# OSS License Compliance kurz erklärt

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## Open Source

#### Wie sieht denn eine Open Source Lizenz aus?

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# Wie macht das denn Chromium / Firefox?

- Chromium:
  - Über Chromium -> Open-Source-Software
- Google Chrome auf Android:
  - Einstellungen -> Über Google Chrome -> Rechtliche Hinweise ->
     Open Soruce-Lizenzen
- Firefox:
  - Help -> About Firefox -> Licensing Information

## Theorie OSS Lizenzen

#### Geschichte

- Richard Stallman, MIT, Software Entwicklung
- Anekdote: Laser Drucker, der E-Mail verschickt
- 80er: Software Lizensierung, Dongles, Time-Bombs, etc.
- Siehe auch: John "Maddog" Hall
- Beginn Free Software Foundation und GNU Projekt

#### **Ziele Freier Software**

- Jedermann
  - Benutzung
  - Verbreitung
  - Veränderung
  - Veränderung und Verbreitung
- Freie Software ist nicht gleich Open Source Software

#### **Open Source Lizenzen**

- GNU Lizenzen
- OSI Definition, weitere (z.B. Debian, Apache)
- SPDX License List: ca. 380 Lizenzen

#### Permissive vs. Copyleft: Permissive, Beispiel MIT Lizenz

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#### Permissive vs. Copyleft: Copyleft, Beispiel GPL-2.0

- Unterschied zu Permissive Licensing
  - (Lizenztext, Copyrights ebenfalls)
  - Source code bereitstellen, auch als Angebot
  - Modifikationen unter originaler Lizenz
  - Modifikationen kennzeichnen

#### Lizenzhandling

- Oftmals: Copyright Kennzeichnungen
- Oftmals: Lizenztexte
  - Identifikation der Lizenztexte, bekannte Lizenzen
  - Extraktion der Lizenztexte: neue, modifizierte Lizenzen

# Warum brauchen wir Tool Unterstützung?

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- 2. BSD-3-Clause Clear License
- 3. BSD-3-Clause No Nuclear License
- 4. TOSL / Sleepycat

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- \* Redistributions in any form must be accompanied by information on how to obtain complete source code for this software and any accompanying software that uses this software. The source code must either be included in the distribution or be available in a timely fashion for no more than the cost of distribution plus a nominal fee, and must be freely redistributable under reasonable and no more restrictive conditions. For an executable file, complete source code means the source code for all modules it contains. It does not include source code for modules or files that typically accompany the major components of the operating system on which the executable file runs.

[DISCLAIMER]

## Lizenzierung und Copyrights identifizieren

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#### Tools:

- FOSSology
- Scancode Toolkit
- CodeAurora License Identifier (lid)

• ...

#### Beispiel: Apache Thrift v0.12.0

aclocal	Autoconf-exception, FSF, Freeware, GPL-2.0+, GPL-3.0+, Libtool-exception, No_license_found				
build	Apache-2.0, BSD-2-Clause, BSD-3-Clause, No_license_found				
compiler	Apache-2.0, Bison-exception-2.2, FSF, GPL-2.0+-with-bison-exception, GPL-3.0+, No_license_found				
contrib	Apache-2.0, Freeware, No_license_found, See-file				
debian	Apache, Apache-2.0, LGPL-2.1, MIT, No_license_found, Zlib				
doc	Apache-2.0, LGPL-2.1, LGPL-2.1+, MIT, No_license_found				
lib	Apache-2.0, Apache-possibility, BSD-3-Clause, FSF, No_license_found, OpenSSL, PHP-3.01, WebM				
test	Apache-2.0, FSF, No_license_found				
tutorial	Apache-2.0, FSF, MIT, No_license_found				
.clang-format	No_license_found [N]				
.dockerignore	No_license_found [N]				
.editorconfig	Apache-2.0 [N]				
.rustfmt.toml	No_license_found [N]				
.travis.yml	Apache-2.0 [N]				
CHANGES	LGPL [N]				
CMakeLists.txt	Apache-2.0 [N]				
CONTRIBUTING.md	Apache-2.0 [N]				
LANGUAGES.md	No_license_found [N]				
LICENSE	MIT [N], Apache-2.0 [N][M: 99%]				
Makefile.am	Apache-2.0 [N]				
Makefile.in	FSF [N][M: 83%], Apache-2.0 [N]				
NOTICE	No_license_found [N]				
README.md	Apache-2.0 [N]				
Thrift.podspec	Apache-2.0 [N]				
aclocal m4	CDL 2.0 + [N] ECE [N][M+ 999/] Autoconf exception [N]				

## Bill of Material generieren

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### Tools:

• Plugins für Maven, Gradle, NPM,

• • •

- Eclipse SW360antenna
- Open Source Review Toolkit
- Quartermaster
- Tern

•

# Lizenz Situation verstehen und einschätzen



### License Checklist

https://www.osadl.org/Access-to-raw-data.oss-compliance-raw-data-access.0.html

#### OSADL License Checklist für BSD-2-Clause:

```
USE CASE Source code delivery
YOU MUST Forward Copyright notices
YOU MUST Forward License text
YOU MUST Forward Warranty disclaimer
USE CASE Binary delivery
YOU MUST Provide Copyright notices In Documentation OR Distribution material
YOU MUST Provide License text In Documentation OR Distribution material
YOU MUST Provide Warranty disclaimer In Documentation OR Distribution material
```

#### OSADL License Checklist für Apache-2.0:

```
USE CASE Source code delivery
          YOU MUST Forward License text
          IF Software modification
              YOU MUST Provide Modification notices
              YOU MUST Forward Copyright notices
              YOU MUST Forward Patent notices
              YOU MUST Forward Trademark notices
              YOU MUST Forward Attribution notices
              IF Work Includes File "NOTICE"
                  YOU MUST Delete Irrelevant parts
                  EITHER
                      YOU MUST Forward File "NOTICE"
                  0R
                      YOU MUST Forward File "NOTICE" In Source code
                  0R
                      YOU MUST Forward File "NOTICE" In Documentation
                  0R
                      YOU MUST Display File "NOTICE"
          IF Service offerings
              YOU MUST Indemnify Other contributors
      USE CASE Binary delivery
          YOU MUST Provide License text
          IF Software modification
              IF Work Includes File "NOTICE"
CC By-Sa 4.0
```

# Open Source License Compliance Handbook

https://github.com/finos-osr/OSLC-handbook

#### Open Source License Compliance Handbook

#### BSD 2-Clause "Simplified" License

SPDX License ID

BSD-2-Clause

#### **Conditions**

Description	UB	MB	US	MS	Compliance Notes
Provide copy of license	X	X	X	X	For binary distributions, this information must be provided in "the documentation and/or other materials provided with the distribution"
Provide copyright notice	X	X	X	X	For binary distributions, this information must be provided in "the documentation and/or other materials provided with the distribution"

Nachdem wir nun die Pflichten können, wollen wir:

# Compliance Dokumente generieren



https://spdx.org

## Compliance Dokumente generieren

# Tools:

- FOSSology
- EclipseSW360

• ...

# Compliance Dokumente ausliefern

Zum Beispiel:

- Header über (minified) Code mitschicken, wie bei 1, 2 oder
   3
- Compliance Dokumente in einem GUI Dialog anzeigen
- Compliance Dokumente mit in das JAR packen

•

# Prozesse

## Prozesse

- Rollen
- Aufgaben
- Ergebnisse

#### Rollen

- Verantwortliche Personen oder Gremien für
  - FOSS Anfragen
  - FOSS Management
  - Bewertung von Lizenzfragen
  - Bewertung von Risiken

### Aufgaben

- Prozess(e) um FOSS Compliance herzustellen
- Wie werden Anwendungsfälle umgesetzt
  - Behandlung von Binary Lieferungen
  - Source Code Lieferungen
  - Modifikation von FOSS in Lieferungen
  - Umsetzung von Lizenzpflichten

#### Ergebnisse

- Anfertigung FOSS Compliance Dokumente
  - Einleitender Text
  - Formatierung
  - Dokumentenformat
- Archiverung
  - FOSS Compliance Dokumente
  - Source Code, Installationsanleitung, etc.

## **Community Arbeit**

- Position zur Teilnahme an Communities
  - Durchführung / PublikationContributions
  - Ansprechpartner
  - Freigabeprozess
- Dokumentation in Organisation

#### Kommunikation

- Organisationsweite Definition
- FOSS Policy
  - Position zu FOSS
  - Verantwortliche Ansprechpartner
- FOSS Training
  - Zum Beispiel als Linux Foundation Training LF-191
  - Verbreitung

## Outing

- Dokumentation des Reifegrades
- Herstellererklärung der Umsetzung
- Genannte Elemente vorheriger Slides: Open Chain Project
  - Supply Chain Thema
  - FOSS Compliance für Software Lieferungen



https://www.openchainproject.org/

#### Further reading:

- The Software Freedom Law Center: softwarefreedom.org
- TODO Group Guides: todogroup.org/guides/
- Institut f\u00fcr Rechtsfragen der Freien und Open Source Software: ifross.org
- Freies "Compliance Basics For Developers" online-Training (LFC191): training.linuxfoundation.org/training/compliance-basics-fordevelopers
- tl;drLegal: tldrlegal.com

#### **Further reading:**

# Ibrahim Haddad

http://www.ibrahimatlinux.com/publications.html



# Zusammenfassung

## **Open Source kommt mit**

- Rechten,
- Einschränkungen und
- Pflichten.

#### Um Lizenzen zu erfüllen muss man wissen

- welche man erfüllen muss,
- was der <u>genaue Lizenztext</u> ist und
- <u>welche Copyright Statements</u> dazu gehören.

# Um zu wissen, welche Lizenzen man erfüllen muss, muss man wissen

- welche OSS Projekte man verwendet,
- unter welchen Lizenzen diese tatsächlich stehen,
- wie diese miteinander integriert sind und
- was in welchem (ausgeliefertem) Artefakt landet.

Michael C. Jaeger, Software Compliance Academy

Maximilian Huber, TNG Technology Consulting

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#### Quellen:

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