

# OpenSSF Scorecard



## Hyperledger Fabric

openssf scorecard 8 openssf best practices passing

### Overview

<https://securityscorecards.dev/>

### More information

<https://github.com/ossf/scorecard/tree/main>

### Reference

<https://github.com/ossf/scorecard/blob/main/docs/checks.md>

### Github Action (Fabric sample)

<https://github.com/hyperledger/fabric/blob/main/.github/workflows/scorecard.yml>

Viewer <https://scorecard.dev/viewer/>  
<https://scorecard.dev/viewer/?uri=github.com/hyperledger/fabric>

- 6.8** [github.com/hyperledger/besu](https://github.com/hyperledger/besu)  
API URL: <https://api.scorecard.dev/projects/github.com/hyperledger/besu>  
COMMIT: 40cfc800f7e311b1adae9a59f7f5d220ec05a84f  
GENERATED AT: 2024-05-06  
SCORECARD VERSION: v5.0.0-rc1-29-g6b5cb27c
- 5.6** [github.com/hyperledger/cactus](https://github.com/hyperledger/cactus)  
API URL: <https://api.scorecard.dev/projects/github.com/hyperledger/cactus>  
COMMIT: 4c94bf21ee570349995c61204fe60a2dc6a35766  
GENERATED AT: 2024-05-06  
SCORECARD VERSION: v5.0.0-rc1-29-g6b5cb27c
- 5.5** [github.com/hyperledger/caliper](https://github.com/hyperledger/caliper)  
API URL: <https://api.scorecard.dev/projects/github.com/hyperledger/caliper>  
COMMIT: 21a98f496c850840c211a670c32cfa9240612bb  
GENERATED AT: 2024-05-06  
SCORECARD VERSION: v5.0.0-rc1-29-g6b5cb27c
- 5.7** [github.com/hyperledger/cello](https://github.com/hyperledger/cello)  
API URL: <https://api.scorecard.dev/projects/github.com/hyperledger/cello>  
COMMIT: 31b6bfee96cbcf850484757cb25c68f744f720b1  
GENERATED AT: 2024-05-06  
SCORECARD VERSION: v5.0.0-rc1-29-g6b5cb27c
- 8.0** [github.com/hyperledger/fabric](https://github.com/hyperledger/fabric)  
API URL: <https://api.scorecard.dev/projects/github.com/hyperledger/fabric>  
COMMIT: fe7c46adb7e3c313d46acf6b404892636ef9d468  
GENERATED AT: 2024-05-15T18:36:28Z  
SCORECARD VERSION: v4.13.1
- 6.1** [github.com/hyperledger/iroha](https://github.com/hyperledger/iroha)  
API URL: <https://api.scorecard.dev/projects/github.com/hyperledger/iroha>  
COMMIT: 2cf50c0da52da31a8e2c80a24c5582a525f02a9f  
GENERATED AT: 2024-05-06  
SCORECARD VERSION: v5.0.0-rc1-29-g6b5cb27c

# OpenSSF Scorecard

## Mapping to Hyperledger graduation criteria

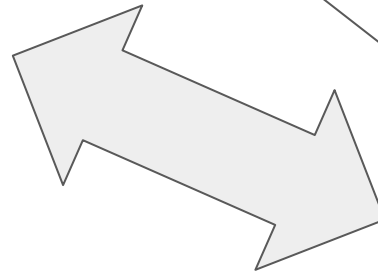
10	<b>Dangerous-Workflow</b> <b>CRITICAL</b>	Determines if the project's GitHub Action workflows avoid dangerous patterns.
0	<b>Signed-Releases</b> <b>HIGH</b>	Determines if the project cryptographically signs release artifacts.
9	<b>Code-Review</b> <b>HIGH</b>	Determines if the project requires human code review before pull requests (aka merge requests) are merged.
10	<b>Binary-Artifacts</b> <b>HIGH</b>	Determines if the project has generated executable (binary) artifacts in the source repository.
10	<b>Dependency-Update-Tool</b> <b>HIGH</b>	Determines if the project uses a dependency update tool.
10	<b>Maintained</b> <b>HIGH</b>	Determines if the project is "actively maintained".
10	<b>Token-Permissions</b> <b>HIGH</b>	Determines if the project's workflows follow the principle of least privilege.
10	<b>Vulnerabilities</b> <b>HIGH</b>	Determines if the project has open, known unfixed vulnerabilities.
0	<b>SAST</b> <b>MEDIUM</b>	Determines if the project uses static code analysis.
1	<b>Pinned-Dependencies</b> <b>MEDIUM</b>	Determines if the project has declared and pinned the dependencies of its build process.
10	<b>Fuzzing</b> <b>MEDIUM</b>	Determines if the project uses fuzzing.
10	<b>Packaging</b> <b>MEDIUM</b>	Determines if the project is published as a package that others can easily download, install, easily update, and uninstall.
10	<b>Security-Policy</b> <b>MEDIUM</b>	Determines if the project has published a security policy.
5	<b>CI-Best-Practices</b> <b>LOW</b>	Determines if the project has an OpenSSF (formerly CII) Best Practices Badge.
9	<b>CI-Tests</b> <b>LOW</b>	Determines if the project runs tests before pull requests are merged.
10	<b>Contributors</b> <b>LOW</b>	Determines if the project has a set of contributors from multiple organizations (e.g., companies).
10	<b>License</b> <b>LOW</b>	Determines if the project has defined a license.

- Legal
    - All code has been made available under the Apache License and is free of incompatible dependencies
    - Project name has been checked for trademark issues
  - Community support
    - The project must have an active and diverse set of contributing members representing various constituencies
    - The project is not highly dependent on any single contributor (there are at least 3 legally independent committers and there is no single company or entity that is vital to the success of the project)
    - Release plans are developed and executed in public by the community.
  - Sufficient test coverage
  - The project must include a comprehensive unit and integration test suite and document its coverage. Additional performance and scale test capability is desirable.
  - Sufficient user documentation
  - The project must include enough documentation for anyone to test or deploy any of the modules.
  - Alignment
    - Requirements fulfillment
      - The project must document what requirements and use cases it addresses.
    - Architecture
      - The project must document how it fits within the [Hyperledger Architecture](#)
    - Compatibility with other Hyperledger projects
      - Where applicable, the project should be compatible with other *Graduated* projects.
    - Release numbering: the project should use the Hyperledger standard [release taxonomy](#), once that is agreed upon.
    - Project must make a [release](#), even a "developer preview", before graduation.
  - Infrastructure
    - GitHub repo has been created
    - Mailing lists have been created and are archived
    - Other communication means used, such as chat channels, are set up
    - Project is set up with Continuous Integration
    - All project repos have implemented the [common repository structure](#)
  - Security
    - The project must identify key contact points to address security related questions and concerns. Some of the other responsibilities for them include:
      - Address automated alerts, such as depend-a-bot, in a timely manner.
      - Participate in Hyperledger Foundation wide security discussions.
  - OpenSSF Best Practices Badge
- A team seeking to graduate from *Incubation* shall have started the OpenSSF Best Practices Badge application and be nearly complete with incomplete badge requirements referenced in their graduation proposal. That does not mean the project must have 100% of all criteria, just 100% of the applicable criteria. This is to allow for projects such as test harnesses, that have "N/A" answers for questions that don't offer that as an option.

# OpenSSF Best Practices

## Mapping to Hyperledger graduation criteria

Basics	13/13
Change Control	9/9
Reporting	8/8
Quality	13/13
Security	16/16
Analysis	8/8



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**OpenSSF Best Practices Badge**

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<a href="#">OpenSSF Best Practices</a>	<a href="#">OpenSSF Scoreboard</a>	<a href="#">Proposed Badge</a>
Basics→License	License	Legal
Change Control→Repository	CII Best Practices	Structure
	Contributors (from multiple organizations)	Diversity/Decentralized
Change Control→Version numbering	Packaging	Release
Quality→Builds Quality→Automated test suite Quality→New functionality testing	CI Tests Dangerous Workflow Token Permissions	Testing and CI/CD
Basics→Documentation		Documentation
Reporting→Vulnerabilities Security→Vulnerabilities fixed Analysis→Static code analysis Analysis→Dynamic code analysis	Security Policy Dependency Update Tool Pinned Dependencies, Vulnerabilities Fuzzing, SAST	Security
		Conformity
Basics→Contributions Reporting→Bugs		Responsiveness/Engagement
		Production