How to contribute to OSSelot

A field report

Oliver Fendt and Astrid Spura





My starting position

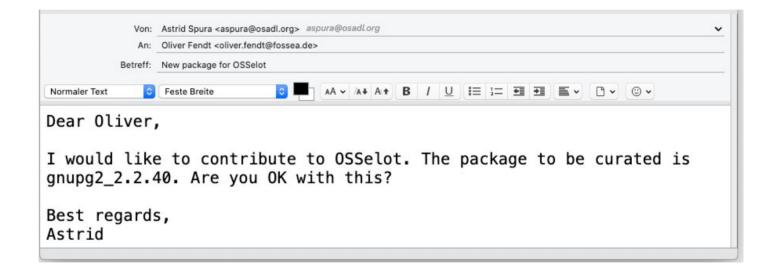
- Working for OSADL for many years
- Practical experience with Open Source compliance and Open Source licenses
- Started to contribute to OSSelot last year





At the very beginning

- Choose package to be curated
- Inform maintainer about planned contribution







Contributions are very welcome

Dear Astrid,

Yeap, great! Go ahead! We welcome contributions. Everybody is invited to contribute any material, which will ease and / or reduce the effort of OSS license compliance activities:

- Curated license and copyright information of OSS packages
- Articles
- Blog Posts
- Tools
- And other material

All contributions must be licensed under Creative Commons Public Domain Dedication: CC0-1.0

Warm regards

Oliver





In case you do not know

• We require a Certificate of Origin:

Signed-off-by: Joanna Doe (jo.doe@happy.hacking.com)

- In case you want to contribute in the context of a company, please clarify first with your employer that you are allowed to do the contribution.
- If you want to contribute, but you do not want that your name / your company's name is disclosed, we offer a way to do so.





In case you do not know

• If you want to contribute curated license and copyright information of OSS packages – the first packages shall not be that complicated.

gnupg2_2.2.40 is fine – go for it!





Let's get to it

- Download package (as upstream as possible, e.g. from original project website)
- Save the package on my computer
- Note the download URL for later
- Upload package in FOSSology (Upload from file)
- Scan the package



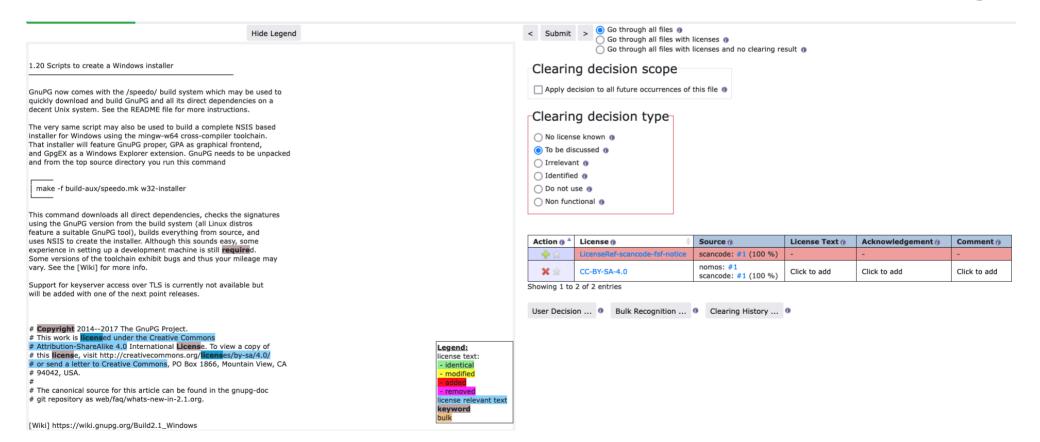


It's curation time

	filter for scan results 🔻	filter for edited results 🔻	Open		Edit Decisions			Clea	
Files	Scanner Results (N: nomos, M: monk, Nk: ninka, I: reportImport, O: ojo, S: scancode, Sp: spasht, Rs: reso)	Edited Results	Clearing Status	Cleared / Open / Total	Actions	Scanner Count	Concluded License V	License Name	
agent	FSFULLR, GPL-3.0+, LicenseRef-scancode-fsf- unlimited-no-warranty, No_license_found		•	0 / 26 / 27	[Tag][Edit][Bulk]	501		GPL-3.0+	
	,			:	[View][Info]	136	0	GPL-2.0+	
am/cmacros.am	GPL-3.0+ [N][S: 100%]		•	0/1/1		115	0	LGPL-3.0+	
						109	0	FSFULLR	
	Autoconf-exception, blessing, BSD-3-Clause, bzip2-1.0.6, Dual-license, FSFAP, FSFULLR, GPL, GPL-3.0+, GPL-2.0, GPL-2.0+, GPL-3.0, GPL-3.0+, JSON, LGPL, LGPL-2.0+, LGPL-2.1+, LGPL-3.0+, LicenseRef-scancode-autoconf-simple-exception, LicenseRef-scancode-	se, FSFAP, FSFULLR, 0, GPL-2.0+, GPL-3.0, LGPL-2.0+, LGPL-2.1+, -scancode-autoconf-			91 77	0	Dual-license LicenseRef- scancode-fsf- unlimited-no- warranty		
build-aux	autoconf-simple-exception, LicenseRef-scancode-free-unknown, LicenseRef-scancode-fsf-unlimited-no-warranty, LicenseRef-scancode-public-domain, LicenseRef-scancode-		•	0 / 23 / 34	[Tag][Edit][Bulk]	45	0	GPL-1.0+	
Duliu-aux						24	0	LGPL-2.1+	
				14	0	See-URL			
	tex-exception, LicenseRef-scancode-unknown- license-reference, MIT, No_license_found,					14	0	Autoconf- exception	
	Public-domain, Public-domain-ref, TeX- exception, WebM, X11, Zlib AGPL-3.0+, BSD, BSD-3-Clause, BSD-style, Dual-license, FSFULLR, GPL-1.0+, GPL-2.0+,					13	0	LicenseRef- scancode- unknown- license-reference	
common	GPL-2.0-with-autoconf-exception, GPL-3.0+, LGPL-2.0+, LGPL-2.1, LGPL-2.1+, LGPL-3.0, LGPL-3.0+, LicenseRef-scancode-fsf-unlimited- no-warranty, LicenseRef-scancode-generic-		•	0 / 142 / 145	[Tag][Edit][Bulk]	13	0	LicenseRef- scancode-free- unknown	
	exception, LicenseRef-scancode-unknown- license-reference, No_license_found							12	0
dirmngr	Apache-2.0, Dual-license, FSFULLR, GPL, GPL-1.0+, GPL-2.0+, GPL-3.0+, LicenseRef-scancode-bsd-original-uc-1986, LicenseRef-scancode-fsf-unlimited-no-warranty, LicenseRef-scancode-public-domain, MIT,		•	0 / 65 / 69	[Tag][Edit][Bulk]	12	0	LicenseRef- scancode- autoconf-simple- exception-2.0	
	No_license_found, OLDAP, OLDAP-2.8, Public-		}	1		11	0	GPL	
	domain		-		-	1	10	0	Public-domain

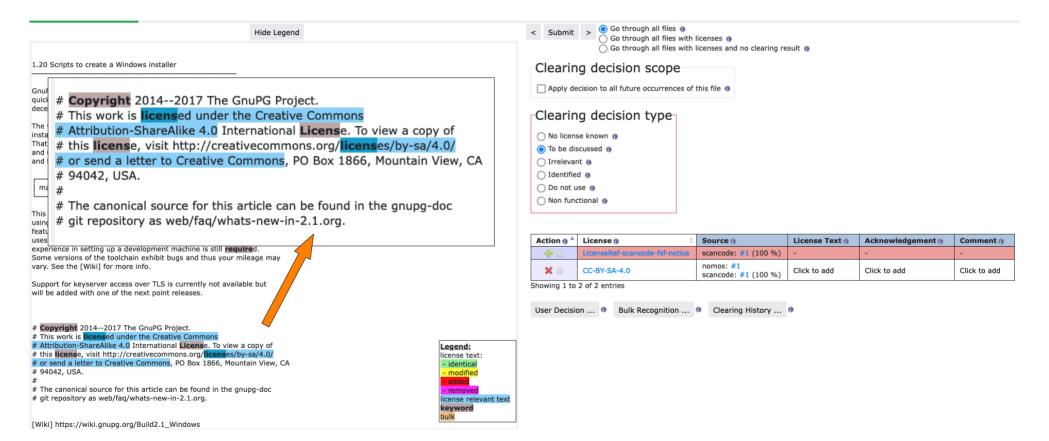
Finished, almost ...

• There may be some files that are not easy to be concluded, e.g.



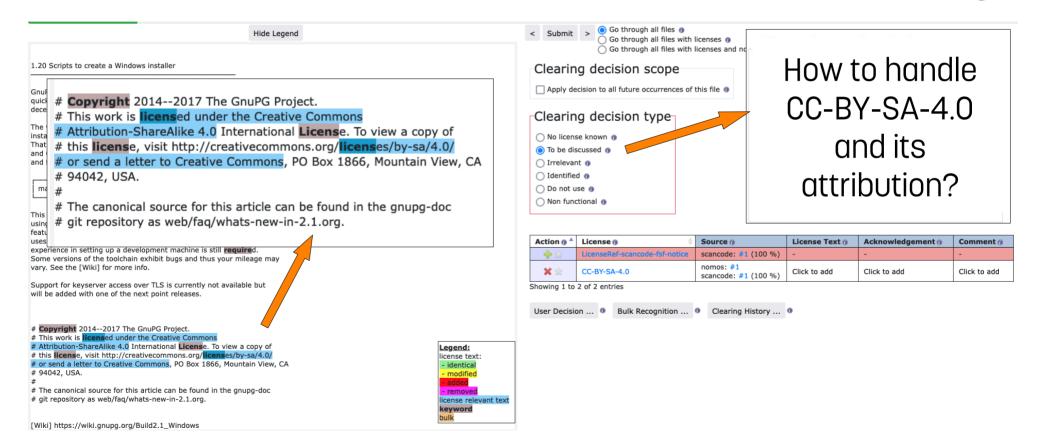
Finished, almost ...

There may be some files that are not easy to be concluded, e.g.



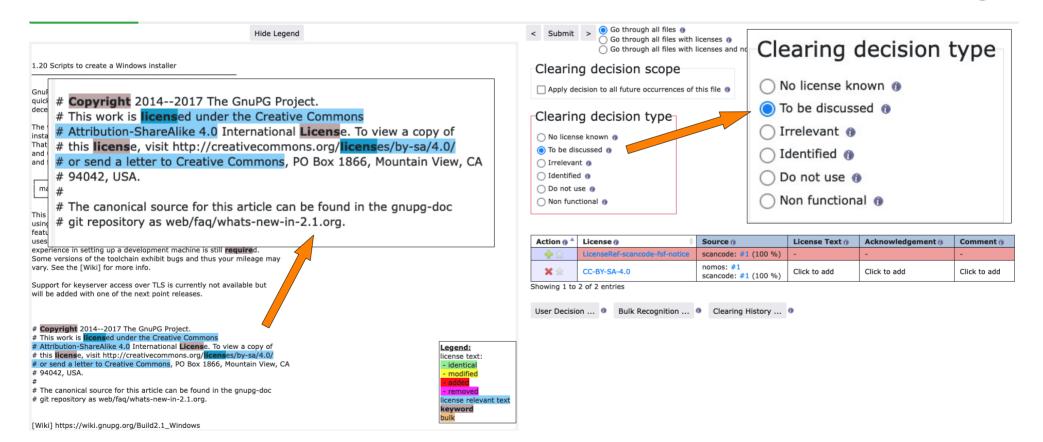
I have questions

There may be some files that are not easy to be concluded, e.g.



We need to talk

• There may be some files that are not easy to be concluded, e.g.



... I need help



Hi Oliver,

I am almost done with the curation of the gnupg2 package. However, there is one file I need help with. Could you please have a look into FOSSology?

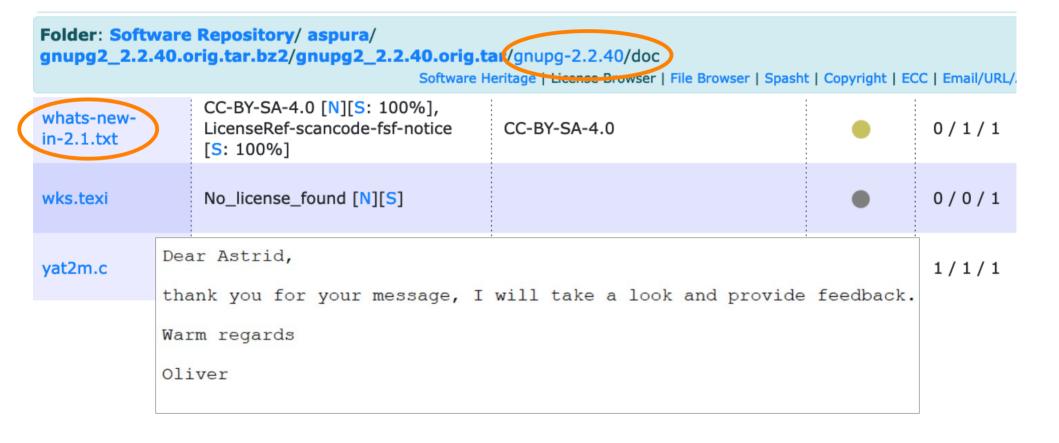
In gnupg-2.2.40/doc/whats-new-in-2.1.txt the scanner rightly found CC-BY-SA-4.0 license which I concluded, but how should I handle the information requirements of the license? Shall I use the Acknowledgement field in order to insert required information there? How would this look like?

Thanks for your help Astrid





No worries – I will support you



Acknowledgements for CC-BY licenses

```
Dear Astrid,
```

no worries about the attribution. As you rightfully mentioned you can do attributions with the help of the acknowlegment field in Fossology. As far as I understood the CC-BY licenses you need to provide the following data in the attribution text - acknowledgment.

- name of the creator
- copyright notice
- license notice
- disclaimer
- link to the material
- and in case you changed the work you must indicate that you modified the material

In this case the following might be sufficient:

This software includes copyrighted material from the GnuPG Project, Copyright 2014--2017 The GnuPG Project.

This material is licensed under CC-BY-SA-4.0. The license document is available in this document and at https://creativecommons.org/licenses/by-sa/4.0/

For further details please have a look at the file "whats-new-in-2.1.txt in the source code package of GnuPG under doc or at https://git.gnupg.org/cgi-bin/gitweb.cgi?p=gnupg.git;a=blob;f=doc/whats-new-in-

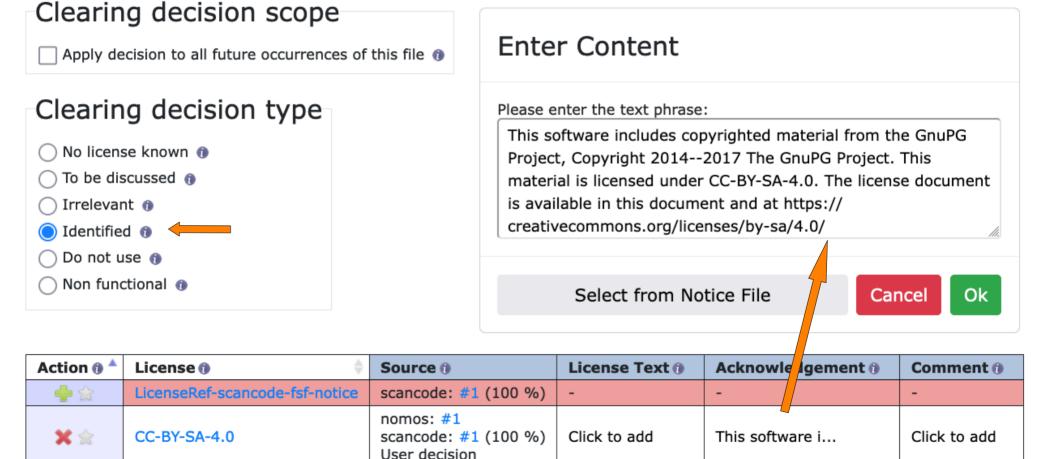
2.1.txt;h=1ea68dc2dfd0245d00c82b8f09b3a734cb07a526;hb=HEAD

Disclaimer of Warranties and Limitation of Liability.

Unless otherwise... (put here the disclaimer of Warranties and the Limitation of Liability from the license text)

Warm regards Oliver

Almost there: Curate to-be-discussed files



Showing 1 to 2 of 2 entries

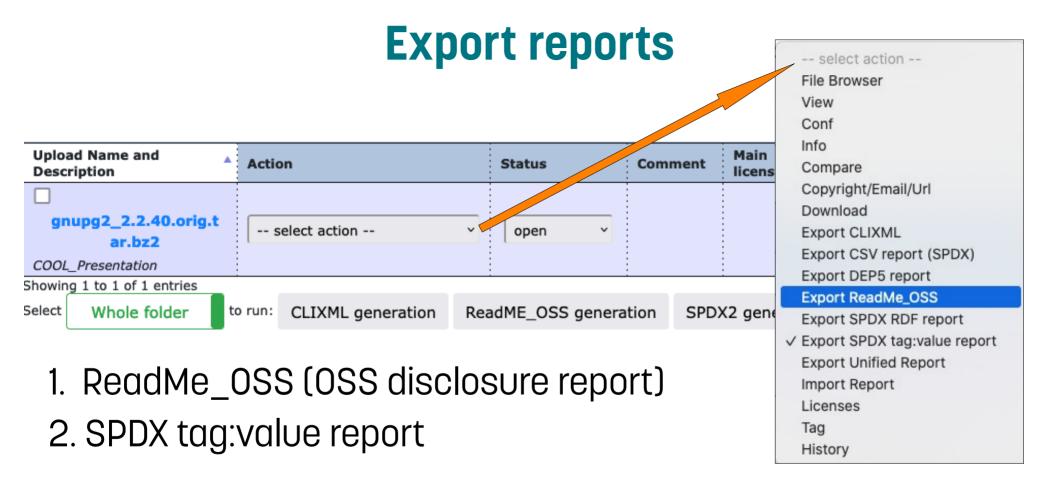
All green, all clear

Display files (tree view or flat)			Clear Display 25 > licenses							
	filter for scan results 🔻	filter for edited results *	Open		Edit Decisions			Clear		
Files	Scanner Results (N: nomos, M: monk, Nk: ninka, I: reportImport, O: ojo, S: scancode, Sp: spasht, Rs: reso)	Edited Results	Clearing Status	Cleared / Open / Total	Actions	Scanner Count	Concluded License v	License Name		
agent	FSFULLR, GPL-3.0+, LicenseRef-scancode-fsf- unlimited-no-warranty, No_license_found	GPL-3.0+, FSFULLRWD	•	26 / 26 / 27	[Tag][Edit][Bulk]	501	500	GPL-3.0+		
am/cmacros.am	GPL-3.0+ [N][S: 100%]	GPL-3.0+	•	1/1/1	[View][Info] [Download][Tag]	136 115	123 108	GPL-2.0+ LGPL-3.0+		
					[Edit]□	109	27	FSFULLR		
	Autoconf-exception, blessing, BSD-3-Clause, bzip2-1.0.6, Dual-license, FSFAP, FSFULLR,					91	110	Dual-license		
	GPL, GPL-1.0+, GPL-2.0, GPL-2.0+, GPL-3.0, GPL-3.0+, JSON, LGPL, LGPL-2.0+, LGPL-2.1+, LGPL-3.0+, LicenseRef-scancode-autoconf-simple-exception, LicenseRef-scancode-autoconf-simple-exception-2.0, LicenseRef-scancode-fsf-unlimited-no-warranty, LicenseRef-scancode-fsf-unlimited-no-warranty, LicenseRef-scancode-tex-exception, LicenseRef-scancode-unknown-license-reference, MIT, No_license_found,	GPL-3.0+, X11, Zlib, Public-domain,				77	0	LicenseRef- scancode-fsf- unlimited-no- warranty		
build-aux		FSFAP, FSFULLR, GPL-2.0-or-later WITH		23 / 23 /	[Tag][Edit][Bulk]	45	0	GPL-1.0+		
bullu-aux		WITH Autoconf-exception, GPL-3.0-or-	•	34		24	20	LGPL-2.1+		
		later WITH TeX-exception, FSFULLRWD				14	0	See-URL		
						14	0	Autoconf- exception		
	Public-domain, Public-domain-ref, TeX- exception, WebM, X11, Zlib					13	0	LicenseRef- scancode-		
	AGPL-3.0+, BSD, BSD-3-Clause, BSD-style, Dual-license, FSFULLR, GPL-1.0+, GPL-2.0+,			142 / 142 / 145				unknown-license- reference		
common	LGPL-2.0+, LGPL-2.1, LGPL-2.1+, LGPL-3.0, LGPL-3.0+, LicenseRef-scancode-fsf-unlimited- GPL-2.0-o	GPL-2.0+, GPL-3.0+, LGPL-2.1+, LGPL-3.0+, BSD-3-Clause, Dual-license, GPL-2.0-or-later WITH Autoconf-	•		[Tag][Edit][Bulk][13	0	LicenseRef- scancode-free- unknown		
	no-warranty, LicenseRef-scancode-generic- exception, LicenseRef-scancode-unknown- license-reference, No_license_found	exception, FSFULLRWD	exception, LicenseRef-scancode-unknown-					12	0	LicenseRef- scancode-public- domain
dirmngr	Apache-2.0, Dual-license, FSFULLR, GPL, GPL-1.0+, GPL-2.0+, GPL-3.0+, LicenseRef-scancode-bsd-original-uc-1986, LicenseRef-scancode-fsf-unlimited-no-warranty, LicenseRef-scancode-public-domain, MIT, No_license_found, OLDAP, OLDAP-2.8, Public-domain	•	65 / 65 / 69	[Tag][Edit][Bulk]	12	0	LicenseRef- scancode- autoconf-simple- exception-2.0			
						11	0	GPL		
						10	4	Public-domain		

Copyright notices look good

Activated FOSSology Findings statements:

Show 50 v entries			
Count •	FOSSology Findings		
111	Copyright (C) 2016 g10 Code GmbH	×	
48	Copyright (C) 2007 Free Software Foundation Inc.	×	
36	Copyright (C) 2009 Free Software Foundation Inc.	×	
26	Copyright (C) 2015 g10 Code GmbH	×	
22	Copyright (C) 2014 Werner Koch	×	
22	Copyright (C) 2004 Free Software Foundation Inc.	×	
20	Copyright (C) 2008 Free Software Foundation Inc.	×	
20	Copyright (C) 1994-2020 Free Software Foundation Inc.	×	
19	Copyright (C) 2017 g10 Code GmbH	×	
15	Copyright (C) 2020 g10 Code GmbH	×	
15	Copyright (C) 2016 Bundesamt für Sicherheit in der Informationstechnik	×	
15	Copyright (C) 2011 Free Software Foundation Inc.	×	
12	Copyright (C) 2015 Werner Koch	×	
		* *	_







Hands-on post processing

- Some post processing must be done to ensure consistency and compliance in documentation.
- Some can be easily scripted, some must be done manually.
- Files must be fitted to naming convention:
 - [package name]-[version number]-SPDX2TV.spdx → gnupg2-2.2.40-SPDX2TV.spdx
 - [package name]-[version number]-OSS-disclosure.txt → gnupg2-2.2.40-OSS-disclosure.txt





Post processing: Example "Creator"

```
## Creation Information
15
    Creator: Tool: spdx2
    Creator: Person: aspura
    (aspura@osadl.org)
18 CreatorComment: <text>
   This document was created using
    license information and a
    generator from Fossology.
  </text>
    Created: 2024-03-07T08:57:19Z
    LicenseListVersion: 2.6
23
    ## Package Information
```

- Replace "username" with clear name of creator
- Contact information like email address is voluntary





Post processing: Example "Creator"

12 13 14 15	## ## Creation Information ##	12 13 14 15	Replaced "aspura" with clear name "Astrid Spura" (contact data voluntary)
16	Creator: Tool: spdx2	16	Creator: Tool: spdx2
17	Creator: Person: aspura		Creator: Person: Astrid Spura
	(aspura@osadl.org)		(aspura@osadl.org)
18	CreatorComment: <text></text>	18	CreatorComment: <text></text>
19	This document was created using	19	This document was created using
	license information and a generator from Fossology.		license information and a generator from Fossology.
20		20	It contains the license and
21	Created: 2024-03-07T08:57:19Z		copyright analysis of gnupg2-
22	LicenseListVersion: 2.6		2.2.40
23		21	Please check "LicenseComments"
24	##		for explanations of concluded
25	## Package Information		licenses





Post processing: Example "Dual license"

```
b5a6e4a4e6a03bc1a08d42e1ca52eb8
     ef3e055de034ac019755040b153ecef
     f6
     FileChecksum: MD5:
150
     48e3f362060d7T26p501e79408f02c1
     LicenseConcluded: GPL-2.0+ AND
151
     LGPL-3.0+ AND LicenseRef-BSD-3-
     Clause-
     e0455a392ce95ba09b5df20d37208ab
     5 AND LicenseRef-Dual-license-
     07513a15837ea90a8e37b791307891e
152
     Licensecomments
     <text>NOASSERTION AND
     NOASSERTION AND NOASSERTION AND
     The information in the file is:
```

- Remove "LicenseRef-Duallicense"
- Have a look into source code file and replace "AND" operator with "OR" operator, if applicable





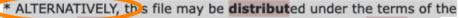
Example: Multi-license info in source code file

GnuPG is free software; you can redistribute and/or modify this part of GnuPG under the terms of either

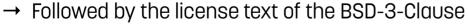
- the GNU Lesser General Public License as published by the Free
- Software Foundation; either version 3 of the License, or (at your option) any later version.

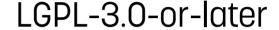


- * the GNU General Public License as published by the Free
- Software Foundation; either version 2 of the License, or (at
- your option) any later version.



- * following license in which case the provisions of this license are
- required INSTEAD OF the GNU Lesser General License or the GNU
- General Public License. If you wish to allow use of your version of
- * this file only under the terms of the GNU Lesser General License or
- * the GNU General Public License, and not to allow others to use your
- * version of this file under the terms of the following license,
- * indicate your decision by deleting this paragraph and the license
- * below.







GPL-2.0-or-later



BSD-3-Clause





Post Processing: Example "Dual license"

150	b5a6e4a4e6a03bc1a08d42e1ca52eb8 ef3e055de034ac019755040b153ecef f6 FileChecksum: MD5: 48e3f36a060d7f26b501e78408f02c1	Removed LicenseRef-Dual-license string and replaced "AND" operators with "OR" operators
	4	4
151	LicenseCopeluded: GPL-2.0 AND	300 LicenseConcluded: LicenseRef-
	LGPL-3.0 AND LicenseRef-BSD-3-	GPL-2.0-or-later OR LicenseRef-
	Clause-	LGPL-3.0-or-later OR
	e0455a392ce95ba09b5df20d37208ab	LicenseRef-BSD-3-Clause-
	5 AND LicenseRef Dual license	e0455a392ce95ba09b5df20d37208ab
	07513a15037ea90a0e37b791307091e	5
	6	301 LicenseComments:
152	LicenseComments:	<text>NOASSERTION AND</text>
	<text>NOASSERTION AND</text>	NOASSERTION AND NOASSERTION AND
	NOASSERTION AND NOASSERTION AND	The information in the file is:
	The information in the file is:	302 "GnuPG is free software; you





Post Processing – Example "Third-party info"

- Sometimes a package includes third-party information.
- Typical file names that can contain such third-party information are COPYING, LICENSE, NOTICE, THIRD-PARTY ...
- If applicable, the OSSelot project provides such thirdparty information in the SPDX tag:value report.





Post Processing – Example "Third-party info"

Packages with "THIRD-PARTY-NOTICE" files

Some packages provide files in which they list the license of included software or software which is needed to run the built package. In most of the cases the files are called "THIRD-PARTY-NOTICE" or similar. According to our experience such files get/are outdated in most of the cases. We discussed with a lawyer how to treat the content of such files. The lawyer's statement was, that we should provide the content of such files unmodified in the created artifacts, although they might be outdated and/or incomplete. Based on this advice we follow currentl the below listed approach: We provide the entire content of such files in the element "PackageLicenseComments:" in the SPDX file:

PackageLicenseComments: licenseInfoInFile determined by Scanners:

Third-party information in a file (extract)

Folder: Software Repository/ aspura/gnupg2_2.2.40.orig.tar/gnupg-2.2.40/COPYING.other

```
# COPYING.other -*- org -*-
#+TITLE: List of code with permissive licenses as used by GnuPG.
#+STARTUP: showall

* DNS resolver (dirmngr/dns.c)

dns.c - Recursive, Reentrant DNS Resolver.

Copyright (c) 2008, 2009, 2010, 2012-2016 William Ahern
```

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:





Post Processing – Example "Third-party info"

- Provide third-party information in the SPDX tag:value report in tag "PackageLicenseComments".
- The text should start with the comment "Additional information found in <full path/file name>:".
- Included text should be separated by starlet lines.





Post Processing – Example "Third-party info"

```
PackageLicenseComments: <text>
   PackageLicenseComments: <text>
                                                     Placed third-party information as text
    licenseInfoInFile determined by
                                               42
                                                      in tag "PackageLicenseComments"
    Scanners:
                                               43
     - nomos ("4.1.0.95".82b3b2)
                                                          separated by starlet lines*
                                               44
    - monk ("4.1.0.95".82b3b2)
41
                                                      scancode ("4.1.0.95".82b3b2)
    - ojo ("4.1.0.95".82b3b2)
42
     - scancode ("4.1.0.95".82b3b2) </text>
                                                   ***************
    PackageLicenseInfoFromFiles:
                                                   Additional information found in: gnupg-
    NOASSERTION
                                                   2.2.40/COPYING.other
    PackageCopyrightText: NOASSERTION
                                                   # COPYING.other -*- org -*-
46
                                                   #+TITLE: List of code with permissive
    Relationship: SPDXRef-DOCUMENT
                                                   licenses as used by GnuPG.
    DESCRIBES SPDXRef-upload733
                                                   #+STARTUP: showall
48
                                               51
49
                                                   * DNS resolver (dirmngr/dns.c)
                                               53
    ## File Information
                                              209
                                                   ************
53
                                                   </text>
                                              210
   ##File
```

* Text truncated





More file formats, please!

- FOSSology export consists of
 - ReadMe_OSS (OSS disclosure report) ✓
 - SPDX tag:value report ✓
- OSSelot provides more file formats such as
 - SPDX json file
 - SPDX rdf.xml file
 - SPDX yaml file





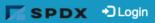
Validate and convert SPDX tag:value report

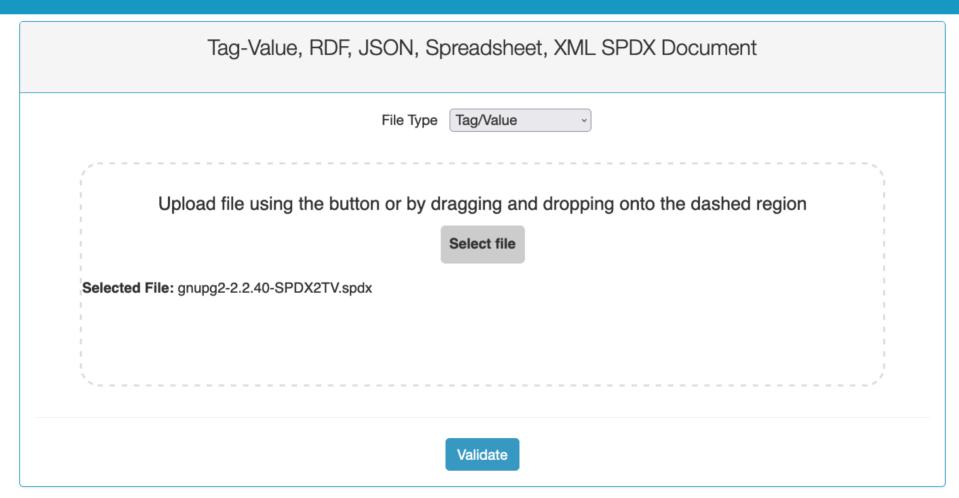
- SPDX Online Tool (https://tools.spdx.org/app)
- Provides a portal to upload, validate and convert SPDX files.
- First validate, then convert.
- Please note:
 Use Command Line Tools for files > approx. 5 MB
 (https://github.com/spdx/tools-java)

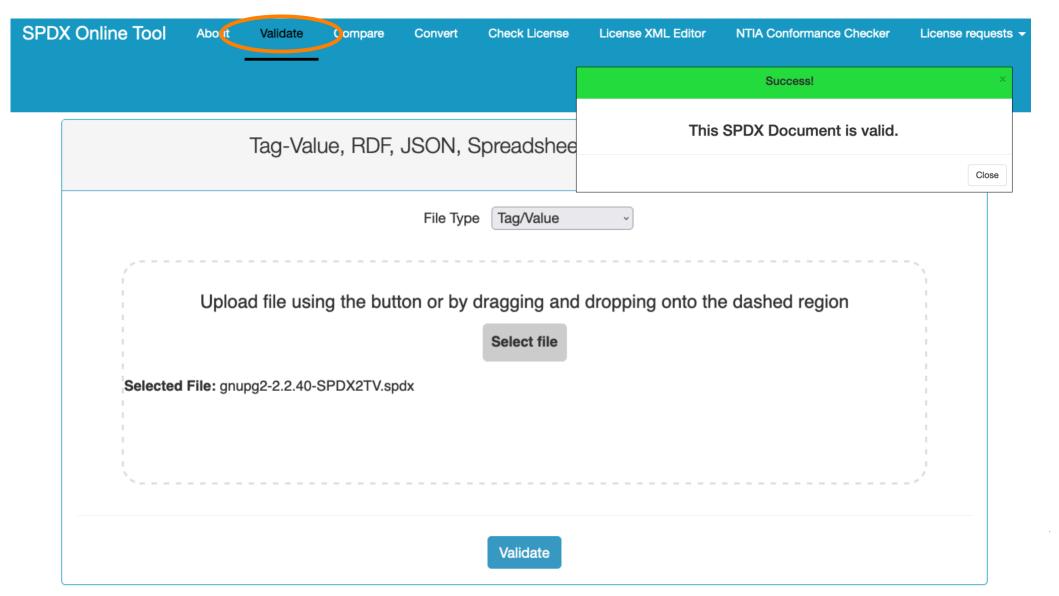


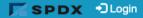


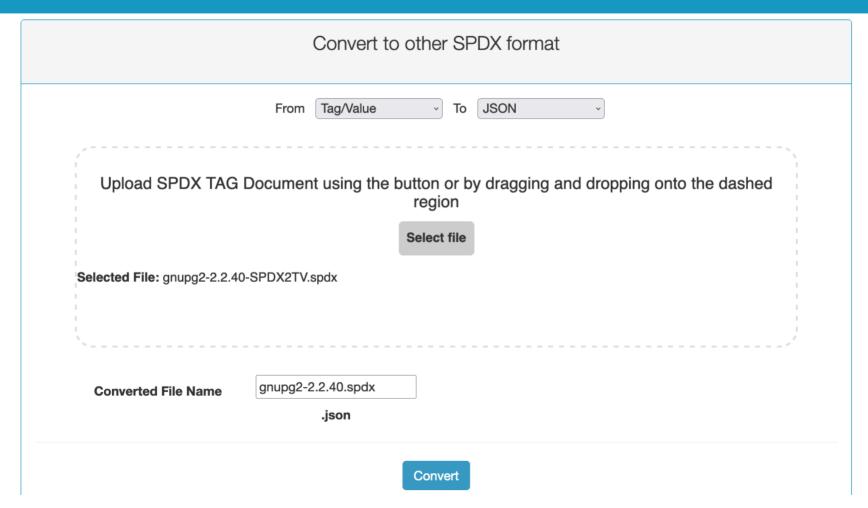


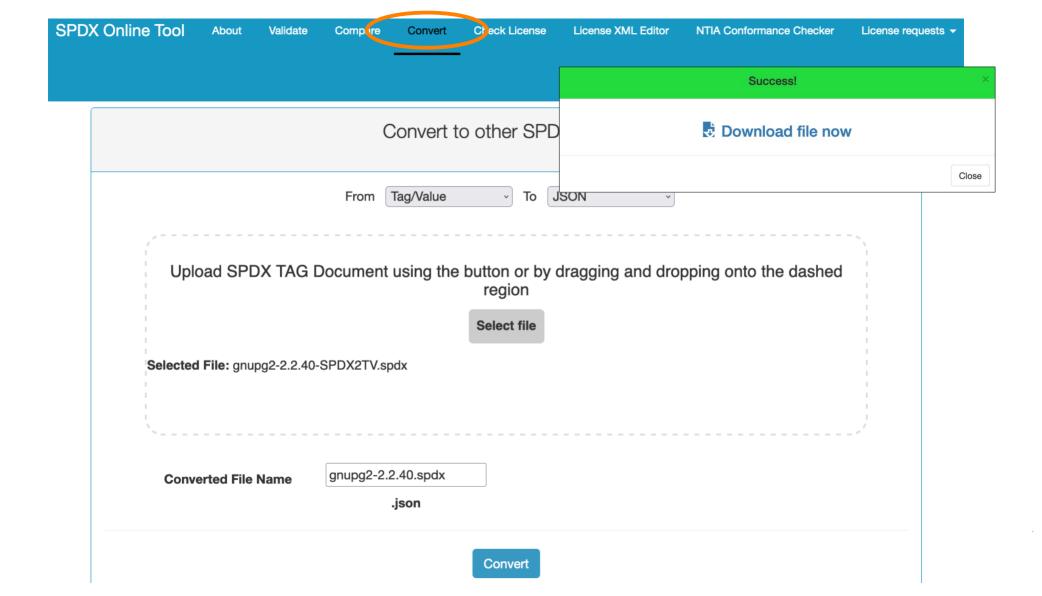












Still one file left

- FOSSology export consists of
 - ReadMe_OSS (OSS disclosure report) ✓
 - SPDX tag:value report ✓
- OSSelot provides more file formats such as
 - SPDX json file ✓
 - SPDX rdf.xml file ✓
 - SPDX yaml file ✓
- Readme file





Create Readme file

- Download Location (as noted earlier)
- Package URL (purl)
- Creator
- Reviewers will be completed by reviewer
- Comment (if applicable)

```
## Download Location
    http://ftp.debian.org/debian/pool/main/g/gnupg2/
    ## Package URL (purl)
    pkg:generic/gnupg2 2.2.40.orig.tar.bz2?
    download_url=http://ftp.debian.org/debian/pool/main/g/gnupg2/
    ## Creator
    Astrid Spura
    ## Reviewers
14
    The information was reviewed by:
16
    ## Comment
20
```





All artifacts are ready to commit

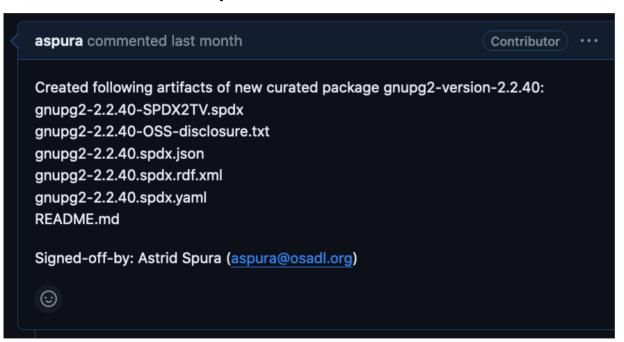
- FOSSology export consists of
 - ReadMe_OSS (OSS disclosure report) ✓
 - SPDX tag:value report ✓
- OSSelot provides more file formats such as
 - SPDX json file ✓
 - SPDX rdf.xml file ✓
 - SPDX yaml file ✓
- Readme file ✓





Commit, Push and Pull Request

Commit and push all artifacts in own fork in Github



 Create Pull Request including "Signedoff-by:" (https://github.com/ Open-Source-Compliance/packageanalysis/blob/main/ CONTRIBUTING.md)





Please review!



Hi Oliver,

I am happy to announce that I have finished the curation of the gnupg2-2.2.40 package. The artifacts have been committed and I have sent a pull request via Github. Please review.

Thanks & best regards, Astrid





Final work – bringing the Pull Request in shape

Dear Astrid,



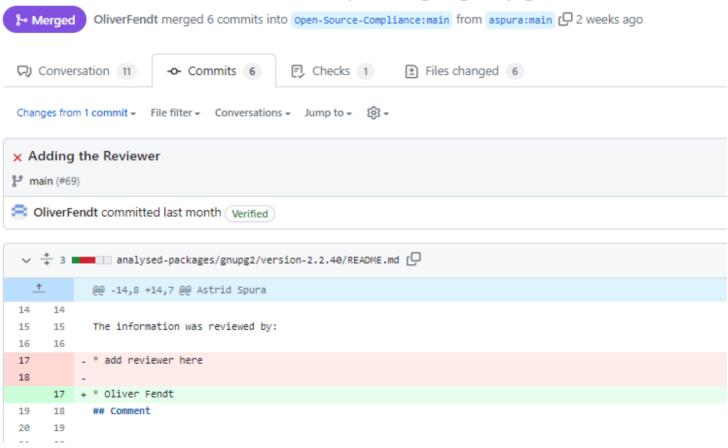
OliverFendt last month

Please provide the exact download link



Last but not least – adding the reviewer

Created artifacts of curated package gridpgz-version-2.2.40



Two heads are better than one

Make corrections and commit again

```
## Download Location
                                                 ## Download Location
   https://ftp.debian.org/debian/pool/m
                                                  https://ftp.debian.org/debian/pool/m
   ain/g/gnupg2/
                                                  ain/g/gnupg2/gnupg2_2.2.40.orig.tar.
                                                  bz2
   ## Package URL (purl)
                                                 ## Package URL (purl)
6
   pkg:generic/gnupg2@2.2.40.orig.tar.b
                                              6
   z2?
                                                  pkg:generic/debian/gnupg2@2.2.40.ori
   download_url=http://ftp.debian.org/d
   ebian/pool/main/g/gnupg2/
                                                  download_url=https://ftp.debian.org/
                                                  debian/pool/main/g/gnupg2/gnupg2_2.2
   ## Creator
                                                  .40.orig.tar.bz2
```

I did it!



Merged #69 into main.

Reply to this email directly, <u>view it on GitHub</u>, or <u>unsubscribe</u>. You are receiving this because you were mentioned.





Ready to use from osselot.org

Curation status

Modified 2 days ago

A total of 340 (210 unique) packages and 1,492,464 files analyzed

Show package URLs

Click on a package name to expand analyzed versions.

Package expand all	Files in package		
gnupg2			
gnupg2/gnupg2-2.2.40	1,145		
gnutls			





Thank you for your attention

Please find more information on OSSelot and how to contribute to it on our

Project website: https://www.osselot.org

Project wiki: https://wiki.osselot.org

Github project repo: https://github.com/0pen-Source-

Compliance/package-analysis/blob/main/README.md



