

Whiteblock completes industry's first EOS benchmark testing and blockchain investigation

ConsenSys uses Bounties.Network to commission performance testing of EOS

DevCon Prague –Oct 31, 2018 — Whiteblock Inc., the world's first blockchain testing company, announced today that they have completed the first independent benchmark testing of the EOS software. The EOS test results indicate dramatically lower transaction throughput than previously advertised when benchmarked under realistic network conditions.

The benchmark testing project was publicly requested by a collection of companies using the [Bounties Network](#), a platform that empowers individuals and groups to self-organize and fund actions of communal interest. Led by Brent Xu, ConsenSys Project Lead, this study was a follow up to the [Blockchain vs DLT](#) series on further understanding interrelated dynamics between systems.

Blockchain organizations such as Cosmos, Ethereum Community Fund, Amis, Maker DAO, IMToken, PlatON, Status, Loom Network, Coinfund, 1KX, Transference Fund, Web 3 Foundation, Grid+, MixLabs, Ledger Capital, Enterprise Ethereum Alliance, Google, Microsoft, ConsenSys and Bo Shen - Founding Partner of Fenbushi Capital & Cofounder of Bitshares, along with academic institutions such as Duke, USC, and MIT have committed to contributing resources to develop comprehensive reports based on Whiteblock's raw data.

Many blockchain companies make claims on scalability and transactions per second without independently verifying these metrics, influencing dApp developers, enterprises, and governments that are exploring blockchain solutions without proper understanding of the technology. In a world of whitepapers and marketing lingo, Whiteblock provides an independent, objective method of validating performance claims. Adequate pre-deployment testing helps development teams avoid network failures like those resulting from the CryptoKitties incident of 2017. It's critical that development teams have the ability to anticipate performance under suboptimal conditions when failure to deliver could significantly diminish credibility and investor confidence.

Whiteblock was chosen after successfully creating a replica of the EOS network that could be used to test the network's ability to withstand certain stress conditions and various faults that would be typical in a production environment. Whiteblock created a network to evaluate the following metrics:

- Transactional throughput

- Resilience to adverse network conditions
- The effects of variable transactions rates and sizes
- Average time to finality for a transaction
- Fault tolerance
- Partition tolerance

This is the first analysis of its kind and a project that will establish metrics for benchmarking base layer blockchain protocols.

Whiteblock launched the test project in September 2018, and after two months of testing the EOS network under a variety of environments, the group will share the raw data for the research groups to evaluate and interpret conclusions about the state of the network.

Based on initial interpretations of the resulting data, network emulation testing, and source code, the investigation has come to several conclusions about the EOS software:

- EOS is not a blockchain, rather a distributed homogeneous database management system, a clear distinction in that their transactions are not cryptographically validated.
- EOS token and RAM market is essentially a cloud service where the network provides promises for computational resources in a blackbox for users to access via credits. There is no mechanism for accountability due to the lack of transparency on what Block producers are able to create in terms of computational power.
- EOS throughput is significantly lower than EOS initially claimed in marketing materials.
- EOS suffers from consensus failures and lacks Byzantine Fault Tolerance.

The research results prove the inaccuracies in performance claims and concluded that the foundation of the EOS system is built on a flawed model that is not truly decentralized. After years of momentous development and promise in the blockchain ecosystem, Whiteblock testing, led by Zak Cole CTO, is spearheading accountability, by creating a process for evaluating blockchain protocols in a rigorous test environment.

“Our Whiteblock test framework is blockchain agnostic,” said Neal Roche, Whiteblock CEO. “We’re also running performance tests on other leading blockchains. Whiteblock’s established testing methodology and tooling has been proven to accurately test complex networks at scale. With Whiteblock, customers can easily validate performance, conduct due diligence, or run competitive benchmarks for a number of technologies and systems.”

Whiteblock will livestream the EOS benchmark tests in November ([RSVP here](#) to get an invitation to the livestream).

About Whiteblock

Whiteblock Inc. provides the world’s first scalable test system for blockchain and enterprise DLT developers. Whiteblock’s Blockchain Testing as a Service (BTaaS) measures and validates key performance benchmarks, such as transactions per second and consensus over a variety of networks. Developers can automate transactions, test fault tolerance, dynamically add or remove nodes, and quickly provision a private testnet that simulates a live and dynamic global

blockchain network. Read more about blockchain performance testing by visiting the Whiteblock website at www.whiteblock.io.

About Bounties Network

The Bounties Network empowers humans to incentivize and self-organize, from freelancing to grassroots social action, and anything in between. The Bounties Explorer provides access to a global market of projects and talent. Easily create and fulfill tasks, and transact in any token on Ethereum with automated payments.