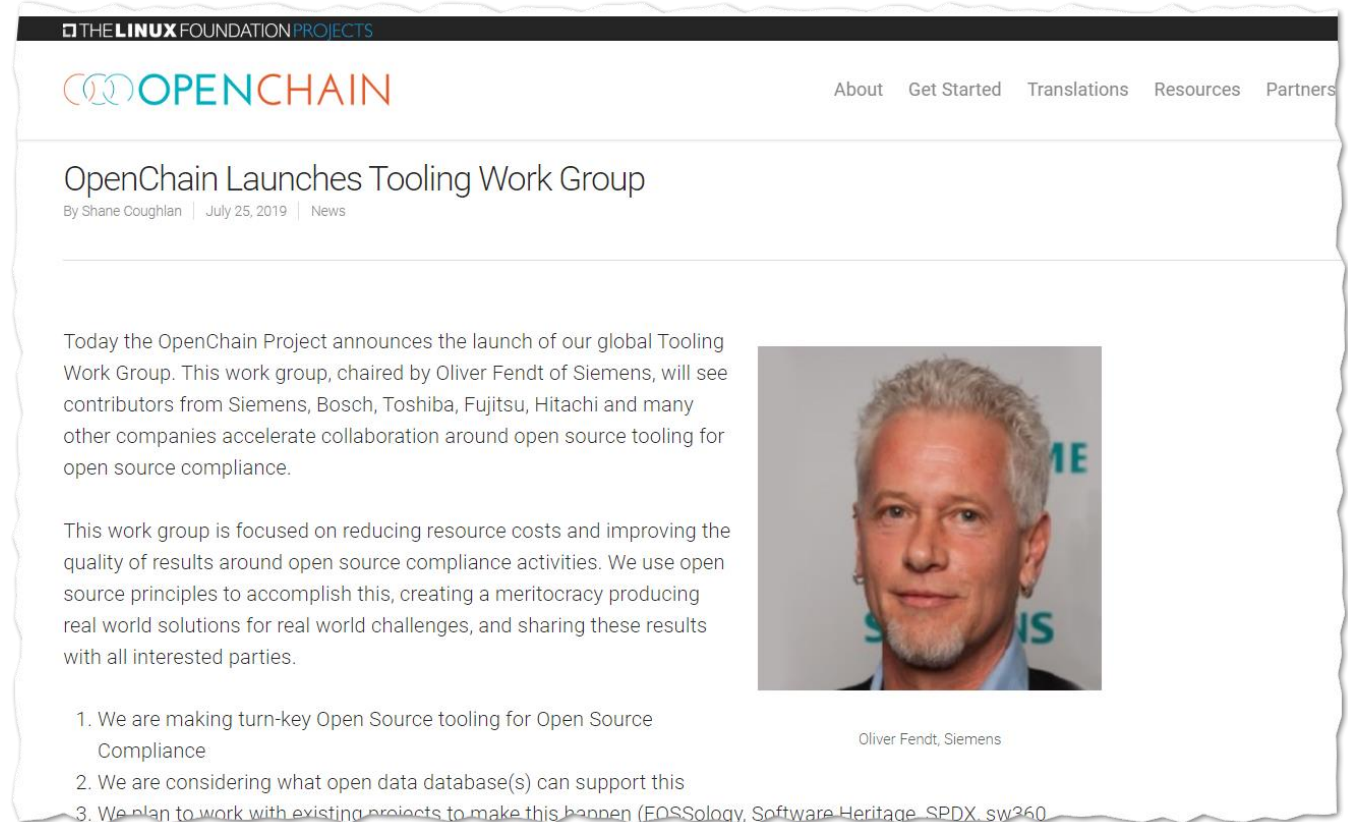


OpenChain Tooling Work Group - Overview

Introduction



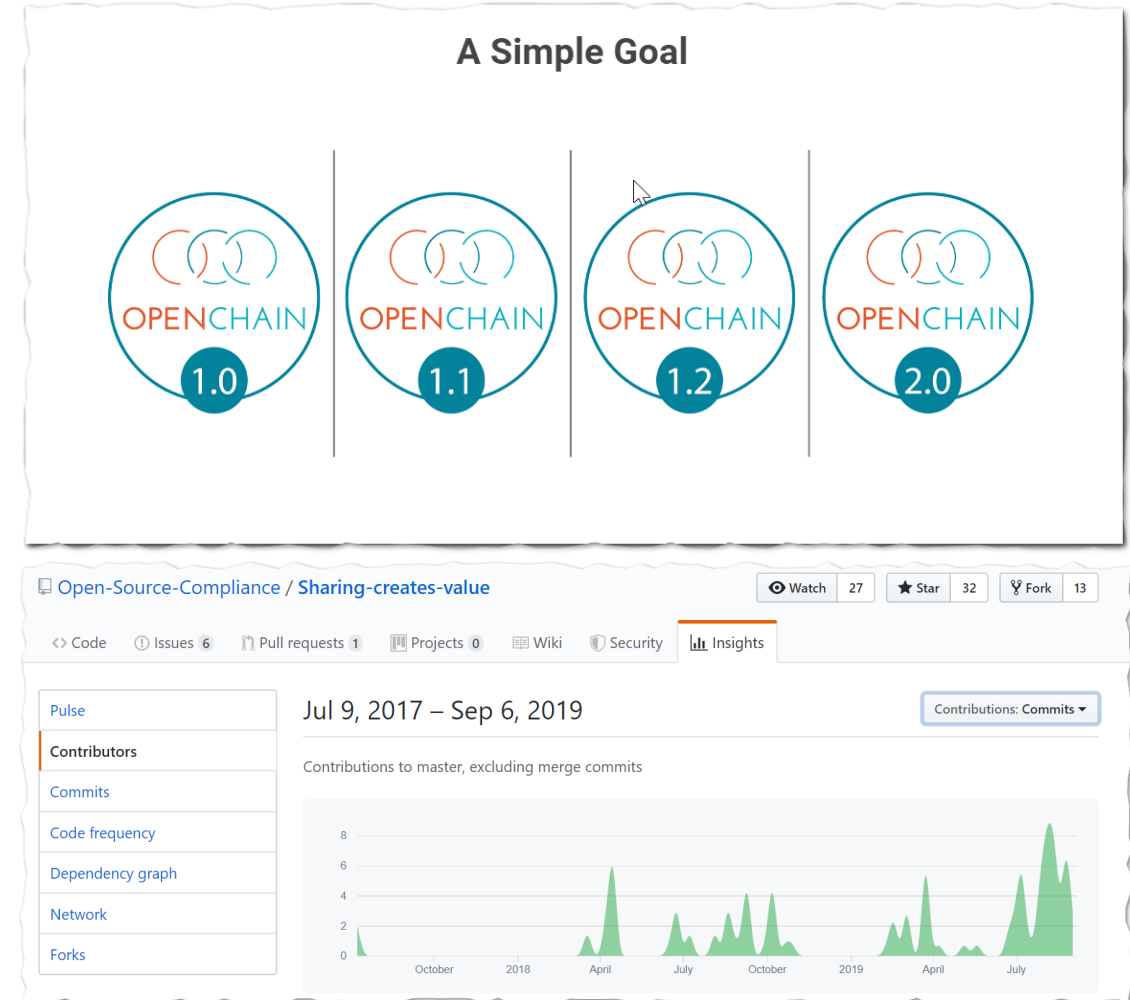
- Reducing resource costs and improving the quality of results
- Uses open source principles to accomplish the objective
- A meritocracy producing real world solutions for real world challenges and it shares results to all interested parties.



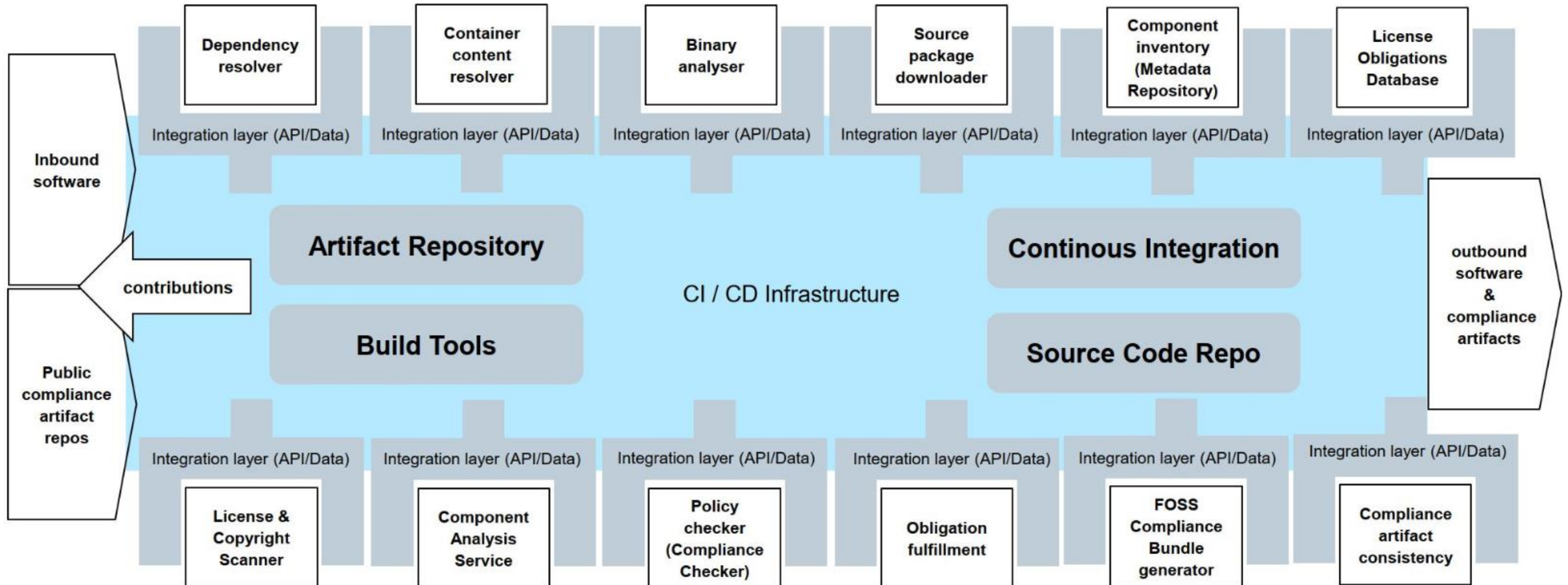
Hierarchy



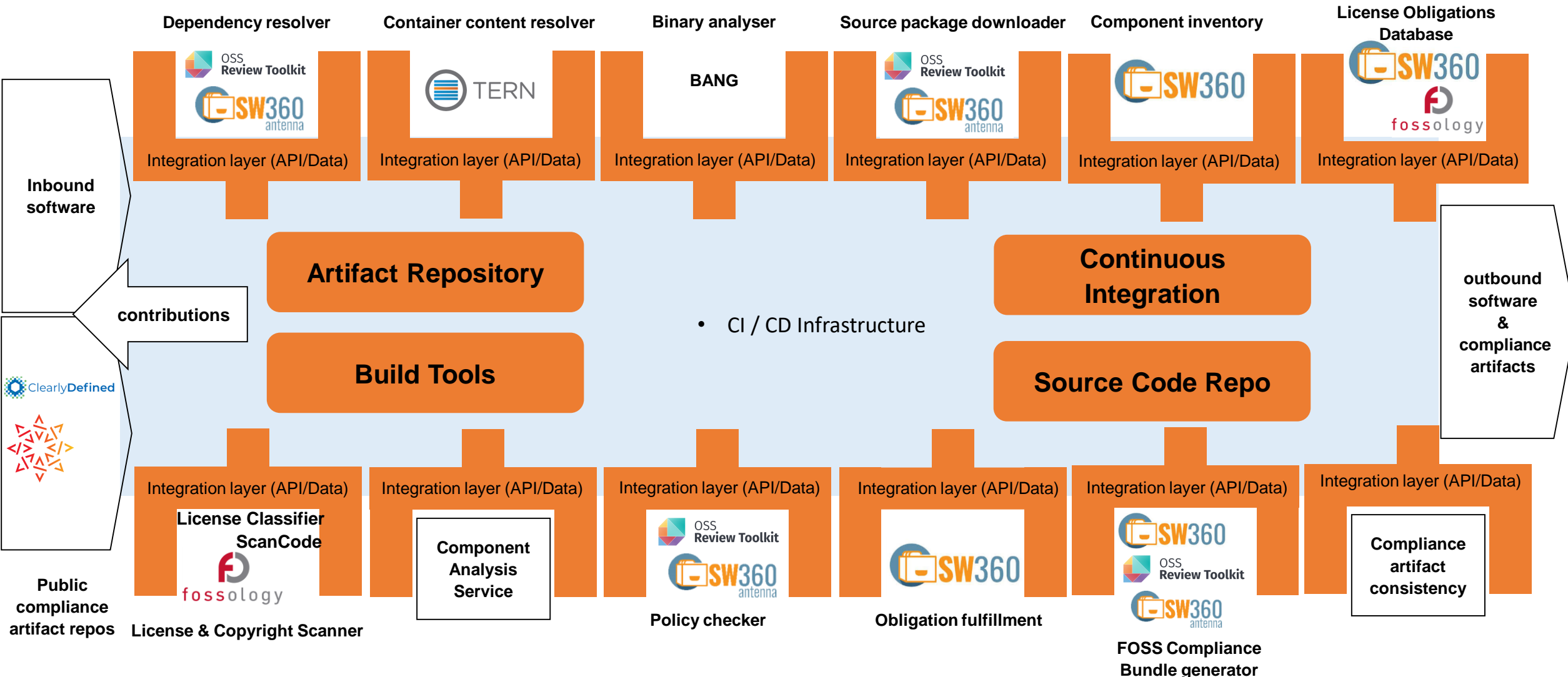
- The [OpenChain Project](#) maintains the standard for open source compliance in the supply chain.
- The OpenChain Project has various Work Groups where volunteers work on specific compliance challenges.
- We use the Sharing Creates Value GitHub Repository and OSS Compliance Tooling mailing list.



Big Picture – Integrated Compliance Toolchain Instance



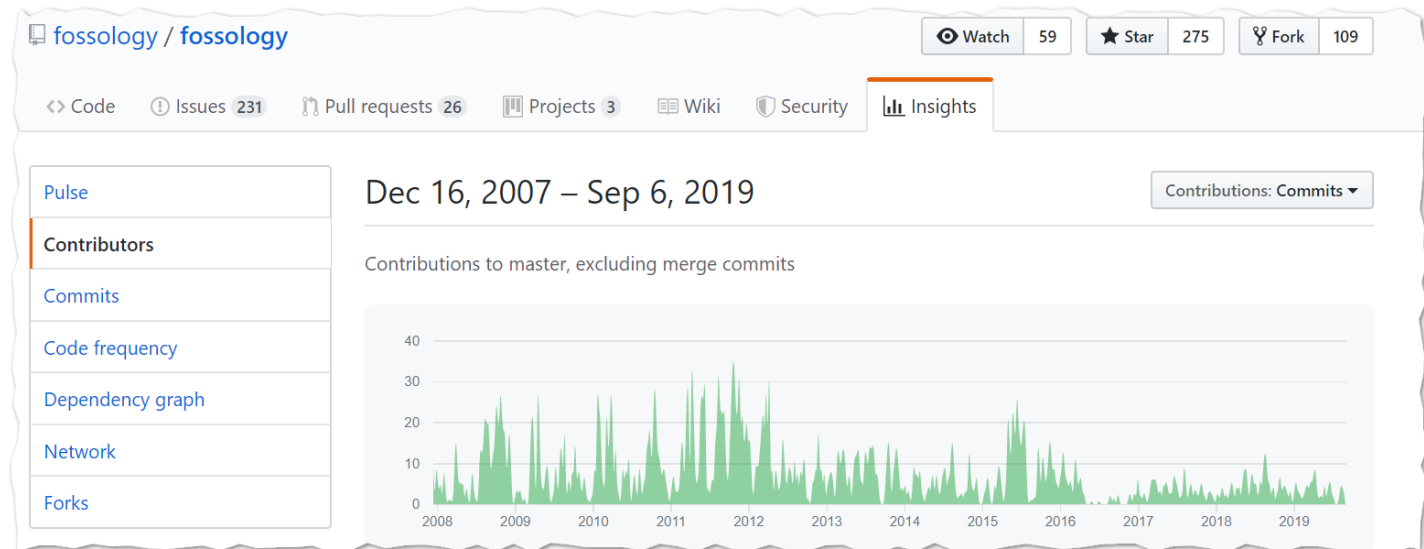
Big Picture – Integrated Compliance Toolchain Instance



Fossology



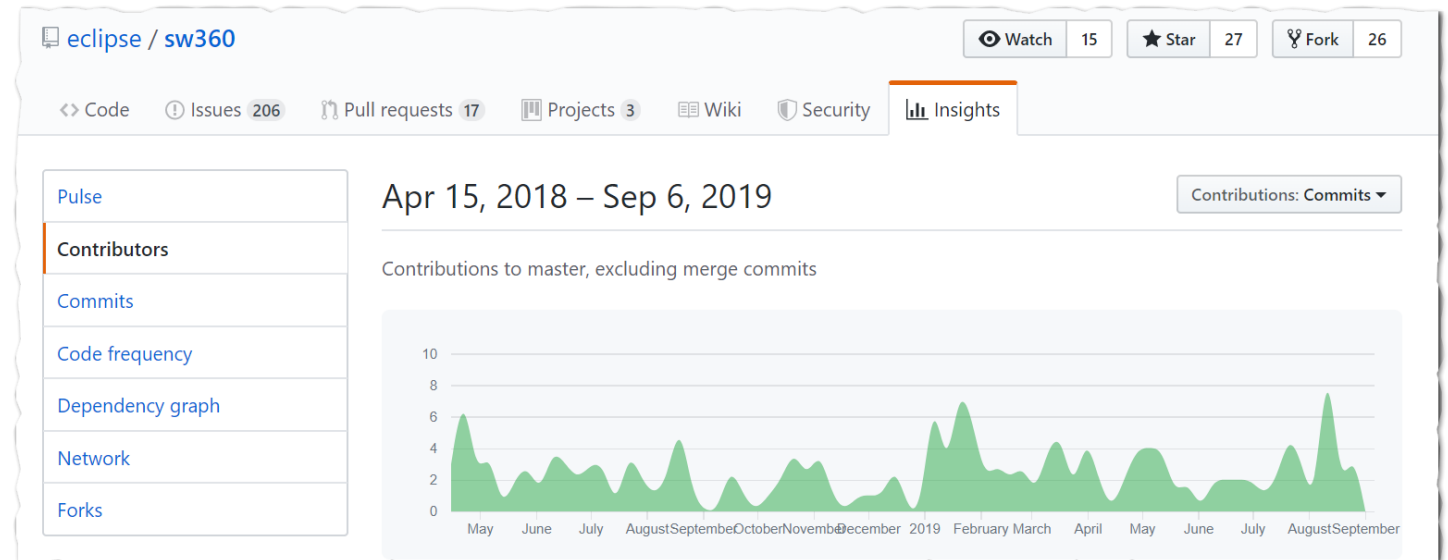
- Scanning tool for license, copyright and export control scans.
- Can generate an SPDX file, or a ReadMe with all the copyrights notices .
- Web UI and a database for a compliance workflow.
- Scanners provided are Monk, Nomos and Ninka.
- Licensed under GPL-2.0 or 2.1



Eclipse SW360



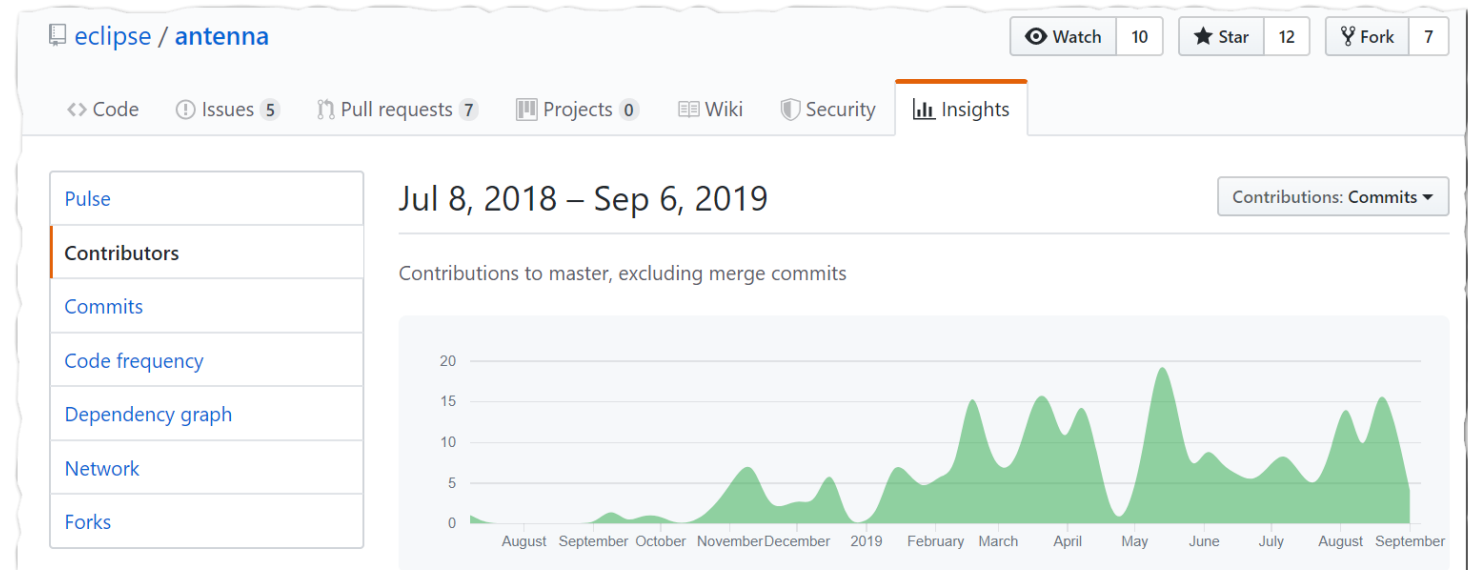
- A software component catalogue application - designed to work with FOSSology.
- SW360 is a server with a REST interface and a Liferay portal application to maintain your projects / products and the software components within.
- Licensed under EPL-2.0



Eclipse SW360 Antenna



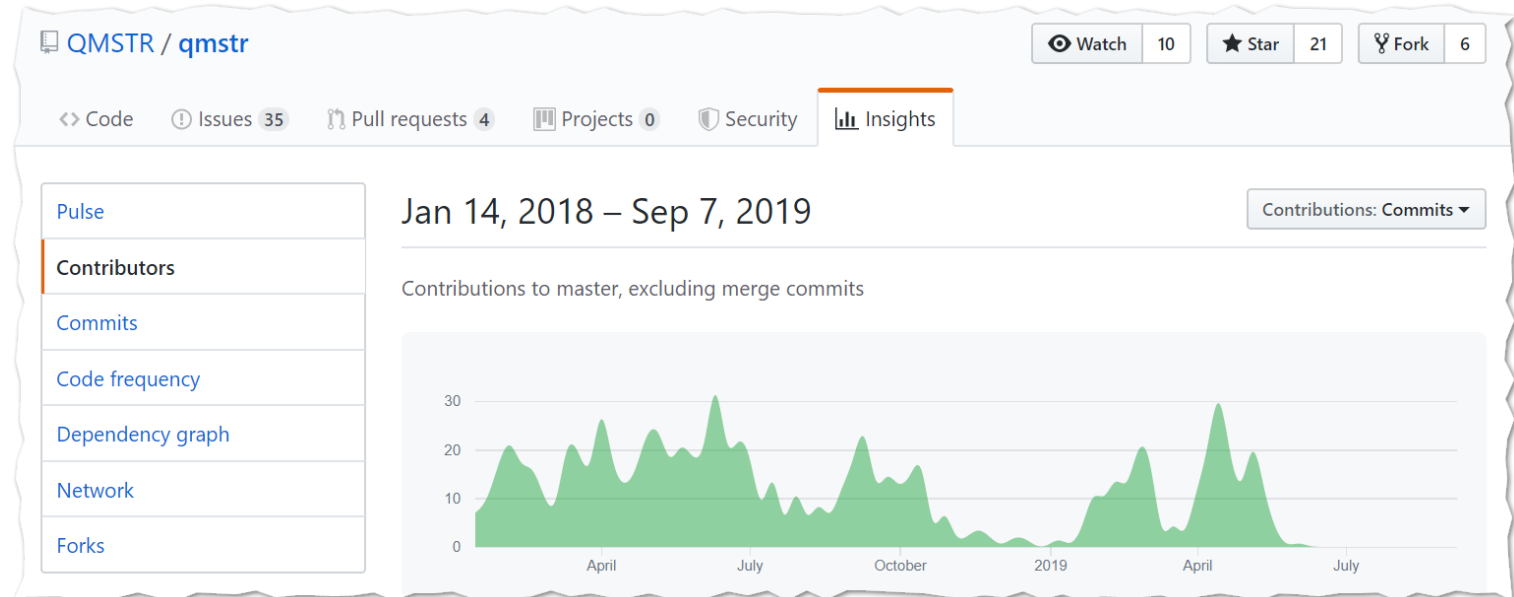
- A tool to automate your open source license compliance process.
- Collect all compliance relevant data
- Process that data and warn if there might be any license compliance related issues.
- Generate a set of compliance artifacts (source code bundle, disclosure document, report)
- Licensed under EPL-2.0



The Quartermaster Project QMSTR



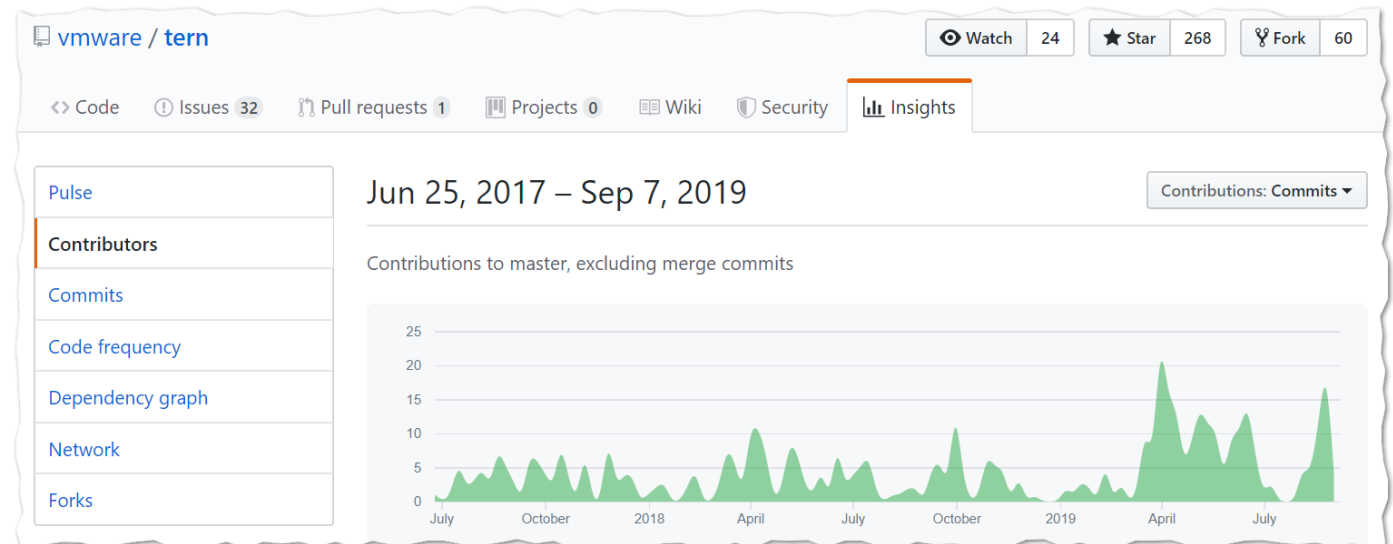
- Suite of command line tools and build system extensions.
- Executes as part of a software build process to generate reports about the analyzed product.
- Part of LF's Automated Compliance Tooling (ACT) project.
- Licensed under GPL-3.0



TERN



- Inspection tool to find the metadata of the packages installed in a container image.
- Default report is a verbose explanation of what layers brought in what software components.
- Licensed under BSD-2-Clause.



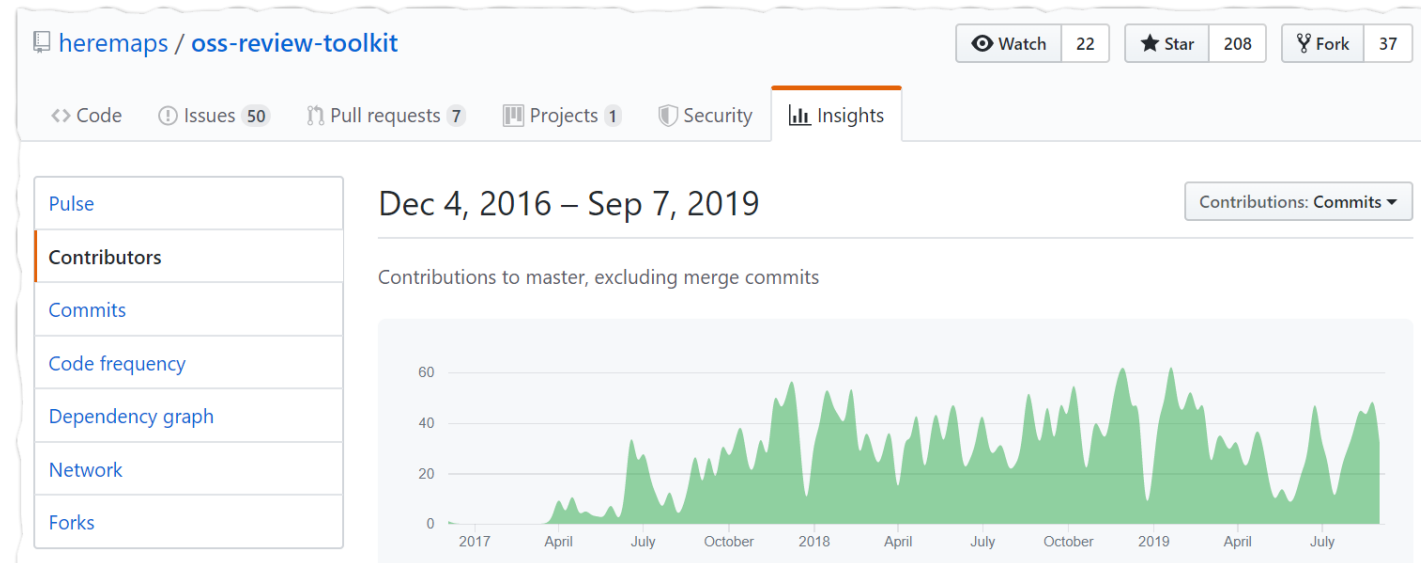
OSS Review Toolkit



- Analyses the project's build system for dependencies.
- Download and scan the source code of the dependencies for license information and summarize the results.
- Available Toolkits: Analyzer, Downloader, Scanner, Evaluator, Reporter.
- Planned Toolkits: Advisor, Documenter.
- Licensed under Apache-2.0



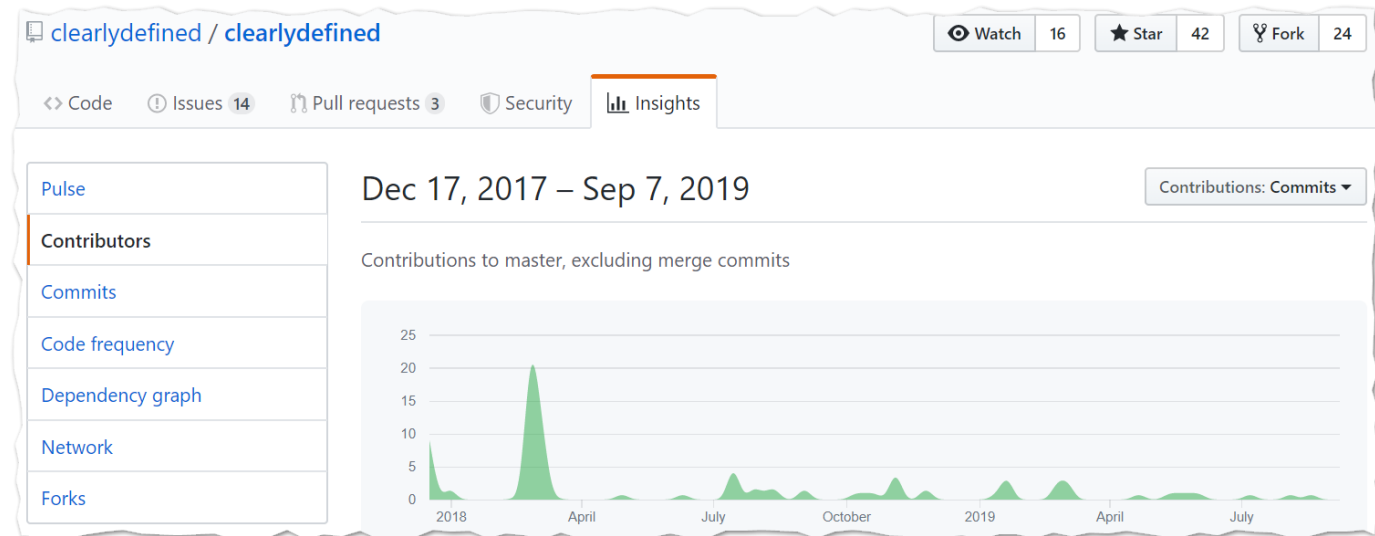
**OSS
Review Toolkit**



Clearly Defined



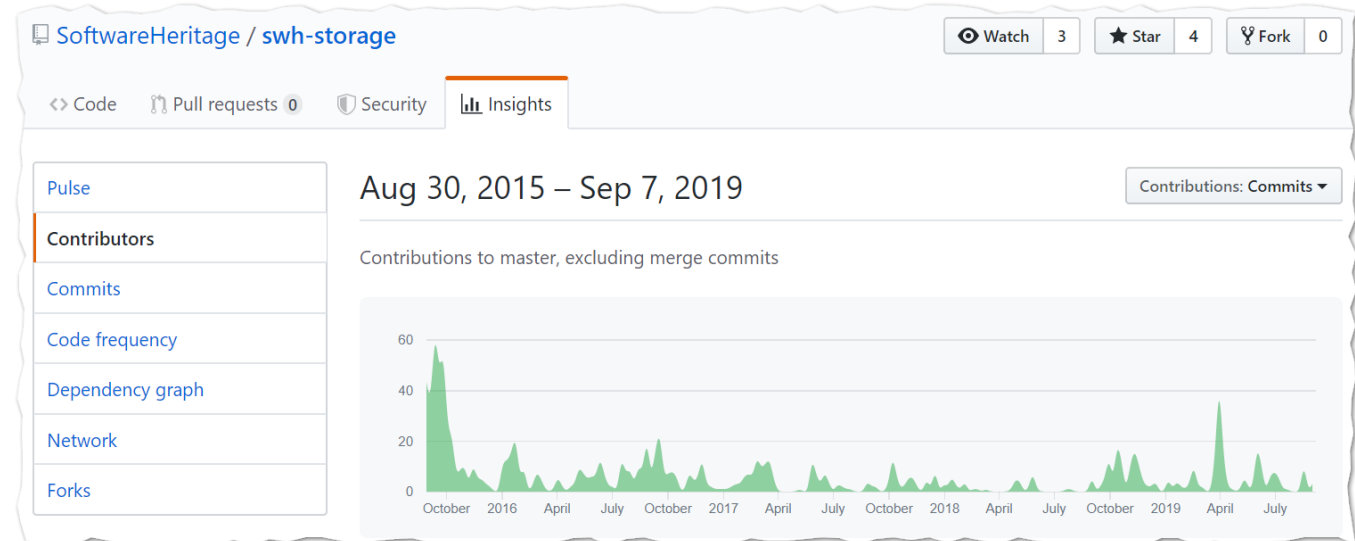
- **Mission:** To help FOSS projects thrive by being, well, clearly defined.
- Clearly Described
- Clearly Licensed
- Clearly Secure
- Licensed under Creative Commons CC0 1.0 Universal



Software Heritage



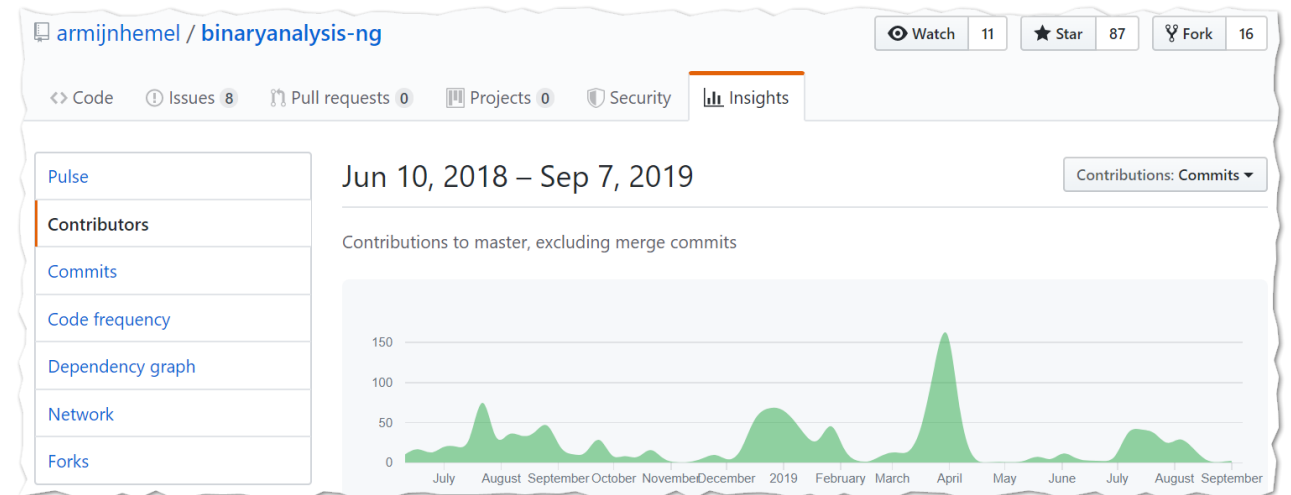
- To **collect**, **preserve**, and **share** all software that is publicly available in source code form.
- Ensures: Availability, Traceability and Uniformity of the collected source code.
- Licensed under GPL-3.0



BANG – Binary Analysis- NG



- Framework for unpacking files (like firmware) recursively and running checks on the unpacked files.
- To find out the provenance of the unpacked files and classify/label files, making them available for further analysis.
- Supports around 130 different file formats.
- Licensed under AGPL-3.0



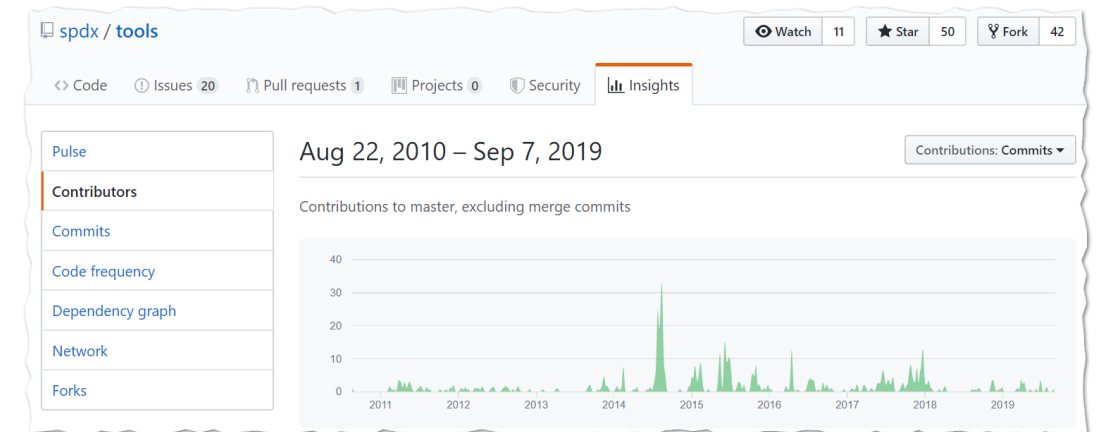
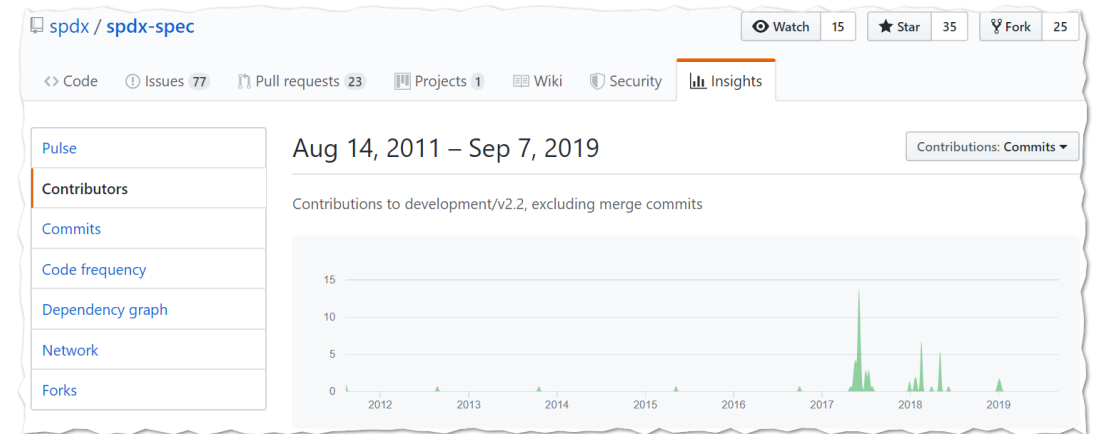
SPDX



- Open standard for communicating software bill of material information.
- For communicating the components, licenses and copyrights associated with a software package.
- Spec Licensed under Creative Commons Attribution 3.0

Unported

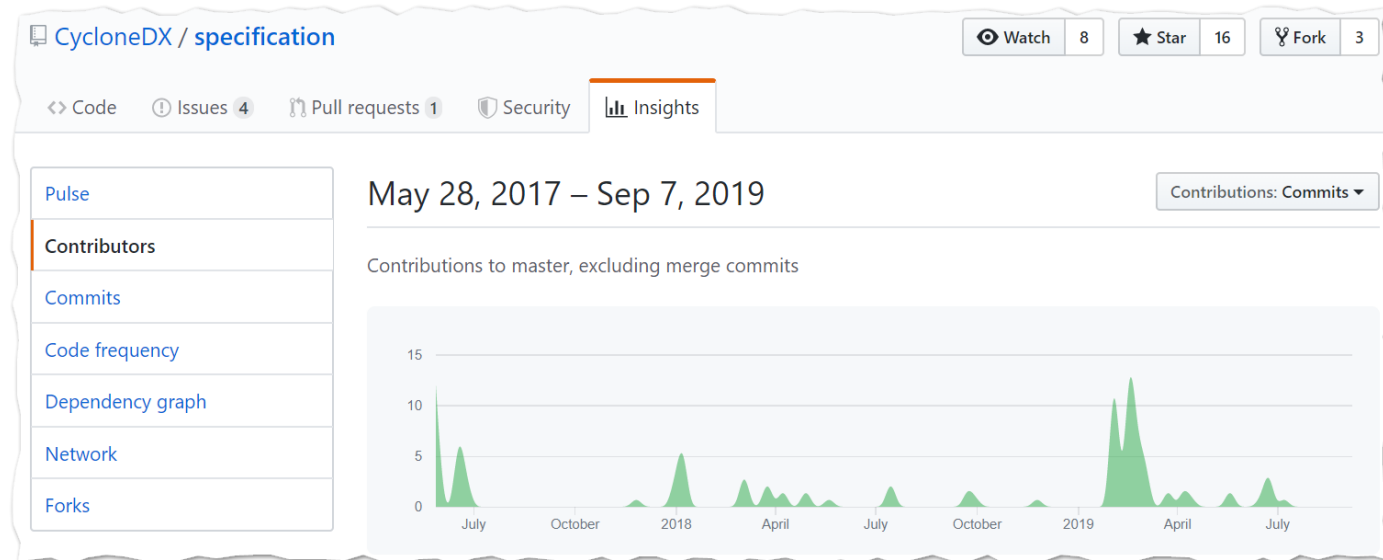
- Tools Licensed under Apache-2.0



CycloneDX



- Software Bill-of-Material (SBOM) specification designed for use in application security contexts and supply chain component analysis.
- Licensed under Apache-2.0



Open Source Automation Development Lab (OSADL)



- Intended to promote and coordinate the development of open source software for the machine, machine tool, and automation industry.

Open Source License Checklists - Checklists and license texts

License name	Project checklists
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Academic Free License v2.1	AFL-2.1
GNU Affero General Public License v3.0 only	AGPL-3.0-only
GNU Affero General Public License v3.0 or later	AGPL-3.0-or-later
Apache License 1.0	Apache-1.0
Apache License 1.1	Apache-1.1
Apache License 2.0	Apache-2.0
Artistic License 1.0 (Perl)	Artistic-1.0-Perl



Open Source License Checklists - Checklists and license texts

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Show reference license text in a new window [Next](#)

Checklist (Unreferenced raw data, Referenced raw data)

☒ USE CASE Source code delivery

☒ IF Software modification [Hide ref.](#)

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☒ USE CASE Binary delivery

☒ EITHER

YOU MUST *Include Original source code* [Ref.](#)

ATTRIBUTE *Machine-readable* [Ref.](#)

☒ IF Software modification [Ref.](#)

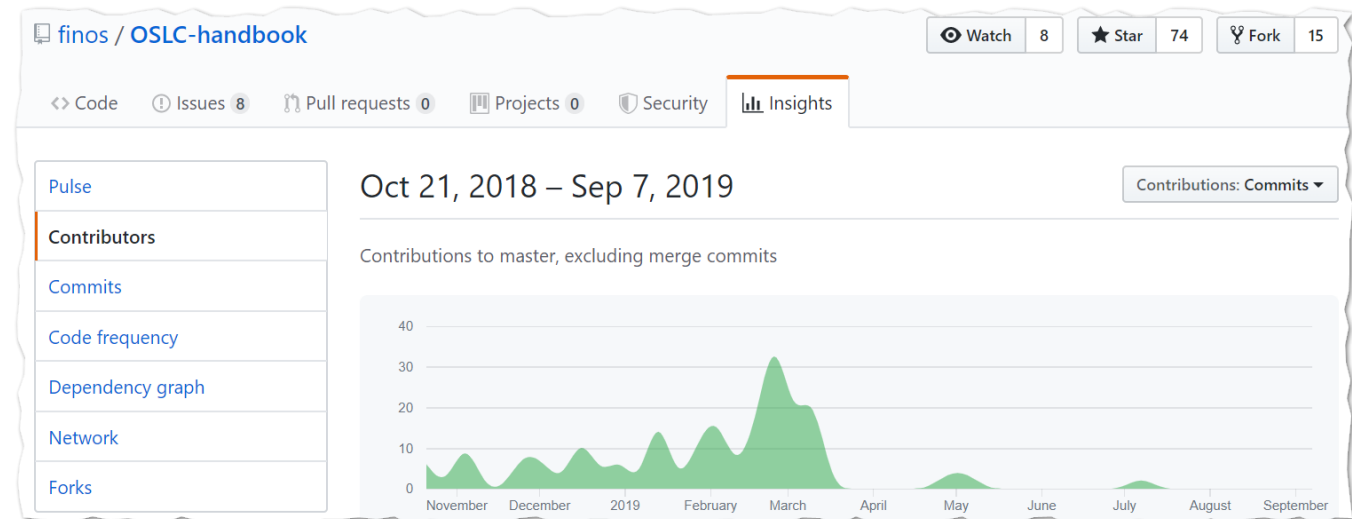
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FINOS – OSLC Handbook



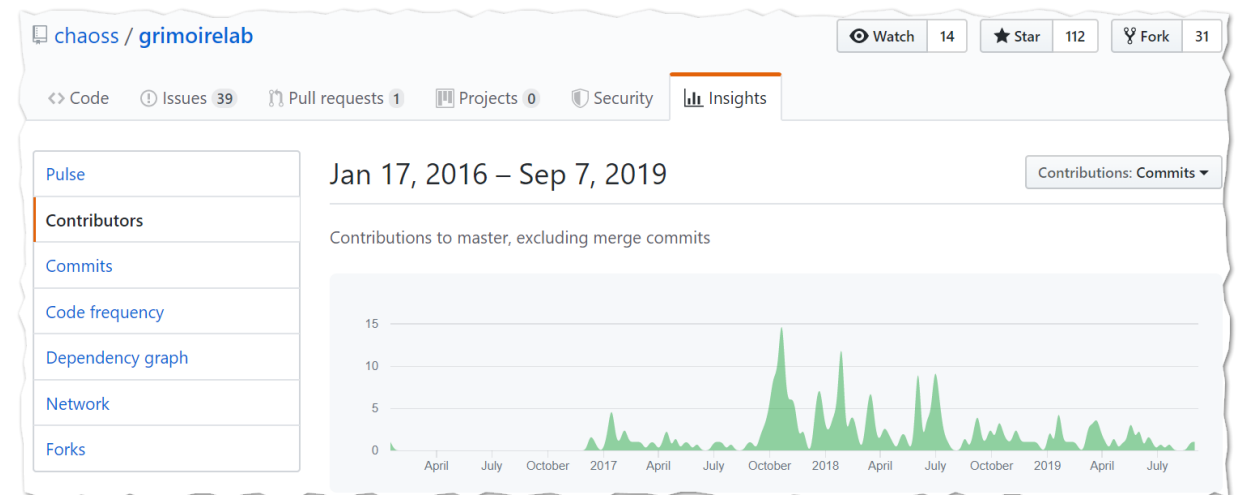
- Data store and handbook of practical information about complying with the most common open source licenses.
- Based on uses cases (modified/unmodified, binary/source)
- Licensed under Creative Commons Attribution-ShareAlike 4.0 International



CHAOSS



- Linux Foundation project focused on creating analytics and metrics to help define community health.
- Working groups to refine the metrics and to work with software implementations.
- GrimoireLab: toolset for software development analytics
- Augur: Python library and web service for Open Source Software Health and Sustainability metrics.



Thank You!

Arun Azhakesan

Lead – Open Source License Compliance

Siemens Healthineers, Bangalore, India

 @arunazhakesan