



# **Instruction Manual for Wanwallet 2.1 beta GUI**

## **ERC20 Cross-chain transactions - MakerDAO**

With 2.1 beta release, Wanwallet now supports cross-chain transactions with Ethereum and also ERC20 tokens.

Previous versions of Wanwallet still work as usual after release of Wanwallet 2.1 beta, but new features like ERC20 cross-chain transactions require Wanwallet 2.1 beta or later.

For users of previous versions, we strongly recommend backing up keystore files in a safe location before upgrading to Wanwallet 2.1 beta to prevent any kind of data loss, though the upgrading process will not alter existing keystore files in any way.

This instruction guide is for Wanwallet 2.1 beta GUI in which users can send ERC20 tokens to Wanchain and withdraw ERC20 from Wanchain to Ethereum.

ERC20 tokens used in this instruction manual are MKR and DAI deployed on Ethereum Rinkeby testnet for testing purposes.

More ERC20 tokens will come with Wanwallet 2.1 mainnet release. Actually Wanwallet 2.1 can support cross-chain transaction of all kinds of ERC20 token, given necessary implementation by Wanchain Foundation for them.

ERC20 token issuing party doesn't have any implementation/adaptation work to do in order to be supported by Wanchain's cross-chain ability.

For 2.1 beta ERC20 cross-chain transactions testing, please use test network, although users can choose between ETH/WAN main network and test network.

This version combines ETH light wallet and WAN full node wallet.

## Terminology

WMKR (WDAI): Wanchain MKR(DAI) Crosschain Token, MKR(DAI) symbol on Wanchain. MKR(DAI) being ERC20 token on Ethereum

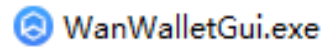
HTLC: Hashed Timelock Contracts.

1) Download Wanwallet 2.1 beta installation file from <http://47.104.60.142/wanwallet2.1/>

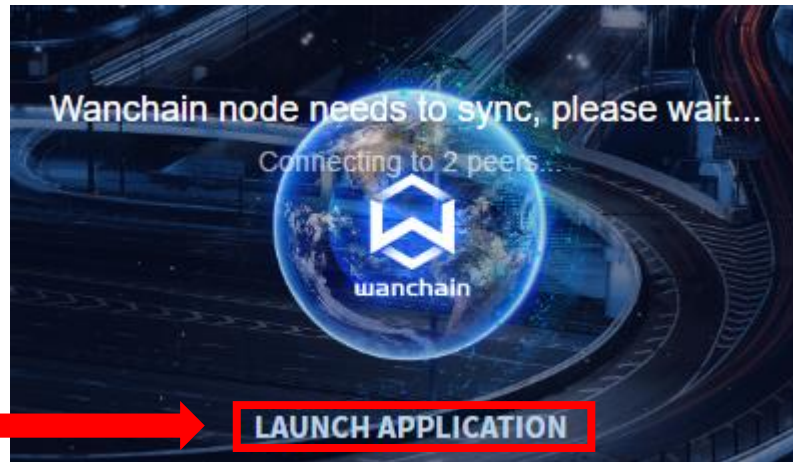
\*Wanwallet 2.1 beta supports Linux, Windows, MacOS, please download corresponding installation file for your OS.

2) Extract the file, run, and click the "LAUNCH APPLICATION" button below to start the wallet

For Windows:



For MacOS:



Click here to start

For Linux: Setup by CLI: `sudo dpkg -i WanWalletGui-linux64-2.10.X.deb`

Start by CLI for main network: `wanwalletgui`

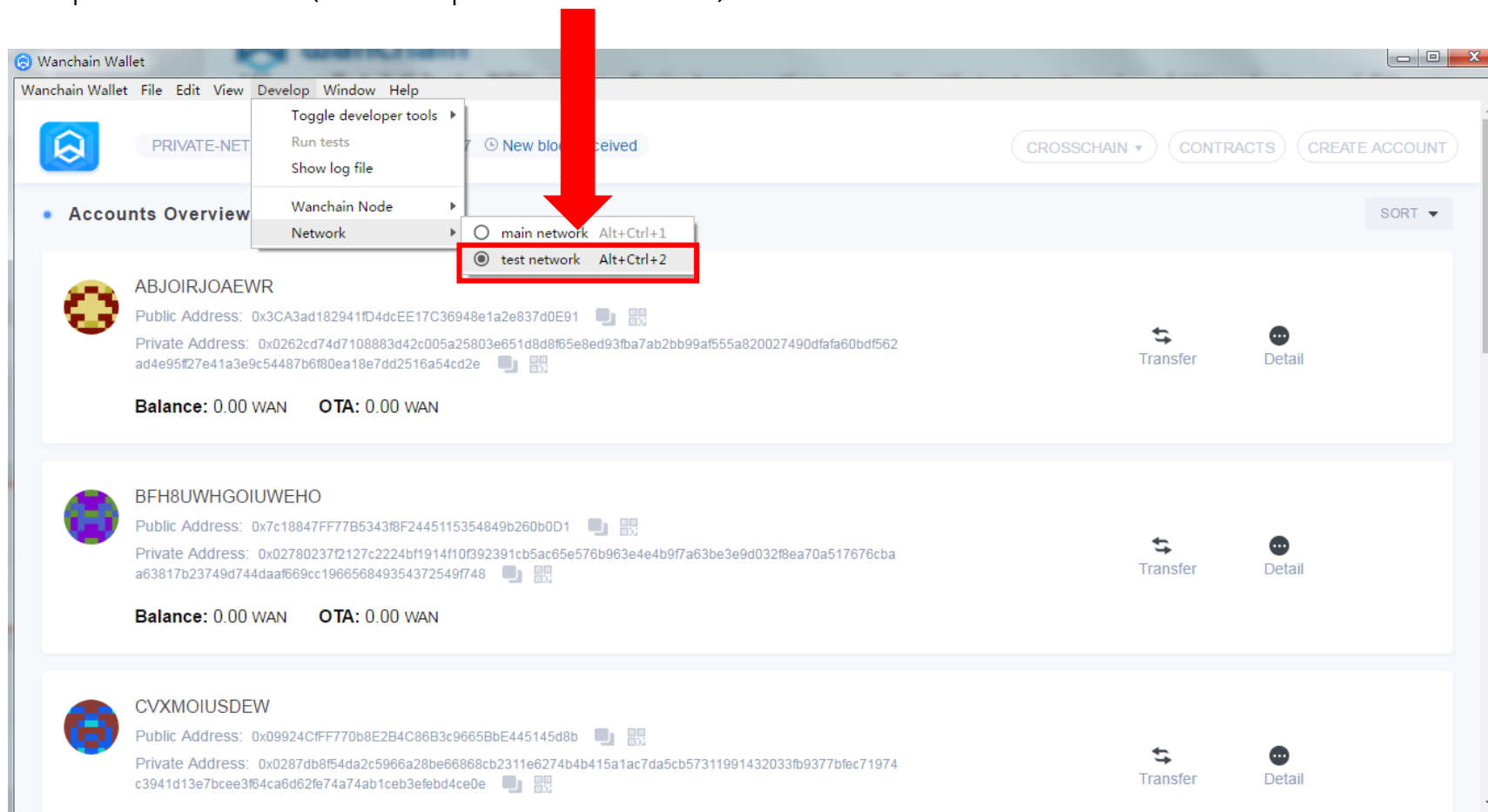
Start by CLI for test network: `wanwalletgui --network testnet`

Or click Wanwalletgui to start under `/usr/local/bin/`

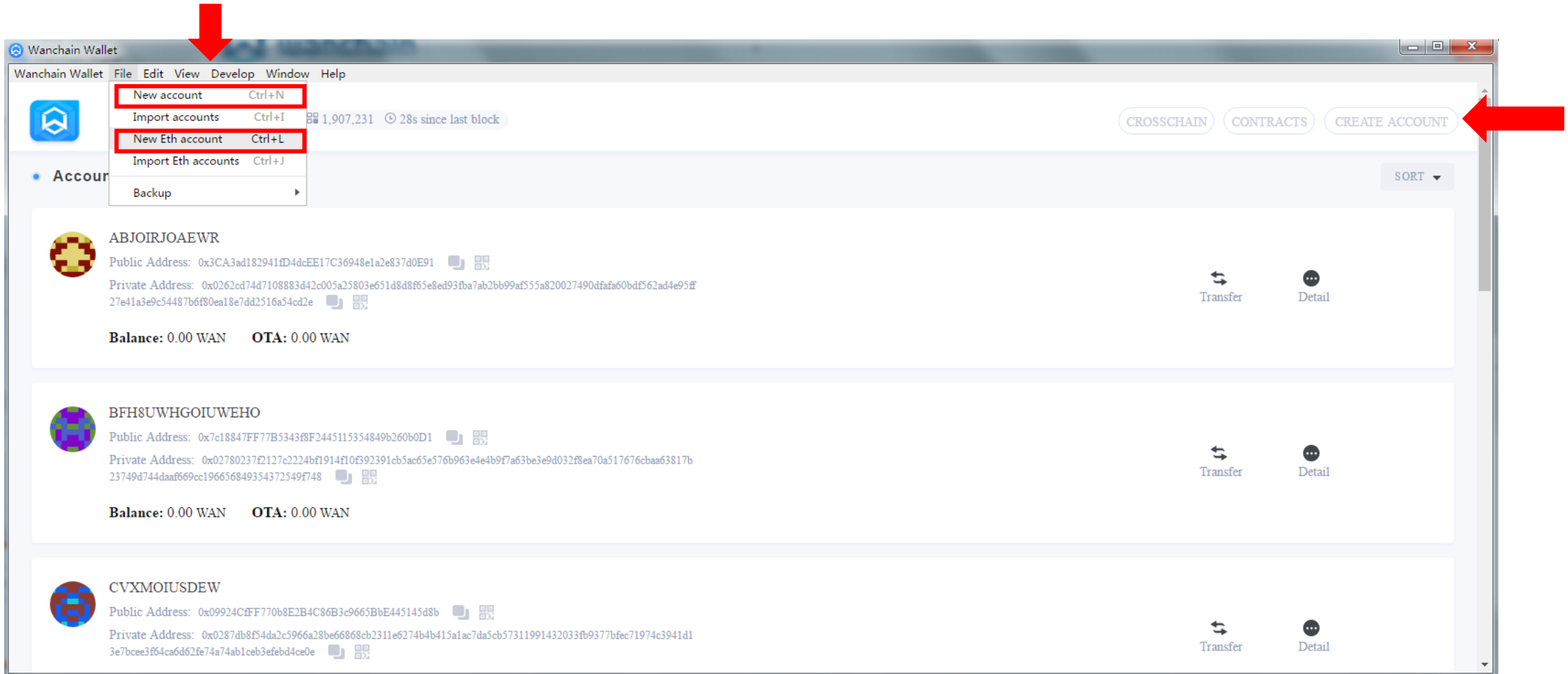
Wanwallet 2.1 beta ERC20 cross-chain transactions work with test networks of Wanchain and Ethereum.

Below you can see the Wanchain accounts overview page (also the default start-up page), you can access it anytime by clicking on the Wanchain logo on the upper-left corner

4) Use the menu option below (Develop--->Network) to switch to test network.

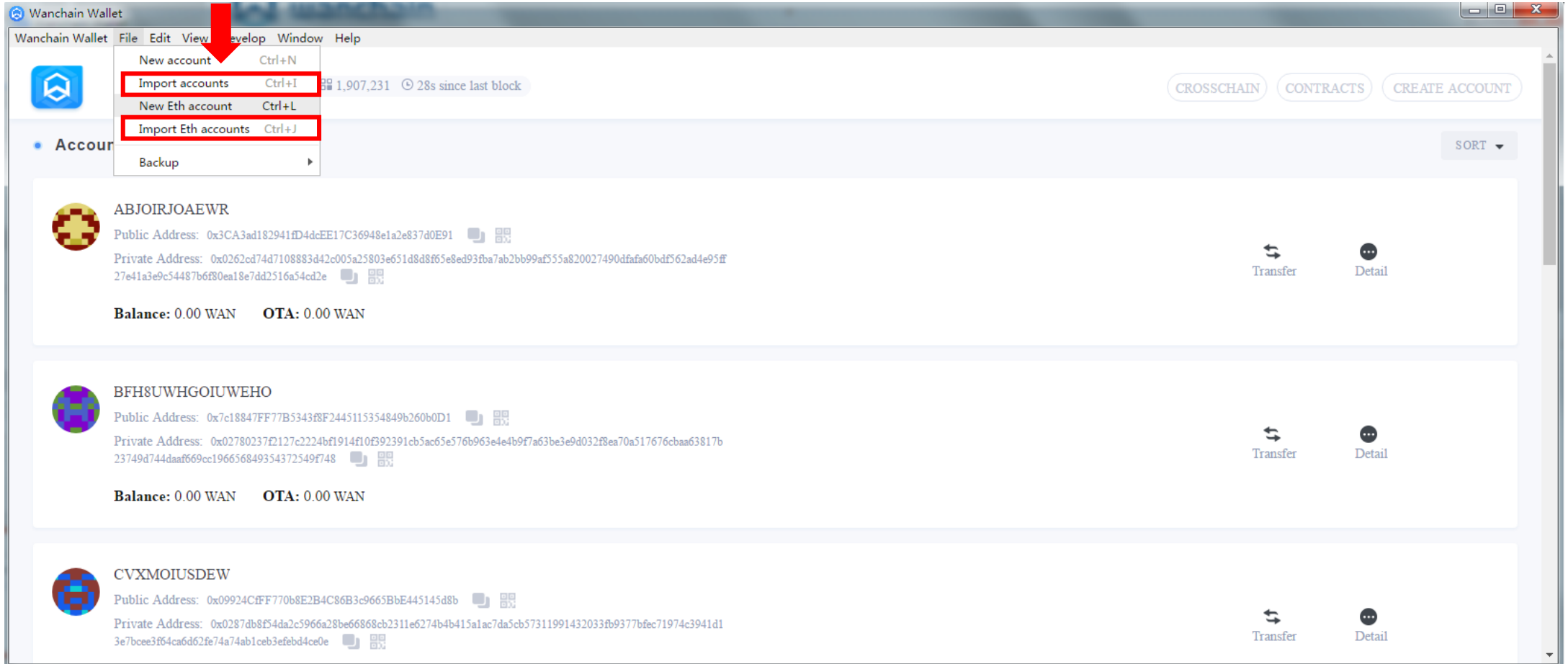


5) These 2 options allow you to create new WAN account or new ETH account.  
The "CREATE ACCOUNT" button in the upper-right corner only creates new WAN account



You can also import existing WAN or ETH account using wallet keystore file

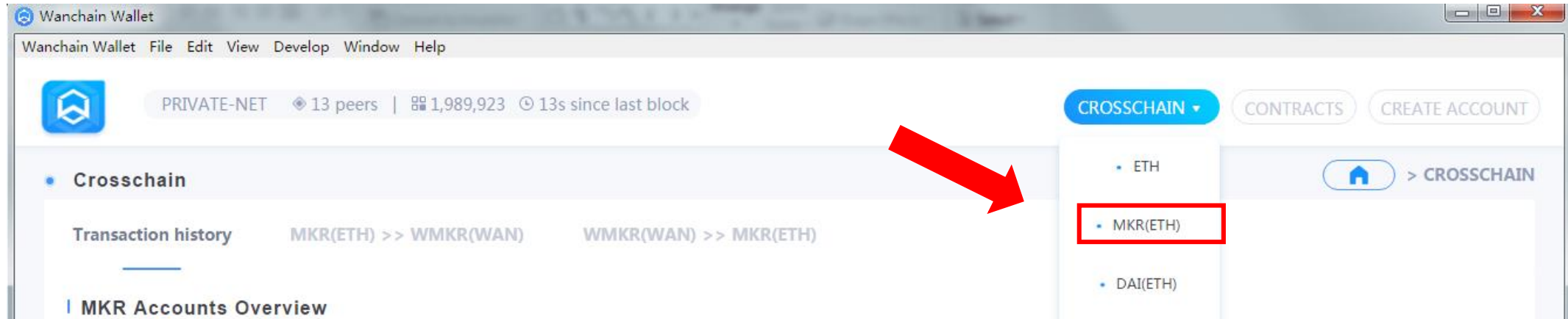
Backup feature opens local keystore files location of WAN or ETH accounts





In following parts of this instruction manual, we use MKR ERC20 token as example, same instructions also apply to DAI ERC20 token.

To access ERC20 cross-chain transactions, click on "MKR(ETH)" option under "CROSSCHAIN" button.



6) Before you make an ERC20 cross-chain transaction, please check WAN and ETH and also ERC20 balance in your account in Wanwallet GUI or with explorer listed below. If you don't have any WAN or ETH or ERC20 (MKR here), you can use testnet faucets to get some.

Test network explorer :

ETH: <https://rinkeby.etherscan.io/>

WAN: <http://13.58.108.244>

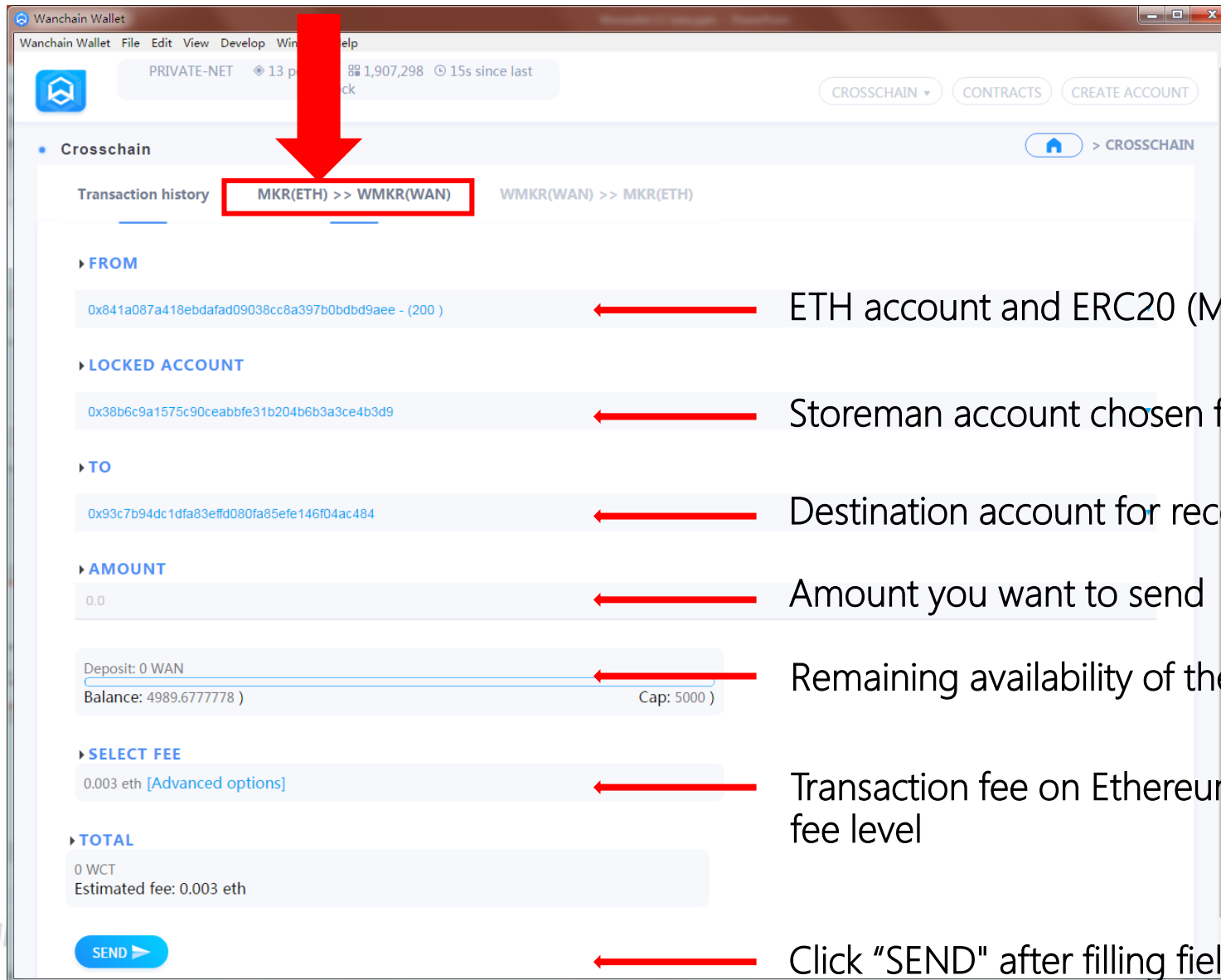
ETH testnet faucet :

<https://faucet.rinkeby.io/>

WAN testnet faucet :

<http://52.88.191.131:8080/>

7) Click the "MKR(ETH) >> WMKR(WAN)" tab below to send ERC20 (MKR) to Wanchain.



Wanchain Wallet

PRIVATE-NET 13 p 1,907,298 15s since last

CROSSCHAIN CONTRACTS CREATE ACCOUNT

Crosschain

Transaction history **MKR(ETH) >> WMKR(WAN)** WMKR(WAN) >> MKR(ETH)

FROM

0x841a087a418ebdafad09038cc8a397b0bdbd9aee - (200 )

LOCKED ACCOUNT

0x38b6c9a1575c90ceabbfe31b204b6b3a3ce4b3d9

TO

0x93c7b94dc1dfa83effd080fa85efe146f04ac484

AMOUNT

0.0

Deposit: 0 WAN  
Balance: 4989.6777778 ) Cap: 5000 )

SELECT FEE

0.003 eth [Advanced options]

TOTAL

0 WCT  
Estimated fee: 0.003 eth

SEND

ETH account and ERC20 (MKR) balance

Storeman account chosen for your cross-chain transaction

Destination account for receiving ERC20 (MKR) on Wanchain

Amount you want to send

Remaining availability of the storeman node you choose

Transaction fee on Ethereum. Click "Advanced options" to adjust fee level

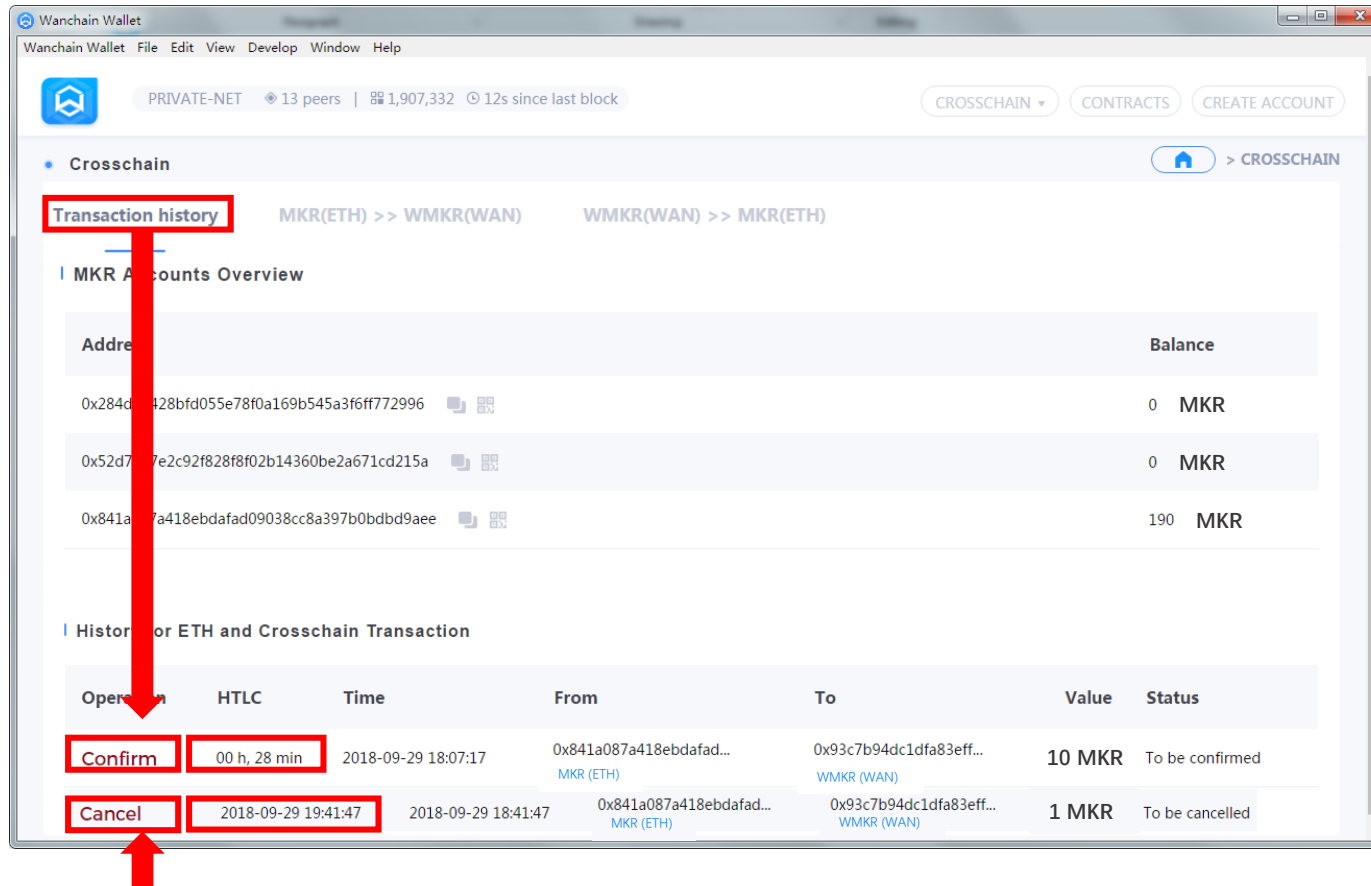
Click "SEND" after filling fields above.



MANCHAIN

WWW.WANCHAIN.ORG

8) In the "Transaction history" tab, click on the "Confirm" button to finalize the cross-chain transaction process once it turned red.



If you do not confirm before the HTLC countdown ends, it means you choose to cancel the transaction and refund the ERC20 (MKR here) from the locked account. The "Confirm" button changes to "Cancel" and you can click it to cancel the transaction once it turned red

Once the “Confirm” button turned red, click it to access “Confirm Transaction” page.

## History for ETH and Crosschain Transaction

Operation	HTLC	Time	From	To	Value	Status
Confirm	00 h, 26 min	2018-09-29 18:07:17	0x841a087a418ebdafad... MKR (ETH)	0x93c7b94dc1dfa83eff... WMKR (WAN)	10 MKR	To be confirmed

Enter the password then click "OK" button to finalize transaction

Confirm Transaction

From:

0x841a087a418ebdafad09038cc8a397b0bdbd9aee  
MKR (ETH)

To:

0x93c7b94dc1dfa83effd080fa85efe146f04ac484  
WMKR (WAN)

Storeman:

0x38b6c9a1575c90ceabbfe31b204b6b3a3ce4b3d9

Amount:

10 MKR

+ Estimated fee 0.036

Gas price 18000000000

Estimated required gas 200000

Data

0x6b2dedb90000000000000000000000000000b410aa9124e5623d62cbb82b4f38a7230c6590f48bb5bcff17f91e115cdeafeffc35209963e9e2d478266489a9f1a09f4fc562

Enter TO account's password

CANCEL

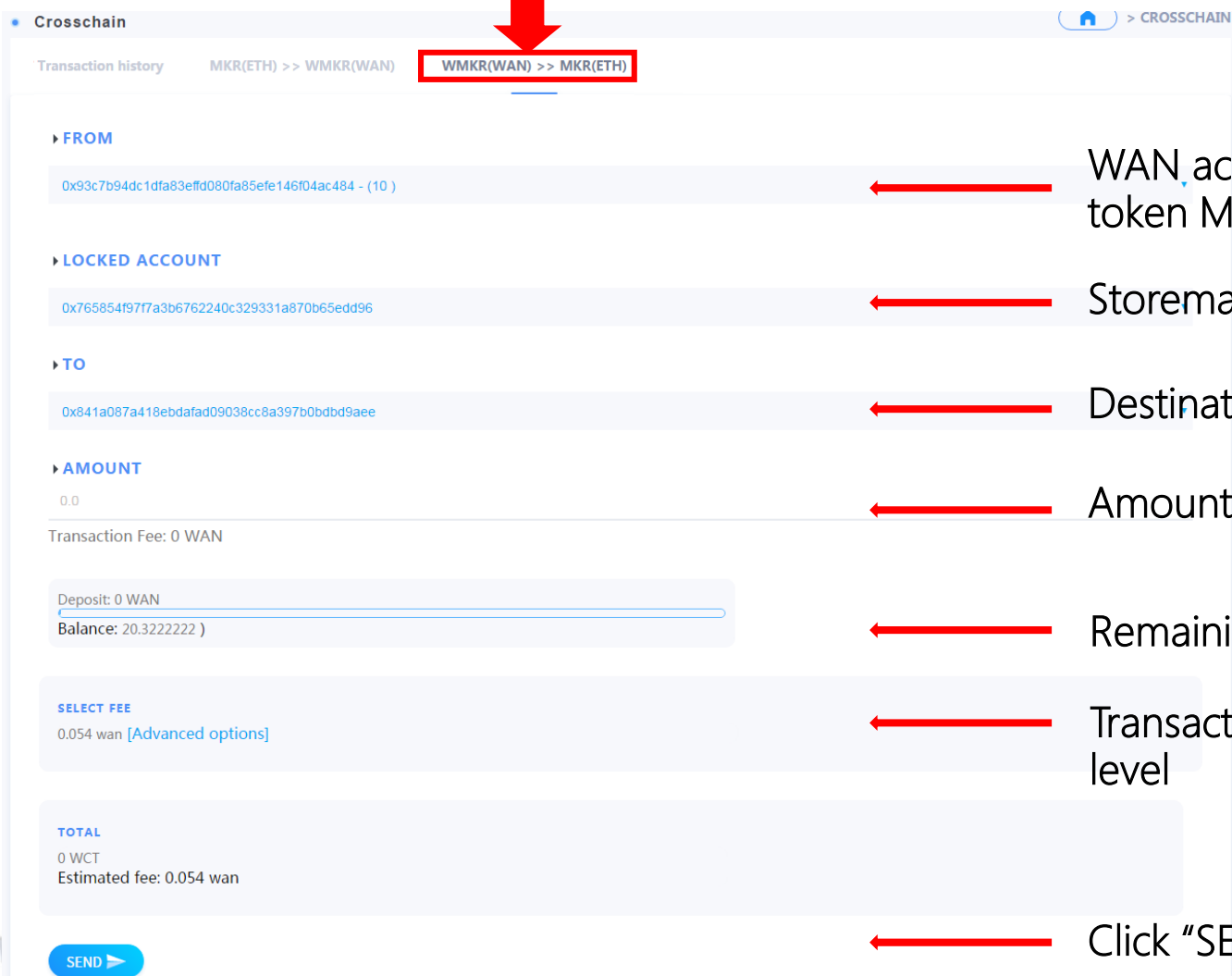
OK

To be cancelled

Enter the password then click "OK" button to cancel the transaction

OK

9) If you have ERC20 balance on Wanchain (WMKR balance here), you can send WMKR back to MKR on Ethereum. Click the "WMKR(WAN) >> MKR(ETH)" tab below to perform this kind of cross-chain transaction. The process is similar to the MKR(ETH) to WMKR(WAN) one, please refer to section 8 for details about how to confirm or cancel the transaction.



The screenshot shows the Wanchain Crosschain interface. At the top, there are tabs for "Transaction history", "MKR(ETH) >> WMKR(WAN)", and "WMKR(WAN) >> MKR(ETH)". The "WMKR(WAN) >> MKR(ETH)" tab is selected and highlighted with a red box. A red arrow points to this tab from above. Below the tabs, the interface is divided into several sections:

- FROM:** A text field containing the address "0x93c7b94dc1dfa83effd080fa85efe146f04ac484 - (10)".
- LOCKED ACCOUNT:** A text field containing the address "0x765854f97f7a3b6762240c329331a870b65edd96".
- TO:** A text field containing the address "0x841a087a418ebdafad09038cc8a397b0bdbd9aee".
- AMOUNT:** A text field containing "0.0".
- Transaction Fee:** A text field containing "0 WAN".
- Deposit:** A text field containing "0 WAN".
- Balance:** A text field containing "20.3222222".
- SELECT FEE:** A text field containing "0.054 wan" with a link to "[Advanced options]".
- TOTAL:** A text field containing "0 WCT" and "Estimated fee: 0.054 wan".

At the bottom left, there is a blue button labeled "SEND" with a right-pointing arrow.

WAN account and WMKR balance (Symbol of ERC20 token MKR on Wanchain)

Storeman account chosen for your cross-chain transaction

Destination ETH account for receiving ERC20 (MKR here)

Amount you want to send

Remaining availability of the storeman node you choose

Transaction fee on WAN. Click "Advanced options" to adjust fee level

Click "SEND" after filling fields above.



[www.wanchain.org](http://www.wanchain.org)

## Join the conversation

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Facebook:  
<https://www.facebook.com/wanchainfoundation/>

Reddit : <https://www.reddit.com/r/wanchain/>

Telegram :

Announcement Channel <https://t.me/WanchainANN>

Chat Group: <https://t.me/WanchainCHAT>