

Training: Open Source Licenses and Copyright Notices

Steve Winslow

ONAP VF2F - February 8, 2018

 THE **LINUX** FOUNDATION

Antitrust Policy Notice

- › Linux Foundation meetings involve participation by industry competitors, and it is the intention of the Linux Foundation to conduct all of its activities in accordance with applicable antitrust and competition laws. It is therefore extremely important that attendees adhere to meeting agendas, and be aware of, and not participate in, any activities that are prohibited under applicable US state, federal or foreign antitrust and competition laws.
- › Examples of types of actions that are prohibited at Linux Foundation meetings and in connection with Linux Foundation activities are described in the Linux Foundation Antitrust Policy available at <http://www.linuxfoundation.org/antitrust-policy>. If you have questions about these matters, please contact your company counsel, or if you are a member of the Linux Foundation, feel free to contact Andrew Updegrave of the firm of Gesmer Updegrave LLP, which provides legal counsel to the Linux Foundation.

Agenda

```
// WITHOUT WARRANTIES OR CONDI
// See the License for the spe
// limitations under the Licen
//
// SPDX-License-Identifier: Ap
package authenticator
type AuthenticatorConfig struc
    Anonymous bool
```

1. Licensing and Copyright Basics
2. LF License Scans
3. ONAP Processes and Best Practices
4. Q&A

Preliminary: Talk to your legal counsel!

- › This training is intended to focus on community norms and best practices in license and copyright management. It is not intended as legal advice.
- › The LF is not able to provide you with legal advice. For questions on interpretation of licenses contained in the code repository, ONAP members should consult with their own legal counsel.

An Ongoing Process

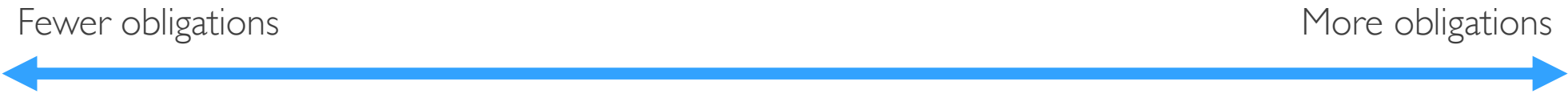
- › License compliance is a matter of ongoing improvement
 - › ...like all aspects of collaborative software development
- › Areas of focus will change over time as we improve together
- › Focusing on key priorities first
- › Reach out with any questions!
 - › Steve Winslow: swinslow@linuxfoundation.org
 - › your in-house legal counsel (for any legal interpretation questions)

Licensing and Copyright Basics

Open Source Licensing: Basics

- › Copyright – certain rights owned in software code (among other things)
- › License – permission to do something
 - › “Proprietary” – typically very limited rights to use but not modify or redistribute; restrictive conditions and obligations
 - › “Open Source” – typically broad rights to use, modify and redistribute, with varying conditions
- › Standardized language for various (100+) open source licenses

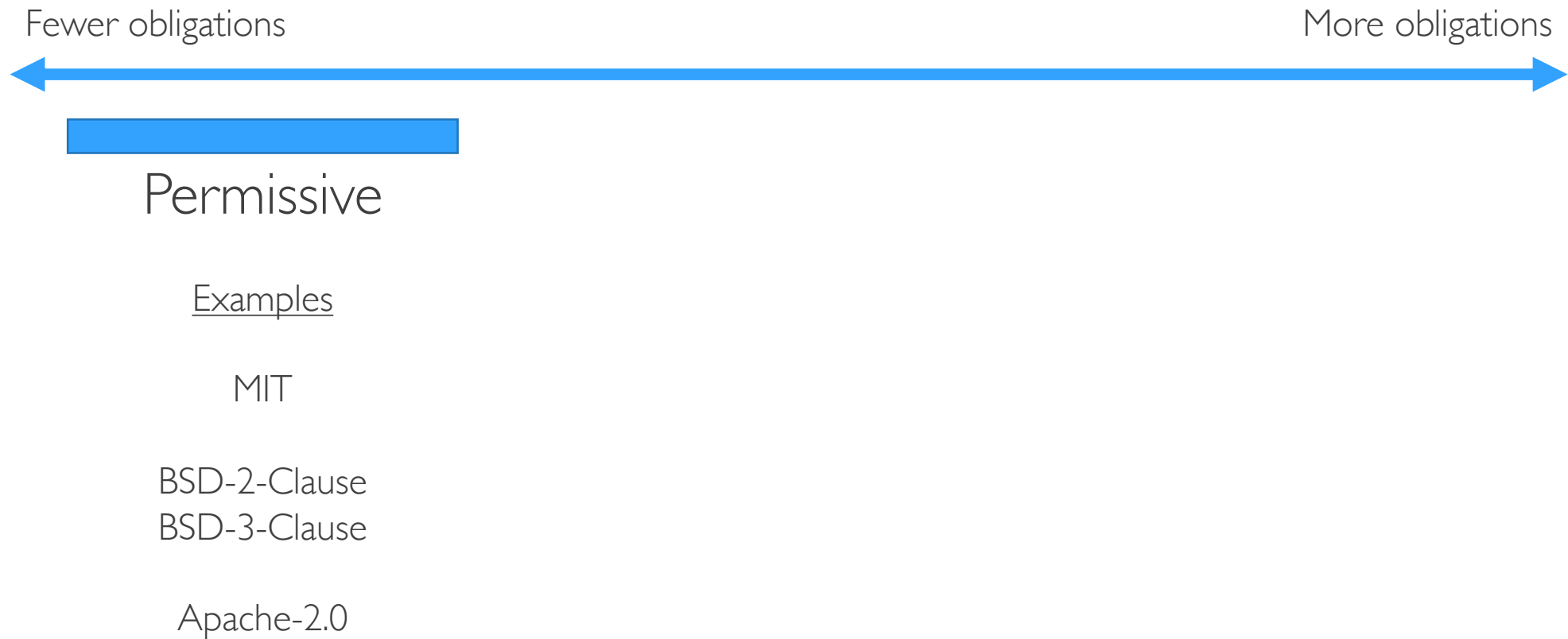
Open Source Licensing: Types



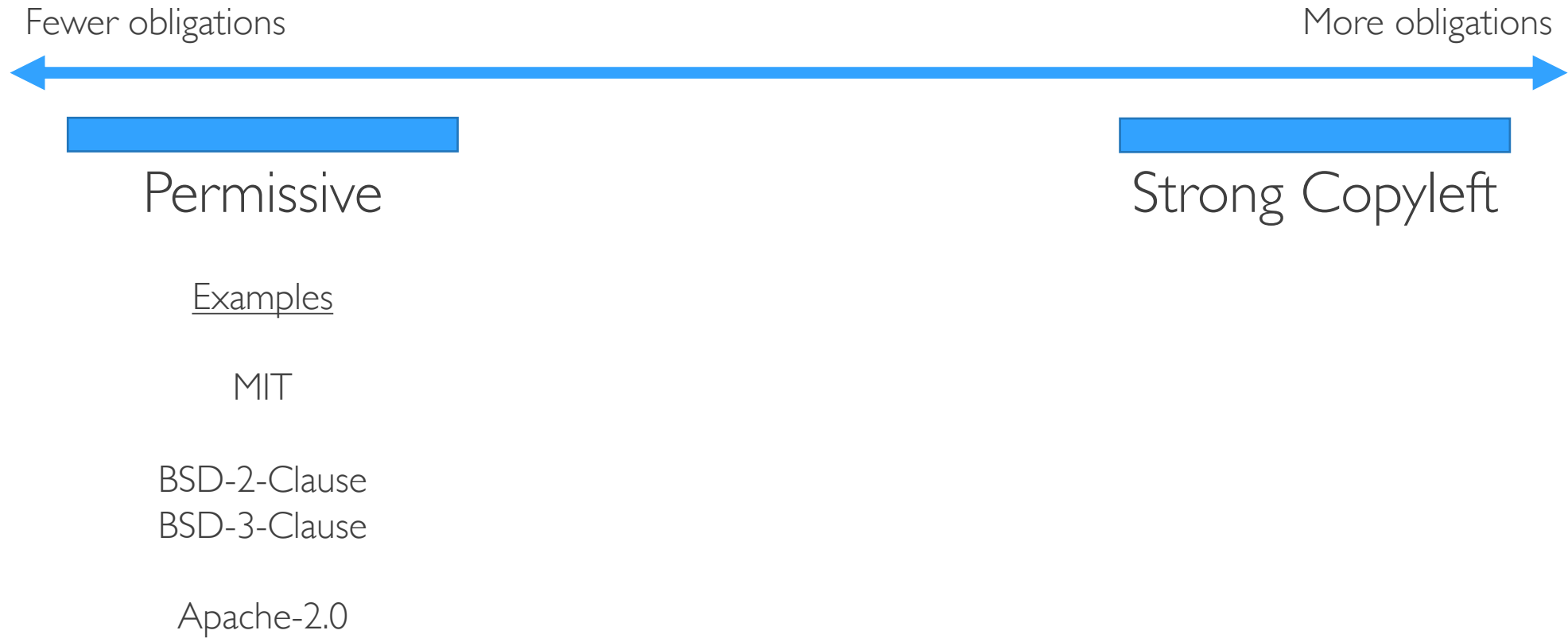
Open Source Licensing: Types



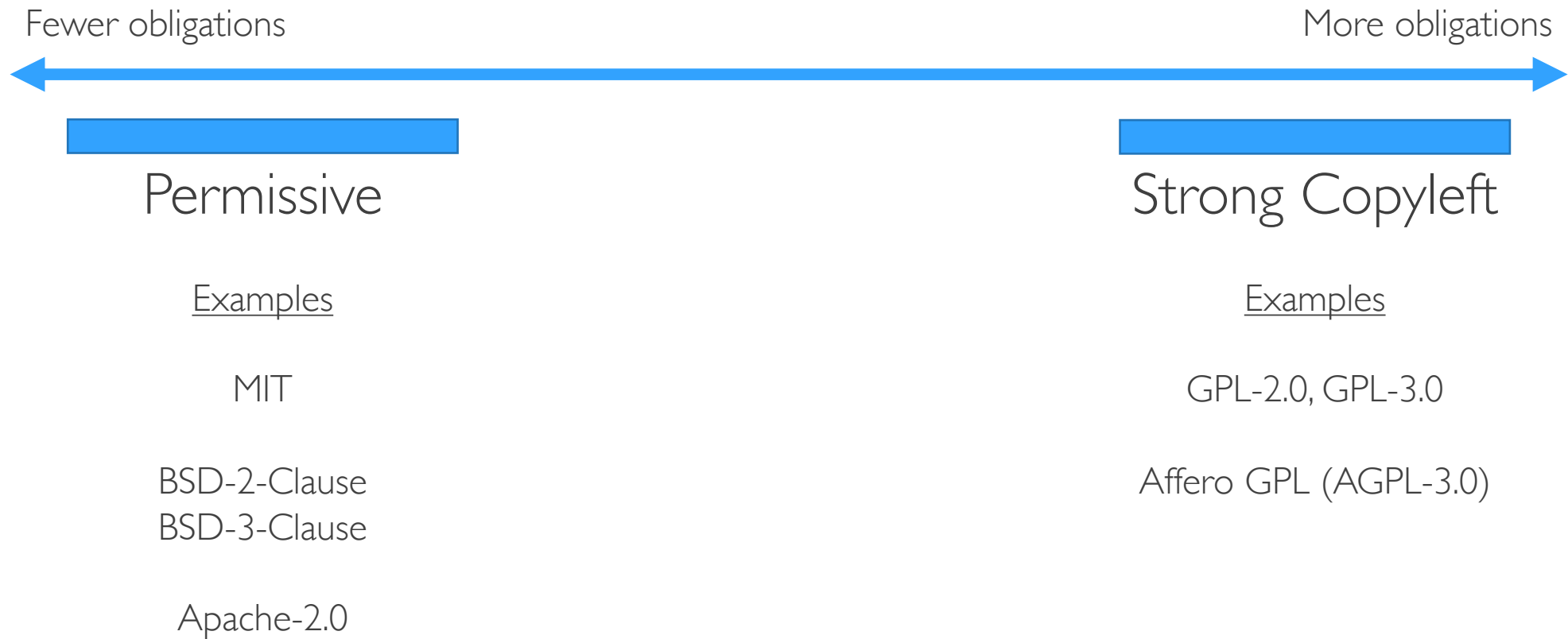
Open Source Licensing: Types



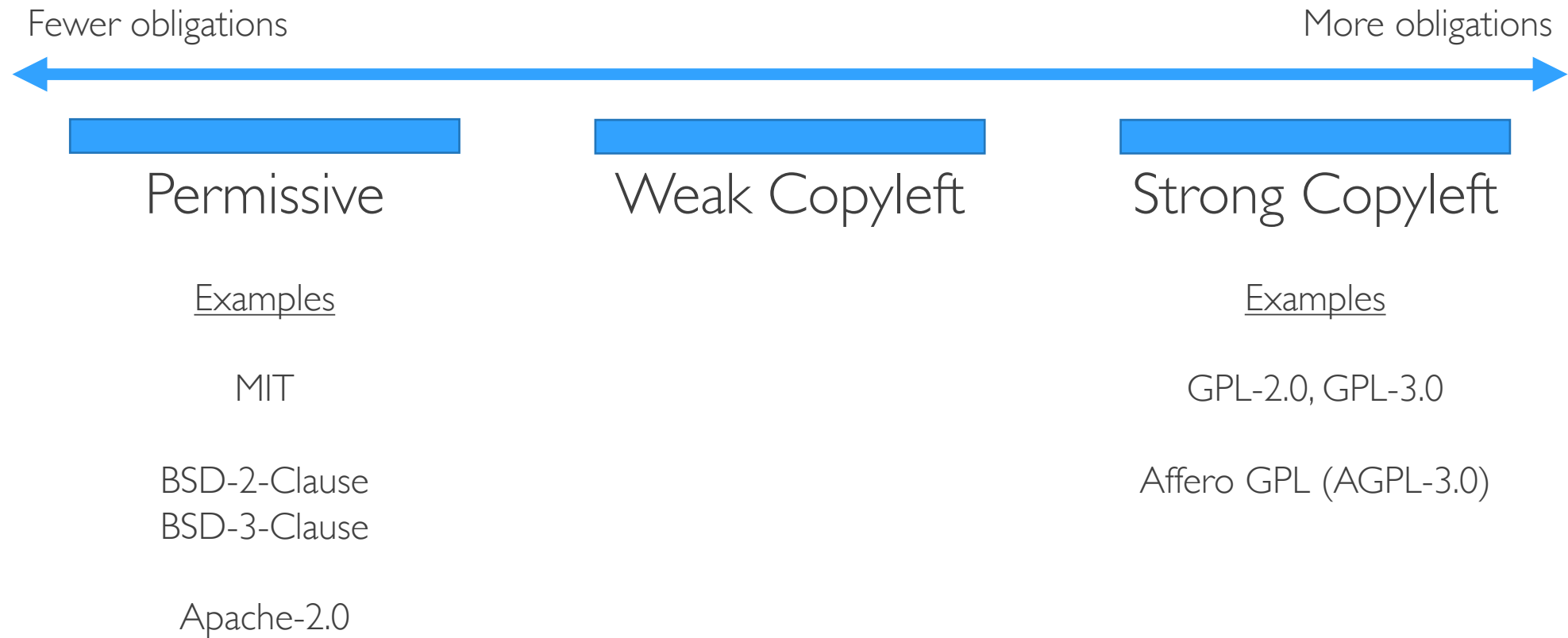
Open Source Licensing: Types



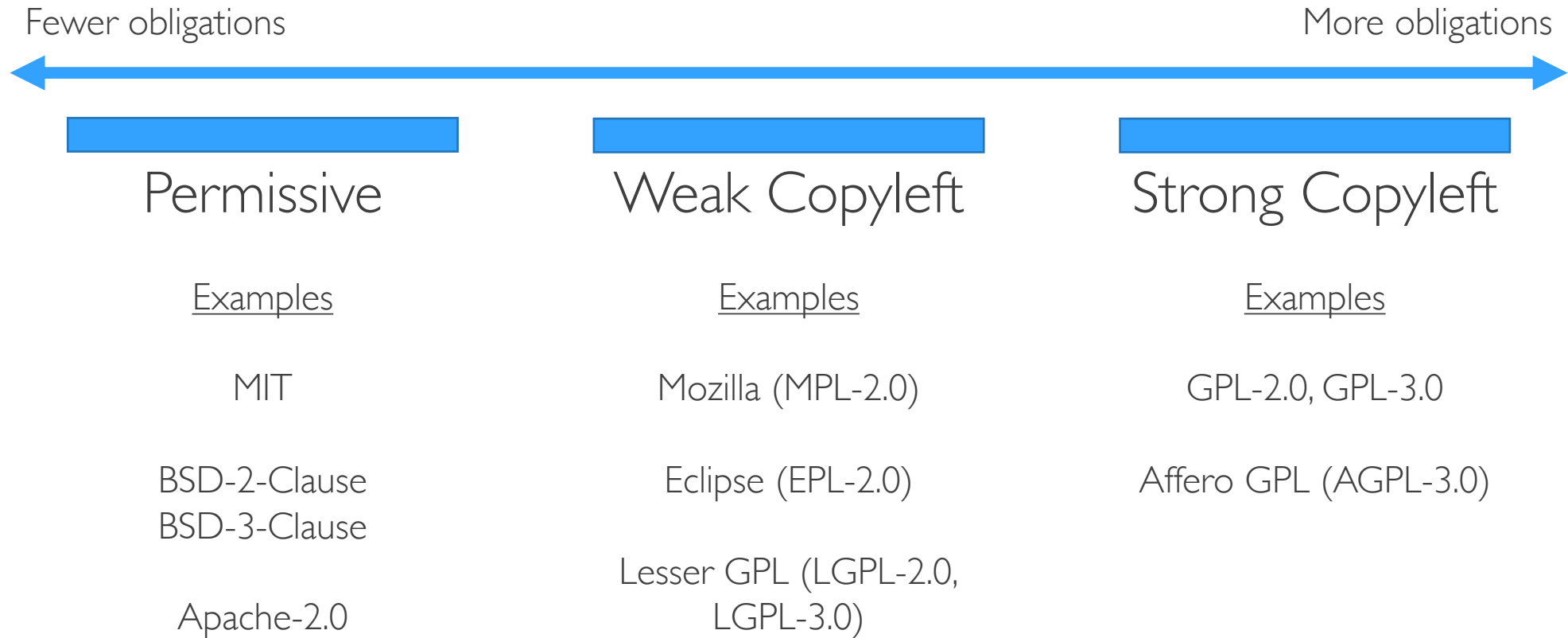
Open Source Licensing: Types



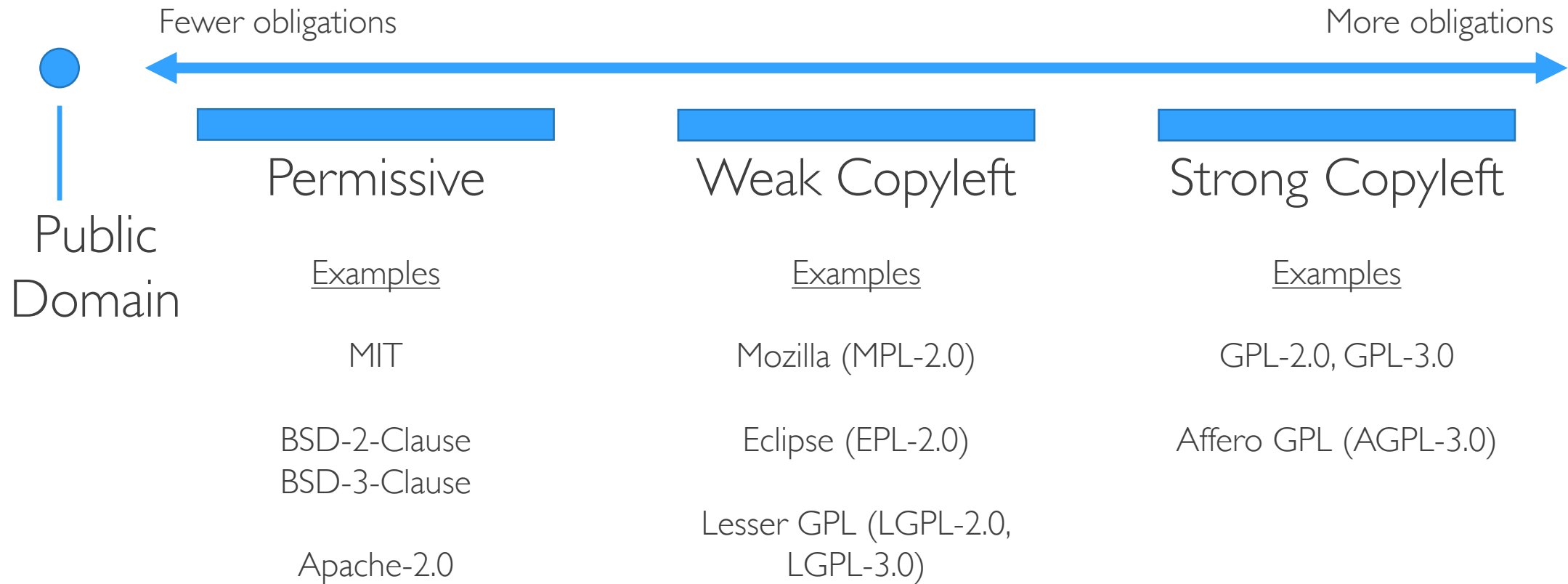
Open Source Licensing: Types



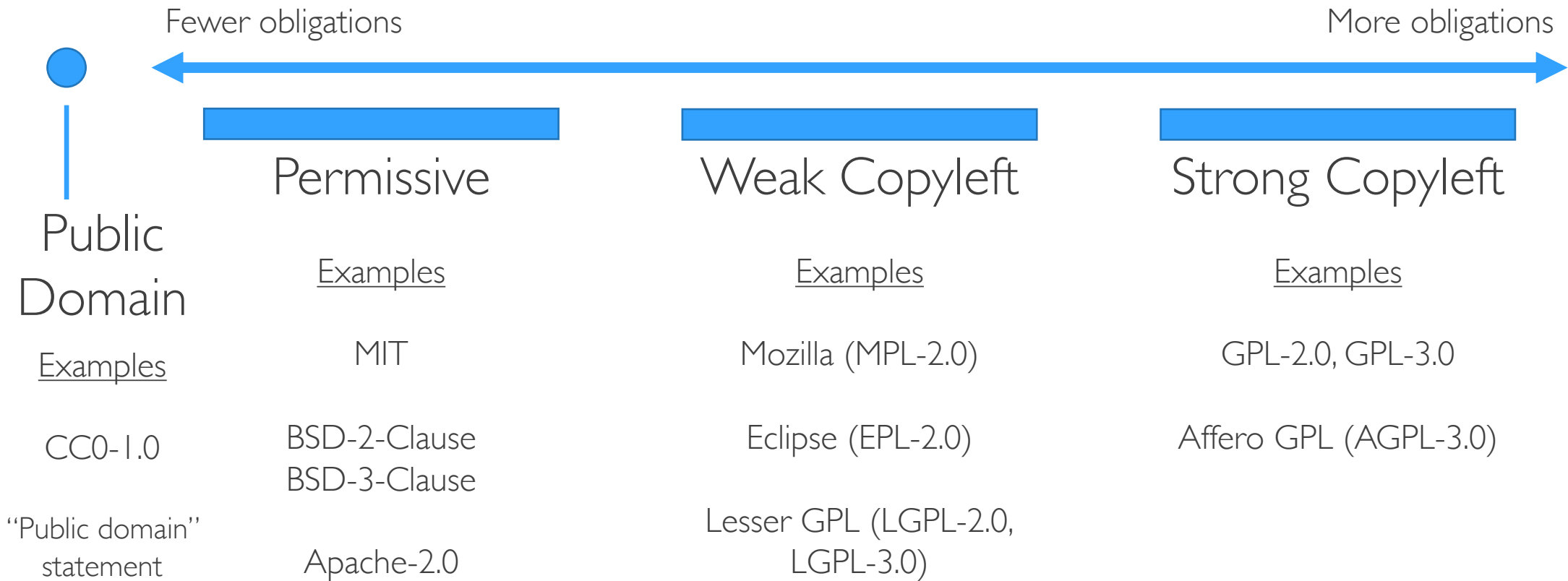
Open Source Licensing: Types



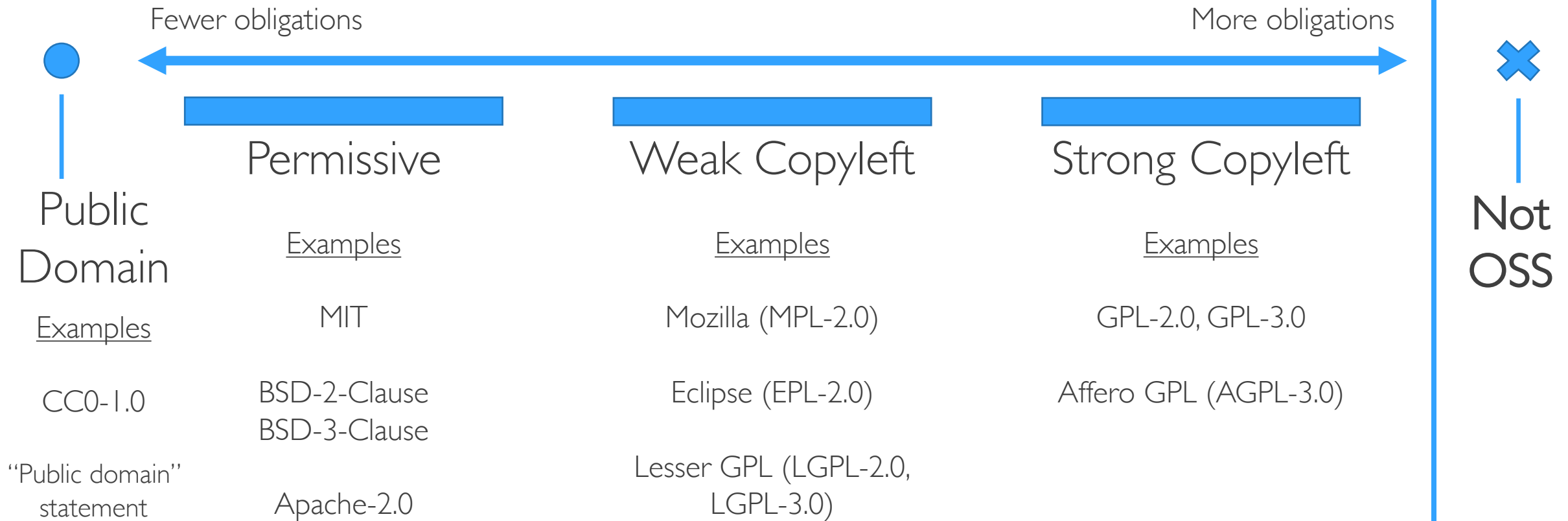
Open Source Licensing: Types



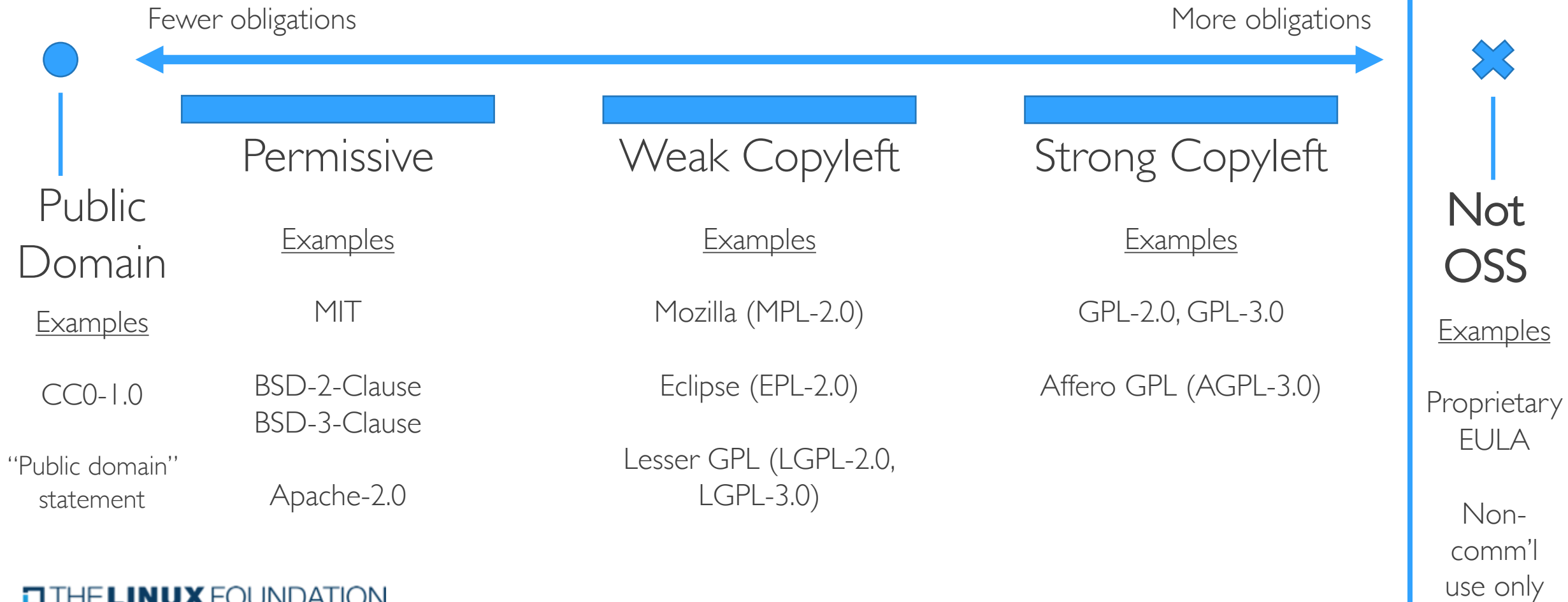
Open Source Licensing: Types



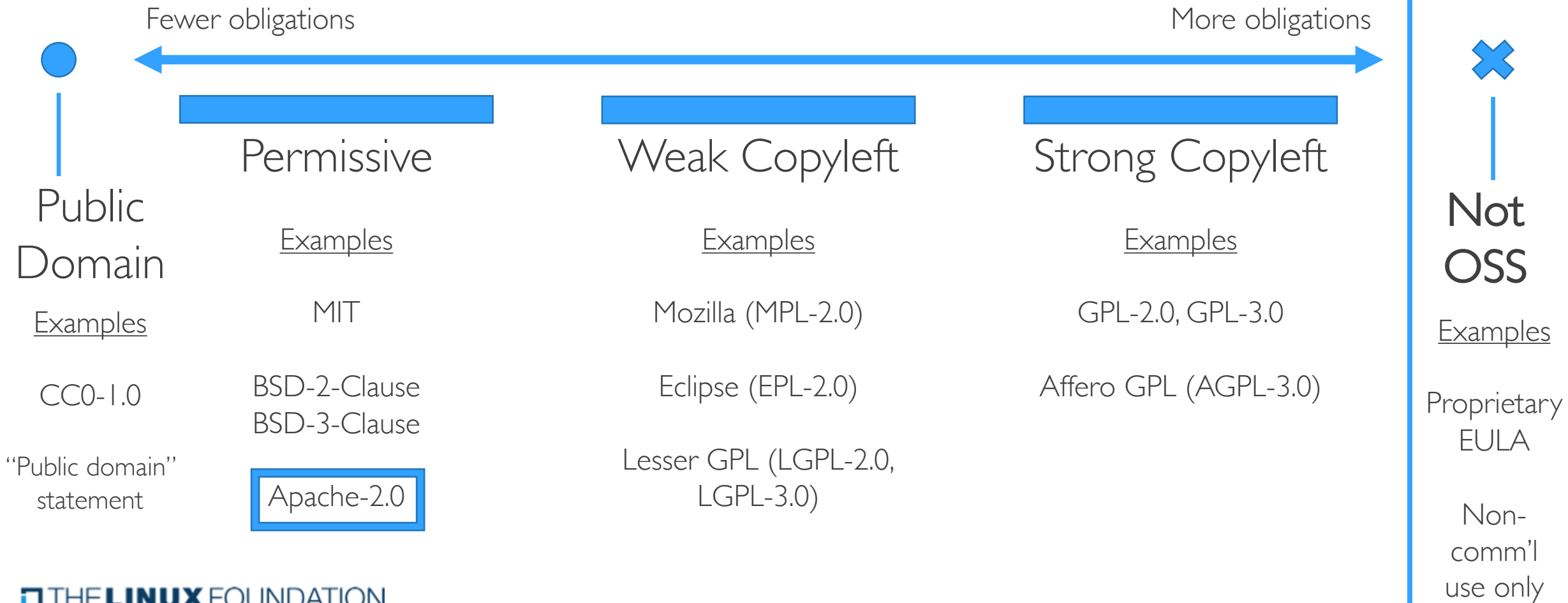
Open Source Licensing: Types



Open Source Licensing: Types



Open Source Licensing: Types



Open Source Licensing: Basics

- › But – more considerations than just permissive vs. copyleft:
 - › Patent licenses?
 - › Compatibility?
 - › Other obligations? (e.g. advertising clauses; reverse-engineering)

Open Source Licensing: Basics

- › Who cares about license compliance?
 - › Contributors to the project
 - › The project itself
 - › Downstream users (expectations and compliance burdens)

Open Source Licensing: In ONAP

- › ONAP's IP policy specifies the project's licenses for contributions:
 - › Code: Apache License 2.0 (Apache-2.0)
 - › Documentation: Creative Commons Attribution 4.0 (CC-BY-4.0)
- › Exceptions for use of other licenses:
 - › Subject to TSC approval...
 - › ...with TSC informed by LF Networking Governing Board's Legal Committee

Open Source Licensing: Contexts

- › Within ONAP code base:
 - › snippets
 - › entire files
- › And beyond that – can be relevant for:
 - › build-time dependencies (e.g., Java JARs)
 - › install-time dependencies (e.g., Python packages)
 - › run-time dependencies (e.g., system libraries)

Open Source Licensing: Which license?

- › Knowing what license applies isn't easy
 - › “**declared**” licenses: LICENSE.txt; package manager metadata
 - › “**observed**” licenses: what we find in source files
 - › These are often different or incomplete
- › Notices in individual files are important

LF License Scans

LF License Scans:Tools

FOSSology

Used to scan a codebase for licenses

Performs textual analysis and regular expression scanning to identify likely license notices and references

Supplemented with manual review to remove false positives and investigate unusual findings

The screenshot shows the FOSSology License Browser interface. The top navigation bar includes links for 'Close', 'Cleared: 2738/2738', 'One-Shot Copyright/Email/URL', 'One-Shot License', 'License Browser', 'File Browser', 'Info', 'View', 'Licenses', and 'Copyright/Email/Url/Author'. The main content area displays the license text for a file, including sections for 'GNU LESSER GENERAL PUBLIC LICENSE', 'Copyright(c) 2010-2013 Intel Corporation', 'Copyright(c) 2014-2017 Wind River Systems, Inc.', and 'BSD LICENSE'. A 'Submit' button is visible, along with radio buttons for 'Go through all files', 'Go through all files with license', and 'Go through all files with license'. Below the submit button are options for 'Clearing decision scope' and 'Clearing decision type'. A table at the bottom shows the scan results for the file.

License	Source	Text
WebM	monk: #1 (92 %)	-
Dual-license	User decision	Click to e
LGPL-2.0	nomos: #1	-
BSD-3-Clause	nomos: #1 Bulk: #477558	Click to e
LGPL-2.1	User decision	Click to e
GPL-2.0	nomos: #1	-

Showing 1 to 6 of 6 entries

User Decision ... Bulk Recognition ...

LF License Scans: Tools

License Threat	Component
Apache-2.0, CDDL-1.0, CDDL-1.1	com.sun.jersey : jersey-core : 1.18
CDDL-1.1	org.glassfish.jersey.core : jersey-common : 2.22.1
CDDL-1.1	org.glassfish.jersey.ext : jersey-entity-filtering : 2.22.1
CDDL-1.1	org.glassfish : javax.json : 1.0.4
CDDL-1.1	com.sun.xml.bind : jaxb-core : 2.2.11
CDDL-1.1	org.glassfish.hk2 : hk2-api : 2.4.0-b31
EPL-1.0	ch.qos.logback : logback-classic : 1.1.3
CDDL-1.1	org.glassfish.jersey.core : jersey-client : 2.22.1
EPL-1.0	ch.qos.logback : logback-core : 1.1.3
BSD-3-Clause, EPL-1.0	org.eclipse.persistence : eclipselink : 2.6.2
EPL-1.0	ch.qos.logback : logback-core : 1.1.7
Apache-2.0	org.yaml : snakeyaml : 1.15
Apache-2.0	org.apache.httpcomponents : httpcore : 4.2.4
Apache-2.0	org.apache.hadoop : hadoop-yarn-common : 2.5.0
Apache-2.0	org.codehaus.jackson : jackson-core-asl : 1.9.13

Sonatype Nexus IQ

Used to scan Java dependencies imported at build time

Based on Sonatype (Maven) Java artifacts, with declared and observed licenses

Supplemented with manual review and, where appropriate, FOSSology scans of artifacts

LF License Scans: Tools



<https://spdx.org>

SPDX License List:
<https://spdx.org/licenses>

SPDX

Used to communicate license information in a standardized, machine-readable format

SPDX documents are produced from each FOSSology source code scan

SPDX short-form identifiers used to enable quickly adding license info to source code with minimal burden

LF License Scans: Reports

License	# of files
Project licenses:	
Apache-2.0	9209
CC-BY-4.0	1
Copyleft:	
(Apache-2.0 OR LGPL-3.0+) AND (GPL-2.0 OR LGPL-3.0+)	1
GPL-2.0 OR LGPL-3.0+	8
LGPL-3.0	4
MPL-2.0	2
Attribution:	
Apache-2.0 AND MIT	1
Apache-2.0 OR LGPL-3.0+	8
BSD-2-Clause	70
BSD-2-Clause AND MIT	1
BSD-3-Clause	25
BSD-3-Clause AND MIT	2
BSD-style	147
ISC	9
MIT	
MIT-style	

File	License
/vendor/github.com/heketi/heketi/LICENSE	(Apache-2.0 OR LGPL-3.0+) AND (GPL-2.0 OR LGPL-3.0+)
/vendor/github.com/heketi/heketi/pkg/utlils/bodystring.go	GPL-2.0 OR LGPL-3.0+
/vendor/github.com/heketi/heketi/pkg/utlils/jsonutils.go	GPL-2.0 OR LGPL-3.0+
/vendor/github.com/heketi/heketi/pkg/utlils/log.go	GPL-2.0 OR LGPL-3.0+
/vendor/github.com/heketi/heketi/pkg/utlils/sortedstrings.go	GPL-2.0 OR LGPL-3.0+
/vendor/github.com/heketi/heketi/pkg/utlils/statusgroup.go	GPL-2.0 OR LGPL-3.0+
/vendor/github.com/heketi/heketi/pkg/utlils/stringset.go	GPL-2.0 OR LGPL-3.0+
/vendor/github.com/heketi/heketi/pkg/utlils/stringstack.go	GPL-2.0 OR LGPL-3.0+
/vendor/github.com/heketi/heketi/pkg/utlils/uuid.go	GPL-2.0 OR LGPL-3.0+
/vendor/github.com/juju/ratelimit/LICENSE	LGPL-3.0
/vendor/github.com/juju/ratelimit/ratelimit.go	LGPL-3.0
/vendor/github.com/juju/ratelimit/reader.go	LGPL-3.0
/vendor/gopkg.in/yaml.v2/LICENSE	LGPL-3.0
/vendor/github.com/hashicorp/golang-lru/LICENSE	MPL-2.0
/vendor/github.com/hashicorp/hcl/LICENSE	MPL-2.0

Reports for Developers

Summary and listing of license combinations identified per-file

Calls to discuss situations where remediation may be appropriate

Information gathering to facilitate license exception approvals

LF License Scans: Reports

License	# of files
Project licenses:	
Apache-2.0	19479
Apache-2.0 AND CC-BY-4.0	2285
Apache-2.0 OR EPL-1.0	129
CC-BY-4.0	431
Use restrictions:	
ATT-Proprietary	14
ATT-Proprietary AND Apache-2.0	8
Apache-2.0 AND CC-BY-4.0 AND Olympic-logo-reference	2
Dynamic-Drive-2015	2
bpmn.io License AND Apache-2.0 AND BSD-3-Clause AND MIT	1
Copyleft:	
Apache-2.0 AND (CDDL-1.1 OR GPL-2.0-WITH-classpath-excep	1
Apache-2.0 AND CC-BY-4.0 AND CC-BY-SA-4.0	1
BSD-3-Clause AND EPL-1.0 AND EDL-1.0 AND MIT	2
CC-BY-SA-4.0	1
GPL-2.0 AND Link-exception	3
GPL-3.0+-WITH-OpenSSL-linking-exception	32
LGPL	6
LGPL-3.0 AND Link-exception	3
MIT AND MPL-1.1	7
Attribution:	
(MIT OR GPL-2.0) AND (MIT OR BSD OR GPL)	4
Apache (version unspecified)	2

File	License	Notes
/policy-engine/PolicyEngineClient/src/test/java/org/ona/p/policyengine/GeneralTestClient.java	ATT-Proprietary AND Apache-2.0	Proprietary notice should be removed, or else file should be removed.
/policy-engine/PolicyEngineClient/src/test/java/org/ona/p/policyengine/PolicyEngineTestClient.java	ATT-Proprietary AND Apache-2.0	Proprietary notice should be removed, or else file should be removed.
/vvp-portal/vvp/app/welcome/welcome.html	Apache-2.0 AND CC-BY-4.0 AND Olympic-logo-reference	References in footer to "36USC220506" and (c) / trademark ownership by "Intellectual Property" should likely be removed.
/vvp-portal/vvp/dist/welcome/welcome.html	Apache-2.0 AND CC-BY-4.0 AND Olympic-logo-reference	References in footer to "36USC220506" and (c) / trademark ownership by "Intellectual Property" should likely be removed.
/portal-sdk/ecompsdk/epsdk-app-overlay/src/main/webapp/static/fusion/raptor/js/ajax_dynamic_content.js	Dynamic-Drive-2015	The license for this Dynamic Drive file (http://www.dynamicdrive.com/notice.htm) may not allow it to be redistributed, so this file should likely be removed and replaced with an alternative.
/usecase-ui/usecaseui-common/src/main/webapp/static/fusion/raptor/js/ajax_dynamic_content.js	Dynamic-Drive-2015	The license for this Dynamic Drive file (http://www.dynamicdrive.com/notice.htm) may not allow it to be redistributed, so this file should likely be removed and replaced with an alternative.
/clamp/src/main/resources/META-INF/resources/designer/index.js	bpmn.io License AND Apache-2.0 AND BSD-3-Clause AND MIT	In mid-2017, the team stated that they would replace the bpmn.io component (which is under a non-OSS license that prohibits certain modifications). This component from bpmn.io was approved for Amsterdam only and should be removed and replaced for Beijing.

◀ ▶
License counts
Project licenses
Use restrictions
Copyleft
Attribution
Other or Unknown

Sonatype Nexus IQ

S	W	Name ↓	Last Success	Last Failure	Last Duration	Policy Violations
🟡	☀️	aaf-authz-docker-maven-clm-master	5 days 15 hr - #25	N/A	7 min 3 sec	🏠 10 18
🟡	☁️	aaf-authz-maven-clm-master	4 days 19 hr - #20	11 days - #19	7 min 26 sec	🏠 10 18
🟡	☀️	aaf-cadi-maven-clm-master	5 days 6 hr - #19	N/A	5 min 15 sec	🏠 5 4
🟡	☀️	aaf-inno-maven-clm-master	5 days 11 hr - #18	N/A	2 min 11 sec	🏠 2
🟡	☀️	aai-aai-common-maven-clm-amsterdam	4 days 21 hr - #9	N/A	12 min	🏠 6 38
🟡	☀️	aai-aai-common-maven-clm-master	5 days 15 hr - #20	N/A	12 min	🏠 6 38
🟡	☀️	aai-aai-service-maven-clm-release-1.0.0	5 days 13 hr - #24	N/A	32 min	🏠 1 12 68
🟡	☀️	aai-babel-maven-clm-master	4 days 17 hr - #22	N/A	6 min 59 sec	🏠 12 34
🟡	☀️	aai-champ-maven-clm-master	4 days 20 hr - #19	N/A	10 min	🏠 Nexus IQ Server error
🔴	☀️	aai-data-router-maven-clm-amsterdam	12 days - #8	5 days 3 hr - #9	3 min 30 sec	
🔴	⚡	aai-data-router-maven-clm-master	1 mo 10 days - #12	5 days 6 hr - #17	3 min 37 sec	
🟡	☀️	aai-esr-gui-maven-clm-amsterdam	4 days 21 hr - #9	N/A	2 min 53 sec	🏠 2
🟡	☁️	aai-esr-gui-maven-clm-master	5 days 9 hr - #19	8 days 7 hr - #17	3 min 24 sec	🏠 1 1
🟡	☀️	aai-esr-server-maven-clm-amsterdam	4 days 21 hr - #9	N/A	6 min 30 sec	🏠 6 26
🟡	☀️	aai-esr-server-maven-clm-master	1 day 13 hr - #25	N/A	6 min 25 sec	🏠 4 28
🟡	☀️	aai-logging-service-maven-clm-amsterdam	5 days 2 hr - #9	N/A	2 min 24 sec	🏠 4

Jenkins view: <https://jenkins.onap.org/view/CLM/>

Sonatype Nexus IQ

Project aai-aai-service-maven-clm-release-1.0.0

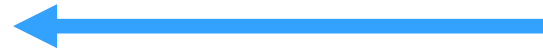


[Recent Changes](#)



[Application Composition Report](#)

 **1** **12** **68**

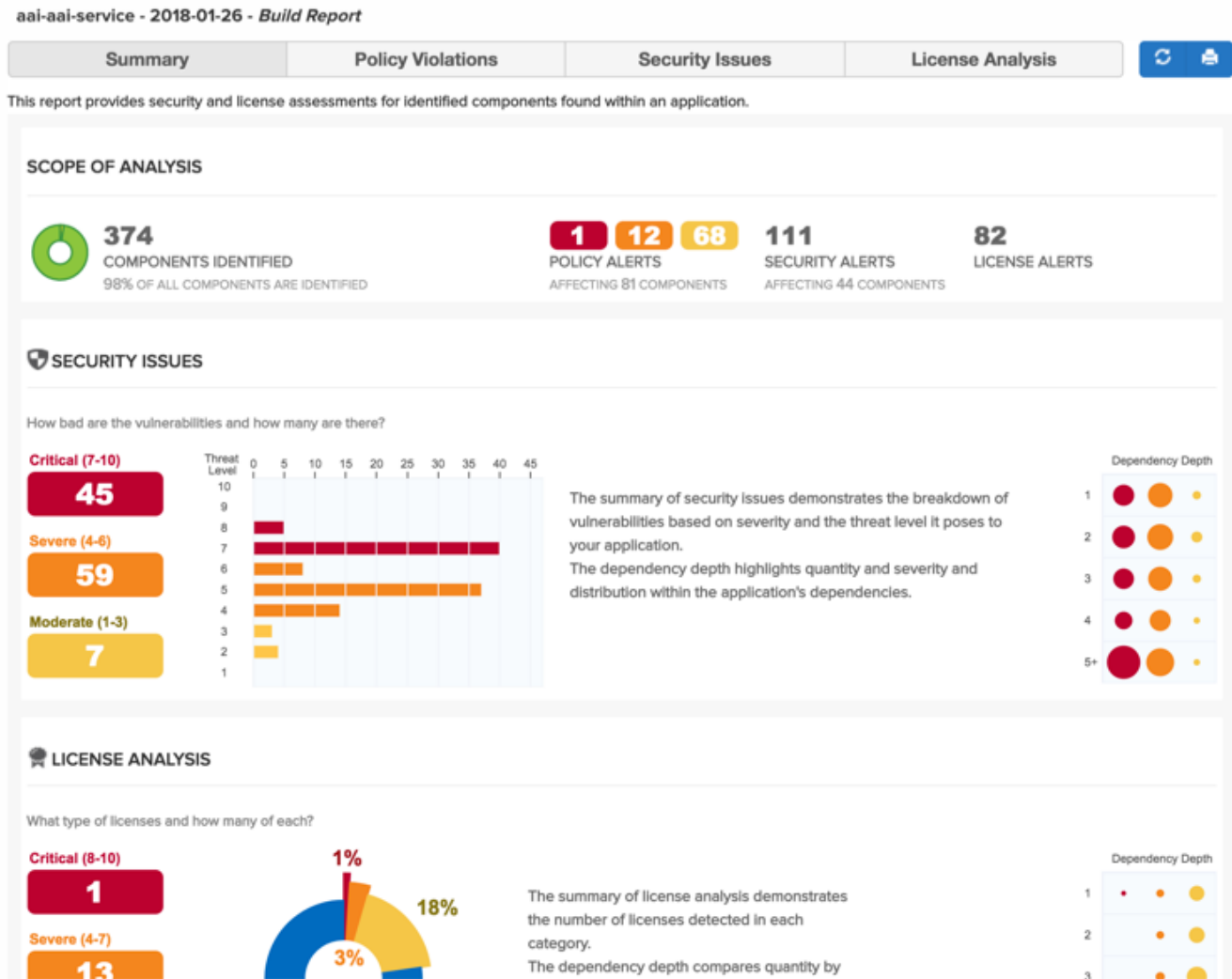


Click here
(login required)

Permalinks

- [Last build \(#24\), 5 days 13 hr ago](#)
- [Last stable build \(#15\), 2 mo 8 days ago](#)
- [Last successful build \(#24\), 5 days 13 hr ago](#)
- [Last unstable build \(#24\), 5 days 13 hr ago](#)
- [Last unsuccessful build \(#24\), 5 days 13 hr ago](#)
- [Last completed build \(#24\), 5 days 13 hr ago](#)

Sonatype Nexus IQ



Sonatype Nexus IQ

aai-aai-service - 2018-01-26 - Build Report

Summary		Policy Violations		Security Issues		License Analysis	
FILTER: All Exact Similar Unknown Proprietary		VIOLATIONS: Summary All Waived					
Policy Threat	Component	Filename	Pop...	Age	Release History		
<input type="text" value="Search Name"/>	<input type="text" value="Search Component"/>	<input type="text" value="Search Filename"/>			----- 48 years -----		
No strong copyleft with	org.powermock : powermock-module-javaagent ...	powermock-javaa...	●	2.9 y			
	dom4j : dom4j : 1.6.1	dom4j-1.6.1.jar	●	12.5 y			
No use restrictions	org.freemarker : freemarker : 2.3.14	freemarker-2.3.14...	●	9.4 y			
	org.grails : grails-web : 1.3.7	grails-web-1.3.7.jar	●	7.0 y			
	org.json : json : 20090211	json-20090211.jar	●	8.9 y			
	org.twitter4j : twitter4j-core : 4.0.3	twitter4j-core-4.0....	●	2.9 y			
	xml-apis : xml-apis : 1.0.b2	xml-apis-1.0.b2.jar	●	12.3 y			
No standards body term	org.jtidy : jtidy : 4aug2000r7-dev	jtidy-4aug2000r7-...	●	12.3 y			
	org.apache.cxf : cxf-core : 3.0.6	cxf-core-3.0.6.jar	●	2.5 y			
	org.apache.cxf : cxf-rt-ws-policy : 3.0.6	cxf-rt-ws-policy-3....	●	2.5 y			
No weak copyleft LGPL	bsh : bsh : 1.3.0	bsh-1.3.0.jar	●	12.5 y			
	org.oncrpc : oncrpc : 1.0.7	oncrpc-1.0.7.jar	●	6.8 y			
	org.xhtmlrenderer : core-renderer : R8	core-renderer-R8.jar	●	7.7 y			
No weak copyleft - non-	ch.qos.logback : logback-access : 1.1.7	logback-access-1....	●	1.8 y			
	ch.qos.logback : logback-classic : 1.1.7	logback-classic-1....	●	1.8 y			
	ch.qos.logback : logback-core : 1.1.7	logback-core-1.1....	●	1.8 y			
	com.sun.instrsev : instrsev-client : 1.18	instrsev-client-1.18.jar	●	4.2 y			

Sonatype Nexus IQ

iai-aai-service - 2018-01-26 - Build Report

Summary Policy Violations Security Issues License Analysis

License Threat	Component	Status
Search Licenses	Search Component	Search Status
Apache-2.0, BSD-3-Clause, GPL-2.0-with-classpath-exception	org.powermock : powermock-module-javaagent : 1.6.2	Selected

Component Info Policy Similar Occurrences Licenses Vulnerabilities Labels Audit Log

Group: org.powermock
Artifact: powermock-module-javaagent
Version: 1.6.2
Declared License: Apache-2.0
Observed License: BSD-3-Clause, Apache-2.0, MIT, GPL-2.0-with-classpath-exception
Effective License: BSD-3-Clause, Apache-2.0, MIT, GPL-2.0-with-classpath-exception
Highest Policy Threat: **8**

LGPL-2.1	org.xhtmlrenderer : core-renderer : R8	Selected
Not Declared, No Source License	org.codehaus.plexus : plexus-i18n : 1.0-beta-7	Confirmed
LGPL-2.1	bsh : bsh : 1.3.0	Overridden
EPL-1.0	org.eclipse.aether : aether-impl : 0.9.0.M2	Selected

Sonatype Nexus IQ

aai-aai-service - 2018-01-26 - Build Report

Summary	Policy Violations	Security Issues	License Analysis															
<p>License Threat ▾</p> <p>Search Licenses Search Component Search Status</p> <table border="1"><thead><tr><th>License Threat</th><th>Component</th><th>Status</th></tr></thead><tbody><tr><td>Apache-2.0, BSD-3-Clause, GPL-2.0-with-classpath-e</td><td>org.powermock : powermock-module-javaagent : 1.6.2</td><td>Selected</td></tr></tbody></table> <p>Component Info Policy Similar Occurrences Licenses Vulnerabilities Labels Audit Log</p> <p>powermock-javaagent.jar located at ajsc-aai/target/agents</p> <table border="1"><tbody><tr><td>LGPL-2.1</td><td>org.xhtmlrenderer : core-renderer : RB</td><td>Selected</td></tr><tr><td>Not Declared, No Source License</td><td>org.codehaus.plexus : plexus-i18n : 1.0-beta-7</td><td>Confirmed</td></tr><tr><td>LGPL-2.1</td><td>bsh : bsh : 1.3.0</td><td>Overridden</td></tr></tbody></table>				License Threat	Component	Status	Apache-2.0, BSD-3-Clause, GPL-2.0-with-classpath-e	org.powermock : powermock-module-javaagent : 1.6.2	Selected	LGPL-2.1	org.xhtmlrenderer : core-renderer : RB	Selected	Not Declared, No Source License	org.codehaus.plexus : plexus-i18n : 1.0-beta-7	Confirmed	LGPL-2.1	bsh : bsh : 1.3.0	Overridden
License Threat	Component	Status																
Apache-2.0, BSD-3-Clause, GPL-2.0-with-classpath-e	org.powermock : powermock-module-javaagent : 1.6.2	Selected																
LGPL-2.1	org.xhtmlrenderer : core-renderer : RB	Selected																
Not Declared, No Source License	org.codehaus.plexus : plexus-i18n : 1.0-beta-7	Confirmed																
LGPL-2.1	bsh : bsh : 1.3.0	Overridden																

Sonatype Nexus IQ

aai-aai-service - 2018-01-26 - Build Report

Summary Policy Violations Security Issues License Analysis

License Threat	Component	Status
Search Licenses	Search Component	Search Status
Apache-2.0, BSD-3-Clause, GPL-2.0-with-classpath-e	org.powermock : powermock-module-javaagent : 1.6.2	Selected

Component Info Policy Similar Occurrences Licenses Vulnerabilities Labels Audit Log

DECLARED LICENSES

- Apache-2.0

OBSERVED LICENSES

- Apache-2.0
- BSD-3-Clause
- GPL-2.0-with-classpath-exception
- MIT

EFFECTIVE LICENSE

- Apache-2.0
- BSD-3-Clause

Scope: ONAP

Status: Selected

License(s): Apache-2.0, BSD-3-Clause, MIT, GPL-2.0-with-class...

Comment

Update

LGPL-2.1	org.xhtmlrenderer : core-renderer : R8	Selected
Not Declared, No Source License	org.codehaus.plexus : plexus-i18n : 1.0-beta-7	Confirmed
LGPL-2.1	bsh : bsh : 1.3.0	Overridden
GPL-2.0	org.eclipse.aether : aether-impl : 0.9.0.M2	Selected

ONAP Processes and Best Practices

ONAP: Review monthly reports

- › LF will continue to send monthly to PTLs:
 - › FOSSology reports (licenses detected within ONAP repos)
 - › Nexus IQ reports (licenses detected in build-time JAR dependencies)
- › Please review these reports for findings in your repos
- › Discuss questions with me (and/or your legal counsel)

ONAP: License findings

- › Remediate (e.g., remove and replace) where possible for high-priority findings:
 - › Non-OSS / use restrictions
 - › Copyleft (especially strong copyleft)
- › Where any non-Apache.2.0, non-CC-BY-4.0 licenses will remain in the project, a license exception approval from the TSC will be required
 - › This process is being defined, following transition to LF Networking

ONAP: License notices within individual files

- › Different types of notices:
 - › Full license text in top-level LICENSE.txt file
 - › Copyright notice
 - › Standard license headers in each file
 - › SPDX short-form IDs in each file

(sample; not from ONAP)

```
4 #
5 # Copyright (C) The Linux Foundation
6 #
7 # Licensed under the Apache License, Version 2.0 (the "License");
8 # you may not use this file except in compliance with the License.
9 # You may obtain a copy of the License at
10 #
11 # http://www.apache.org/licenses/LICENSE-2.0
12 #
13 # Unless required by applicable law or agreed to in writing,
14 # distributed under the License is distributed on an "AS IS"
15 # WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either expressed
16 # or implied. See the License for the specific language governing
17 # permissions and limitations under the License.
18 #
19 # SPDX-License-Identifier: Apache-2.0
20
```

ONAP: License notices within individual files

For files without license notices, we recommend developers add SPDX short-form IDs

Examples:

- › For ONAP original code:

SPDX-License-Identifier: Apache-2.0

- › For a file that contains ONAP-original code, together with third-party code under MIT:

SPDX-License-Identifier: (Apache-2.0 AND MIT)

- › For ONAP-original documentation:

SPDX-License-Identifier: CC-BY-4.0

ONAP: License notices within individual files

Some files can't easily have license notices added.

Examples:

- › Image files (.jpeg, .png, ...)
- › Structured metadata without comment fields (.json, binary formats)
- › Other binary files (e.g. test files)

For these types of files, the best that can easily be done is to rely on the top-level LICENSE.txt notices.

ONAP: Copyright notices within individual files

Many different formats possible; your company / legal counsel may have a preference.

Our recommendation:

```
Copyright (c) [your company name]
```

- › It is not typically necessary to include the year
- › If the year is present, you can choose to update your own copyright notices when you update the file, but it is not mandatory to do so

ONAP: Things Not to Do

Do NOT:

- › Remove or modify a third party's license or copyright notice
- › Add a license notice that is incompatible with one already present
 - › E.g., don't add an Apache-2.0 notice to a GPL-2.0 file
- › Add a reference to Apache-2.0 just to bypass the license checker
- › Add third-party code from another source without including its license information

DO:

- › If you aren't sure about what's compatible, please ask (and include your legal counsel). There are differences of opinions and no single definition of "compatible."

ONAP: Miscellaneous

- › Brand new ONAP repos from existing seed code:
 - › We'll run a quick initial scan before upload, looking for major red flags
 - › After upload to ONAP repo, will become part of ongoing monthly scans
- › Record-keeping for Open Source within repos:
 - › Recommend using outputs from scanning process, rather than “Project FOSS” pages (manual updates not occurring)
 - › To be discussed with the TSC

An Ongoing Process

- › License compliance is a matter of ongoing improvement
 - › ...like all aspects of collaborative software development
- › Areas of focus will change over time as we improve together
- › Focusing on key priorities first
- › Reach out with any questions!
 - › Steve Winslow: swinslow@linuxfoundation.org
 - › your in-house legal counsel (for any legal interpretation questions)

Q&A

 THE **LINUX** FOUNDATION

Contact Us

The Linux Foundation

1 Letterman Drive

Building D, Suite D4700

San Francisco CA 94129

Phone/Fax: +1 415 7239709

www.linuxfoundation.org



General Inquiries

info@linuxfoundation.org

Membership

membership@linuxfoundation.org

Corporate Training

training@linuxfoundation.org

Event Sponsorship

sponsorships@linuxfoundation.org

Legal Notices

- › The Linux Foundation, The Linux Foundation logos, and other marks that may be used herein are owned by The Linux Foundation or its affiliated entities, and are subject to The Linux Foundation's Trademark Usage Policy at <https://www.linuxfoundation.org/trademark-usage>, as may be modified from time to time.
- › Linux is a registered trademark of Linus Torvalds. Please see the Linux Mark Institute's trademark usage page at <https://lmi.linuxfoundation.org> for details regarding use of this trademark.
- › Some marks that may be used herein are owned by projects operating as separately incorporated entities managed by The Linux Foundation, and have their own trademarks, policies and usage guidelines.
- › TWITTER, TWEET, RETWEET and the Twitter logo are trademarks of Twitter, Inc. or its affiliates.
- › Facebook and the "f" logo are trademarks of Facebook or its affiliates.
- › LinkedIn, the LinkedIn logo, the IN logo and InMail are registered trademarks or trademarks of LinkedIn Corporation and its affiliates in the United States and/or other countries.
- › YouTube and the YouTube icon are trademarks of YouTube or its affiliates.
- › All other trademarks are the property of their respective owners. Use of such marks herein does not represent affiliation with or authorization, sponsorship or approval by such owners unless otherwise expressly specified.
- › The Linux Foundation is subject to other policies, including without limitation its Privacy Policy at <https://www.linuxfoundation.org/privacy> and its Antitrust Policy at <https://www.linuxfoundation.org/antitrust-policy>, each as may be modified from time to time. More information about The Linux Foundation's policies is available at <https://www.linuxfoundation.org>.
- › Please email legal@linuxfoundation.org with any questions about The Linux Foundation's policies or the notices set forth on this slide.