



User Guide

Version 1.1





Table of Contents

<u>Introduction</u>	3
<u>Registration</u>	4
<u>Login</u>	6
<u>How to install?</u>	9
<u>Key Exchange</u>	12
<u>Encryption</u>	14
<u>Decryption</u>	16
<u>Cloak</u>	17
<u>Decloak</u>	18
<u>Shredder</u>	20
<u>Disk Wipe</u>	21
<u>Clipboard</u>	22
<u>Settings</u>	26



Introduction

VX-Lock is a comprehensive encryption utility based on the best PKI technologies using Elliptic Curve Cryptography (ECC) and Advance Encryption Standard (AES). It provides easy-to-use encryption functions to prevent your confidential files from being viewed or hacked by unauthorized person(s).

File Security

- **Key Exchange**

Key exchange is the process where you will share your public key and profile with your friends who are **VX-Lock** users.

- **File Encryption and Decryption**

Encrypt and decrypt any type of file format(s) in your computer. You can encrypt files for your own viewing or to be viewed by person(s) that you have authorized.

- **File Cloaking and Decloaking**

File cloaking adds an extra layer of security apart from using encryption alone. It hides your files behind an ordinary-looking file such as pictures, sounds and videos, therefore, bypassing unsuspecting interceptor(s).

- **Shredder**

Normal file deletion does not execute permanent file deletion like deleting file via windows recycle bin. Those files can be retrieved by using forensic software or data recovery applications. On the other hand, **VX-Lock** secures deletion by permanently deleting the files.

- **Disk Wipe**

Disk Wipe performs a low-level overwriting into the free sectors of your hard disk. Disk Wipe acts as an additional protection against data recovery software that might be able to recover files that have been shredded alone.

- **Clipboard**

Clipboard allows you to encrypt/decrypt which you copied to it. This feature is extremely useful when you want to share a text message via instant messaging apps such as WhatsApp, WeChat, Telegram, KakaoTalk, Line and Zalo to your friend securely.

VX-Lock employs encryption technology based on approved algorithms by world cryptography community and **FIPS** (Federal Information Processing Standard) of the US, which are **ECC** (Elliptic Curve Cryptography) for key agreement and **AES** (Advance Encryption Standard) for encryption. Besides that, we also use our own **PKID** technology (Patent Pending - PI20031745) for greater security.



Registration

If you just installed the app freshly, you need to register yourself so that your public key can be generated for yourself and shared with your friends.

Registration – Step One

Enter your Name and email address. Note that an email address is mandatory and you must enter a valid email address. OTP will be sent to your email address. After filling in the name and email address, click on “Send OTP” so that server can send you the OTP to your email address.

The screenshot shows a mobile application window titled "Register" with a close button (X) in the top right corner. The background is dark blue. At the top center is the VX-Lock logo, which consists of a shield with a stylized 'V' and 'X' inside, followed by the text "VX-Lock". Below the logo, the text "Please register to continue." is displayed. Underneath that, it says "Step one of three". A yellow "Note:" follows, stating: "An OTP (One Time Password) will be send to the given email address. Please make sure that you give correct email address." There are two input fields: "Full name" and "Email address", each with a white underline. At the bottom, there are two buttons: "Cancel" and "Send OTP".

Registration – Step Two

You will receive the OTP in your mail box. Please, check your Spam/Junk folders also. Enter the OTP and click on “Next” button.

The screenshot shows the same mobile application window titled "Register" with a close button (X) in the top right corner. The background is dark blue. At the top center is the VX-Lock logo. Below it, the text "Please register to continue." is displayed. Underneath that, it says "Step two of three". The text continues: "Your OTP (One Time Password) has been sent to your email id demo.three@vx-lock.com. Check your Spam/Junk box as well." There are three input fields: "Demo User Three", "demo.three@vx-lock.com", and a field with six dots (••••••) for the OTP. At the bottom, there are two buttons: "Back" and "Next".



Registration – Step Three

Fill in your mobile number and choose your desired access code (minimum length should be eight characters) and click on “Register” button to complete your registration process.

The screenshot shows a registration window titled "Register" with a close button (X) in the top right corner. The window has a dark blue background with the VX-Lock logo at the top. Below the logo, it says "Please register to continue." and "Step three of three". The form contains several input fields: a text field with "Demo User Three", a text field with "006145678903", a text field with "demo.three@vx-lock.com", and two password fields, each with eight dots representing masked characters. At the bottom, there are two buttons: "Cancel" and "Register".



Login

Enter your access code and click on “Login” button.

Note: For the first-time user, the default password is “12345678”. It is highly recommended to change your default password.

Check the box “Remember access code for this session” so that it won’t prompt you to enter your access code for Decrypting and Decloaking processes.

VX-Lock Login

VX-Lock

Please login to continue.

demo.three@vx-lock.com

.....

Remember access code for this session

Login Cancel

If the entered access code is correct, it will take you to the OTP verification by reading secure QR Code with VX-Lock mobile app.

VX-Lock Authentication

VX-Lock

Escanee el código QR con la aplicación móvil VX-Lock e ingrese la OTP.



.....

Verificar Cancelar

Login to your mobile application and click on “Scan QR Code”.

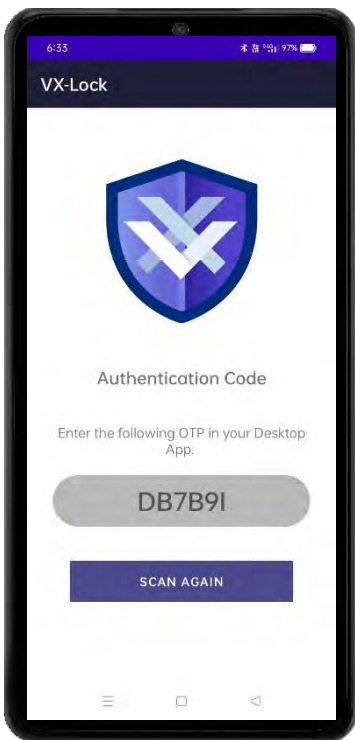


Focus on the QR Code displayed on desktop.





After the successful scan, OTP will be displayed on screen.



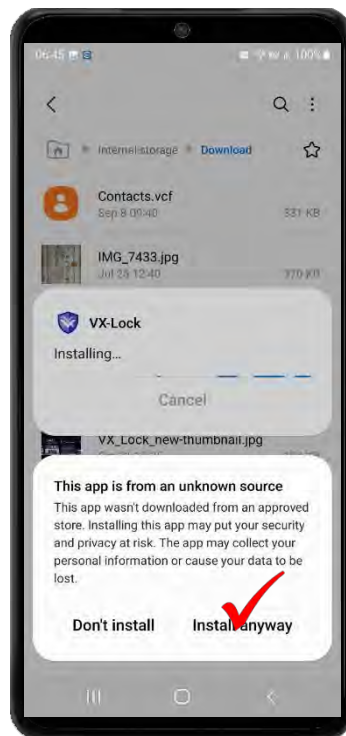
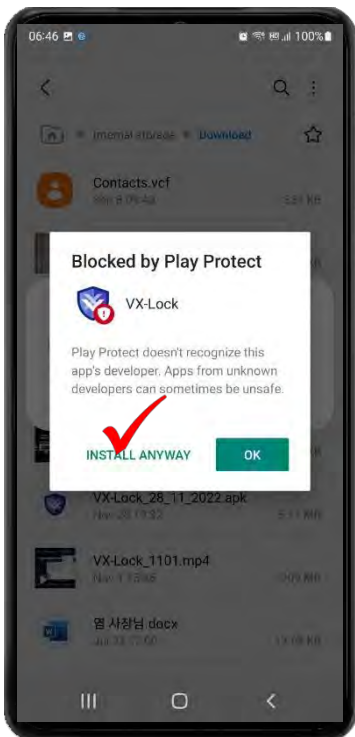
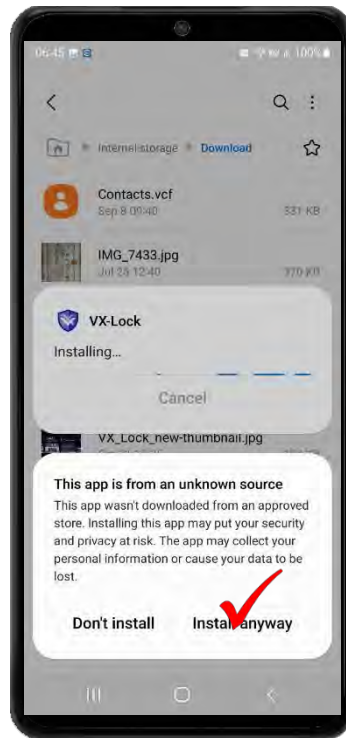
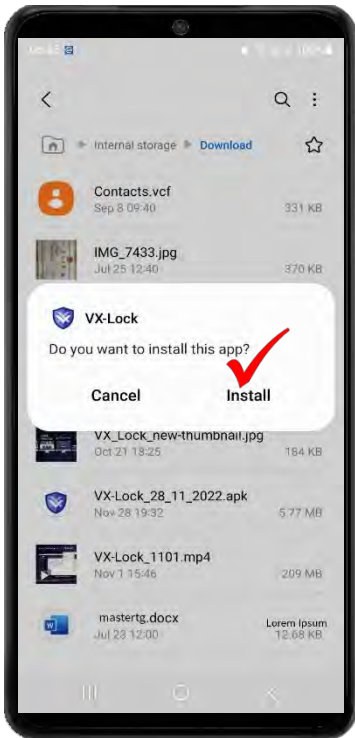
Enter the OTP in desktop app and click on "Verify" button. Then, it will take you to next screen.

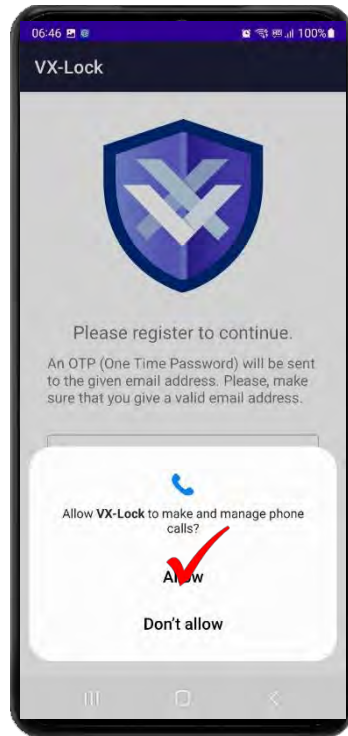
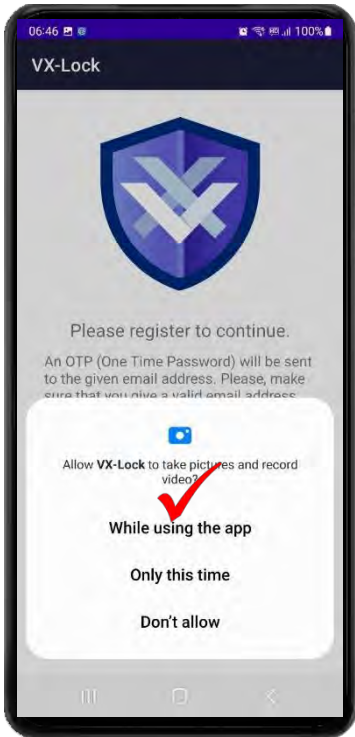




How to install?

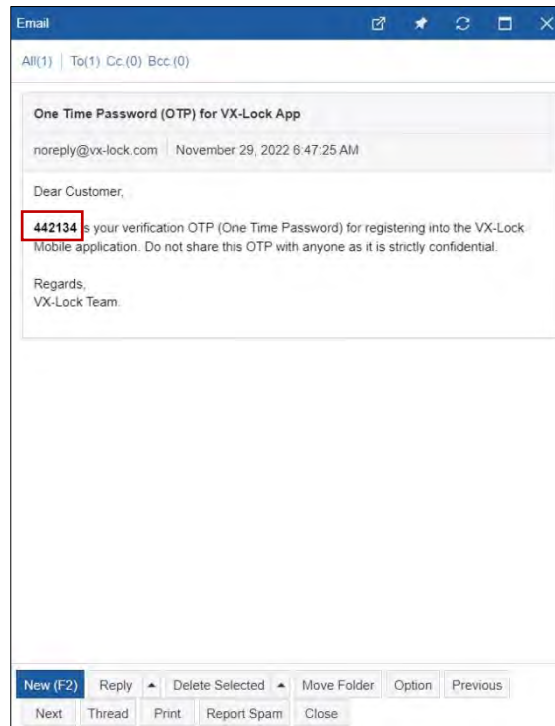
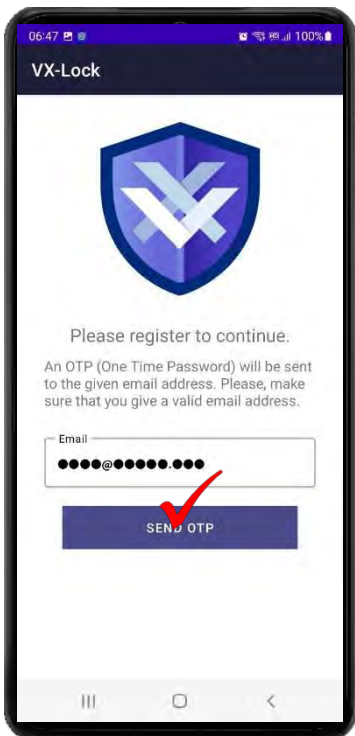
First of all, download the App from the official website, www.vx-lcok.com. Then, install the App on your smartphone like the following.





Send OTP

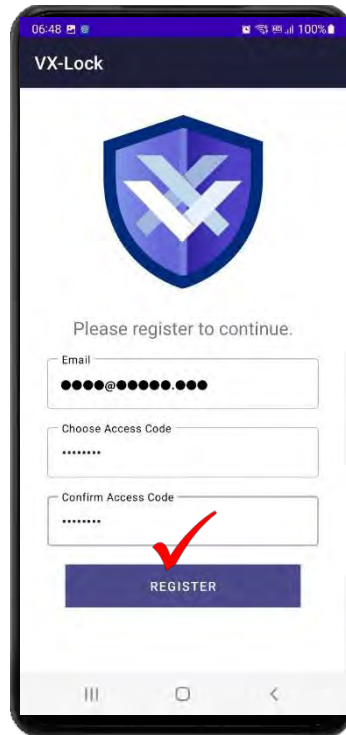
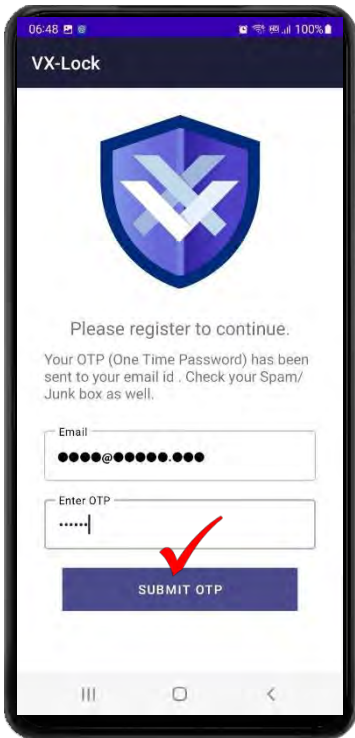
Input your email address, and click on SEND OTP button. Then, OTP will be sent to your email account.





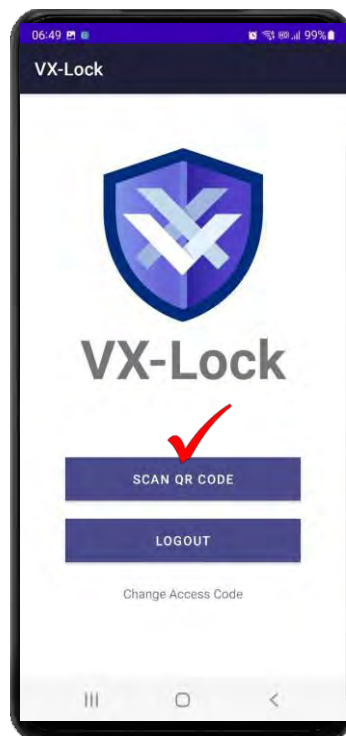
Submit OTP & Register

Input the OPT and submit it. And enter your own access code and register.



Login & Scan QR Code

Login by entering Access Code and click on SCAN QR CODE button to scan the secure QR Code.





Key Exchange

Key Exchange is the first process of utilizing **VX-Lock** App. It is to communicate securely with other **VX-Lock** users. You need a copy of their public key and they need yours. Your public key is just a block of text, so it's quite easy to share your keys with someone. A list of all your friends with whom you have exchanged your public key will be displayed here.

First, export your public key. **VX-Lock** will export your public key to a file of **xxxxxxxx.pkid** which you can send via e-mail by attaching it or you can transfer it using a **thumb drive**. Once the recipient receives the key, she or he will import your public key.

Import allows you to import your friends' public key and profile shared through file.

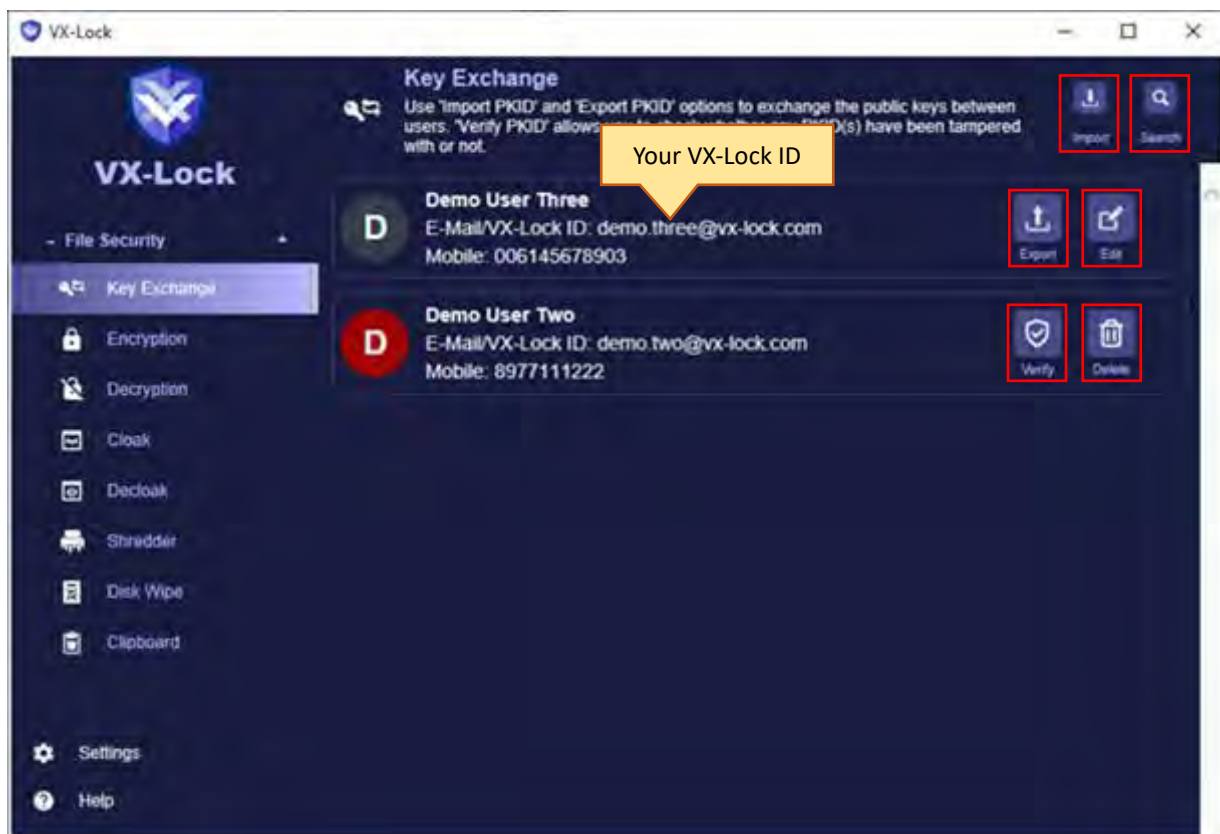
Search allows you to search for your friends' **VX-Lock** ID and import their profiles directly. This process requires internet connection.

Export is used to export your public key and profile to a file which you can share it with your friends.

Edit allows you to edit your profile except for your email address.

Verify allows you to check if the public key of a particular user tampered with or not.

Delete is used to delete the profile & public key of you friend that you selected.



To export PKID:

1. Click on "Export" button on the Key Exchange page.
2. Select the folder location to export the PKID (public key) & Profile.
3. Share the PKID (public key) file (xxxxxxxx.pkid) with your friends.

To Import PKID:

1. Click on "Import" button on the Key Exchange page.
2. Select the received public key and click on "Open" to import PKID.
3. Your friend's profile will be imported and the same will be updated in the Key Exchange page.



To Delete the PKID:

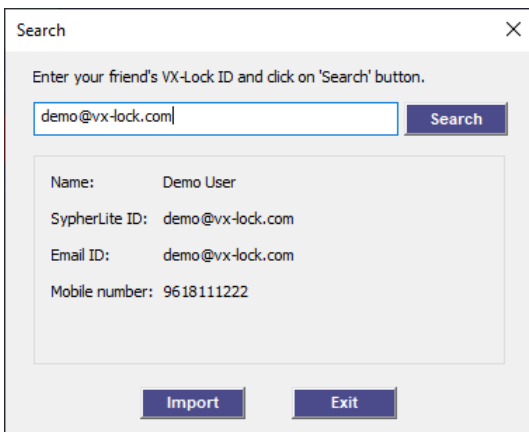
Click on “Delete” button which is next to your friend’s profile which you want to delete. A confirmation message box will be displayed and click “Yes” button to confirm deletion.

To Verify the PKID:

This function is to verify the PKID, and ensure that the PKID was not tampered with. Click on the “Verify” button next to the friend’s name to verify PKID.

Search & Import:

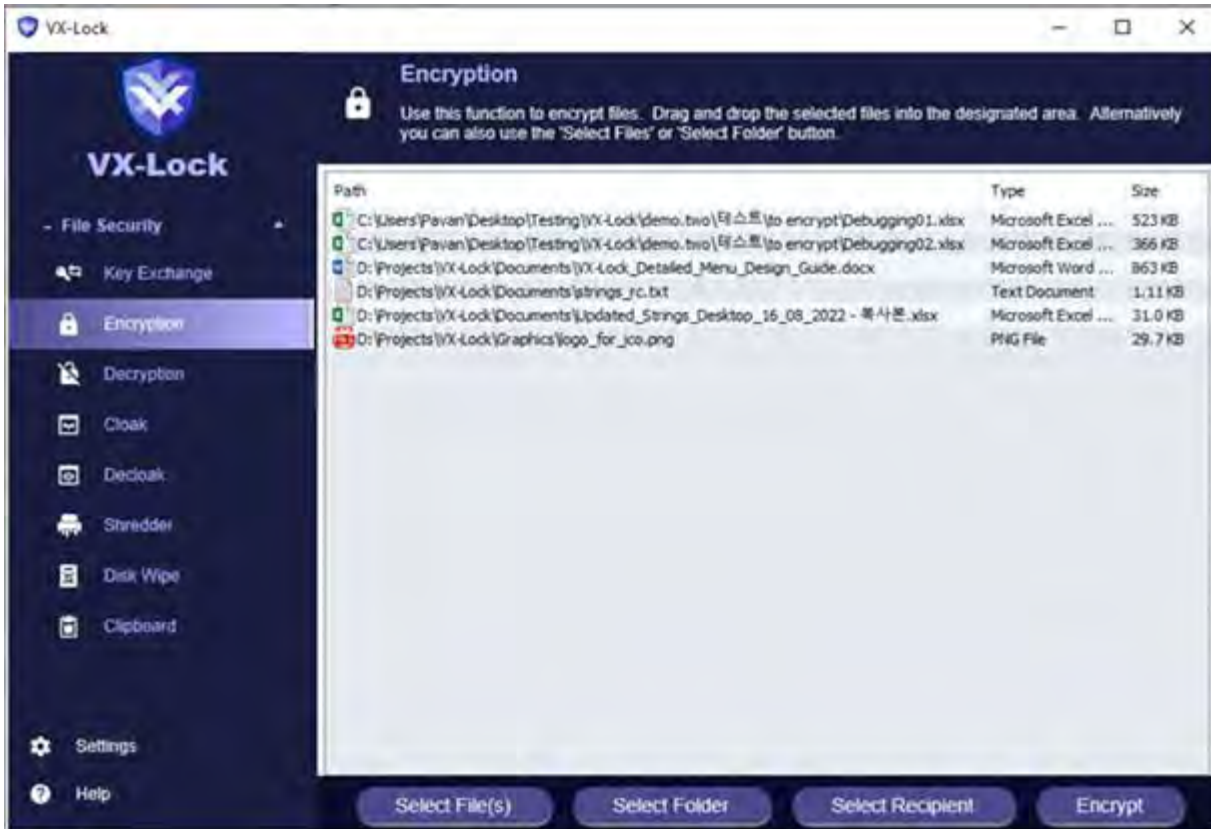
Enter your friend’s **VX-Lock** ID and click on “Search” button, it will display your friend’s profile below, check the name and mobile number and if they are okay click on “Import” button to import your friend’s PKD & Profile.





Encryption

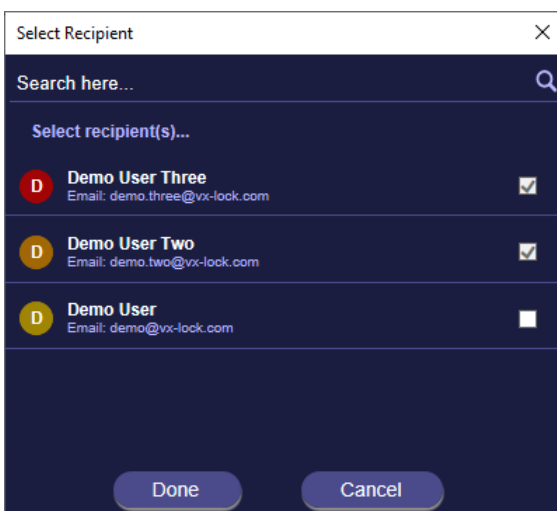
Encryption is a process to cipher(scramble) the contents of your file in a way that render it to be meaningless if opened by an unauthorized person(s). By encrypting a file, you change the matrix of its original form until it is decrypted by yourself or the person(s) that you have authorized to do so.



You may choose either one of the followings to encrypt the file(s) or document(s):

1. Drag and drop the file(s) or document(s) into the **VX-Lock** interface page;
2. Click on “Select File” button to browse and select the file(s) or document(s); or
3. Click on “Select Folder” button to browse and select the folders.

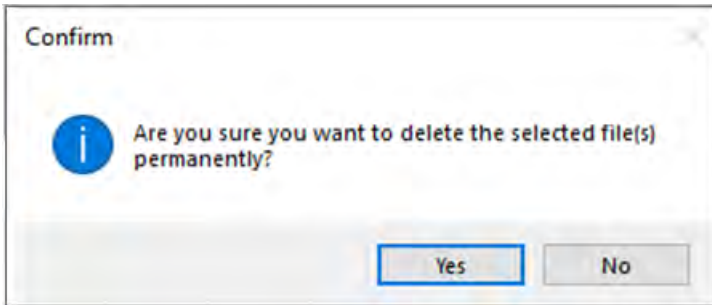
Now, click on 'Select Recipient' button to select the recipient(s).





After selecting the recipient, click on “Done” button.

Now, click on “Encrypt” button to encrypt selected file(s) or folder(s) to your selected recipient list. After the successful encryption, you will be asked whether to delete the original file(s) or not. Click on the 'Yes' button to delete original file or click on 'no' button to skip deleting the original file(s).



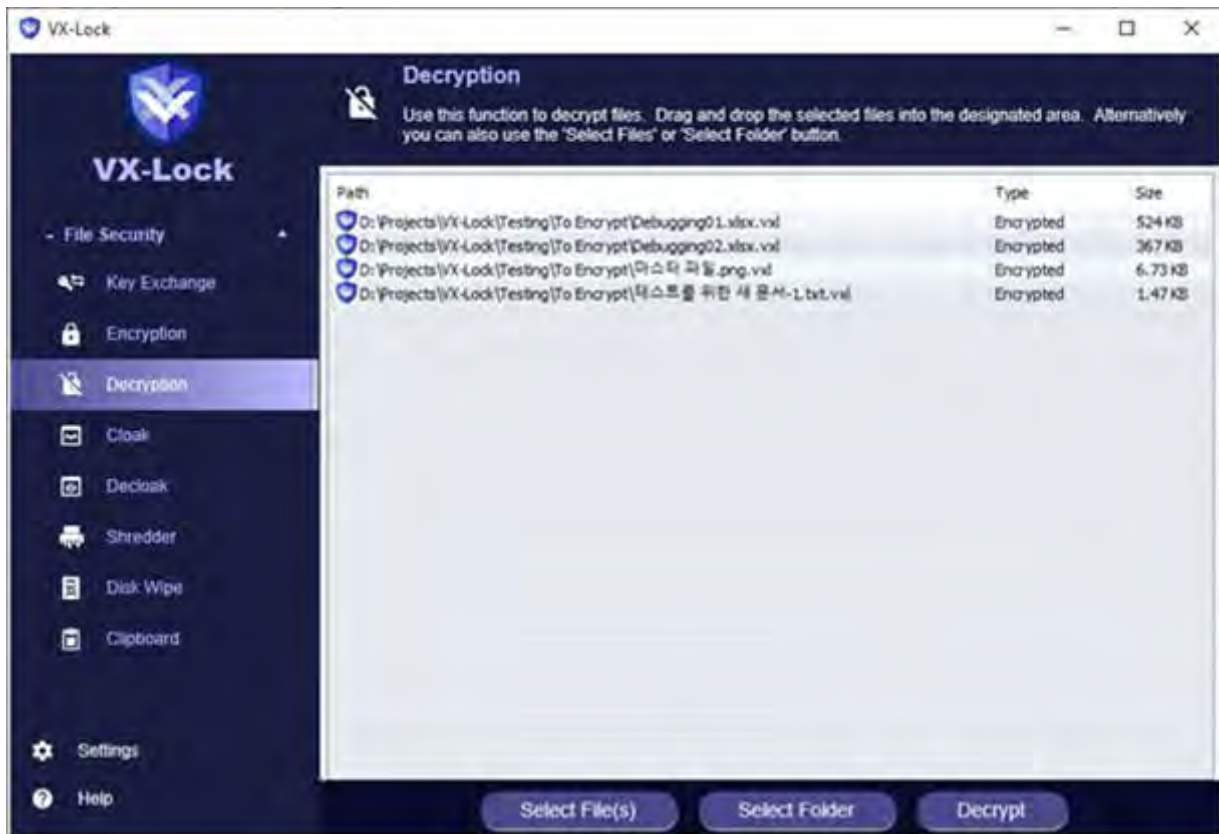
All the encrypted files will be saved into the same location where you have selected originally from.

Now, you may share the encrypted files to your recipients using email application or any other messaging applications.



Decryption

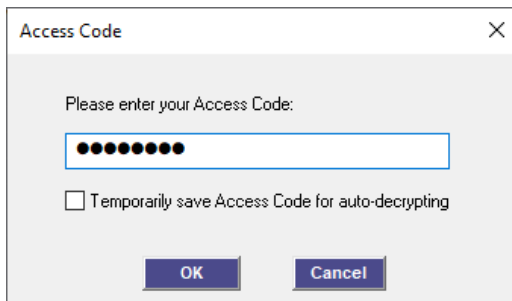
Decryption is a process to decipher encrypted contents of your file. You can only decrypt file(s) that have been encrypted for you, either by yourself or by other **VX-Lock** user(s).



You may choose either one of the followings to decrypt the file(s) or document(s):

1. Drag and drop the file(s) or document(s) into the **VX-Lock** interface page; or
2. Click on “Select File” button to browse and select the file(s) or document(s); or
3. Click on “Select Folder” button to browse and select the folders.

Click on “Decrypt” button to decrypt the files. You will be prompted to enter your access code. Enter the correct access code to decrypt the file(s).



Note: If you have checked the 'Temporarily save access code for auto decrypting' during login, then you will not be asked to enter your access code.

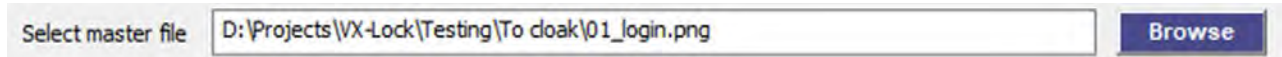


Cloak

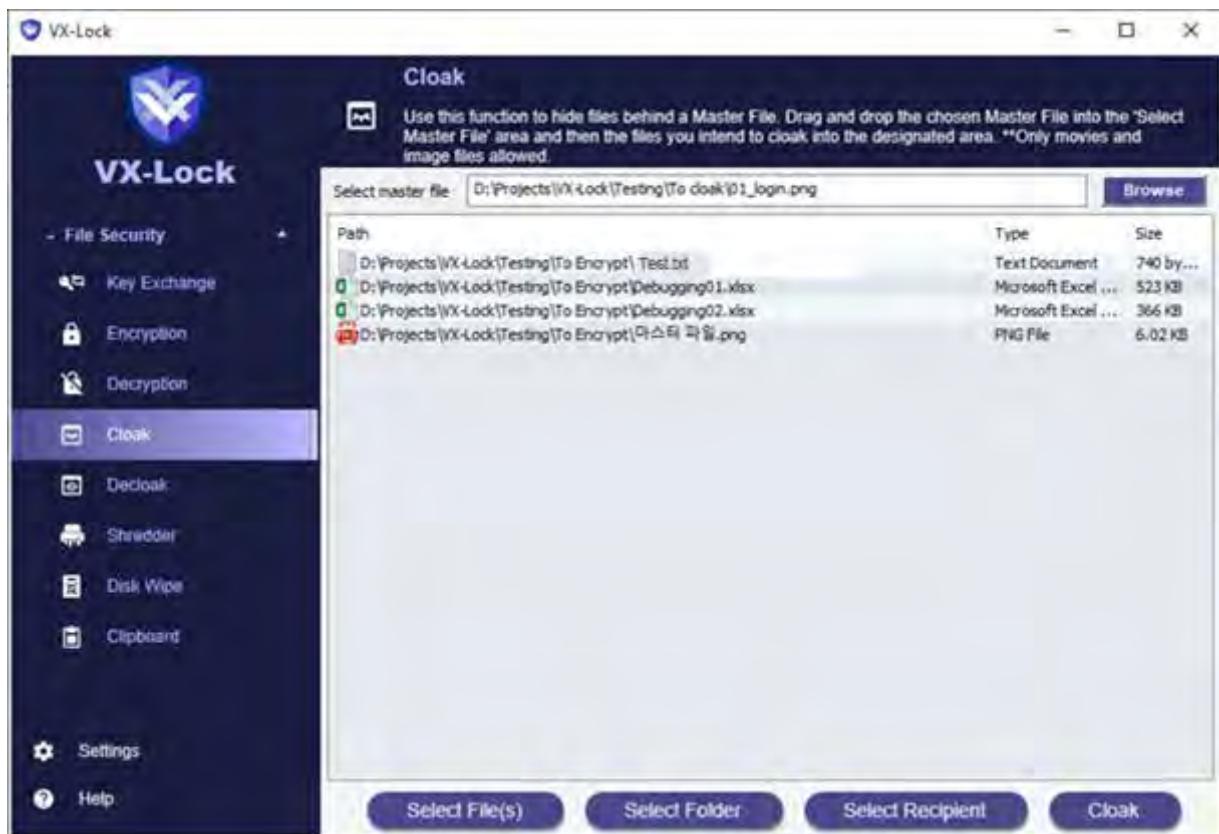
Cloaking is a process of encrypting and hiding files into another file (Master File). It adds an additional layer of security above the encryption because the cloaked file(s) may pass unnoticed by an unsuspecting eavesdropper.

To cloak the file, the user needs to select the master file:

Click on “Browse” button on the “Cloak” interface page and select the file.



*** Only image and movie file(s) are allowed as the Master File.**



You may choose either one of the followings to cloak the file(s) or document(s):

1. Drag and drop the file(s) or document(s) into the **VX-Lock** interface page; or
2. Click on “Select File” button to browse and select the file(s) or document(s); or
3. Click on “Select Folder” button to browse and select the folders.

Select PKID to cloak, and click on “Select Recipient” button to choose the recipient by the “Check Box” on the Recipient list.

After selecting the recipient, click on “Cloak” button to cloak the file(s). You will be asked whether to delete the original files or not. Click on the 'Yes' button to delete original file(s) and click 'No' to skip the process.



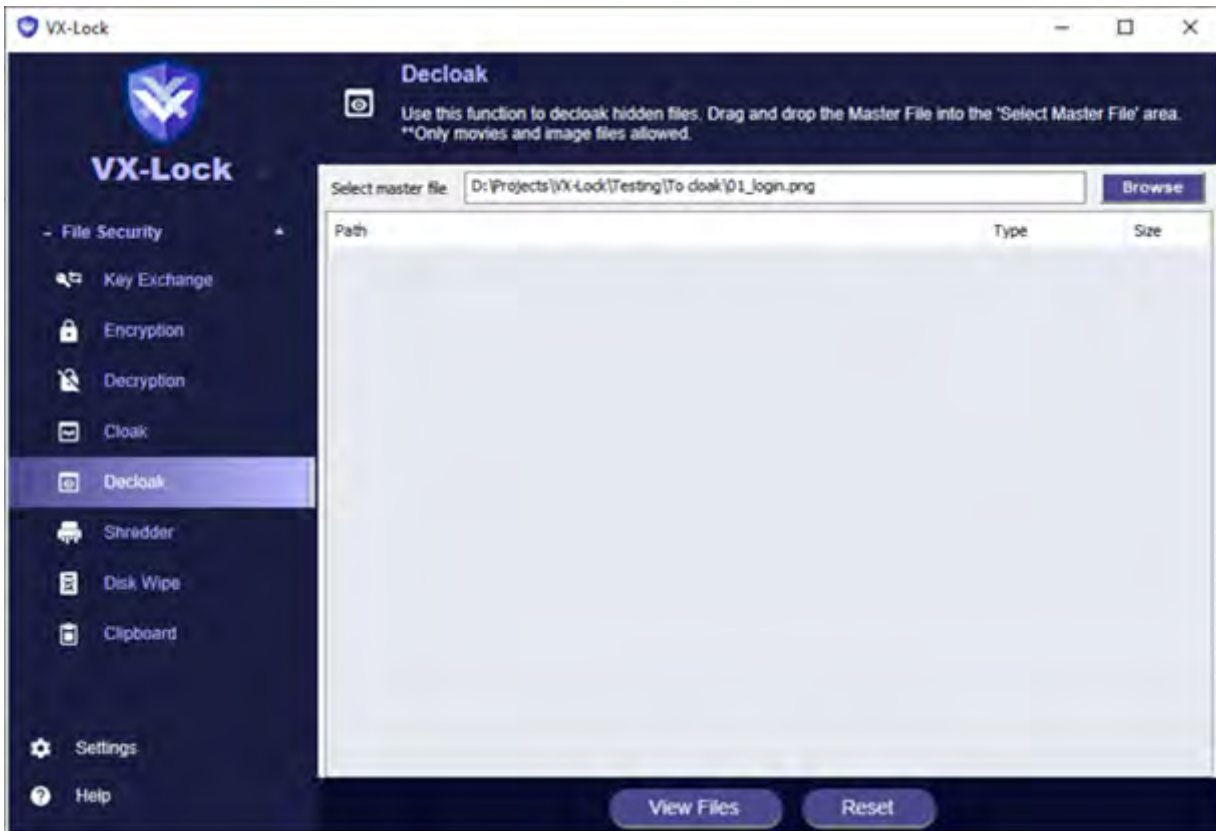
Decloak

Decloaking separates the hidden file(s) back from the cloaking process. As with decrypting, you must be the person that was intended to decloak the file(s).

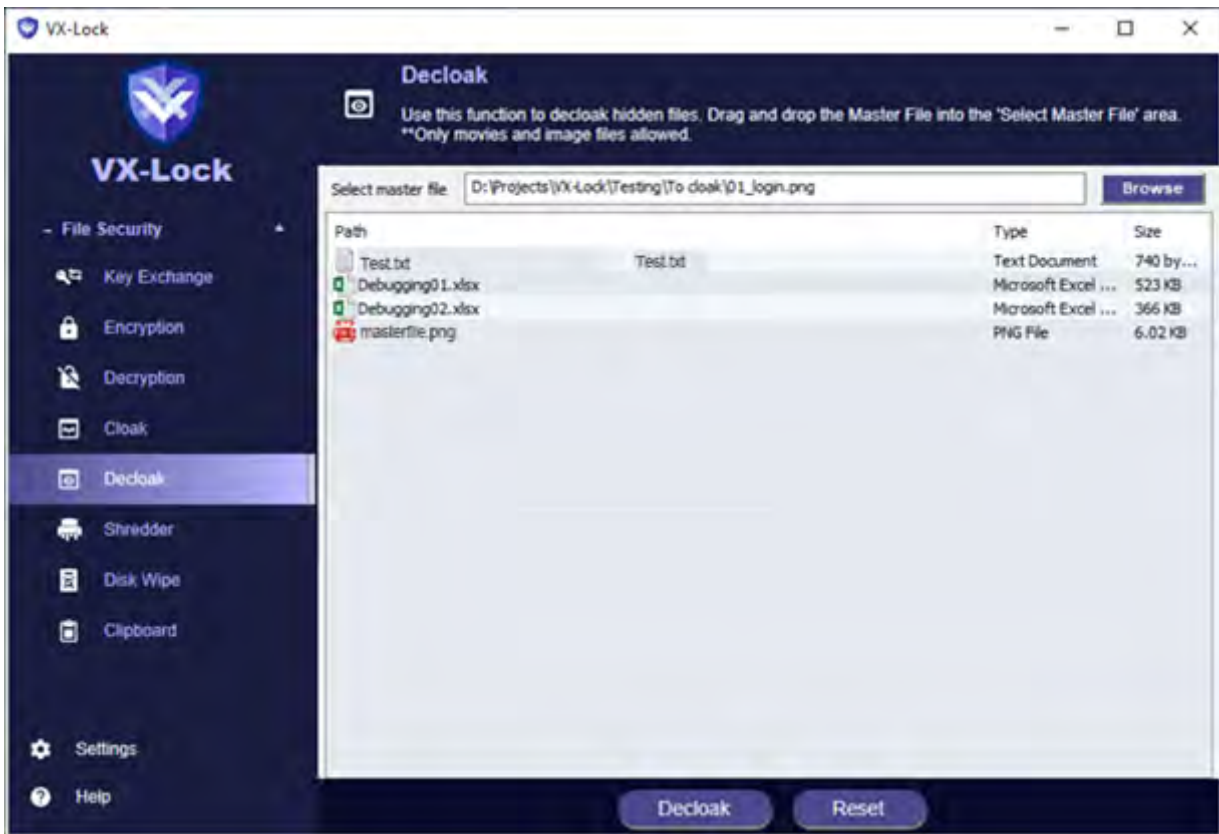
You can choose either one of the followings to decloak the file(s) or document(s):

1. Drag and drop the “master file” into the **VX-Lock** Decloak interface page; or
2. Click “Browse” button to browse and select the file.

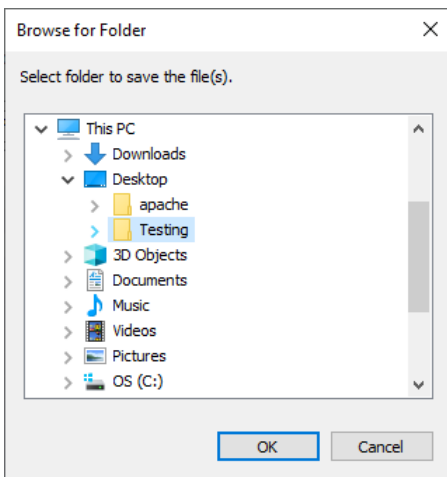
Now, click on “View Files” button to see what are the file(s) hidden under the selected master file.



If a valid master file has been selected, then it will display the list of files hidden under the master file.

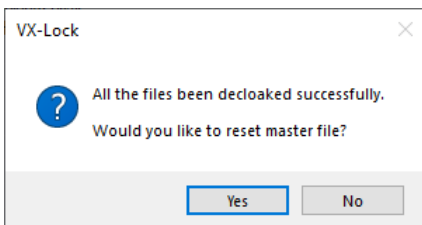


Click on “Decloak” button to decloak the files hidden under the master file. Select the folder where you would like to save the decloaked files.



If you have entered valid access code and you are authenticated to decloak, then the files will be decloaked to the selected destination folder.

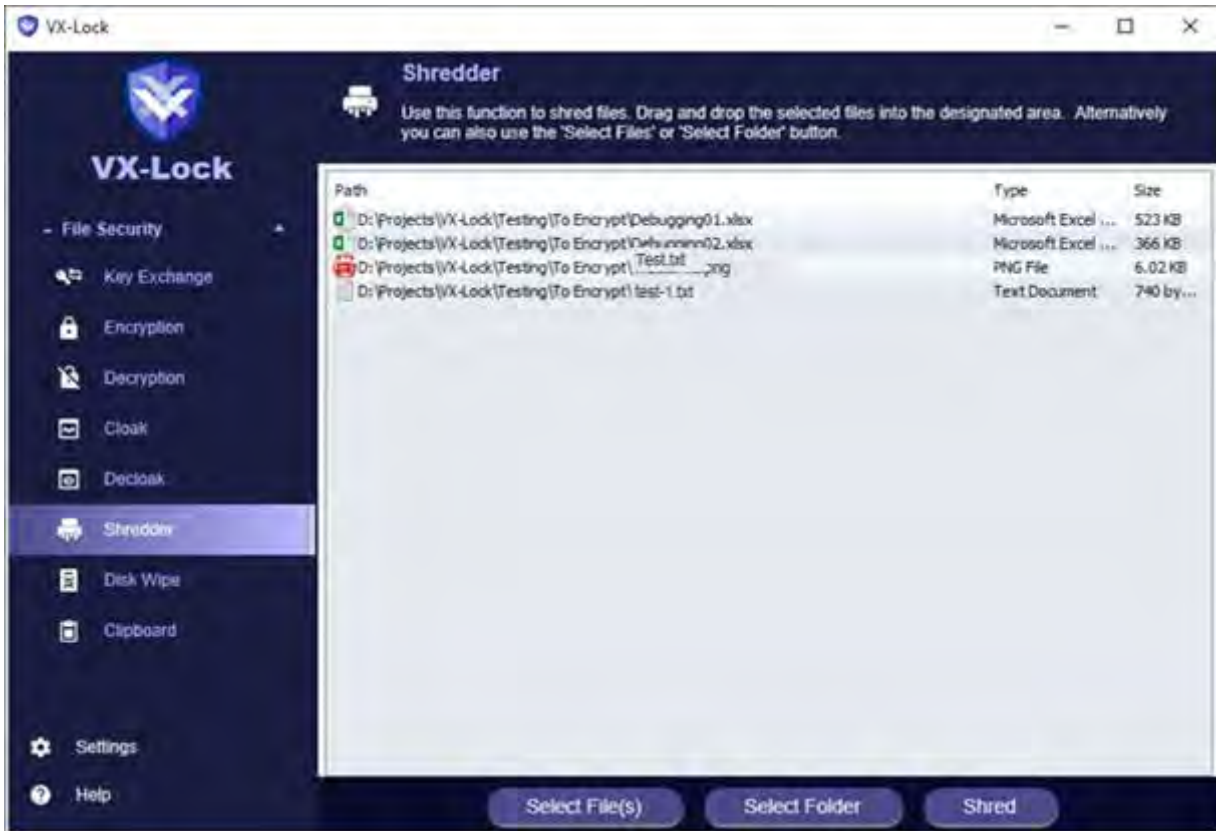
A message will be prompted for you to select the option to reset master file. By clicking on “Yes” button, master file will be reset to normal file. “No” will keep the master file as it is.





Shredder

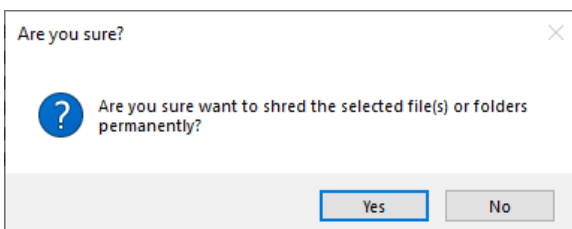
File(s) that you have deleted and gone into Windows Recycle Bin can be retrieved. They still can be recovered by forensic softwares or data recovery applications, even after emptying the recycle bin. With **VX-Lock** Shredder, you can erase these files with complete assurance that they will not be easily recovered. **VX-Lock** garbles the file contents before erasing them from the file system. On top of that, **VX-Lock** performs erasures at the sector level.



You may choose either one of the followings to shred the file(s) or document(s):

1. Drag and drop the file(s) or document(s) into the **VX-Lock** interface page;
2. Click on “Select File” button to browse and select the file(s) or document(s); or
3. Click on “Select Folder” button to browse and select the folders.

And click on “Shred” button to securely delete the selected files. Make sure that you have selected correct files and click on “Yes” button to confirm delete the files permanently.

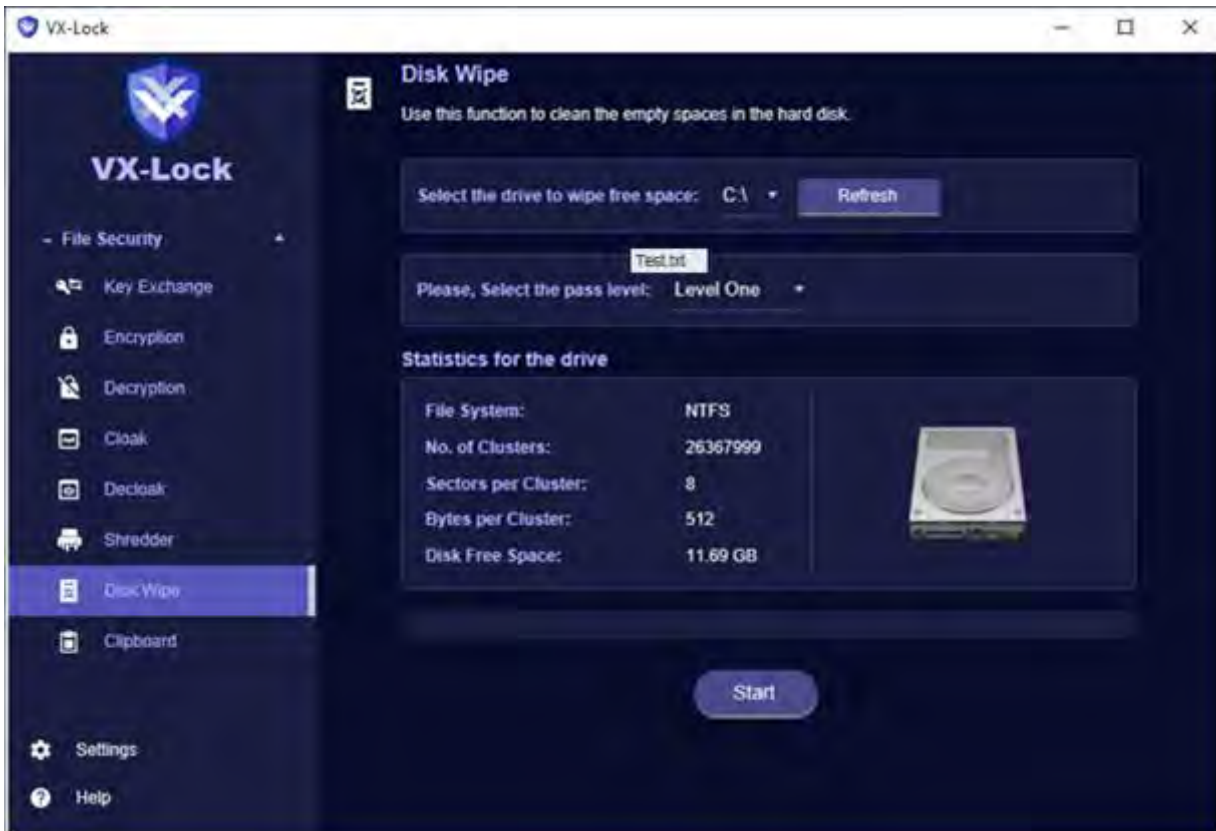




Disk Wipe

Disk Wipe performs a low-level writing into the free sectors of your hard disk.

Disk Wipe acts as an additional protection against data recovery software that might be able to recover files that have been shredded alone.



First, select the drive to wipe from the drive list shown on **VX-Lock** Disk Wipe interface page.

Next, indicate how many passes you want to perform. Each pass garbles the information in the hard drive once. The more passes you select, the more unlikely for anyone to make out your original data. We recommend between 1 to 3 passes.

After the input process, click on “Start” button to start the disk wipe process.

Note: Each pass may take a few minutes to complete, even hours if your computer has slower processor or your drive has large amount of free space.



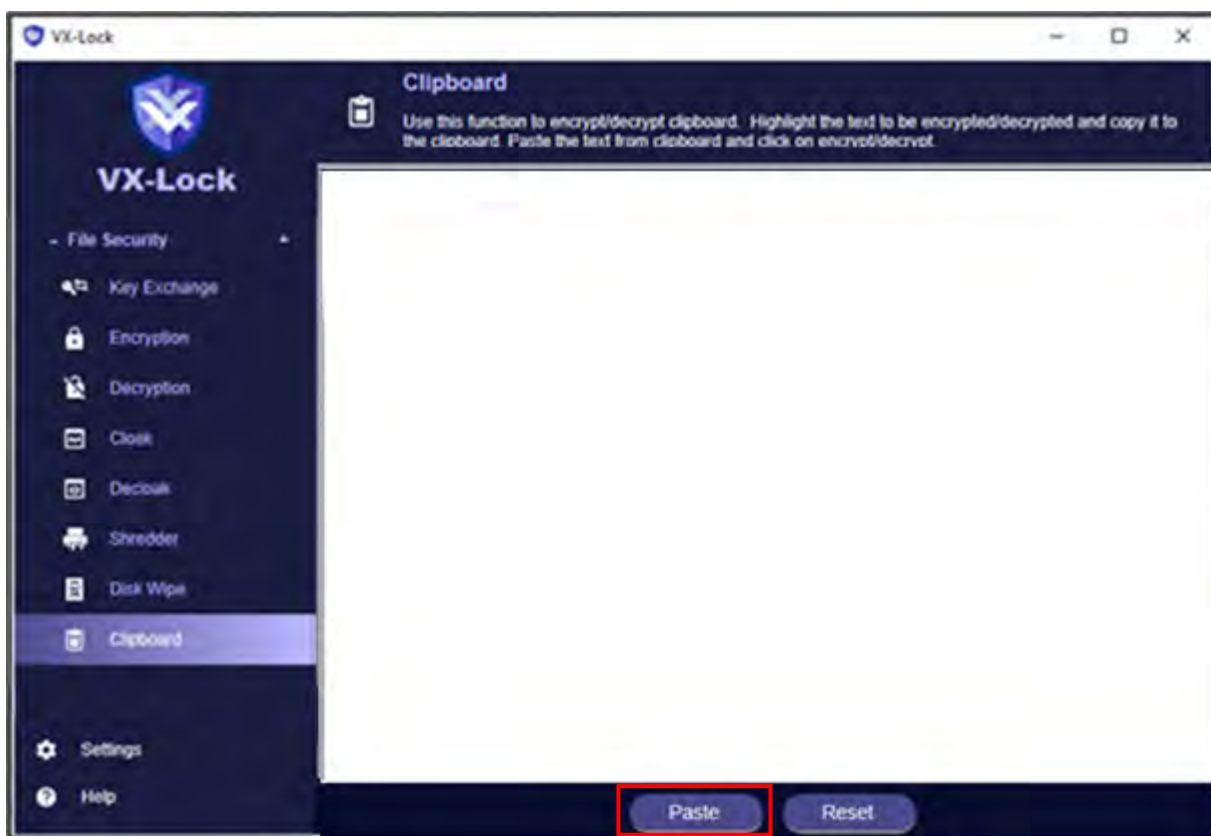
Clipboard

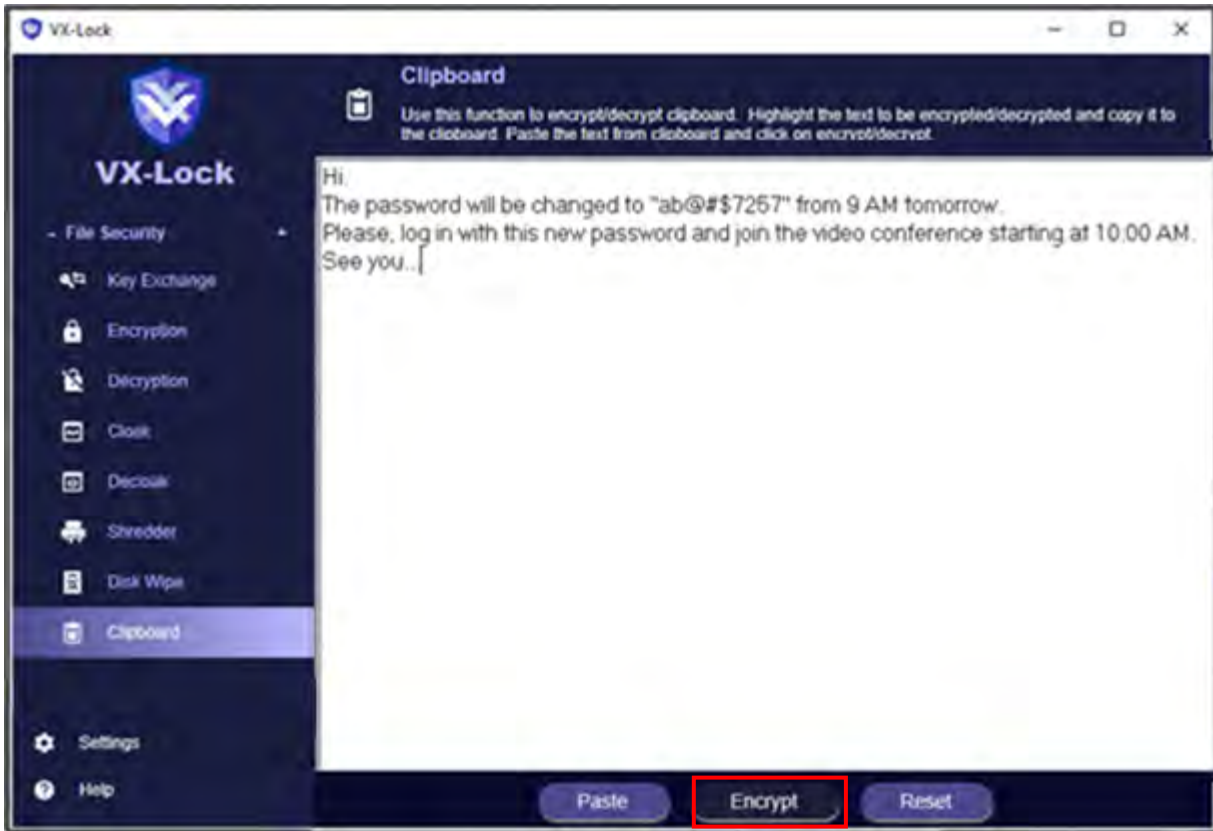
Clipboard function allows you to encrypt/decrypt the text which is copied to clipboard. This feature is very useful while exchanging text messages between friends.

To encrypt any text, copy the text using the command (Ctrl+C) or use the mouse right click to copy the selected text.

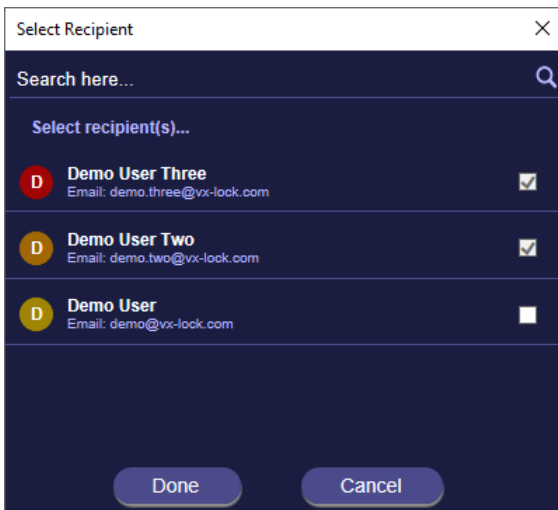
Hi.
The password will be changed to "ab@#\$7257" from 9 AM tomorrow.
Please, log in with this new password and join the video conference starting at 10:00 AM.
See you...

Move to **VX-Lock** App, and select clipboard option from left side menu and click on "Paste" button or use the shortcut key (Ctrl+V).

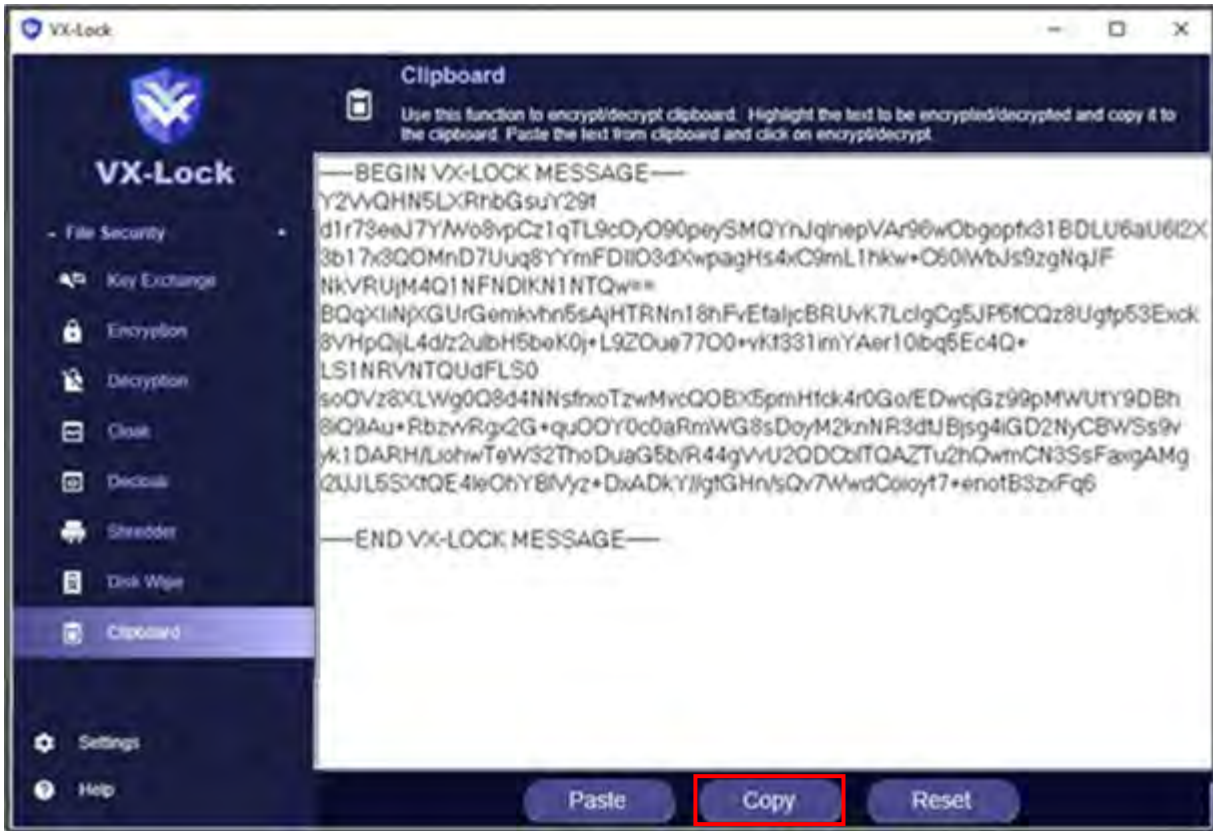




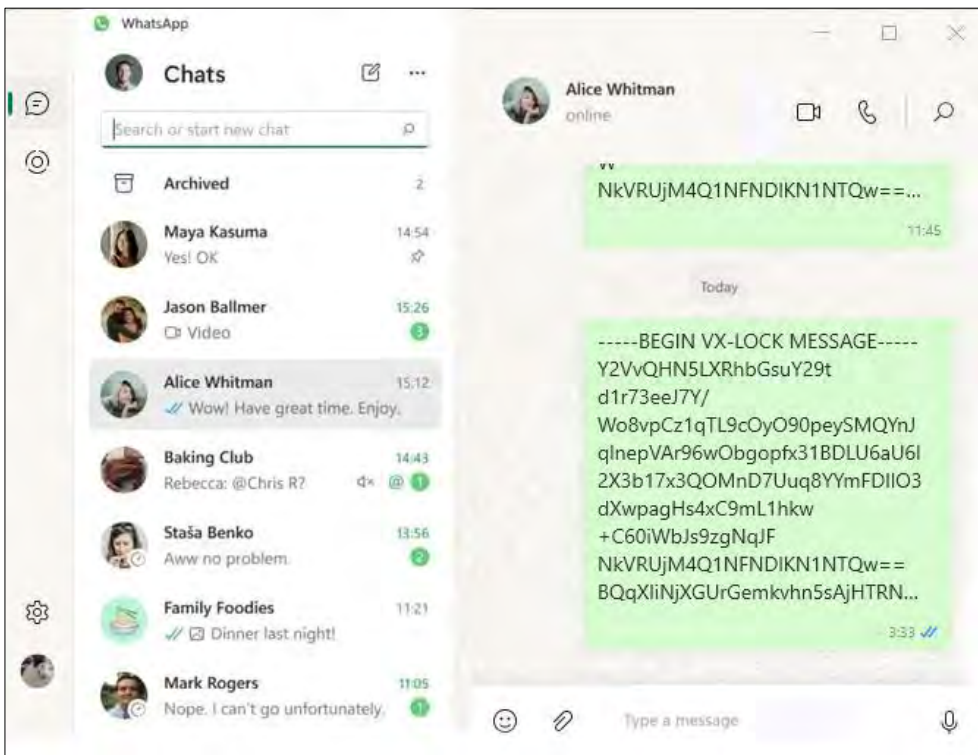
Encrypt button will be enabled. Click on “Encrypt” button and select the recipient from the list.



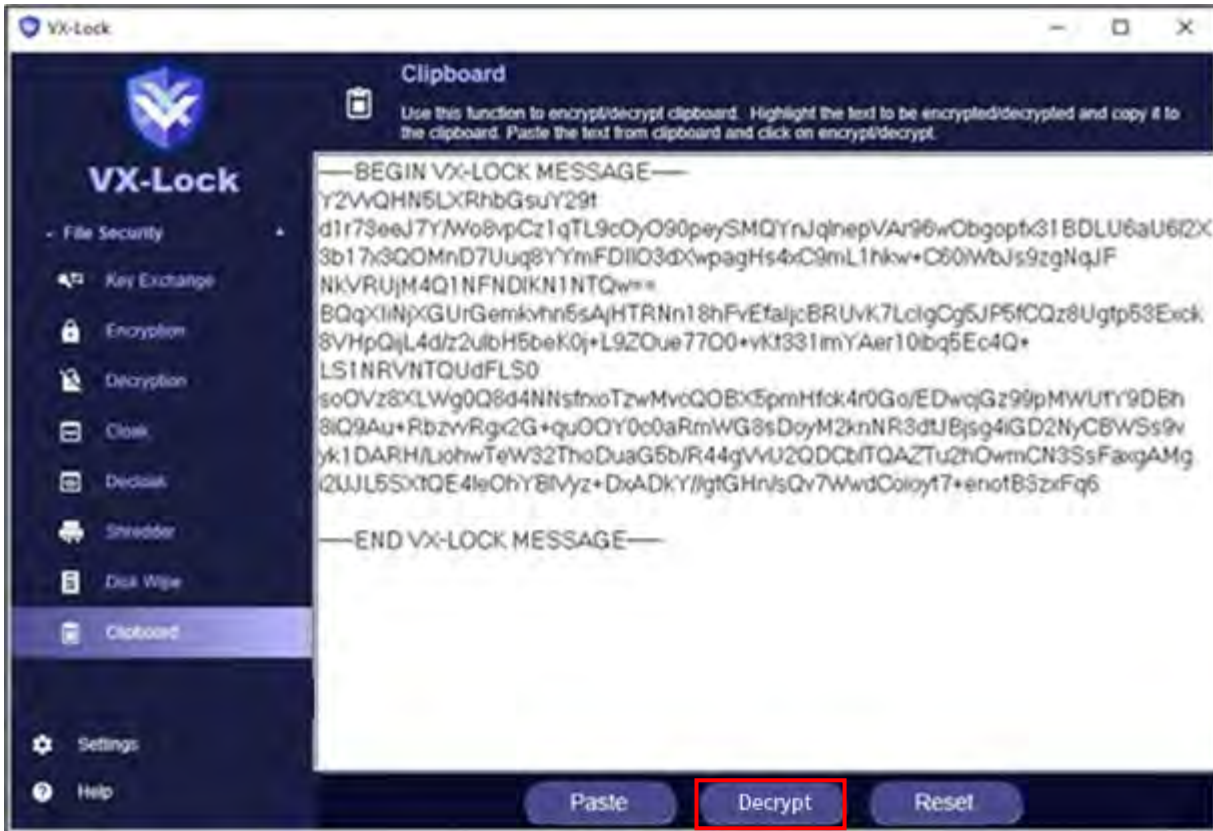
Text will be encrypted and the encrypted text will be displayed on the screen.



Click on “Copy” button to copy the encrypted text to clipboard.
Share the encrypted text using any medium (Mail, WhatsApp, Facebook, WeChat, Telegram, KakaoTalk, Line, and Zalo, etc.)



Once the recipient receives the encrypted text, they need to copy the encrypted text and paste into **VX-Lock** App.



Click on “Decrypt” button to decrypt the text. Then, the decrypted text will be displayed on screen.





Settings

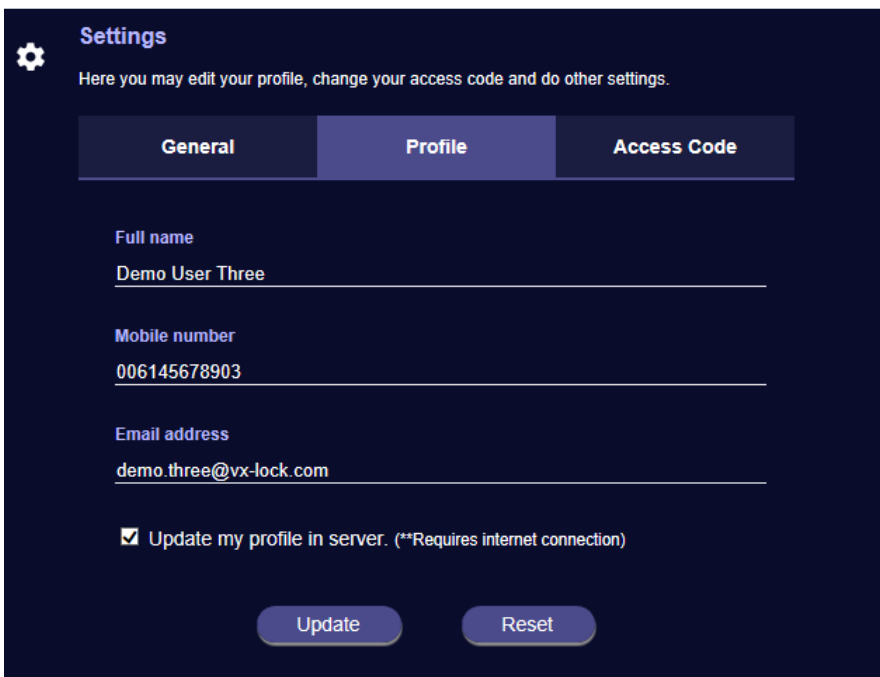
General

This allows you to set general preferences. You will find the version of **VX-Lock** App. You may change your preferred language, select auto logout time, and change the mode to light or dark.



Profile


This allows you to update your profile. Do the modifications to your name or mobile number and click on “Update” button to save your updated profile.



Access Code

This allows you to change your access code. Enter your current access code, new access code and confirm your access code. Click on “Update” button to update/change your access code.



 **Settings**
Here you may edit your profile, change your access code and do other settings.

General **Profile** **Access Code**

Old Access Code
.....

New Access Code
.....

Confirm Access Code
.....

Update **Reset**

Thank you and enjoy VX-Lock for your purpose!