

## Shadow Bank (mixer)

TERA

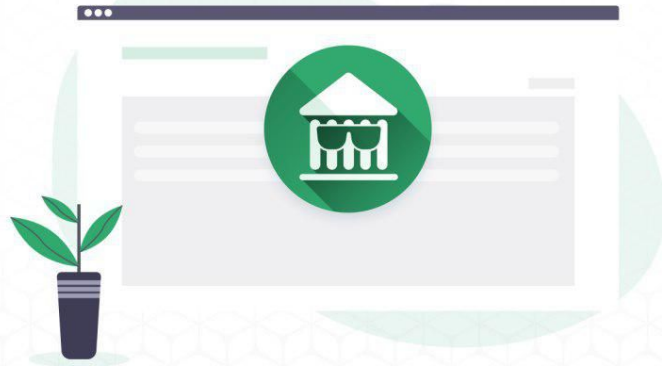
### ShadowBank – payments anonymizing dApp

A test of new anonymize dApp has been launched

#### New dApp allows:

- eternal storing of currencies
- unlimited withdraw
- intrabank transfers

Check out the **TESTNET**



**TEST-NET:** <http://dapptgate.com:88/dapp/63>

**Getting Test Monets:** <http://dapptgate.com:88/dapp/16>

Blockchain-based payment systems often have problems with anonymity. This is due to the fact that all information is stored in the blockchain in the clear and that you can trace all transactions from one account to another.

We offer two options for solving this problem:

- 1) Use a money mixer (when amounts from different accounts are mixed with each other through a single smart contract account)
- 2) Use encrypted transactions, so that the information in the clear form is not stored in the blockchain

DApp works on the principle of a bank. You can store money there (without a time limit), you can make unlimited withdrawal, as well as make intra-bank transfers (from one deposit to another).

#### Deposits


You open a deposit, the number of which coincides with the account number in your wallet. Opening a deposit occurs by sending the amount of money. Dapp has a limit on the minimum rechargeable amount (in the test base it is 50 Tera), it is displayed on the Deposit tab and is visible at the time of transfer.



Open: true  
Min amount: 50 TERA  
Bank: 9570 TERA


At any time, you can replenish your deposit account by simply sending more coins to the same deposit number.

You can find out the deposit balance by clicking the Refresh button next to the deposit number.

After that, the program will analyze the blockchain and find the last known balance on this account. The balance is not stored in the clear, it is visible only to the account holder (encrypted with the wallet's private key).

If the balance is found, then the information on the deposit will be displayed as an additional line "(DEP: XXXX)":

## Money transfers

In order to withdraw money to another account, the Orders tab is used. In it you enter the deposit number, the account to which you want to transfer money and the amount. A fee is taken for the transfer. Information about the fee charged is visible at the time of the transfer.



Note: Data is sent in encrypted and anonymous form

From deposit:

31726.Money (DEP: 5571)



To account

31726

Intrabank transfer to another deposit

Amount: 4800

Fee: 1 TERA

Order

The command to send an order is executed anonymously, it does not have an open link to the account number, and all the information necessary to complete the operation is encrypted (only a bank can read it).

In addition to specifying a standard account, you can check the box "Intrabank transfer to another deposit". In this case, the transfer will be made inside the bank (smart contract), and since the information on the transfers is encrypted, nothing will be visible in the public domain. The payee can make sure that the payment is made by going to the dapp on the Orders tab and click on the refresh button next to the account. At the same time, he does not need to completely bind the smart contract to the account - the link is only needed at the time of replenishment of the deposit, in the future it is not needed and it can be removed at any time, and then re-set if necessary.

**The bank (owner) of the smart contract has the right to set:**

- A sign that the bank is open to accept deposits
- Minimum deposit replenishment amount
- Size of commission for each transfer order

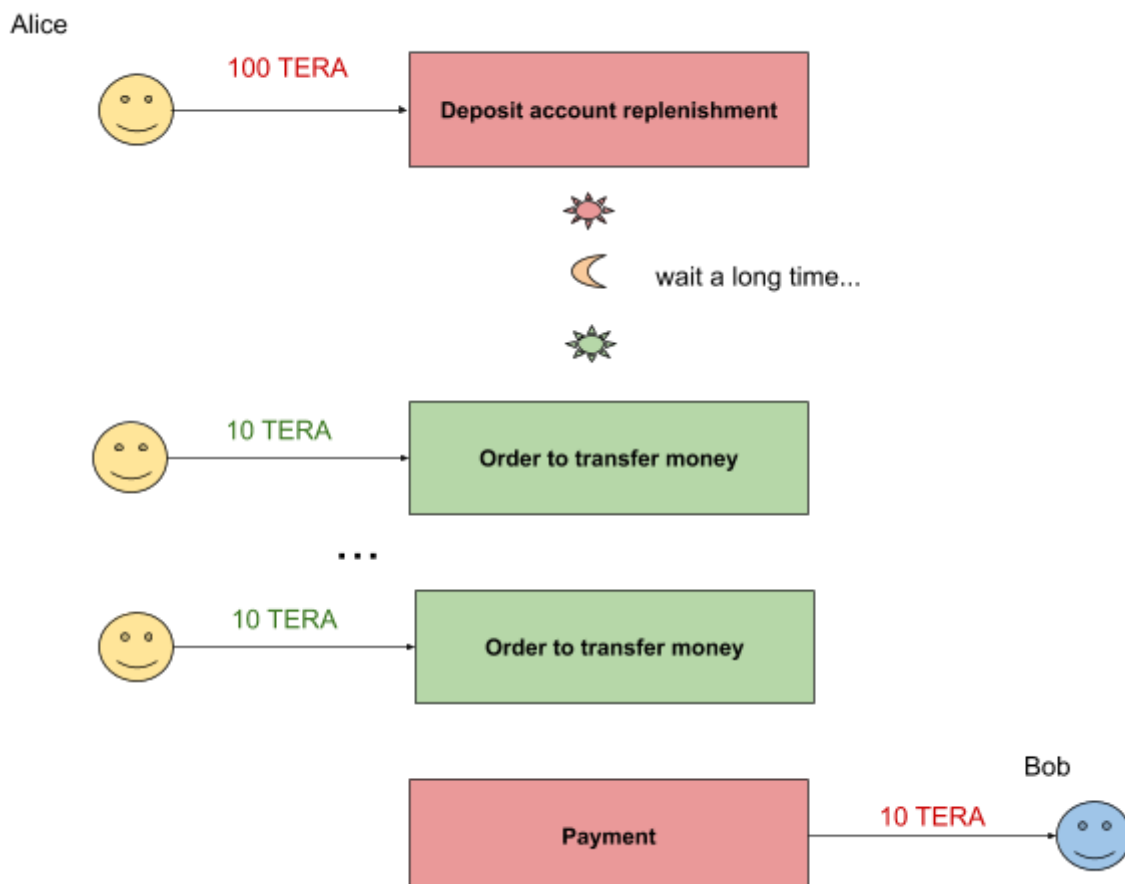
**Recommendations for increasing the anonymity of transfers:**

1. Check that the bank account already has money - in this case, your money will be mixed with the existing balance. Make sure that the amount in the bank is more than the amount you want to withdraw. The higher the difference, the less likely it is to link

payments to you. Information on the total bank balances is located on the Deposit tab:



2. After the transfer, make sure that a sufficient amount of time has passed so that it is impossible to connect the deposit with the withdrawal of money. The command to indicate from which deposit to which transfer is anonymous, but depositing money and withdrawing money is an open operation, therefore it is recommended that these two operations be separated in time. Better yet, the operations of other users are conducted between your input and output.
3. Try so that the amount of the deposit does not coincide with the amount of payment (withdrawal of money). You can replenish the deposit with a larger than necessary amount of money. The remainder will wait for the next payment command.



4. Use intra-deposit transfers more often. In this case, maximum anonymity is provided, because all operations are encrypted. If you received a payment in the form of a transfer to your account inside the bank, then you can not withdraw money to your account in your wallet, but leave it for payment to other counterparties in the form of intra-deposit transfers. In this case, it will be impossible to track your payments based on open blockchain information.

### Recommendations for the bank:

- Automatic payment processing is carried out centrally on the side of the bank operator. No need to write a backend code that will be executed on the server, just leave the dapp form open and run enable autorun (checkmark Autorun).
- Use the most secure platform from hacking in which root access at the operating system level is closed, for example, iOS devices.

### Architecture

Bank processing module - a module that decides which accounts to transfer money to does not interact directly with the client. They communicate only through the blockchain, which is a kind of data bus. The client and the bank may be in arbitrary parts of the world and their location is unknown to each other. The client sends control instructions on the blockchain (such as replenishment / transfer / withdrawal of a deposit). The bank operator (in the form of the client part of the dapp) reads these instructions in the order of their priority and as far as possible. If such instructions are valid, he sends money transfer transactions and a change in the balance of the deposit to the blockchain.

