome.

fossology

License Browser

2.1.0-ng, commit: [#0d99362] 2014/12/10 17:53 UTC built @ 2014/12/15 06:49 UTC

Folder: **Software Repository**/
linux-3.12.20.tar.xz/ linux-3.12.20/ arch

Display 25 licenses

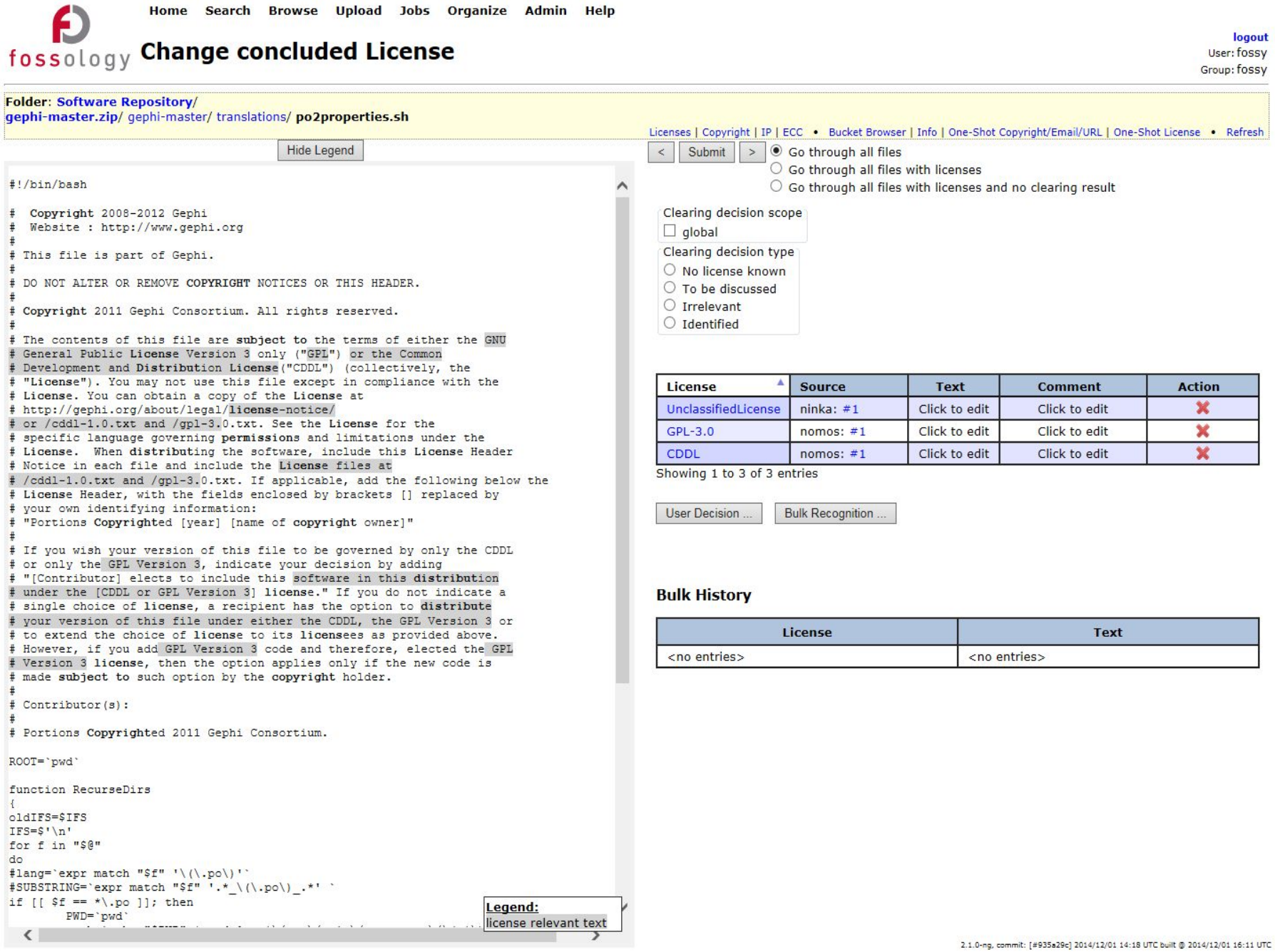
Search Clear

Scanner Count	Concluded License Count	License Name
6745	0	No_license_found
4032	0	GPL-2.0
3043	0	GPL-2.0+
1565	0	GPL
183	0	BSD-3-Clause
173	0	Dual-license
142	0	WebM
53	0	BSD
50	0	BSD-2-Clause
43	0	BSD-2-Clause-NetBSD
42	0	See-file(README)
28	0	MIT-style
26	0	See-file(COPYING)
23	0	BSD-style
19	0	Motorola
16	0	MIT
15	0	GPL-1.0
14	0	LGPL-2.0+
9	0	See-file
7	0	GPL-2.0+-with-classpath-exception

Display 50 files

Clear

Files	Scanner Results (N: nomos, M: monk, Nk: ninka)	Edited Results	Clearing Status	Files Cleared	Actions
alpha	AGPL, GPL, GPL-2.0, GPL-2.0+, HP-DEC, LGPL-2.0+, No_license_found, See-file(COPYING)		●	0/20	[Tag][Edit] [Bulk]
arc	GPL-2.0, No_license_found		●	0/138	[Tag][Edit] [Bulk]
arm	BSD-style, Cryptogams, Dual-license, GPL, GPL-1.0, GPL-2.0, GPL-2.0+, LGPL-2.0+, MIT, MIT-style, No_license_found, OpenSSL, Public-domain, See-file, See-file(COPYING), See-URL		●	0/2738	[Tag][Edit] [Bulk]
arm64	GPL, GPL-2.0, GPL-2.0+, MIT, MIT-style, No_license_found		●	0/184	[Tag][Edit] [Bulk]
avr32	GPL, GPL-2.0, No_license_found		●	0/141	[Tag][Edit] [Bulk]
blackfin	BSD, BSD-3-Clause-Clear, BSD-style, GPL, GPL-2.0, GPL-2.0+, No_license_found		●	0/361	[Tag][Edit] [Bulk]
c6x	GPL, GPL-2.0, GPL-2.0+, No_license_found		●	0/86	[Tag][Edit] [Bulk]
cris	BSD-style, GPL, GPL-2.0, GPL-2.0+, No_license_found		●	0/86	[Tag][Edit] [Bulk]


Home Search Browse Upload Jobs Organize Admin Help
fossology
Change concluded License
logout
User: fossy
Group: fossy
Folder: Software Repository/
gephi-master.zip/ gephi-master/ translations/ po2properties.sh
Licenses | Copyright | IP | ECC • Bucket Browser | Info | One-Shot Copyright/Email/URL | One-Shot License • Refresh
Hide Legend
< Submit >
Go through all files
Go through all files with licenses
Go through all files with licenses and no clearing result
Clearing decision scope
global
Clearing decision type
No license known
To be discussed
Irrelevant
Identified
#!/bin/bash
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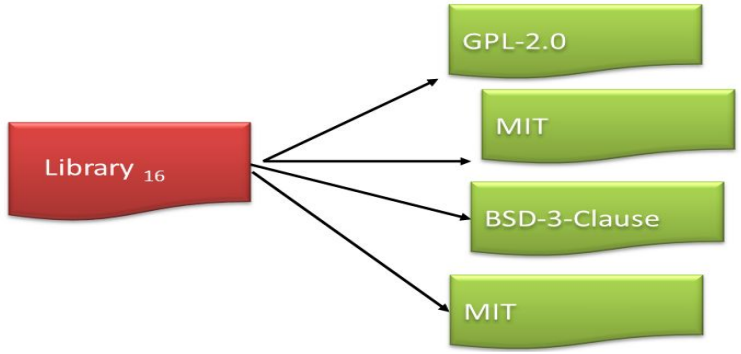
# Portions Copyrighted 2011 Gephi Consortium.
ROOT=`pwd`
function RecurseDirs
{
oldIFS=$IFS
IFS=$'\n'
for f in "$@"
do
#lang=`expr match "$f" '\(\.po\)'`
#SUBSTRING=`expr match "$f" '.*_\(\.po\)_.*' `
if [[$f == *\.po]]; then
PWD=`pwd`
Legend:
license relevant text
License
Source
Text
Comment
Action
UnclassifiedLicense
ninka: #1
Click to edit
Click to edit
GPL-3.0
nomos: #1
Click to edit
Click to edit
CDDL
nomos: #1
Click to edit
Click to edit
Showing 1 to 3 of 3 entries
User Decision ...
Bulk Recognition ...
Bulk History
License
Text
<no entries>
<no entries>
2.1.0-ng, commit: [#935a29c] 2014/12/01 14:18 UTC built @ 2014/12/01 16:11 UTC

Commercial Tools supporting SPDX documents

- Wind River:
  - Free to submit code and it sends you an SPDX document http://spdx.windriver.com
- Black Duck:
  - Creates and consumes SPDX documents https://www.blackducksoftware.com/products/spdx
- Protecode
  - Creates SPDX document http://www.protecode.com/license-compliance-is-evolving-with-spdx/
- Source Auditor
  - Creates SPDX documents http://sourceauditor.com/blog/source-auditor-supports-spdx-2/
- TripleCheck
  - Creates SPDX documents http://triplecheck.net/what-we-do.html
- WhiteSource
  - Creates SPDX documents http://docs.whitesourcesoftware.com

Analysis of License Quality?

- August 2015 Windriver introduced concept of a License Quality Grade (LQG) measuring the license discipline of a software package (A+ to F)
- Although a top level license often exists, the emphasis is on individual source file licenses



- LQG = % of copyrightable source files with clear licensing terms *contained within* the set of source files (ie. package) analyzed.
- A license notice as simple as the following is sufficient:

  "This file is licensed under the GPL-2.0."

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License Quality Grade

Table(LQI)

Grade	License Quality Index
A+	970 - 1000
A	930 - 969
A-	900 - 929
B+	850 - 899
B	800 - 849
B-	750 - 799
C+	700 - 749
C	650 - 699
C-	550 - 649
D+	500 - 549
D	400 - 499
D-	300 - 399
F	<= 299

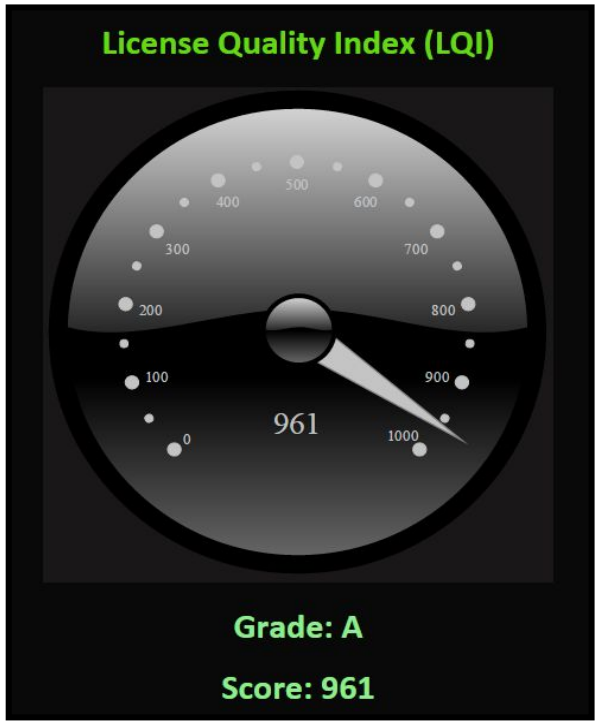
- LQI = % of source files with license notices * 1000
- Grade based on table values
- Grade bump from F to D if License.txt exists

- For example:
  LQG = *Table*(LQI) = 86.3% * 1000 = 863 = **B+**

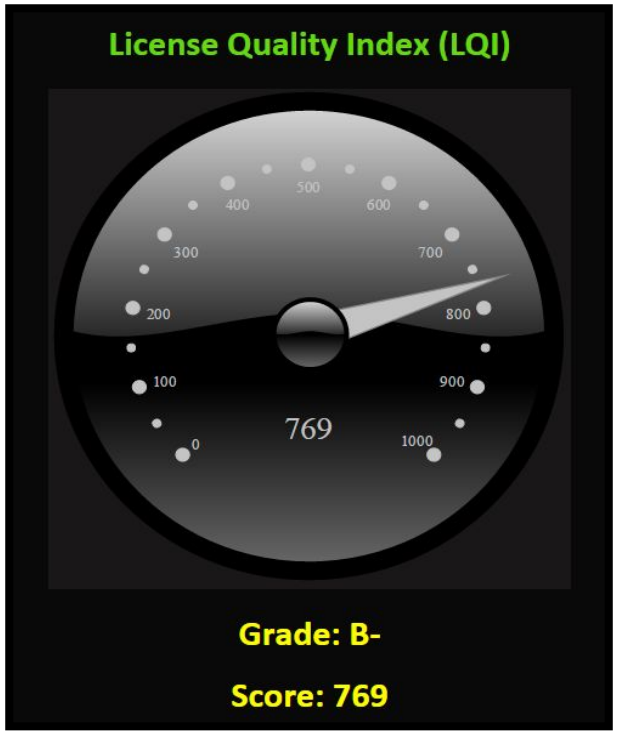
License Quality Grade (LGA)

OpenStack Packages:

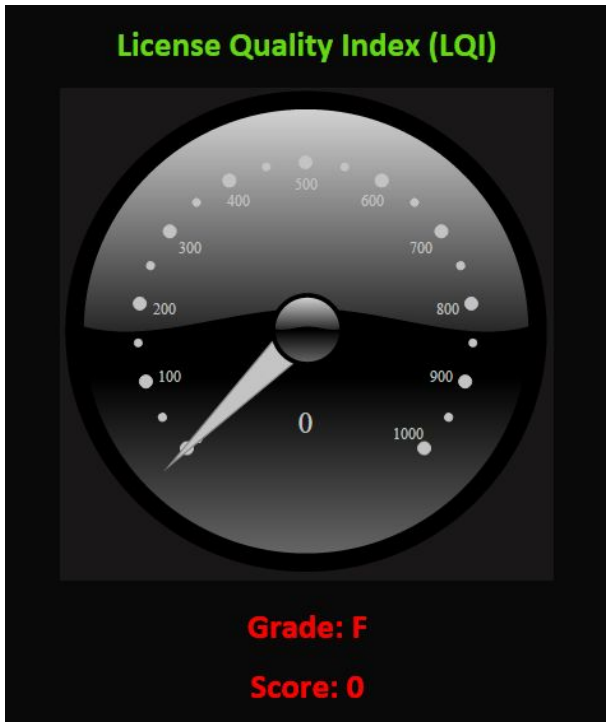
ironic-sysinv-1.0.tar.bz2



novnc-0.4.tar.bz2



keyring-3.2.zip



More Info on SPDX

- Best practices for creating SPDX documents: http://wiki.spdx.org/view/Technical_Team/Best_Practices

- spdx.org → General information
- spdx.org/licenses → SPDX License List
- spdx.org/tools → SPDX Tools

- wiki.spdx.org →
  - Wiki for technical, business, and legal teams
  - Contains information on joining the mailing lists and calls

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Features Planned for SPDX 2.1

- Additional Use Case Supported:
  - Snippets!
  - Enhanced Options for External References
    - Linkage to standard source repositories via External Identifiers
    - Reference to packages without source accessible to be analyzed.
  - Linking to Security Identifiers (CPE, SWID)

- Syntax for using SPDX license identifiers in source files.
  - See: http://wiki.spdx.org/view/Technical_Team/SPDX_Meta_Tags

SPDX

Want to help?

- If your analysis tool doesn't provide or consume SPDX documents – ask your vendor for it!

- Encourage your Developers, Testers and Writers to help with the Open Source based tools working with SPDX.
  - Adding SPDX tag:value format to FOSSology, SPDX tools, and other open source projects
  - Extend the open source based tools to implement with the use cases you care about.
- Join one of the SPDX teams (see: www.spdx.org) , ask questions on the mail lists, file bugs for areas where your use case can't be handled.
- Email me at stewart@linux.com with your idea

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Thank you!

Questions?

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