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Open source software licensing

2020

Setting the context

Introduction: What is open source software?

Open source software (OSS) is a software programme with a source code that anyone can check, modify, and update. It is usually developed in a collaborative manner and released under a licence that allows the developer to inspect, change, and distribute the software to anyone for any purpose.

The way an organisation can use an open source software programme depends on its licence. Hundreds of different open source licences are available; each has its own terminologies and restrictions.

The two main categories of OSS licences are permissive and copyleft.

Permissive

- Allowed to use the source code for any purpose
- Attribution or acknowledgement for creators / authors is necessary
- Minimal restrictions on licence use
- Can be a part of proprietary software programmes

Examples

- Berkeley Software Distribution (BSD) licence
- Apache

Copyleft

- Allowed to use the source code for any purpose
- Attribution or acknowledgement for creators / authors is necessary
- No further restrictions can be placed on the code, distributed to the community as received
- Necessary to make an open source code for others to use it freely

Examples

- GNU General Public Licence
- Eclipse

Introduction: Current situation overview

With an increase in the use of OSS in organisations, managing and optimising OSS effectively is important. This can help organisations manage risk, compliance, and security vulnerability associated with open source components consumed internally.

Did you know?

- About **80** different types of OSS licences are available; each has its own terminologies and restrictions.
- According to Gartner, OSS is used by more than **95%** IT organisations worldwide.
- Through 2022, the **percentage of open source within IT portfolios** relative to either homegrown or licensed third-party solutions will **increase at a** compound annual growth rate (CAGR) of **30%**.

Why is it in focus now?

- After the COVID-19 crisis, most organisations would have remote workers who can download any software with minimal restrictions.
- More organisations are shifting to easily accessible OSS to reduce dependency on paid proprietary tools.
- However, OSS has its own set of restrictions and security issues that need monitoring.

Business need for OSS compliance

Open source software come with certain requirements, which when not followed can lead to legal, operations and security issues.

IP infringement risk: licensing obligations by using open source licence for patent provisions

Restrictions on use as proprietary licence: It can mandate the release of the source code as an OSS, and provide rights to modify and distribute at no charge.

Derivative work for copyleft licences: It needs to be licensed under the same OSS licence

Copyright notices: that are required to be included in the developed code are found in the licence text and source code files

Security risk: It indicates vulnerabilities associated with source code components.

Open source software licensing requirement/rationale

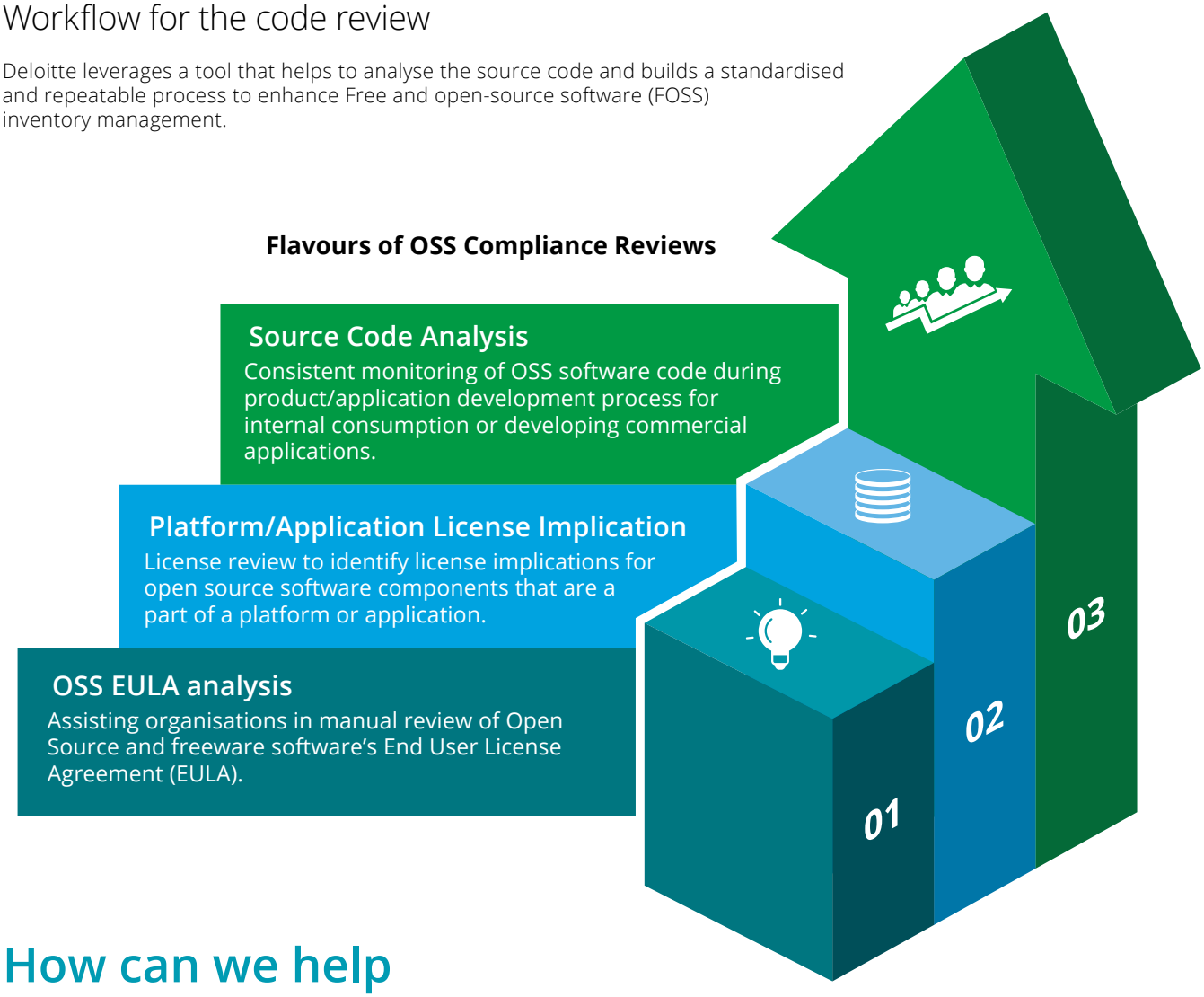
Source

What innovation leaders must know about open-source software:
https://www.gartner.com/document/3956651?ref=solrAll&refval=248155840

Solution overview

Workflow for the code review

Deloitte leverages a tool that helps to analyse the source code and builds a standardised and repeatable process to enhance Free and open-source software (FOSS) inventory management.



How can we help

Areas where we help organisations use OSS

Acquisitions involving OSS platform

Carry out due diligence of the application platforms and identify any potential risks posed by software licences used in building the platform.

Organisations shifting from proprietary to OSS software base

Provide consulting services on which types of OSS licences can be used in developing in-house and proprietary software.

Software applications/ product development organisations

Monitor OSS software code consistently during the complete cycle of product/ application development process.

OSS included as a part of the review of entire the SAM asset base

Provide a view of the OSS included in the deployment footprint and risk assessment of the installed OSS.

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