OpenST

A FRAMEWORK FOR BUILDING TOKEN ECONOMIES

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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

OpenST is a holistic solution powered by Ethereum to scale Ethereum to.

2 Existing Work

3 OpenST

4 OpenST Gateway

Assumption that state root is known to the respective other chain.

Consider an origin blockchain O which is assumed to have liveliness and BFT security properties. The origin blockchain produces blocks e_i at height i.

Lemma 1 - branch referencing Without loss of generality a transaction can always

5 OpenST Mosaic

Mosaic transfers blockchain state roots from a source to a target.

5.1 Transferring origin's state to auxiliary

5.2 Transferring auxiliary's state to origin

6 Conclusion and Outlook

6.1 Outlook

- dynamic validator set
- long range revision attack
- catastrophic crash

References

[1] Vitalik Buterin and Virgil Griffith: Casper the Friendly Finality Gadget (2017)
URL https://github.com/ethereum/research/tree/master/papers/casper-basics.