Wanchain 3.0 Alpha Testing

CLI wallet - Bitcoin cross-chain commands (testnet)

Install environment

1. Fetch code

```
$ git clone https://github.com/wanchain/wanchain-crosschain-walletcli
$ cd wanchain-crosschain-walletcli
$ git checkout –t origin/wanchain3.0
```

2. Install dependencies

```
$ npm install
```

3. Start CLI

```
$ node cli.js
```

4. Get the help text

```
$ help
```

Information about testnet

In Wanchain 3.0 Alpha Testing, we use BTC testnet3.

BTC testnet explorer:
https://testnet.blockchain.info/

WAN testnet explorer:
http://47.104.61.26/

You can use these links to obtain some testnet Bitcoins:
https://coinfaucet.eu/en/btc-testnet/
https://testnet.manu.backend.hamburg/faucet

You can use this link to obtain some testnet Wanchain tokens:
http://52.88.191.131:8080/

HTLC timelock is set to expire 2 hours after locking transaction is confirmed in testnet.
You can finalize a BTC to WBTC or a WBTC to BTC transaction during these 2 hours.

Normally testnet3 BTC blocks are created every 3 minutes, and you need to wait 1 block to see your locking transaction confirmed.

General Bitcoin commands

createBtcAddress

Create a new Bitcoin address, it will prompt to enter password of the new Bitcoin address

listBtcAddress

Get list of Bitcoin addresses

getBtcBalance

Get the balance of all Bitcoin addresses

sendBtcToAddress

Send Bitcoin to another BTC address (normal transaction)

General Wanchain commands

listWbtcBalance

List the WBTC balance for all WAN addresses

listWanBalance

List WAN balance for all WAN addresses

Cross-chain transaction commands

listTransactions

List all transactions

lockBtc

Lock BTC for cross-chain transaction (BTC to WBTC)

redeemBtc

Finalize a BTC to WBTC transaction

revokeBtc

Cancel BTC to WBTC transaction once HTLC timelock is expired

lockWbtc

Lock WBTC for cross-chain transaction (WBTC to BTC)

redeemWbtc

Finalize a WBTC to BTC transaction

revokeWbtc

Cancel WBTC to BTC transaction once HTLC timelock is expired

listStoremanGroups

List BTC address and WAN address of Storeman group

Example 1 – Send BTC to a Wanchain Address

First, create a new BTC address

```
> createBtcAddress
```

You will need BTC in your CLI wallet to be able to transact, so before continuing send some testnet BTC to the address from your preferred wallet. Once bitcoin is sent to the wallet address, check that the value has been received.

```
> getBtcBalance
```

Also, make sure that you have a positive balance in your WAN account as well.

```
> listWanBalance
```

If you do not have a positive WAN balance, send some testnet WAN coins to the CLI wallet address.

Now, with balances in both the WAN and BTC addresses, initiate a new BTC to WBTC transaction by locking some bitcoin.

```
> lockBtc
```

Answer the prompts, select the storeman group you would like to use, the WAN address you would like to send to, and the amount that you would like to send. Then enter your WAN address's password, and your BTC wallet password.

Once completed, you can list the transactions to see that it was registered.

```
> listTransactions
```

After a few minutes when the transaction that you just created changes to the status "waitingX" (which means that the BTC locking transaction has been confirmed), you can then proceed to finalize the transaction.

```
> redeemBtc
```

Now check your WBTC balance. You should see that you now have WBTC.

```
> listWbtcBalance
```

If instead you waited too long and the status changes to "waitingRevoke" (which means the HTLC timelock has expired), you can then proceed to reclaim your BTC.

```
> revokeBTC
```

Example 2 – Send WBTC to a Bitcoin Address

Note: you must have positive balances of both WAN and WBTC.

Initiate a new BTC to WBTC transaction by locking some WBTC.

```
> lockWbtc
```

Answer the prompts, select the storeman group you would like to use, the WAN address you would like to send from, the BTC address you would like to send to, and the amount that you would like to send. Then enter your WAN password. (You don't have to enter your BTC wallet password here)

Once completed, you can list the transactions to see that it was registered.

```
> listTransactions
```

When the transaction that you just created changes to the status "waitingX" (which means that the WBTC locking transaction has been confirmed), you can then proceed to finalize the transaction.

```
> redeemWbtc
```

Now check your BTC balance. After a few minutes, once the BTC transaction confirms, you should see that you received the bitcoin.

```
> getBtcBalance
```

If instead you waited too long and the status changes to "waitingRevoke" (which means the HTLC timelock has expired), you can then proceed to reclaim your WBTC.

```
> revokeWbTC
```