

# VINCSS OVPN CLIENT USER MANUAL

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**Written by:** Product Department, VinCSS

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**Phone:**

## VINCSS INTERNET SECURITY SERVICES

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## VERSION TRACKING

Version	Date	Writer	Position	Contact	Note
1.0	16/08/2021		Product Department, VinCSS		VinCSS OVPN Client User Manual



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## I. INSTALLING AND CONFIGURING VINCSS OVPN CLIENT SOFTWARE

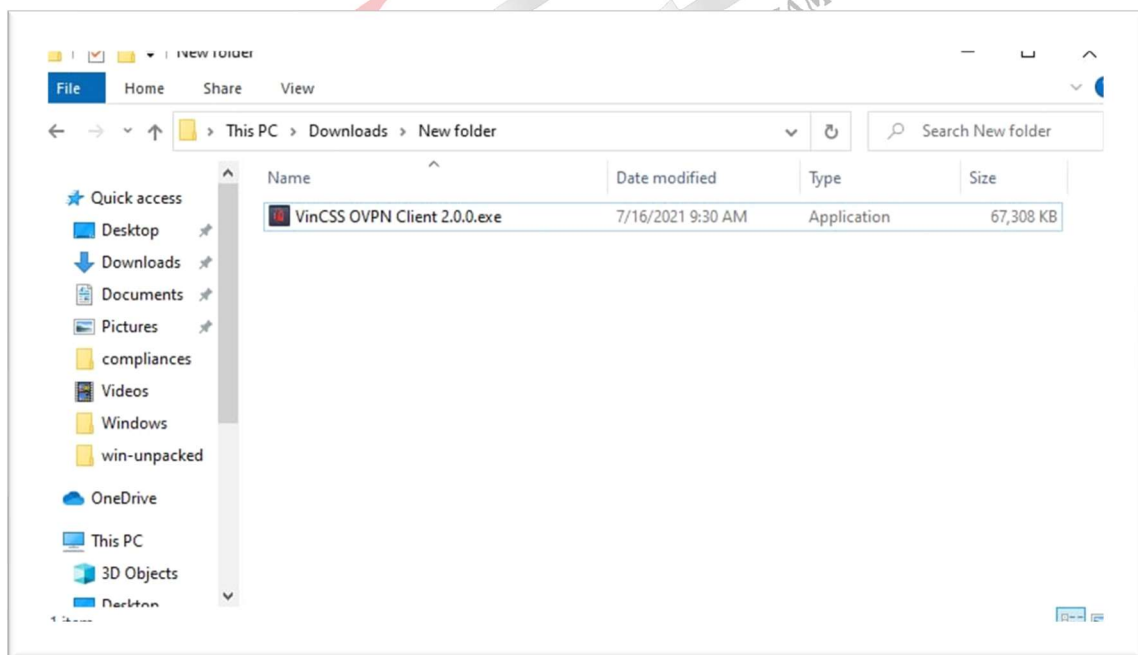
VinCSS OVPN Client software is compatible with following operating systems:

- **Windows 10**
- **Windows 8**
- **Windows 7**
- **macOS Big Sur**
- **macOS Catalina**
- **Ubuntu 20.04**
- **Ubuntu 18.04**

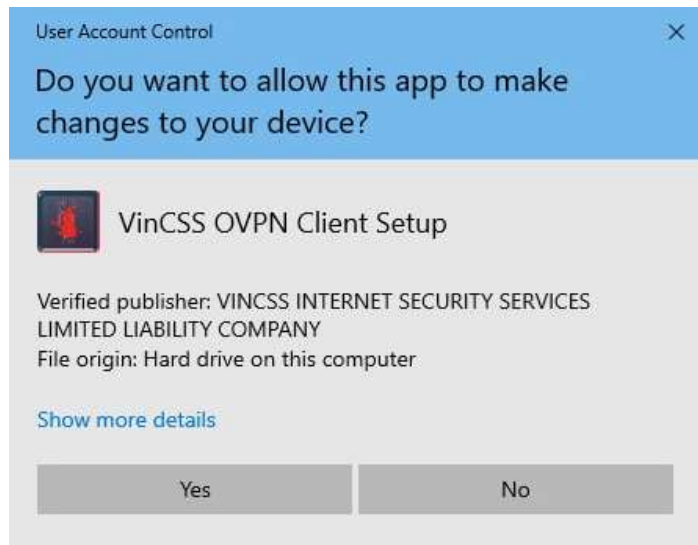
### I.1. Windows

#### I.1.1. Installing VinCSS OVPN Client

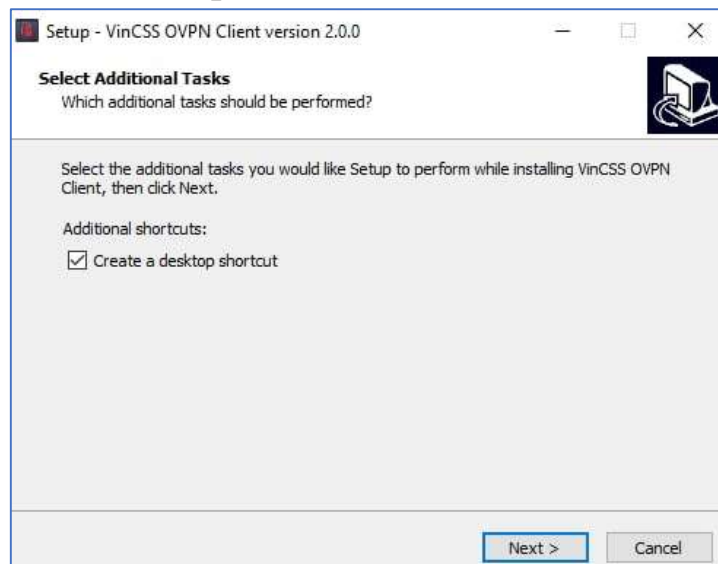
- Download VinCSS OVPN Client version for Windows OS at:  
<https://github.com/VinCSS-Public-Projects/VinCSS-FIDO2-OVPN-Client/releases>
- Run **VinCSS OVPN Client.exe** file.



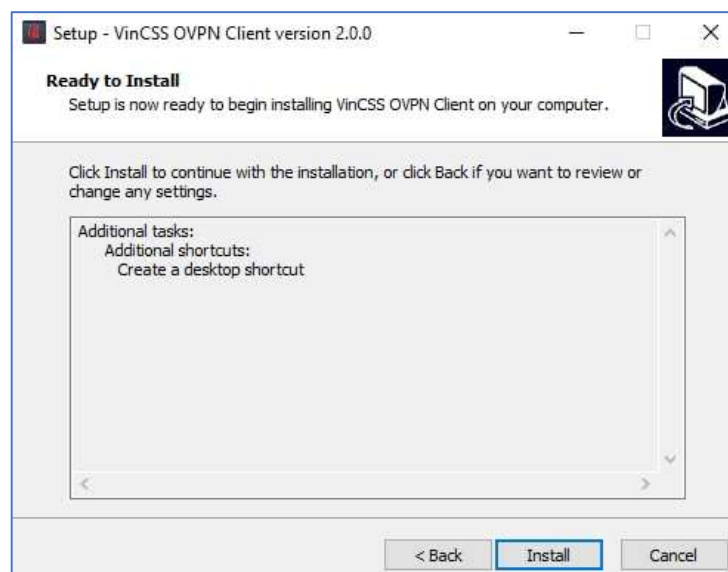
- Check that window shows a valid installation package with information on the publisher “VINCSS INTERNET SECURITY SERVICES LIMITED LIABILITY COMPANY”. If the publisher information is correct, click **Yes** to continue.



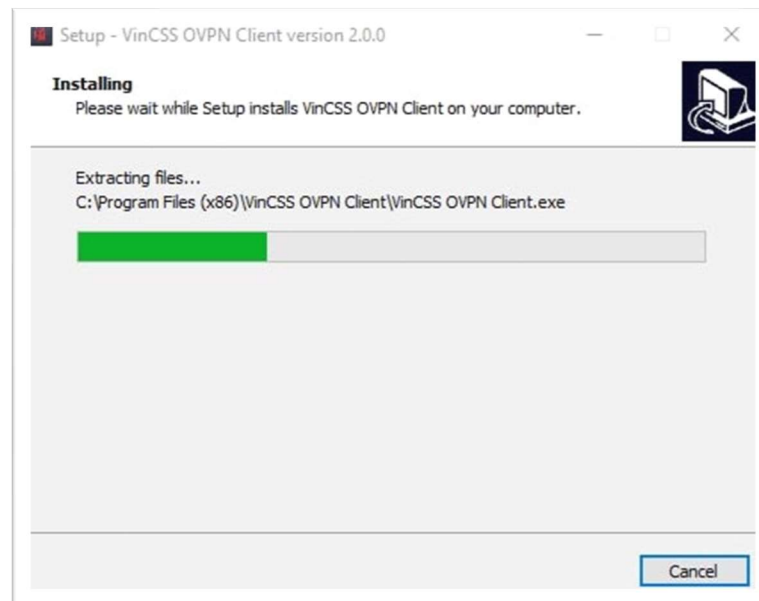
- Select **Create a desktop shortcut** and click **Next** to continue.



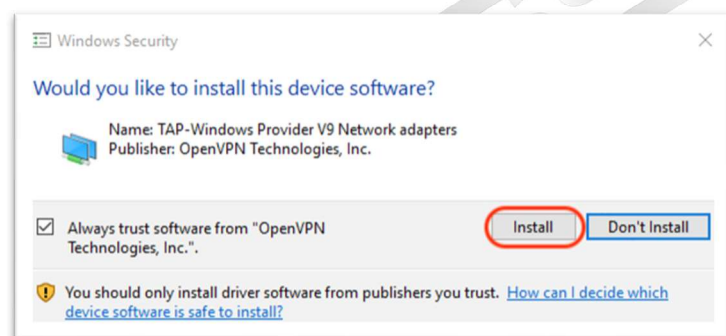
- Click **Install** to start installing the software.



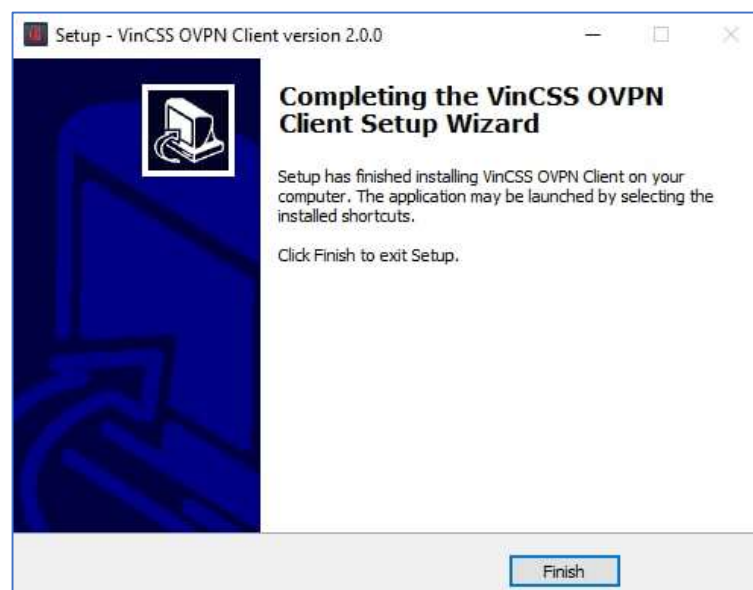
- Installing software.



- Click **Install** to run tap adapter installation (if required).

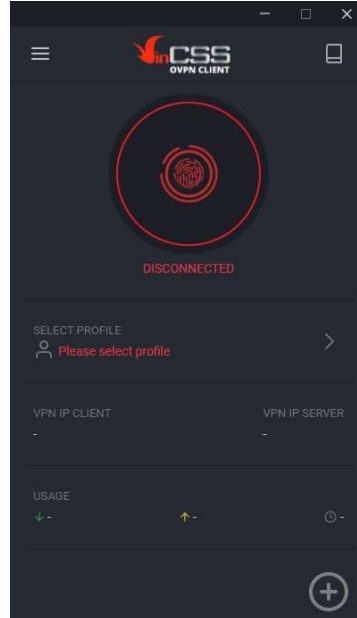


- Click **Finish** to complete the installation of VinCSS OVPN Client software.

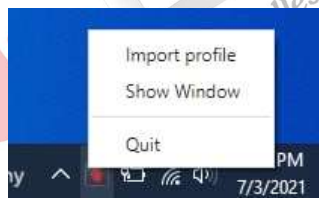


### I.1.2. Configuring VPN connection

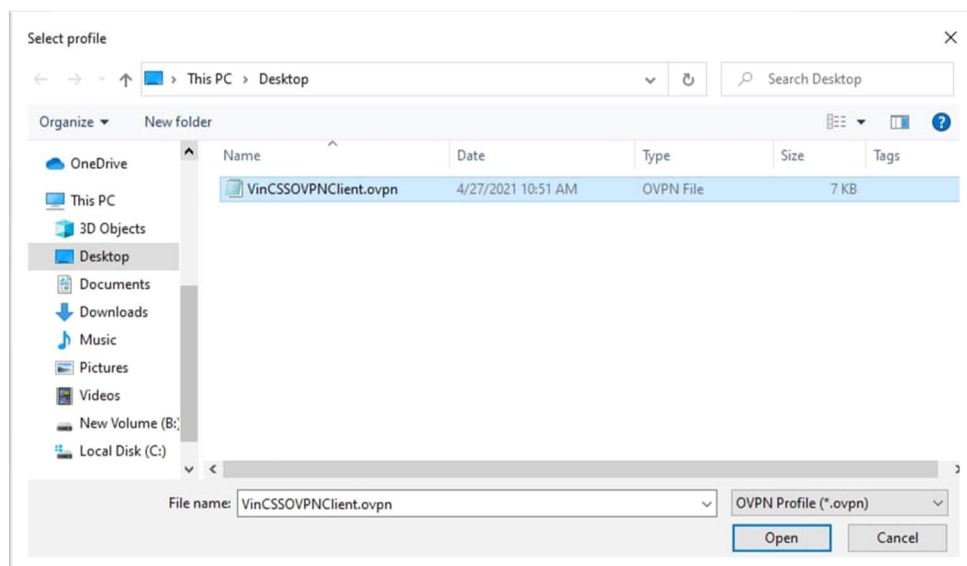
- Open VinCSS OVPN Client software installed in the computer. On main screen, click (+) symbol to add a new profile.



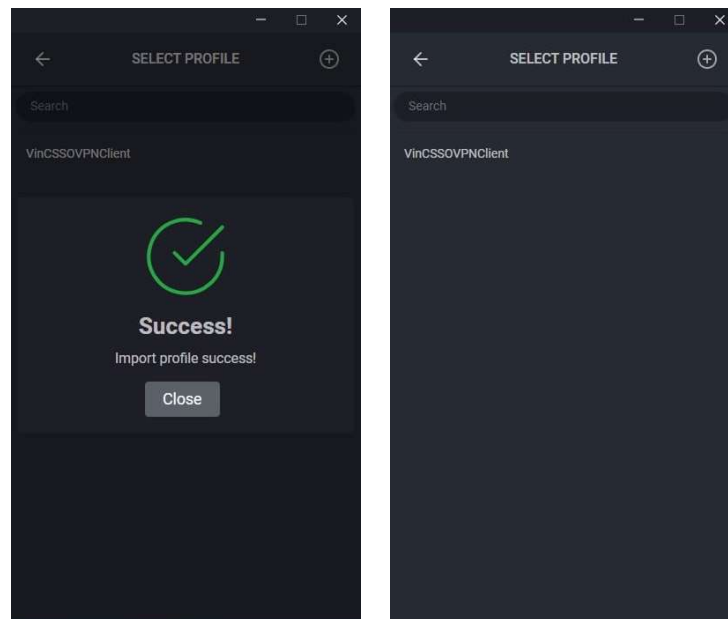
- Or, right-click on **VinCSS OVPN Client** icon on the taskbar, select **Import profile**.



- Select profile was sent by the administrator (file .ovpn) and click **Open**.



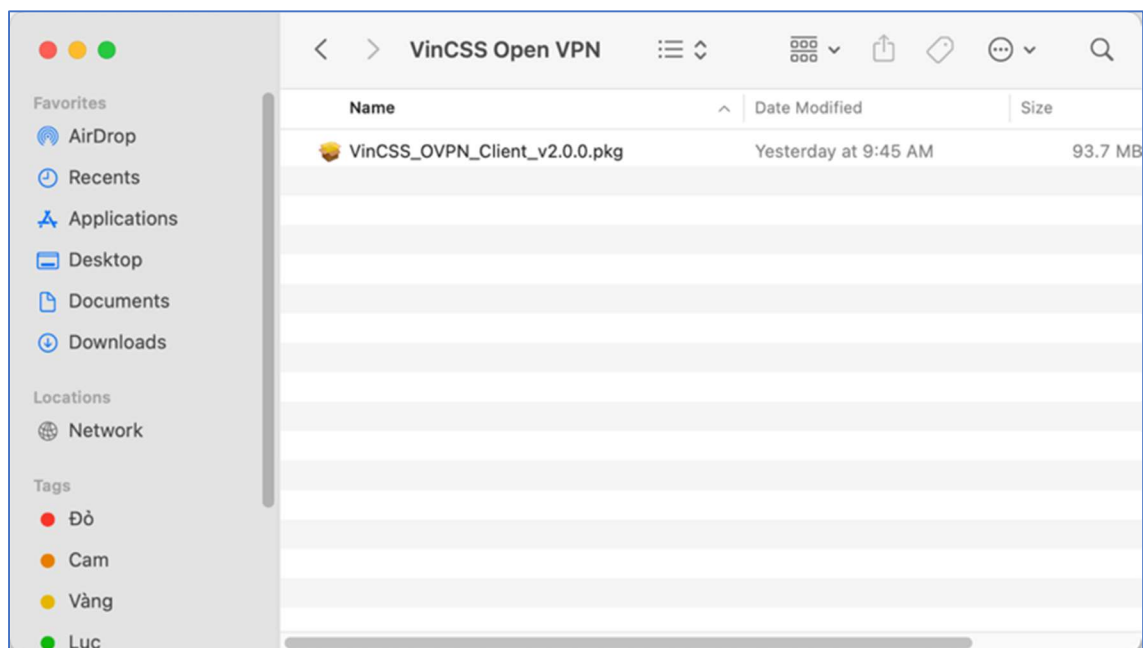
- After profile is added successfully, click **Close** to close the notification window. Screen shows profile name in the list.



## I.2. macOS

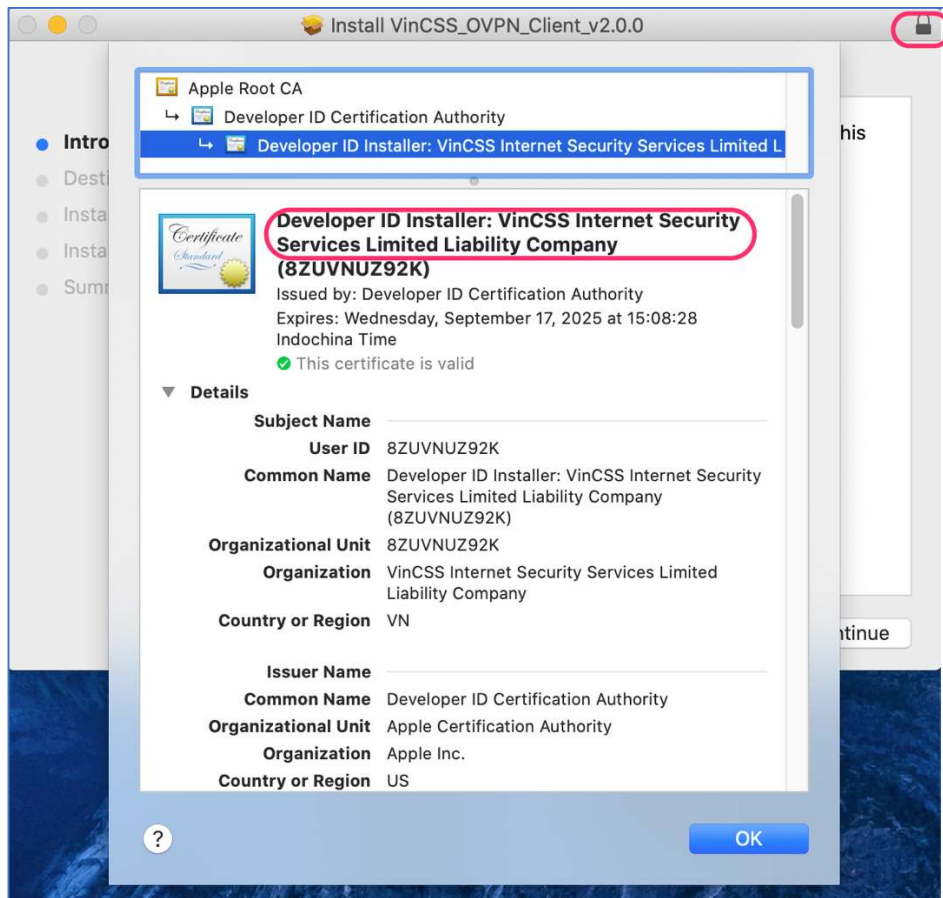
### I.2.1. Installing VinCSS OVPN Client

- Download VinCSS OVPN Client version for macOS at: <https://github.com/VinCSS-Public-Projects/VinCSS-FIDO2-OVPN-Client/releases>
- Run **VinCSS OVPN Client.pkg** file.

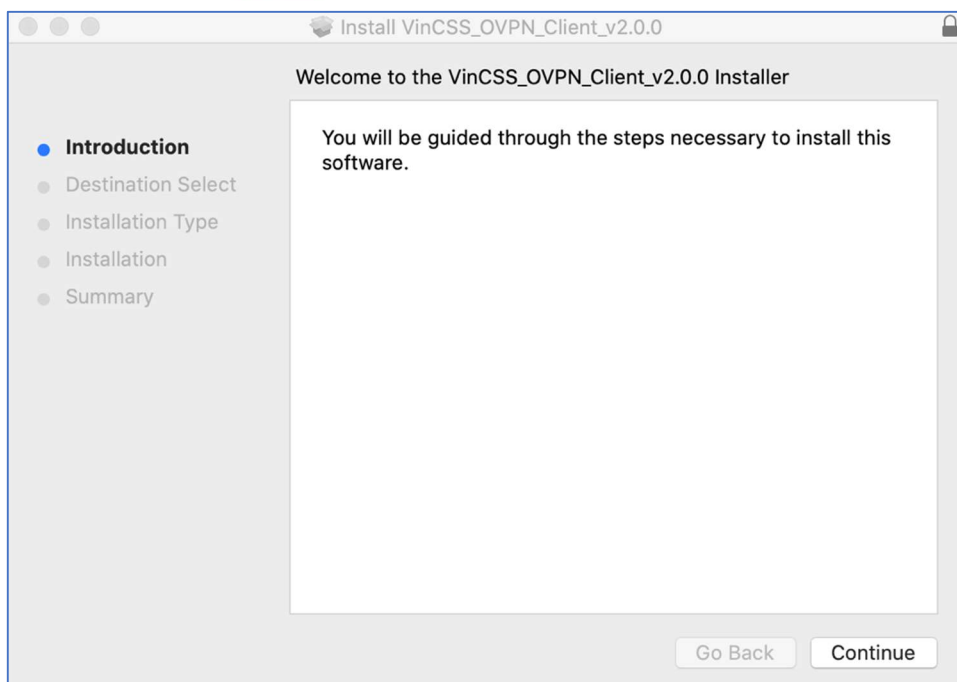




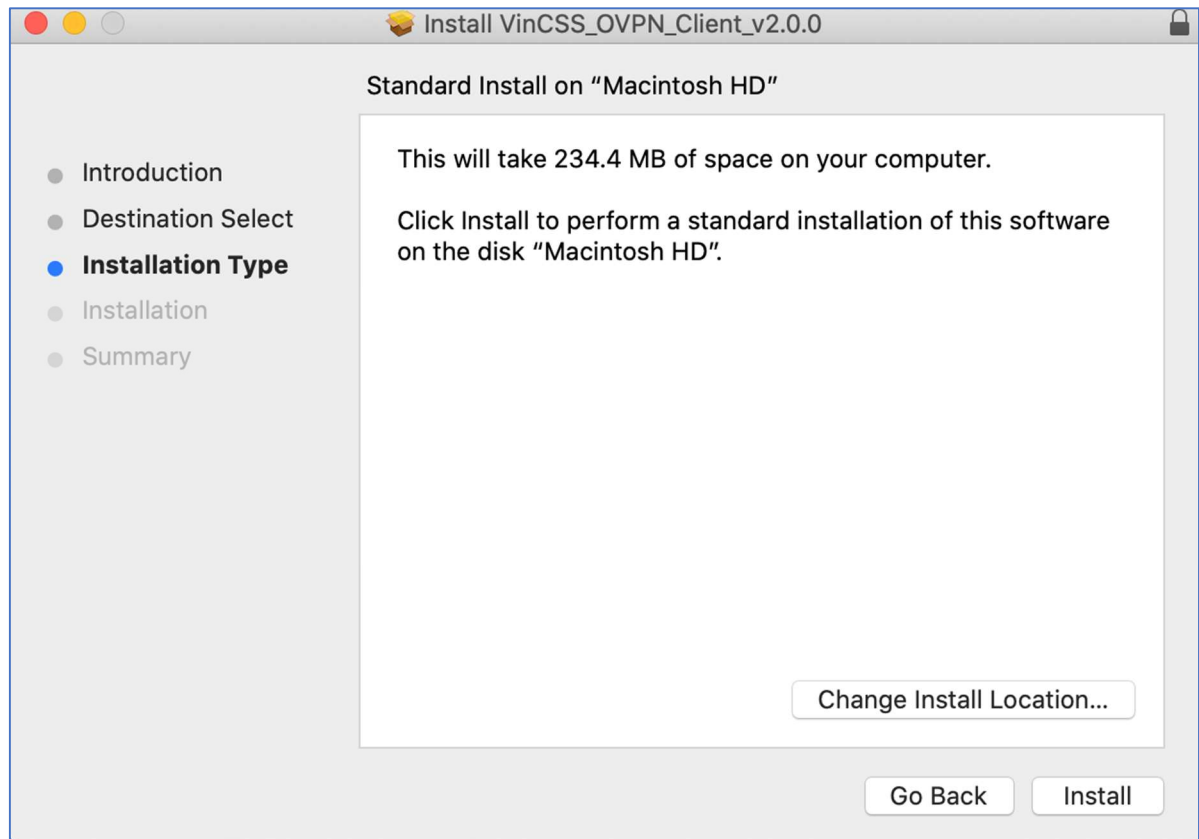
- Click on the lock icon in the upper right corner to check the software provider company information.



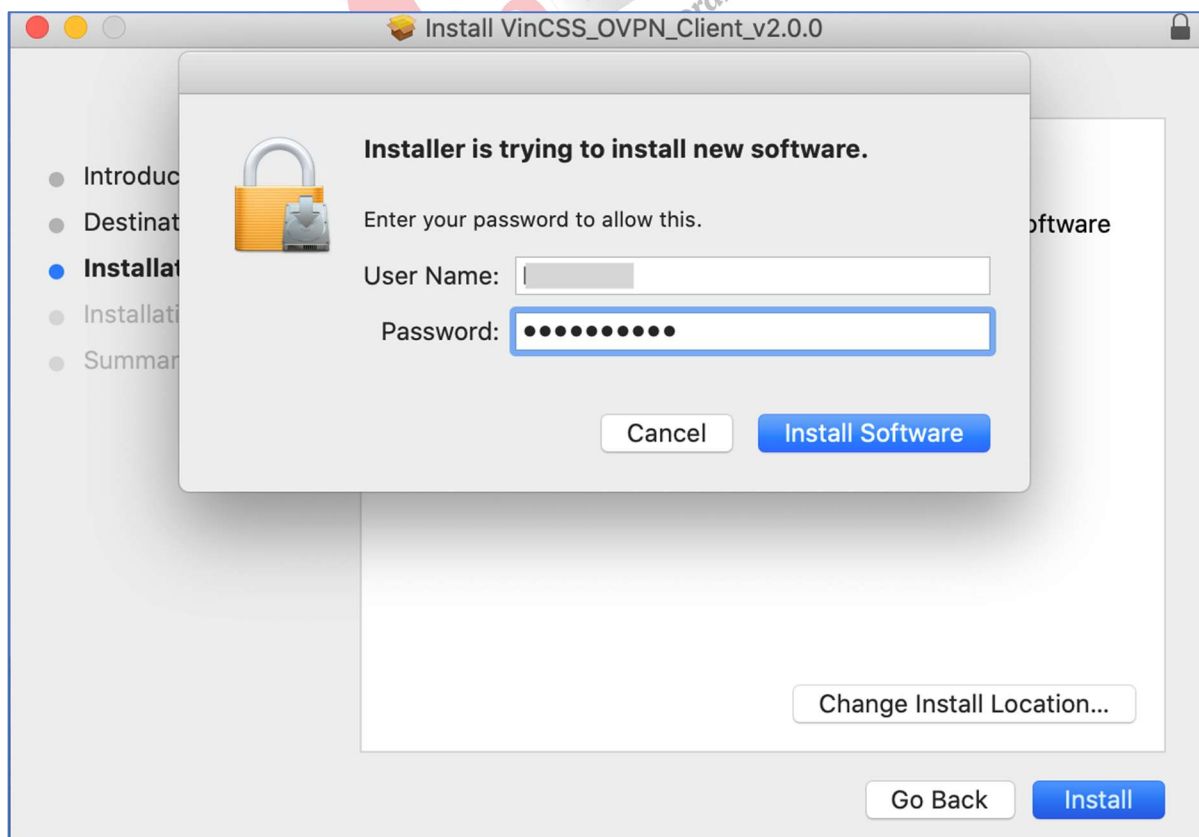
- Click **OK** and then **Continue** to start installing the software.



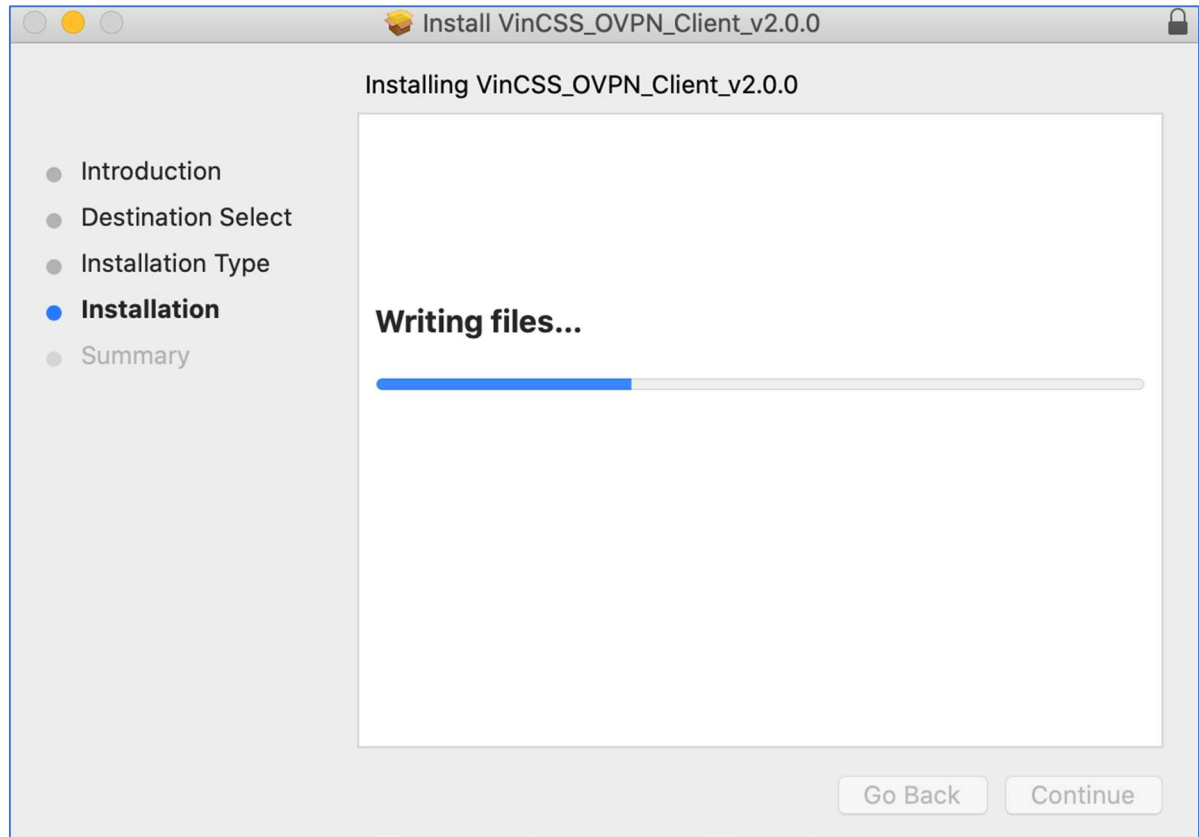
- Click **Install** to continue.



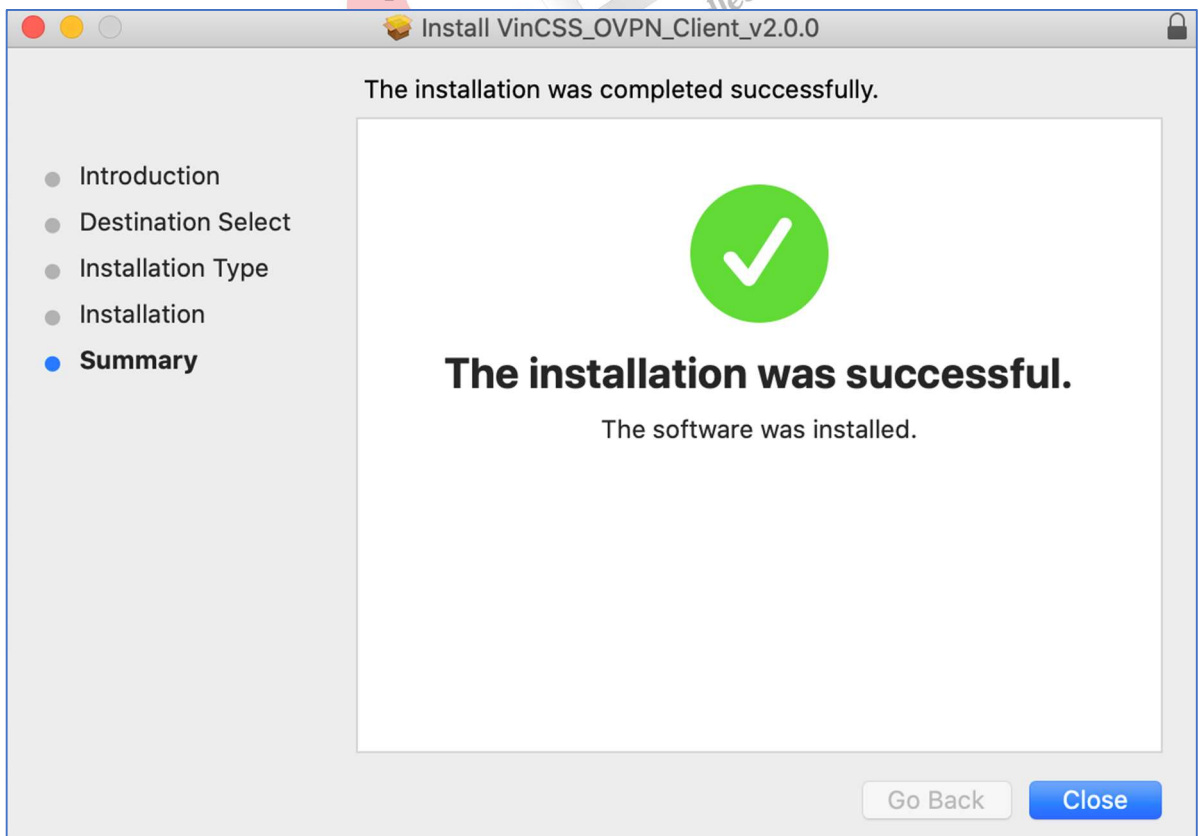
- Enter **Password**, then click **Install Software** to continue.



- Installing software.

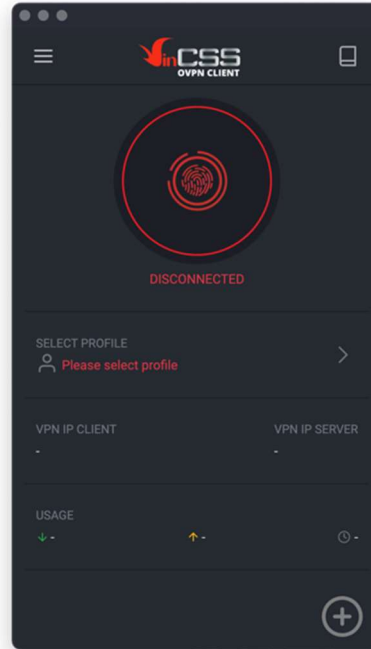


- Click **Close** to complete the installaion of VinCSS OVPN Client software.

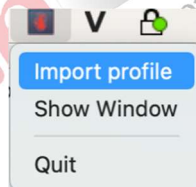


### I.2.2. Configuring VPN connection

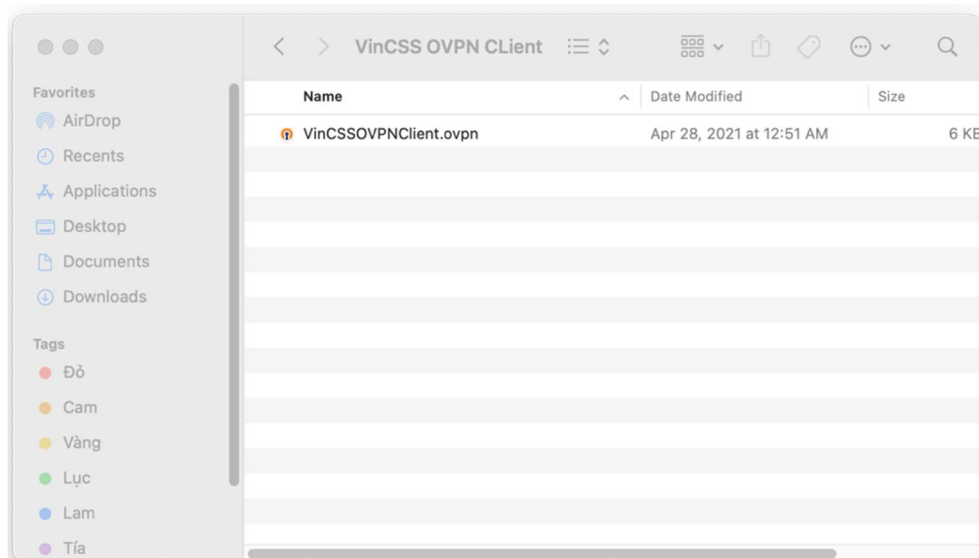
- Open VinCSS OVPN Client software installed in the computer. On the main screen, click (+) symbol to add new a profile.



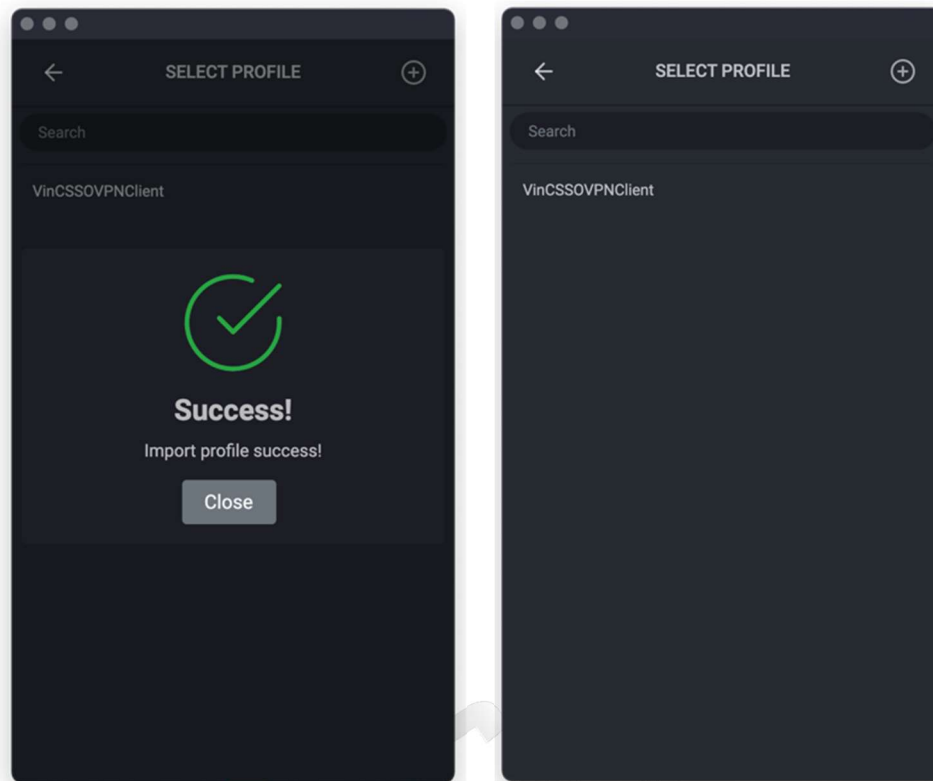
- Or, right-click on VinCSS OVPN Client icon on the taskbar, select **Import profile**.



- Select profile was sent by the administrator (file .ovpn) and click **Open**.



- After profile is added successfully, click **Close** to close the notification window. Screen shows profile name in the list.



### I.3. Linux

#### I.3.1. Installing VinCSS OVPN Client

Use file **GPG\_CodeSigning\_VinCSS.asc** at <https://github.com/VinCSS-Public-Projects/VinCSS-FIDO2-OVPN-Client/releases/latest> to verify the installation package.

- Import public key with the following command:

```
gpg --import GPG_CodeSigning_VinCSS_pub.asc
```

```
vincss@ubuntu:~/Desktop/VinCSS_OVPN_Client$ gpg --import GPG_CodeSigning_VinCSS_pub.asc
gpg: keybox '/home/vincss/.gnupg/pubring.kbx' created
gpg: /home/vincss/.gnupg/trustdb.gpg: trustdb created
gpg: key 345AF17951F3DFEF: public key "VinCSS LLC <v.office@vincss.net>" imported
gpg: Total number processed: 1
gpg:             imported: 1
```

- Use the following command to verify the installation package is valid (result show "GOODSIG"):

```
dpkg-sig --verify VinCSS-OVPN-Client_< version,
example: 1.3.4>_amd64.deb
```

```
vincss@ubuntu:~/Desktop/VinCSS_OVPN_Client$ dpkg-sig --verify VinCSS_OVPN_Client_v1.3.4_amd64.deb
Processing VinCSS_OVPN_Client_v1.3.4_amd64.deb...
GOODSIG_gpgbuilder D3822102A757AA31A070087D345AF17951F3DFEF 1614055614
vincss@ubuntu:~/Desktop/VinCSS_OVPN_Client$
```

- Open Terminal and access the path containing the installer file.
- Use file **VinCSS-OVPN-Client\_<version>\_amd64.deb** and run the following command to install:

```
sudo dpkg -i VinCSS-OVPN-Client_<version,
example: 1.3.4>_amd64.deb
```

- System will ask for root permission to install. Enter password, then click **Enter**.

```
vincss@ubuntu:~/Desktop/VinCSS_OVPN_Client$ sudo dpkg -i VinCSS_OVPN_Client_v1.3.4_amd64.deb
Selecting previously unselected package vincss-ovpn-client.
(Reading database ... 127493 files and directories currently installed.)
Preparing to unpack VinCSS_OVPN_Client_v1.3.4_amd64.deb ...
vincss-ovpn-client: no process found
Failed to stop vpnservice.service: Unit vpnservice.service not loaded.
Failed to disable unit: Unit file vpnservice.service does not exist.
rm: cannot remove '/etc/systemd/system/vpnservice.service': No such file or directory
Unpacking vincss-ovpn-client (1.3.4) ...
dpkg: dependency problems prevent configuration of vincss-ovpn-client:
 vincss-ovpn-client depends on openvpn (>= 2.4.4); however:
  Package openvpn is not installed.
 vincss-ovpn-client depends on openvpn-systemd-resolved (>= 1.2.7); however:
  Package openvpn-systemd-resolved is not installed.

dpkg: error processing package vincss-ovpn-client (--install):
 dependency problems - leaving unconfigured
Processing triggers for gnome-menus (3.13.3-11ubuntu1.1) ...
Processing triggers for desktop-file-utils (0.23-1ubuntu3.18.04.2) ...
Processing triggers for mime-support (3.60ubuntu1) ...
Errors were encountered while processing:
 vincss-ovpn-client
```

- System will ask to install additional packages openvpn-systemd-resolved. Use the following command to install the missing package:

```
sudo apt-get -f install
```

- Type the letter 'Y', then press **Enter** to confirm setting.

```
vincss@ubuntu:~/Desktop/VinCSS_OVPN_Client$ sudo apt-get -f install
Reading package lists... Done
Building dependency tree
Reading state information... Done
Correcting dependencies... Done
The following additional packages will be installed:
  libnss-resolve libnss-systemd libpam-systemd libpkcs11-helper1 libsystemd0 openvpn openvpn-systemd-resolved systemd
Suggested packages:
  easy-rsa resolvconf systemd-container
The following NEW packages will be installed:
  libnss-resolve libpkcs11-helper1 openvpn openvpn-systemd-resolved
The following packages will be upgraded:
  libnss-systemd libpam-systemd libsystemd0 systemd
4 upgraded, 4 newly installed, 0 to remove and 297 not upgraded.
1 not fully installed or removed.
Need to get 3,858 kB/3,963 kB of archives.
After this operation, 1,697 kB of additional disk space will be used.
Do you want to continue? [Y/n]
```

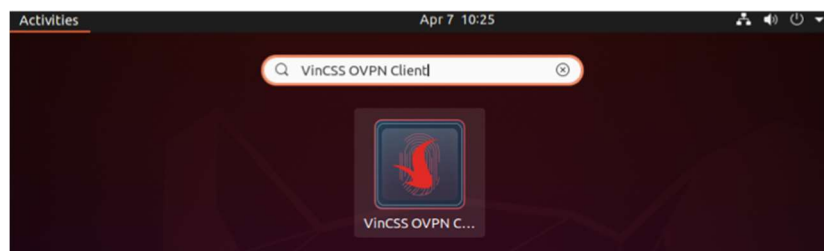


- Installation success screen.

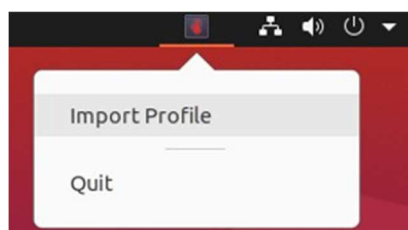
```
Do you want to continue? [Y/n] Y
Get:1 http://us.archive.ubuntu.com/ubuntu bionic/main amd64 libpks11-helper1 amd64 1.22-4 [43.5 kB]
Get:2 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpam-systemd amd64 237-3ubuntu10.50 [107 kB]
Get:3 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 systemd amd64 237-3ubuntu10.50 [2,914 kB]
Get:4 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libsystemd0 amd64 237-3ubuntu10.50 [287 kB]
Get:5 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 openvpn amd64 2.4.4-2ubuntu1.6 [470 kB]
Get:6 http://us.archive.ubuntu.com/ubuntu bionic-updates/universe amd64 libnss-resolve amd64 237-3ubuntu10.50 [106 kB]
Get:7 http://us.archive.ubuntu.com/ubuntu bionic/universe amd64 openvpn-systemd-resolved amd64 1.2.7-1 [9,272 B]
Fetched 3,858 kB in 16s (238 kB/s)
Preconfiguring packages ...
Selecting previously unselected package libpks11-helper1:amd64.
(Reading database ... 127572 files and directories currently installed.)
Preparing to unpack .../libpks11-helper1_1.22-4_amd64.deb ...
Unpacking libpks11-helper1:amd64 (1.22-4) ...
Preparing to unpack .../libpam-systemd_237-3ubuntu10.50_amd64.deb ...
Unpacking libpam-systemd:amd64 (237-3ubuntu10.50) over (237-3ubuntu10.42) ...
Preparing to unpack .../libpam-systemd_237-3ubuntu10.50_amd64.deb ...
Unpacking libpam-systemd:amd64 (237-3ubuntu10.50) over (237-3ubuntu10.42) ...
Preparing to unpack .../libsystemd0_237-3ubuntu10.50_amd64.deb ...
Unpacking libsystemd0:amd64 (237-3ubuntu10.50) over (237-3ubuntu10.42) ...
Preparing to unpack .../libsystemd0_237-3ubuntu10.50_amd64.deb ...
Unpacking libsystemd0:amd64 (237-3ubuntu10.50) over (237-3ubuntu10.42) ...
Setting up libsystemd0:amd64 (237-3ubuntu10.50) ...
Selecting previously unselected package openvpn.
(Reading database ... 127582 files and directories currently installed.)
Preparing to unpack .../openvpn_2.4.4-2ubuntu1.6_amd64.deb ...
Unpacking openvpn (2.4.4-2ubuntu1.6) ...
Selecting previously unselected package libnss-resolve:amd64.
Preparing to unpack .../libnss-resolve_237-3ubuntu10.50_amd64.deb ...
Unpacking libnss-resolve:amd64 (237-3ubuntu10.50) ...
Selecting previously unselected package openvpn-systemd-resolved.
Preparing to unpack .../openvpn-systemd-resolved_1.2.7-1_amd64.deb ...
Unpacking openvpn-systemd-resolved (1.2.7-1) ...
Setting up libpks11-helper1:amd64 (1.22-4) ...
Setting up openvpn (2.4.4-2ubuntu1.6) ...
* Restarting virtual private network daemon.
Created symlink /etc/systemd/system/multi-user.target.wants/openvpn.service → /lib/systemd/system/openvpn.service.
Setting up systemd (237-3ubuntu10.50) ...
Installing new version of config file /etc/dhcp/dhclient-enter-hooks.d/resolved ...
Setting up libnss-resolve:amd64 (237-3ubuntu10.50) ...
First installation detected...
Checking NSS setup...
Setting up openvpn-systemd-resolved (1.2.7-1) ...
Setting up libnss-systemd:amd64 (237-3ubuntu10.50) ...
Setting up libpam-systemd:amd64 (237-3ubuntu10.50) ...
Setting up vincss-ovpn-client (1.3.4) ...
Created symlink /etc/systemd/system/multi-user.target.wants/vpn.service → /etc/systemd/system/vpn.service.
Processing triggers for libc-bin (2.27-3ubuntu1.2) ...
Processing triggers for dbus (1.12.2-1ubuntu1.2) ...
Processing triggers for ureadahead (0.100.0-21) ...
vincss@ubuntu:~$ dpkg-query -f='${Package} ${Version} ${Architecture}\n' -W -f='${Package} ${Version} ${Architecture}\n' | grep openvpn
openvpn 2.4.4-2ubuntu1.6 amd64
openvpn-systemd-resolved 1.2.7-1 amd64
vincss@ubuntu:~$
```

### I.3.2. Configuring VPN connection

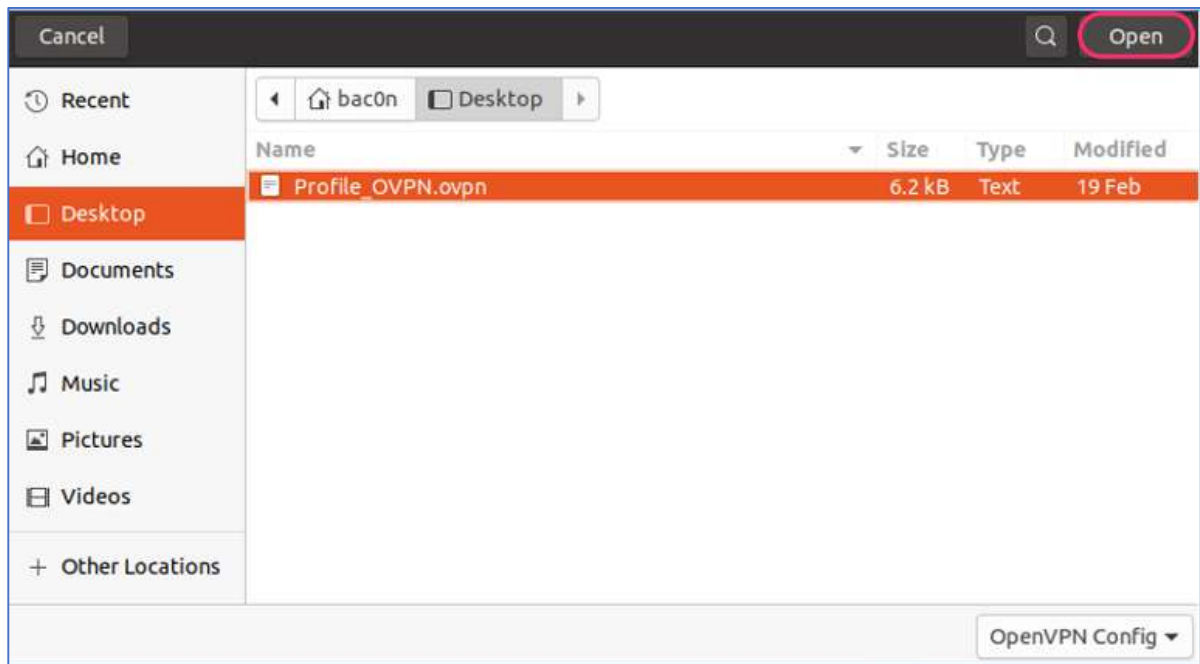
- Default on Linux, after VPN installed, it does not update DNS so you must add some information in VPN profile. Follow steps below:
  - o Open VPN profile file was sent by the administrator (file .ovpn), add line at the end of the VPN profile file.  
`dhcp-option DOMAIN-ROUTE .`
  - o After adding information, proceed to save the configuration VinCSS OVPN Client file.
- Open VinCSS OVPN Client software is intalled in the computer.



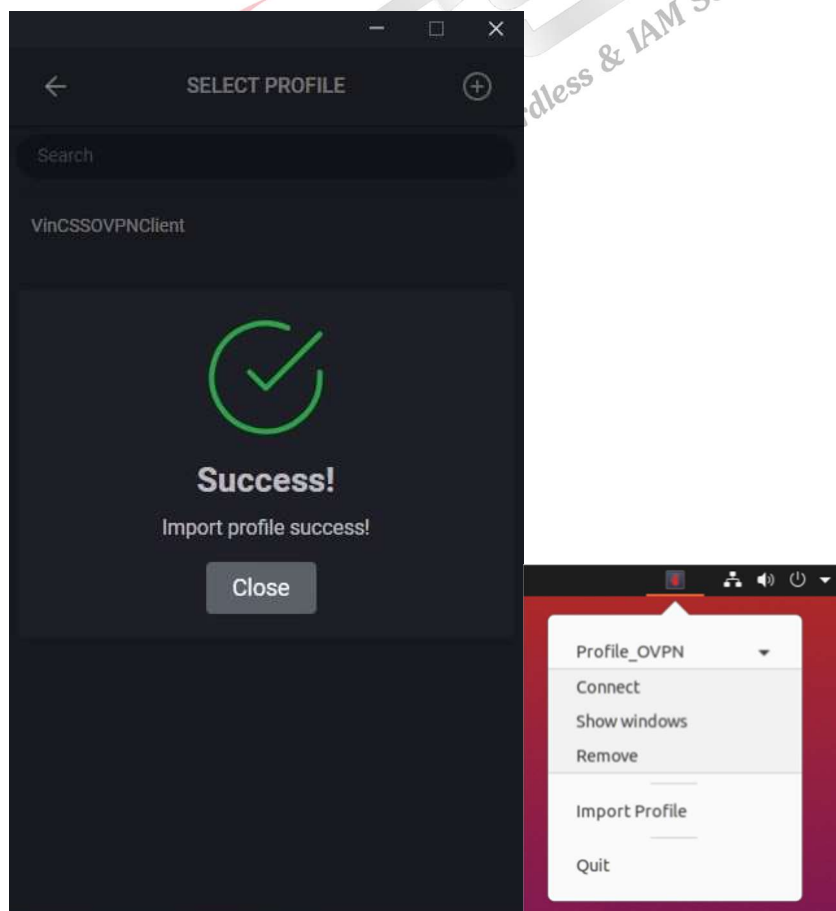
- Click on VinCSS OVPN Client icon, then select **Import Profile**.



- Select profile has added information and click **Open**.



- After profile is added successfully, click **Close** to close the notification. Screen shows profile name in the list.





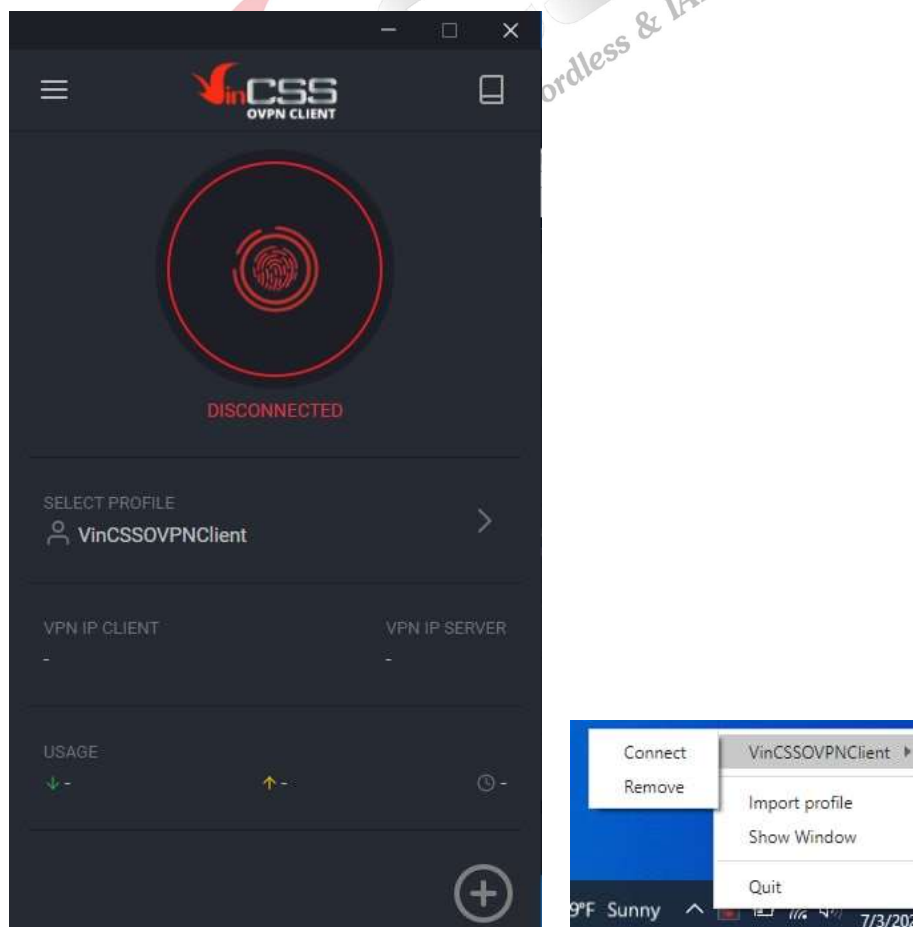
## II. CONNECT VPN WITH VINCSS OVPN CLIENT USING VINCSS FIDO2® TOUCH 1 FOR PASSWORDLESS AUTHENTICATION

### Note:

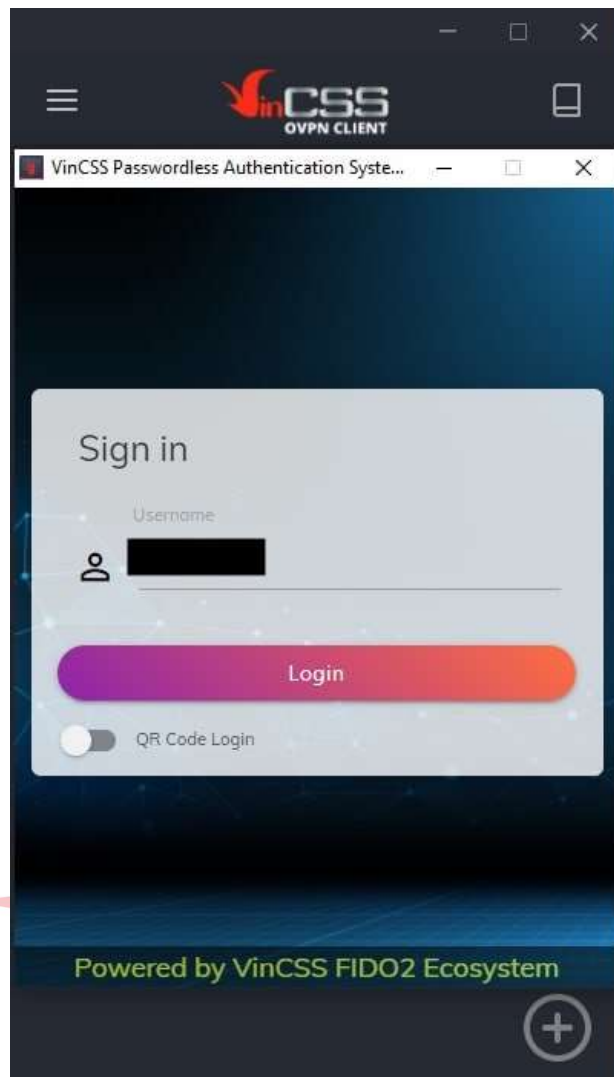
- Contact administrator to register the VinCSS FIDO2® Touch 1 for passwordless authentication with VinCSS OVPN Client software.
- Sequence of steps to establish VPN connection with VinCSS OVPN Client using VinCSS FIDO2® Touch 1 key for passwordless authentication are performed the same for Windows, macOS, Linux.  
Section below is a step-by-step guide on Windows operating system.

### Configuring VPN connection

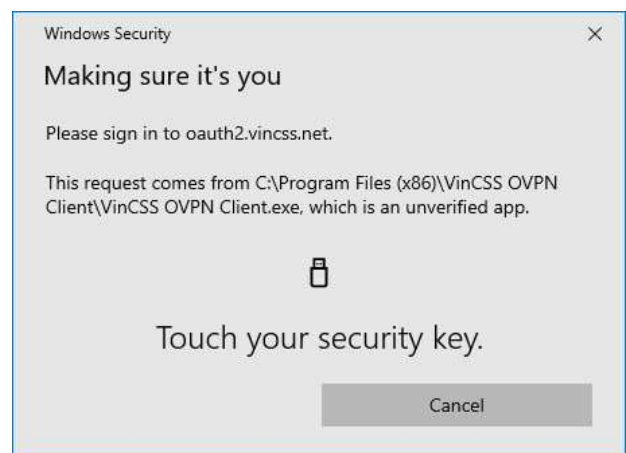
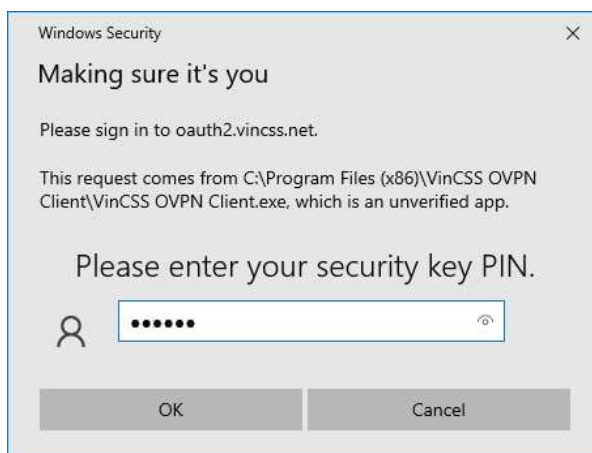
- Connect VinCSS FIDO2® Touch 1 key to the computer.
- On the VinCSS OVPN Client application interface, select VPN profile to connect, then click the red fingerprint icon. Or right-click on VinCSS OVPN Client icon on taskbar, select VPN profile to connect, then select **Connect**.



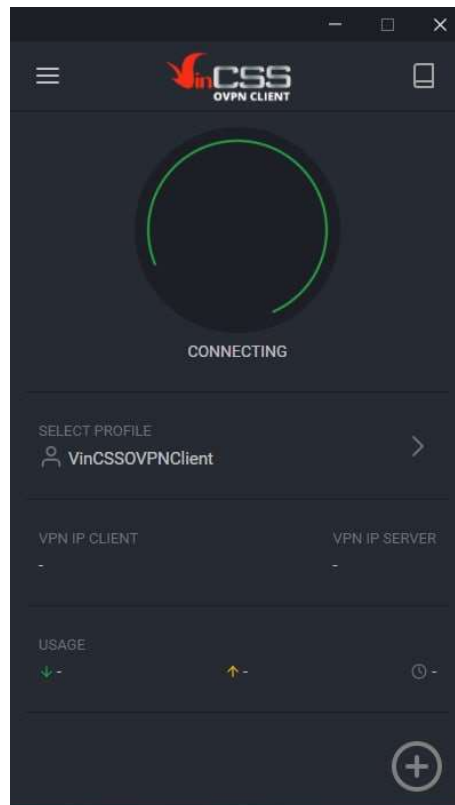
- On the program interface, enter the Username (case sensitive), then click **Login**.



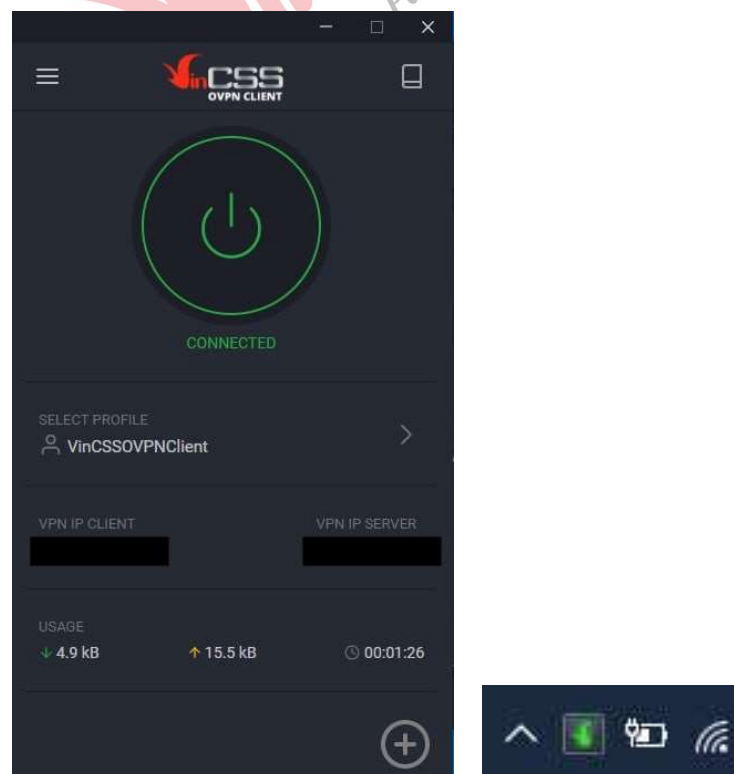
- Enter the PIN code of VinCSS FIDO2® Touch 1 and click **OK**. Then touch logo on the VinCSS FIDO2® Touch 1 security key.



- Loading screen while connecting server.



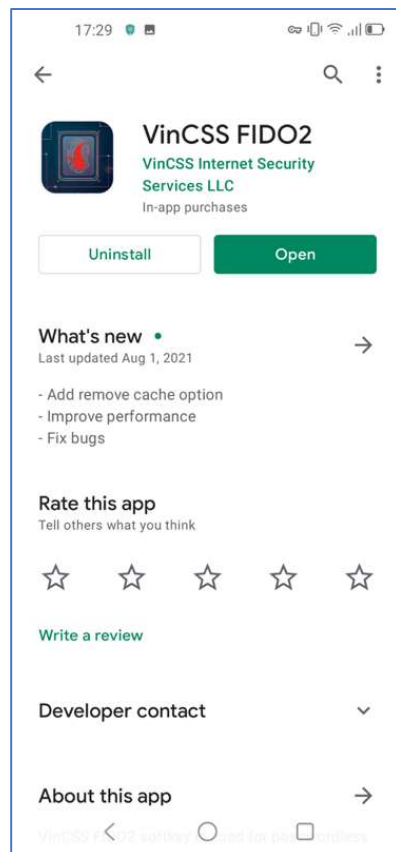
- VPN connection is established successfully if the screen shows the word **CONNECTED** in green. On the taskbar will be displayed a green icon.



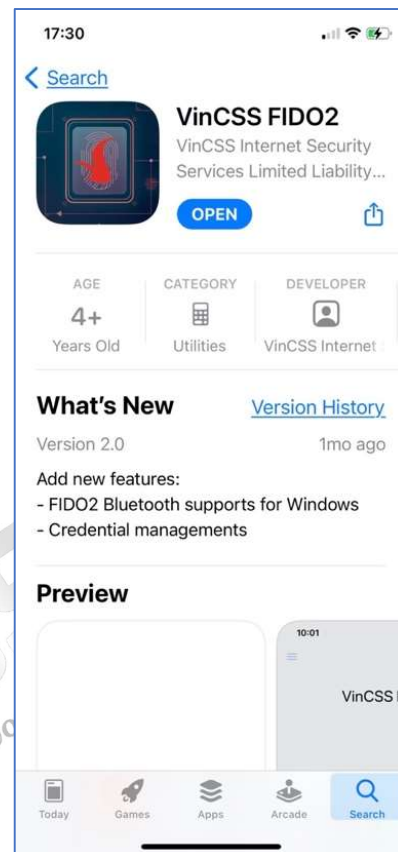
### III. CONNECT VPN WITH VINCSS OVPN CLIENT USING VINCSS FIDO2 APPLICATION FOR PASSWORDLESS AUTHENTICATION

**Note:**

- *Install VinCSS FIDO2 application on smartphone.*



*VinCSS FIDO2 app on Android*



*VinCSS FIDO2 app on iOS*

- *Contact the administrator to get the QR Code for key registration in VinCSS FIDO application.*

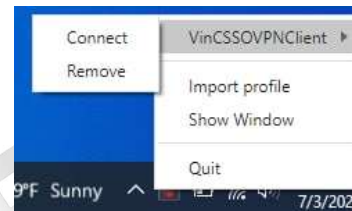
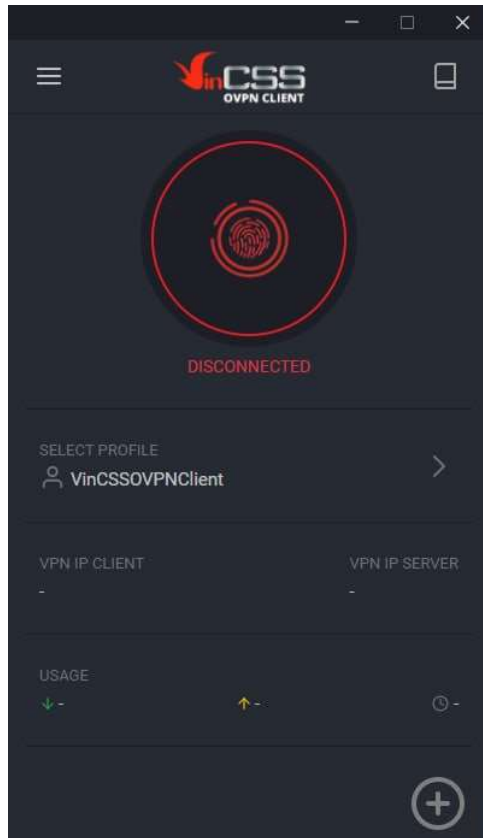
### Configuring VPN connection

**Note:**

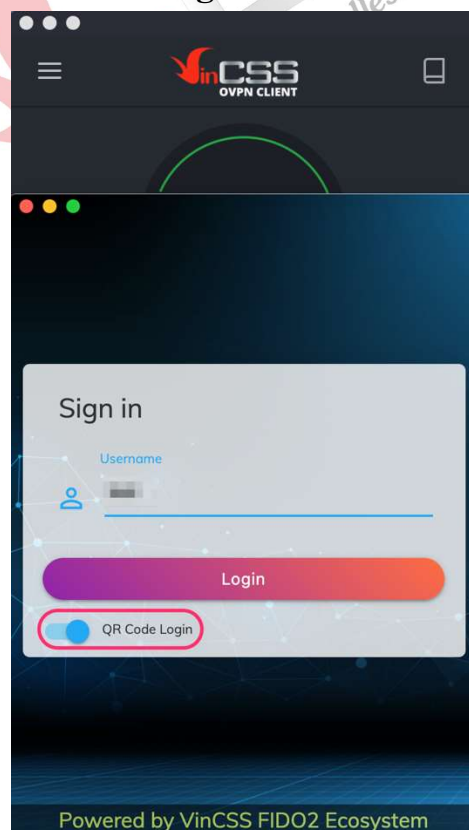
*Sequence of steps to establish VPN connection with VinCSS OVPN Client using VinCSS FIDO2 application on smartphone for passwordless authentication are performed the same for Windows, macOS, Linux operating system.*

*Section below is a step-by-step guide on Windows.*

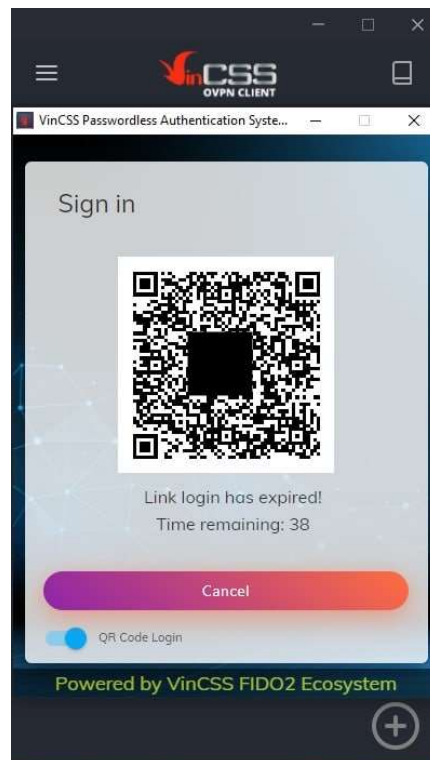
- On the VinCSS OVPN Client interface, select VPN profile to connect, then click the red fingerprint icon. Or right-click on VinCSS OVPN Client icon on taskbar, select VPN profile to connect, then click **Connect**.



- On the program interface, enter the Username (case sensitive), then select **QR Code Login** and click **Login**.



- QR Code is displayed on a new pop-up window. Use VinCSS FIDO2 application on smartphone to scan QR Code (code is valid for 40 seconds).



- VPN connection is established successfully if the green **CONNECTED** word is displayed. On the Taskbar will be displayed a green icon.

