CRYPTOUNIT Blockchain Crypto Wallet Manual

Crypto Wallet is an application created for storing and transferring CRYPTOUNIT blockchain tokens issued on an EOS smart contract with the further possibility of managing them, displaying the received staking revenues and other actions within the framework of the implemented logic.

I. Key generation

For users registered in the personal account of my-cryptounit.com and who have passed verification, it is possible to generate a secret phrase (Seed Phrase), which will later be necessary to authorize the user in the crypto-wallet.
The secret key is generated from the user's personal account by clicking on the appropriate button.

To generate a secret key you must:
1. Log in to your my-cryptounit.com personal account and copy your crypto-wallet address, consisting of 12 characters and paste the wallet address into a separate Word document or other text file that you will securely store on a flash drive or print on a printer, you can also write out these symbols on a sheet of paper, then press the "generate access key" button. (Fig. 1)
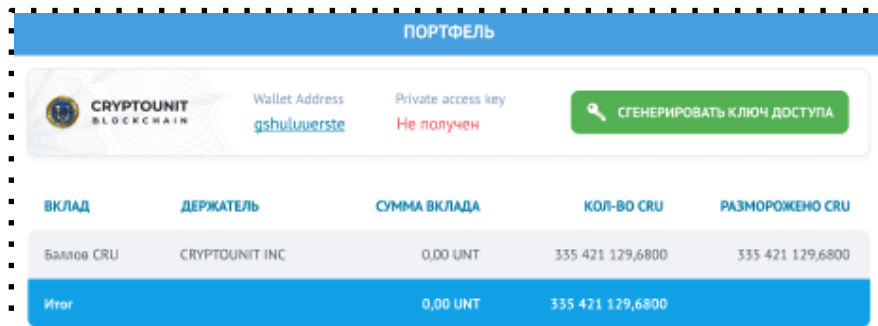

Fig.1

After that, you go to the CryptoWallet screen. (Fig. 2)
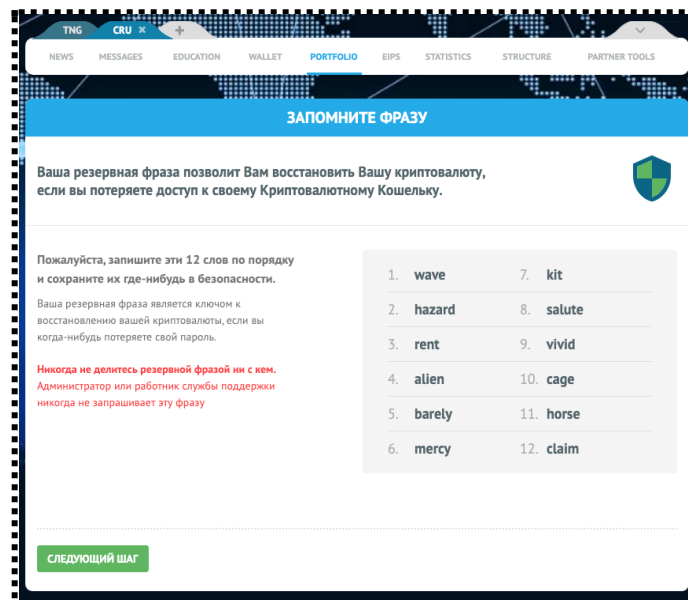The screen will display 12 words of the secret phrase.

Fig.2

2. The 12 words must be saved in a text file, where you have already written out your wallet address (preferably write it down on paper), so that you can enter it on subsequent confirmation screens in the future, and also easily restore access in case of possible technical failures or device change.
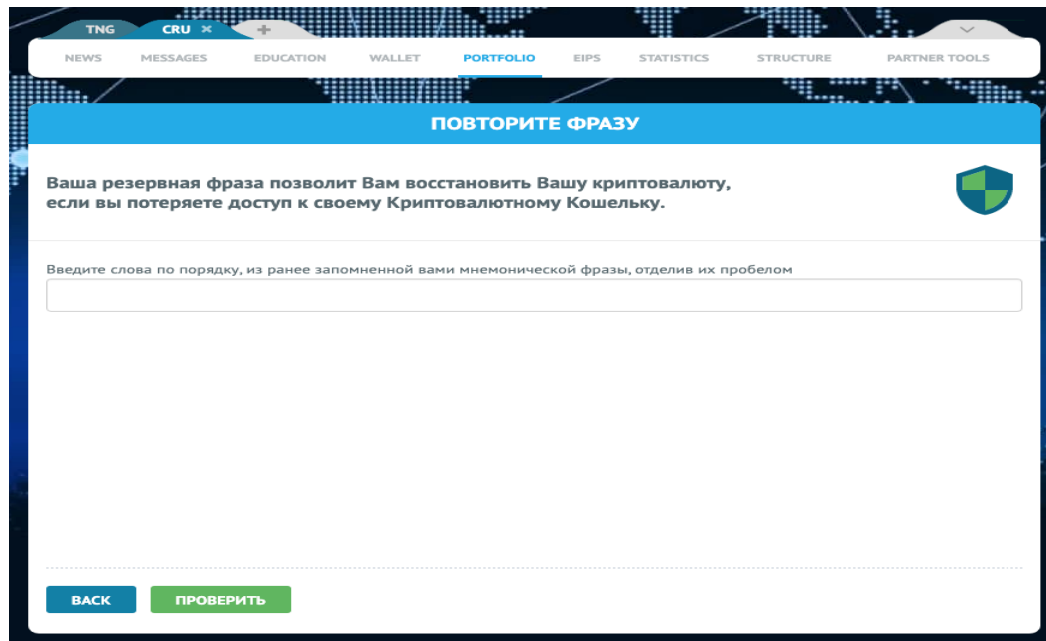3. Press the " Next step" button, go to the screen fig. 3

Fig.3

4. In the window (Fig. 3), the user needs to completely repeat the phrase, that is, enter the words in turn in the order in which they were presented on the previous screen. This must be done to make sure that the user actually saved or recorded the phrase.
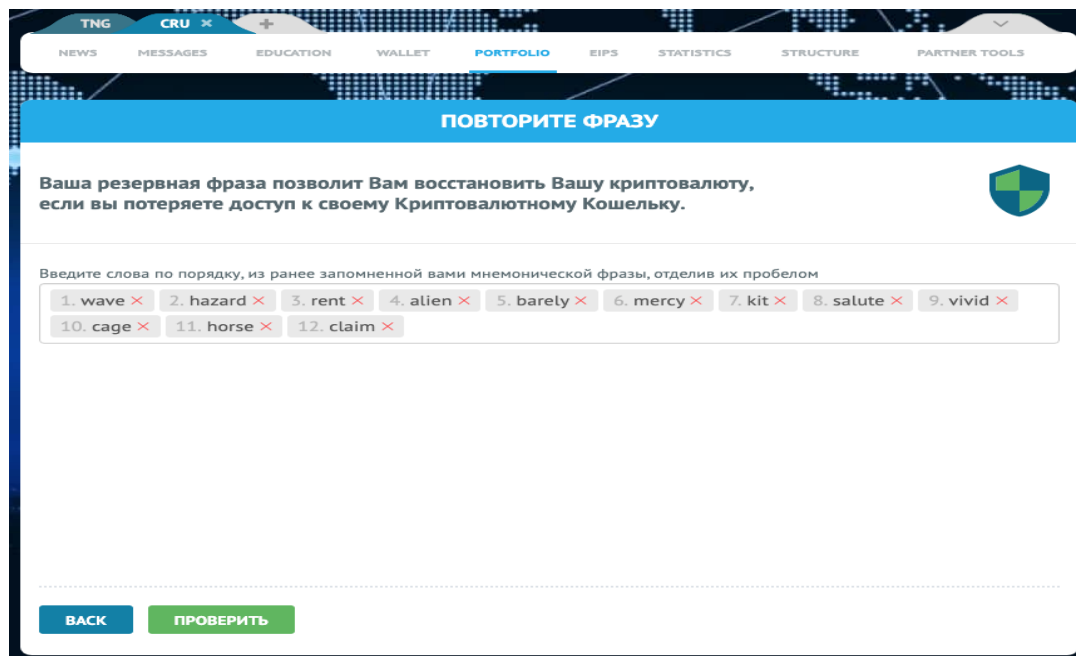

Fig.4

5. If the phrase is not assembled correctly, press the "Back" button and return to the screen with the phrase (Fig.3). After making sure that all 12 words of the secret phrase have been

transferred in the correct order, press the "Check" button (Fig. 4). Then press the "Go to wallet" button (Fig.5).
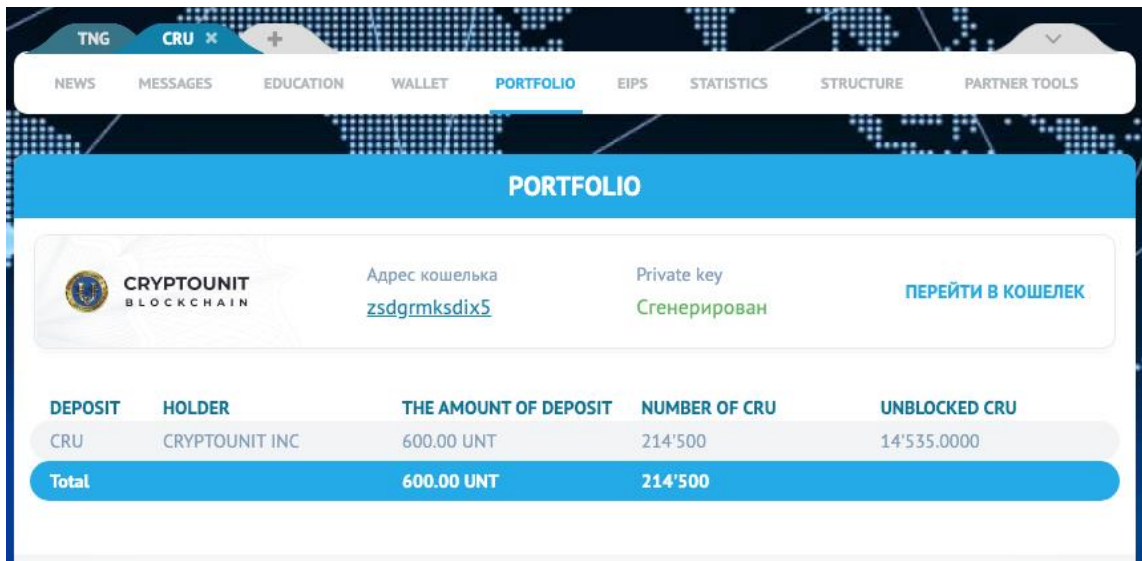

Fig.5

6. On the authorization screen, enter the address of your wallet, which is indicated in your portfolio, and the Seed Phrase that you saved in the text file, if you wrote 12 words on a sheet of paper, then when manually filling in, you need to put one space between each word.
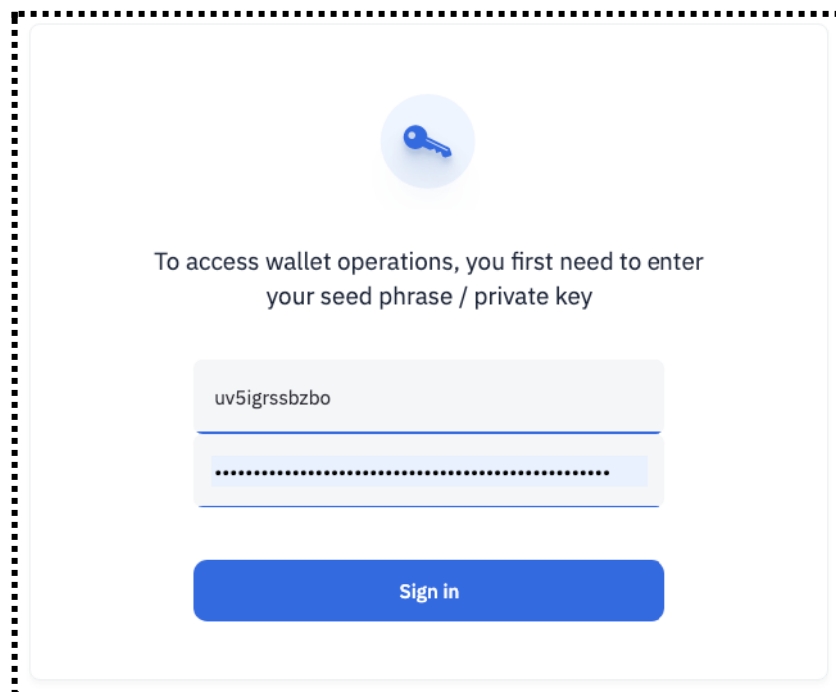

Fig.6

7. After entering the secret key (Seed Phrase), click **Sign in** to continue.

8. If authorization is successful at the first login, the user needs to come up with a 6-digit PIN-code, confirm it in the second field and press **Set pin**.

!!! Attention. Do not use simple pin combinations such as 6 zeros or 6 ones or your date of birth. Remember that the PIN is an important part of protecting your assets and only you know it, do not create a PIN in the presence of strangers and do not share it with other people.
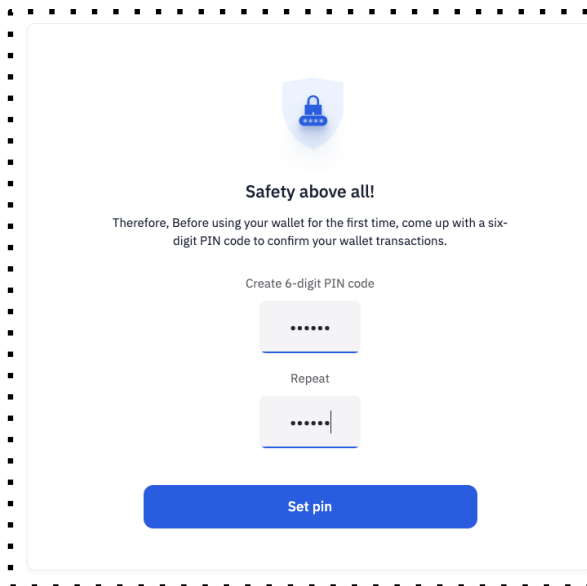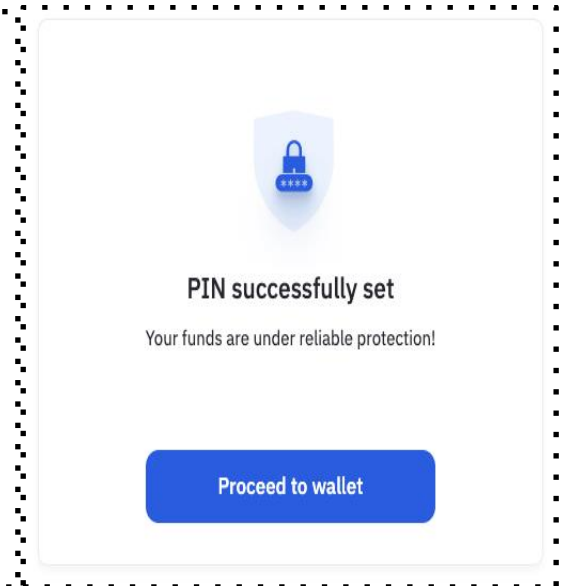
Fig.7   Fig.8

Next, a message about the successful setting of the PIN-code and the Proceed to wallet button will appear on the screen.

After entering the 6-digit PIN code and confirming it, the user goes to the main wallet screen (**Wallet Dashboard Fig. 9).**
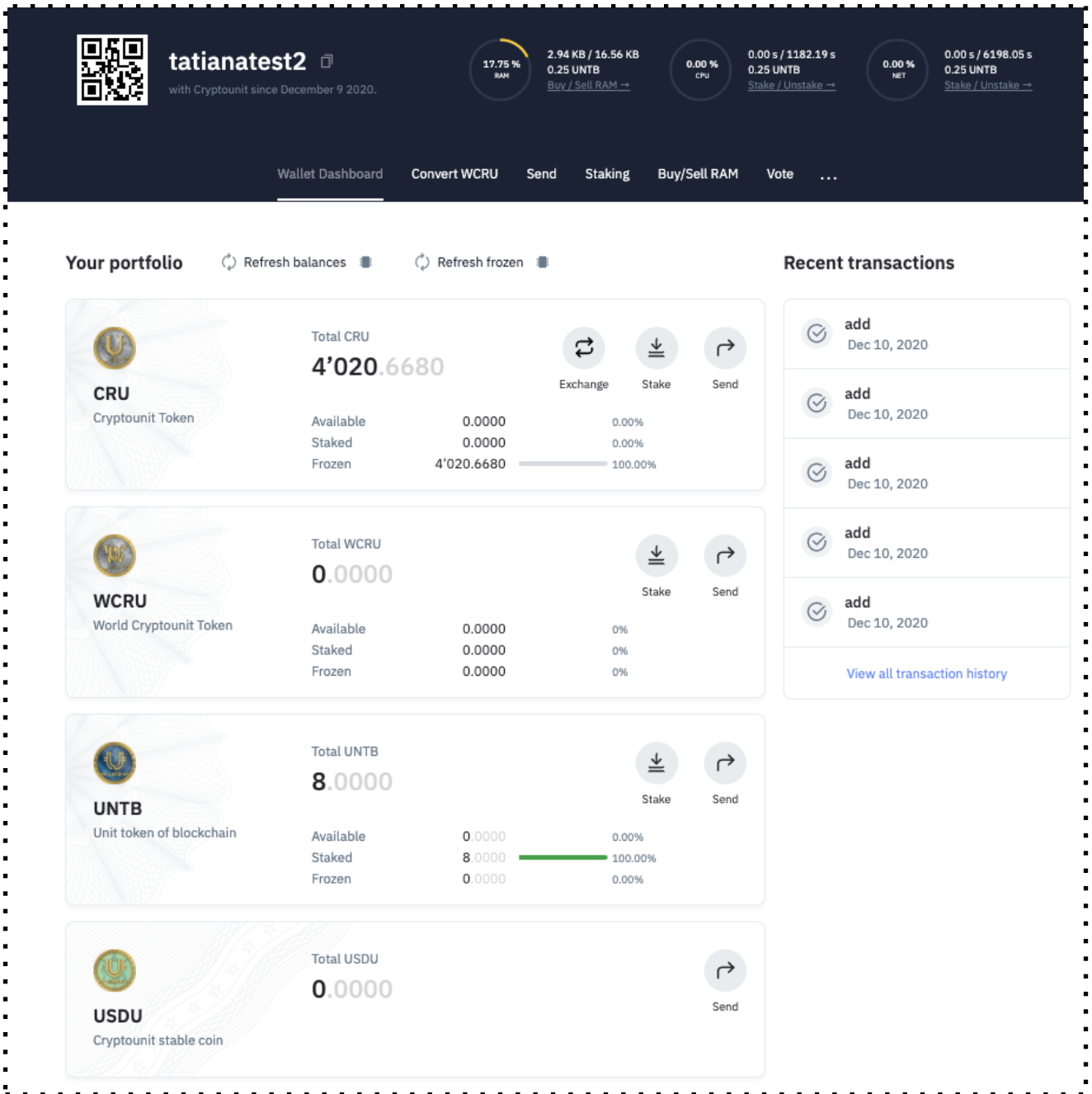
II. Dashboard

Fig.9

The main screen consists of modules that contain:

- user information and tabbed menus;
- information about the state of the user's balance;
- the history of last transactions.

III. "User information" block
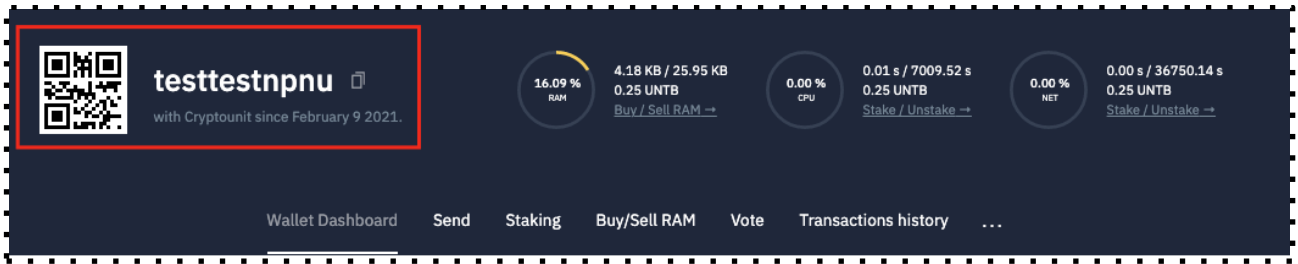
Fig.10

1. The "User information" block (Fig. 10) contains the following information:
   - username - a set of letters and numbers next to a QR code - it is also the address of the crypto wallet;
   - There are two small squares at the end of the crypto wallet address - this is the "copy wallet address" function. It is convenient to use when transferring tokens to other crypto wallets in order to avoid mistakes when copying the address.
   - date of creation of the user account in the blockchain;
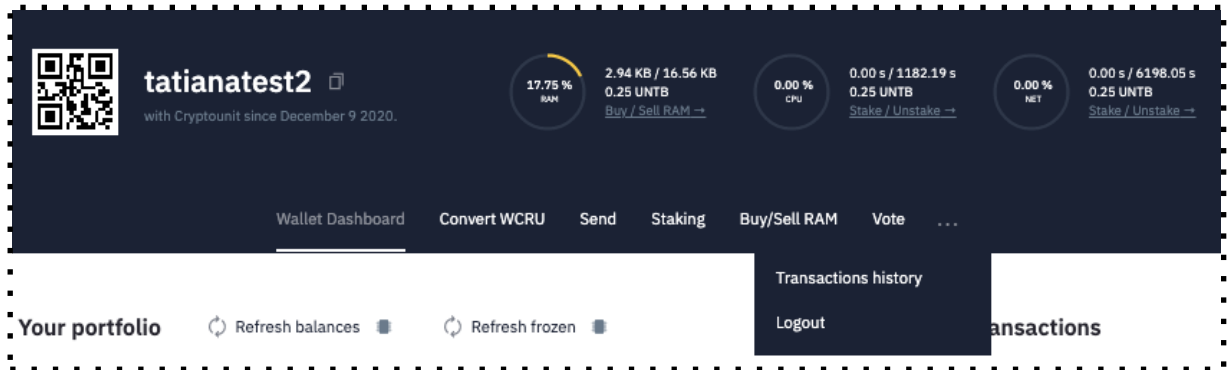
Fig.11

2. Next to the user information block on the Main screen there is the following information:
   - on the state of computing power - CPU-processor, NET-network speed and RAM-random access memory, for which the UNTB token is used.
   - on the number of UNTB tokens required for the operation of each network parameter.
   - buttons for buying/selling RAM, as well as for placing tokens in staking/withdrawing from staking.

3. Buttons for navigating pages:
   - Wallet Dashboard - General information about the balances of all tokens
   - Convert WCRU - Function for converting CRU to WCRU
   - Send - To send
   - Staking - Place in staking
   - Buy/Sell RAM- to buy or sell RAM
   - Vote - to vote
   - Transactions history - the history of transaction
   - Logout - to log our of the Personal Account
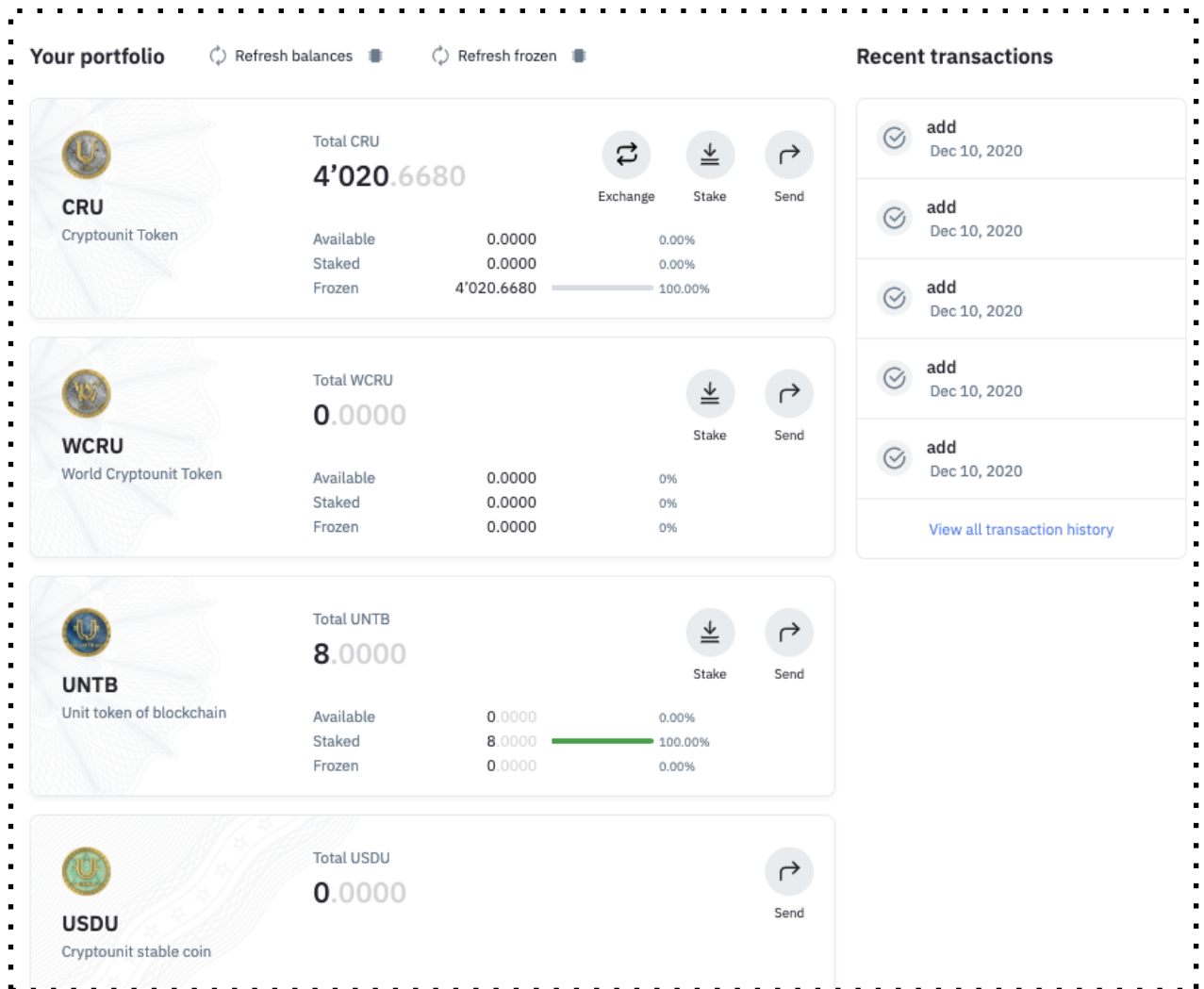
IV. "User portfolio" block

Fig.12

The "User portfolio" block (Fig. 12) contains the following information

1. About user's token balances:
   - **CRU** with statuses Staked/Unstaked/Frozen;
   - **WCRU** with statuses Staked/Unstaked/Frozen;
   - **UNTB** with statuses Staked/Staked;
   - **USDU**;

2. Updating user token balances:
   - Refresh frozen button - calls system smart contracts and refreshes data on frozen/unfrozen user tokens
     !!! Attention. Regular use of the Refresh frozen button is a prerequisite for working with frozen tokens to update data. Check your balances at least once a month.
   - "Refresh balances" button - to refresh balances. Calls on system smart contracts and refreshes CRU balances to be accrued from staking.

V. "Last transactions" block
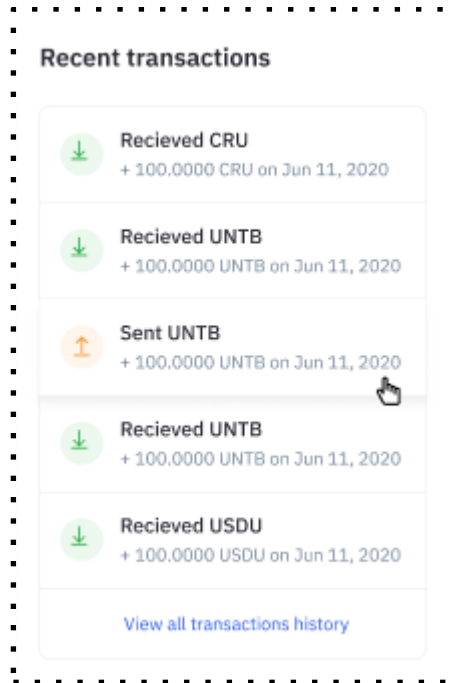
Fig.13

III. The "Last transactions" block (Fig. 13) displays:

1. History of recent transactions.
    When you click on a transaction, its details:
    - block number;
    - block creation time;
    - transaction ID;
    - number of actions;
    - username of the signer

2. Go to the page for viewing all transactions - click the "View all transaction history"
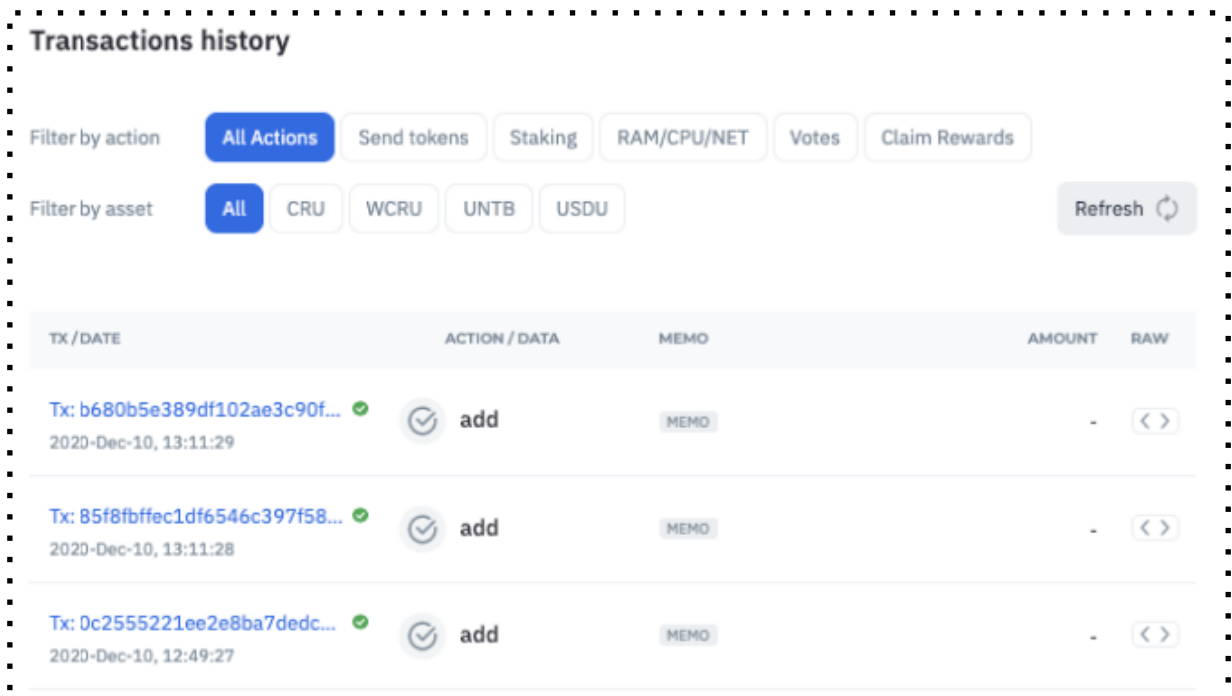
Fig.14

3. Update information on transaction history - "**Refresh"** button
4. Available filters

About transactions:
- All Actions - all
- Send tokens - sent tokens
- Staking - placed in staking
- RAM/CRU/NET- for RAM/CRU/NET-
- Votes- voting
- Claim Reward - getting income from staking

About assets:
- All
- UNTB
- CRU
- USDU

VI. Sending tokens

Fig. 15

1. The token transfer screen allows the user to transfer tokens from one account to another. Contains the following fields:

- allows you to select the type of token for transfer (drop-down list);
- the number of free tokens available for transfer;
- recipient (account name - address of the crypto-wallet of the user of the CRYPTOUNIT blockchain);
- Number of tokens;
- Memo (note - the memo must be filled in when sending tokens to the exchange, when sending tokens to each other, "memo" is optional)
- Send button

To transfer tokens to another user or to your own other wallet, you need to enter the number of tokens in the **You send** field, select the type of tokens. In the **Send to** field enter the name of the user - cryptowallet address and click on **Send**.
Each operation requires confirmation with a pin code.

A message about the successful completion of the transaction will be displayed on the screen, and an entry will appear in the Recent Transaction block.
You can also view the transaction history on the **Sent** page.

VII. Buying USDU tokens*
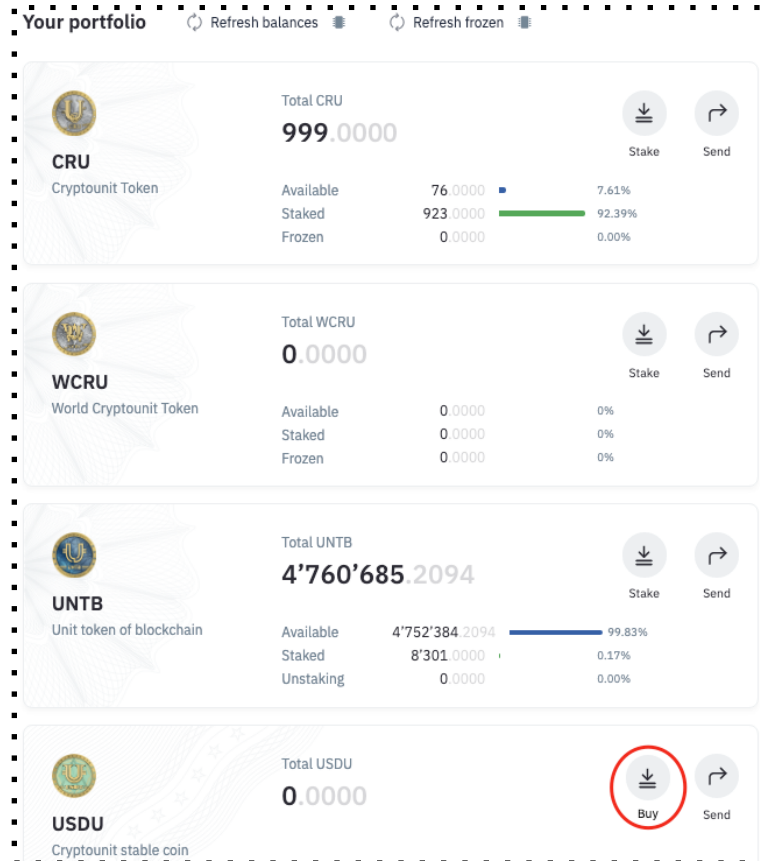*This functionality will be available in March 2021

Fig. 16

By clicking on the Buy button, the user is redirected to the Quantum payment gateway.

!!! Attention. If you could not complete the payment process, then all operations with your wallet will be stopped for 20 minutes, since the purchase service will wait for the payment to be completed (Fig. 17)

Fig.17

Fig.18

In case of successful payment, a message about the completed operation will be displayed and USDU tokens will be credited to your balance.

In case of unsuccessful payment, a message will be displayed stating that the purchase was not completed.

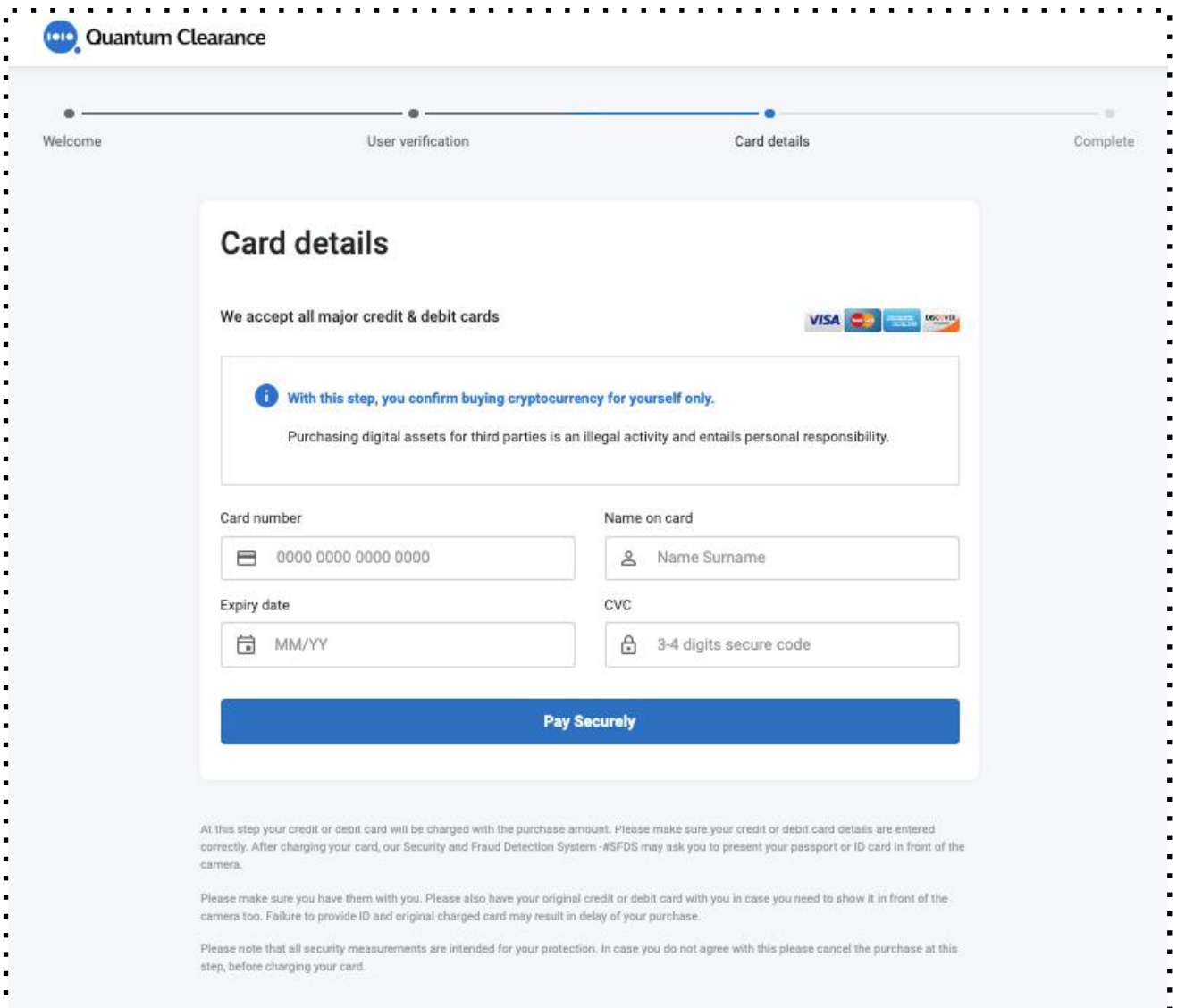Below are the images of the Quantum payment gateway.

Fig.19

Fig.20

VIII. Token staking. General page.

4. The page for staking tokens includes a summary of the different types of tokens placed in staking. (Fig. 21)

1.   CRU for UNTB
Est. monthly reward per 100 CRU - displaying the average profit in UNTB tokens obtained with a given type of CRU staking
Current Staked Amount - the current number of user tokens in staking is displayed;
Current Reward - the current number of UNTB accrued based on staking results for the current user is displayed;
CRU Available for Staking - the number of free CRU of the user is displayed

2.   CRU for CRU
Monthly Reward - the highest % under the terms of the contract that is available to the user is displayed;
Current Staked Amount - the current number of user tokens in staking is displayed;
Current Reward - the current number of CRU accrued based on staking results for the current user is displayed;
CRU Available for Staking - the number of free CRU of the user is displayed

3.WCRU for UNTB

Est. monthly reward per 100 WCRU - displaying the average profit received when staking
Current Staked Amount - the current number of user tokens in staking is displayed;
Current Reward - the current number of UNTB accrued based on staking results for the current user is displayed;
WCRU Available for Staking - the number of free WCRU of the user is displayed

4. UNTB for NET/CPU

NET - the amount of the user with the value displayed in UNTB
CPU - the amount of the user with the value displayed in UNTB
UNTB Available for Staking - displaying the number of free UNTB of the user

To go to the staking page of the token you need, you need to click on the button of the selected type, for example "Staking CRU for CRU"

Staking

CRU for CRU
Stake your CRU tokens to gain more CRU

Monthly reward
up to 8%

Current staked amount   Current Reward
0.0000   0.0000 CRU

⬇ **Stake CRU for CRU**

0.0000 CRU Available for staking

WCRU for UNTB
Stake your WCRU tokens to gain UNTB

Est. monthly reward per 24h
0 UNTB

Current staked amount   Current Reward
0.0000   0.0000

⬇ **WCRU for UNTB**

0.0000 WCRU Available for staking

CRU for UNTB
Stake your CRU tokens to gain more UNTB

Est. monthly reward per 24h
0 UNTB

Current staked amount   Current Reward
0.0000   0.0000

⬇ **Stake CRU for UNTB**

0.0000 CRU Available for staking

UNTB for NET/CPU
Stake your UNTB to receive NET/CPU advantages

NET 0 KB / 5.77 GB   CPU 0.00 s / 1182.05 s
4.0000 UNTB   4.0000 UNTB

⬇ **Stake UNTB for NET/CPU**

0.0000 UNTB Available for staking

Fig.21

1. Staking CRU for UNTB

Only unlocked CRU are eligible for this type of staking. (Fig. 22)
The result of staking CRU tokens is the accrual of UNTB tokens to the user's account.

In the **Stake CRU** field, enter the number of CRU tokens and press the Stake CRU button.

There is also a slider on the page for selecting the number of tokens to be staked. The amount will be automatically filled in the Stake CRU field.

Fig.22

After staking has been made, the **available balance** decreases, the **staked balance** increases by the number of tokens placed in staking.

You can also perform the reverse operation. In the **Unstake CRU** field, the user enters the number of CRU tokens and clicks the **Unstake CRU button.** The balances change in the opposite direction by the number of transferred CRU tokens.
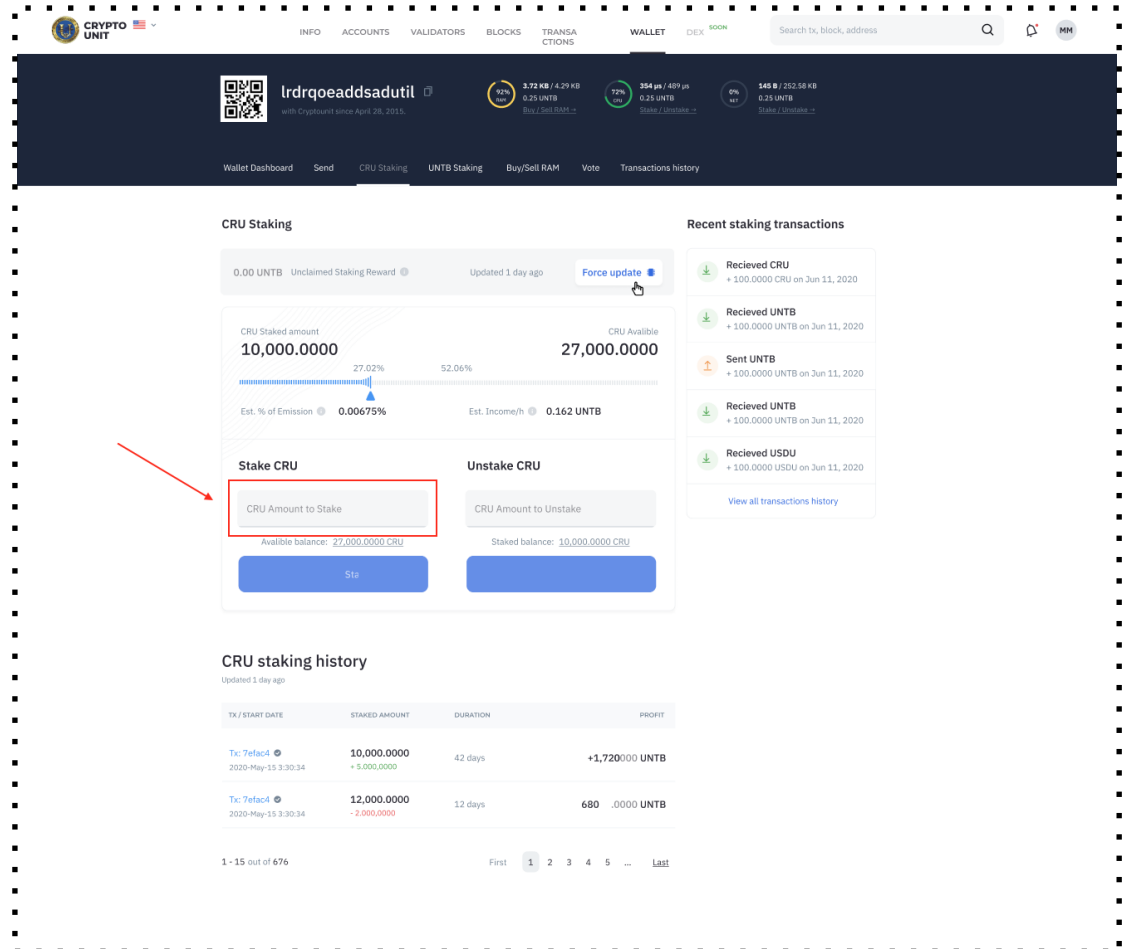

Fig. 23

When staking CRU tokens, rewards are accumulated in UNTB. (Fig.23)

In order to see the accrued UNTB tokens, the user needs to click on the refresh icon displayed in the middle of the block. The accrued tokens are displayed in the "Unclaimed Staking Reward" field on the left. Since the user could have skipped the emission step on the remuneration accrued to them, or in order to update information, it is necessary to always update the UNTB balance for reliability.

The tokens displayed in the Unclaimed Staking Reward field can be withdrawn by the user at any time by clicking on the **Claim UNTB** button, in this case the tokens will be displayed in the user's wallet in the Available UNTB section.
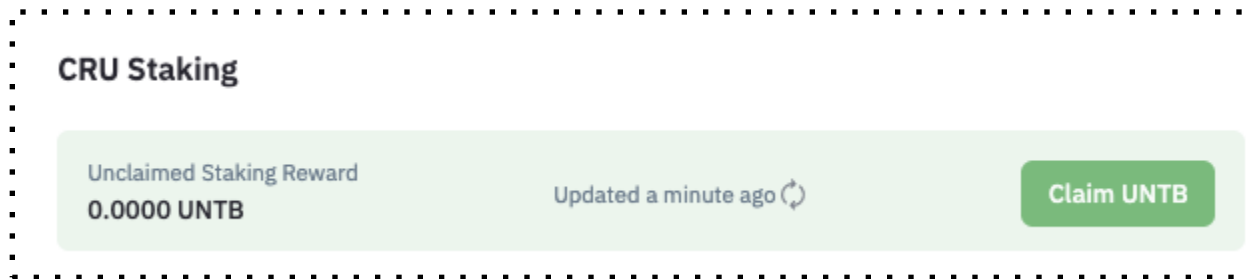
The transferred amount of UNTB tokens is displayed on the main wallet screen.
You can also see the transaction history at the bottom of the **CRU staking** page .

2.   Staking CRU for CRU
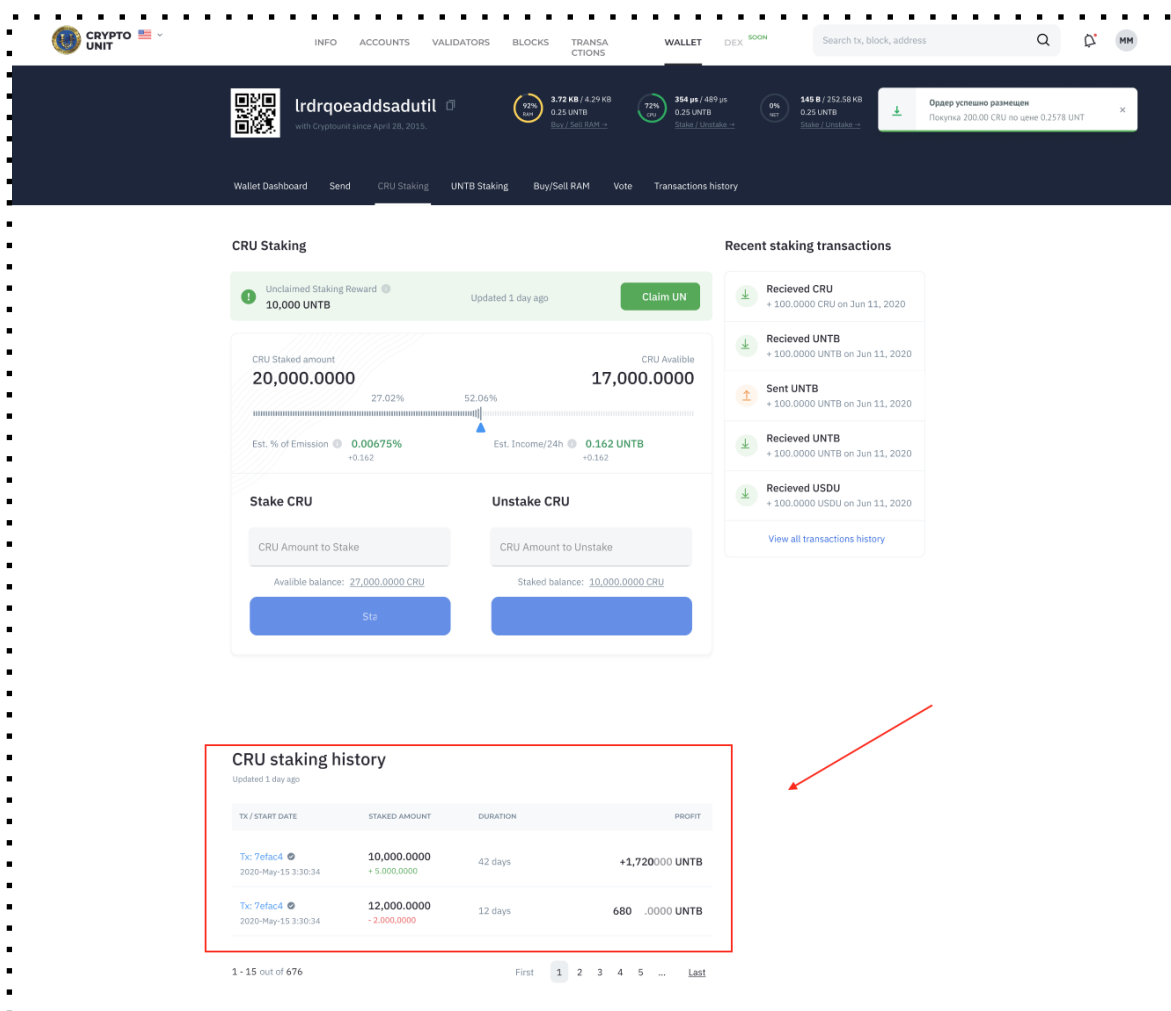
Fig.24

Only unlocked CRU are eligible for this type of staking. (Fig. 24)
The result of staking CRU tokens is the accrual of CRU tokens to the user's account.
The user needs to indicate the number of CRU subject to subsequent staking in the **Select CRU amount you'd like to stake** field, or click on the buttons with the percentage of available CRU tokens, which the system will automatically calculate and fill in the field.
Next, the user needs to select the Staking Plan from the drop-down list.

When choosing a plan, the user will be shown the following information:

- Duration of the tariff plan;
- % of remuneration per month;
- Time period;
- Descriptive part of the plan;
- Received profit in CRU after the expiration of the entire duration of the tariff plan;
- Warning about impossibility to cancel staking.

Staking Pool - a block with up-to-date information showing the progress of the remaining CRU tokens that are scheduled for payment to users who have already staked CRU for CRU. Initially, 3 billion CRU were released to pay rewards to users, but with each new stack, the amount for payments decreases. Fig.25

Fig.25

The page also displays the user's staking history below.

Fig.26

3. Staking WCRU token for UNTB

Fig.27

This type of staking involves all types of WCRU, both blocked and unblocked.

The result of staking WCRU tokens is the accrual of UNTB tokens to the user's account.

In the **Stake WCRU** field, enter the number of WCRU tokens and press the Stake WCRU button. (Fig.27)

After staking has been made, the **available balance** decreases, the **staked balance** increases by the number of tokens in staking.

You can also perform the reverse operation. In the **Unstake WCRU** field, the user enters the number of WCRU tokens and clicks the **Unstake WCRU button.** The balances change in the opposite direction by the number of transferred WCRU tokens.

When staking WCRU tokens, rewards are accumulated in UNTB.

The displayed tokens in the Unclaimed Staking Reward field can be withdrawn by the user at any time by clicking on the on the Update button first, and then on the **Claim UNTB** button (Fig. 28), in this case the tokens will be displayed on the main screen of the user's wallet in the Dashboard section.
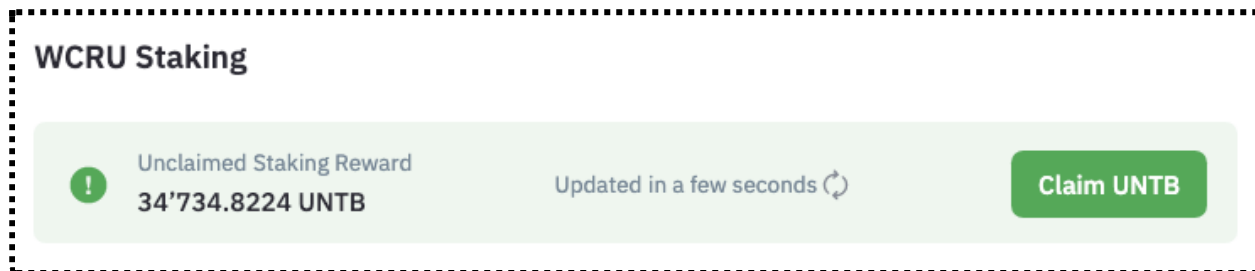
Fig. 28

You can also see the transaction history at the bottom of the **WCRU staking** page.

Fig. 29

4. UNTB token staking

UNTB staking is designed to increase the throughput of a crypto wallet and access to blockchain network resources.
UNTB staking implies a mechanism for blocking tokens for a certain time to receive CPU and NET resources, and also release them when the need for them decreases.
The page contains **Stake/Unstake** tabs.

The **Stake** tab is represented by the following fields:

- amount of CPU for staking (in EOS)
  - field for entering information
  - choice in % expression from 4 values (25%, 50%, 75%, 100%)
- amount of NET for staking (in EOS)
  - field for entering information
  - choice in % expression from 4 values (25%, 50%, 75%, 100%)

The **Unstake** tab is represented by the following fields:
- amount of CPU for unstaking (in EOS)
  - field for entering information
- the amount of NET for unstaking (on EOS)
  - field for entering information

In the **Stake UNTB** field, enter the number of UNTB tokens and press the Stake UNTB button.
After having staked, the **available balance** decreases, the **staked balance** increases by the number of staked tokens.

You can also perform the reverse operation. In the **Unstake UNTB** field, the user enters the number of UNTB tokens and clicks the **Unstake UNTB button.** The balances change in the opposite direction by the number of transferred UNTB tokens.

The user can also not enter tokens manually, but choose a percentage (25 %, 50 , 75 and 100) of the total balance.

IX. Converting WCRU*
*This functionality will be available in March 2021

To convert the CRU token to WCRU, select Convert WCRU in the top tab, go to the conversion screen. Both Available (Free tokens) and Frozen (blocked) CRU are subject to conversion.

The choice of the type of tokens is carried out using the switch at the top of the table (Fig. 30)

Fig.30

To convert Free tokens, just enter the amount in the **Select available CRU amount** field and the amount of WCRU tokens received by the user during conversion will be displayed in the **You will Receive** block on the right. (Fig 31)

This block also displays the following information:
- about the exchange rate;
- about the commission charged for the exchange, since the conversion procedure is paid and depends on the volume of the converted CRU tokens. Tariff information is displayed in the info tip next to the **Transaction Fee** field. (Fig. 32)
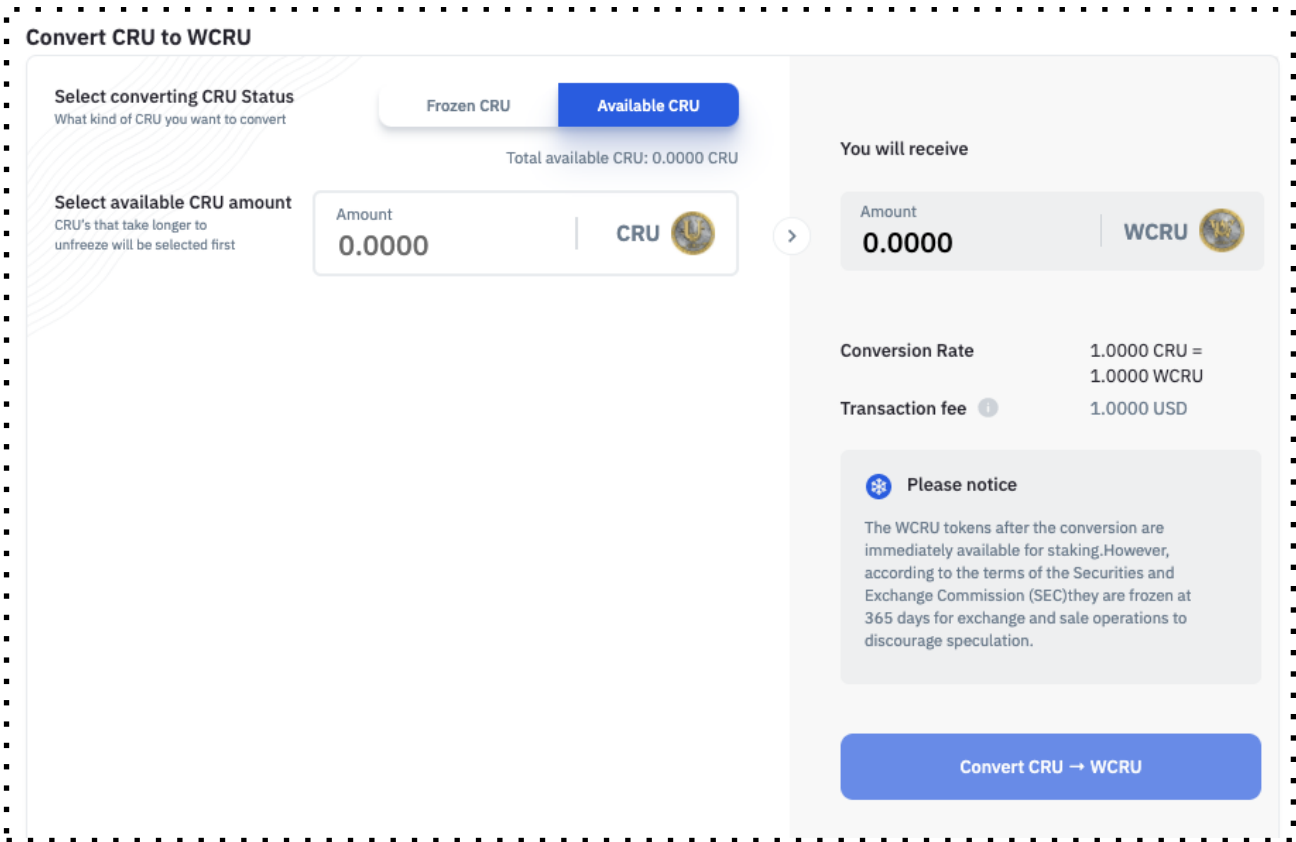
Fig.31

Fig.32

The conversion fee is charged in USDU tokens.

USDU stablecoin can be purchased on the crypto wallet on the DASHBOARD homepage
(see. Section V. of the Instructions on Buying USDU tokens) either on the exchange or from other users via a P2P exchange.

To continue the conversion procedure, click on the **Convert CRU - WCRU** button.
Next, the user is shown a screen with confirmation information about the conversion and the amount of the commission, after which it is necessary to continue the procedure by clicking on the **Pay** button.

In case of successful/unsuccessful payment, a message about the carried out conversion operation will be displayed. (Fig. 33, Fig. 34)
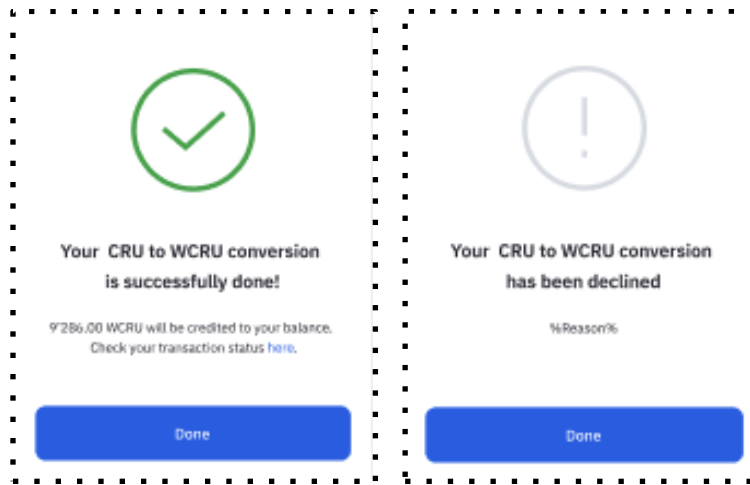
Fig.33   Fig.34

When converting **blocked CRU**, the user is given the option of choosing blocked CRU based on the number of days remaining before defrosting.

It is most profitable to convert CRU tokens with the largest number of days remaining until unblocking, since, during conversion, WCRU tokens will also be frozen.

On the screen, the user is given the opportunity to select days on a chart consisting of several years and within each year - the number of months. (Fig. 35)

The filter contains the parameter "more than 365 days", by clicking on which, the months (on the right of the graph columns) remaining until the end of the frozen period (that is, everything that exceeds 365 days) are selected. The user can also select Select All and all months and all accruals are highlighted on the graph.
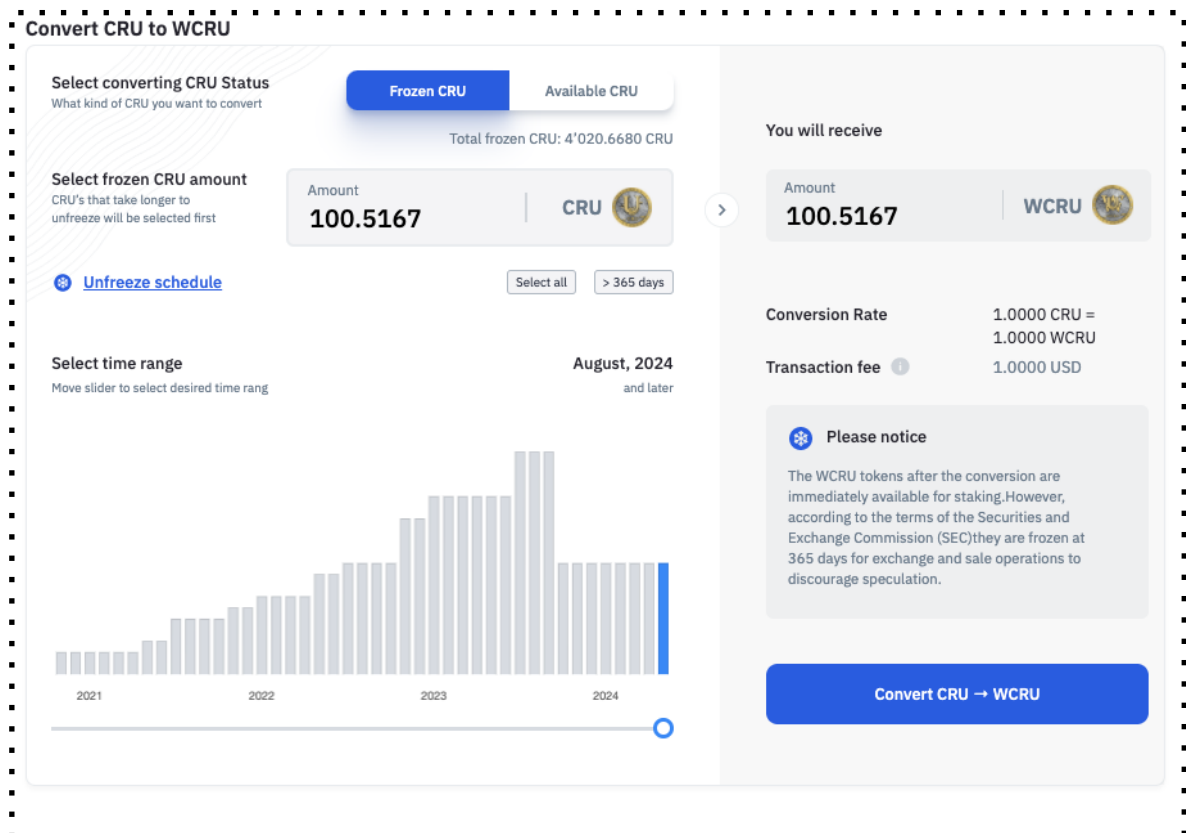
Fig.35

Each column is a month, by clicking on which we can see a pop-up window with information about how many frozen objects will be present and their total number. (Fig. 36)
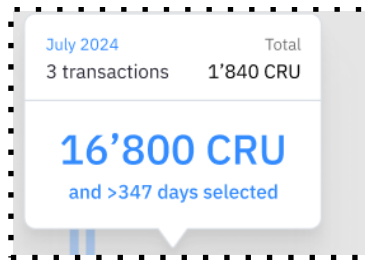
Fig.36

For example, if the total number of CRU is 2828,1250 in November 2023, then it can consist of 2 transactions (Fig. 37)
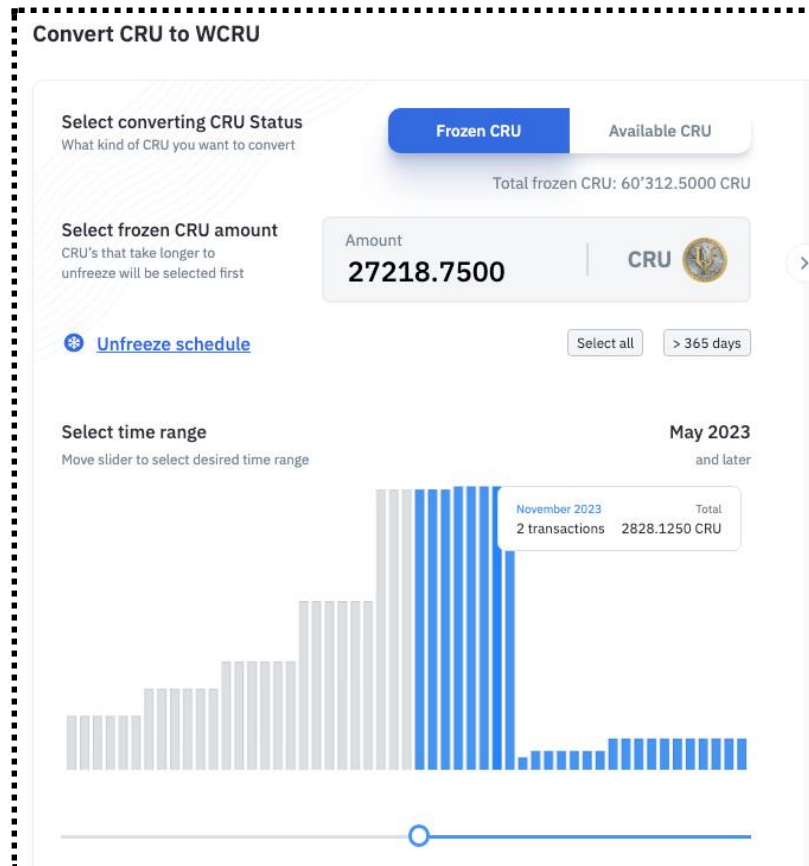
Fig.37

A token defrosting schedule is also available. (Fig. 38)
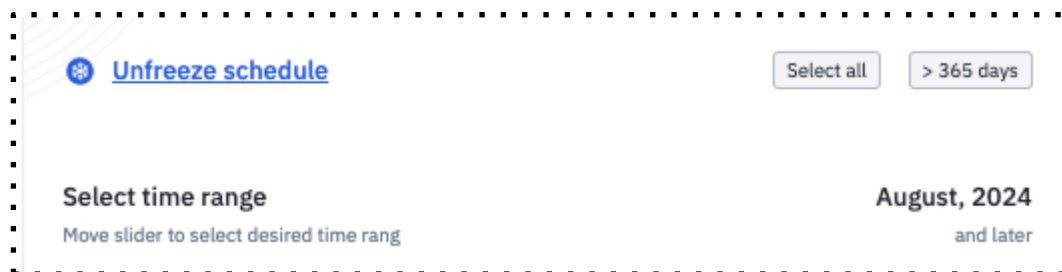
Fig.38

Clicking on the "Unfreeze schedule" link displays a screen with information about each of the objects to be frozen. (Fig. 39)

- date of receipt;
- initial number of tokens;
- residual amount at the time of viewing;
- number of days until complete defrosting;
- % until completely defrosting.

Fig.39

Using this form, you can also go deep and see information about the defrosting schedule for each object/transaction (Fig. 40)
- serial defrosting number;
- defrosting date;
- number of unfrozen CRU;
- accrued % of payments;
- % of unfrozen tokens of the original amount.

Fig.40

X. Sale/purchase of RAM (random access memory)

The purchase of RAM involves the purchase of random access memory by the user at the market price in UNTB tokens.
A certain type of data assumes that the user has RAM to store data on the blockchain. For example, RAM is required when creating an account, constants from a smart contract, balance to make a record about it.

The page contains **Buy/Sell** tabs. (Fig.41)

The **Buy** tab is represented by the following fields:
- RAM recipient (username)
- radio button with selectable display of RAM purchase equivalent
  - byte
  - token
- amount of RAM to buy (displayed in the selected equivalent)

The **Sell** tab is represented by the following fields:
- the amount of user RAM (displayed in bytes and token units):
  - bought
  - used
  - available
- amount of RAM for sale (displayed in bytes and token units)
  - field for entering information
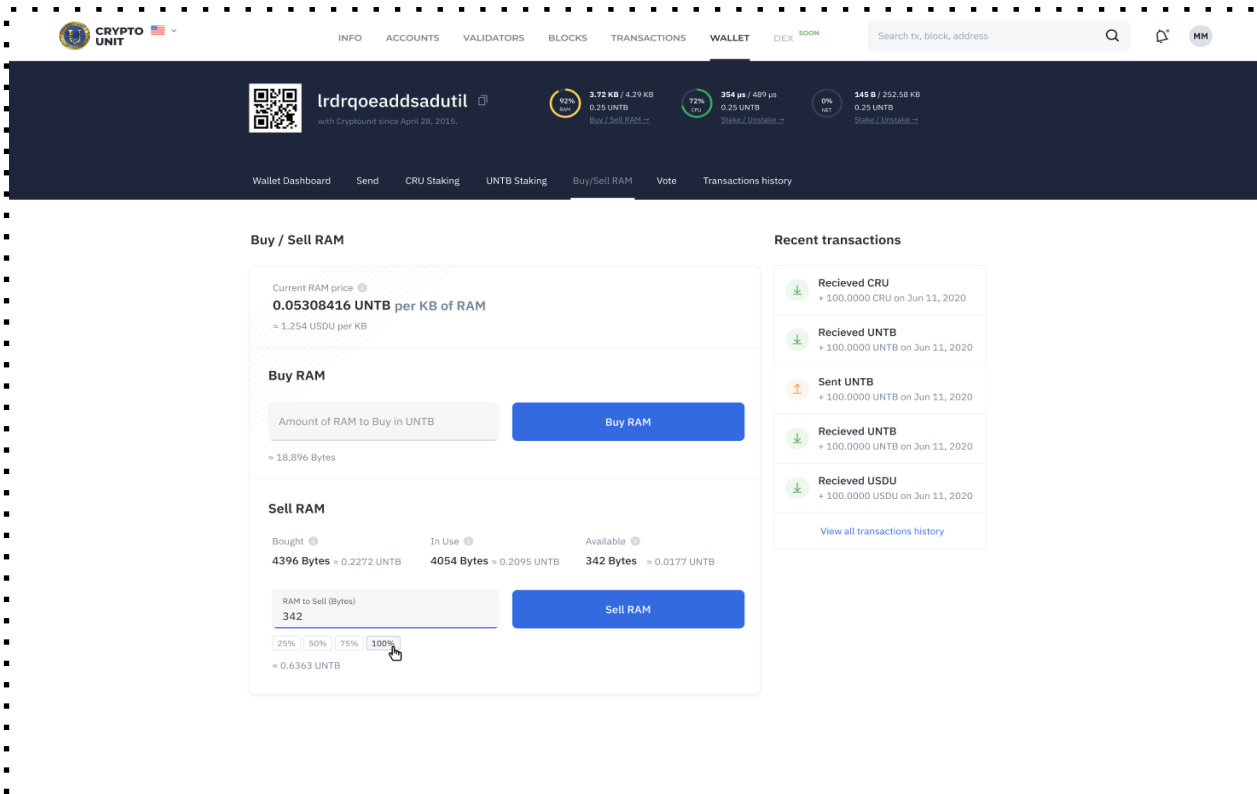
Fig.41

To buy RAM, the user must enter the number of UNTB tokens in the Buy RAM field and click the **Buy RAM** button.

To sell RAM, the user must enter the number of bytes in the Sell RAM field and click the **Sell RAM** button.

XI. Voting*

*This functionality will be available in October 2021

The Voting for Validators screen allows the user to vote with UNTB for the best block producer. (Fig.42) Each user can vote for no more than 3 candidates.

The top 21 block producers are voted on to become the "main" block producers.

The table with a list of producers of voting blocks contains the following fields:

- position of the candidate;
- username;
- status;
- location (country);
- ratio of votes;
- total number of votes;
- the number of UNTB tokens earned;
- Checkbox for selecting a candidate

Fig.42

To vote, the user can check the box for one or several candidates at the same time and click the **Vote to Producers** button.