

Prototype: Double Spending Attack Simulation



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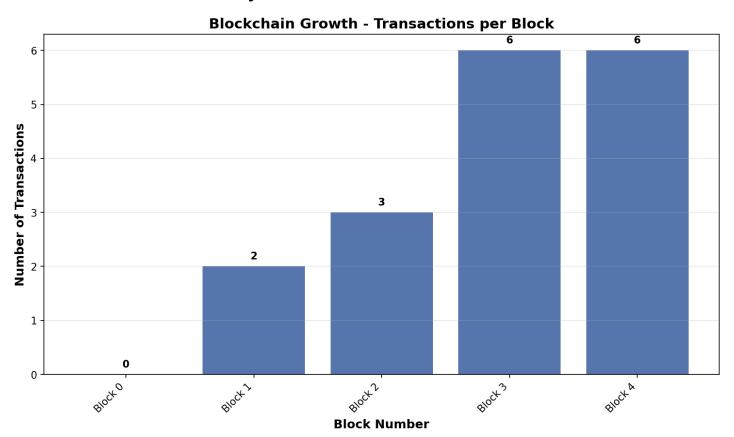
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Comprehensive Blockchain Analytics Report

This report contains detailed analytics and visualizations of the blockchain network, including transaction patterns, mining statistics, and double-spending attack simulations.

1. Blockchain Growth Analysis





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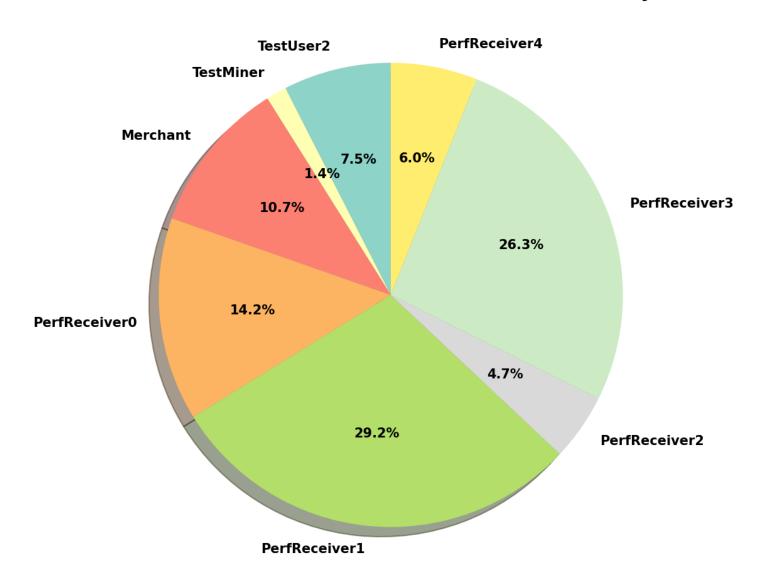
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2. Wallet Balance Distribution

Wallet Balance Distribution (Positive Balances Only)



3. Mining Time Analysis



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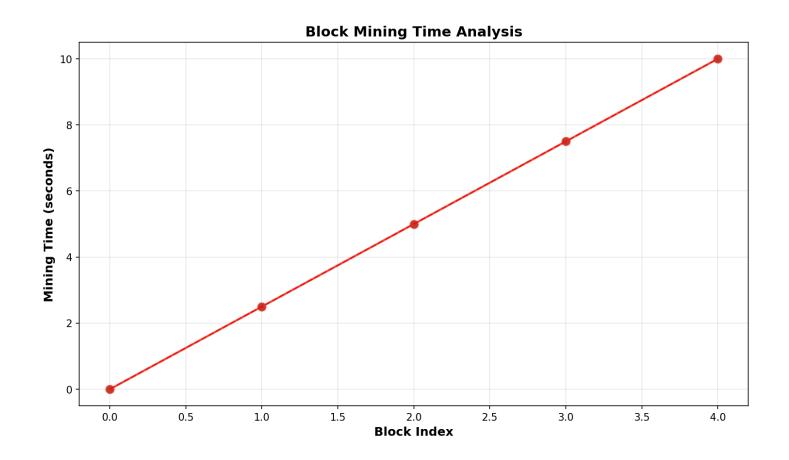
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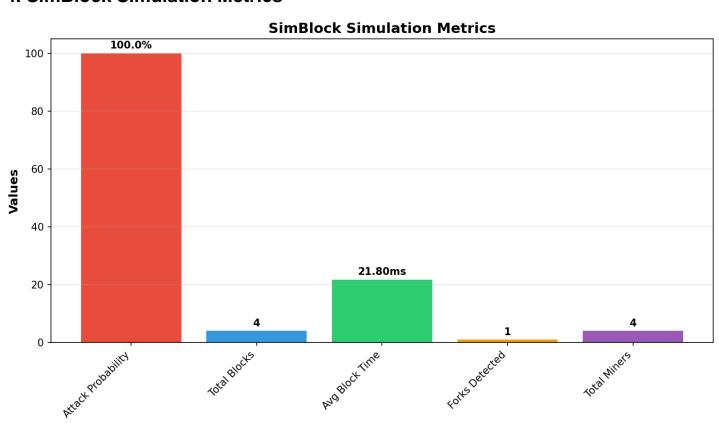
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4. SimBlock Simulation Metrics



Simulation Metrics

5. Honest vs Attacker Blocks



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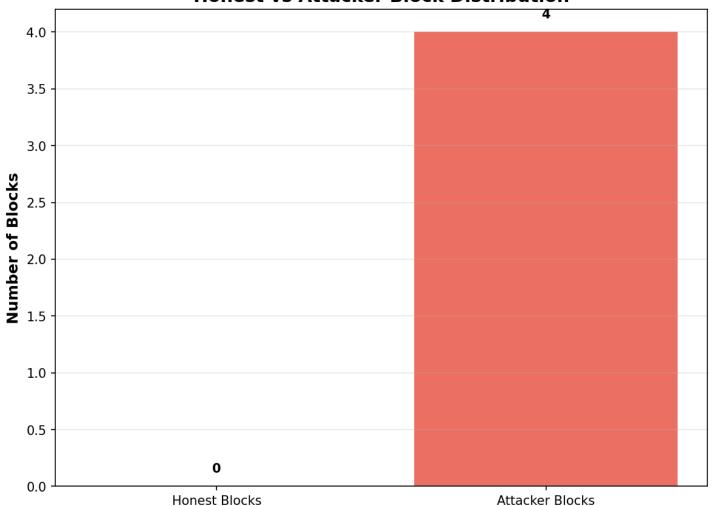
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Honest vs Attacker Block Distribution





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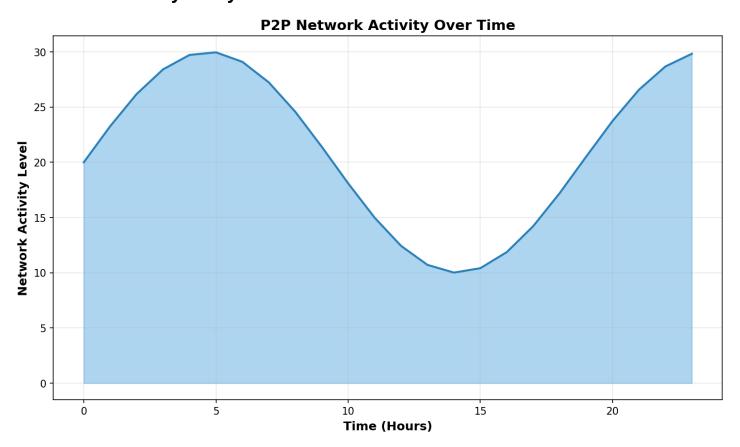
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6. Network Activity Analysis





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Double Spending Attack Results

Attack Configuration

Attacker: TestAttacker

Private Blocks Mined: 1

Amount: 5.0 coins

Hash Power: 50%

Success Probability: 50.0%

Attack Results

Attack Outcome: FAILED



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Detailed Statistics

Blockchain Statistics

Key	Value
Total Blocks	5
Total Transactions	17
Pending Transactions	23
Current Difficulty	3
Connected Peers	1

SimBlock Simulation Summary

Key	Value
Attack Conclusion	Attack Successful!
Attack Successful	Yes
Attack Probability	100.00%
Total Blocks	4
Avg Block Time	21.80 ms
Forks Detected	1
Total Miners	4