OpenST Mosaic

A FRAMEWORK TO SCALE ETHEREUM

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Abstract

We present improvements to the OpenST protocol. OpenST is a framework powered by Ethereum to build token economies. We lay out in detail two contributions, OpenST Mosaic and OpenST Gateway, which work together to scale Ethereum. OpenST Mosaic is a layer-2

1. Introduction

Ethereum is inherently limited in the number of transactions it can perform per second [1]. In order for Ethereum to gain mass adoption, an increase in throughput is desired. Current efforts include state channels [2] like the Raiden Network [3] and side chains [4] like Plasma [5]. A drawback of the proposed solutions is the fact that the user has to be always online in order to ensure integrity of her transactions.

OpenST Mosaic is a holistic solution powered by Ethereum to scale Ethereum to thousands of transactions per second.

2. Related Work

Verifiers' Dilemma [6]

Interblockchain Communication [7]

Casper FFG [8]

3. Our Contribution

4. OpenST Mosaic

4.1. OpenST Mosaic

4.2. OpenST Gateway

OpenST Gateway enables chain-to-chain transfer of state objects.

5. Outlook

5.1. Token Economies

5.2. Neo and Cardano

6. Conclusion

References

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