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

2 OpenST

2.1 Use Cases

2.1.1 BT

2.1.2 DApp

3 Related Work

Verifiers' Dilemma

Interblockchain Communication

Casper FFG [1]

4 Our Contribution

5 Openly Scaling Blockchains

5.1 OpenST Gateway

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

5.2 OpenST Mosaic

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

5.2.1 Observing the origin chain

5.2.2 Leveraging origins security

5.2.3 Asynchronously finalising on origin

5.2.4 OSTgas

5.2.5 Rewarding Validators

6 Securing Simple User Experience

6.1 Token Holder Contracts

APIs; no need to follow the chain.

7 Platform

7.1 Token Rules

7.2 OpenST Platform

8 Outlook

8.1 Neo and Cardano

9 Conclusion

References

[1] Vitalik Buterin and Virgil Griffith: Casper the Friendly Finality Gadget (2017)

URL https://github.com/ethereum/research/tree/master/
papers/casper-basics.