Logic test

Logic test

2.1 test content

Logic testing is testing the logic of the new functions involved in the development of dynamic nodes, mixed consensus, and cross-consensus engines, it is mainly about whether the logical flow of the functions such as mortgage governance node, creating proposal application node, proposal voting, proposal execution, consensus switching and so on is normal, whether there is the possibility of skipping, and whether the update schedule is normal. For example:

- Whether a non-governance node can initiate a proposal
- Whether the non-governance node can update the governance node information
- Whether the non-governance node can execute the completed proposal
- Whether the governance node can execute an incomplete proposal

2.2 test methods

The above functional tests have completed the normal logical process testing, and the next logical test is mainly to test the abnormal process. This test is done in the test network initiated by the above script, mainly by calling the command that does not conform to the logic to test whether the abnormal process can pass, the dynamic node logic test script is shown in the https://github.com/dimensionofficial/dimension—testnet/tree/master/test。.

2.3 test flow

- 1. Prepare the environment, cleon
- 2. Launch the Keond, create the Wallet, and import the test account private key
- 3. non-governance node non-normal logic test
- 4, governance node abnormal logic test
- 5. Clean up the environment

2.4 process output

```
Please input the local nodeon http port, such as 8888: 8888

/logic.sh: line 51: cleon: command not found

/logic.sh: line 68: keond: command not found

info 2019-10-27T11:38:43.205 thread-0 wallet_plugin.cpp:42

plugin_initialize ] initializing wallet plugin
```

```
info 2019-10-27T11:38:43.205 thread-0 http_plugin.cpp:452
plugin_initialize | configured http to listen on 127.0.0.1:8900
info 2019-10-27T11:38:43.206 thread-0 http_plugin.cpp:622
                    1 add api url: /v1/keond/stop
info 2019-10-27T11:38:43.206 thread-0 http_plugin.cpp:530
plugin startup
                   ] start listening for http requests
info 2019-10-27T11:38:43.206 thread-0 http_plugin.cpp:622
add_handler
                   add api url: /v1/node/get_supported_apis
info 2019-10-27T11:38:43.206 thread-0 wallet_api_plugin.cpp:73
plugin startup
                   ] starting wallet_api_plugin
info 2019-10-27T11:38:43.206 thread-0 http_plugin.cpp:622
add_handler
                   ] add api url: /v1/wallet/create
info 2019-10-27T11:38:43.206 thread-0 http_plugin.cpp:622
                    ] add api url: /v1/wallet/create_key
add_handler
info 2019-10-27T11:38:43.206 thread-0 http_plugin.cpp:622
                    ] add api url: /v1/wallet/get_public_keys
info 2019-10-27T11:38:43.206 thread-0 http_plugin.cpp:622
add_handler
                    ] add api url: /v1/wallet/import_key
info 2019-10-27T11:38:43.206 thread-0 http_plugin.cpp:622
add_handler
                    ] add api url: /v1/wallet/list_keys
info 2019-10-27T11:38:43.206 thread-0 http_plugin.cpp:622
add_handler
                    ] add api url: /v1/wallet/list_wallets
info 2019-10-27T11:38:43.206 thread-0 http_plugin.cpp:622
add_handler
                   ] add api url: /v1/wallet/lock
info 2019-10-27T11:38:43.206 thread-0 http_plugin.cpp:622
add_handler
                    ] add api url: /v1/wallet/lock_all
info 2019-10-27T11:38:43.206 thread-0 http_plugin.cpp:622
add handler
                    ] add api url: /v1/wallet/open
info 2019-10-27T11:38:43.206 thread-0 http_plugin.cpp:622
add_handler
                    ] add api url: /v1/wallet/remove_key
info 2019-10-27T11:38:43.206 thread-0 http_plugin.cpp:622
add_handler
                    ] add api url: /v1/wallet/set_timeout
info 2019-10-27T11:38:43.206 thread-0 http_plugin.cpp:622
add_handler
                    ] add api url: /v1/wallet/sign_digest
info 2019-10-27T11:38:43.206 thread-0 http_plugin.cpp:622
add_handler
                    ] add api url: /v1/wallet/sign_transaction
info 2019-10-27T11:38:43.206 thread-0 http_plugin.cpp:622
                    ] add api url: /v1/wallet/unlock
add handler
warn 2019-10-27T11:38:43.717 thread-0 wallet.cpp:223
save_wallet_file
                 ] saving wallet to file /home/chen/./test-
wallet/./test.wallet
Creating wallet: test
Save password to use in the future to unlock this wallet.
Without password imported keys will not be retrievable.
"PW5KccPrfL4R7eMmW19pjSfJH53uv4hpS7Q1rmzxgA4xF3Th2Kxkw"
warn 2019-10-27T11:38:43.734 thread-0 wallet.cpp:223
save_wallet_file ] saving wallet to file /home/chen/./test-
wallet/./test.wallet
```

```
30 imported private key for:
   eon53A7xmcSWLuzTZLnJBsj63FB3yxNYXTUGuXNKPjxg5uYkToSXV
+ ./dimension/build/programs/cleon/cleon -u http://127.0.0.1:8888 --
   wallet-url http://127.0.0.1:8900 system newproposal testaccount1
   testaccount1 0 1 0
  Error 3050003: eonio assert message assertion failure
   assertion failure with message: only governance node can new proposal
   + test 1
36 + '[' 1 -eq 0 ']'
37 + ./dimension/build/programs/cleon/cleon -u http://127.0.0.1:8888 --
   wallet-url http://127.0.0.1:8900 system newproposal testaccount1
   testaccount1 0 2 0
   Error 3050003: eonio_assert_message assertion failure
   Error Details:
   assertion failure with message: only governance node can new proposal
41 + test 1
42 + '[' 1 -eq 0 ']'
   + ./dimension/build/programs/cleon/cleon -u http://127.0.0.1:8888 --
   wallet-url http://127.0.0.1:8900 system newproposal testaccount1
   testaccount1 0 3 0
   Error 3050003: eonio_assert_message assertion failure
   Error Details:
46 assertion failure with message: only governance node can new proposal
   + test 1
48 + '[' 1 -eq 0 ']'
   + ./dimension/build/programs/cleon/cleon -u http://127.0.0.1:8888 --
   wallet-url http://127.0.0.1:8900 system updategnode testaccount1
   EON53A7xmcSWLuzTZLnJBsj63FB3yxNYXTUGuXNKPjxg5uYkToSXV
   Error 3050003: eonio_assert_message assertion failure
   Error Details:
   assertion failure with message: account not in _gnode
   + test 1
54 + '[' 1 -eq 0 ']'
55 + set +x
56 executed transaction:
   5254eb7250f2830da8839e652c5e38278244103b5f54b62ef965e7afd7c3e980 120
   bytes 417 us
             eonio <= eonio::newproposal
   {"owner": "gnodeaccount", "account": "dst1nrphukuw", "block_height": 0, "type": 2
   ,"status":0}
# eonio.token <= eonio.token::transfer
   {"from": "gnodeaccount", "to": "eonio.prop", "quantity": "1.5000
   EON", "memo": "transfer 1.5000 EON to new ...
59 # gnodeaccount <= eonio.token::transfer</pre>
   {"from": "gnodeaccount", "to": "eonio.prop", "quantity": "1.5000
   EON", "memo": "transfer 1.5000 EON to new ...
       eonio.prop <= eonio.token::transfer</pre>
   {"from": "gnodeaccount", "to": "eonio.prop", "quantity": "1.5000
```

```
EON", "memo": "transfer 1.5000 EON to new ...
61 warning: transaction executed locally, but may not be confirmed by the
   network yet
  + ./dimension/build/programs/cleon/cleon -u http://127.0.0.1:8888 --
   wallet-url http://127.0.0.1:8900 system execproposal testaccount1 7
  Error 3050003: eonio_assert_message assertion failure
  Error Details:
  assertion failure with message: only governance node can exec proposal
  + test 1
  + '[' 1 -eq 0 ']'
68 + ./dimension/build/programs/cleon/cleon -u http://127.0.0.1:8888 --
  wallet-url http://127.0.0.1:8900 system execproposal gnodeaccount 15
  Error 3050003: eonio_assert_message assertion failure
70 Error Details:
  assertion failure with message: proposal not end
  + test 1
73 + '[' 1 -eq 0 ']'
74 + set +x
75 kill keond pid: 11991
  *********************
   ******
  ******************* Congratulations!!! The logic test passed, let's
   go! *********
  ***********************
   *******
```

2.5 test results

After testing, dynamic nodes, mixed consensus, cross-consensus engine involved in the functional logic chain testing is normal.