# Functions of blockchain test page

Using web3 calls - <https://github.com/ethereum/wiki/wiki/JavaScript-API>

Northern Trust Bank

Identity address = 0xfe497052a6f67b36a75712d5c9799c91e8bfe39c

Functions:

Assert (key, value)

bankContract.assert.sendTransaction(1,"<key>", "<value>",{from: <bank address>, gas: 3000000});

Send (security, to, amount)

securityContract.send.sendTransaction(bankContract.get.call(address)[1], 500, {from: <bank address>, gas: 3000000})

View existing assertions. For each assertion show if it is attested and by whom

bankContract.get.call(n)

bankContract.getAttestedAssertion.call(n)

bankContract.getAttestee.call(n, m)

NY Street Bank

Identity address = 0xaba1b8435b9d655e0018ba2929d836fcf45ad1e8

Functions:

Assert (key, value)   
Send (security, to, amount)

View existing assertions

Regulator

Identity address = 0x29d1db1d76f1130283fc89f053acda31031b08bf

Functions:

Attest (address of a bank, assertion number)

bankContract.attest.sendTransaction([name,], {from: <regulator address>, gas: 3000000})

Security

Security address: 0x15c7d3cf21b0913636a700f059e814c3f0517f40

Functions

View name, identifier, address

securityContract.name()

securityContract.name()

securityContract.address()

Balance (address of a bank)

securityContract.custodyBalances.call(<bank address>)

For Reference:

Identity contract:

var identityContract = web3.eth.contract([{"constant":false,"inputs":[],"name":"getAttestedAssertionCount","outputs":[{"name":"count","type":"uint256"}],"type":"function"},{"constant":false,"inputs":[],"name":"kill","outputs":[],"type":"function"},{"constant":false,"inputs":[{"name":"assertionType","type":"uint256"},{"name":"key","type":"string"},{"name":"value","type":"string"}],"name":"assert","outputs":[],"type":"function"},{"constant":false,"inputs":[{"name":"requestee","type":"address"},{"name":"assertionType","type":"uint256"}],"name":"getSessionKey","outputs":[{"name":"encryptedSessionKey","type":"string"}],"type":"function"},{"constant":false,"inputs":[{"name":"requestee","type":"address"},{"name":"assertionType","type":"uint256"},{"name":"sessionKey","type":"string"},{"name":"description","type":"string"}],"name":"grant","outputs":[],"type":"function"},{"constant":false,"inputs":[{"name":"assertionTypes","type":"uint256[]"}],"name":"attest","outputs":[],"type":"function"},{"constant":false,"inputs":[{"name":"assertionType","type":"uint256"}],"name":"getAttesteeCount","outputs":[{"name":"count","type":"uint256"}],"type":"function"},{"constant":false,"inputs":[{"name":"requestee","type":"address"}],"name":"revoke","outputs":[],"type":"function"},{"constant":false,"inputs":[{"name":"assertionType","type":"uint256"}],"name":"get","outputs":[{"name":"key","type":"string"},{"name":"value","type":"string"}],"type":"function"},{"constant":false,"inputs":[{"name":"index","type":"uint256"}],"name":"getAttestedAssertion","outputs":[{"name":"assertionType","type":"uint256"}],"type":"function"},{"constant":false,"inputs":[{"name":"assertionType","type":"uint256"},{"name":"index","type":"uint256"}],"name":"getAttestee","outputs":[{"name":"attestee","type":"address"}],"type":"function"},{"constant":false,"inputs":[{"name":"requestee","type":"address"}],"name":"getGrantedAssertionCount","outputs":[{"name":"count","type":"uint256"}],"type":"function"},{"constant":false,"inputs":[],"name":"getGranteeCount","outputs":[{"name":"count","type":"uint256"}],"type":"function"},{"constant":false,"inputs":[{"name":"index","type":"uint256"}],"name":"getGrantee","outputs":[{"name":"grantee","type":"address"},{"name":"description","type":"string"}],"type":"function"},{"constant":false,"inputs":[{"name":"requestee","type":"address"},{"name":"index","type":"uint256"}],"name":"getGrantedAssertion","outputs":[{"name":"assertionType","type":"uint256"}],"type":"function"},{"inputs":[],"type":"constructor"}]);

Security contract:

var securityContract = web3.eth.contract([{"constant":true,"inputs":[],"name":"name","outputs":[{"name":"","type":"string"}],"type":"function"},{"constant":true,"inputs":[{"name":"","type":"uint256"}],"name":"custodians","outputs":[{"name":"","type":"address"}],"type":"function"},{"constant":false,"inputs":[{"name":"addresses","type":"address[]"},{"name":"addr","type":"address"}],"name":"contains","outputs":[{"name":"contained","type":"bool"}],"type":"function"},{"constant":false,"inputs":[{"name":"openingBalance","type":"uint256"}],"name":"registerHolder","outputs":[],"type":"function"},{"constant":false,"inputs":[],"name":"kill","outputs":[],"type":"function"},{"constant":false,"inputs":[{"name":"overrideProposal","type":"bytes32"}],"name":"confirmOverride","outputs":[],"type":"function"},{"constant":true,"inputs":[],"name":"identifier","outputs":[{"name":"","type":"string"}],"type":"function"},{"constant":true,"inputs":[{"name":"","type":"bytes32"}],"name":"overrides","outputs":[{"name":"accountToBeUpdated","type":"address"},{"name":"balanceChange","type":"int256"},{"name":"description","type":"string"},{"name":"timeProposed","type":"uint256"},{"name":"overrideGranted","type":"bool"}],"type":"function"},{"constant":false,"inputs":[],"name":"getBalanceOnLoan","outputs":[{"name":"balance","type":"uint256"}],"type":"function"},{"constant":false,"inputs":[{"name":"balanceChange","type":"int256"},{"name":"description","type":"string"}],"name":"overrideBalance","outputs":[],"type":"function"},{"constant":true,"inputs":[{"name":"","type":"address"}],"name":"custodyBalances","outputs":[{"name":"underCustody","type":"uint256"},{"name":"onLoan","type":"uint256"}],"type":"function"},{"constant":false,"inputs":[],"name":"getBalanceUnderCustody","outputs":[{"name":"balance","type":"uint256"}],"type":"function"},{"constant":false,"inputs":[{"name":"receiver","type":"address"},{"name":"amount","type":"uint256"}],"name":"send","outputs":[],"type":"function"},{"constant":true,"inputs":[],"name":"idType","outputs":[{"name":"","type":"uint8"}],"type":"function"},{"inputs":[{"name":"\_name","type":"string"},{"name":"\_identifier","type":"string"},{"name":"\_idType","type":"uint8"}],"type":"constructor"},{"anonymous":false,"inputs":[{"indexed":false,"name":"from","type":"address"},{"indexed":false,"name":"to","type":"address"},{"indexed":false,"name":"amount","type":"uint256"}],"name":"CustodyTransfer","type":"event"},{"anonymous":false,"inputs":[{"indexed":false,"name":"proposalID","type":"bytes32"},{"indexed":false,"name":"accountToBeUpdated","type":"address"},{"indexed":false,"name":"amount","type":"int256"},{"indexed":false,"name":"description","type":"string"}],"name":"ErrorCorrection","type":"event"}]);