



TEST STAKING

Table of Contents

[components](#)

[token](#)

[demo_app](#)

components

onchain/Validators

We use them to understand when and why some transaction is considered invalid
To build the validator nodes we need to run this command in the folder onchain

```
cd .\kubecoin-deposit-main\onchain  
aiken build --trace-level verbose
```

In case it is deemed necessary, it is also possible to perform the build directly within a container

offchain/Validators

Within Offchain we find the folder for building and deploying validators on blockchain

```
cd .\kubecoin-deposit-main\offchain\validators
```

offchain/tx

Within Offchain we find the folder for building transactions, where we find all the transaction types associated with the smart contract

```
cd .\kubecoin-deposit-main\offchain\tx
```

offchain/manage

Within Offchain we find the folder for managing smart contracts.

Check [demo_app](#)

config/manage

In config you find ts files that manage the configuration for various aspects, such as APY, assets used, txbuild

clients/cli

Another way to interact with smart contracts directly from the command line without using the test webapp directly

```
cd .\kubecoin-deposit-main\clients\cli
```



token

We use them to understand when and why some transaction is considered invalid
To build the validator nodes we need to run this command in the folder onchain

```
cd .\kubecoin-deposit-main\manage  
deno run -A mint.ts UTxO nameToken
```

To start the minting, follow these commands, before doing so you must have configured the .env file for variables related to network and keys, you will find .env in the general folder

```
cd .\kubecoin-deposit-main\
```



demo_app

In manage you can deploy the contracts, before doing so you must have configured the .env file for variables related to keys, wallet, etc.

```
cd .\kubecoin-deposit-main\manage\deploy
deno run -A ./mod.ts preview test1 preview1
```

- *preview -> network*
- *test1 -> asset*
- *Preview1 -> plan APY*

When we do the, it is directly updated the deployments.json file automatically, you can find it in the /config/deployments.json folder

```
cd .\kubecoin-deposit-main\config
```

You are now able to be able to interact with the contract you deployed, on the network in which you placed it.

To start the DAPP test, follow these commands, before doing so you must have configured the .env file for variables related to network and keys, you will find .env in the same folder

```
cd .\kubecoin-deposit-main\clients\web\demo_app
deno task start
```

Once DAPP is started, open the page in localhost and enter the key to connect to Blockfrost

Insert BF Key -> Button Create Lucid

It allows us to connect to the Blockfrost node, now we can operate on the network

Allocate

Allows provadier to allocate reward funds for staking

Withdraw by provider

Allows provider to remove reward funds for staking

Deposit Flex

It does not require deposit time and allows those who want to staking to deposit funds for a free amount of time, taking the APYs of staking Flex

Whitdraw Flex

This function allows withdrawal of deposited funds in flex mode, with interest generated. For withdrawal there is a minimum GAP to be met if you want to have the interest which you can read from the console log, this GAP is setttable in /offchain/tx/mod.ts by changing the two constants.

Withdrawal requires the hash reference of the deposit transaction

Deposit Fix

It does require deposit time and allows those who want to staking to deposit funds for a fixed amount of time, taking the APYs of staking Fix

Whitdraw Fix

This function allows withdrawal of deposited funds in fix mode, with interest generated. For withdrawal there is a minimum GAP to be met if you want to have the interest which you can read from the console log, this GAP is setttable in /offchain/tx/mod.ts by changing the two constants.

Withdrawal requires the hash reference of the deposit transaction.

If I try to withdraw before the set time, I will receive error, I can only make withdrawal without rewards

Whitdraw Fix Early

This function allows withdrawal early of deposited funds in fix mode, without interest generated. Withdrawal requires the hash reference of the deposit transaction

*Remember that each value must be entered with as many zeros as there are decimals

