

2020 Q1 Hyperledger Besu

Project

Hyperledger Besu

Project Health

Besu is strong and growing. This quarter Besu has prioritized fostering the community around Besu and delivering its 1.4 Release.

Questions/Issues for the TSC

- RocketChat continues to present an unneeded point of friction bringing in members from the larger Ethereum community. We are considering linking a different chat channel (Slack, Gitter) to RocketChat to assist this friction and give community members a separate entry point.
- The Besu team would like the TSC to consider [Besu's active status proposal](#) again along with this quarterly report.
 - Additionally, we have another organization, WhiteBlock building on Besu. ETC has been supporting Besu generally as well as contracted WhiteBlock to add keccak256 PoW mining.
 - The diversity of the project has continued to grow with an additional maintainer from a new organization onboarded. We now have 4 separate organizations represented with maintainers.
 - We previously received feedback from the TSC to continue to demonstrate usage of Hyperledger tools, which we have done since onboarding. We are currently transitioning to GitHub issues.
 - Non-PegaSys contributions have been 28% of the contributions since our prior quarterly report.

Releases

Besu has released one minor version update (1.4, 26 Feb) and six bi-weekly patch releases (1.3.7 on 13 Dec through 1.4.1 on 13 Dec, 18 Dec, 15 Jan, 29 Jan, 12 Feb, 26 Feb, 12 Mar respectively).

Major functional improvements include:

- PlugIn APIs
- New tracing APIs
- Multi-tenancy
- Advanced key management
- End-to-end encryption TLS

Check out the blog [here](#) for more information on the feature improvements.

Overall Activity in the Past Quarter

A few high-level activities include:

- Continue to run our bi-weekly contributor calls and grow the attendance
- We have been using the Hyperledger tools consistently and with general success. Onboarding onto RocketChat is still a barrier for some community members.
- Team is transitioning to GitHub Issues from Jira issues.
- A security audit on the Besu codebase has been in progress by Tevora. The final report is due on Friday, 3/27.

As a part of joining the Hyperledger community, the Besu team has participated in the community by:

- Continuing to work on Besu's support of Caliper, including 5 commits to date
- Presented on supply chain SIG
- Attended the Hyperledger Global Forum and presented several talks
- Attended Hyperledger meet-up in Phoenix
- Presented at Hyperledger Korea meet-up
- Provided proposal on DCO process for Hyperledger
- Approved to be Co-mentor with Mark Wagner on Hyperledger mentorship project to have Besu run on OpenShift
- Published a couple of blogs on Hyperledger's site:
 - [Announcing Hyperledger Besu 1.4](#)
 - [How Hyperledger Besu will Help Solve the Pharmaceutical Waste Problem in the U.S.](#)

Current Plans

The Besu project team has several upcoming priorities:

1. The project team is currently working towards its 1.5 Release, scheduled for June 2020. The 1.5 Release is expected to include the following features:
 - a. Performance improvements: Performance is a high priority item for the Besu team at this time to ensure it's a leading Ethereum space. Some of the improvements will include block propagation, block product and validation, transaction pool management, and JSON RPC query response time.
 - b. Privacy Improvements
 - c. Beam Sync Early Access
 - d. Mining Support
2. The Besu team is also continuing to focus on finalizing and publishing performance metrics with its work on Hyperledger Caliper. The publishing of the metrics was slightly delayed since last quarter because there remains additional work for the team to get the range of metrics and tests it requires. The team is currently working on this task. We still believe publishing these performance metrics will help provide the community additional context on the project's usability for a variety of use cases.
3. Similar to last quarter, Besu is also continuing to engage with its community and grow the diversity of its maintainer and contributor base. The Besu team is hoping to continue to grow attendance for its bi-weekly contributor calls to grow engagement across contributors.

Maintainer Diversity

Our maintainer diversity is growing. We have maintainers from four different organizations at this point in time. This is an additional organization since the previous quarter.

The four organizations include:

- ConsenSys (PegaSys)
- Web3Labs
- Chainsafe
- Machine Consultancy (new as of this quarter)

The new maintainers this quarter include:

- Antoine Toulme (Machine Consultancy)
- Stefan Pingel (PegaSys)

We are planning on likely downgrading a couple of maintainers in the upcoming quarter because of their lack of recent Besu contributions.

The maintainers breakdown is currently:

- 13% non-PegaSys

Contributor Diversity

Commits from 2019-12-09 to 2020-03-20 : 252

Committers from 2019-12-09 to 2020-03-20 : 33

Identified Orgs 2019-12-09 to 2020-03-20 : 7 + 3 independent committers

Additional Information

N/A

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