Unit testing

Unit testing

3.1 test content

Unit testing is the testing of new functions developed by dynamic nodes, mixed consensus, and cross-consensus engines, it mainly includes the testing of mortgage becoming governance node and mortgage releasing governance node, mortgage becoming governance node and update governance node information, sponsor proposal testing, sponsor proposal type testing, sponsor vote testing, implement proposal testing, dynamic node and cross-consensus engine testing, hybrid consensus testing.

3.2 Test Methods

MORTGAGE AS GOVERNANCE NODE AND MORTGAGE RELEASE GOVERNANCE NODE TEST:

```
BOOST_FIXTURE_TEST_CASE( stake_unstake_gnode, eonio_system_tester ) try {}
```

MORTGAGE BECOMES GOVERNANCE NODE AND UPDATE GOVERNANCE NODE INFORMATION TEST:

```
BOOST_FIXTURE_TEST_CASE( stake_update_gnode, eonio_system_tester ) try {}
```

INITIATE THE PROPOSAL TEST:

```
BOOST_FIXTURE_TEST_CASE( new_proposals, eonio_system_tester ) try {}
```

Test the type of proposal you are sponsoring

```
BOOST_FIXTURE_TEST_CASE( new_proposals_type_test, eonio_system_tester )
try {}
```

Voting test of proposal

```
BOOST_FIXTURE_TEST_CASE( vote_proposals, eonio_system_tester ) try {}
```

Run the proposal test

```
BOOST_FIXTURE_TEST_CASE( exec_proposals, eonio_system_tester ) try {}
```

Dynamic node and cross-consensus engine testing

```
BOOST_FIXTURE_TEST_CASE( add_remove_producers, eonio_system_tester ) try
{}
```

Hybrid consensus test

```
1  BOOST_FIXTURE_TEST_CASE( set_consensus_test, eonio_system_tester ) try {}
```

3.3 test flow

The primary source code for Unit Tests is $dimension / Units Tests / .
You need to compile before running your tests, and for the new features covered by
the dimension project, you can run the following commands with parameters

```
1  $dimension/build/unittests/unit_test -t "eonio_system_tests"
```

3.4 process output

Pass will have the following output, do not pass will have the corresponding prompt
error code location

```
1  Random number generator seeded to 1576590909
2  Running 15 test cases...
3  *** No errors detected
```

3.5 test results

All of them

```
1  Random number generator seeded to 1576590909
2  Running 15 test cases...
3  *** No errors detected
```