



**ANASTASIA LABS**

**Proof of Achievement – Milestone 4**

Test Execution Results

**Project Number** 1100024

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**Project Name:** Lucid Evolution: Redefining Off-Chain Transactions in Cardano

**URL:** [Catalyst Proposal](#)

## Evidence Definition

Test execution reports documenting the results of testing, including pass/fail status, identified issues, and any necessary follow-up actions taken

## Test Execution Results

Our tests involve executing >100 CI tests against the latest updated state with every update we push. **All test cases run directly on the Cardano preprod and preview networks.** For a better understanding please refer to our repository directly, specifically the test cases:

- `onchain-preprod.test.ts`
- `onchain-preview.test.ts`

In our tests we cover different domains of operations:

**Transaction Building** Tests validate basic and complex transaction construction, including multi-asset handling and metadata integration. Our transaction chaining tests requiring that dependent transactions execute correctly in sequence.

**Stake Operations** Testing of stake registration, delegation, and rewards. This includes native staking operations and complex scenarios involving multiple validators.

### Conway Era Features

Full coverage of new governance endpoints, including DRep registration, voting delegation, and combinations of pool and DRep delegation scenarios.

**Multi-Validator Operations** Tests that verify complex interactions between different validator scripts

**Asset Management** several different operations for native assets, including minting, burning, and transfer scenarios, with proper verification of token policies.

As part of our CI pipeline, these tests run regularly, ensuring ongoing compatibility and reliability with each new version of `lucid-evolution`. Each test execution validates not just the success of operations, but also proper resource management through UTxO recycling and optimization.

So everytime we are updating our library we ensure that we can meet the demands of our testing suite to have a reference of secure design

## Library test

Example test execution of all our tests in our testing suite passing (from `onchain-preprod.test.ts`):

### Video Material

[Successful Library check](#)

## Governance Endpoints Test

To ensure consistency across different Cardano environments, we run our test suite on both the Preview and Preprod networks:

- `packages/lucid/test/onchain-preview.test.ts`
- `packages/lucid/test/onchain-preprod.test.ts`

### GIF Testrun

[Successful Governance Test](#)

This GIF, **a onchain test** running in terminal, showcases that our test packages are working as intended by displaying successfully executed test cases