Support Clique for Besu on HL Labs BAF

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Support Clique Consensus for Besu on HL Labs Blockchain Automation Framework</th>
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<tbody>
<tr>
<td>Status</td>
<td>ACCEPTING APPLICATIONS</td>
</tr>
<tr>
<td>Difficulty</td>
<td>MEDIUM</td>
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Description

Hyperledger Labs Blockchain Automation Framework (BAF) is a tool to deploy different DLT platforms automatically on a given Kubernetes cluster. BAF supports multi-cloud and multi-DLT deployments, and already supports HL Fabric, HL Besu, Quorum, R3 Corda. For HL Besu, currently only IBFT2 Consensus is supported by BAF.

With this internship program we want to support the Clique consensus for Besu, so that BAF can be used to deploy and operate a HL Besu network with Clique consensus. This will also include upgrading BAF to support the latest stable Besu version.

Additional Information

- Wiki: Blockchain Automation Framework lab

Learning Objectives

The mentee will be able to learn:

- Production grade architecture.
- DevOps in Blockchain Development.
- Architecture of Besu and BAF.
- work in true spirit of open-source, communicating with both Besu and BAF community, joining calls and using other community tools.
- writing documentation, so anyone in the community could use the results of their work.
- following rules and standards of open-source projects created by Hyperledger.

Expected Outcome

1. Documented, ready-to-use Besu Clique consensus on BAF.
2. Documented upgrade of Besu to latest stable on BAF.

Relation to Hyperledger

This mentorship program will enable interoperability between Hyperledger Besu and Hyperledger Labs Blockchain Automation Framework (BAF) projects.

Education Level

Preferred undergraduate.

Skills

- Reading and Writing English documentation,
- Ansible and Molecule
- Helmcharts and Kubernetes
- GitOps

Future plans
Work on the extensive feature list for BAF. Opened for cooperation after successful internship.

Preferred Hours and Length of Internship

No preference (just do Your job good before 15th August according to project plan and report to mentors every 2-weeks during the BAF Sprint Planning session.

Mentor(s) Names and Contact Info

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