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# **Verto Guide**

**Dec 13, 2019**



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## 1.1 Download Wallet

This is the page for downloading the wallet.

## 1.2 Setup Wallet

### 1.2.1 About

This page describes the workflow when a user opens the wallet for the first time.

### 1.2.2 Note

Please note that you are entirely responsible for the management, safety, protection, and recovery of your private key. No one else including partners of the Volentix ecosystem.

You have 2 choices on persisting your private key. Both methods are designed to ensure your private key remains safe. Write your key down.

Or, encrypt your key in a password protected file. Plan a strategy for the physical storage of your private key. This storage strategy should include long term thinking, including: Physical Security: Vaults of any kind that provide the protection you are seeking. Think of somewhere you know is safe from theft as well as the elements. some examples are a home or bank safe, or lawyer. you may choose to protect your keys by storing copies in multiple places. Legacy: Things happen. Life ends. You need to plan for the transference of your wallet to someone else. In some cases that may be a will, please consider your options carefully. The choice is yours.

### 1.2.3 Responsibilities

The following screen ensures that you are aware of your responsibilities for the safe keeping and management of your wallet, its private keys, and its configuration.

In short, Verto does not have a central service for the management of Verto configurations. The configuration will always remain on your laptop.

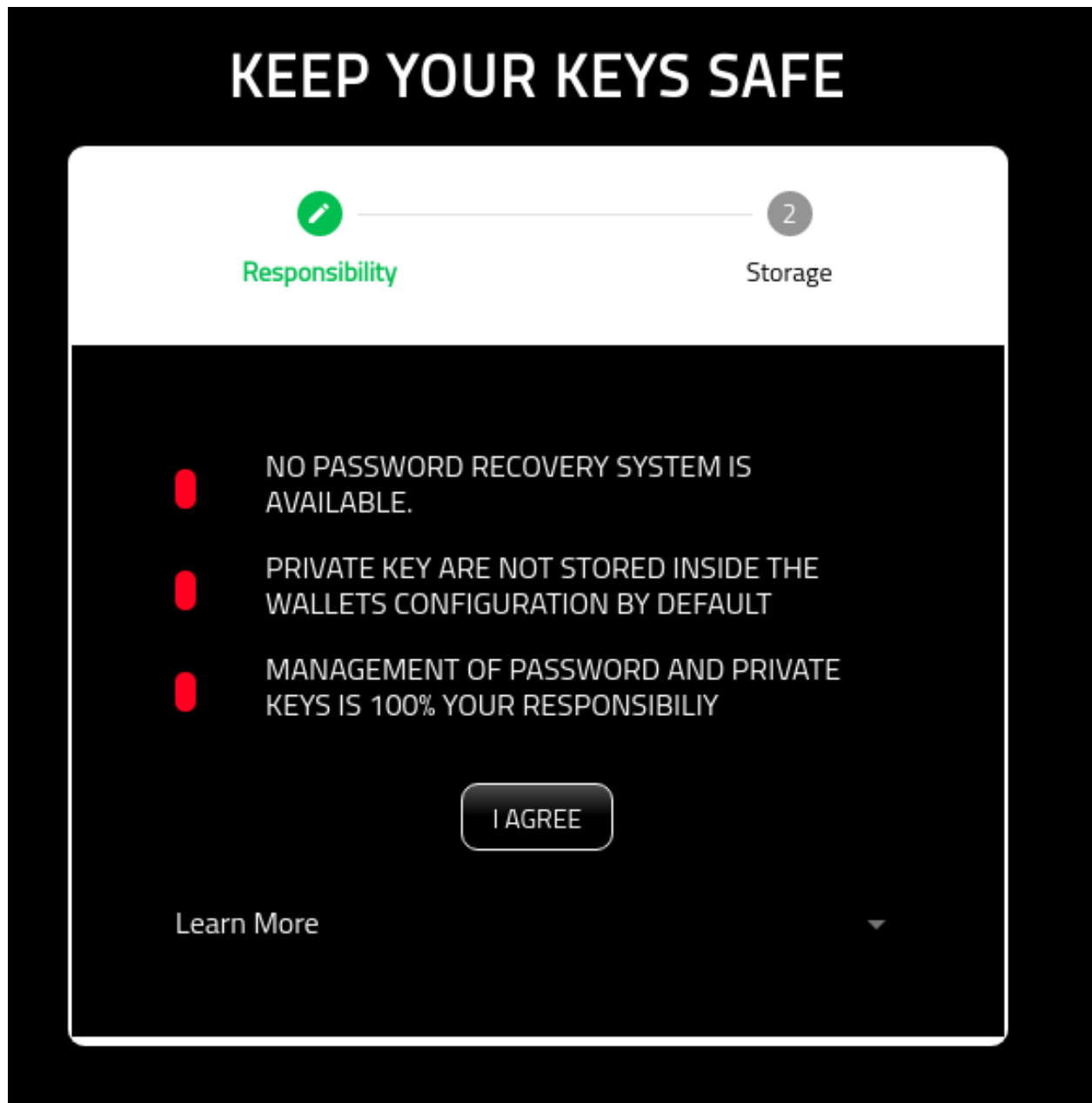
As a result, Volentix, or any of its partners, are not able to restore, or recover any of its configuration.

Additionally, passwords are not stored. As a result, users are 100% responsible for the management of their passwords. No backup is provided by Volentix or any of its partners.

To be as clear as possible. . . . we strongly believe that whatever happens in Verto remains in the control of the user with no outside influences.

Finally, Verto collects no metrics of usage from the user. We want none of your data. Anonymity is a sovereign right of the Volentix ecosystem.

The following is the first screen you will see when opening the wallet.



By selecting 'I AGREE', you are agreeing to the terms of use.

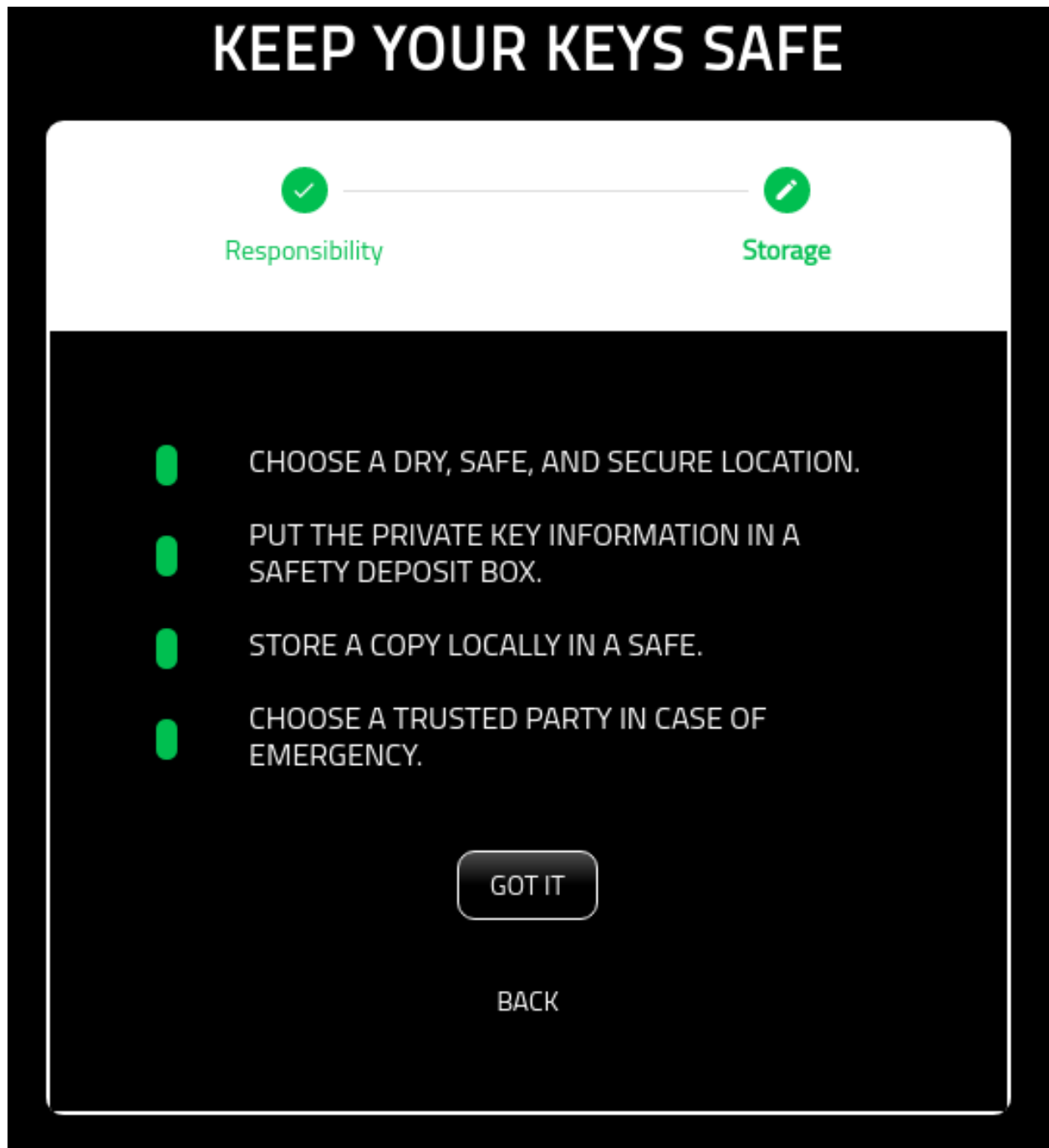
### **1.2.4 Key Mangement**

You are responsible for the management, and storage of your keys.

In short, we suggest backing up the private key onto a physical storage device (USB, or paper) that will last the test of time.

Once backed up, you should store a copy of the key in a dry, safe, and secure location such as a saftey deposit box.

The following page identifies some best practices for managing your key.



### 1.2.5 Create Verto Password

On this screen, you are asked to create a password for Verto. The only restriction is that it must be at least eight digits in length.

Please note: Your password is NEVER stored in Verto. Only you have the copy of your password.

For some recommendations on creating password, please review the following links:

External hyperlinks:



- PluralSight: Best Practice
- UCSB

**LET'S GET STARTED**

1 **Create Password** 2 **Confirm**

**MINIMUM OF 8 CHARACTERS**

Create Your Verto Password

RESTORE CONFIG

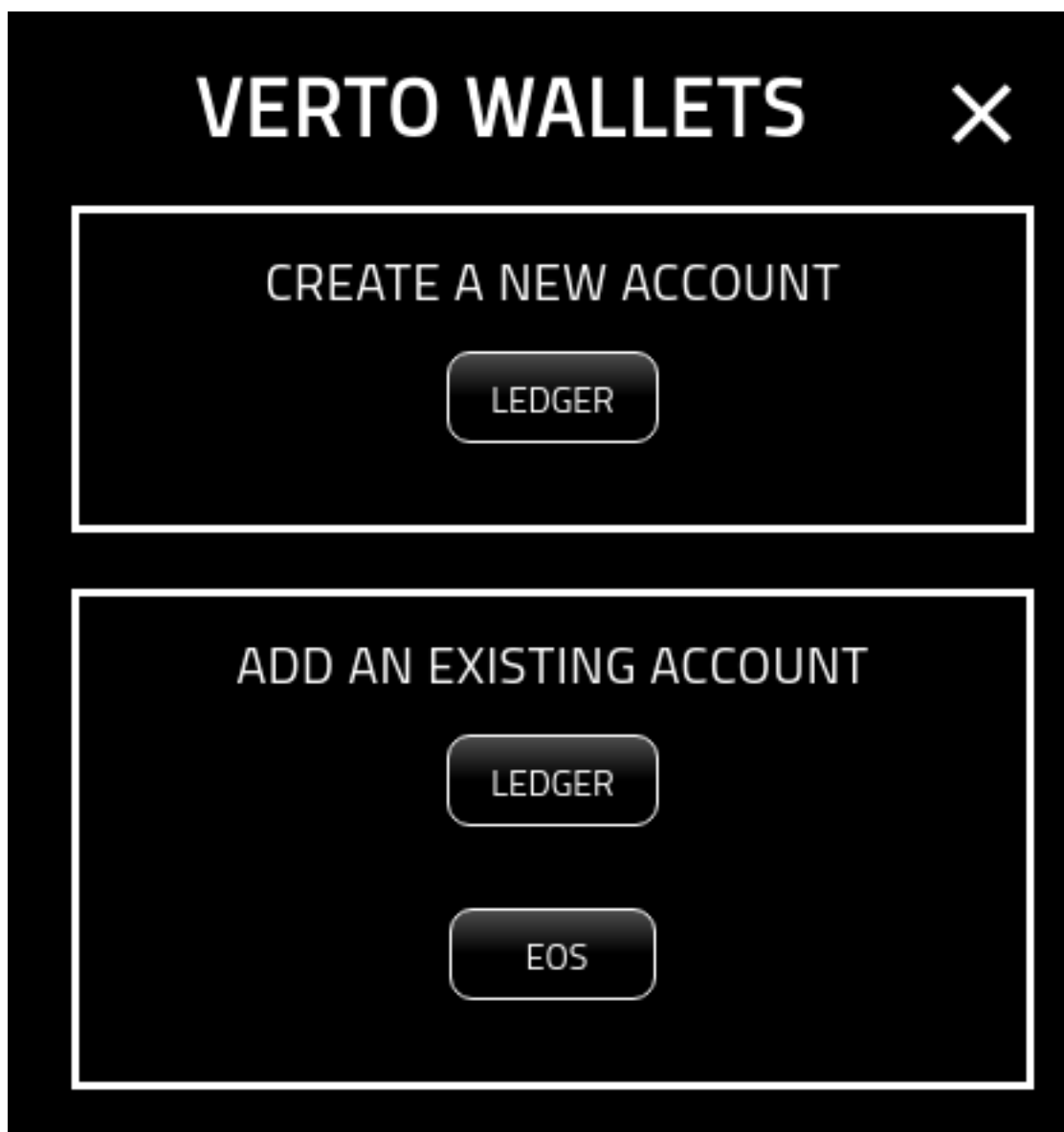
### 1.2.6 Confirm Verto Password

Once you have added your password, you will need to then confirm the password. Once the two passwords match, you will be able to proceed.

The screenshot shows a mobile application interface with a black background. At the top, the text "LET'S GET STARTED" is displayed in large, white, bold, sans-serif capital letters. Below this, a white rounded rectangle contains a progress indicator consisting of two green circular icons connected by a thin grey line. The first icon contains a white checkmark, and the second contains a white pencil. Below the first icon is the text "Create Password" in green, and below the second is "Confirm" in green. In the center of the white rectangle, the text "Confirm Verto Password" is shown in grey, with a horizontal white line underneath it. At the bottom center of the white rectangle, the word "BACK" is written in white, all-caps, sans-serif font.

### 1.2.7 Success

Once you are successful, you will be presented with the following page.

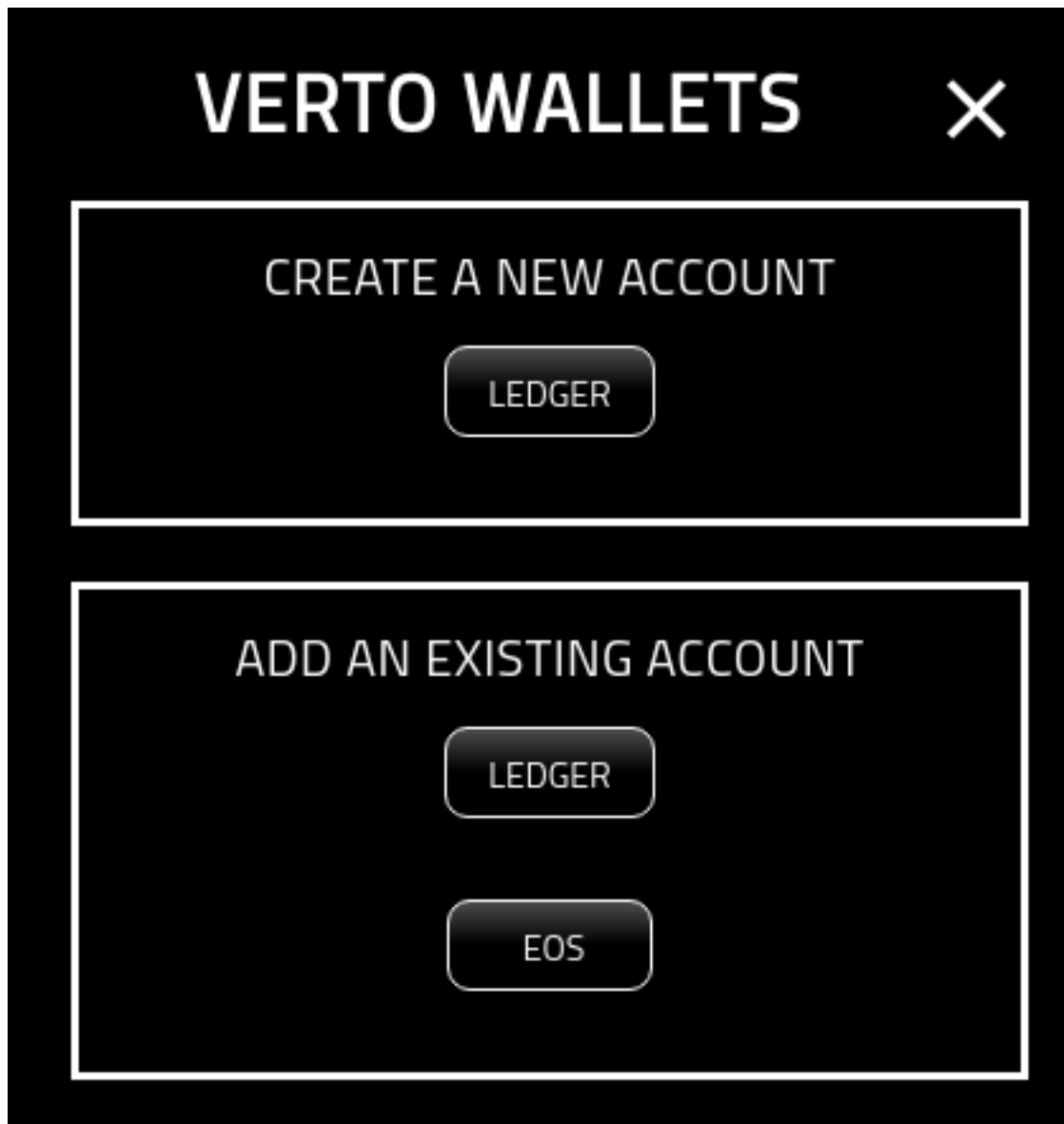


Next steps. Add a Wallet!

### **Add Wallet**

### **About**

This page provides the details on how the options available for adding a wallet to Verto.

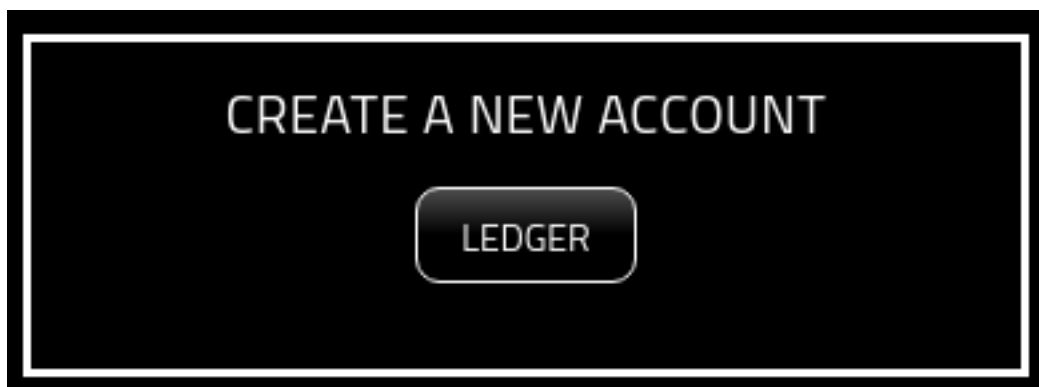


## Overview

When creating a wallet, you are provided with a few options. However, for the most part, the adding of a wallet is broken down into two main categories.

### Create A New Account

You will need to create a new account in the event that you do not yet have one. For now, the wallet only supports creating Ledger accounts. These are the accounts we use for the Qualified Investors. However, we are looking into creating EOS accounts in the near future.



Read The Tutorial For Creating A Ledger Account:

### Create Ledger

#### About

This page provides the details on how to create a Ledger account.



Warning: The private key is your responsibility. Volentix nor its partners have a copy. If you lose the private key it cannot be recovered by the system.

#### Overview

This screen provides you with two options:

#### Save The Private Key Encrypted

This option allows you to download an encrypted copy of your private key.

It is recommended that, should you choose this options, you download the file onto a USB or other external storage device, rather than directly onto you computer.

See the following tutorial on saving your files.

### Create Ledger Save File

#### About

This page provides the details for creating a new Ledger wallet and downloading the private key in an encrypted file.

#### Wallet Name

Provide the wallet with a meaningful name.

Note that this cannot be changed later.

**SAVE TO FILE** ✕

1 2 3

**Wallet Name** File Password Verto Password

Give Wallet A Name. ie: Savings

#### File Password

On this screen you are asked to provide the password, and confirm it, that will be used to encrypt the private key.

Note that it is recommended that you select a different password from the wallet.

Also note that this password is non-recoverable. If you lose the password Volentix, nor any of its partners, are able to get it back for you.

**SAVE TO FILE**

Wallet Name File Password Verto Password

IS EIGHT CHARACTERS OR MORE

SHOULD BE DIFFERENT THAN THE WALLET PASSWORD

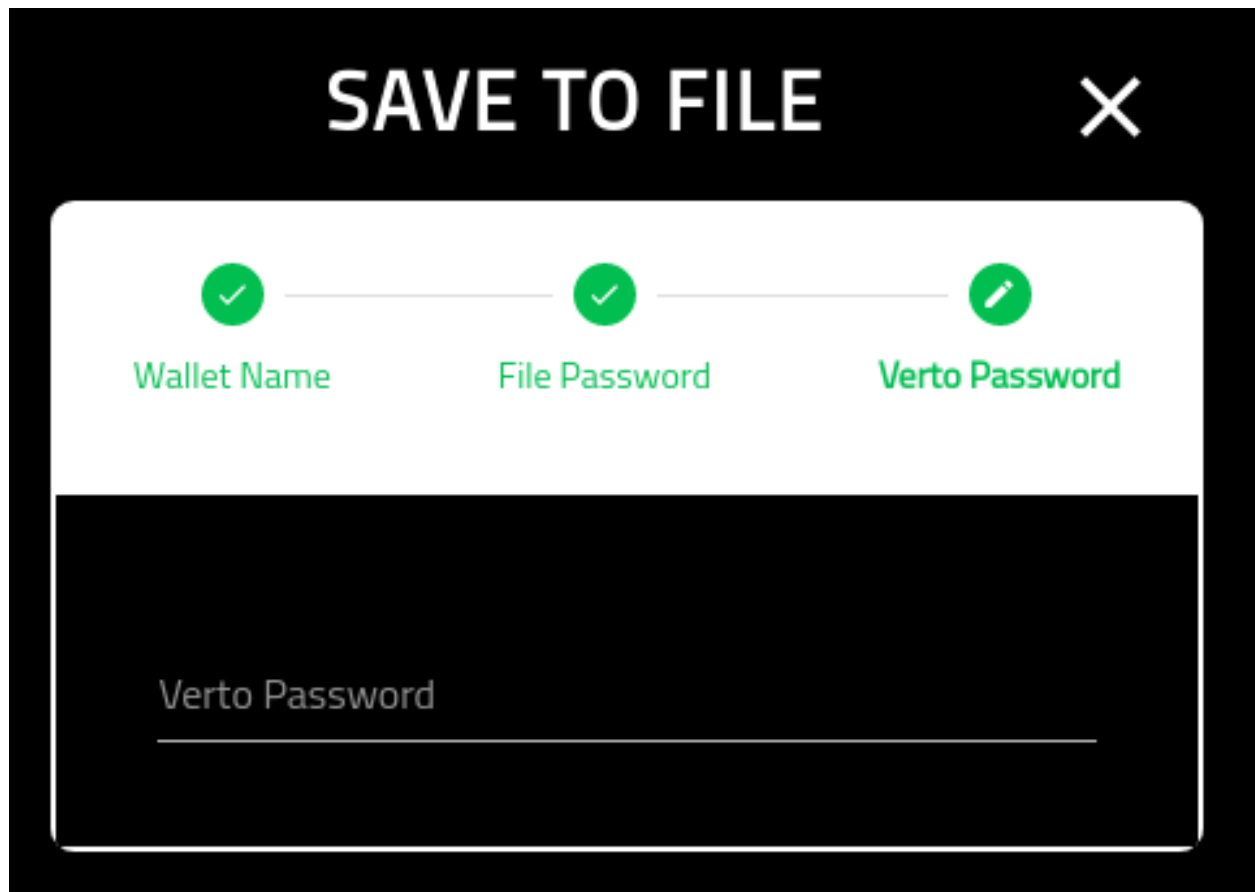
Choose Private Key Passwords

Confirm Private Key Password

### Verto Password

On the final screen you must put in your Verto password.

Once you have completed this screen you will be redirected into the new wallets home screen.



### Write The Private Key Down

This option allows you to write down your private key. Note that it is one time event and cannot be reproduced without the private key.

It is recommended that when you write it down you use a quality paper and pen. Once written down, you must store it in a dry, safe, and secure environment.

See the following tutorial on saving your files.

### Create Ledger Write It Down

#### About

This page provides the details for creating a new Ledger wallet and writing down the private key.

#### Show Private Key


This screen shows you the private key generated. Note that once you have completed the creation of the wallet, this is no longer available in the wallet.


Note that the key shown below is useless and never used.

Once you have completed writing down the private key, click the 'I AM DONE WRITING MY KEY DOWN' button.



# WRITE IT DOWN






Private Key

2

Wallet Name

3

VertoPassword

5JNZ3JK7Pc8HmH 

5bUFXMEhzSaCWVj

ukz5KTmSd6ATiaB

FUHUv5g

I AM DONE WRITING MY KEY DOWN

### Wallet Name

You must now provide the wallet with a name. Choose something meaningful.

Note that this cannot be changed later.

WRITE IT DOWN X

Private Key Wallet Name VertoPassword

Give Wallet Name: ie Savings

BACK

### Verto Password

On the final screen you must put in your Verto password.

Once you have completed this screen you will be redirected into the new wallets home screen.

**WRITE IT DOWN** X

✓ Private Key      ✓ Wallet Name      ✎ VertoPassword

Enter Verto password

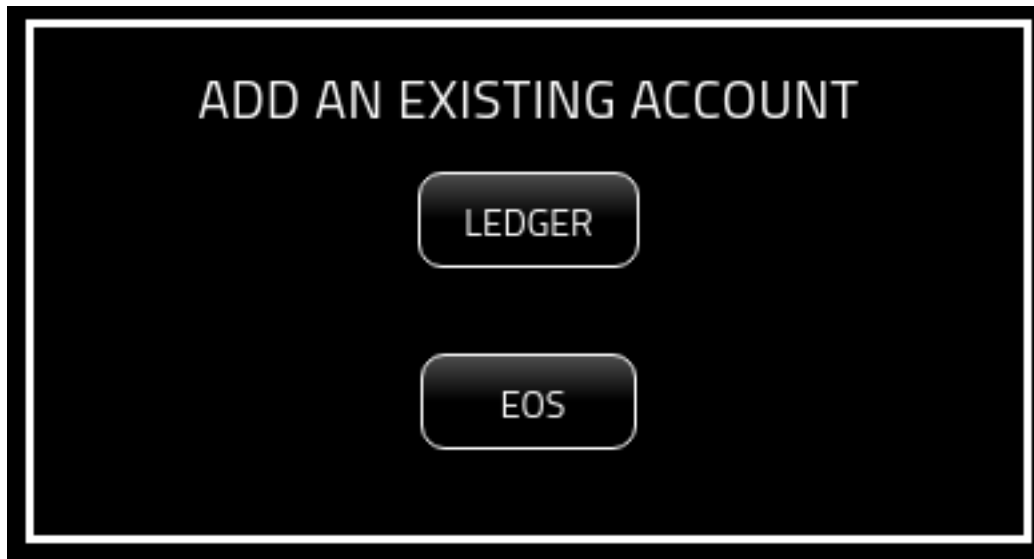
BACK

### Adding Existing Account

You are able to add both Ledger as well as EOS accounts to the wallet.

Note that you will require:

- A public key for Ledger accounts
- A private key for EOS accounts



Read The Tutorial For Adding A Ledger Account:

### **Add Ledger**

### **About**


This page provides the details on how to add an existing Ledger account to Verto.

### **Wallet Name**

Provide the wallet with a meaningful name.

Note that this cannot be changed later.

# FROM PUBLIC KEY



2

3

Wallet Name

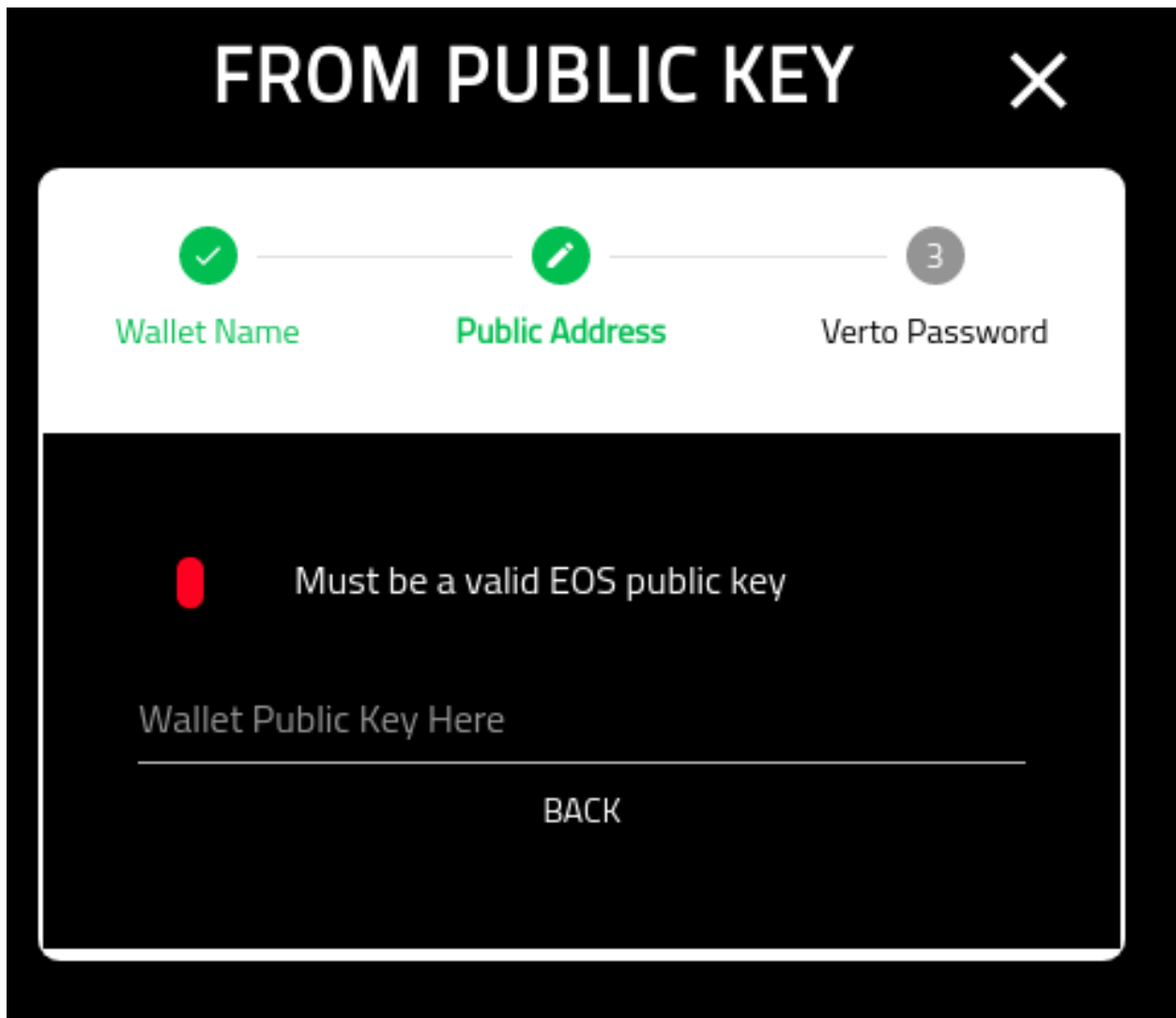
Public Address

Verto Password

Give Wallet Name: ie Savings

### Ledger Public Key

This screen requires your Ledger public key.



### Verto Password

On the final screen you must put in your Verto password.

Once you have completed this screen you will be redirected into the new wallets home screen.

FROM PUBLIC KEY

✓ — ✓ — ✎

Wallet Name Public Address Verto Password

Verto MainPassword

BACK

Read The Tutorial For Adding An EOS Account:

## Add EOS

### About

This page details the actions required to add an EOS wallet to Verto.

Note that this process is a little more intense than the other functions of adding a wallet.

### EOS Private Key

This screen requires you to put in the private key associated to your account.

The key must be a valid EOS active Private key.

Note that future iterations of Verto will support more ways of importing an EOS account.

# IMPORT EOS ACCOUNT

1

2

3

4

Private KeyAccount NameSave KeyVerto Password

A VALID EOS ACTIVE KEY

Enter your private key

0 / 51

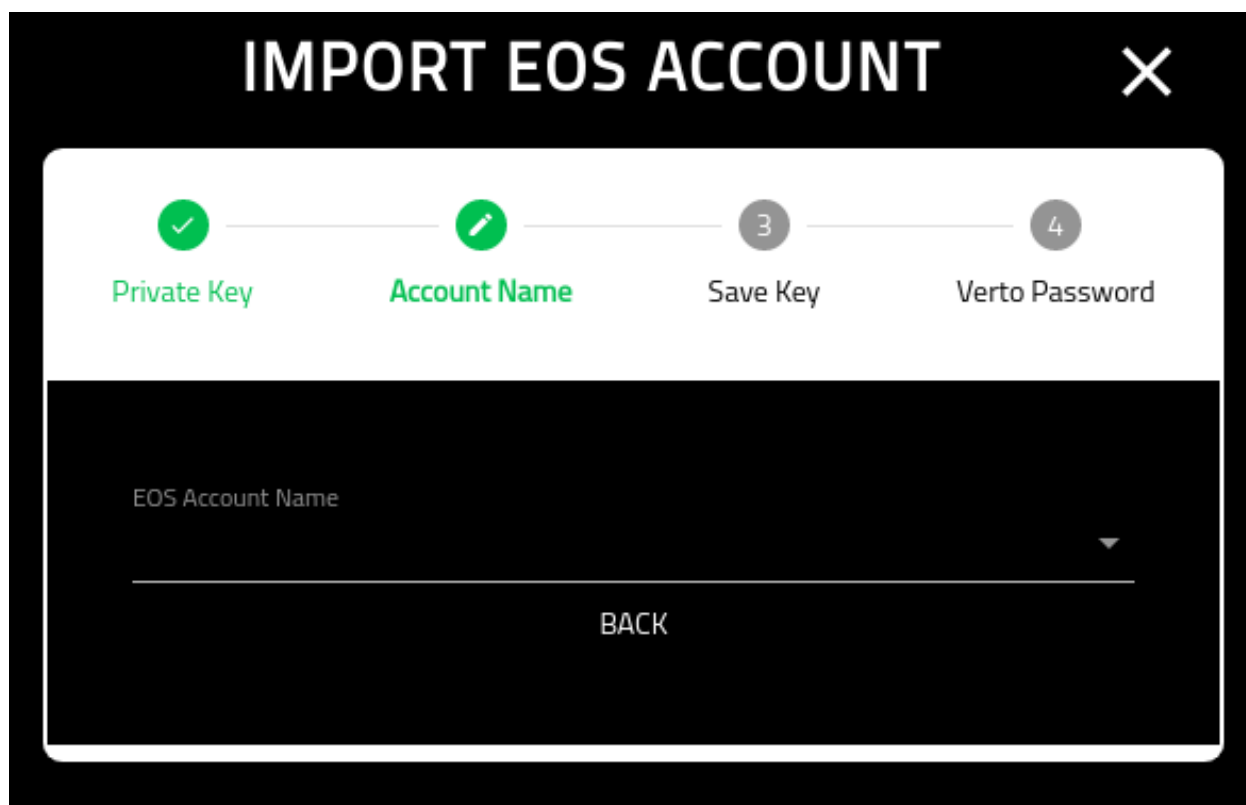
## EOS Account Name

Note that EOS allows multiple accounts to be associated to the key.

This screen allows you to select one of the accounts associated with this key.

Finally, you can import the other EOS account names into separate wallets in Verto.



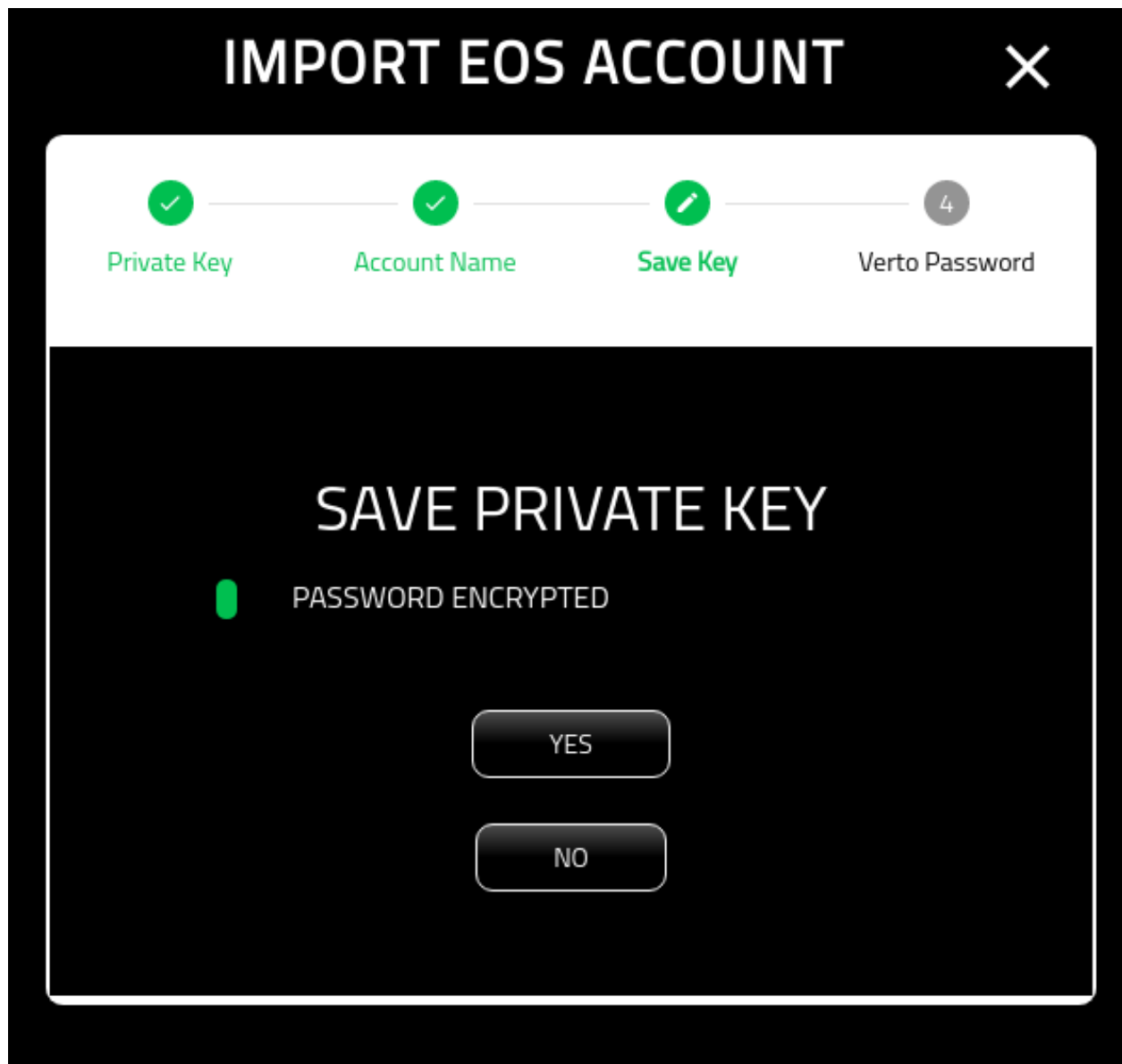


The image shows a mobile application screen titled "IMPORT EOS ACCOUNT" with a close button (X) in the top right corner. Below the title is a progress bar with four steps: 1. Private Key (marked with a green checkmark), 2. Account Name (marked with a green pencil icon), 3. Save Key (marked with a grey circle containing the number 3), and 4. Verto Password (marked with a grey circle containing the number 4). The second step, "Account Name", is the current active screen. It features a text input field labeled "EOS Account Name" with a dropdown arrow on the right. Below the input field is a "BACK" button.

### Save Private Key

This is entirely optional, however, you should at least download an encrypted version of your private key for safe keeping.

If you select 'NO', you will proceed to the 'Verto Password' screen.




### File Password

On this screen you are asked to provide the password that will be used to encrypt the private key.

Note that it is recommended that you select a different password from the wallet.

Also note that this password is non-recoverable. If you lose the password Volentix, nor any of its partners, are able to get it back for you.


# SAVE PRIVATE KEY

  
File Password

2  
Confiirm Password

3  
Save In Wallet

RECOMMENDED TO BE DIFFERENT THAN YOUR WALLET  
PASSWORD

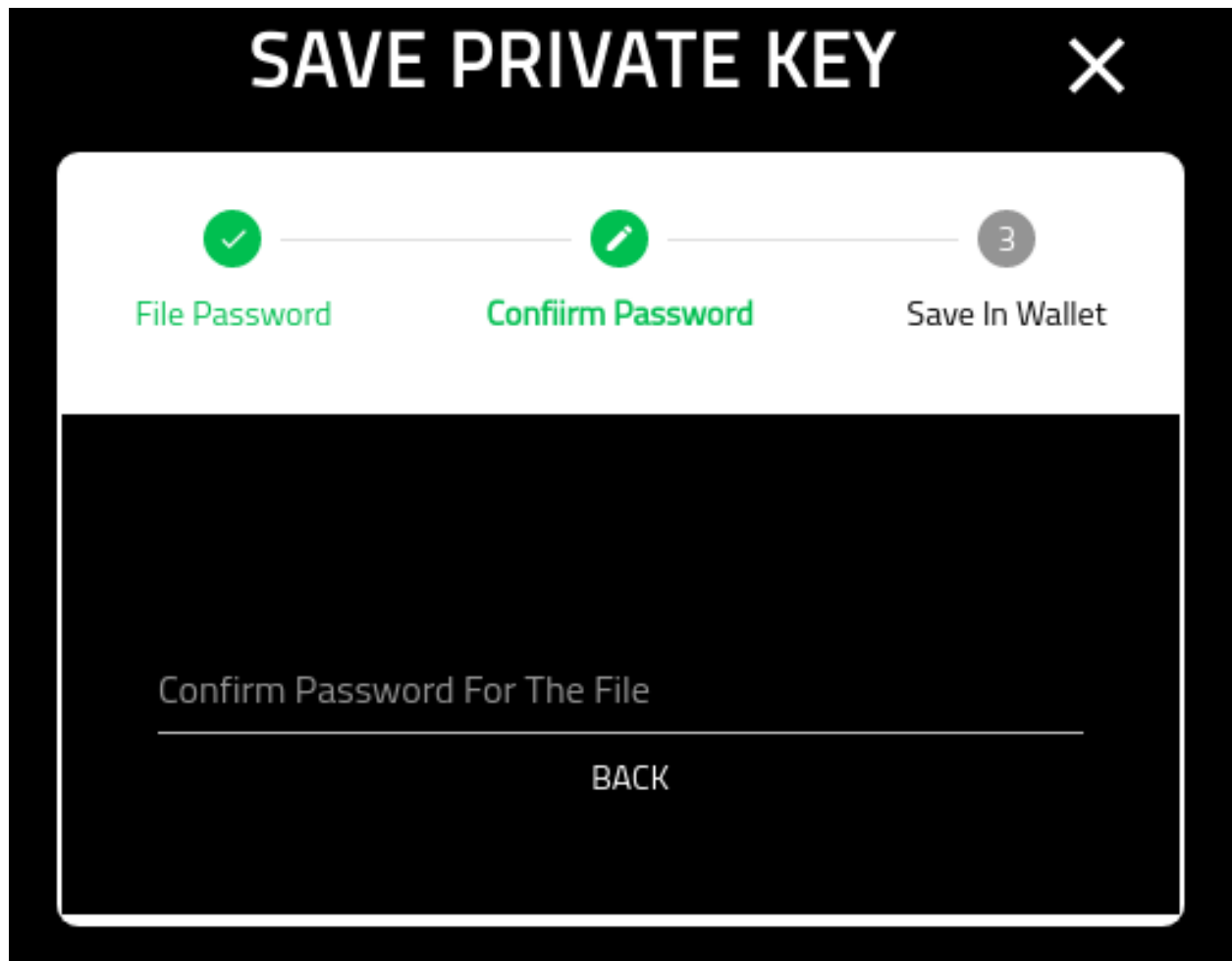
 MINIMUM 8 DIGITS

Password For The File

BACK

## Confirm File Password

This screen requires that you confirm you password from the previous screen.

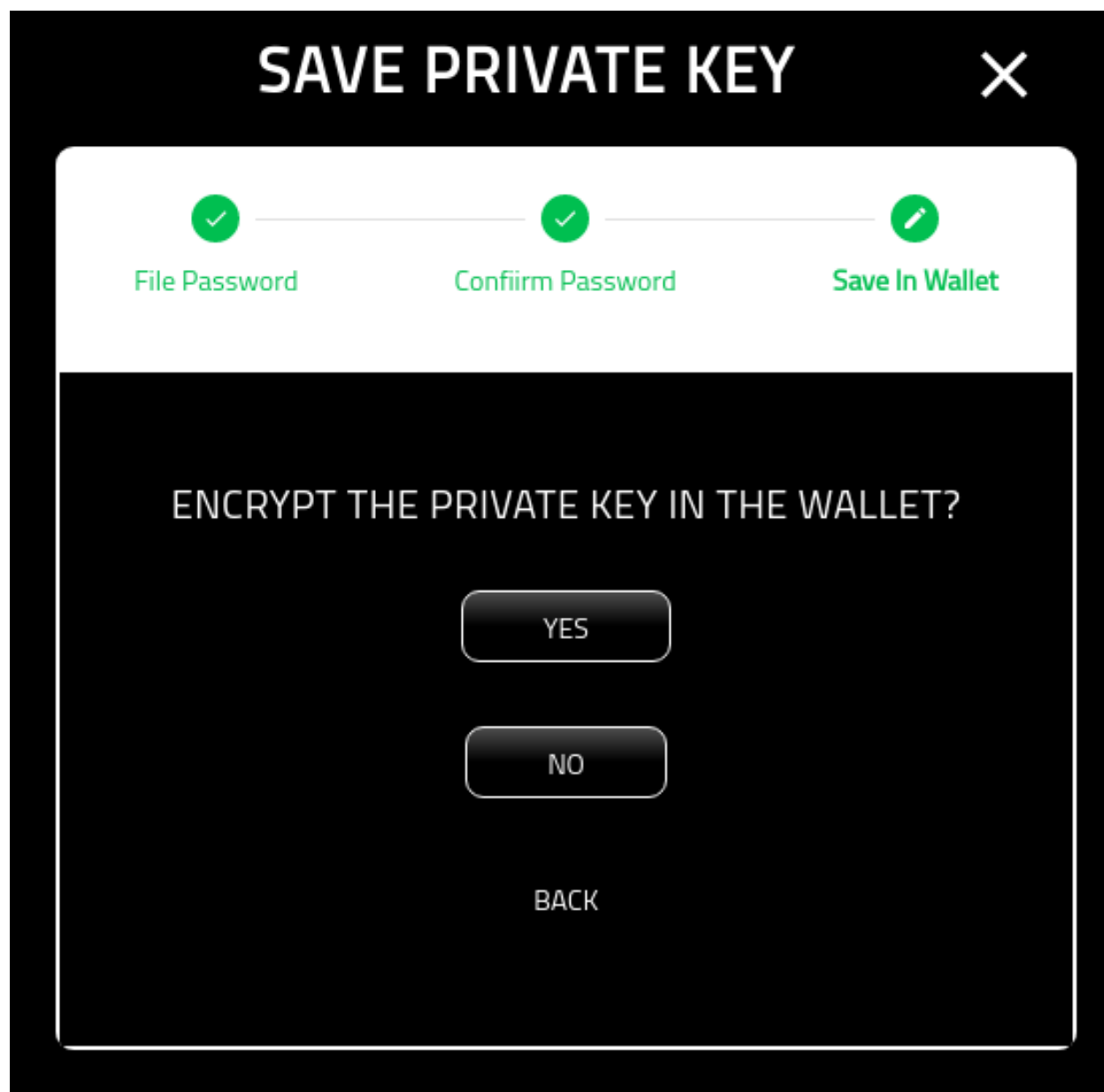


### Save In Verto

Some users may want to store their private key (encrypted) inside of Verto, however, it is not required.

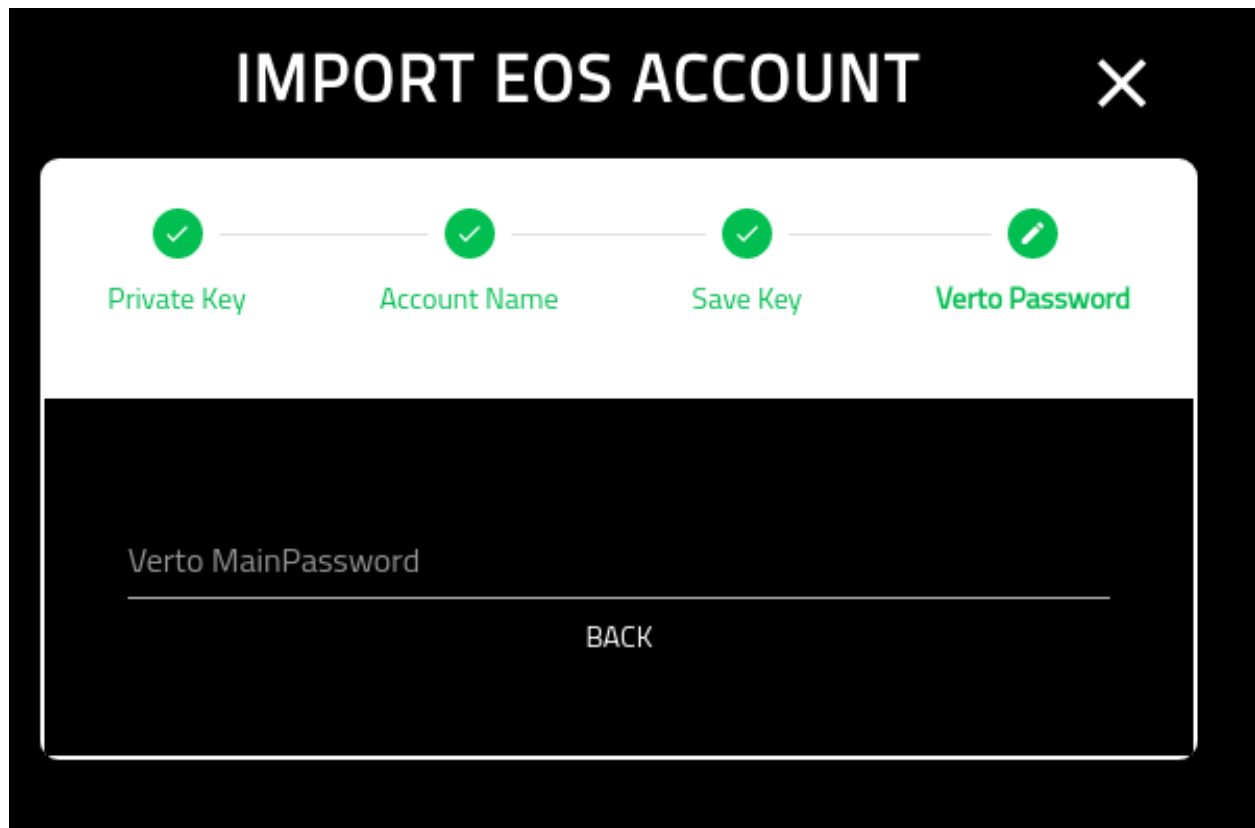
Note that, from the Wallet Manager you are able to add/remove private keys to any account.

Selecting 'YES' stores an encrypted copy of your private key inside the wallet. Note that, although Verto config is itself encrypted, the private key remains encrypted even after the configuration has been decrypted. It still requires the password from the previous steps to decrypt it.



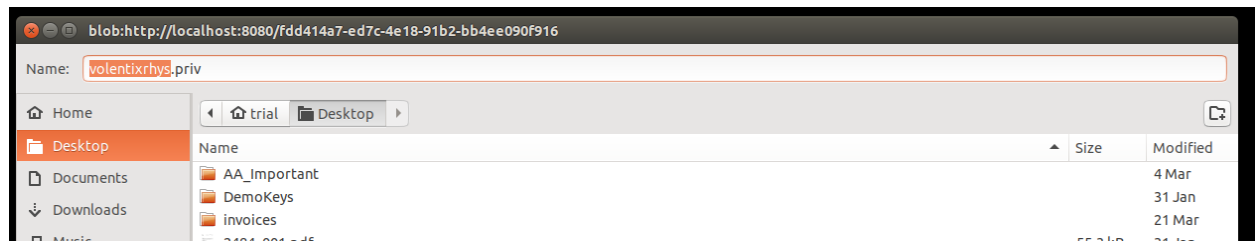
### Verto Password

On the final screen you must put in your Verto password.



If you opted to download an encrypted copy of the password, your file system browser will appear in order for you to select where to save the file.

Note that we recommend storing the file on a removable storage device such as a USB.











Once completed, you will be redirected to the new EOS wallet in Verto.

## 1.3 Wallet Manager

### 1.3.1 About

This page provides a high-level overview of the wallet manager and its functions.

WALLET MANAGER					
					
Default	Type	Wallet Name	Private Key	Associations	Delete
<input checked="" type="checkbox"/>		VOLENTIXRHYS			
<input type="checkbox"/>		TESTLEDGER			
Records per page: 5 ▾ 1-2 of 2 < >					

### 1.3.2 Adding Wallet

In the center of the screen, there is a plus sign in green. Pretty hard to miss. It looks like the following.










Clicking on this will redirect you to the Add Wallet Screen

To learn more about Add Wallet functionality, please see the following.

### 1.3.3 Understanding The Table

The following is an image of the wallet table containing two rows in order to showcase the functions available.

Default	Type	Wallet Name	Private Key	Associations	Delete
<input checked="" type="checkbox"/>		VOLENTIXRHYS			
<input type="checkbox"/>		TESTLEDGER			

The columns shown above, can be defined as:

1. Default: One wallet is always default. You can change which wallet is default by clicking on the checkbox of a non-default wallet.

To learn more about changing the default wallet, please see:

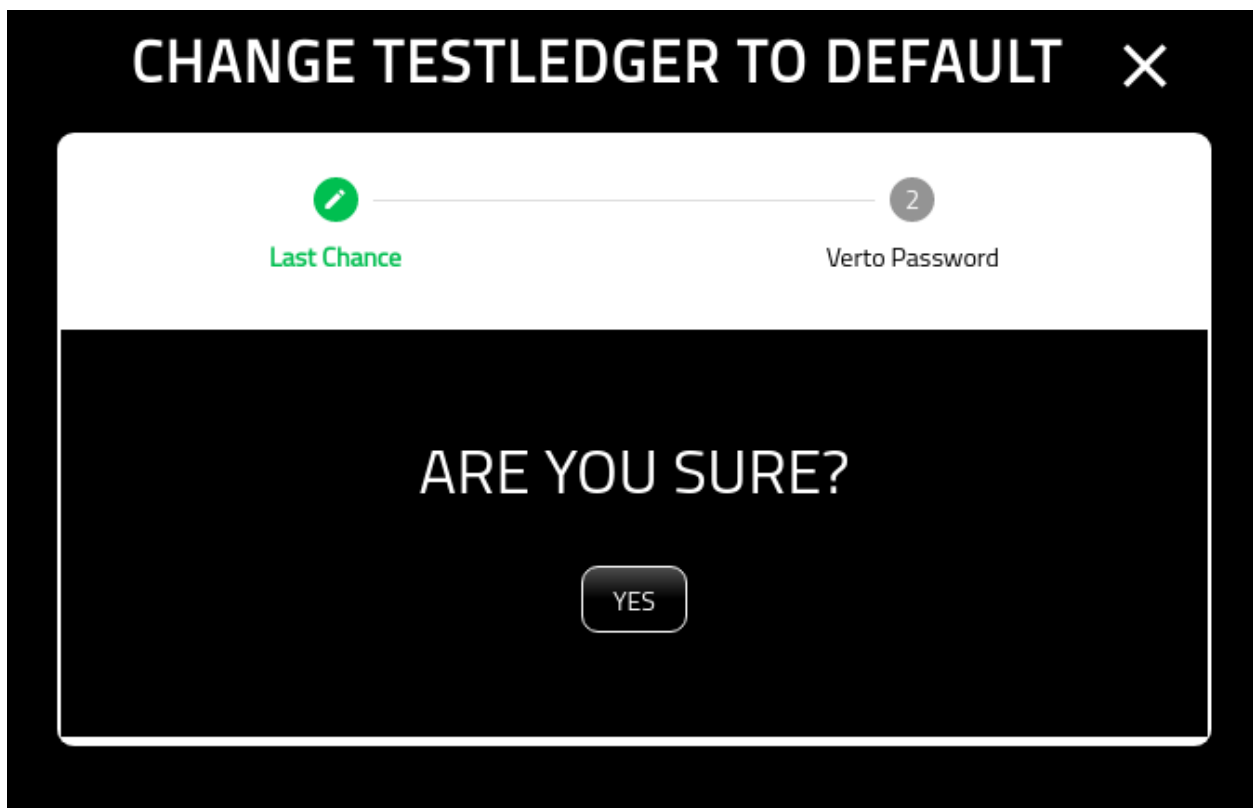
### Change Default Wallet

#### About

This screen allows you to change your default wallet. At this point, you have already selected the wallet to become default from the Wallet Manager.

#### Confirmation

A simple confirmation screen before you change the default. Click 'Yes' to continue.

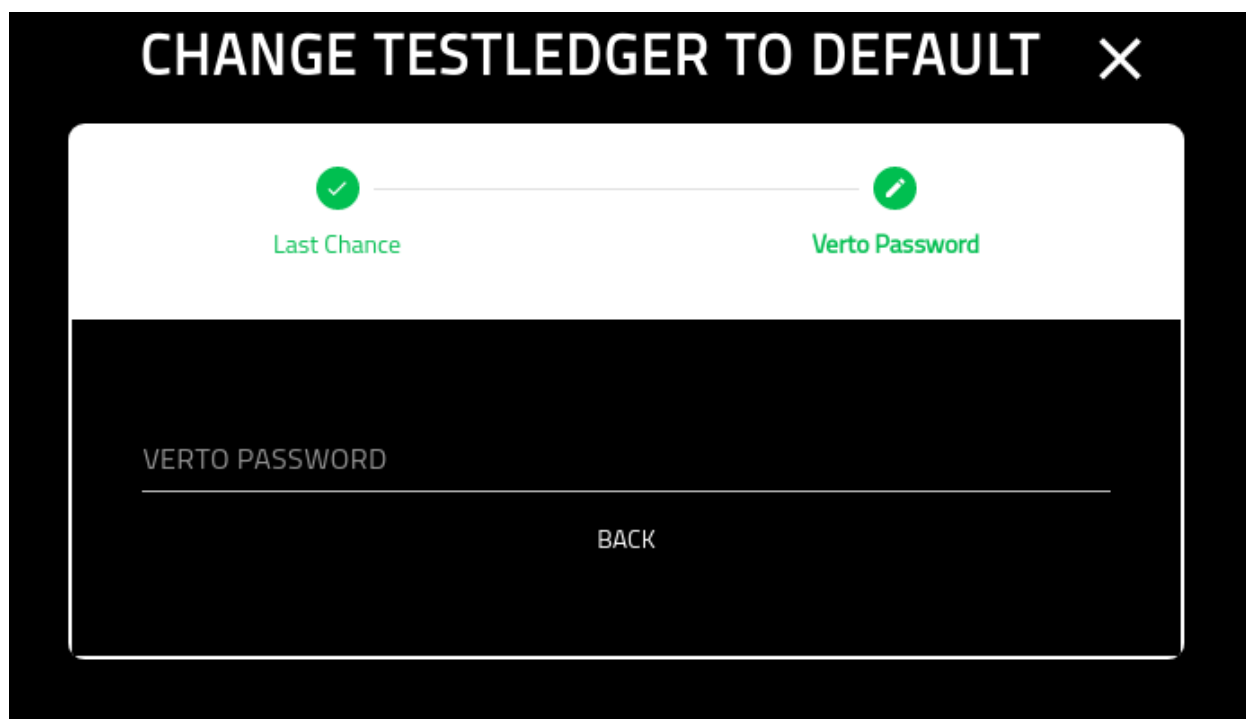


#### Verto Password

On the final screen you must put in your Verto password.

Once you have completed this screen you will be redirected back to the wallet manager.





2. Type: This is the type of wallet. Currently only two wallet types are supported. Ledger and EOS.

The EOS wallet has the following image:



The Ledger wallet has the following image:



3. Wallet Name: This column has the name of the wallet. Note that this name cannot be changed. If you click on the name, you will be redirected to the wallets screen.

For more information on the wallet screen, please see:

### Wallet

asdasdas

4. Private Key: This column shows if the wallet has, or does not have, a private key stored within the Verto configuration. Its images are as follows:

For wallets with a private key stored within them, the following is shown:



By clicking on the image, you are able to delete the private key within the Verto config. For more information please see:

### Delete Private Key

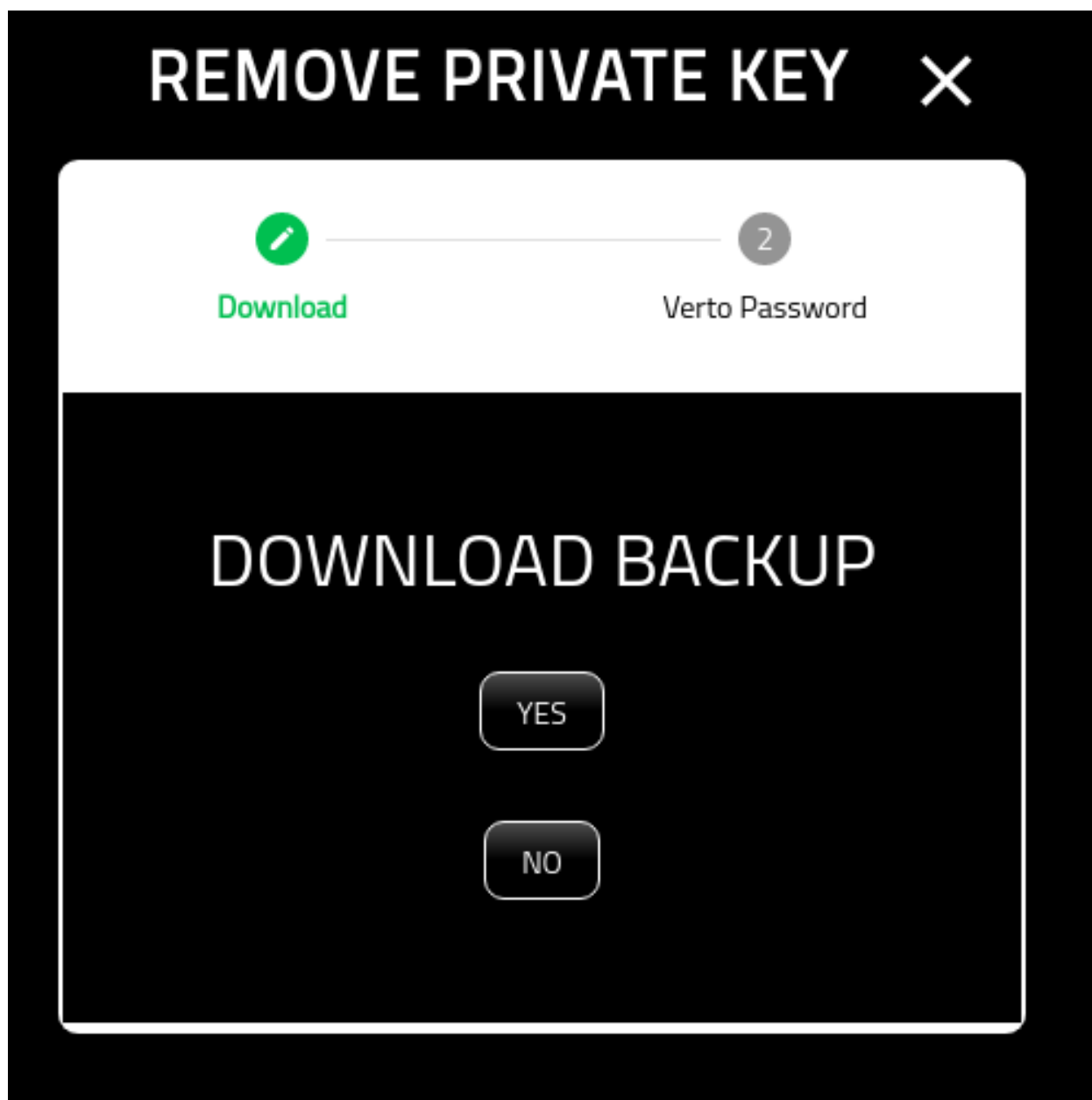
#### About

This page provides the details on deleting a private key from the wallet.

Note that you must select the option from the wallet manager.

#### Download Backup

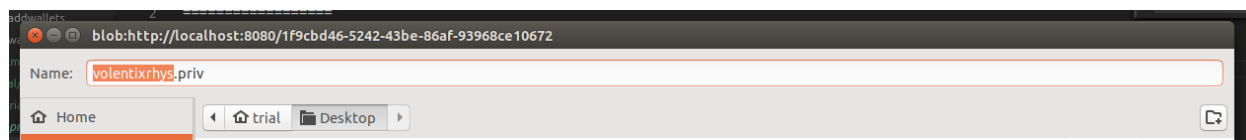
Before deleting the private key, it is recommended that you store an encrypted backup of it offline. If you want to download an encrypted copy select 'Yes'. If not, select 'No'.



### Choose File

If you selected 'YES' above, the operating system will open up a file manager for you to select where you want this file downloaded to.

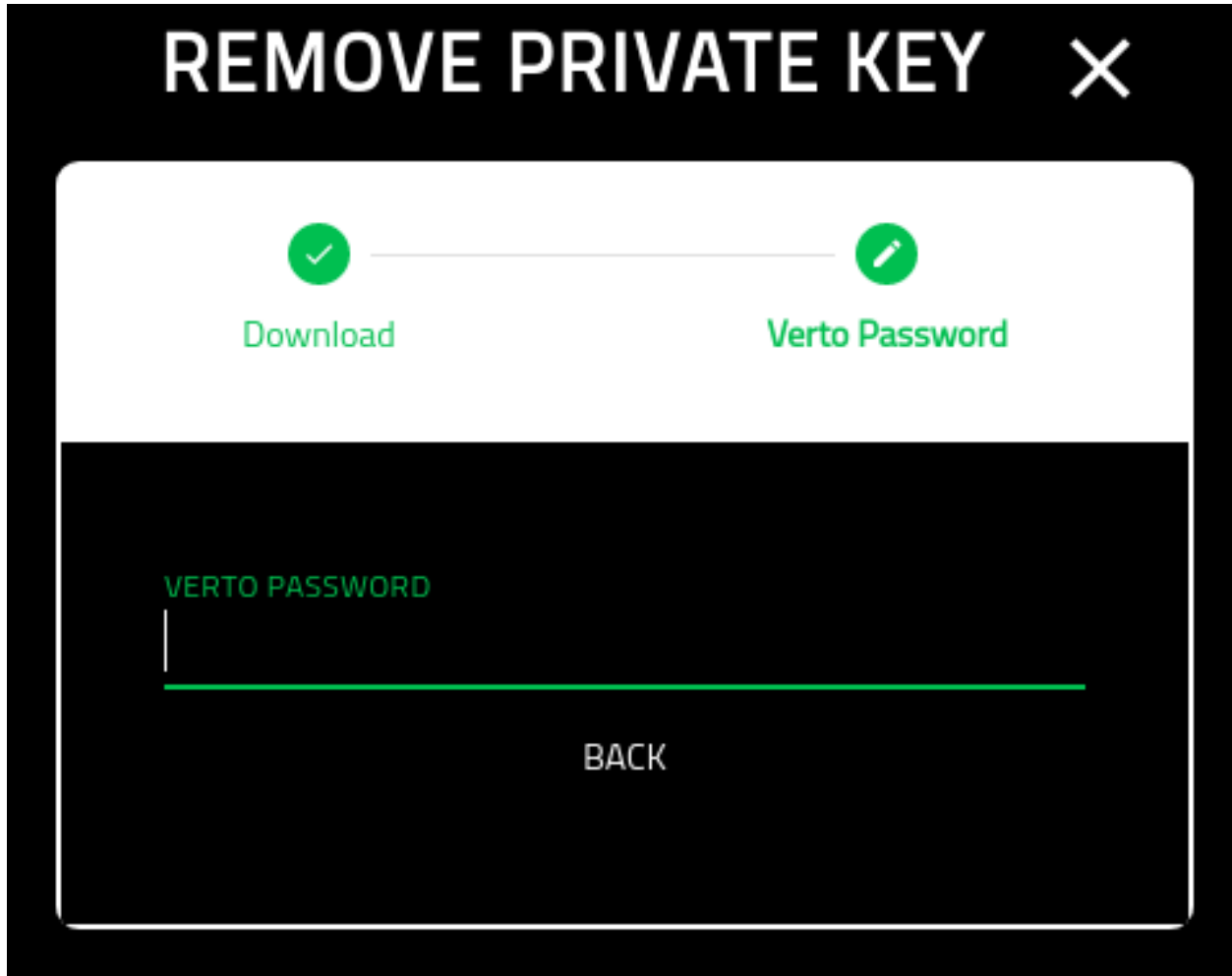
We strongly recommend storing in a removable unit such as a USB.



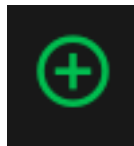
### Verto Password

On the final screen you must put in your Verto password.

Once you have completed this screen you will be redirected back to the wallet manager.



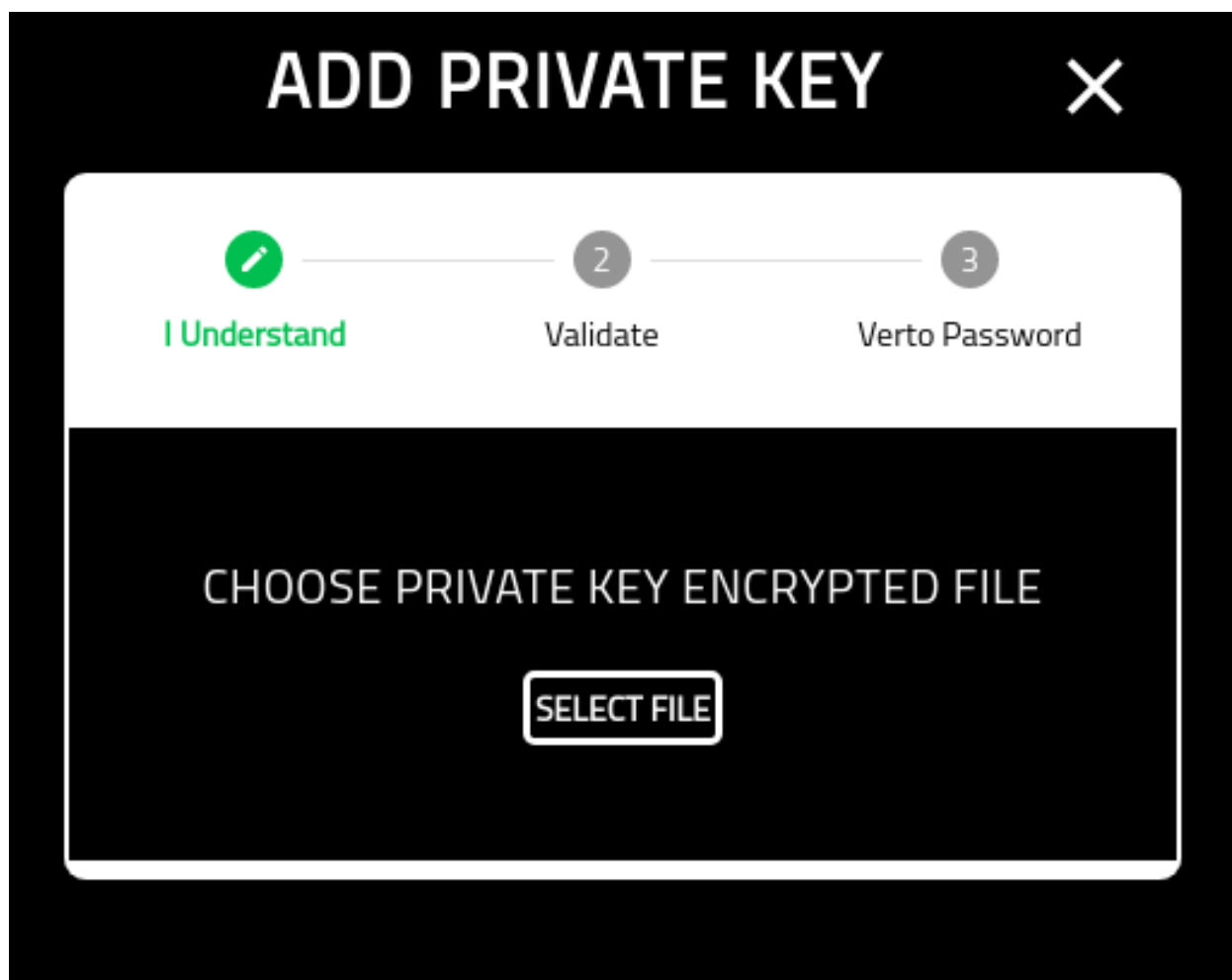
For wallets without a private key stored within them, the following is shown:



By clicking on the image, you are able to add the private key within the Verto config. For more information please see:

### Add Private Key

sdfsfs



sdfsfs



sdfsfs

# ADD PRIVATE KEY

✓

I Understand

✎

Validate

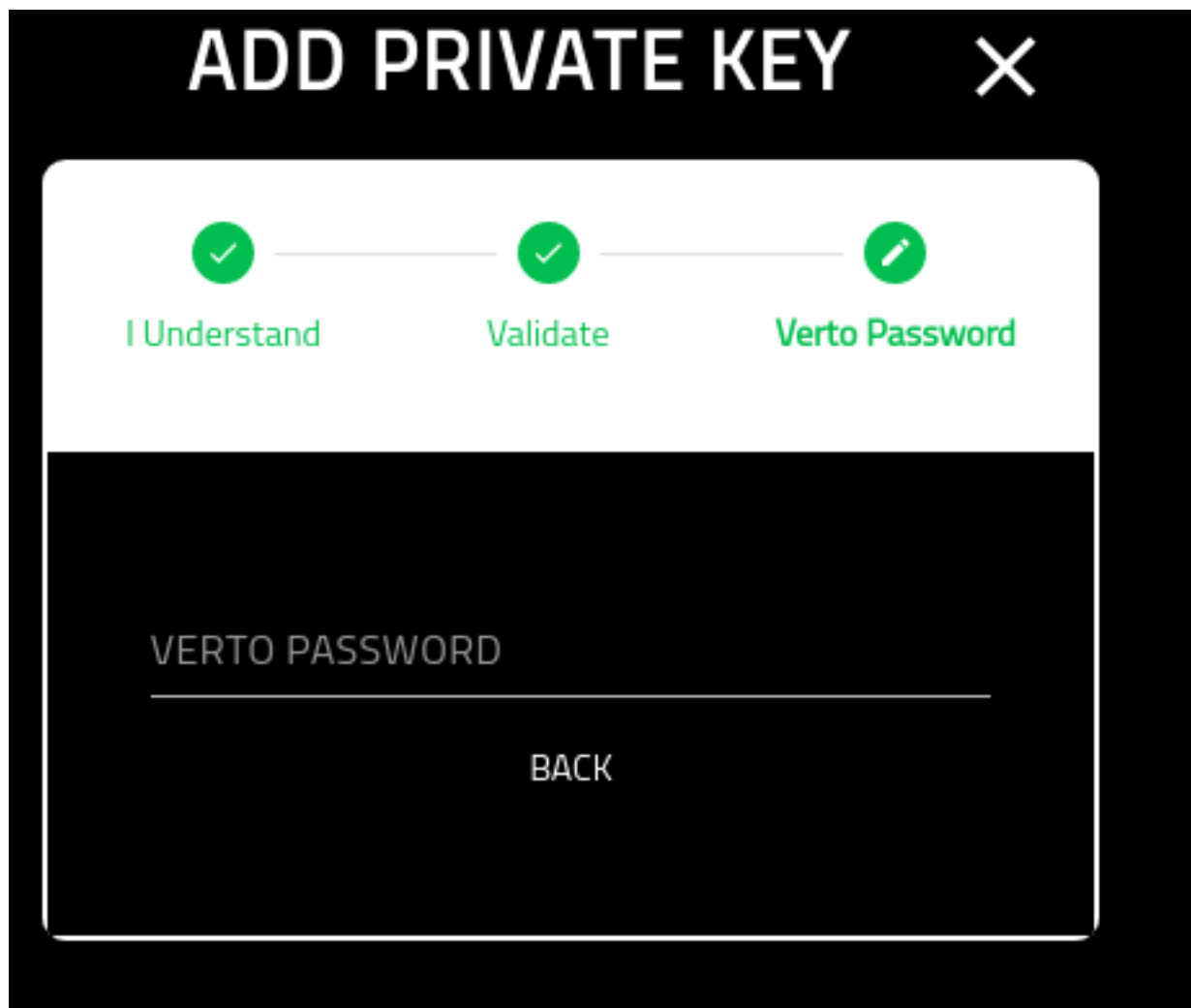
3

Verto Password

PRIVATE KEY PASSWORD

BACK

sdfsf



5. Associations: You can associate your wallet to various external parties in order to leverage more advanced features in Verto.

Click the icon below to manage your associations.



For more information about managing associations for a wallet, please see the following:

## **Associations**

### **About**

This page provides a high-level overview of associating a Verto account to trusted third parties.

For example, in order to Get VTX, you must first associate your Verto public key with Blocktopus or Zixipay.

### **Starting Out**

When you open this screen for the first time, you will have nothing associated to it. As a result, it will appear as the following.



# WALLET ASSOCIATIONS

Associate you wallet to other services.

## Venue

Associate this wallet with Venue!

YES

NOT NOW

## Blocktopus

Associate this wallet with Blocktopus!

CREATE ACCOUNT

LOGIN

NOT NOW

## Zixipay

Do you have an account with Zixipay?

YES

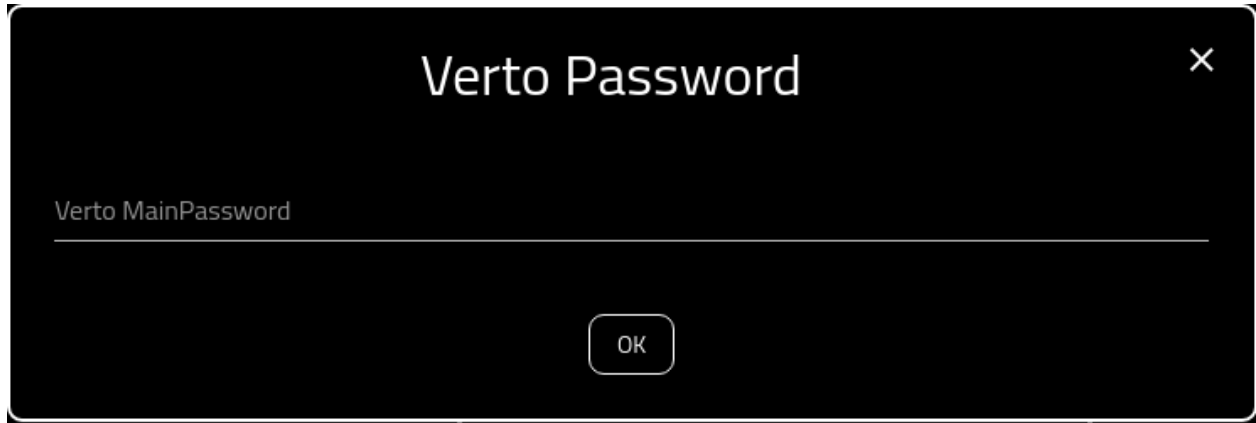
NOT NOW

DONE

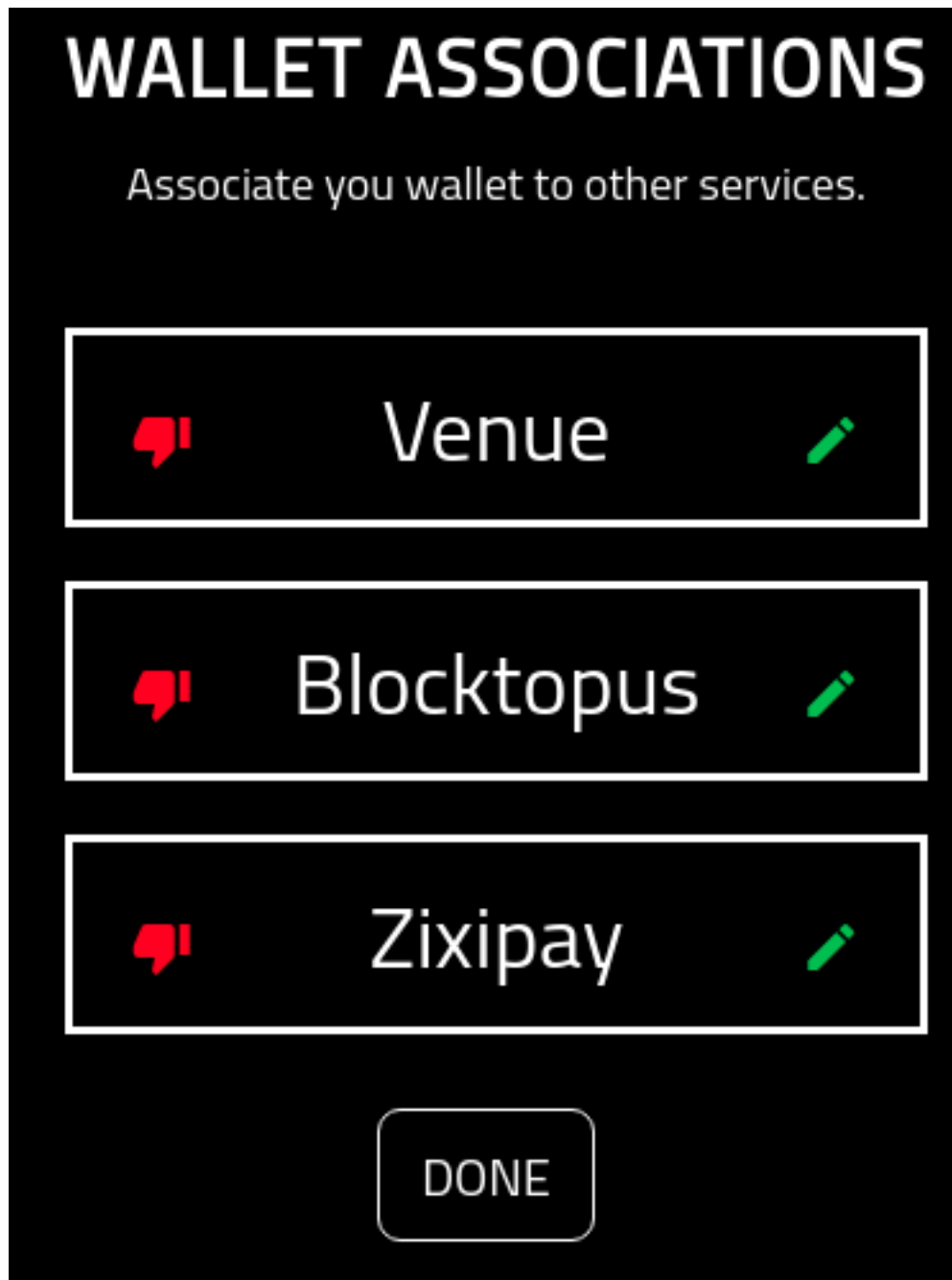
### It Starts With No

If you do not want any third parties associated with this wallet, simply click the 'Not Now' option.

If you do, you will be asked for your Verto password in order to update Verto config with your decision.



By selecting 'Not Now' for all the associations, you will end up with the screen appearing as follows:



### Icons

The icons, that end up appearing on the panel as as follows:

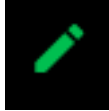
1. Thumbs Down: This shows that the wallet is not yes associated with the service.



2. Thumbs Up: This shows that a wallet is associated with a service. Note that you cannot delete an association.



3. Edit: If you have a thumbs down, you will also have the pencil (edit) icon. Clicking on this icon will open up an association for editing.



4. Close Edit: If you have opened up an association for editing, you will see a red X on the right. You can close the association by clicking it.



### Venue

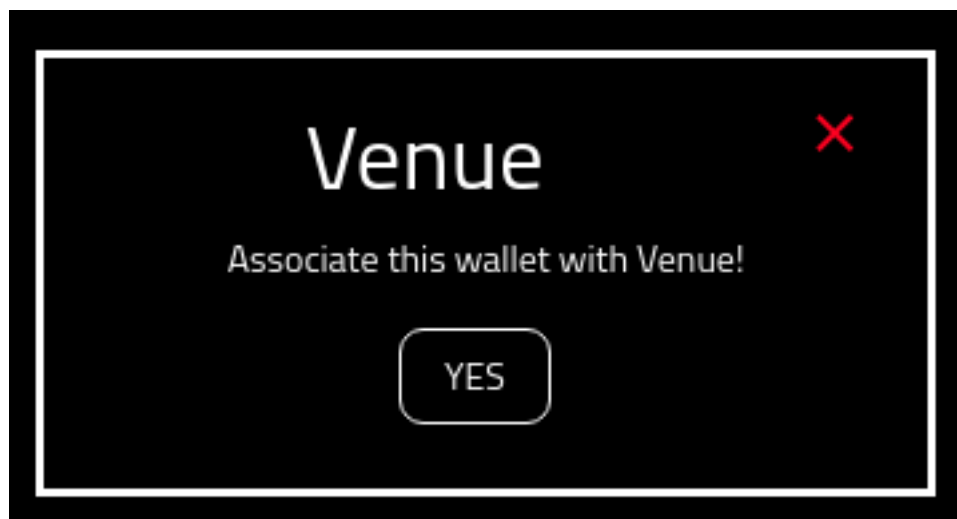
Note that to associate the wallet with Venue, you must already have an account registered and confirmed.

If you do not have an account already, please create one [here](#)

With an account set up, and confirmed, select the edit button.



Once selected, you will see the following screen. To associate the wallet with Venue, simply click 'Yes'




Note that Verto does NOT store your Venue credentials in the wallet. They are used in a one time event.

Add your Venue username.

# VENUE ASSIGN ADDRESS

×



1


Username

2

Password

3

Verto Password



YOUR VENUE CREDENTIALS ARE NOT STORED BY VERTO.

VENUE USER NAME

Put in your Venue password.

# VENUE ASSIGN ADDRESS

✓

Username

✎

Password

3

Verto Password

VENUE PASSWORD

BACK

The final screen requires your Verto password in order to update your wallet.

# VENUE ASSIGN ADDRESS

✓

✓

✎

UsernamePasswordVerto Password

CURRENT VERTO PASSWORD

BACK

Once you click save, you will be redirected to the Associations screen again. Note that Venue has now been associated to the wallet.



## Blocktopus

Select the edit button.

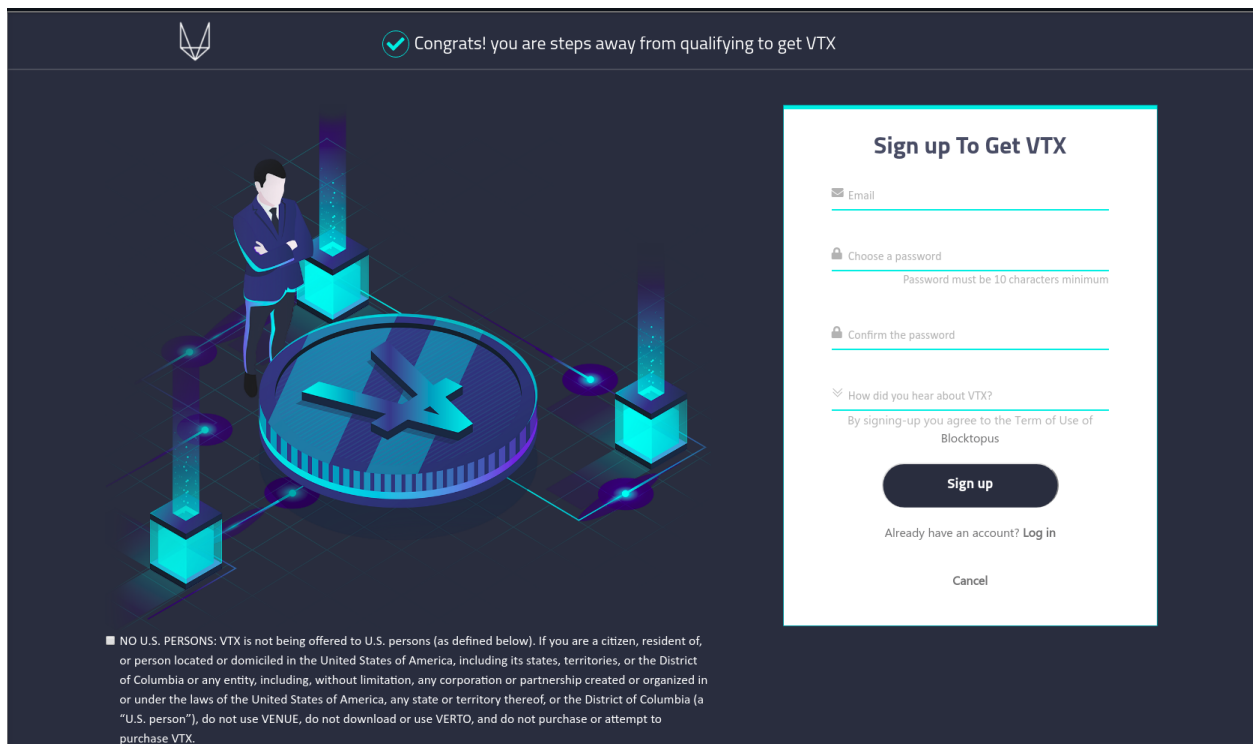


You are provided with two options when associating your wallet with Blocktopus.

The 'CREATE ACCOUNT' option is in the event that you do not yet have a Blocktopus account, The 'LOGIN' option is in the event that you do have an account but have not yet associated your wallet.

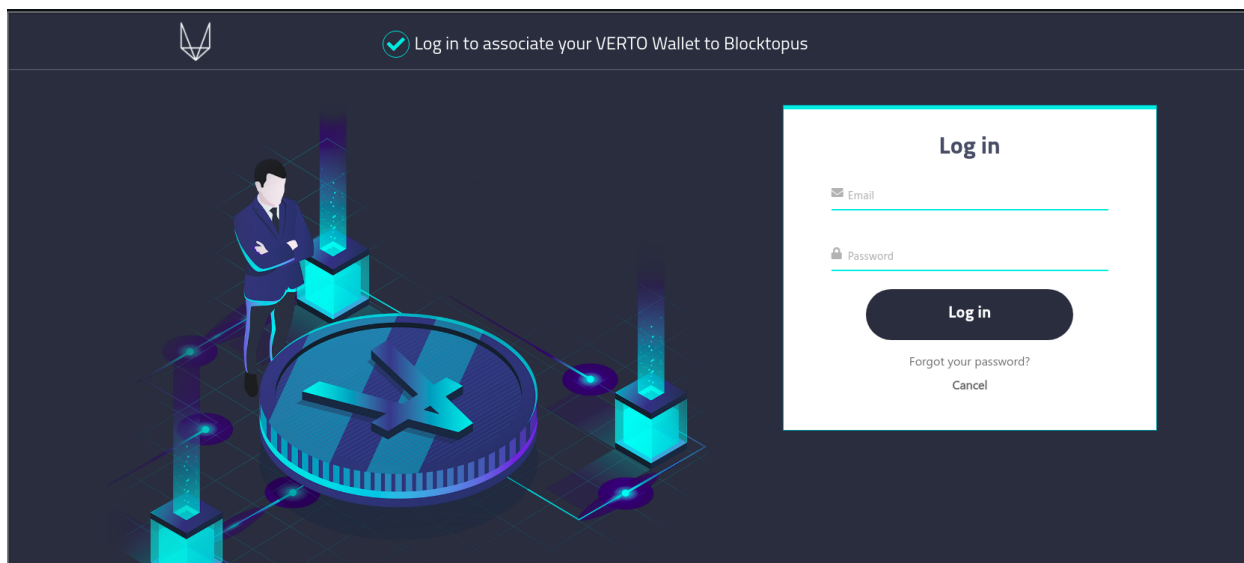


If you choose to 'CREATE ACCOUNT' you will be provided with the following screen.

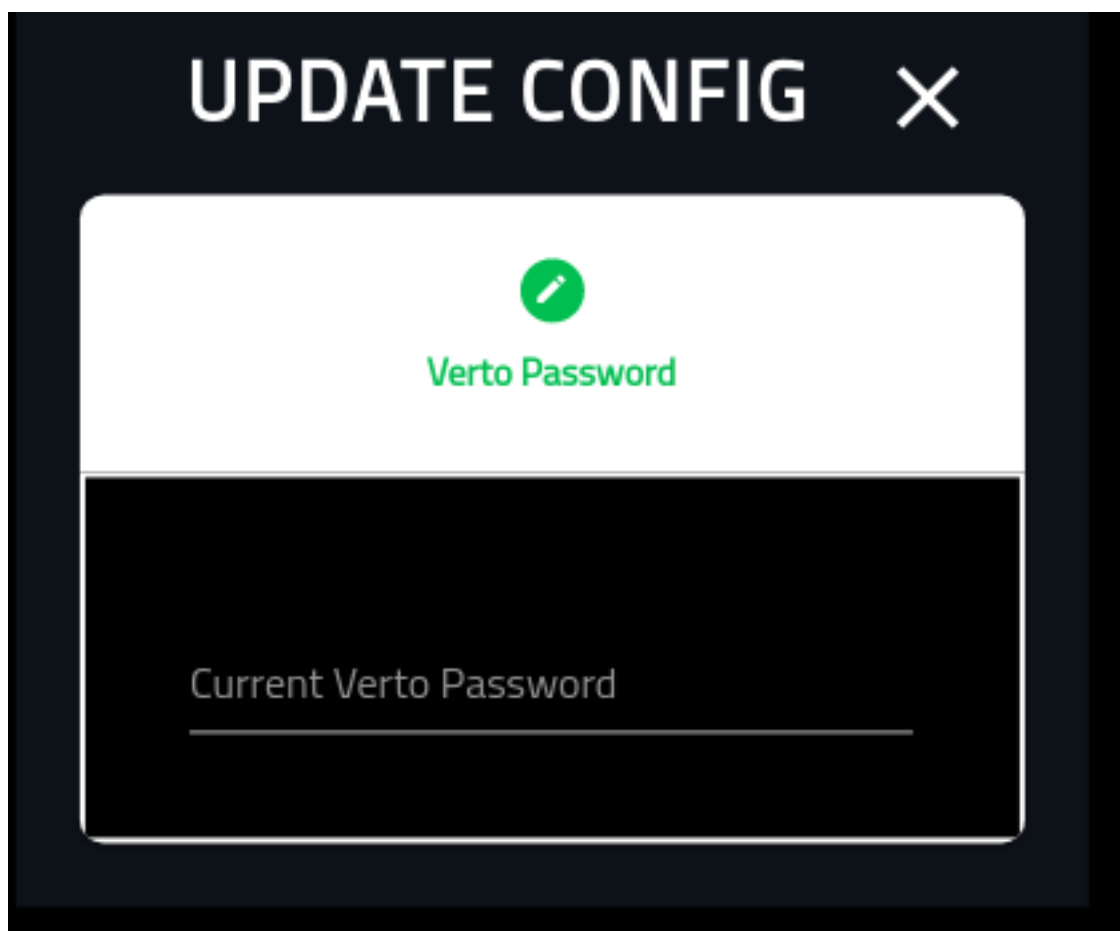


If you choose to 'LOGIN' you will be provided with the following screen.





Once you have successfully associated the wallet with Blocktopus, you will need to provide your Verto password in order to preserve the association.



Upon successful completion your Blocktopus association will show thumbs up.



## ZIXIPAY

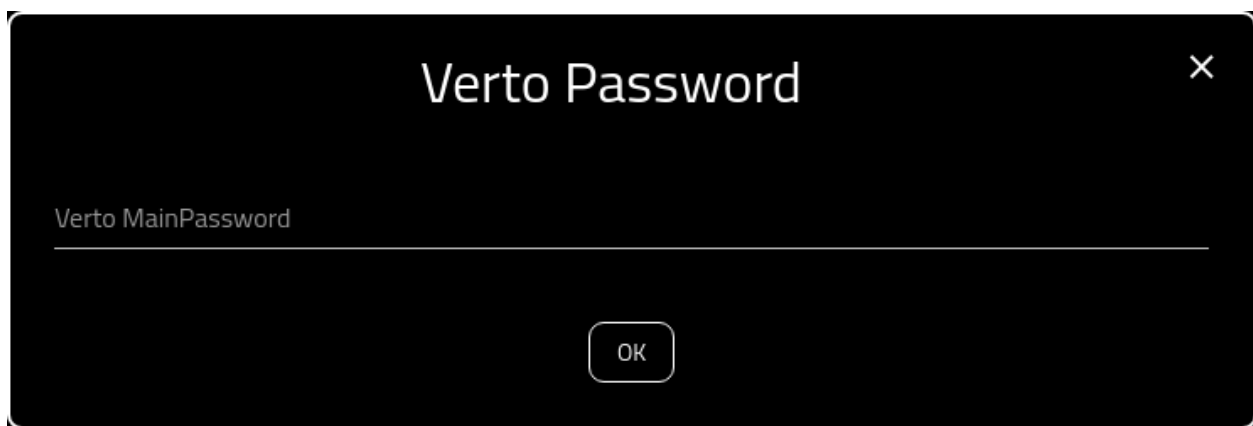
Select the edit button.



Select the 'YES' button to associate the wallet with Zixipay.



Provide your Verto password to update the config.

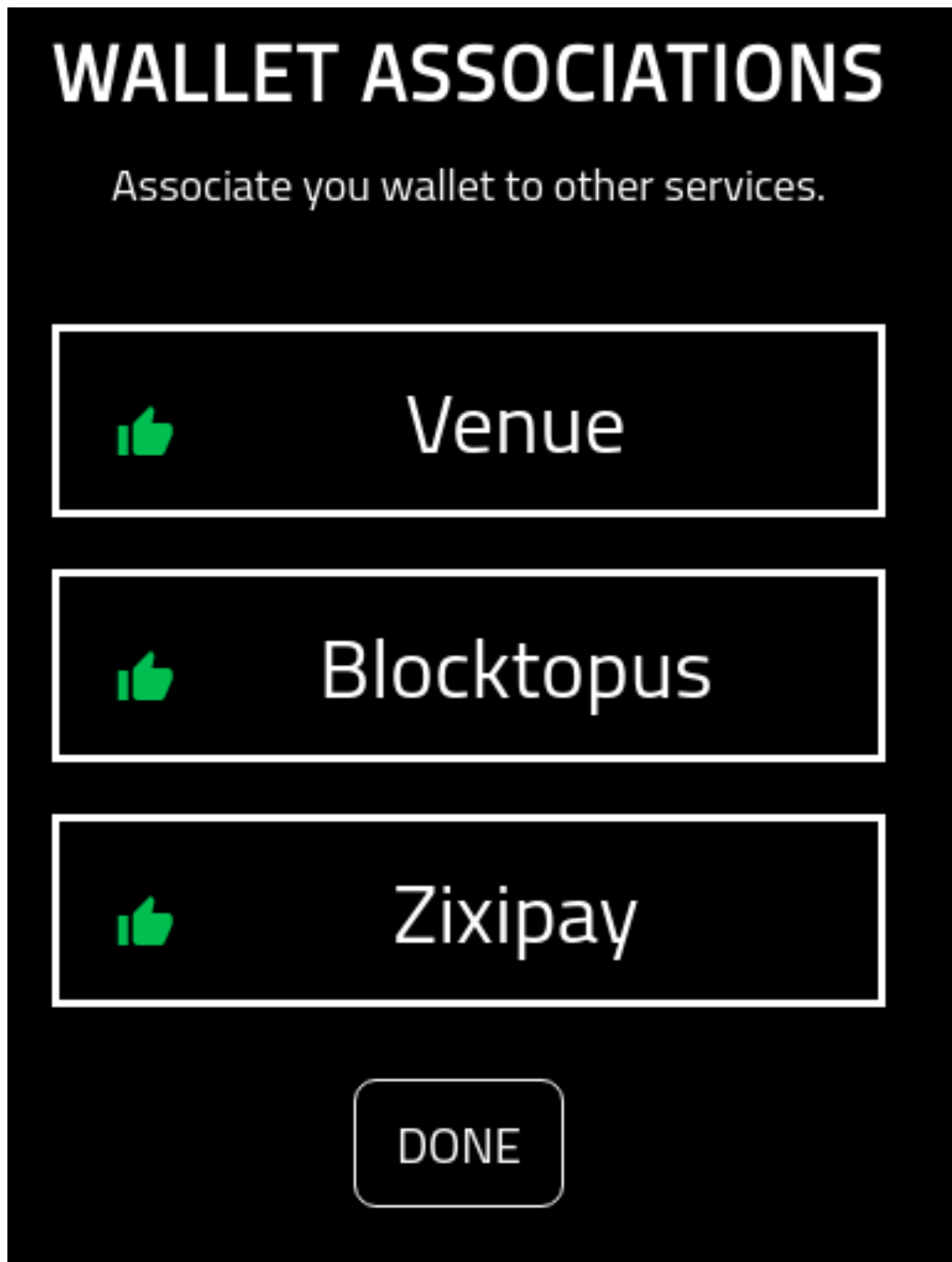


Upon successful completion your Zixipay association will show thumbs up.



### **Everything Associated**

Once everything (optional) has been associated, your screen will look like the following.



6. Delete: The final column is in the event that the user wants to delete a key. Note that the default key cannot be deleted.



By selecting the icon, you are redirected to delete the wallet from Verto. For more information please see:

## Delete Wallet

### About

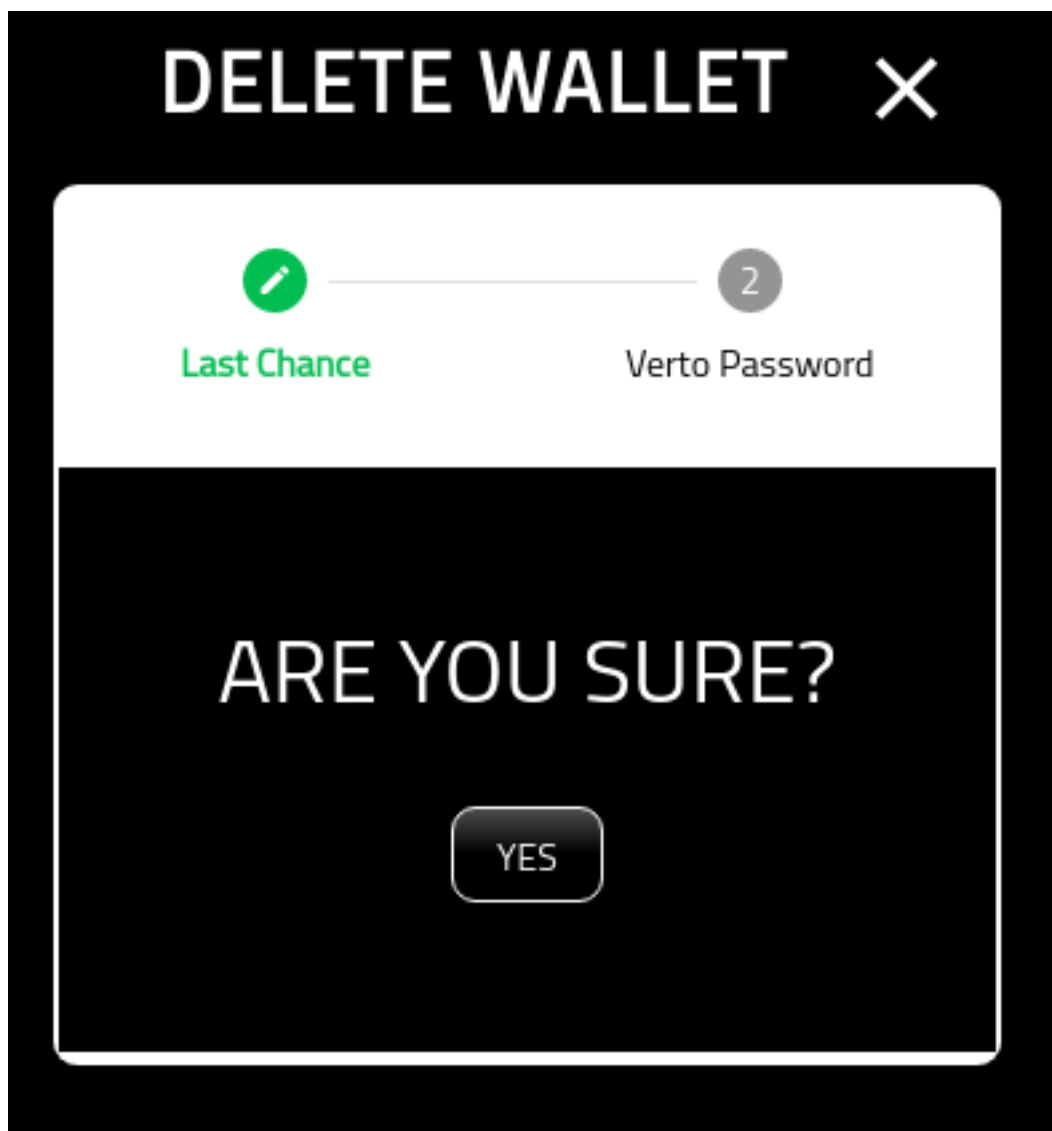
This page provides the details on deleting a wallet from Verto.

Please note, it is not possible to retrieve the deleted wallet once removed.

Please ensure you have backed up Verto as well as the private key associated with the wallet.

### Confirmation

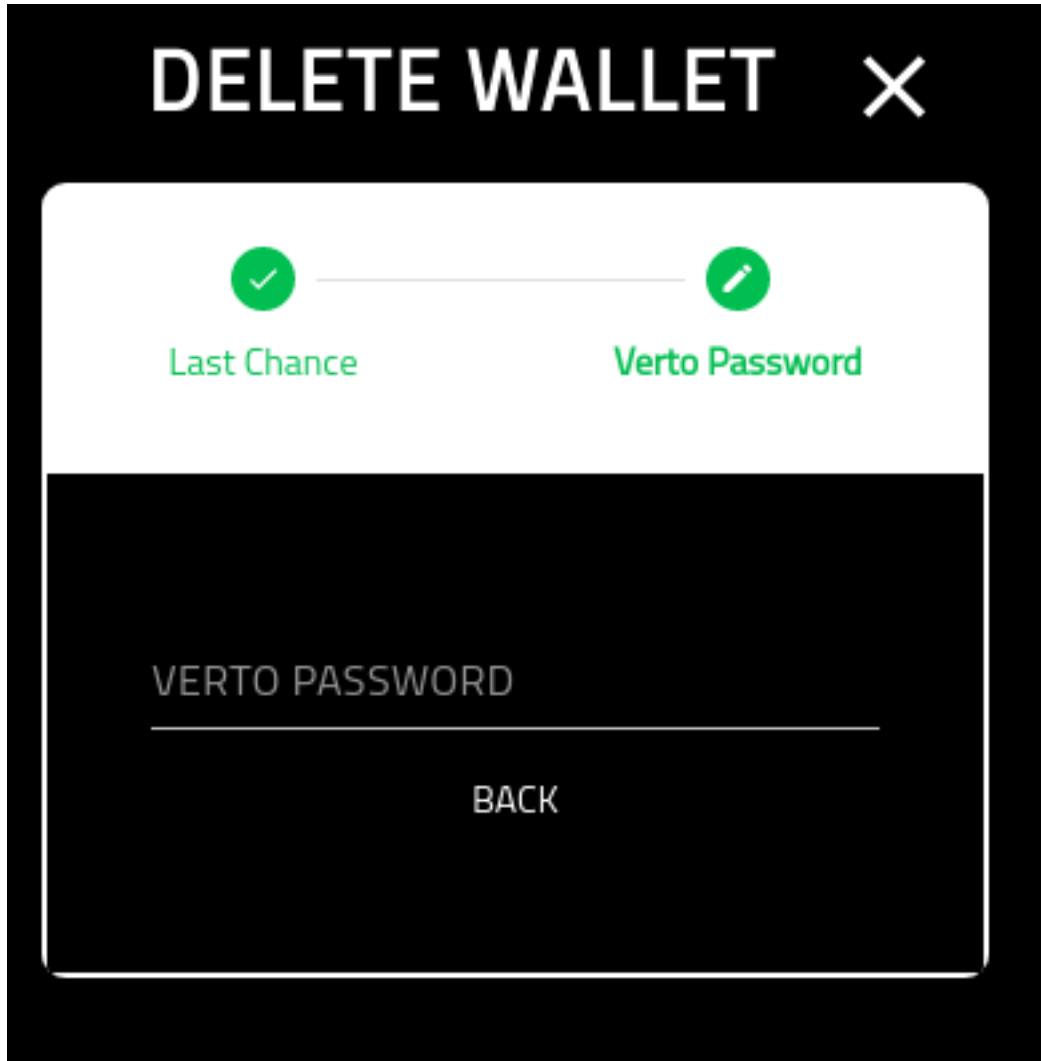
A simple confirmation screen before you delete the wallet from Verto.



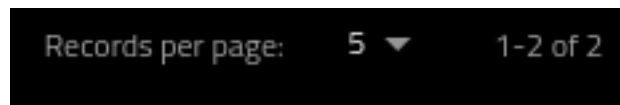
### Verto Password

On the final screen you must put in your Verto password.

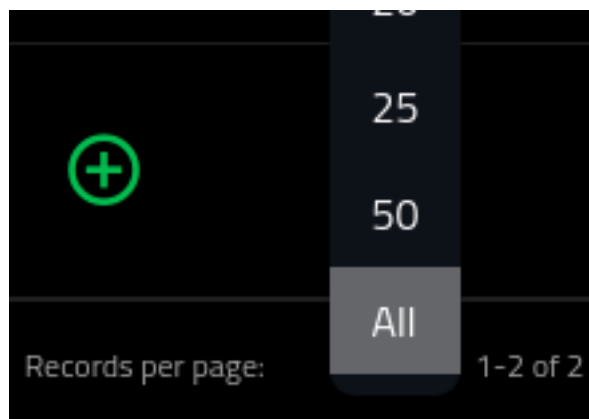
Once you have completed this screen you will be redirected back to the wallet manager.



7. Number Of Results Shown: At the bottom right of the wallet, you are able to select the number of visible rows within the wallet. Default is 5. `walletManagerNumRecords`



Clicking on it will open up the options for how many records to display.



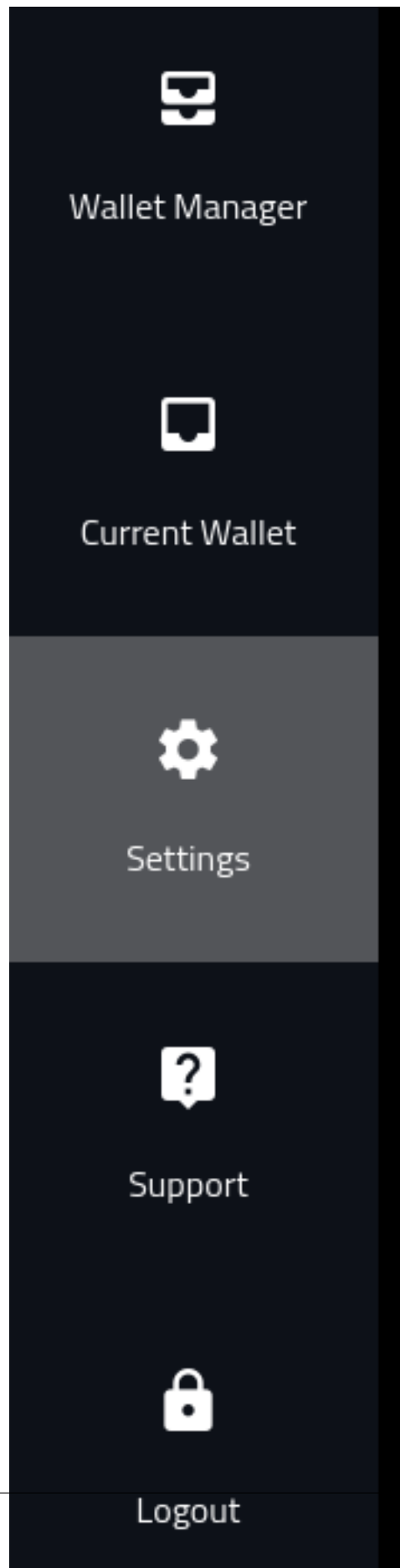
## 1.4 Settings

### 1.4.1 About

This page provides details on using the settings page.

### 1.4.2 Navigation

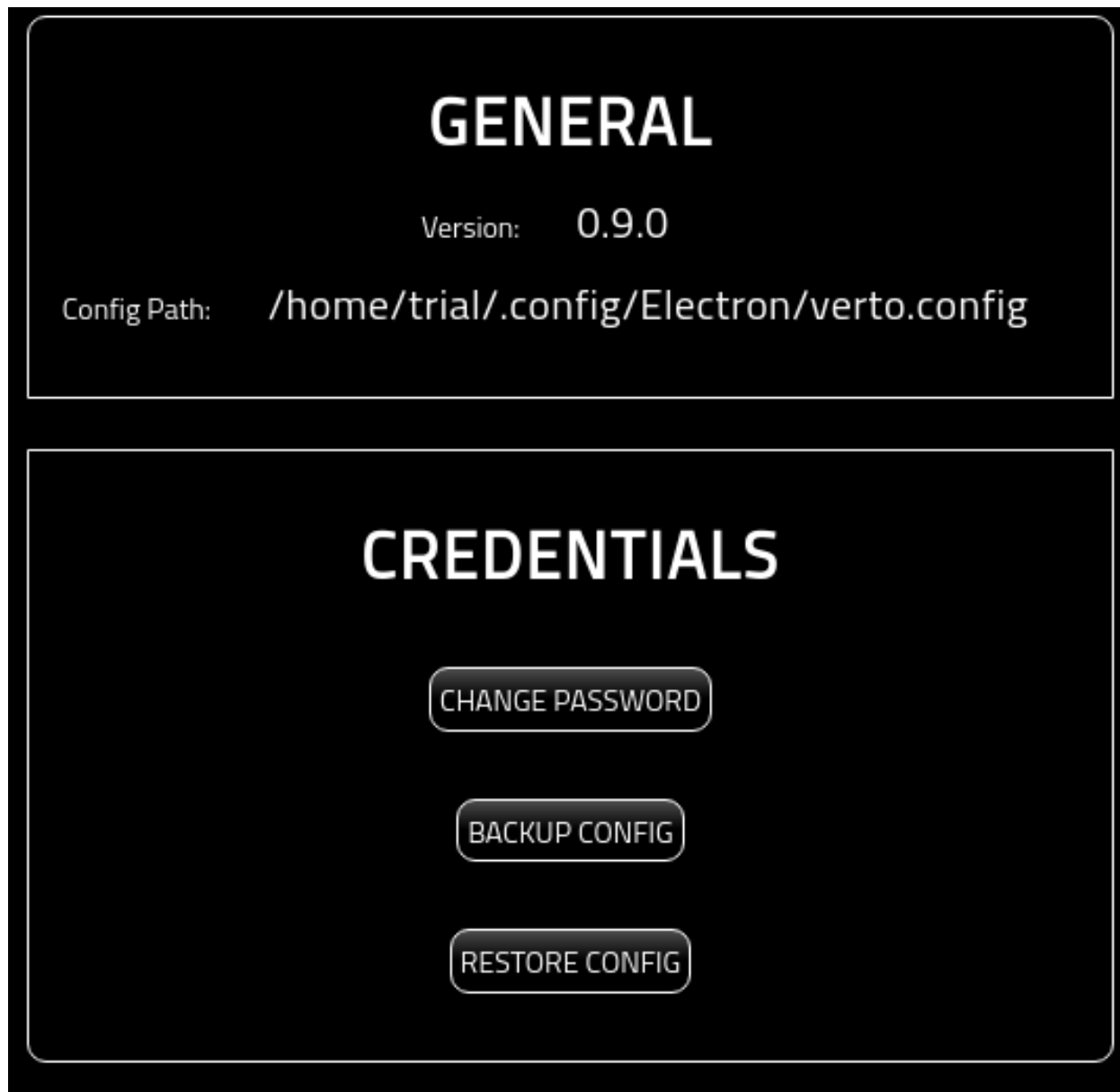
From the left hand navigation menu, select the Settings option:





### 1.4.3 Settings Page

Once open, you will be presented with the following screen.



### 1.4.4 General Settings

This section of the page provides the general, read only, settings of the wallet.



1. The Version showcases what version of Verto you are running.
2. The Config Path identifies where the verto.config file is being stored.

### 1.4.5 Credentials

This section provides access for you to modify, backup, and restore Verto credentials.



The three options are:

1. Change Password: Change the Verto password. For more information on changing your password, please see [here](#):

#### Change Password

## About

This page provides details on changing your Verto password.

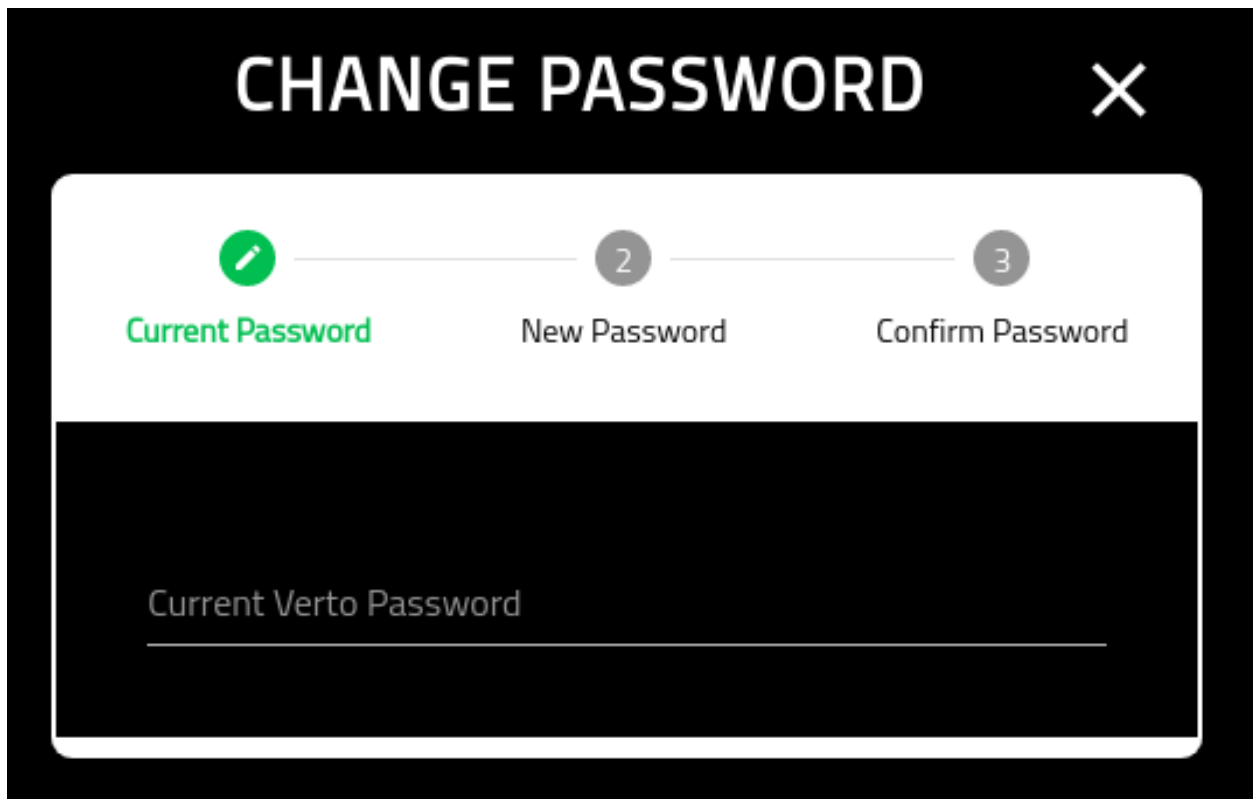
Please note that any historical backups of the Verto configuration will not be able to use this password. Backups are encrypted with the password used at the time of backup.

## Process

In order to change your Verto password, you must go through the following process.

### Current Password

You must first need the current wallet password.



The screenshot shows a 'CHANGE PASSWORD' dialog box. At the top, the title 'CHANGE PASSWORD' is displayed in white on a black background, with a close button (X) to its right. Below the title bar is a white rounded rectangle containing the password change steps. A progress indicator at the top of this rectangle shows three steps: 1. 'Current Password' (highlighted with a green circle and green text), 2. 'New Password' (grey circle and text), and 3. 'Confirm Password' (grey circle and text). The first step is expanded, showing a text input field with the placeholder text 'Current Verto Password'.

If the password is incorrect, you will not be able to proceed and will see the following screen.

The screenshot shows a mobile application interface for changing a password. At the top, there is a header bar with a question mark icon, the title "CHANGE PASSWORD", and a close icon (X). Below the header, a progress indicator shows three steps: "1" (Current Password, highlighted in green), "2" (New Password), and "3" (Confirm Password). The main content area is dark gray and contains a label "Current Verto Password" above a password input field. The input field shows three dots and a toggle icon (an eye with a slash). Below the input field, a red error message reads "THE PASSWORD PROVIDED IS INCORRECT".

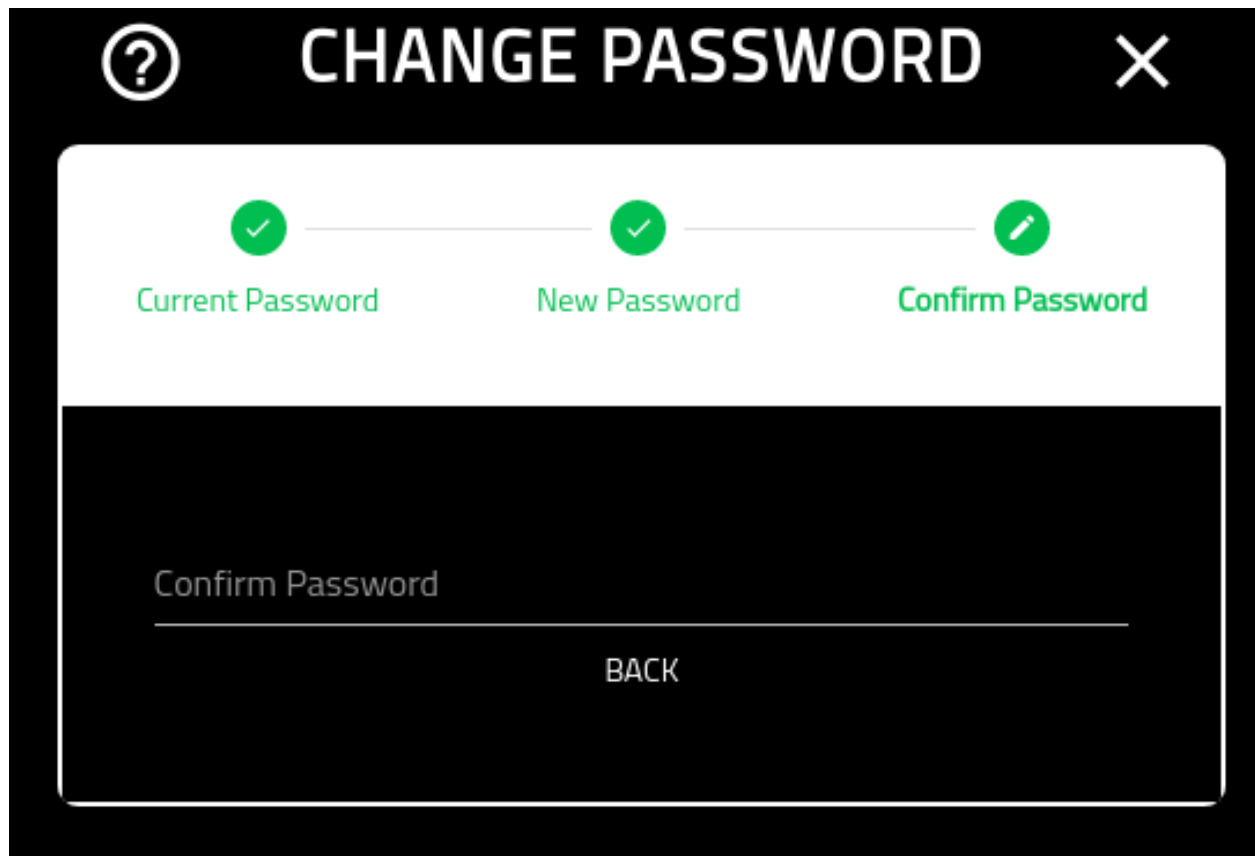
### New Password

This screen is for you to create your new password. Note that the password must be at least 8 digits in length.

The image shows a mobile app screen titled "CHANGE PASSWORD". At the top left is a help icon (question mark in a circle) and at the top right is a close icon (X). Below the title is a progress bar with three steps: "Current Password" (marked with a green checkmark), "New Password" (marked with a green pencil icon), and "Confirm Password" (marked with a grey circle containing the number 3). The "Confirm Password" step is the active one. Below the progress bar is a large black rectangular area. Inside this area, on the left, is a red vertical bar. To its right, the text "MINIMUM OF 8 CHARACTERS" is displayed. Below this text is a white text input field with the placeholder text "New Verto Password". At the bottom center of the black area is a white button labeled "BACK".

### Confirm New Password

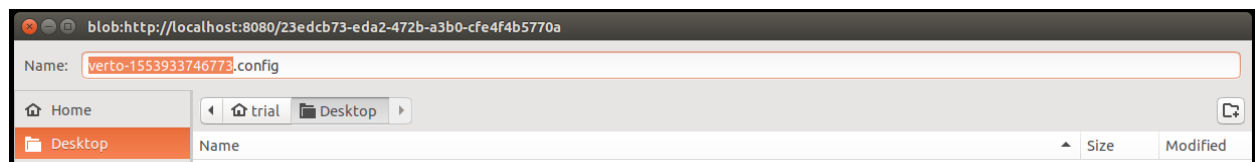
This screen is for you to confirm your new password. You will not be able to advance unless the passwords match.



## Success

Once you are successful, you will be re-directed to the Settings screen.

2. Backup Config: Allows you to download a copy of the Verto config encrypted with the current wallet password. Simply click the 'BACKUP CONFIG' button and you will be presented with a file system explorer to choose where to store it.



3. Restore Config: Allows you to restore Verto config to a previously saved config file. Note that the password for the restore file may be different than the current Verto password.

For more information on restoring your config, please see the following:

## Restore Verto Config

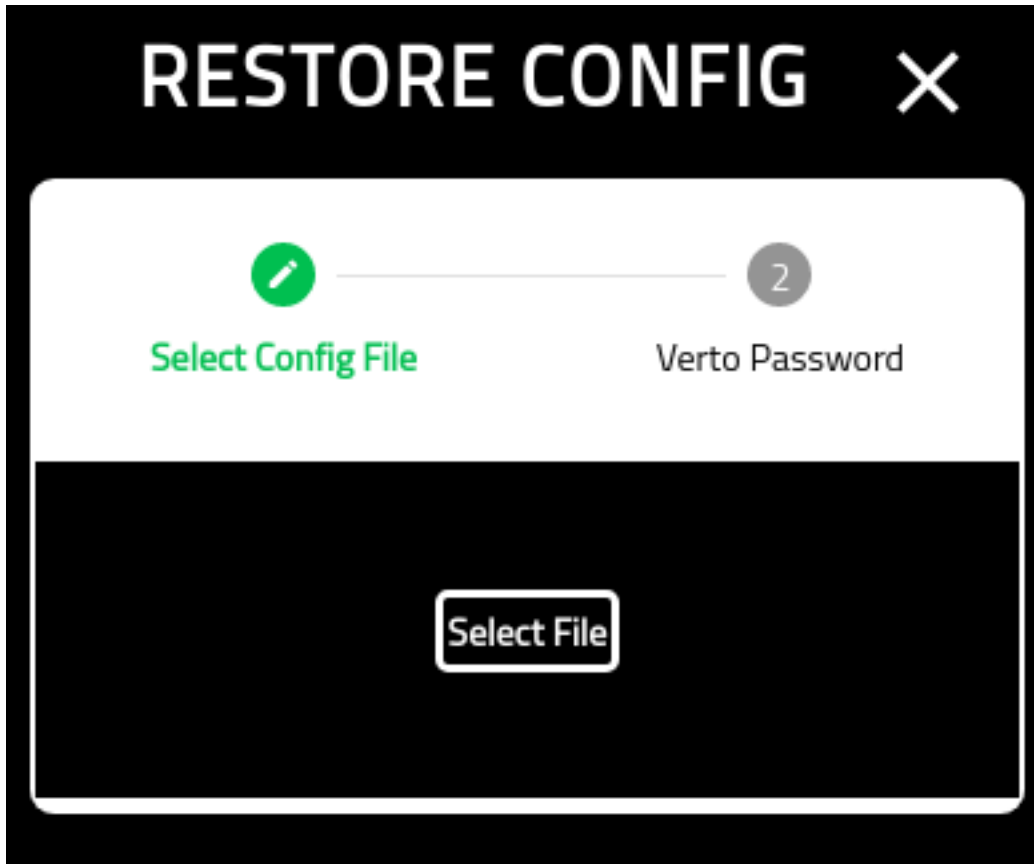
### About

This page provides details on using the restore config page.

## Choose File

On the first panel, you must select the file from which you wish to restore Vero.

Click the 'SELECT FILE' button to choose the file.



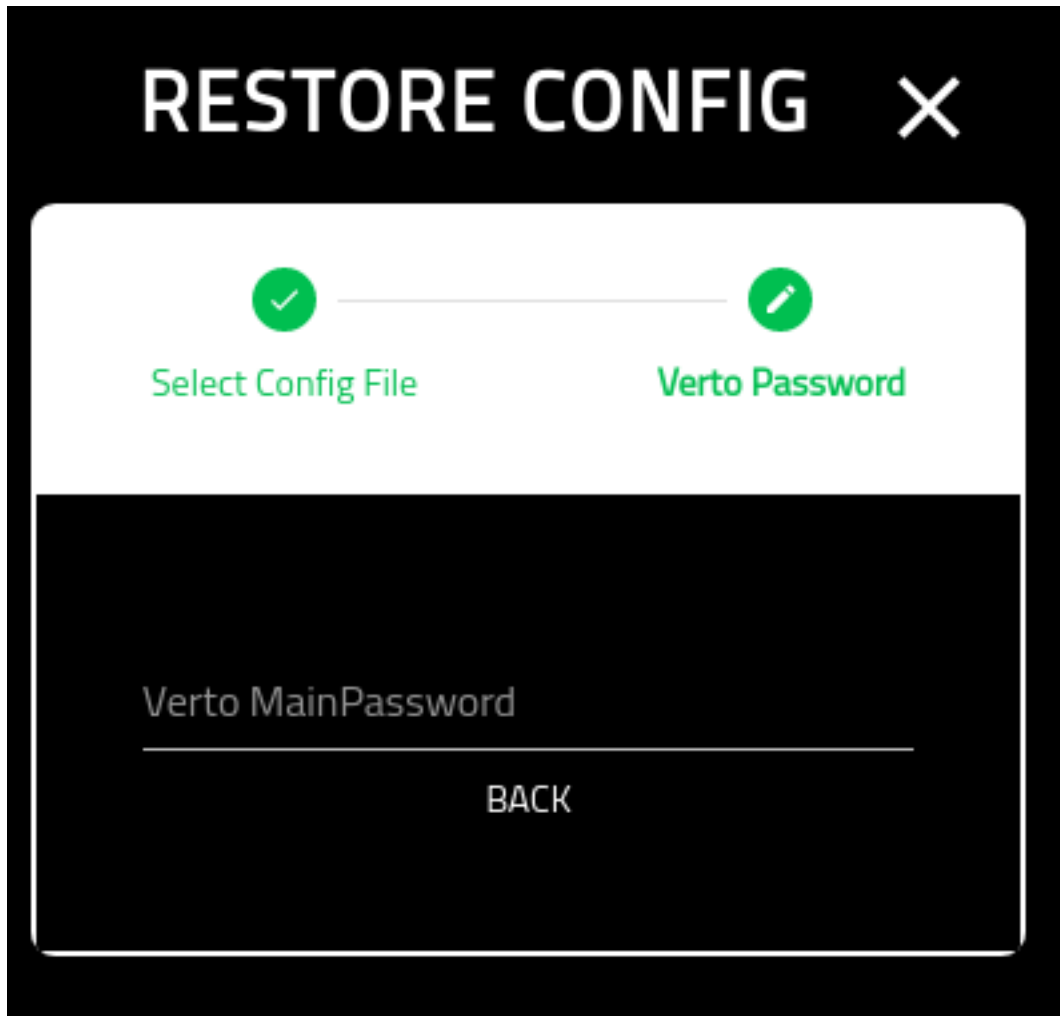
You will be provided with a system file explorer to choose the file.



## Verto Password

On the final screen you must put in your Verto password.

Note that this is the password of the config you are restoring. It may be different than the one you are currently using.



Once completed, you will be redirected to the Settings screen.

## 1.5 Get VTX

### 1.5.1 About

This page provides a high-level overview for qualified investors who are seeking to get vtx.

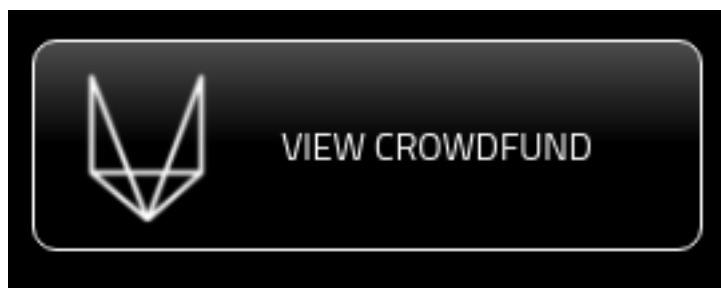
In order to Get VTX, you must:

1. Associate your Verto public key with Blocktopus.
2. Successfully KYC with Blocktopus.
3. Get Whitelisted

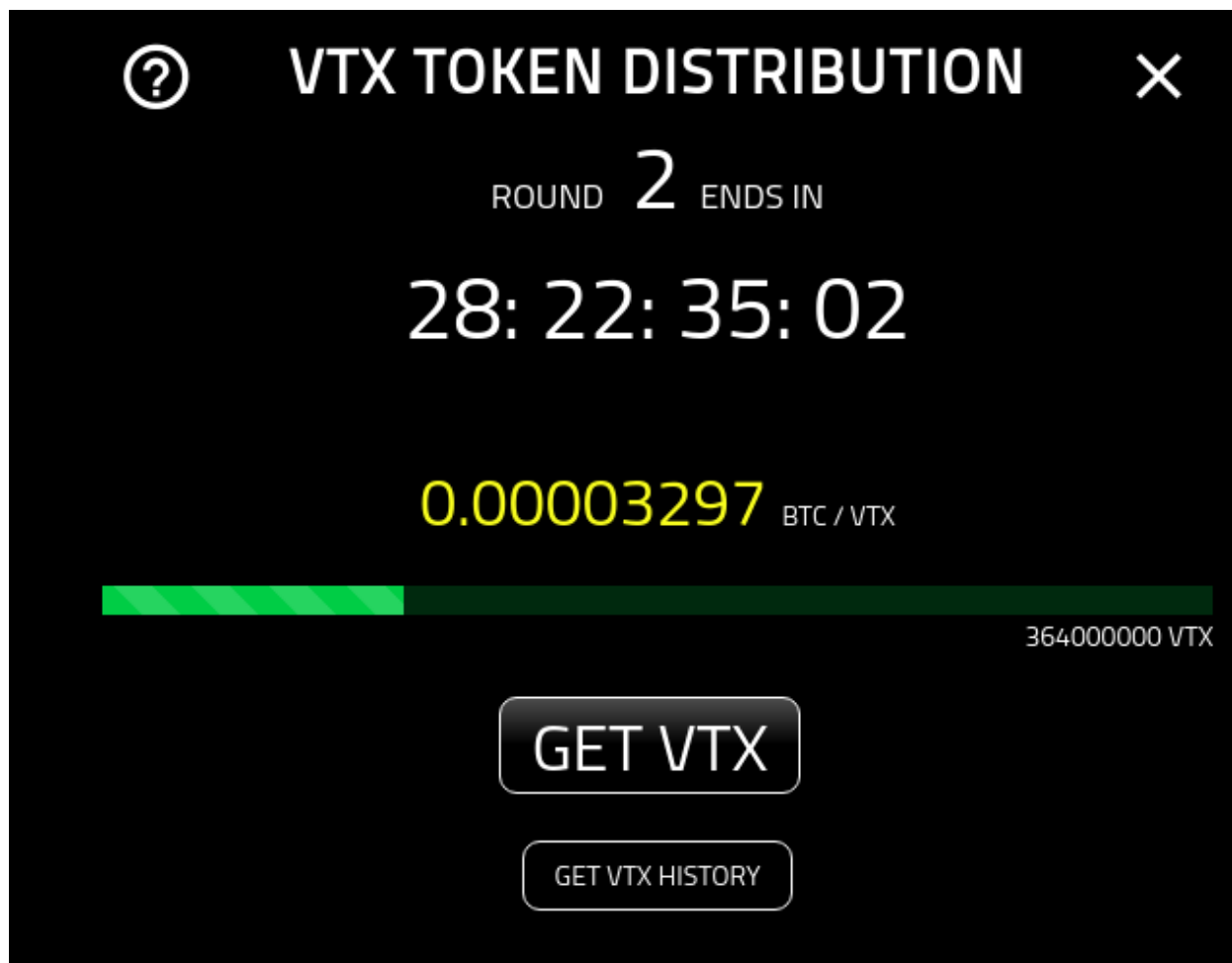
### 1.5.2 Starting Out

You can navigate to the Crowdfund summary page from your wallet. Click the 'View Crowdfund' button.





Once you have selected to View Crowdfund, you will be directed to the Crowdfund summary screen.



You are presented with two options:

1. Get VTX: Use a native chain to get your own VTX.
2. Get VTX History: To see the history of your transactions.

To know more about the transaction history page, please see the following:

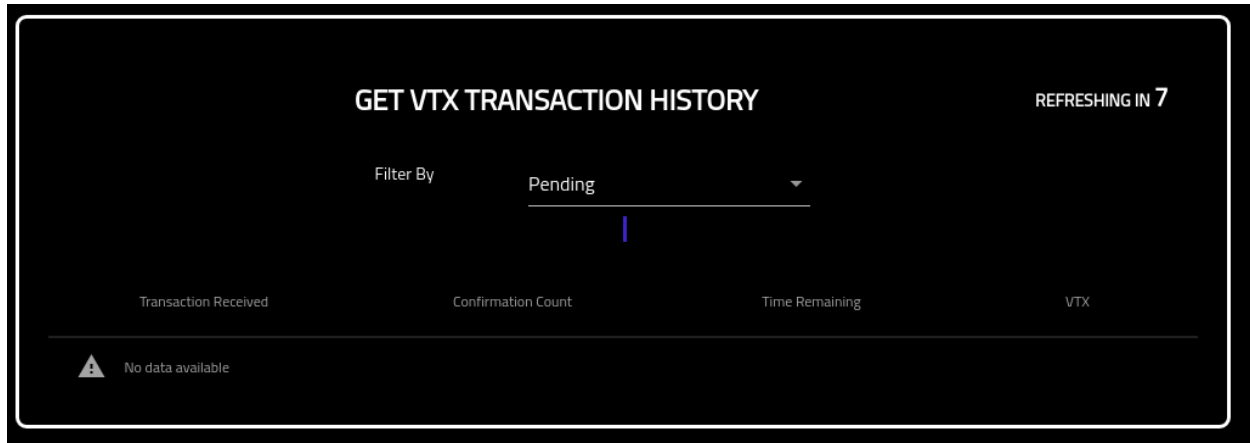
### **View History**

### About

This page provides an overview of viewing your Get VTX history.

In short, when getting vtx, the transaction must go through various stages before being allocated and attested on the ledger. For example, we need six block confirmations before finalizing the transactions. This page provides the auditing necessary for you to monitor your transaction through the system.

You will be presented with the following on entering this page.



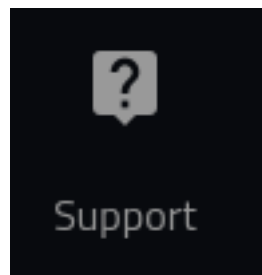
You can toggle the statuses to see current as well as previous transaction histories.

The stages of a transaction are detailed below.

### Stages Of A Transaction

The process of getting VTX has multiple stages. They are:

1. Cancelled: The transaction has been canceled.
2. Pending: The transaction has been received and viewed on the native chain, however, it has not yet been confirmed.
3. Accepted: The transaction has been confirmed and is in the process of being written to ledger. Please note that this is a very quick phase. If your transaction remains in this phase for any period of time please notify the Verto team. You can notify the team by clicking the Support button on the left hand navigation.

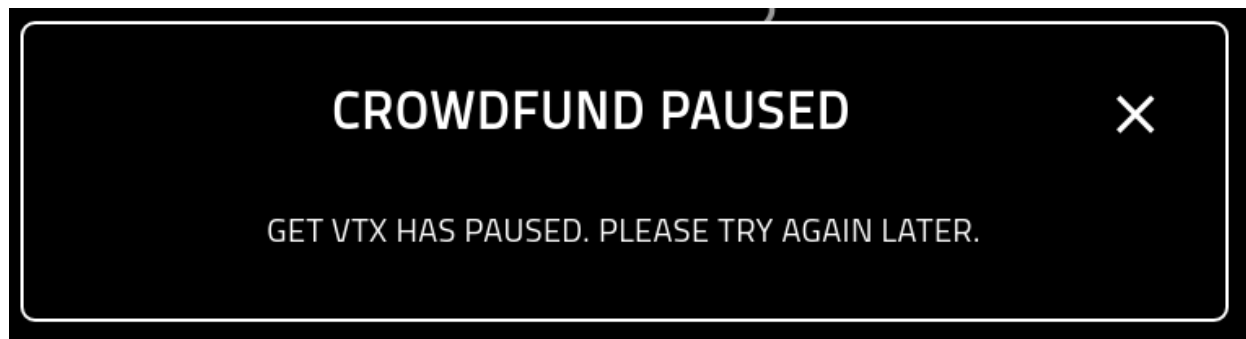


### 1.5.3 Status

In order to get vtx, you must be a qualified investor that has KYC'd as well as been selected for whitelist. By selecting the 'Get VTX' button, you will be guided through the process.

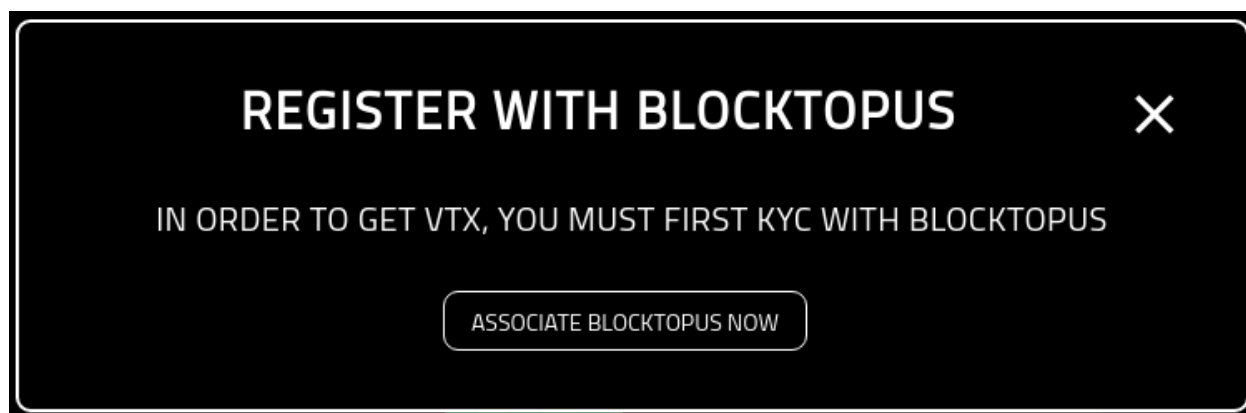
### Paused

In the event that crowdfund has been paused, you will receive the following screen.



### Wallet Not Associated

You must first associate your wallet as well as create an account on Blocktopus. If you see the following message, simply click on the 'Associate Blocktopus Now' button and you will be redirected to the Associations screen. From there you are able to create or associate an account with your Verto public address.



### Waiting For KYC

If you see the following screenshot, it means that the wallet is associated with Blocktopus, but has not yet been approved.

If you are experiencing a delay, please reach out to the Blocktopus team for assistance.

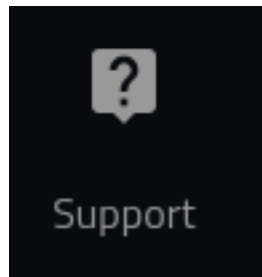


### Waiting Approval

Once KYC'd, you may still need to be approved by the team. If you see the following message it means you have not yet been approved

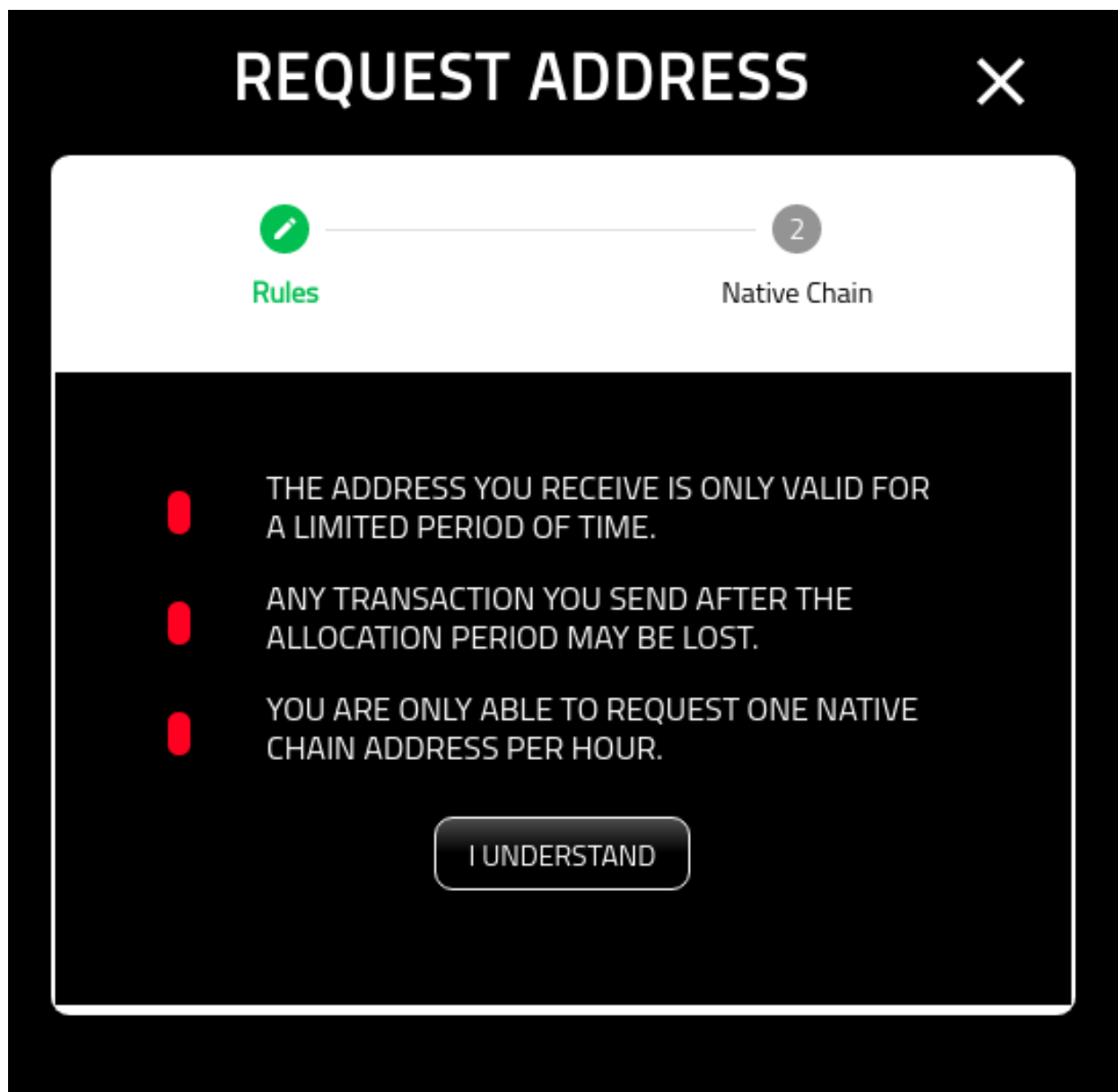


If you are experiencing a delay, please reach out to the Verto team for assistance. Simply click the 'Support' button on the left hand menu.



### Approved

If you have completed the process, you will be re-directed to the 'Request Address' screen and are now ready to get vtx.



For more information on requesting an address, please see the following:

## Request Address

### About

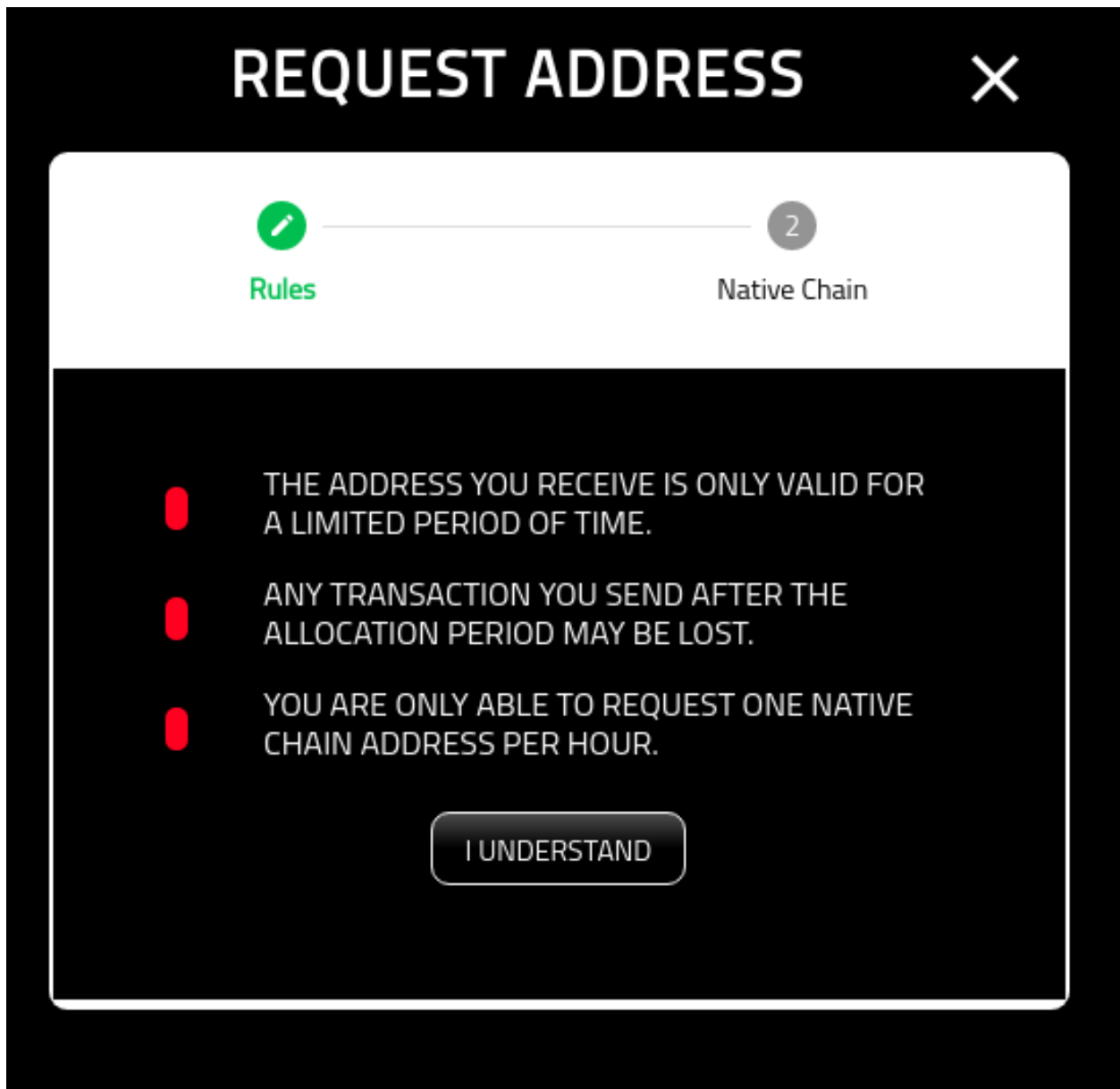
This page provides an overview if requesting an address for Crowdfund. This address, once allocated will be used to send tokens to.

Note that:

1. Addresses are only good for 15 mins
2. You can only get one address an hour

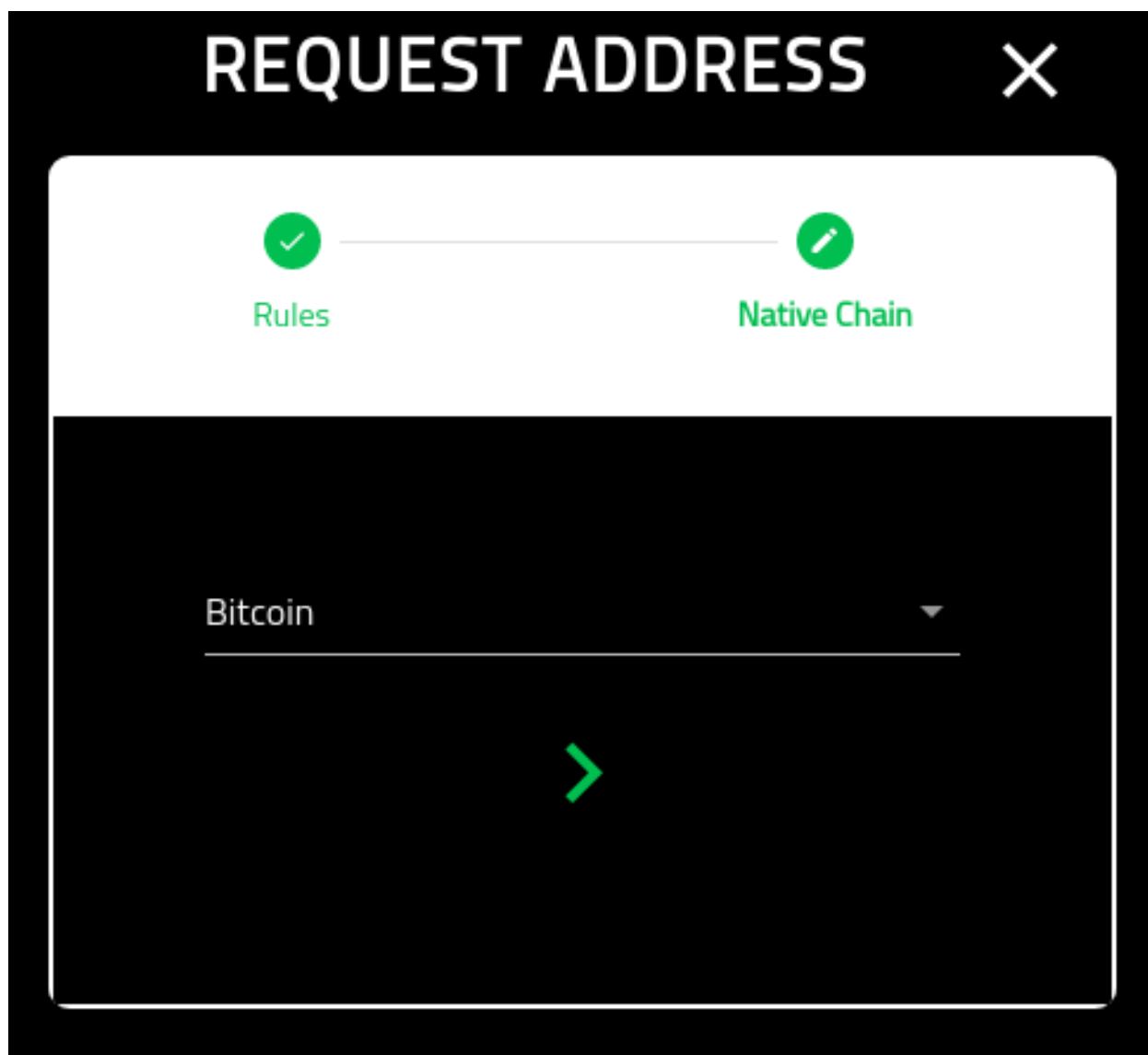
## Summary Screen

You must first agree to the terms before having an address allocated for you.

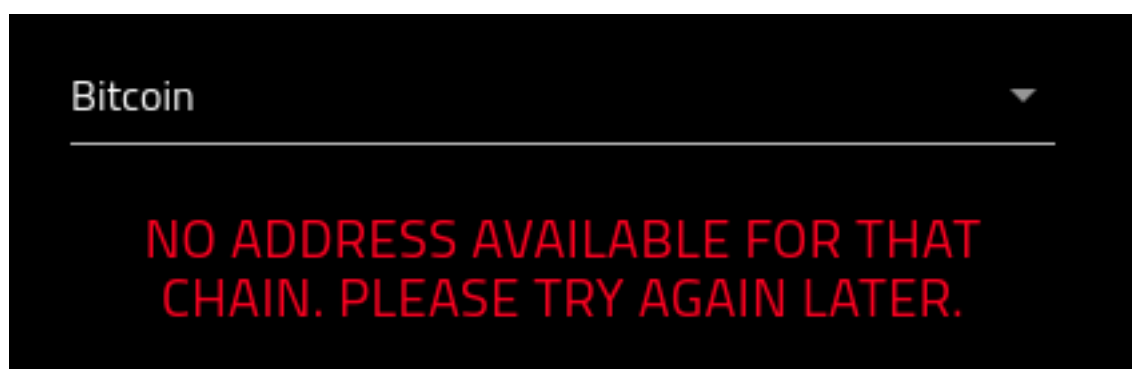


## Get Address

Once you agree to the terms, you will now be able to claim an address.



In the event that no address is available, you will be presented with the following error message.



If you are successful, you will be directed to the screen with you allocated address.

For more information on using the allocated address, please see the following:

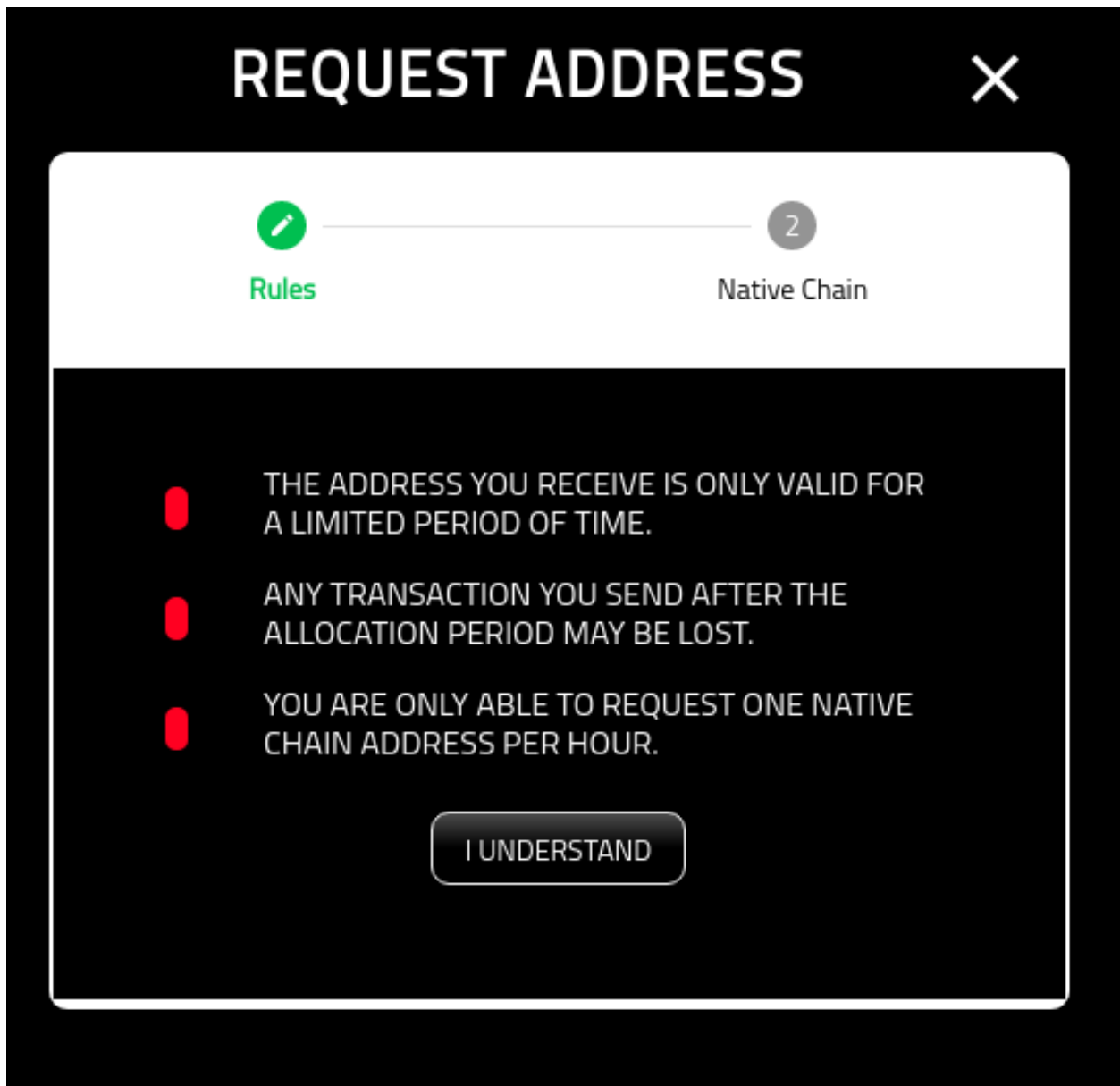
### Claim VTX

#### About

This page provides an overview if requesting an address for Crowdfund. This address, once allocated will be used to send tokens to.

#### Address Display

The following is what you are presented with once an address has been allocated.



On the left is the QR code of the allocated addresses public key. Also on the page is the time available to use the address. You will also note the copy button.



At this point you can use your native wallet of choice to send tokens to the publically allocated address.<sup>4</sup>

### Times Up

Once you run out of time allocated to you for the address, you will be presented with the following screen.



## 1.6 Wallet

asdsa

### 1.6.1 Make Payment

sdas



## 2.1 Vision Document

- *Vision*
- *Principles*
  - *Principle 1: Anonymity*
  - *Principle 2: Sovereign Identity (SI)*
  - *Principle 3: Decentralized*
  - *Principle 4: Extensibility*

### 2.1.1 Vision

Easy Anonymity.

### 2.1.2 Principles

From day one, we have stuck to a few principles that drive decisions for integrating value into Verto. These principles are founded on the need to ensure users remain anonymous on the network. At times, this made the work more difficult. It would be easy to solution using common patterns for more user friendly workflows when the business asks for them, however, by agreeing on principles at the outset of the project we are able to ensure the integrity, and final vision, of Verto remains intact.

#### Principle 1: Anonymity

The user must remain anonymous on the network in as much as is possible. In order to do that, the following rules apply:

1. All configuration data is the responsibility of the user

2. Verto does not not track the users usage
3. Only the Verto public key is shared with integrated services by default
4. Users decide what services are integrated into the wallet

### Principle 2: Sovereign Identity (SI)

The idea of SI needs to be a first class citizen within Verto, however, as most services will manage their data themselves, we must also accommodate centralized services as well. In order to accomplish this goal, Verto passes in the Verto public address of the current wallet to integrated services. In this fashion, centralized services can leverage the public id to associate themselves to a Verto user.

### Principle 3: Decentralized

As with Principle 2, we need to face the realities of the world we live in. While running, Verto requires no centralized service as all the configuration information is managed by the user on their device(s). However, we are still using centralized services like Github for version updates and S3 for web hosting. Overtime we expect to overcome these shortcomings in order to provide 100% decentralized utility.

### Principle 4: Extensibility

Everyone seems to want to make a wallet for their DApp. Verto is envisioned to allow third party developers to write plugins that further extend the value of Verto even from communities outside the Volentix ecosystem. It will also be able to protect the users from nefarious integration through an extensive governance process and cryptographic proofs.

## 2.2 Core Concepts

The following document provides the core concepts behind the Verto. Note that these core concepts are inline with the three main principles outlined in the [Vision](#).

### 2.2.1 Config

The config information for Verto, and its associated data, can be found in the `vertov.config` file on your local operating system. Its contents are the responsibility of the owner and are never stored into a centralized service.

Note that this configuration information is designed to be extendable as the wallet begins to take on more features. For now, the focus has been on each wallet and its configuration, as a result, all the configuration can be found in the `keys` label. Each key has their configuration contained within it. However, going further, and especially once the sovereign identity management system gets more verbose, we would expect more top level elements begin to take shape in the config file.

The following shows the configuration as of the time of writing. Note the keys with `//` are considered comments for clearer context but do not appear in the decrypted file.

```
{
  "keys": [
    {
      "name": "Wallet Name",
      "type": "vertov/vtx/btc",
      "key": "PUBLIC_KEY",
```

(continues on next page)

(continued from previous page)

```

    "defaultKey": true,
    "associations": [
      {
        "name": "Zixipay/Blocktopus/Venue",
        "createTime": "2019-04-03T19:00:26.164Z"
      }
    ],
    "//": "This is opt in and can be removed by the user at any time.
↪",
    "//": "Note that the private key is encrypted even after the_
↪verto.config ",
    "//": "has been decrypted. This is additional security for the_
↪private key.",
    "privateKeyEncrypted": {
      "iv": "uBkNBWS6hgmoJ0zU2vDaXw==",
      "v": 1,
      "iter": 10000,
      "ks": 128,
      "ts": 64,
      "mode": "ccm",
      "adata": "",
      "cipher": "aes",
      "salt": "uX9mUzihxaA=",
      "ct": "PokVS37fX4+izqVGy6vJhnbS50kJzxJTswul8d0LFA2cQ/....."
    }
  }
]
}

```

For more details about the configuration management of the system, please see the file *src/util/ConfigManager.js*.

## 2.2.2 MultiPlatform

Currently, Verto is supported on the following platforms:

1. Windows
2. Mac
3. Linux
4. IOS
5. Android
6. Web

For the most part, the application has no differences between platforms, however, as the config information is capture on the host machine (influxdb on the web), the mechanics for retrieving the information is managed per environment. For details on how this is accomplished, please refer to the *src/util/platformTools/index.js* file.

## 2.2.3 Web?

Verto has a web site for anyone to use, however, it does have one main shortcoming in that it, for now, must be hosted from a centralized S3 bucket, however, it is intended that the website be migrated to a more decentralized service (like IPFS) in the near future.

If you have any thoughts about how to decentralize the web based delivery, [please contact the team on Discord](#).

## 2.3 Sovereign Identity Architecture

In order to begin the documentation process, the following notes were taken out of the roadmap document in favor of collating them here for now until this document is extended.

**Specs** The more post MVP will provide access to other SI networks. So it is noted that the MVP holds compliance with the [W3C spec on digital identity](#). Additional reading includes the [Sovrin Whitepaper](#) as well as its underlying specification for [JSON-LD](#)

It was also mentioned, that 3rd party applications will need to publish their own JSON-LD files to be included in the marketplace. This must be considered as the [curators](#) will need to manage their data based on the JSON-DL spec. Note that the spec must be able to import, or extend, other specs as well

**Storage** Current thinking is to use [GunDB](#) graph database as the mechanic to store and secure data. An issue that needs to be resolved is on the mechanic, using the decentralized mesh of GunDB, we can isolate data sharing without broadcasting it to the whole network. Meaning, if:

1. We have 3 users on the network. UserA, UserB, and UserC.
2. UserA is friends with both UserB and UserC
3. UserB and UserC do not share data

In this scenario, data from UserB **MUST NOT** be copied, even if it is encrypted, onto UserC storage or vice-versa.

One way is to have separate graphs for different shared data and personas. . . not sure of the expense of doing that. Additionally, should this approach be taken, we could have update graphs and security graphs. . .

Another thing that was brought up was being able to multi-sig data. For example:

1. Three users exist. One is the original owner of the data.
2. The user wants to back up the data and replicate it, encrypted, but on 2 of their friends graphs
3. In the case of emergency, the two friends would be able to unlock the data. But one of the friends, without the other friend, will not be able to open and view the data.

**Personas** Multitenant Persona Management (DID. . . the work you, the friend you, the brother you)

### Misc

It was recommended to look at the ZeroMQ guys stuff for [some ideas on the management of data](<http://zguide.zeromq.org/page:all>)

## 2.4 Webview Vrs Electron

- *Intro*
- *What Is Webview*
- *Size Matters*
- *What Do We Gain*
- *What Do We Give Up*
- *Where Is The Line*
- *And The Others*

### 2.4.1 Intro

The current version of Verto runs on [Electron](#) for desktop applications. While this has been the industry trend, we have also seen some cracks emerge. As a result, a new pattern of using [Webview](#).

### 2.4.2 What Is Webview

Webview is a layer lower down than the Electron Chromium. It is more native and will give us much more control on the features and security we can integrate into the application. The issues with webview is that many of the features found in Electron will need to be rebuilt ontop of webview.

Think of Webview as a lower-level and just about presenting application user interfaces in browser-based windows. Webview also supports C and C++ in addition to Golang and also exposes bindings for other languages like Rust and Haskell. This library supports not only Chrome/Chromium but also working on Windows' MSHTML and other WebKit coverage.

### 2.4.3 Size Matters

The more code you write and ship with the more likely you are to have issues later on with regards to consequences you had not intended. With this in mind, the size of the respective platforms are, approx:

1. **Electron:** 50Mb
2. **Webview:** 5Mb

### 2.4.4 What Do We Gain

Besides a smaller code base, and a friendlier user experience, especially at the edge of the network, going towards webview provides us with a lot more security. Because we will need to write the wrapper to webview, we will also be able to control the sandboxing and intercommunication of applications. Something that Electron does not do easily. This is important for the additional features like the sovereign identity platform as well as third party plugins.

The long and the short of it is, we get better security that will protect our users and their investments.

### 2.4.5 What Do We Give Up

Convenience. Webview requires us to write a wrapper to use it. This is great because we can limit the amount of functionality available, however, it comes at the cost of engineering.

Additionally, as has been mentioned in other places, Webview also requires autoupdaters to be written since that function, native to Electron, does not exist on this platform.

### 2.4.6 Where Is The Line

We will need to decide who is responsible for what aspects from a logical perspective. For example, it makes sense that Quasar has a build plugin, native to Quasar, that others, outside of Verto may reuse.

### 2.4.7 And The Others

Other platforms to consider:

- [NW.js](#)

## 2.5 Build Pipeline

- *Intro*
- *Platforms*
- *Release Management*
- *Targets*

### 2.5.1 Intro

This is a fairly simple one. We need to ramp up our CI server strategy. Currently, we have Verto building on CircleCi, however, it has been neglected and is in need of a little TLC.

### 2.5.2 Platforms

Verto supports many platforms, and as a result, the builds for iOS, at this time, will need to be conducted manually, at least the code signing will. Additionally, platform specific testing is not really in scope. This is due to an impediment with CircleCI and the propriety nature of Apple.

### 2.5.3 Release Management

Due to the platforms issue listed above, we will not be able to have a completed automated build env. that can also be leveraged as a release manager. Just to note, as it was above, Apples processes and restrictions make it overly prohibited to have an end to end release management strategy. Ideally, sometime in the future, we will be able to overcome these restrictions.

### 2.5.4 Targets

The V1 version of the build will include the following targets:

1. Linter
2. Automated Security Audit
3. Test Suite
4. Build Artifacts

Out of scope for the first version:

1. Release Management
2. E2E
3. Platform specific testing

## 2.6 Plugin Architecture

The following contains the system architecture for plugins within Verto.



### 2.6.1 Notes

As the MVP plugin, it is recommended to take an existing feature of the wallet (such as change password) and refactor it to be a plugin. In this way, we will not need to depend on any third party service provider.



Here are some common questions about Verto

### 3.1 Before You Begin

This FAQ does not provide any walkthroughs of Verto capabilities. If you are looking for instructions on how to use Verto, please refer to the [Tutorials](#).

For technical details on Verto architecture, please refer to [Architecture](#).

### 3.2 Reporting

If a question or tutorial you need has not been provided, please hit us up on [Telegram](#).

### 3.3 Questions

#### 1. What is Verto?

Verto is envisioned to be a web interface for aggregating various capabilities for the newly emerging Decentralized service economy. Its core capabilities include integration with Volentix assets, however, it also leverages services outside the ecosystem.

#### 2. Is Verto a wallet?

Yes and no. It supports wallets, however, it also supports additional features such as multi-currency management, sovereign data management, service integration management, and other features.

In short, you can think of Verto as a portfolio management system.

#### 3. Who is building Verto?

The original design and version 1 of the wallet are being built by VolentixLabs. A Volentix partner. Volentix Labs is located in Montreal Canada.

#### **4. Where is my data stored?**

Your data is stored locally on your device. Additionally, this data has restricted access controlled by you. Share the data you want with the services you want.

For ease of migration, you can move download a copy of Verto.

Note that it encrypted at rest and only accessible with a password.