

# Automated access to OSSelot data via the newly added REST API

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# Four different ways to access OSSelot data

- Raw data in the Github repository  
<https://github.com/Open-Source-Compliance/package-analysis/>
- Package list on **OSSelot**  
<https://www.osselot.org/index.php?s=data>
- Interactive Web tools  
<https://www.osselot.org/index.php?s=tools>  
<https://wiki.osselot.org/>
- Batch processing  
e.g. <https://wiki.osselot.org/licenses.php?bash>  
e.g. <https://rest.osselot.org/json/bash>

# Raw data in the Github repository

<https://github.com/Open-Source-Compliance/package-analysis/>

- The development of the project takes place in the Github repository; therefore, this is the place where all information including history of additions and changes can be found.
- One disadvantage is that automatic analyses, such as checking the availability of a particular package, are not easily available.

# Raw data in the Git repository

Open Source Compliance / package-analysis

Code Issues Pull requests 7 Actions Projects Security Insights

main / package-analysis / analysed-packages

OliverFendt Create Python-3.11.10-OSS-disclosure.txt 4b8556a - 7 hours ago

Name	Last commit message	Last commit date
..		
Alpine	Update musl-1.2.2-OSS-disclosure.txt	5 months ago
BehaviorTree.CPP/version-3.8.0	Added BehaviorTree.CPP-3.8.0.spdx.rdf.xml and Behavio...	last year
FFmpeg	Added FFmpeg-n5.1.1.spdx.rdf.xml	last year
FreeRTOS-Kernel	Create FreeRTOS-Kernel-11.1.0-OSS-disclosure.txt	5 months ago
NetworkManager	Create NetworkManager-1.42.0-SPDX2TV.spdx	4 days ago

# Package list on OSSelot

<https://www.ossebot.org/index.php?s=data>

- The project progress is continuously updated on the "Data" page of the project website.
- The available package versions are displayed by package name and by purl.

# Package list on OSSelot

<https://www.osselot.org/index.php?s=data>

- The project progress is continuously updated on the "Data" page of the project website.
- The available package versions are displayed by package name and by purl.
- In addition, the growth of the number of curated packages over time is plotted.
- However, this is still a manual interactive approach.

# Package list on OSSelot

## Curation status

Modified 10 hours ago

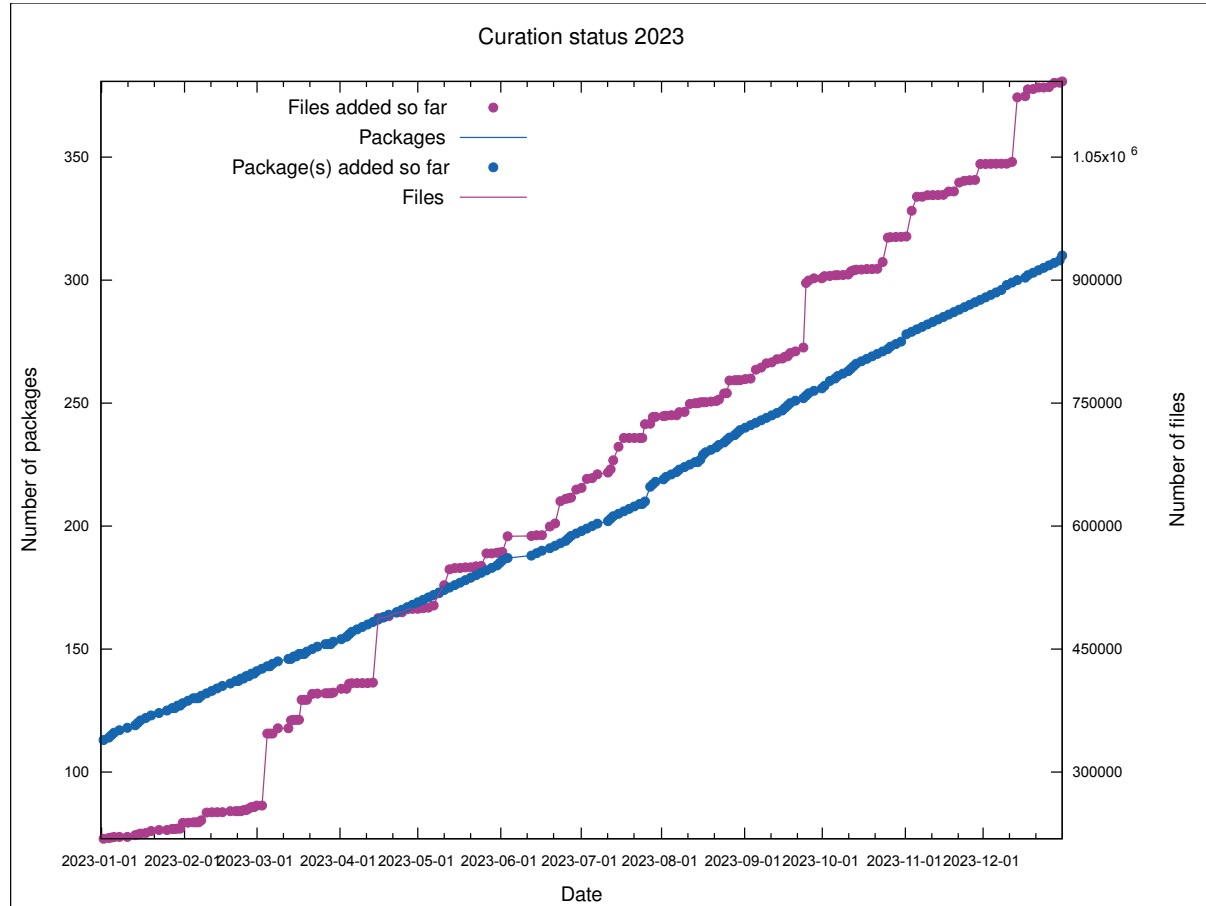
A total of 505 (299 unique) packages and 1,765,136 files analyzed

Show package URLs

Click on a package name to expand analyzed versions.

Package <a href="#">expand all</a>	Files in package
<a href="#">abseil-cpp</a>	
<a href="#">acl</a>	
<a href="#">acl/acl-2.2.53</a>	232
<a href="#">acl/acl-2.3.1</a>	233
<a href="#">acl/acl-2.3.2</a>	237
<a href="#">adduser-debian</a>	

# Progress plot on OSSelot



Automated access to OSSelot data via the newly added REST API  
COOL September 25, 2024



# Interactive Web tools

<https://www.osselot.org/index.php?s=tools>

<https://wiki.osselot.org>

- These Web tools provide widgets to
  - search for the curation status and available versions of a given package,
  - retrieve the disclosure document of a given package and version,
  - obtain an accumulated list of licenses of a given package and version,
  - individually assemble the disclosure document.

# 1. Example widget to search for a package

Enter the name of a package to search for ...

Web interface to immediately run the above described Web script from this page and provide links to the found repositories [ [edit](#) | [edit source](#) ]

Look for other software packages that may have already been curated at [OSSelot](#) and provide links to the related repositories

Search the [OSSelot](#) repository

# 1. Example widget to search for a package

... and the available versions will be displayed ...

Web interface to immediately run the above described Web script from this page and provide links to the found repositories [ [edit](#) | [edit source](#) ]

Look for other software packages that may have already been curated at [OSSelot](#) and provide links to the related repositories

Search the [OSSelot](#) repository

[bash/version-5.1.16](#)

[bash/version-5.2.15](#)

[bash/version-5.2.33](#)

Click here to browse to the Github repository of this package

# 1. Example widget to search for a package

Web interface to immediately run the above described Web script from this page and provide links to the found repositories [ [edit](#) | [edit source](#) ]

Look for other software packages that may have already been curated at [OSSelot](#) and provide links to the related repositories

Search the [OSSelot](#) repository

[bash/version-5.1.16](#)

[bash/version-5.2.15](#)

[bash/version-5.2.33](#)

Click here to browse to the Github repository of this package

... then click on a version to browse to the Github repository.

# 1. Behind the widget is a simple URL request

- The widgets are explained on <https://wiki.ossebot.org>. They can easily be added to a company's intranet server page.
- The package search can also be executed from command line:  

```
$ wget -O - https://www.ossebot.org/curated.php?bash -q
```

# 1. Behind the widget is a simple URL request

- The widgets are explained on <https://wiki.ossebot.org>. They can easily be added to a company's intranet server page.
- The package search can also be executed from command line:

```
$ wget -O - https://www.ossebot.org/curated.php?bash -q  
<pre>  
bash/version-5.1.16  
bash/version-5.2.15  
bash/version-5.2.32  
</pre>
```

# Check packages of an embedded system

- An embedded system is maintained using a package manager
- The list of installed packages is available through
  - `dpkg -l | grep ^ii | awk '{print $2,$3}'`
  - `rpm -qa`
  - `pacman -Q`
  - etc.
- Run a script with the essential lines

```
result=`wget -q0 - https://www.osselot.org/curated.php?$package`  
if test "$result"  
then  
    echo -n Found package $package  
fi
```

# Check packages of an embedded system

The output may look like

```
Found package acl, WITH version match 2.3.1
Found package alsa-lib, WITH version match 1.2.8
Found package alsa-ucm-conf
Found package argon2, WITH version match 20190702
Found package attr, WITH version match 2.5.1
Found package audit
Found package bash, WITH version match 5.1.16
Found package brotli, WITH version match 1.0.9
Found package bzip2, WITH version match 1.0.8
Found package ca-certificates
Found package coreutils
Found package cryptsetup, WITH version match 2.6.1
```

...



## 2. Example widget to get a license list

Enter the name of a package to get a license list ...

Web interface to immediately use the above described script and [search](#) for a given package and provide a list of licenses [ [edit](#) | [edit source](#) ]

Look for other software packages that may have already been curated at [OSSelot](#) and provide links to display the licenses that are used by a particular version

Search for an [OSSelot](#) list of concluded licenses

[bash/version-5.1.16](#)

[bash/version-5.2.15](#)

[bash/version-5.2.32](#)

## 2. Example widget to get a license list

... and the licenses in use will be displayed ...

Web interface to immediately use the above described script and [search](#) for a given package and provide a list of licenses [ [edit](#) | [edit source](#) ]

Look for other software packages that may have already been curated at [OSSelot](#) and provide links to display the licenses that are used by a particular version

Search for an [OSSelot](#) list of concluded licenses

**bash/version-5.1.16:**

BSD-4-Clause-UC AND HPND	License-of-FSF-Licenses
FSF AND FSFUL	Manpage-Copyleft
FSF-with-disclaimer-of-warranty	MIT-Permission-Notice
FSF-with-disclaimer-of-warranty AND FSFULLR	NOASSERTION
FSFAP	Permission-Notice
FSFUL	Permission-notice-gettext
FSFULLR	Permission-Notice_gettext
GFDL-1.3-no-invariants-or-later	Public-domain
GFDL-1.3-no-invariants-or-later AND License-of-FSF-Licenses	Public-domain AND X11
GFDL-1.3-or-later	
GNU-Manpages	
GPL-2.0-or-later	
GPL-2.0-Unnamed-License-with-autoconf-exception	
GPL-3.0-only	
GPL-3.0-only AND OFL-1.1	
GPL-3.0-or-later	
GPL-3.0-or-later AND Public-domain	
GPL-3.0-Unnamed-License-with-autoconf-exception	
GPL-3.0-Unnamed-License-with-bison-exception	
GPL-3.0-Unnamed-License-with-Tex-exception	

## 2. Example widget to get a license list

- The license retrieval can also be executed from command line:  
`$ wget -O - https://www.ossebot.org/licenses.php?bash/version-5.1.16 -q`

## 2. Example widget to get a license list

- The license retrieval can also be executed from command line:

```
$ wget -O - https://www.ossebot.org/licenses.php?bash/version-5.1.16 -q
```

```
<pre>
```

```
BSD-4-Clause-UC AND HPND
```

```
FSF AND FSFUL
```

```
FSF-with-disclaimer-of-warranty
```

```
FSF-with-disclaimer-of-warranty AND FSFULLR
```

```
FSFAP
```

```
FSFUL
```

```
FSFULLR
```

```
GFDL-1.3-no-invariants-or-later
```

```
GFDL-1.3-no-invariants-or-later AND License-of-FSF-Licenses
```

```
GFDL-1.3-or-later
```

```
GNU-Manpages
```

```
GPL-2.0-or-later
```

```
GPL-2.0-Unnamed-License-with-autoconf-exception
```

```
GPL-3.0-only
```

```
GPL-3.0-only AND OFL-1.1
```

```
GPL-3.0-or-later
```

```
...
```

# Wide variety of disclosure document formats

Default on [https://wiki.osselot.org/index.php/DIY\\_Disclosure\\_files](https://wiki.osselot.org/index.php/DIY_Disclosure_files)

## Overall design

- Unreferenced licenses, then copyright notices (unmodified SPDX standard)
- Unreferenced licenses, then copyright notices by file
- Copyright notices and license references by file, then referenced licenses
- Referenced license templates, then copyright notices and license references by file with verbatim texts of non-template BSD-type licenses
- Referenced license templates, then copyright notices and license references by file with verbatim texts of all non-template licenses
- Copyright notices and verbatim license texts by file

## Additional features

- Include SHA256 checksums
- Number files consecutively
- Prepend package information

# Wide variety of disclosure document formats

## Recommended

### Overall design

- Unreferenced licenses, then copyright notices (unmodified SPDX standard)
- Unreferenced licenses, then copyright notices by file
- Copyright notices and license references by file, then referenced licenses
- Referenced license templates, then copyright notices and license references by file with verbatim texts of non-template BSD-type licenses
- Referenced license templates, then copyright notices and license references by file with verbatim texts of all non-template licenses
- Copyright notices and verbatim license texts by file

### Additional features

- Include SHA256 checksums
- Number files consecutively
- Prepend package information

# 3. Example widget for DIY disclosure documents

Enter the name of a package to get a DIY disclosure document ...

Web interface to immediately use the above described script and [search](#) for a particular package to create a disclosure document according to the given settings [ [edit](#) | [edit source](#) ]

## Overall design

- Unreferenced licenses, then copyright notices (unmodified SPDX standard)
- Unreferenced licenses, then copyright notices by file
- Copyright notices and license references by file, then referenced licenses
- Referenced license templates, then copyright notices and license references by file with verbatim texts of non-template BSD-type licenses
- Referenced license templates, then copyright notices and license references by file with verbatim texts of all non-template licenses
- Copyright notices and verbatim license texts by file

## Additional features

- Include SHA256 checksums
- Number files consecutively
- Prepend package information

Look for software packages that may have already been curated at [OSSelot](#) and provide links to the related individually designed disclosure documents that will be created on the fly

 OSSelot disclosure document"/>  
[bash/version-5.1.16](#)  
[bash/version-5.2.15](#)  
[bash/version-5.2.32](#)

# 3. Example widget for DIY disclosure documents

... and the DIY disclosure document will be displayed:

```
PackageName: bash-5.1.16.tar.gz
PackageVerificationCode: 1347a922b433d4cd7c17c3d1a5c024cf47c0a56a
PackageChecksum: SHA256: 5bac17218d3911834520dad13cd1f85ab944e1c09ae1aba55906be1f8192f558
PackageLicenseDeclared: NOASSERTION
```

-----

```
FileName: bash-5.1.16.tar.gz/bash-5.1.16.tar/bash-5.1.16/lib/intl/plural.c:
FileChecksum: SHA256: 68d5820f7c6bd2b91200b0d388cf1f1e78f0bd2d0141b163b8d2cd5cc570da09
FileCopyrightText:
Copyright (C) 1984, 1989, 1990, 2000, 2001, 2002, 2003, 2004 Free Software Foundation, Inc.
Copyright (C) 2000, 2001, 2005-2009 Free Software Foundation, Inc. Written by Ulrich Drepper <drepper@cygnus.com>, 2000.
```

```
LicenseConcluded: LicenseRef-GPL-3.0-with-bison-exception-8f7cbd89eeb9e12857d471ae5b03f2b3
```

-----

...



# 3. Example widget for DIY disclosure documents

- The retrieval of the DIY disclosure document can also be executed from command line:  

```
$ wget -O - https://www.osselot.org/diydisclosure.php?bash/  
version-5.1.16&-lr&-c&-p -q
```
- The syntax of the URL is:  

```
https://www.osselot.org/diydisclosure.php?<package>/version-  
<version>&<design>&<features>
```
- The conversion is done using the tool *SPDX2Disclosure* available at <https://github.com/osadl/SPDX2Disclosure>

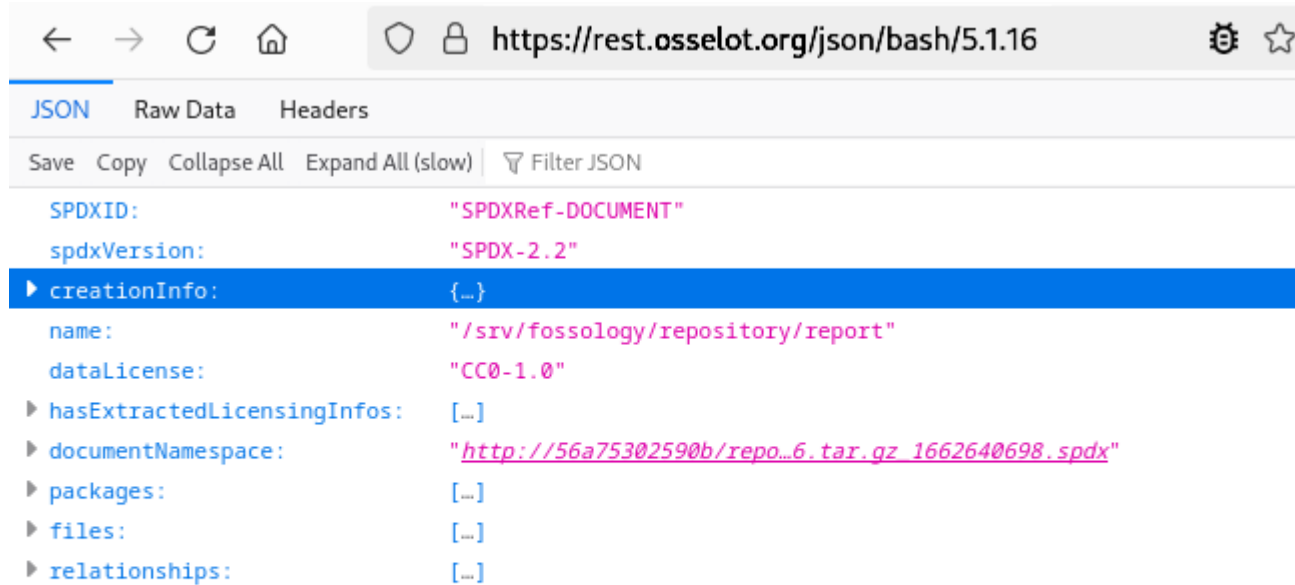
# Batch processing

- Although the Web interface with typical URI-type requests as shown in the examples may already constitute a REST „REpresentational State Transfer“ API, it was requested to provide a separate and independent REST server.
- Therefore,  
<https://rest.ossebot.org/<format>/<package>/<version>>  
was made available.
- Example to obtain the JSON version of the bash-5.1.16 disclosure document:  
<https://rest.ossebot.org/json/bash/5.1.16>

# Batch processing, available formats

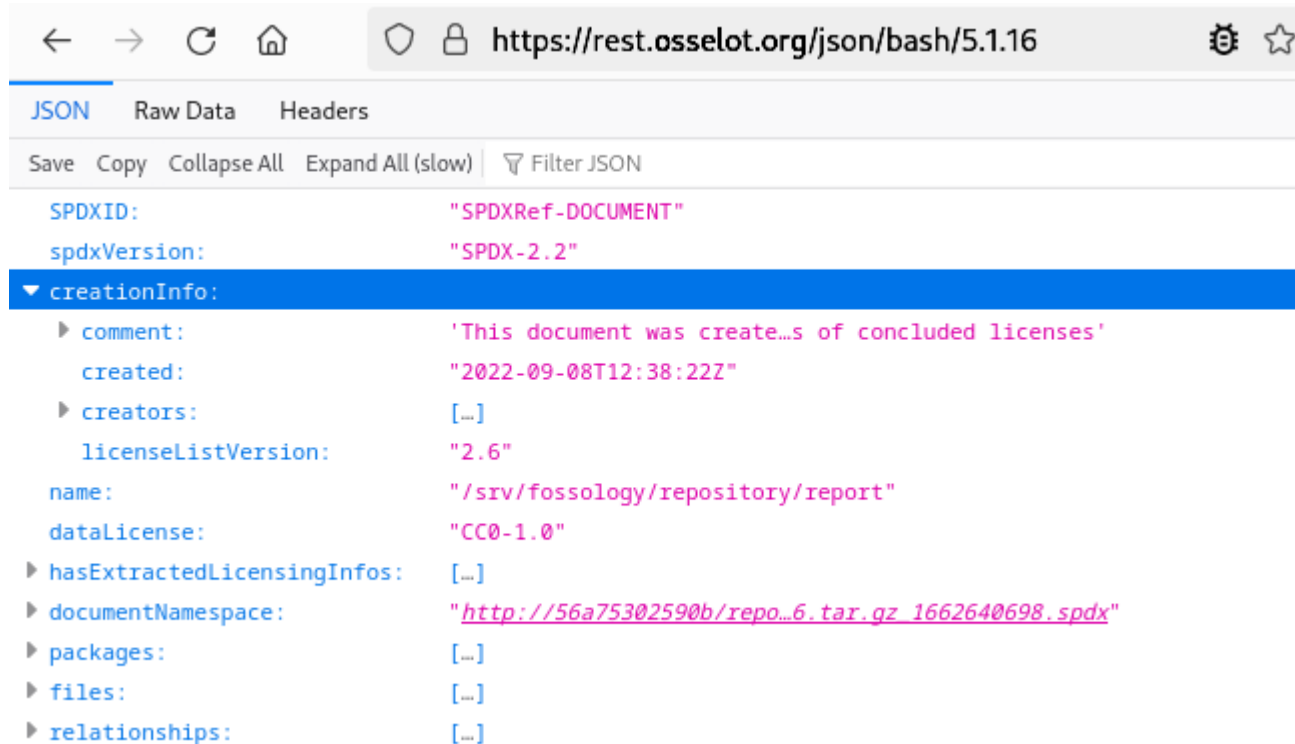
- JSON  
<https://rest.ossebot.org/json/bash/5.1.16> or  
<https://rest.ossebot.org/json/bash>
- RDF-XML  
<https://rest.ossebot.org/xml/bash/5.1.16>
- SPDX2TV  
<https://rest.ossebot.org/spdx/bash/5.1.16>
- YAML  
<https://rest.ossebot.org/yaml/bash/5.1.16>

# Batch processing exemplified from browser



```
← → ↻ 🏠 🔒 https://rest.ossebot.org/json/bash/5.1.16 🐛 ☆  
JSON Raw Data Headers  
Save Copy Collapse All Expand All (slow) 🔍 Filter JSON  
SPDXID: "SPDXRef-DOCUMENT"  
spdxVersion: "SPDX-2.2"  
▶ creationInfo: {...}  
  name: "/srv/fossology/repository/report"  
  dataLicense: "CC0-1.0"  
▶ hasExtractedLicensingInfos: [...]  
▶ documentNamespace: "http://56a75302590b/repo...6.tar.gz\_1662640698.spdx"  
▶ packages: [...]  
▶ files: [...]  
▶ relationships: [...]
```

# Batch processing exemplified from browser



```
← → ↻ 🏠 🔒 https://rest.ossebot.org/json/bash/5.1.16 🐞 ☆
JSON Raw Data Headers
Save Copy Collapse All Expand All (slow) 🔍 Filter JSON
SPDXID: "SPDXRef-DOCUMENT"
spdxVersion: "SPDX-2.2"
▼ creationInfo:
  ▶ comment: 'This document was create...s of concluded licenses'
  ▶ created: "2022-09-08T12:38:22Z"
  ▶ creators: [...]
  ▶ licenseListVersion: "2.6"
  ▶ name: "/srv/fossology/repository/report"
  ▶ dataLicense: "CC0-1.0"
  ▶ hasExtractedLicensingInfos: [...]
  ▶ documentNamespace: "http://56a75302590b/repo...6.tar.gz\_1662640698.spdx"
  ▶ packages: [...]
  ▶ files: [...]
  ▶ relationships: [...]
```

# tl;dr

<https://wiki.osselot.org>



Main page  
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Help about MediaWiki

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Special pages  
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Main Page **Discussion**

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More ▾

Search OSSelot



## Main Page

Welcome to the **OSSelot** Wiki! [\[ edit \]](#) [\[ edit source \]](#)

This Wiki was created to facilitate day-to-day work with the resources of the **OSSelot** project [↗](#), especially when accessing them in batch mode, e.g. as part of a software release build.

**Search for a package** [\[ edit \]](#) [\[ edit source \]](#)

**Find out** whether a particular version of a software package is supported by **OSSelot** and has already been curated. A particular Web script is provided for this purpose, and an interactive Web interface is available to test and use this feature.

Obtain **disclosure files** [\[ edit \]](#) [\[ edit source \]](#)

# https://wiki.osselot.org

A shell script is provided to encapsulate the **Web search script** and obtain the related disclosure files. Another interactive Web interface is available to test and use this feature.

Create individually designed **do-it-yourself disclosure files** [\[ edit \]](#) [\[ edit source \]](#)

Define a set of custom characteristics of what the disclosure file should look like, search for a package and create a custom disclosure file for it.

Obtain **licensing information** [\[ edit \]](#) [\[ edit source \]](#)

Another Web script is available that also encapsulates the internal algorithm of the **Web search script**, but then generates a list of licenses that are used in a given software package. The script accepts as argument either a package name or a package name along with a version. In the former case the licenses of all available versions are listed, whereas in the latter the output is restricted to the specified version.

Obtain curation data in various formats using a **REST interface** [\[ edit \]](#) [\[ edit source \]](#)

The entire curation data of a software package can be retrieved in **JSON** format, curation data of a particular version can be retrieved in **RDF/XML**, **SPDX2TV** or **YAML** format.

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