Open Source in Industry:
License obligations, checklists and redistribution

Legal Heidelberg OSADL Talks, April 28, 2020, Online Session 2

OSADL Open Source License Obligations Checklists
Open Source license obligations exemplified
Redistribution of an entire Linux distribution
License compliance with the OSADL Open Source Policy

Some information on today's sessions

- Please provide feedback on Legal HOT using the online form
  - Use the quick link **osadl.org/FB** (FeedBack), same as osadl.org/?id=3323
- You may ask questions during the session to be answered online, if possible
  - The quick link URL is **osadl.org/AQ** (AskQuestion), same as osadl.org/?id=3321
- You may join an online discussion on all topics of today at 4 pm
  - The quick link URL is **osadl.org/OD** (OnlineDiscussion), same as jitsi.osadl.org
  - Meeting name **OSADLLegalHOT**
  - Username and password will be displayed here after the last presentation

(We will show this slide again at the end of this session)

Open Source licenses

- Open Source licenses are a sub-group of licenses with certain commonly agreed-on properties.
- A number of **common rights** are granted for Open Source software, but the **obligations** of different licenses may **vary greatly**.
- The license obligations of all licenses contained in a project have to be fulfilled.

Canonical license obligations checklists

- The difficulty lies in understanding the **obligations** formulated in different license texts.
- A common understanding of license obligations is required.
- The **compatibility** of different Open Source licenses with each other and with proprietary licenses needs to be evaluated.

Open Source License Obligations Checklists

- **USE CASE** Source code delivery [Ref.]
  - **YOU MUST** *Provide* **Copyright notice** [Ref.] [Interpretation] ⚠ *All or some*
    - **ATTRIBUTE** *Highlighted* [Ref.]
    - **ATTRIBUTE Appropriately** [Ref.]
  - **YOU MUST** *Provide* **Warranty disclaimer** (Warranty disclaimer ⇔) [Ref.]
    - **ATTRIBUTE** *Highlighted* [Ref.]
    - **ATTRIBUTE Appropriately** [Ref.]
  - **YOU MUST NOT** *Modify* **License notices** [Ref.]
  - **YOU MUST NOT** *Modify* **Warranty disclaimer** (Warranty disclaimer ⇔) [Ref.]
  - **YOU MUST** *Provide* **License text** [Ref.]
  - **IF Software modification** [Ref.]
    - **YOU MUST** *Grant* **License** [Ref.]
      - **ATTRIBUTE Original license** [Ref.]
    - **YOU MUST** *Provide* **Modification notice** [Ref.]
    - **YOU MUST** *Provide* **Modification date** [Ref.]
    - **IF Interactive AND** *Display* **License announcement** [Ref.]
      - **YOU MUST** *Display* **License announcement** [Ref.]
      - **YOU MUST** *Display* **Copyright notice** [Ref.] [Interpretation] ⚠ *All or some*
      - **YOU MUST** *Display* **Warranty disclaimer** [Ref.]
      - **YOU MUST** *Reference* **License text** [Ref.]
  - **YOU MUST NOT** *Restrict* **Granted rights** [Ref.] [Interpretation] ⚠ *Legal and/or other means*

https://www.osadl.org/OSLOC
(will be under CC0-1.0)

Checklist elements

- "Language" elements, e.g.
  - **YOU MUST** (to encode a license obligation)
  - **YOU MUST NOT** (to encode a license prohibition)
- Actions to encode what MUST and what MUST NOT be done, e.g.
  - YOU MUST ***Provide***
  - YOU MUST NOT ***Restrict***
- Objects to the actions, e.g.
  - YOU MUST *Provide* **Copyright notice**
  - YOU MUST NOT *Restrict* **Granted rights**

Checklist elements with tooltips

- "Language" eleme
  - **YOU MUST** to
  - **YOU MUST NOT** to encode a license prohibition

The **YOU MUST NOT** language construct specifies an individual license prohibition, i.e. what not to do, probably among other things, to become license compliant. It may optionally be followed by indented language constructs such as ATTRIBUTE that further describe the license prohibition.

- Actions to encode what **MUST** and what **MUST NOT** be done, e.g.
  - **YOU MUST** *Provi*
  - **YOU MUST NOT** *Re*

The action to **Restrict** means to partly or completely withdraw formerly granted permissions or supplied access conditions.

- Objects to the actions, e.g.
  - **YOU MUST** *Provide* Copyright noti
  - **YOU MUST NOT** *Restrict* Granted rig

The term **Granted rights** describes contractual permissions of use or access that otherwise would not exist.

Example: BSD-2-Clause

- USE CASE **Source code delivery** Ref.
  - YOU MUST *Forward* **Copyright notices** Ref.
  - YOU MUST *Forward* **License text** Ref.
  - YOU MUST *Forward* **Warranty disclaimer** Ref.

- USE CASE **Binary delivery** Ref.
  - YOU MUST *Provide* **Copyright notices** In **Documentation** OR **Distribution material** Ref.
  - YOU MUST *Provide* **License text** In **Documentation** OR **Distribution material** Ref.
  - YOU MUST *Provide* **Warranty disclaimer** In **Documentation** OR **Distribution material** Ref.

Example: BSD-2-Clause

☐ USE CASE Source code delivery Ref.

☑ USE CASE Binary delivery Ref.

YOU MUST *Provide* Copyright notices In Documentation OR Distribution material Ref.

YOU MUST *Provide* License text In Documentation OR Distribution material Ref.

YOU MUST *Provide* Warranty disclaimer In Documentation OR Distribution material Ref.

Example: BSD-2-Clause

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

Example: GPL-2.0-only (excerpt)

USE CASE Source code delivery Ref.

USE CASE Binary delivery Ref.

Example: GPL-2.0-only (excerpt)

☐ USE CASE **Source code delivery** Ref.

☑ USE CASE **Binary delivery** Ref.

- ☐ EITHER Ref.
  - YOU MUST *Provide* **Source code** Ref.
- ☐ OR
  - YOU MUST *Provide* **Written offer** (Written offer ⇔) Ref.

Example: GPL-2.0-only (excerpt)

- ☐ USE CASE **Source code delivery** Ref.
- ✓ USE CASE **Binary delivery** Ref.
  - ☐ EITHER Ref.
    - YOU MUST *Provide* **Source code** Ref.
  - ✓ OR
    - YOU MUST *Provide* **Written offer** (Written offer ⇔) Ref.
      - ATTRIBUTE **Duration** 3 years Ref.
      - ATTRIBUTE To **Any third party** Ref.
      - ATTRIBUTE **No profit** Ref.
      - ATTRIBUTE **Delayed source code delivery** Ref.
        - ATTRIBUTE **Machine-readable** Ref.
        - ATTRIBUTE **Customary medium** Ref.
        - ATTRIBUTE **Including Tool chain information** Ref.
        - ATTRIBUTE **Including Installation scripts** Ref.

Example: GPL-2.0-only with reference

✓OR

YOU MUST *Provide* **Written offer** (Written offer ⇔) Ref.

ATTRIBUTE **Duration** 3 years Hide ref.

> b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

ATTRIBUTE To **Any third party** Ref.

ATTRIBUTE **No profit** Ref.

ATTRIBUTE **Delayed source code delivery** Ref.

ATTRIBUTE **Machine-readable** Ref.

ATTRIBUTE **Customary medium** Ref.

ATTRIBUTE **Including Tool chain information** Ref.

ATTRIBUTE **Including Installation scripts** Ref.

Approval and feedback

Request for approval of checklists project participants

Please assist us to validate the above text. When clicking on the below button, you confirm that you approve the text in its current version taking into account the disclaimer below the text.

Approved

Request for feedback from checklists project participants

Please assist us to improve the above text taking into account the disclaimer below the text. Your feedback will be integrated into the text as soon as possible, and you will be notified. We gratefully acknowledge any comments, amendments and additions.

You may type or paste your text here.

Submit

Additional information – Interpretation

- Where a license is unclear, a possible interpretation is given.

YOU MUST NOT *Restrict* **Granted rights** Ref. Interpretation ⚠ *Legal and/or other means*

Additional information – Interpretation

- Where a license is unclear, a possible interpretation is given.

YOU MUST NOT ***Restrict*** **Granted rights** Ref. Hide interpretation

Legal and/or other means: The named 'further restrictions' may relate to the restrictions of this license and, thus, prohibit further restricting legal clauses; however, it also is conceivable that any other means such as technical hindrance methods are included in the meaning of 'further restrictions'.

Additional information – Copyleft clause

- Obligations for derivative works: Is there a copyleft clause? (e.g. MPL-2.0: Yes)

Copyleft clause

- Yes Hide ref.

> All distribution of Covered Software in Source Code Form, including any Modifications that You create or to which You contribute, must be under the terms of this License. You must inform recipients that the Source Code Form of the Covered Software is governed by the terms of this License, and how they can obtain a copy of this License. You may not attempt to alter or restrict the recipients' rights in the Source Code Form.

Additional information – Copyleft clause

- Obligations for derivative works: Is there a copyleft clause?
  (e.g. OpenSSL: Questionable)

Copyleft clause

- Questionable Hide ref.

> The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]

Hide interpretation

> *Questionable copyleft*: The final statement of the appended SSLeay License "The licence and distribution terms for any publically available version or derivative of this code cannot be changed" normally must be interpreted as a copyleft clause, but there is no general consensus on this interpretation. Therefore, a recommendation on the compatibility of the OpenSSL license cannot be given.

Additional information – Patent hints

- Does the license contain patent hints? (e.g. EPL-2.0)

Patent hints

- Yes Hide ref.

b) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in Source Code or other form. This patent license shall apply to the combination of the Contribution and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents. The patent license shall not apply to any other combinations which include the Contribution. No hardware per se is licensed hereunder.
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If Recipient institutes patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Program itself (excluding combinations of the Program with other software or hardware) infringes such Recipient's patent(s), then such Recipient's rights granted under Section 2(b) shall terminate as of the date such litigation is filed.

Additional information – Templates

- Text templates for various circumstances:
  - Acknowledgment
  - Written offer
  - Warranty disclaimer
  - Notices

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Additional information – Templates

- e.g. GPL-2.0: Written offer

```
This product contains software components that are licensed by the holder of the rights
as free software, or Open Source software, under GNU General Public License, Version 2.
The source code for these software components can be obtained from us on a data carrier
(CD, DVD or USB stick) by submitting a request to our customer service department at the
following address within three years after delivery of the product by us:
[Company name]
[Contact]
[Address]
Please provide the following product information
[Name]
[Serial number]
[Date of delivery]
and transfer 5 euros to the account [account information] to cover the costs of providing
the data carrier and shipping it.
```

License compatibility

- Copyright allows to combine software components under different licenses.
- Copying and distributing such a **combined work** is only possible if the licenses are compatible.
- Compatibility is given when there are no conflicting license obligations or prohibitions.
- If two licenses are **unilaterally** compatible, the combined work has to be licensed under one (leading) license.
- If two licenses are **bilaterally** compatible, the combined work may be licensed under either of the involved licenses.

License compatibility

- Guidelines:
  - Copyleft licenses are not compatible with each other.

License compatibility

- Guidelines:
  - Copyleft licenses are not compatible with each other.
- Exception:
  - Explicit exception clauses can make two copyleft licenses compatible. E.g. LGPL-2.1:
    "You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library"

License compatibility

- Guidelines:
  - Copyleft licenses are not compatible with each other.
  - Permissive licenses are bilaterally compatible.

License compatibility

- Guidelines:
  - Copyleft licenses are not compatible with each other.
  - Permissive licenses are bilaterally compatible.
  - Permissive licenses are unilaterally compatible with copyleft licenses.

License compatibility

- Guidelines:
  - Copyleft licenses are not compatible with each other.
  - Permissive licenses are bilaterally compatible.
  - Permissive licenses are unilaterally compatible with copyleft licenses.
- Exception:
  - No compatibility when a permissive license contains additional obligations or requirements that the copyleft license forbids to require.

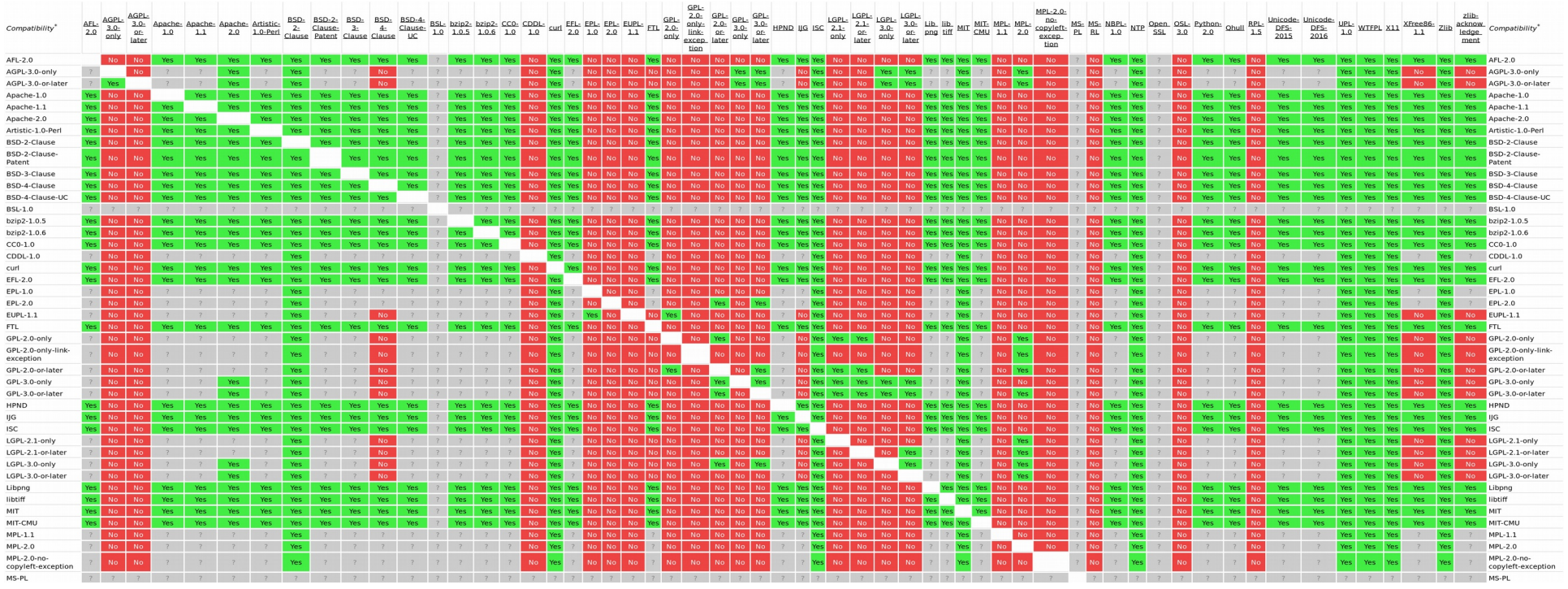
License compatibility

- Guidelines:
  - Copyleft licenses are not compatible with each other.
  - Permissive licenses are bilaterally compatible.
  - Permissive licenses are unilaterally compatible with copyleft licenses.
  - If a license is unclear or the copyleft is questionable, compatibility has to be decided on an individual basis.

License compatibility

- Guidelines:
  - **Copyleft licenses are not compatible with each other.**
  - **Permissive licenses are bilaterally compatible.**
  - **Permissive licenses are unilaterally compatible with copyleft licenses.**
  - **If a license is unclear or the copyleft is questionable, compatibility has to be decided on an individual basis.**

Compatibility Matrix



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Open Source Automation Development Lab (OSADL), Heidelberg

HEIDELBERG OSADL TALKS 2020

OSADL
Open Source Automation Development Lab eG

Compatibility Matrix

⋮

License obligations, checklists and redistribution
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Open Source Automation Development Lab (OSADL), Heidelberg

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OSADL Open Source Automation Development Lab eG

Compatibility Matrix
GPL-2.0-only and BSD-2-Clause

*Compatibility**	AFL-2.0	AGPL-3.0-only	AGPL-3.0-or-later	Apache-1.0	Apache-1.1	Apache-2.0	Artistic-1.0-Perl	BSD-2-Clause	BSD-2-Clause-Patent	BSD-3-Clause	BSD-4-Clause	BSD-4-Clause-UC	BSL-1.0	bzip2-1.0.5
AFL-2.0		No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes
AGPL-3.0-only	?		No	?	?	Yes	?	Yes	?	?	No	?	?	?
⋮														
EUPL-1.1	?	No	No	?	?	?	?	Yes	?	?	No	?	?	?
FTL	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes
GPL-2.0-only	?	No	No	?	?	?	?	Yes	?	?	No	?	?	?
GPL-2.0-only-link-exception	?	No	No	?	?	?	?	Yes	?	?	No	?	?	?
GPL-2.0-or-later	?	No	No	?	?	?	?	Yes	?	?	No	?	?	?
GPL-3.0-only	?	No	No	?	?	Yes	?	Yes	?	?	No	?	?	?
GPL-3.0-or-later	?	No	No	?	?	Yes	?	Yes	?	?	No	?	?	?
HPND	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes

Compatibility Matrix
GPL-2.0-only and BSD-2-Clause

*Compatibility**	AFL-2.0	AGPL-3.0-only	AGPL-3.0-or-later	Apache-1.0	Apache-1.1	Apache-2.0	Artistic-1.0-Perl	BSD-2-Clause	BSD-2-Clause-Patent	BSD-3-Clause	BSD-4-Clause	BSD-4-Clause-UC	BSL-1.0	bzip2-1.0.5
AFL-2.0		No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes
AGPL-3.0-only	?		No	?	?	Yes	?	Yes	?	?	No	?	?	?
⋮														
EUPL-1.1	?	No	No	?	?	?	?	Yes	?	?	No	?	?	?
FTL	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes
GPL-2.0-only	?	No	No	?	?	?	?	Yes	?	?	No	?	?	?
GPL-2.0-only-link-exception	?	No	No	?	?	?	?	Yes	?	?	No	?	?	?
GPL-2.0-or-later	?	No	No	?	?	?	?	Yes	?	?	No	?	?	?
GPL-3.0-only	?	No	No	?	?	Yes	?	Yes	?	?	No	?	?	?
GPL-3.0-or-later	?	No	No	?	?	Yes	?	Yes	?	?	No	?	?	?
HPND	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes

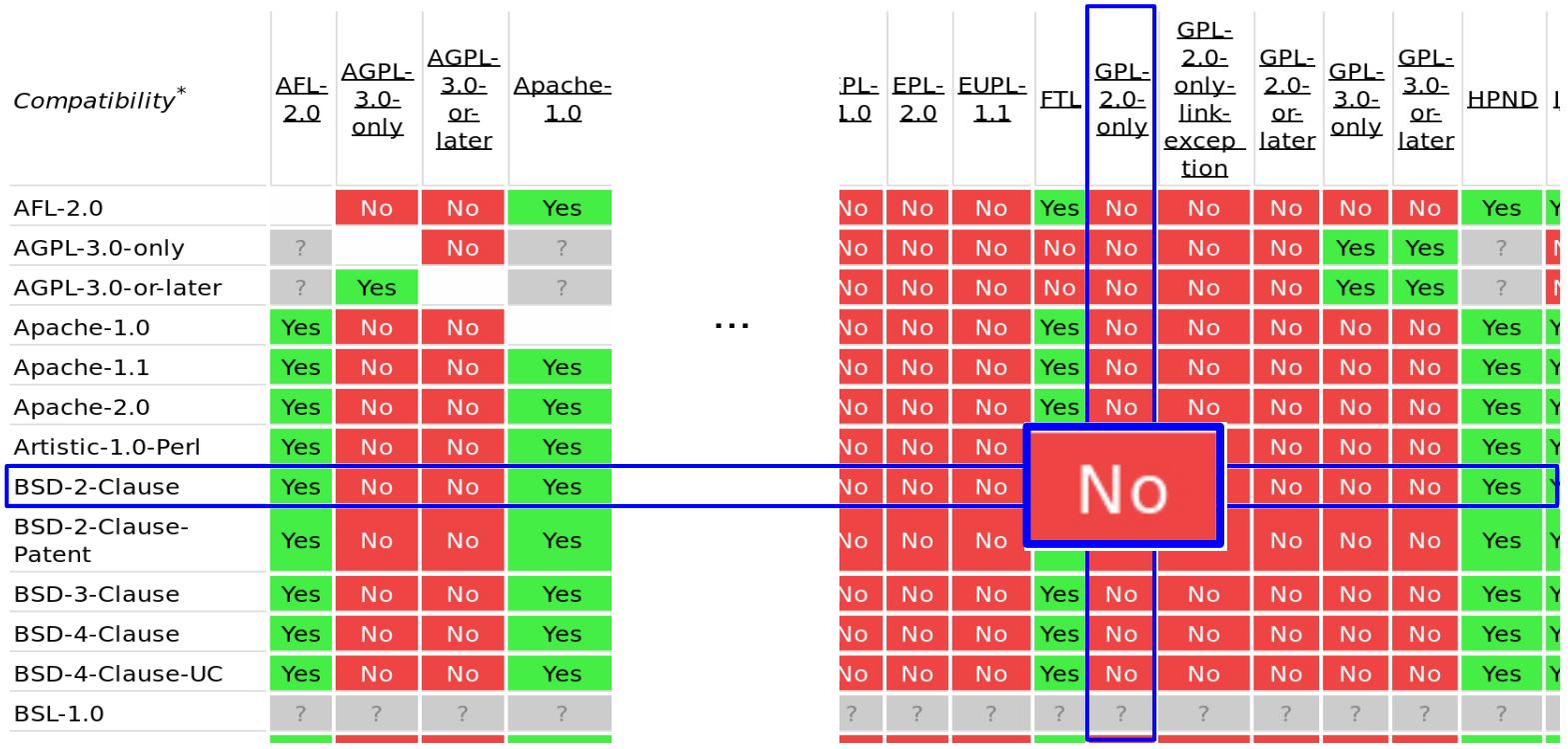
Compatibility Matrix
GPL-2.0-only and BSD-2-Clause

*Compatibility**	AFL-2.0	AGPL-3.0-only	AGPL-3.0-or-later	Apache-1.0	Apache-1.1	Apache-2.0	Artistic-1.0-Perl	BSD-2-Clause	BSD-2-Clause-Patent	BSD-3-Clause	BSD-4-Clause	BSD-4-Clause-UC	BSL-1.0	bzip2-1.0.5
AFL-2.0		No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes
AGPL-3.0-only	?		No	?	?	Yes	?	Yes	?	?	No	?	?	?
⋮														
EUPL-1.1	?	No	No	?	?	?	?	Yes	?	?	No	?	?	?
FTL	Yes	No	No	Yes	Yes	Yes				Yes	Yes	Yes	?	Yes
GPL-2.0-only	?	No	No	?	?	?		Yes		?	No	?	?	?
GPL-2.0-only-link-exception	?	No	No	?	?	?				?	No	?	?	?
GPL-2.0-or-later	?	No	No	?	?	?	?	Yes	?	?	No	?	?	?
GPL-3.0-only	?	No	No	?	?	Yes	?	Yes	?	?	No	?	?	?
GPL-3.0-or-later	?	No	No	?	?	Yes	?	Yes	?	?	No	?	?	?
HPND	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes

Yes

Compatibility Matrix

BSD-2-Clause and GPL-2.0-only

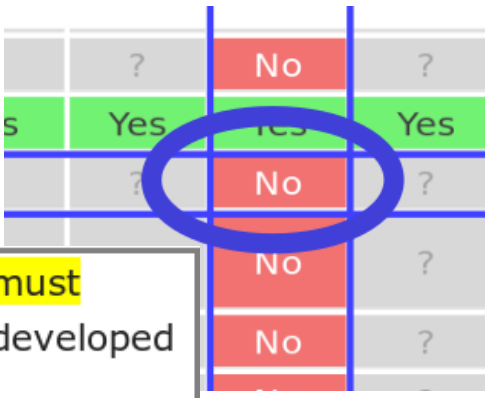


*Compatibility**	AFL-2.0	AGPL-3.0-only	AGPL-3.0-or-later	Apache-1.0	…	PL-1.0	EPL-2.0	EUPL-1.1	FTL	GPL-2.0-only	GPL-2.0-only-link-exception	GPL-2.0-or-later	GPL-3.0-only	GPL-3.0-or-later	HPND	I
AFL-2.0		No	No	Yes		No	No	No	Yes	No	No	No	No	No	Yes	Y
AGPL-3.0-only	?		No	?		No	No	No	No	No	No	No	Yes	Yes	?	N
AGPL-3.0-or-later	?	Yes		?		No	No	No	No	No	No	No	Yes	Yes	?	N
Apache-1.0	Yes	No	No			No	No	No	Yes	No	No	No	No	No	Yes	Y
Apache-1.1	Yes	No	No	Yes		No	No	No	Yes	No	No	No	No	No	Yes	Y
Apache-2.0	Yes	No	No	Yes		No	No	No	Yes	No	No	No	No	No	Yes	Y
Artistic-1.0-Perl	Yes	No	No	Yes		No	No	No				No	No	No	Yes	Y
BSD-2-Clause	Yes	No	No	Yes		No	No	No		No		No	No	No	Yes	Y
BSD-2-Clause-Patent	Yes	No	No	Yes		No	No	No				No	No	No	Yes	Y
BSD-3-Clause	Yes	No	No	Yes		No	No	No	Yes	No	No	No	No	No	Yes	Y
BSD-4-Clause	Yes	No	No	Yes		No	No	No	Yes	No	No	No	No	No	Yes	Y
BSD-4-Clause-UC	Yes	No	No	Yes		No	No	No	Yes	No	No	No	No	No	Yes	Y
BSL-1.0	?	?	?	?		?	?	?	?	?	?	?	?	?	?	

Compatibility Matrix
GPL-2.0-only and BSD-4-Clause

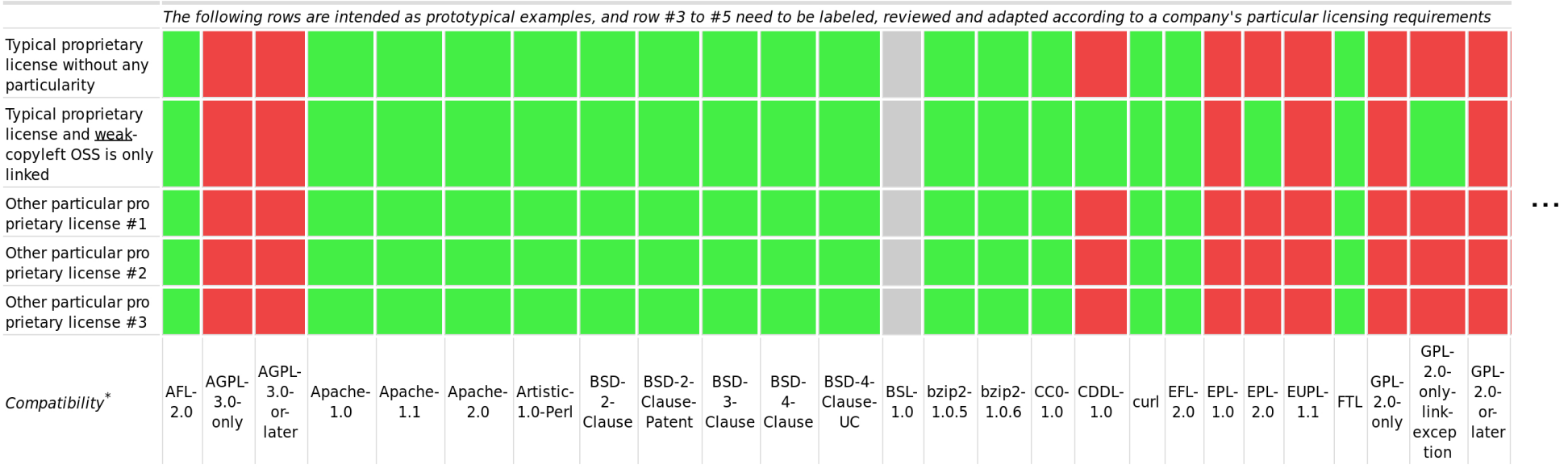
*Compatibility**	AFL-2.0	AGPL-3.0-only	AGPL-3.0-or-later	Apache-1.0	Apache-1.1	Apache-2.0	Artistic-1.0-Perl	BSD-2-Clause	BSD-2-Clause-Patent	BSD-3-Clause	BSD-4-Clause	BSD-4-Clause-UC	BSL-1.0	bzip2-1.0.5
AFL-2.0		No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes
AGPL-3.0-only	?		No	?	?	Yes	?	Yes	?	?	No	?	?	?
⋮														
EUPL-1.1	?	No	No	?	?	?	?	Yes	?	?	No	?	?	?
FTL	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes
GPL-2.0-only	?	No	No	?	?	?	?	Yes	?	?	No	?	?	?
GPL-2.0-only-link-exception	?	No	No	?	?	?	?	Yes	?	?	No	?	?	?
GPL-2.0-or-later	?	No	No	?	?	?	?	Yes	?	?	No	?	?	?
GPL-3.0-only	?	No	No	?	?	Yes	?	Yes	?	?	No	?	?	?
GPL-3.0-or-later	?	No	No	?	?	Yes	?	Yes	?	?	No	?	?	?
HPND	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes

Compatibility Matrix
GPL-2.0-only and BSD-4-Clause



BSD-4-clause	3. All advertising materials mentioning features or use of this software must display the following acknowledgement: This product includes software developed by the organization.
	contradicts
GPL-2.0-only	6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

Compatibility Matrix
Proprietary licenses



	The following rows are intended as prototypical examples, and row #3 to #5 need to be labeled, reviewed and adapted according to a company's particular licensing requirements																									
Typical proprietary license without any particularity																										
Typical proprietary license and weak-copyleft OSS is only linked																										
Other particular pro prietary license #1																										...
Other particular pro prietary license #2																										
Other particular pro prietary license #3																										
*Compatibility**	AFL-2.0	AGPL-3.0-only	AGPL-3.0-or-later	Apache-1.0	Apache-1.1	Apache-2.0	Artistic-1.0-Perl	BSD-2-Clause	BSD-2-Clause-Patent	BSD-3-Clause	BSD-4-Clause	BSD-4-Clause-UC	BSL-1.0	bzip2-1.0.5	bzip2-1.0.6	CC0-1.0	CDDL-1.0	curl	EFL-2.0	EPL-1.0	EPL-2.0	EUPL-1.1	FTL	GPL-2.0-only	GPL-2.0-only-link-exception	GPL-2.0-or-later	

Conclusion

- The freedom to choose the license terms under which conveying a copyright protected work is allowed has led to a large number of different licenses.
- A **canonical language** is required to establish a common understanding of Open Source license obligations.
- The **Open Source License Obligations Checklists** project has encoded the obligations of 63 licenses, as of today.
- In addition, the **compatibility** of these licenses was evaluated.
- **Feedback and approval** from international legal experts is being collected.

Access to the checklists

- For the time being, access to the checklists is granted to everybody on request; please write to office@osadl.org to obtain personal login data.
- Volunteers are welcome to provide feedback on the quality and usability of the checklists.

Why is it so difficult to redistribute a complete Linux distribution?

Scenarios

- A manufacturer of computer boards for embedded systems wants to provide a ready-to-use **“Linux PC”** with a cross toolchain to their customer so that these can develop software for the boards without any overhead.

- A manufacturer of large and complex **embedded systems** wants to avoid the effort of developing their own root filesystem and instead uses an existing complete distribution that he installs on his embedded systems, configures as required and distributes to his customers.

Scenarios

- **“Linux PC”:** The distribution remains unmodified but possibly additional own programs are added.
- **Embedded system:** An existing distribution is modified extensively, e.g. by installing additional drivers and programs.

Why may these Linux distributions not simply be copied and distributed?

Third-party rights on a Linux distribution

- Copyrights of all software authors
- Collective copyrights of the manufacturer of the distribution
- Trademarks of the manufacturer of the distribution
- Patent rights of the respective patent owners

To compliantly copy and distribute a Linux distribution all rights must be considered!

Who must fulfill the license obligations of a Linux distribution?

- Whoever has received a licensed software and is **copying and distributing** it, must fulfill the **license obligations**.

Manufacturer of the distribution:

- **is copying**
- **must fulfill license obligations**

User:

- does not copy anything
- does not need to fulfill license obligations

What happens when a distribution is copied and conveyed?

Manufacturer of the distribution:

- **is copying**
- **must fulfill license obligations**

User 1:

- does not copy anything
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User 1:

- **is copying**
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User 2:

- does not copy anything
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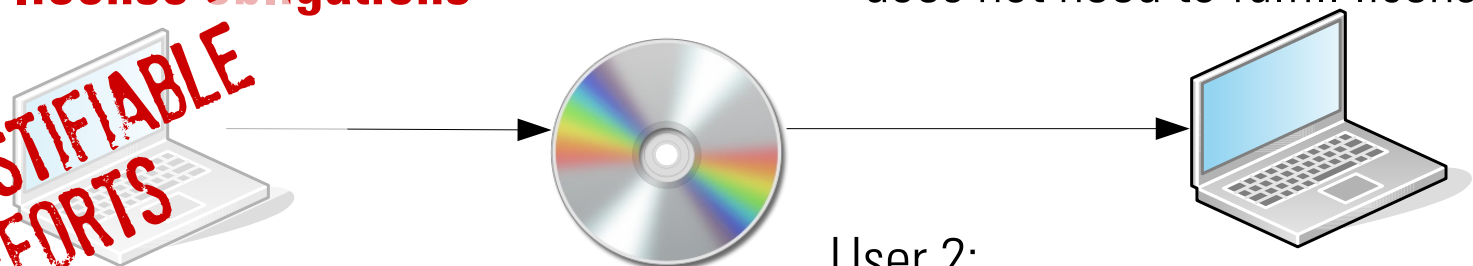

User 1:

- **is copying**
- **must fulfill license obligations**

User 2:

- does not copy anything
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What happens when a distribution is conveyed without being copied or modified?

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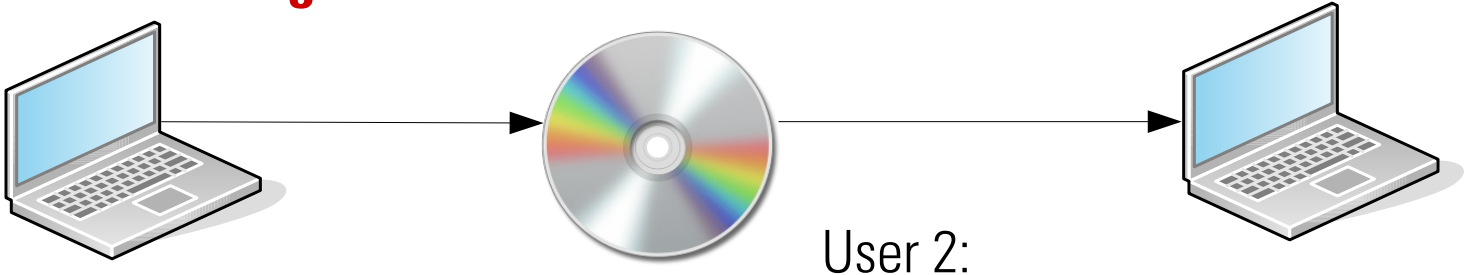


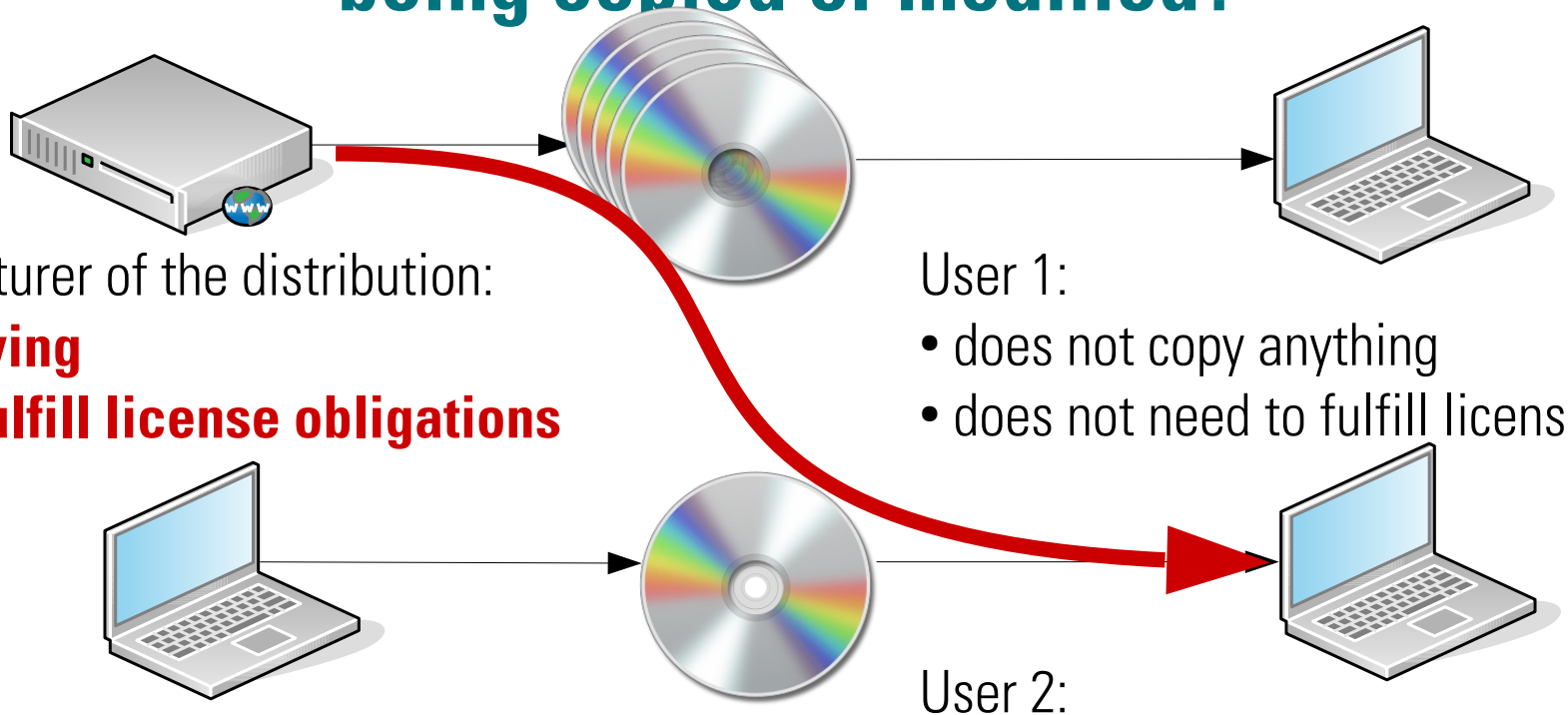
User 1:

- conveys CD, does not copy
- does not need to fulfill license obligations

User 2:

- does not copy anything
- does not need to fulfill license obligations

What happens when a distribution is conveyed without being copied or modified?



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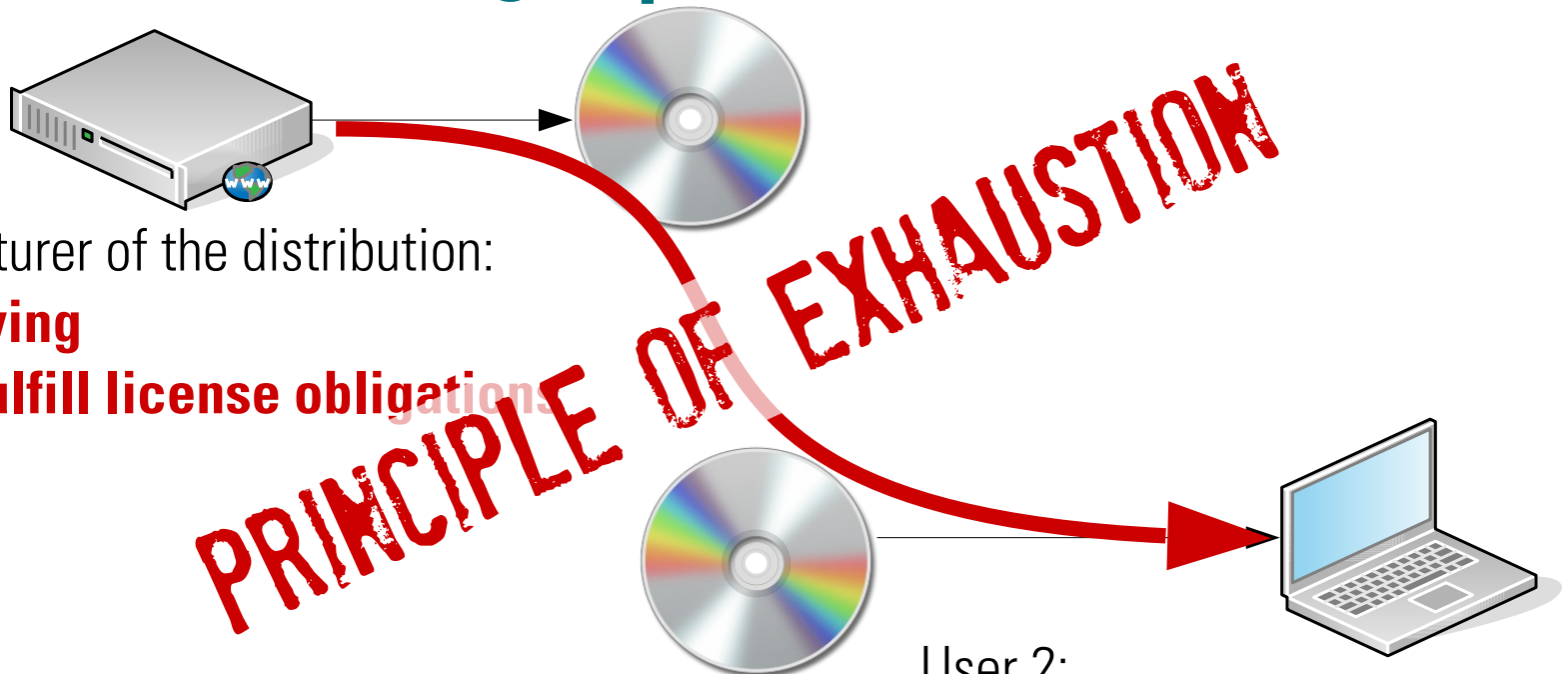

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User 2:

- does not copy anything
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What are the prerequisites for “exhaustion“?

- The original distributor must convey the software compliantly:
  - Information obligations must be fulfilled
  - Disclosure obligations must be fulfilled (complete corresponding source code is delivered with the product or offered to be delivered on request)
- Whoever is conveying such software, must make sure that the license obligations are correctly fulfilled.
- The software must be conveyed **unmodified**.
- The software may **not be installed** yet.
- In this case, there is also exhaustion of the trademark rights.

What must be done if “exhaustion“ does not apply?

- The **license obligations** of the distribution and all software packages contained within **must be fulfilled.**
- The **trademarked** logos and word marks of the manufacturer of the distribution **must be removed** or a trademark license for their use must be acquired.

Summary

- Linux distributions are normally intended to be directly received from the manufacturer and used, but not to be copied and distributed.
- There are two ways to convey a Linux distribution:
  1) **Unmodified versions without keeping a copy**
     - If the primary distribution by the manufacturer is correct, **exhaustion** of copyright and trademark rights applies: The manufacturer must fulfill the license obligations.
  2) **Modified or pre-installed versions or when keeping a copy**
     - **License obligations must be fulfilled** by whomever conveys the distribution.

Recommendation (1)

- If a particular product requires **only few additions or modifications** of the distribution:
  - Acquire **original media** from the manufacturer of the Linux distribution and convey them without retaining a copy.
  - Create a **second medium** with installation packages that contain the required additions or modifications and add them to the product.
  - Instruct the customer that the two media must be **installed subsequently** before the product can be used.

Recommendation (1)

Manufacturer of the Linux distribution must fulfill these license obligations.

The conveying person must only fulfill these license obligations

- If a particular product requires **only few additions or modifications** of the distribution:
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  - Create a **second medium** with installation packages that contain the required additions or modifications and add them to the product.
  - Instruct the customer that the two media must be **installed subsequently** before the product can be used.

Recommendation (2)

- If a particular product requires **a large number of additions or modifications** of the distribution:
  - Remove all unneeded packages.
  - Remove all word marks and logos of the manufacturer of the distribution.
  - Remove all packages that are suspicious of containing patents (e.g. Codecs).
  - Acquire source packages of all remaining binary packages, unpack them, extract copyright and license notices, warranty disclaimers and license texts and convey along with the product. Do sample test builds of the source packages and either convey along with the product or archive to be delivered upon request. Fulfill additional license obligations, if any.

Recommendation (2)

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  - **The legal assessment contains recipes to do so.**

License compliance with the OSADL Open Source Policy

HOT HEIDELBERG OSADL TALKS 2020

License obligations, checklists and redistribution
Legal Heidelberg OSADL Talks, April 28, 2020, Online Session 2
Open Source Automation Development Lab (OSADL), Heidelberg

OSADL
Open Source Automation Development Lab eG

What is company compliance?

- Compliance with legal provisions and regulations
- Compliance with standards
- Compliance with ethical requirements

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Copyright Law

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Copyright Law

Rule of license compliance:
"To prevent copyright law infringement, there must be the general rule that any protected work may not be copied and distributed, unless a valid license that permits doing so was obtained."

The license usually becomes void, if license obligations are not fulfilled

Example GPL-2.0, Section 4:

You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will **automatically terminate your rights under this License**.

A license becomes invalid

- Copyright holders may then assert claims:
  - Injunctive relief, e.g. to no longer copy and distribute
  - Information obligation: e.g. informing all recipients of unauthorized copies, provision of complete customer lists
  - Physical destruction of unauthorized copies
- Penalties may be imposed for **infringement of copyright law**.
- Copyright infringement may be "healed", if all license obligations are immediately fulfilled.

Who is responsible in a company to take care that copyright law is obeyed?

- Not any employee.
- But the management!

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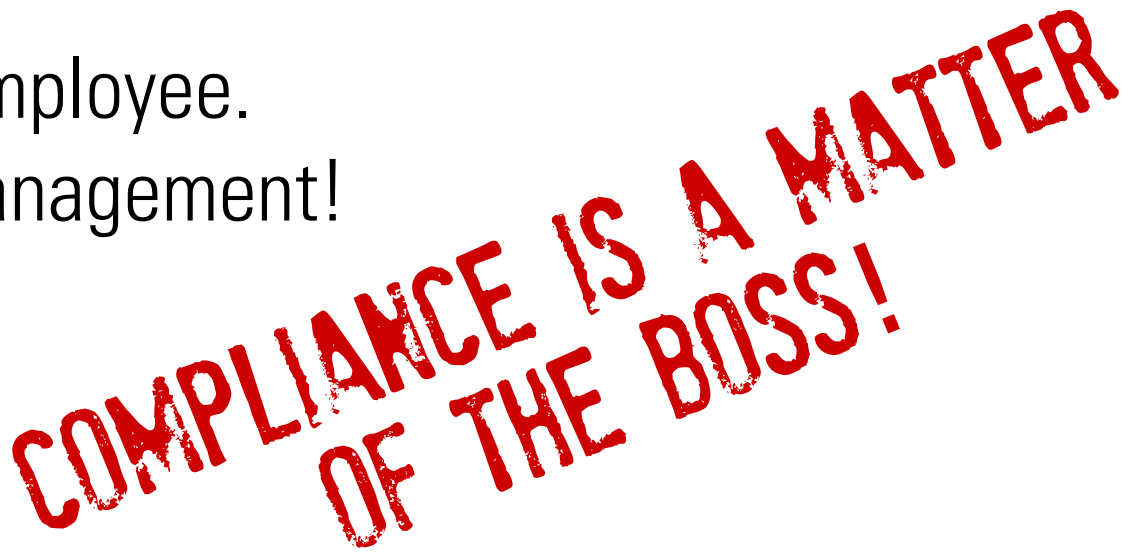
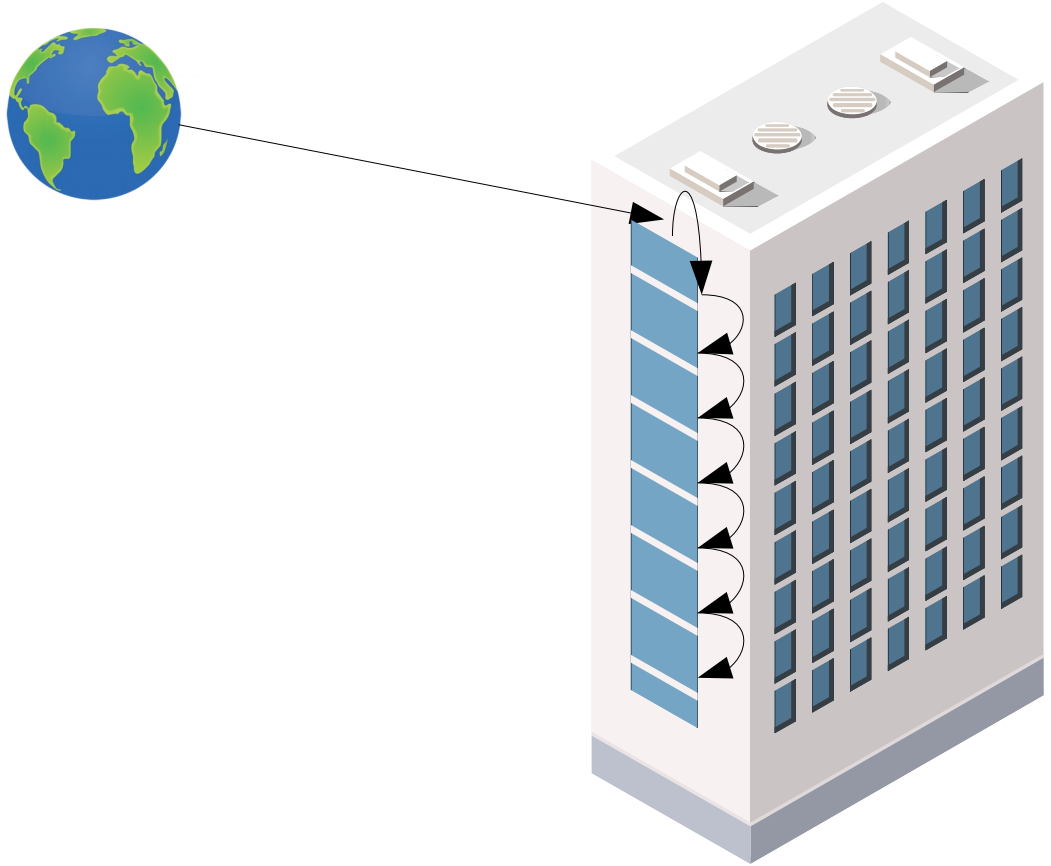


How do *new strategies* normally enter a company?



Management

Strategic management

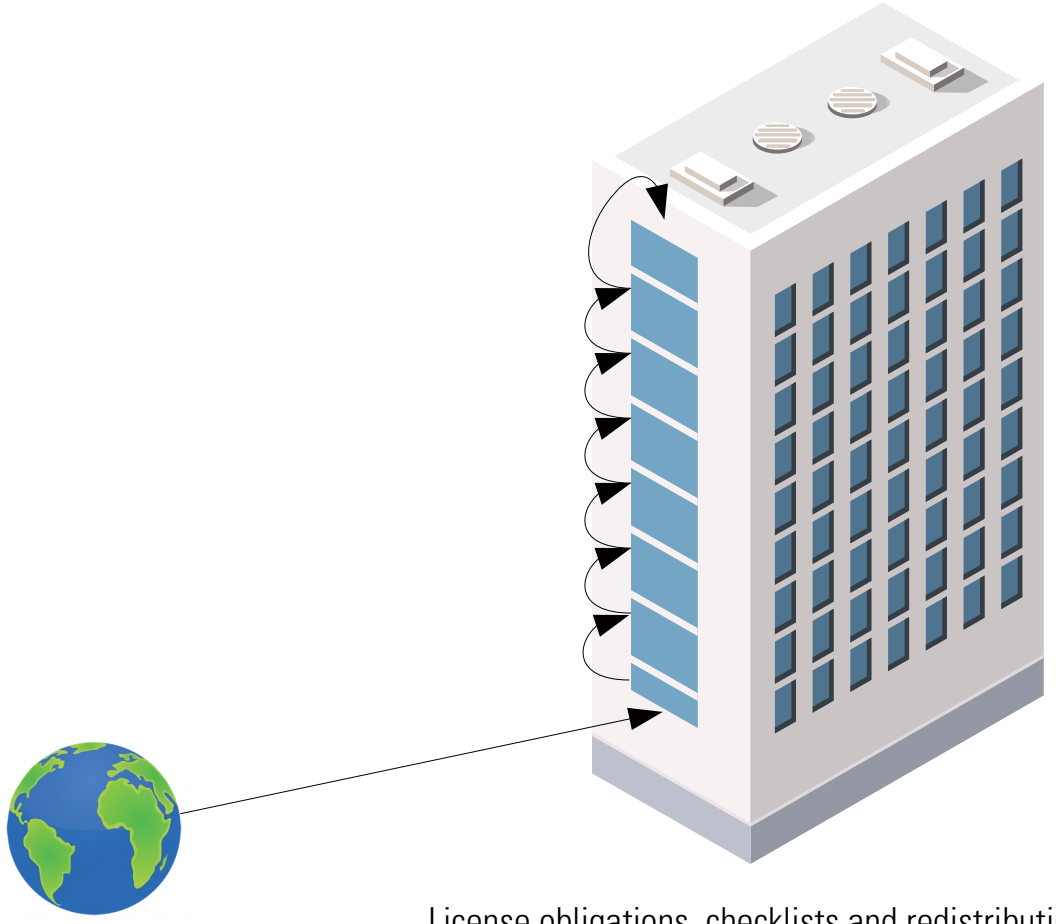
Development dept.

Product management

QA dept.

Software development

How does *Open Source* normally enter a company?



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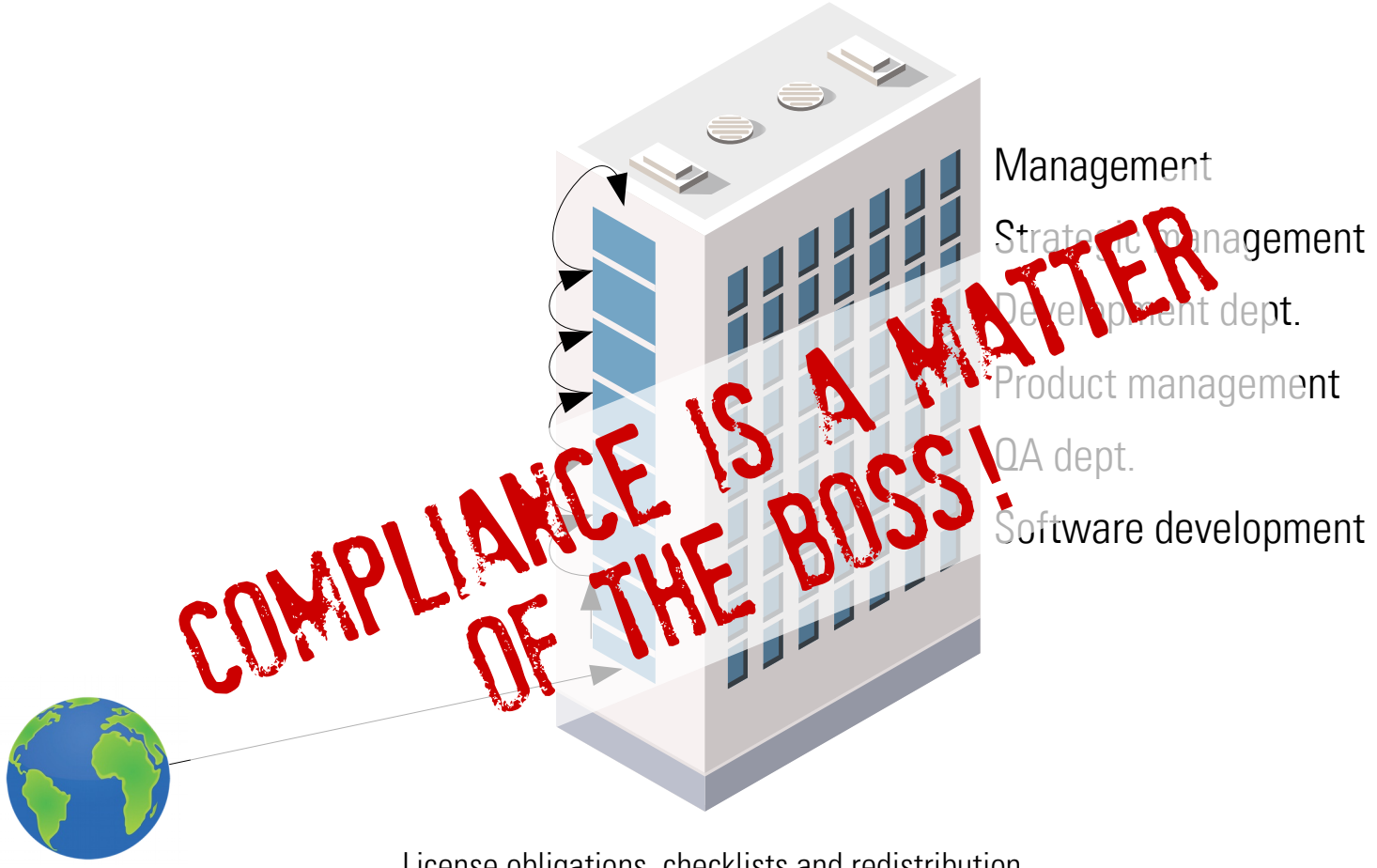
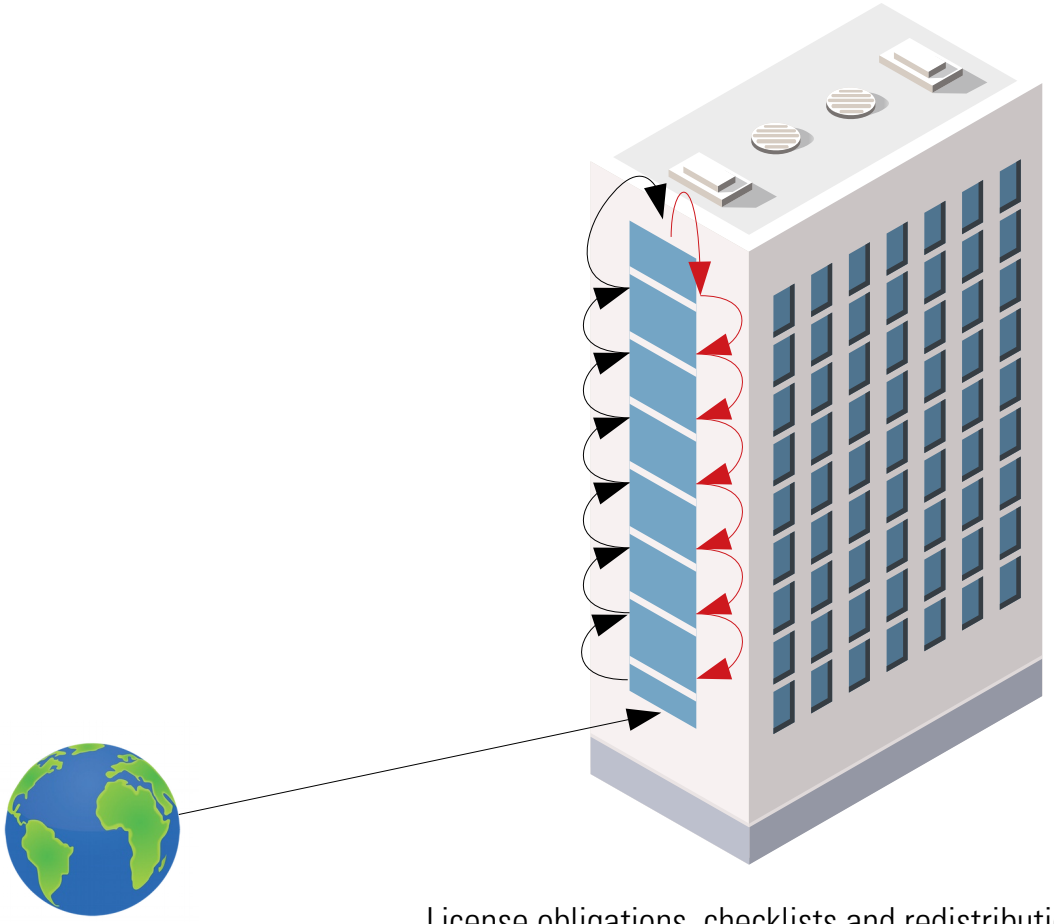


Open Source needs *both ways*



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Management responsibilities

- Checking and adapting trade documents such as EULA and terms and conditions
- Establishing processes to guarantee compliance
- Taking care that employees receive adequate training
- Verifying acceptance of the processes
- Considering external (third party) audits

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Check and adapt trade documents such as EULA and terms and conditions

For example, EULA:

Except, and only to the extent that may be permitted under applicable law, **you may not** decompile, disassemble, or reverse engineer the software by any means whatsoever, or alter, modify, enhance, or create a derivative work of the Software.

must be modified by appending:

The above restrictions do not apply, if particular other licenses (for example of Free and Open Source software) explicitly permit reverse engineering under certain conditions. In this case and in this context, **the other licenses take precedence** over this EULA.

Check and adapt trade documents such as EULA and terms and conditions

For example additional permissions, if proprietary software is linked with a library that is licensed under LGPL-2.1:

"**Modifications** of the software for the user's own use and **reverse engineering** for debugging such modifications are herewith **permitted**. However, forwarding the knowledge acquired during reverse engineering or debugging to third parties is prohibited. Furthermore, it is prohibited to distribute modified versions of the software. In any case, warranty claims on the software will expire, as long as the customers cannot prove that the defect would also occur without the modification."

Management responsibilities

- Checking and adapting trade documents such as EULA and terms and conditions
- **Establishing processes to guarantee compliance**
- Taking care that employees receive adequate training
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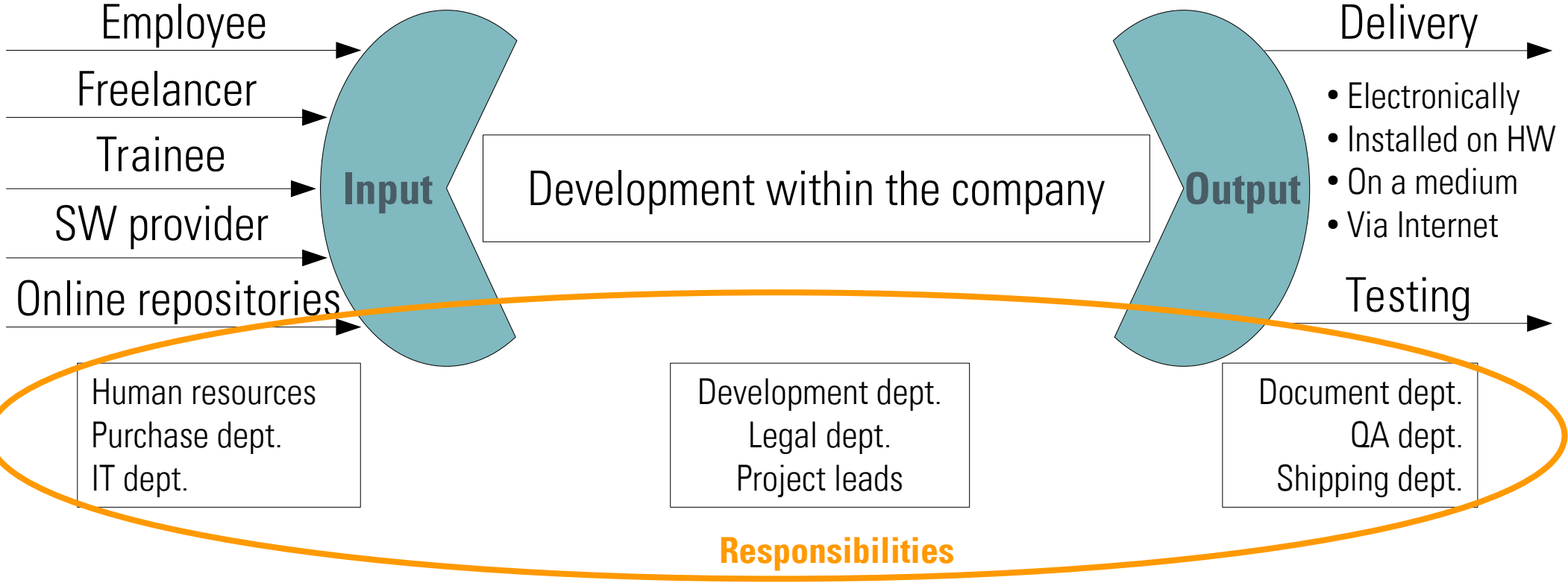
Open Source Policy Template for License Compliance

The template contains

- **motivations and explanations** of the various parts of an OS Policy,
- **text blocks** as basis for an individual policy,
- text blocks to modify **contracts and other documents**,
- **forms** for legal information on projects and products,
- detailed annexes to provide **technical, legal and practical background and instructions** on copyright law and license compliance.

Input/output gateways

Input/output gateways



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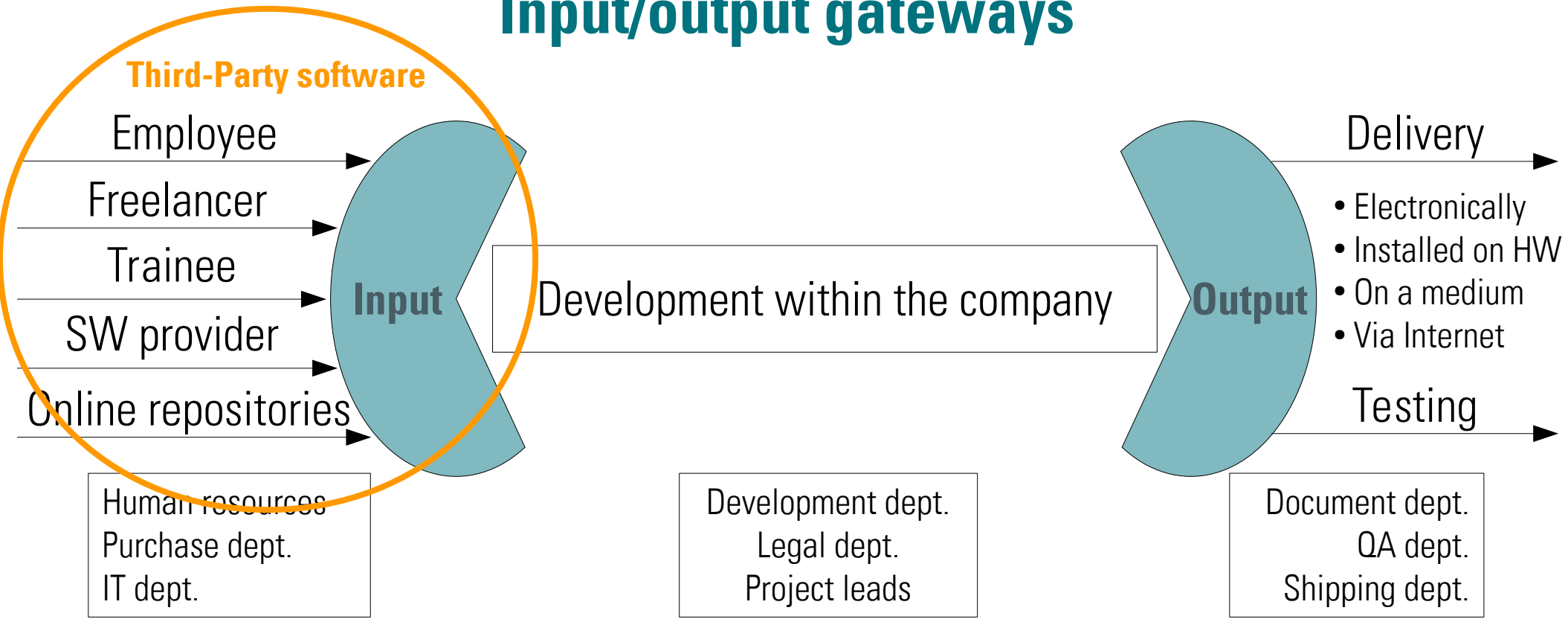

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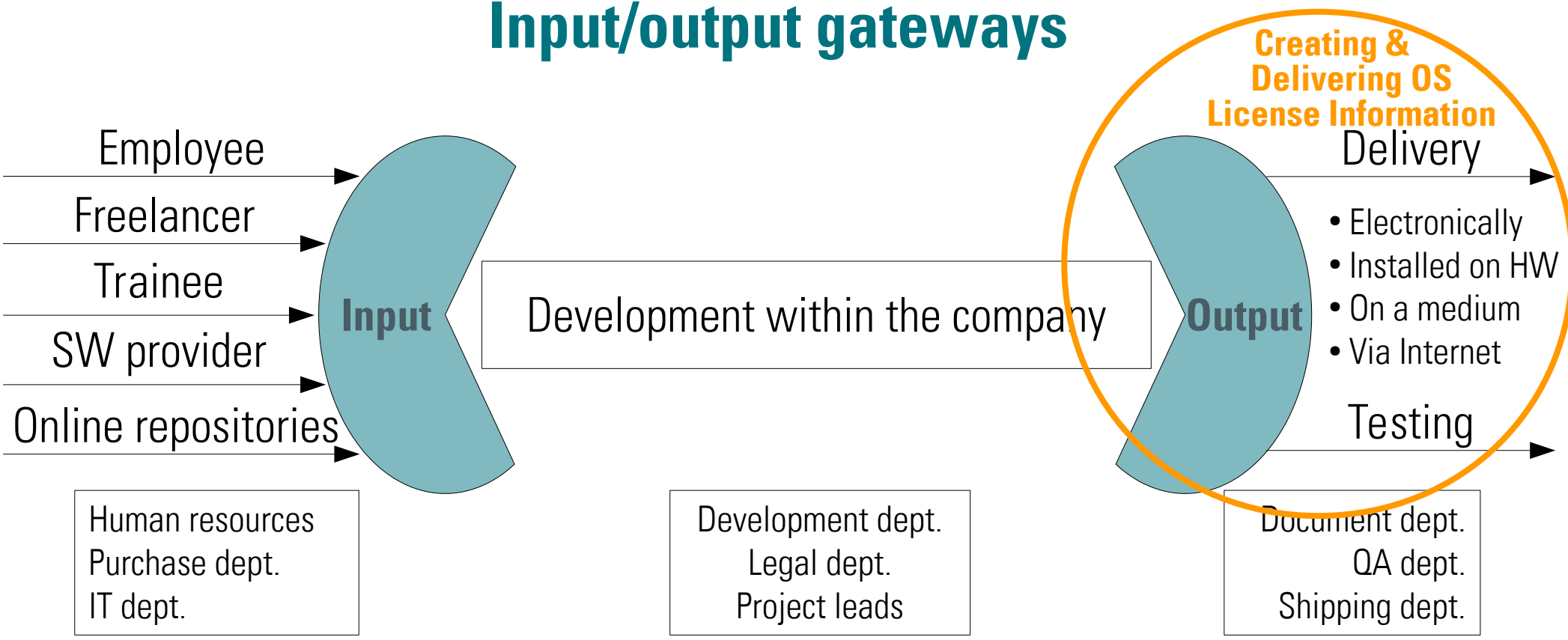

An Open Source Policy is needed ...

... to create and maintain **processes** within a company,

... to establish understanding of concepts related to Open Source software,

... to avoid copyright infringements,

... to provide control about licensing of a company's IP,

... to meet customer requirements.

Some information on today's sessions

- Please provide feedback on Legal HOT using the online form
  - Use the quick link **osadl.org/FB** (FeedBack), same as osadl.org/?id=3323
- You may ask questions at any time to be answered online, if possible
  - The quick link URL is **osadl.org/AQ** (AskQuestion), same as osadl.org/?id=3321
- You may join an online discussion on all topics of today at 4 pm
  - The quick link URL is **osadl.org/OD** (OnlineDiscussion), same as jitsi.osadl.org
  - Meeting name **OSADLLegalHOT**
  - Username and password will be displayed here after the last presentation