

IslandCoin White Paper
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1. Motivation

Blockchain is changing the world around us redistributing value in a fair and decentralized way. The island's barter economy is holding back progress. We want to disrupt the economy by introducing a novel cryptographic currency - IslandCoin.

2. Consensus

The consensus algorithm for IslandCoin is based on a consortium of 4 members [H, S, K, J]. It is a permissioned leader-based algorithm that is tolerant to Byzantine behavior [1] of up to 1/3 of the network. The algorithm requires a majority vote of over 50% of consortium members to approve a block. All members have equal voting rights.

Block time is approximately 24 hours. Blocks are published by the leader which is selected using a round robin mechanism.

3. Transaction and Block Specification

Transaction format:

[SENDER ADDRESS, NONCE, RECIPIENT ADDRESS, AMOUNT, SIGNATURE]

Block format:

[BLOCK NUMBER, TRANSACTIONS 1..N, BALANCES 1..4, SIGNATURES 1..4]

Genesis block:

[1, [], [100,100,100,100], [H, S, K, J]]

4. References

[1] L. Lamport, R. E. Shostak, and M. C. Pease. The byzantine generals problem. ACM, 4(3):382-401, 1982.