

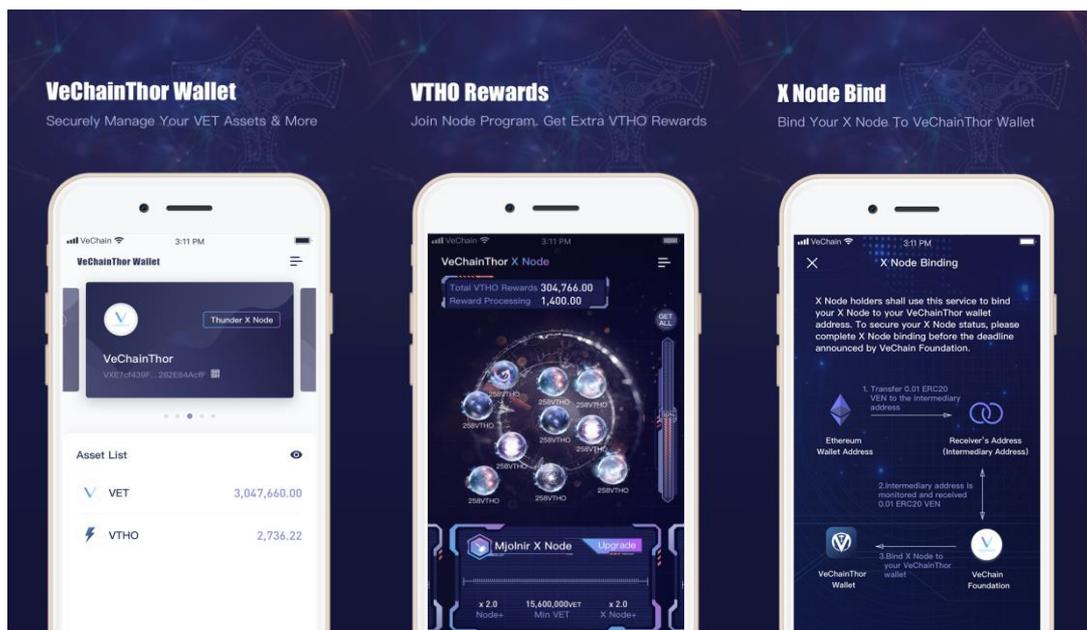
VeChainThor Wallet Manual

including

Token Swap

and

X Node Migration





VECHAINTHOR MAINNET LAUNCH TIMELINE

JUNE 30

Genesis block generated,
VeThor forged

JULY 9

VeChainThor mobile wallet available

MID-JULY

Exchange VeChain Token swap be-
comes available, VET on VeChainThor
(after 1:100 split) starts trading
Exact time to be negotiated with exchanges

MID-AUGUST

X Node Binding service closed
Token Swap Service available
Exact time to be announced

JUNE 30

Authority Masternode deployed
Mainnet Go-Live

JUNE 30

Snapshot on Ethereum,
X Node monitoring pauses

JULY 9

X Node Binding service available

EARLY AUGUST

VeChain token integration with Ledger
Subject to the ledger app code review

EARLY SEPTEMBER

X Node status monitoring resumes
on the VeChainThor Blockchain
Exact time to be announced

**All dates are subject to change under urgent and announced circumstances. Please follow our official Twitter for up-to-date info.*

Introduction and Overview

The VeChainThor Mobile Wallet application will be available for download in the Apple App Store and the Android App Market as early as **July 9th, 2018**.

The main functions of the VeChainThor Wallet include:

- creating a wallet;
- transferring and receiving VET and VTHO;
- X Node binding (the process of migrating your X Node off of MEW);
- collecting VeThor rewards, including the base generation rate, any VeChain Foundation rewards, and any Economic Node or X Node VeThor rewards;
- swapping any other VEN tokens for VET tokens.

For the purposes of this document, the following naming conventions and terms are used:

VEN refers to the original ERC20 VeChain token.

VET refers to the newly-issued VeChainThor token, for which you will swap your held VEN for.

VTHO refers to the newly-created and issued VeThor token, which powers transactions on the VeChainThor blockchain. For more details on VeThor tokens and how they are used, and how VTHO and VET tokens relate to each other, please see the VeChain Development Plan and Whitepaper.

BINDING refers to the process of validating an ERC20 address with the VeChain Foundation for the purposes of X Node migration and/or VEN/VET token swapping.

INTERMEDIARY ADDRESS refers to a unique ERC20 address generated by and inside your VeChainThor Mobile Wallet application, that is used in the binding process. (This will become clearer upon reading the remainder of this document.)

The purpose of this document is to provide a manual for the VeChainThor Mobile Wallet as it relates to the conversion (swap) of ERC20 tokens for the native VeChainThor tokens. This guide also explains how to use the mobile

wallet application to migrate X Nodes from the Ethereum blockchain to VeChainThor (obviously only applicable if you have an X Node).

For X Node Holders, this process entails:

1. **Download** the VeChainThor Mobile Wallet application and create the wallet;
2. **Bind** your X Node ERC20 wallet address by sending 0.01 VEN from that address to a special (intermediary) address monitored by the Foundation;
3. **Swap** your VEN tokens for VET using an approved exchange (mid-July) and then send the VET to the wallet created in step 1 above, **OR** swap your VEN tokens using the mobile wallet application's official VeChain Foundation Token Swap service (mid-August);
4. **Store** your tokens in the Wallet (per step 3 above) and start earning VTHO. **The Foundation's X Node monitoring of the X Node addresses begins again early September, 2018. If you do not have the appropriate number of tokens in your wallet by that time you will lose your X Node.**

Non-X Node holders simply need to swap tokens and store them in a VeChainThor wallet to earn VTHO. This can be done one of two ways: a) using the VeChainThor Mobile Wallet and the VeChain Foundation's official Token Swap Service for both swapping and storage, or b) using an approved exchange for the swap and then storing the tokens in the VeChainThor Mobile Wallet.

For non-X Node holders who wish to use the exchange, this process entails:

1. **Download** the VeChainThor Mobile Wallet application;
2. **Create** a new VeChainThor Wallet;
3. **Transfer** your ERC20 **VEN** tokens to an approved Exchange and the exchange will swap them automatically (mid-July). Note that the exchanges may have specific cut-off times for submitting ERC20 VEN. Check with your preferred exchange to confirm;
4. **Transfer** the new **VET** tokens to the VeChainThor Mobile Wallet;
5. **Store** your tokens in the Wallet (per step 3 above) and start earning VTHO.

For non-X Node holders who wish to use the VeChain Foundation Token Swap service embedded in the mobile wallet application, this process entails:

1. **Download** the VeChainThor Mobile Wallet application;
2. **Create** a new VeChainThor Wallet;
3. **Transfer** your ERC20 tokens to the intermediary address presented when selecting the newly created VeChainThor Wallet in the exchange screen;
4. **Store** your tokens in the Wallet (per step 3 above) and start earning VTHO.

In all of the above instances, it is necessary to STORE your VET tokens in a VeChain wallet in order to generate VTHO. Exchange support for VTHO generation has not yet been announced.

As of the time of publication, the following exchanges have stated they will support the VeChainThor Mainnet launch by conducting a VEN-to-VET token swap:

- **Binance,**
- **Bithumb,**
- **Huobi.pro,**
- **Kucoin,**
- **LBank,**
- **Bitfinex,**
- **DragonEx,**
- **YEX,** and
- **Coinspot.**

More exchanges will be announced in due course.

Please refer to the individual exchanges and their respective documentation to understand and follow the steps for conversion using those exchanges. The scope of this manual does not include specific instructions for exchange-based token swaps, nor is VeChain making any explicit agreements to the timelines or windows in which the exchanges will support the swap.

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1. VeChainThor Wallet Creation

The following terms are necessary to understand in order to secure and protect your wallet. Please understand them before creating your wallet in the mobile wallet application:

Wallet Name is the name you give the newly created wallet in your phone's mobile wallet application. You choose and enter the name when setting up the wallet.

Wallet Password is a password you create, enter, and verify to lock and unlock the wallet on your mobile device. Anyone who has your unlocked phone and this password can access your wallet and associated tokens, including transferring them out to another wallet. The wallet password cannot be used to restore a wallet.

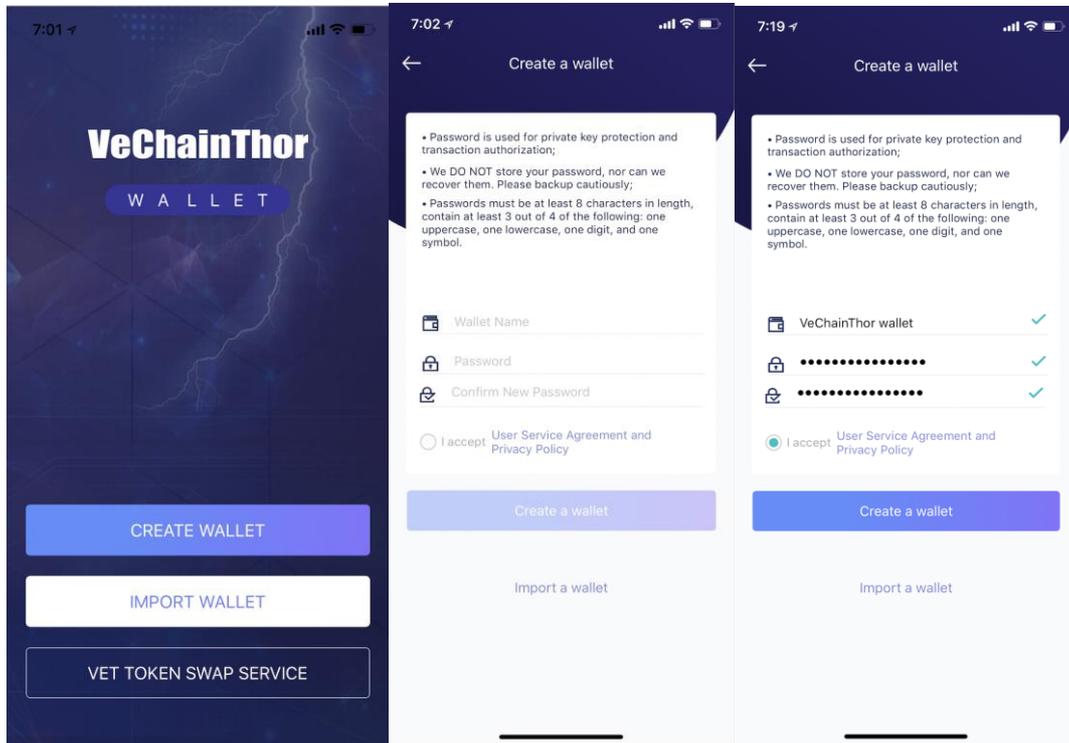
Mnemonic is the 12 word phrase generated by the mobile application during the setup of the wallet. This 12 word phrase is used to restore your wallet in the event you lose your phone. Anyone who has this 12 word phrase, with or without your phone, can restore your wallet on another device. The mnemonic is not used to access the wallet in daily use once the wallet setup is completed. You should follow best-practices for keeping this mnemonic safe and private.

Keystore File is an exportable text file that is a secondary method of restoring the wallet. Anyone with access to this keystore file can restore your wallet, so keep it safe following best-practices.

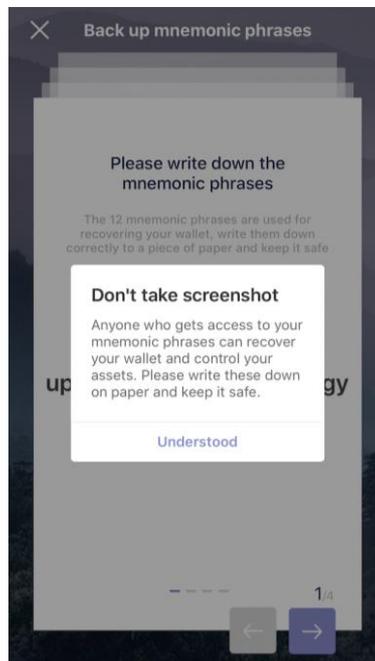
Steps to Create a Wallet:

- 1.1.1** Download and open the VeChainThor Wallet on your mobile device. The VeChainThor Mobile Wallet application will be available for download in the Apple App Store and the Android App Market as early as July 9th, 2018.
- 1.1.2** Read and understand the "*VeChainThor Wallet User Service Agreement and Privacy Policy*". When you have finished reading it, and are sure you understand the policy, click "Accept and set login password".
- 1.1.3** Setup a 6 digit login password. If your phone supports it, you may also choose to setup Touch ID/Face ID for wallet login.
- 1.1.4** Click 'Create Wallet'. Follow the instructions to input your wallet name

and setup the wallet password. The wallet name is a name of your choosing, to distinguish this wallet from other wallets you might create. The wallet password is a password entered on this mobile device to access the contents of the wallet. The password is specific to this device, and is not used to restore the wallet.

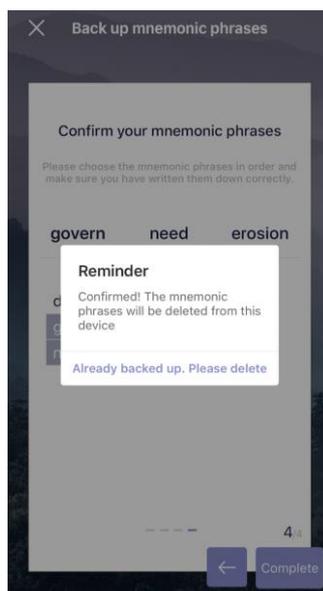


- 1.1.5** Write down your mnemonic phrase on a piece of paper, and keep it safe. **For security reasons** do not take a screenshot, photo, or other digital copy of this phrase.



- 1.1.6** After confirmation, your mnemonic phrase will be removed from the device's memory. It is not retrievable, so please ensure it is secure and accessible to you in the event you need to restore your wallet.

Special note for X Node holders: if you lose both the mnemonic and keystore file, you will have no way to restore the wallet and will need to create a new wallet, in which case you would lose your X Node status.



1.1.7 Once you have completed the steps above, the VeChainThor Wallet creation is completed.

2. X Node Holders Binding Process and Token Swap

X Node holders are those VEN token holders who accumulated a certain amount of VEN in a public, trackable wallet (e.g. MyEtherWallet) by March 20th, 2018. The X Node status was created to reward early supporters of VeChain by giving those supporters special status in the VeChain ecosystem, and by offering other benefits, such as discounts in VeChainThor ICO's.

The details of the X Node program, and the respective amounts and benefits of different X Node tiers, can be found in our Medium.

This section of the document explains how the wallet is used for X Node holders. If you do not have an X Node, you may skip ahead to the next section of this document.

Please note: If you do not complete the X Node binding and token swap process, and store your VET tokens in the mobile wallet, by July 30th 2018, you will lose your X Node permanently with no recourse to reclaim it.

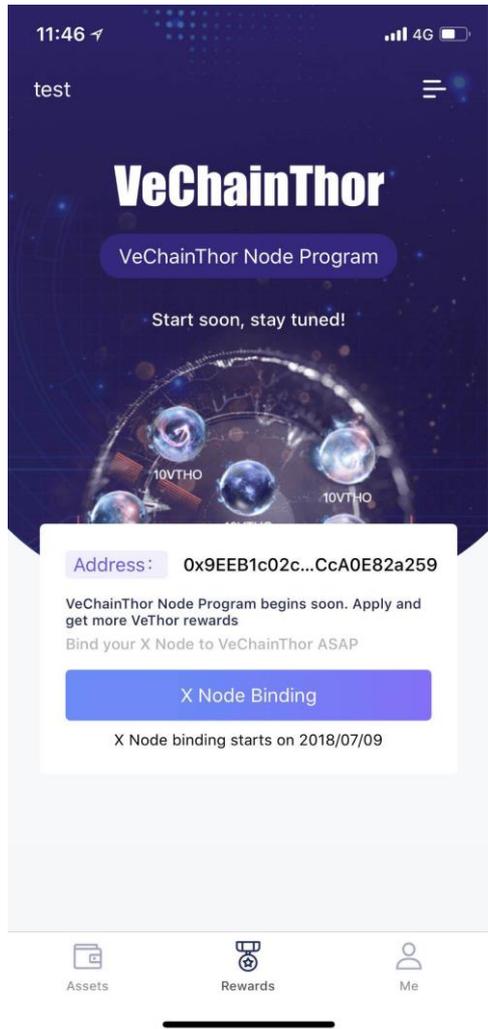
2.1 X Node Binding Process

To migrate an X Node from an ERC20 trackable wallet (MyEtherWallet) to the VeChainThor blockchain, you must “bind” the existing ERC20 X Node by sending 0.01 VEN from your X Node wallet to an intermediary wallet address monitored by the Foundation. This section describes that process in detail.

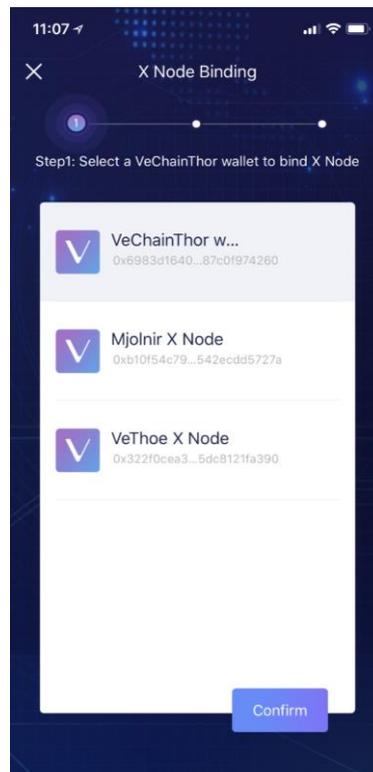
Your intermediary address is a unique address generated by a cryptographic algorithm based on your newly created VeChainThor Wallet address and your existing Ethereum X Node address. No one owns the private key to this intermediary wallet, and you may consider the 0.01 ERC20 VEN you send to it effectively burned. Neither you nor the VeChain Foundation will be able to get access to this VEN, so please **DO NOT transfer more than 0.01 VEN to your intermediary address.**



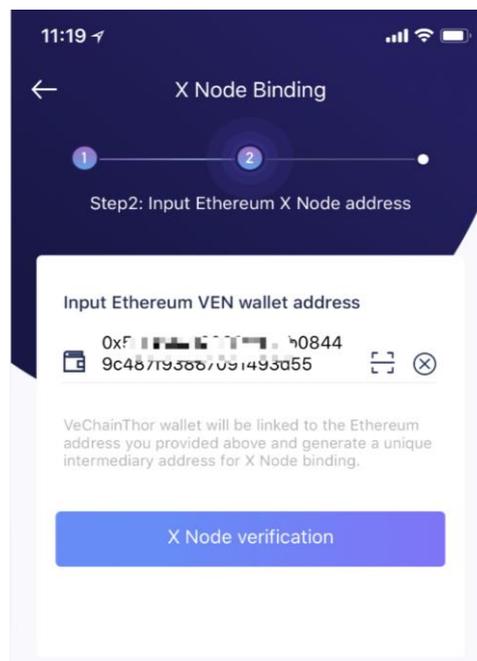
2.1.1 Navigate to Rewards tab, and click on X Node Binding.



2.1.2 Click the VeChainThor Wallet Address in which you have bound and receive your X Node on VeChainThor blockchain.

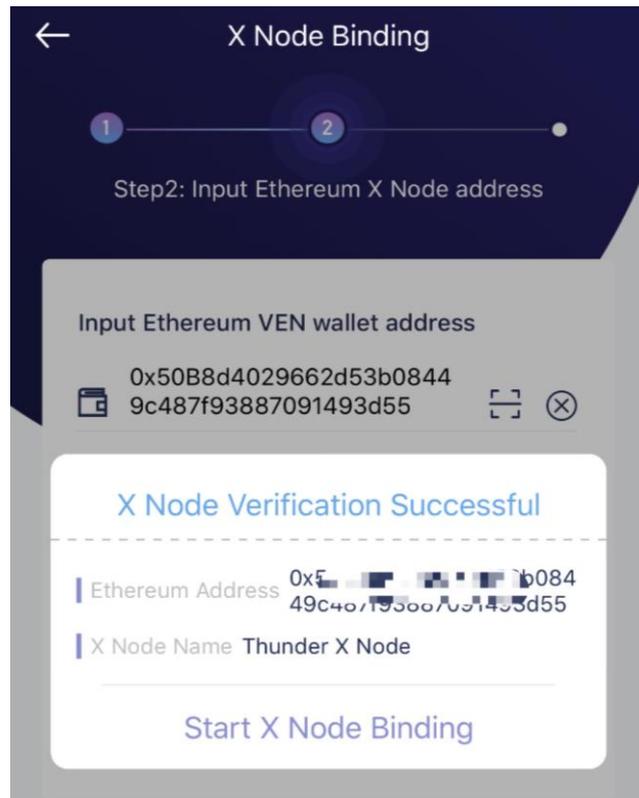


2.1.3 Input your Ethereum X Node address starting from ox, and click “X Node verification”.

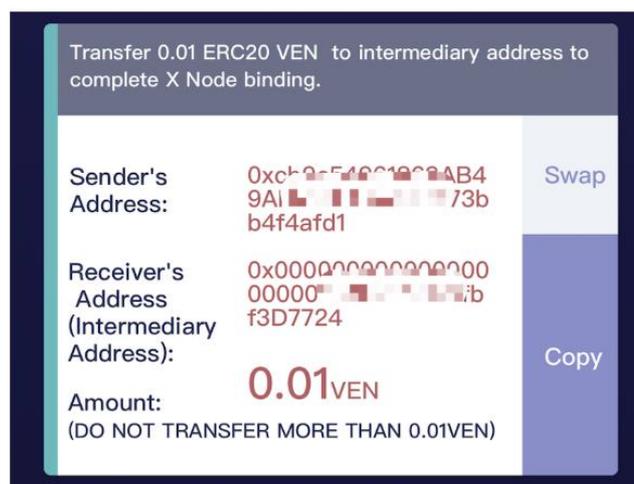


2.1.4 If it is a valid X Node address, after the verification is successful, click

“Start X Node Binding”.



2.1.5 Once you begin the binding process, a unique Intermediary Address is generated based on your Ethereum and VeChainThor addresses. **This is a temporary address for binding purposes only and is not your new wallet address.** Copy the intermediary address by pressing the copy button.



In the picture above:

2.2 X Node VET Token Swap

2.2.1 X Node VET Token Swap via exchanges

There are two different ways to swap your VEN tokens for VET, and finish the migration of your X Node. You may either use an exchange or use the mobile wallet, as described at the opening of this manual. The exchanges will allow you to swap and transfer the coins approximately one week sooner than using the mobile wallet Token Swap service. The exchanges will support swapping mid-July. The mobile wallet application will support swapping in mid-Augusts (expected.) Either method of swapping and transferring will work, you may use whichever method you prefer based on the instructions here and your personal preference. The end result in either method is the same.

Please note: If you do not complete the X Node binding (1.1) and token swap/transfer process (by either method), and store your new VET tokens in your newly created X Node wallet address before X Node monitoring resumes in early September, you will lose your X Node permanently with no recourse to reclaim it.

Using the exchanges to swap your tokens is relatively straightforward. Once you have successfully completed the binding of the old ERC20 address, you are free to move the remainder of your ERC20 VEN tokens to the participating exchange of your choice.

2.2.2 X Node VET Token Swap via the VeChainThor Wallet

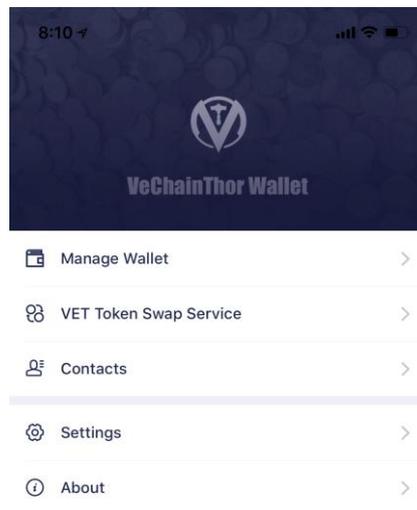
If you would prefer to not use the exchanges for your token swap, you may use the VeChainThor Mobile Wallet Token Swap service.

The estimated date when the VeChainThor Wallet makes the VET Token Swap service available is **mid-August**. The exact date shall be announced via the official Twitter.

After successfully binding your ERC20 X Node address, using the steps listed earlier in this document, please follow the steps as below in order to complete the VET token swap using the VeChain Token Swap service included in the mobile wallet application.

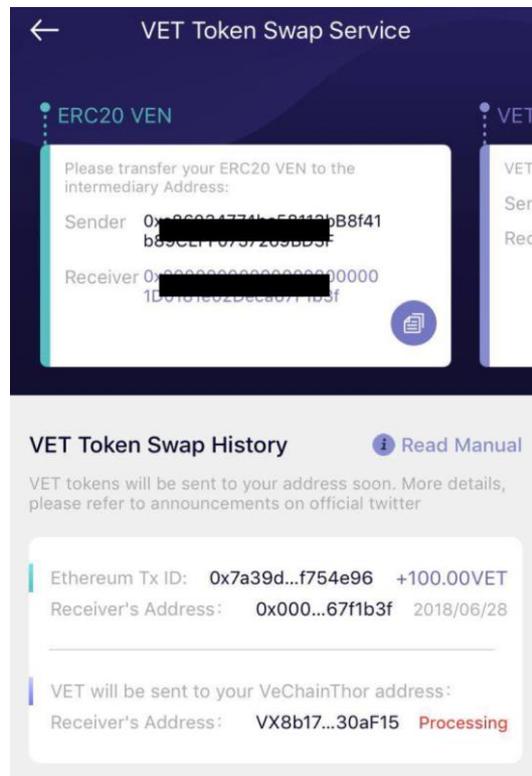


Step 1: Click ‘Me’ (in the lower right corner) → ‘VET Token Swap Service’ to start token swap.



Step 2: Read and comprehend the ‘Token Swap Service Agreement’ and click “start”.

Swap Service will not happen in real time. Instead, it will take 6 to 12 hours (marked as Processing) from the completion of the transfer for your new VET (1:100) to appear in your wallet.



3. Non X Node holders

For non X Node holders, please download the VeChainThor Wallet on **Jul 9, 2018** on the Apple App Store or Android App market.

We will start the VET Token Swap via the mobile wallet after the X Node binding service has been completed; the estimated date is **mid-August**.

3.1 Non-X Node Holder VET Token Swap

3.1.1 VET Token Swap via exchanges

Users can transfer ERC20 VEN to participating exchanges. The exchanges will start providing token swap services in approximately mid-July.

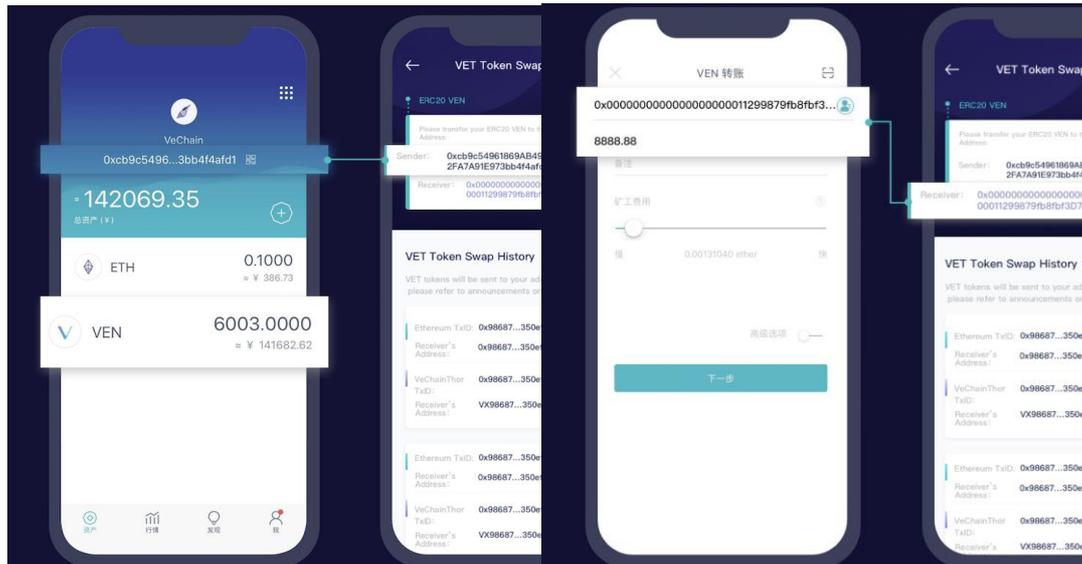
3.1.2 VET Token Swap via VeChainThor Wallet

This section assumes you have already created a wallet. If you have not please check section 1.

The estimated date of VeChainThor Wallet starts VET Token Swap service is **mid-August**. Exact date shall be announced via the official Twitter.



explorer, you can transfer the rest.



Step 5: The VeChain Foundation continuously monitors the intermediary address. Once the ERC20 VEN is received in that address, the VeChain Foundation will manually transfer VET (1:100 ratio) to the VeChainThor Wallet address you created at the very beginning of this process. **Due to security concerns, token swap via the VeChainThor Mobile Wallet Token Swap Service will not happen in real time. Instead, it will take 6 to 12 hours (marked as Processing) from the completion of the transfer for your new VET (1:100) to appear in your wallet.**

