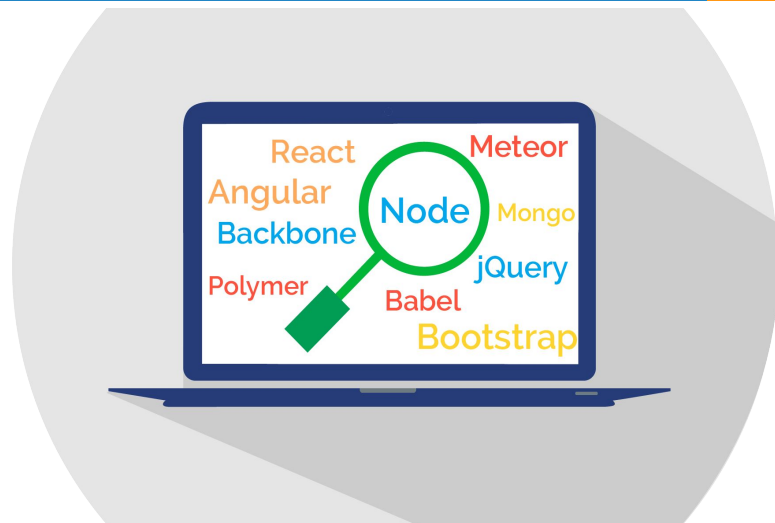


ScanCode Overview

Fall 2019



Topics

- ▷ Why ScanCode
- ▷ ScanCode Community
- ▷ What is ScanCode?
- ▷ ScanCode Roadmap

Why ScanCode Toolkit

- ▷ Easy and simple to install and run, self contained
- ▷ Best in class license & copyright scan accuracy
 - Based on natural language processing
- ▷ Runs on Linux, Mac OSX and Windows
- ▷ Find structured package manifest and dependencies
- ▷ Modern codebase, easy to understand and evolve

Easy to install and run

- ▶ ScanCode is **easy to install and run**. It runs on Windows, macOS and Linux. It runs on your laptop.
 - It can be used by your development teams
 - It can be used **by your supply chain partners, big and small**
- ▶ So easy my mother can install and run it!

Best in class license detection

- ▶ ScanCode has the most accurate license detection engine
 - **Less review needed**
- ▶ Also collects the full matched notice texts
 - Can be used to **automate attribution notice** creation
- ▶ Other scanning tools miss detecting or misdetect.
 - Used by Linux kernel maintainers to clean kernel licensing
 - Selected by Here.com for ORT as best in class
 - Selected by the Eclipse Foundation for ip due diligence
 - Used in ClearlyDefined to scan 6 Million+ FOSS packages

Easy to integrate in your process

- ▷ Command line tool, minimal dependencies
 - Easy to add to your CI/CD process pipeline
- ▷ Multiple OS support: Windows, macOS and Linux.
- ▷ SPDX, JSON, CSV outputs

ScanCode community

- ▷ 750+ stars on GitHub , 200+ forks, 70+ contributors
- ▷ Reactive bug fixing
- ▷ Heavily tested with 10,000+ unit and integration tests
- ▷ Apache-licensed
- ▷ ScanCode is part of the OpenChain compliance automation tooling group
- ▷ ScanCode is the referenced scanner in ClearlyDefined, ORT and Quartermaster.

Takeaway

- ▶ ScanCode is **best in class tool** for FOSS scanning and is **easy to install and run**
- ▶ It **collects all the evidence**: license notices, texts, copyrights and package info
- ▶ Therefore it should be the tool of choice to use **by your supply chain partners, big and small**
 - Low friction when scanning and sharing scans

Who uses ScanCode

- ▷ Used at top FOSS orgs and projects
 - ClearlyDefined, Debian, Eclipse, FSF, Linux kernel, Object Web, OpenEmbedded.org, Openshift analytics, ORT, Quartermaster, CHAOSS and others.
- ▷ Used at major companies
 - Amazon, Comcast, Facebook, Google, Here.com, Microsoft, Red Hat, VMware and others

Some issues with ScanCode

- ▷ Like many open source projects the documentation is something that is lacking a bit BUT
- ▷ We have a tech writer starting today courtesy of the **Google Seasons of Docs** and we expect vastly improved documentation over the next three months!

What is ScanCode?

Open source tools for open source compliance

- ▶ Toolkit - Identify software origin and license from the code
<https://github.com/nexB/scancode-toolkit>
- ▶ Workbench - Review scans and conclude licensing
<https://github.com/nexB/scancode-workbench>
- ▶ Licenses
 - Software - Apache 2.0 (SPDX id:Apache-2.0)
 - License Data - Creative Commons Public Domain (SPDX id: CC0-1.0)

Other companions tools and projects

- ▶ DeltaCode - compare two scans
- ▶ AboutCode toolkit - generate attribution notices
- ▶ TraceCode - trace your build: what code is used and how
- ▶ VulnerableCode - The free correlated vulnerabilities DB
- ▶ conan - Analyze Docker images packages

Next steps

- ▶ New version 3.x about to be released
- ▶ We are starting monthly community requirement planning online meeting to plan for 4.x

ScanCode Roadmap

- ▷ Deduction and inference for scan conclusions
 - Traceable Machine Learning
- ▷ Open source scancode.io - server for scanning
- ▷ License detection in other languages, beyond English
- ▷ VulnerableCode - the free vulnerabilities DB is now funded by the EU and NLnet
- ▷ SPDX Lite support?



Credits

Special thanks to all the people who made and released these awesome free resources:

- ▷ Presentation template by [SlidesCarnival](#)
- ▷ Photographs by [Unsplash](#)
- ▷ And all the software authors that made ScanCode possible