2019 Q2 Hyperledger Burrow

Project

Hyperledger Burrow

Project Health

Project health is largely the same as in previous update. We have a number of casual contributors. We still lack maintainer diversity outside of Monax. There is a steady flow of interest and we are pushing plenty of code relating to our continued heavy use of Burrow.

Issues

The biggest areas of help would be with tooling and documentation.

Releases

- v0.25.1: minor fixes to make deployment via helm easier
- v0.25.0: burrow configure can generate config for every validator, making it easy to run many validators for local testing, burrow deploy can
 execute deploy scripts concurrently, no concensus testing/development mode.
- v0.24.1 v0.24.6: minor bugfixes and dependencies upgrades (e.g. tendermint)
- v0.24.0: Implemented EVM opcodes, burrow deploy can print emitted EVM events, burrow deploy can use keystore names rather than addresses and burrow vent can do projection mapping, all state now stored in a mutable forest.

Overall Activity in the Past Quarter

We have implemented some EVM opcodes and upgraded our tests to use Solidity 0.5.4 and improved our deploy tool to increase concurrency. All state is now stored in a mutable forest so proof can be given for contract state root (not implemented yet, just the plumbing). Lots of porcelain updates to burrow deploy tool.

Current Plans

Work item	Effort (1, 2, 3, 5, 8, 13)	Priority
NameReg extension to support authenticated namespaces (including design)	13	Medium
Burrow-side ABI registry mechanism (probably based on above)	8	Low
Prototype 'new train' WASM execution	13	Low
Implement token economics primitives	13	Medium
Secure access to Burrow chain	5	Medium

We have an active side project looking at using modern compiler tooling to compile Solidity to WASM and are interested in being part of any future movement to share code/structures through WASM execution and interfaces. To that end we are planning to look into the possibility of mounting Go wagon as a WASM interpreter next to our EVM.

We have also been building much business-process-on-a-blockchain functionality with the combination of Burrow and Blackstone our BPM engine implemented in Solidity and Node.JS. We are looking at improving Burrow's native abilities as a process-focussed blockchain. We'd like to explore the possibility of Hyperledger being host to the Blackstone project in some form - it should have relevance to fabric-evm and sawtooth-seth.

Maintainer Diversity

We have added one maintainer from Monax and have a new maintainer, Pierrick Hymbert, from outside Monax

Current maintainers are:

- Greg Hill (Monax)
- Silas Davis (Monax)
- Sean Young (Monax)

- Casey Kuhlman (Monax)
- Tyler Jackson (Monax)Pierrick Hymbert

Contributor Diversity

Interest remains high and lots of in-depth questions are being asked on rocketchat.

Additional Information

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