



## SUB1X Masternode Setup Guide: LINUX Version

What you will need for this guide:

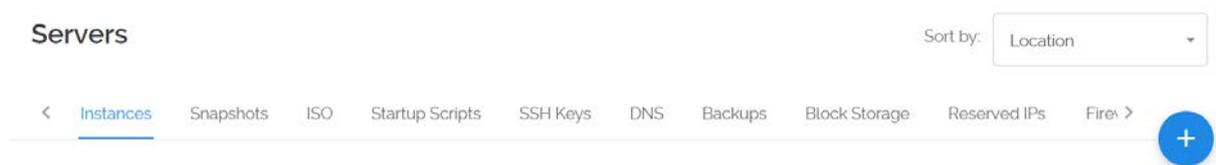
- 1) Local computer with Windows, MacOS or Linux.
- 2) Remote server – VPS [Vultr.com or AWS for instance]
- 3) PuTTY to configure and setup the VPS
- 4) 20 Sub1X

Version 1.2

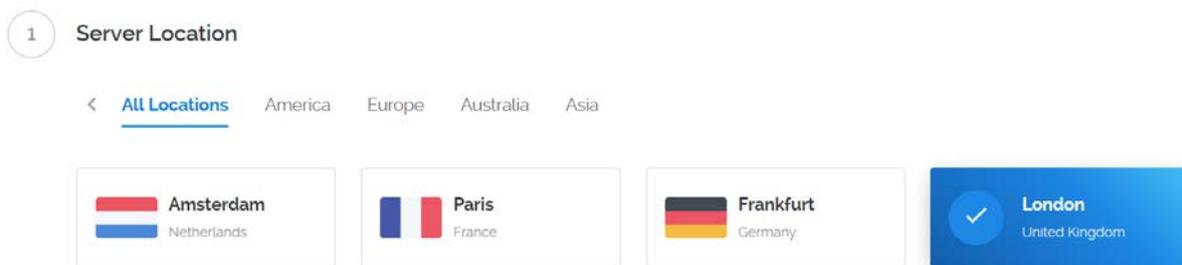
## Setting up a VPS:

Register an account with Vultr: <https://www.vultr.com/?ref=7238323>

Once this is done, you can create a new instance by clicking on the + button

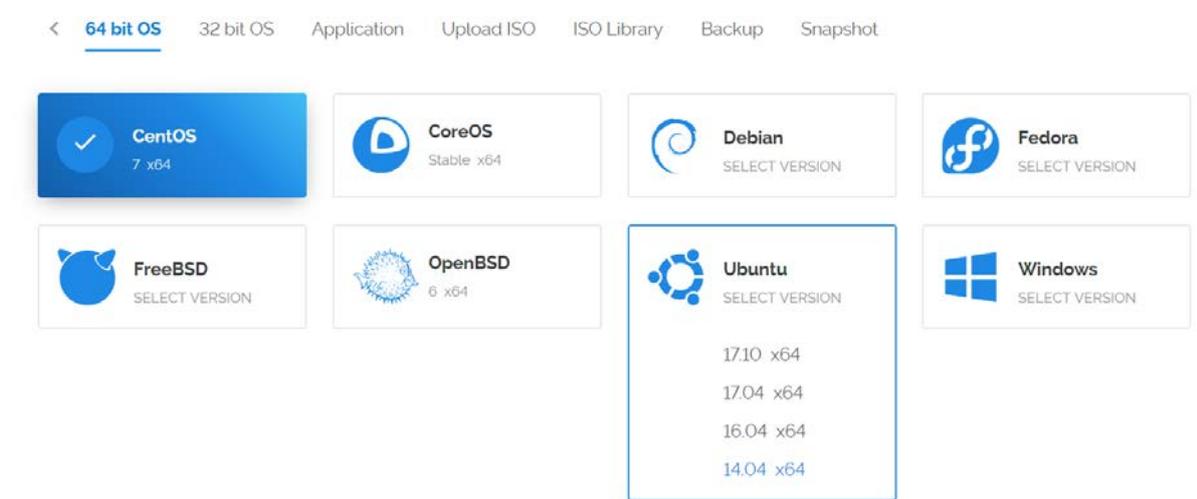


Then select a server location:



Any of them is fine.

You then must select an Operating System. For this tutorial, we will select **Ubuntu 14.04 x64**



As for the server size, 1GB of memory is enough.

3 Server Size

<p>Temporarily Sold Out</p> <p>20 GB SSD</p> <p><b>\$2.50/mo</b></p> <p>\$0.004/h</p> <hr/> <p>1 CPU</p> <p>512MB Memory</p> <p>500GB Bandwidth</p>	<p>25 GB SSD</p> <p><b>\$5/mo</b></p> <p>\$0.007/h</p> <hr/> <p>1 CPU</p> <p>1024MB Memory</p> <p>1000GB Bandwidth</p>	<p>40 GB SSD</p> <p><b>\$10/mo</b></p> <p>\$0.015/h</p> <hr/> <p>1 CPU</p> <p>2048MB Memory</p> <p>2000GB Bandwidth</p>	<p>60 GB SSD</p> <p><b>\$20/mo</b></p> <p>\$0.03/h</p> <hr/> <p>2 CPU</p> <p>4096MB Memory</p> <p>3000GB Bandwidth</p>
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Skip the settings 4 to 6 and directly set a server hostname and label.

7 Server Hostname & Label

Enter server hostname

mn-sub1x

Enter server label

mn-sub1x

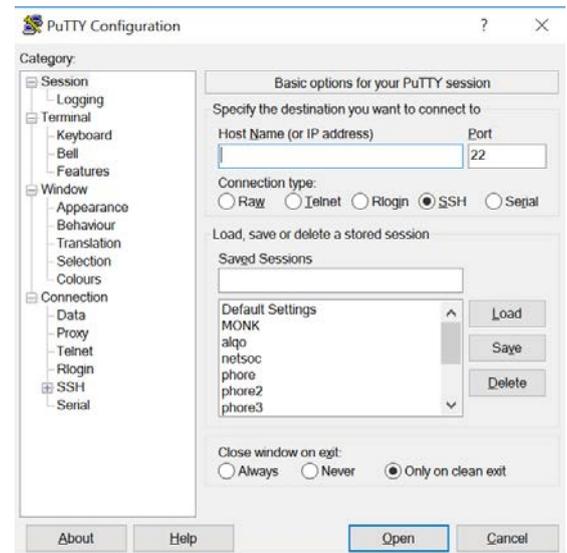
Once everything is set, you can deploy your VPS instance.

Servers Qty:  Summary: **\$5.00/mo** (\$0.007/hr) [Deploy Now](#)

## Connecting to your VPS:

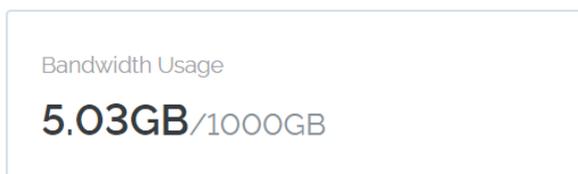
First download Putty to access your VPS instance  
<http://putty.org/>

Start Putty and you should see this window:



You will need two parameters, the server **IP address** and the server **Password**.  
To get these, you will have to connect to your Vultr panel and access your instance Overview.

< [Overview](#) [Usage Graphs](#) [Settings](#)

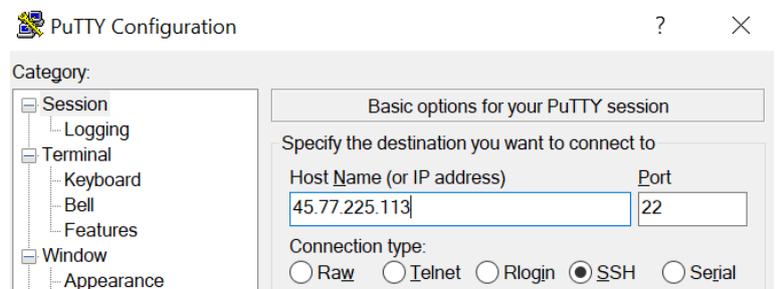


Location:  London

IP Address: 45.77.225.113 

Username: root

Password: .....  



Click the open button and the console will open. A message may appear the first time, press yes.



Then enter your server login details provided in your Vultr account.

You cannot ctrl+V to paste in the console; either right click on mouse or use shift+insert.

User: root

Password: From your VPS overview panel. You may not see it when you type it, just press enter once pasted or typed.

 45.77.63.3 - PuTTY

```
login as: root
root@45.77.63.3's password: █
```

## Updating your VPS:

Run these commands in order, one at a time:

```
sudo apt-get update
sudo apt-get upgrade
sudo apt-get dist-upgrade
sudo apt-get install nano htop git
sudo apt-get install software-properties-common
sudo apt-get install build-essential libtool autotools-dev pkg-config libssl-dev
sudo apt-get install libboost-all-dev
sudo apt-get install libevent-dev
sudo apt-get install libminiupnpc-dev
sudo apt-get install autoconf
sudo apt-get install automake
```

```
sudo add-apt-repository ppa:bitcoin/bitcoin
sudo apt-get update
sudo apt-get install libdb4.8-dev libdb4.8+-dev
```

## Setting up a Firewall:

```
apt-get install ufw
ufw allow ssh/tcp
ufw limit ssh/tcp
ufw allow 43172/tcp
ufw logging on
ufw enable
```

Just to make sure, you can check the status of your firewall with this command:

```
ufw status
```



## Swap Image:

We will then set up a swap file:

```
cd /var
sudo touch swap.img
sudo chmod 600 swap.img
sudo dd if=/dev/zero of=/var/swap.img bs=1024k count=2000
mkswap /var/swap.img
sudo swapon /var/swap.img
sudo free
sudo echo "/var/swap.img none swap sw 0 0" >> /etc/fstab
cd
reboot
```

## Installing the Sub1X wallet:

Reboot your VPS and follow these commands:

```
sudo git clone https://github.com/SuB1X-Coin/SuB1X
chmod +x SuB1X/autogen.sh
chmod +x SuB1X/share/genbuild.sh
chmod +x SuB1X/src/leveldb/build_detect_platform
```

```
cd SuB1X
sudo ./autogen.sh
sudo ./configure
sudo make
sudo make install
```

```
cd src
mv sub1xd sub1x-cli sub1x-tx ~/
cd
```

Now start the wallet:

```
sub1xd
```

You should get an error message, this is normal, we will come back to this later on.



## Snapshot of the instance:

If you intend to run multiple Masternodes on Vultr, you can take a snapshot of this instance to skip the previous steps you just followed.

To do so, go on the instance page, then click on the tab snapshot. You will then have to name it, and click on **Take Snapshot**.

A screenshot of the Vultr web interface showing the 'Snapshots' tab. The navigation bar at the top includes 'Overview', 'Usage Graphs', 'Settings', 'Snapshots' (which is underlined and highlighted), 'Backups', and 'DDOS'. On the right side of the navigation bar, there is a blue circular button with a white plus sign. Below the navigation bar, the main content area is titled 'Take Snapshot'. It features a text input field with the placeholder text 'Label' and a blue button labeled 'Take Snapshot'.

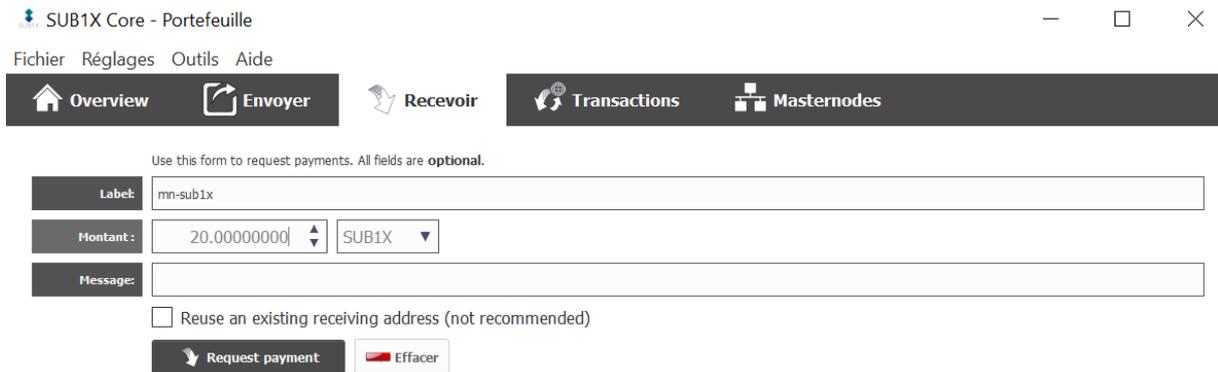
Wait for around 20 minutes, and the snapshot should be done.

To use it, just create a new instance, and go to restore Snapshot to get the data restored.

## Configuring the master wallet:

Start the sub1x wallet, and let's create an address that will hold the Masternode collateral.

Go to the Receive tab, add a label, and put 20 sub1x as the amount. Then press Request payment.



SUB1X Core - Portefeuille

Fichier Réglages Outils Aide

Overview Envoyer Recevoir Transactions Masternodes

Use this form to request payments. All fields are optional.

Label: mn-sub1x

Montant: 20.00000000 SUB1X

Message:

Reuse an existing receiving address (not recommended)

Request payment Effacer

This will generate a window with the newly created address. Copy the address.



Demander un paiement à mn-sub1x

Information de paiement

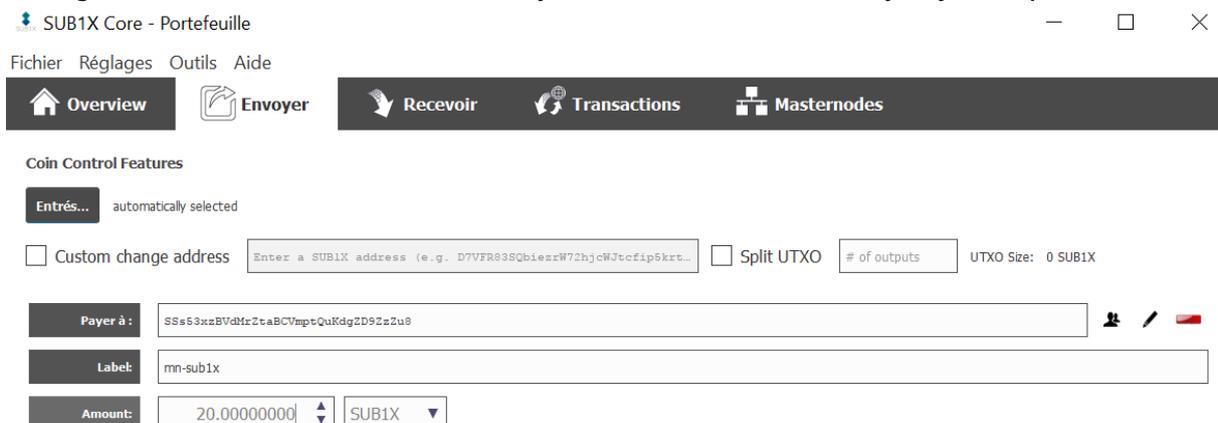
URI: <sub1x:SSs53xzBVdMrZtaBCVmptQuKdgZD9ZzZu8?amount=20,00000000&label=mn-sub1x>

Adresse: SSs53xzBVdMrZtaBCVmptQuKdgZD9ZzZu8

Montant: 20.00000000 SUB1X

Label: mn-sub1x

Now go to the Send tab, and send exactly 20 sub1x to the address you just copied.



SUB1X Core - Portefeuille

Fichier Réglages Outils Aide

Overview Envoyer Recevoir Transactions Masternodes

Coin Control Features

Entrés... automatically selected

Custom change address Enter a SUB1X address (e.g. D7VFR838QbiezrW72hjcWJtcfip5krt...  Split UTXO # of outputs UTXO Size: 0 SUB1X

Payer à: SSs53xzBVdMrZtaBCVmptQuKdgZD9ZzZu8

Label: mn-sub1x

Amount: 20.00000000 SUB1X

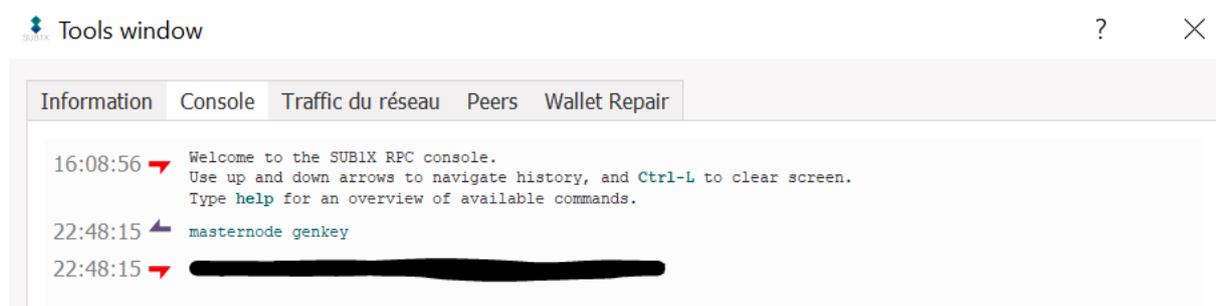
Create a new text file, where you will store all the data for the Masternode.  
You can use this template:

```
MN Label: <Masternode_name>  
Collateral address: <collateral_address>  
Masternode Key: <Masternode_genkey>  
Public IP: <VPS_ip_address>  
MN conf line: <configuration_line>
```

```
rpcuser=<Random username>  
rpcpassword=<Random password>  
rpcallowip=127.0.0.1  
listen=1  
server=1  
daemon=1  
logtimestamps=1  
maxconnections=256  
masternode=1  
externalip=<VPS_ip_address>  
bind=<VPS_ip_address>  
masternodeaddr=<VPS_ip_address>:43172  
masternodeprivkey= <Masternode_genkey>
```

Open the debug console of the wallet [**Tools** then **Debug Console**] and enter this command:

```
masternode genkey
```



Copy that key and save it in your text file.

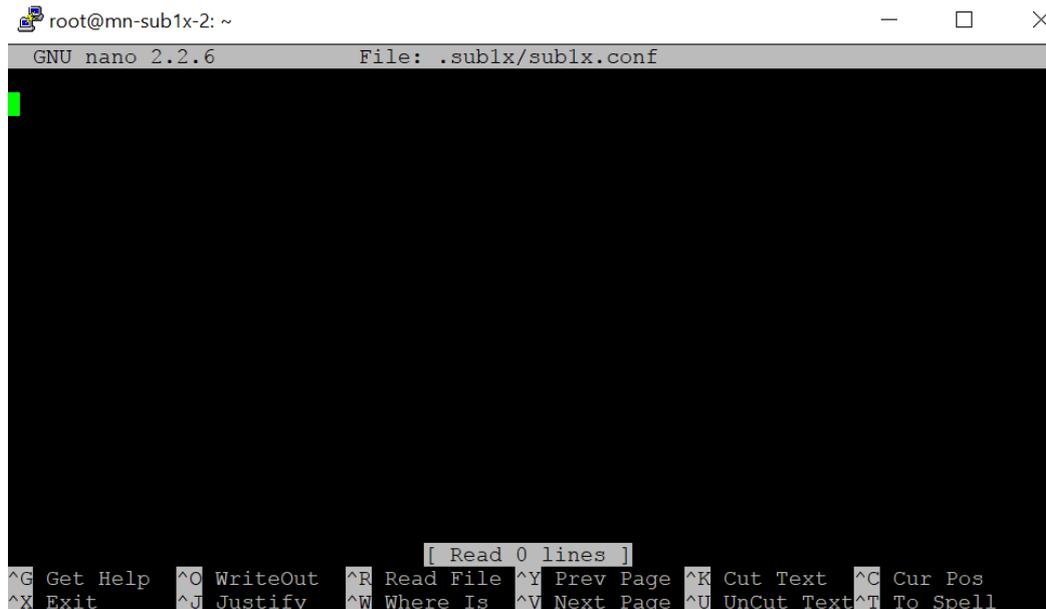


## Configuring the master wallet:

Go back to Putty and enter the following commands:

```
cd
nano .sub1x/sub1x.conf
```

A window like this should appear



```
root@mn-sub1x-2: ~
GNU nano 2.2.6 File: .sub1x/sub1x.conf
[ Read 0 lines ]
^G Get Help  ^O WriteOut  ^R Read File  ^Y Prev Page  ^K Cut Text   ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is  ^V Next Page  ^U UnCut Text ^T To Spell
```

And write the following from the text file you made earlier:

```
rpcuser=<Random username | Same as the Master wallet>
rpcpassword=<Random password | Same as the Master wallet >
rpcallowip=127.0.0.1
listen=0
server=1
daemon=1
logtimestamps=1
maxconnections=256
masternode=1
externalip=<VPS_ip_address>
bind=< VPS_ip_address>
masternodeaddr=< VPS_ip_address>:43172
masternodeprivkey= <Masternode_genkey>
```

Press **ctrl+x** once you are done, then **Y** to save, and **enter** to exit.

Now that everything has been set, we can now start the Masternode wallet.  
To do so, enter this command:

`sub1xd`

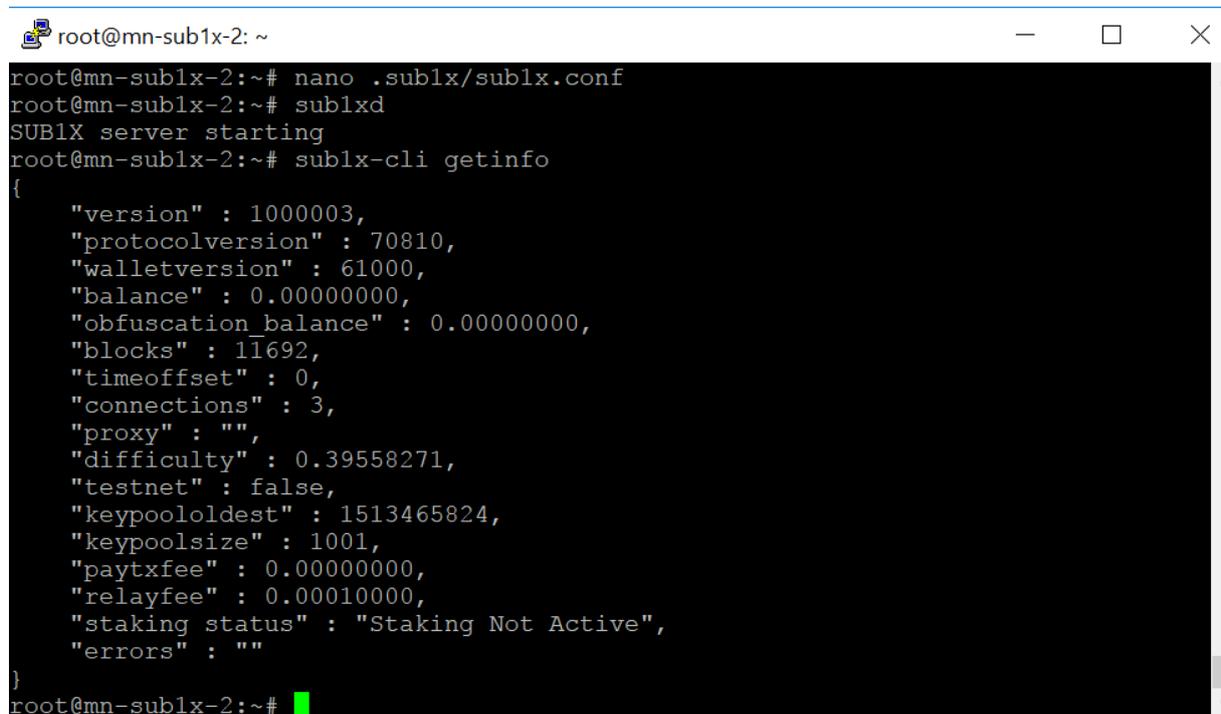
```
root@mn-sub1x-2:~# sub1xd
SUB1X server starting
root@mn-sub1x-2:~# █
```

Let it sync for a few minutes.

You can also check its current synchronization with the Sub1X network with this command:

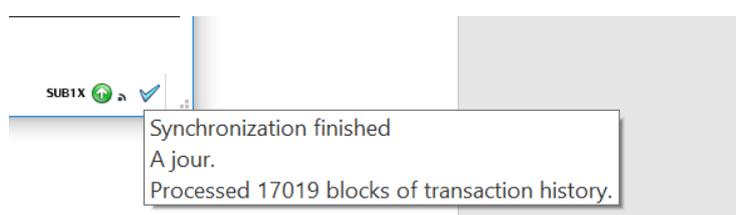
`sub1x-cli getinfo`

And it will display these information:



```
root@mn-sub1x-2: ~
root@mn-sub1x-2:~# nano .sub1x/sub1x.conf
root@mn-sub1x-2:~# sub1xd
SUB1X server starting
root@mn-sub1x-2:~# sub1x-cli getinfo
{
  "version" : 1000003,
  "protocolversion" : 70810,
  "walletversion" : 61000,
  "balance" : 0.00000000,
  "obfuscation_balance" : 0.00000000,
  "blocks" : 11692,
  "timeoffset" : 0,
  "connections" : 3,
  "proxy" : "",
  "difficulty" : 0.39558271,
  "testnet" : false,
  "keypoololdest" : 1513465824,
  "keypoolsize" : 1001,
  "paytxfee" : 0.00000000,
  "relayfee" : 0.00010000,
  "staking status" : "Staking Not Active",
  "errors" : ""
}
root@mn-sub1x-2:~# █
```

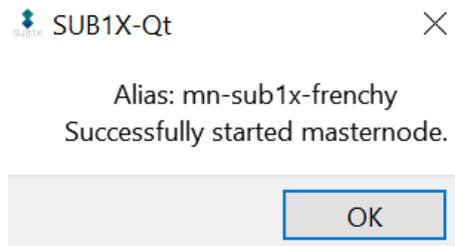
The master wallet tick can help you see what's the current block and if the Masternode wallet is up-to-date or not.



Once it is fully synchronized, go back to the master wallet, and start the Masternode by clicking on **Start Alias**.



If everything is set correctly, you should get this message:



Else, read the error message and track back your mistake.

The first Masternode reward should then come after a while, be patient and wait for a few hours before tweaking anything.

If you have multiple Masternodes to configure, use the instance snapshot, restore it in a new VPS instance and follow these steps again.

For any queries, visit the Sub1X website: <https://sub1x.org/>

Or ask on the telegram channel: [https://t.me/joinchat/FeDyZg6MbSGTo\\_PWpzx0TA](https://t.me/joinchat/FeDyZg6MbSGTo_PWpzx0TA)

Thank you.