



QuantisNet Masternode setup guide V1.21

forked from PIVX

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## Abstract

This is the guide for cold masternode setup. This means involves two wallets. One wallet will be installed remotely on your VPS server. They don't hold any of your coins. The second wallet will be installed on your local PC. They hold all your coins.

Both the wallets that is your remote VPS wallet and your local PC wallet will have a full copy of the blockchain. However your local wallet is the one that is safely holding the collateral amount and so you have full control of your private keys. Now using local controller wallet you'll create a secondary private key which is also called as masternode private key. This masternode private key doesn't give access to your coins but instead it acts as a communication. This key is the proof that you own the funds and it tells the cold online wallet to act on behalf of the hot wallet.

Now using local controller wallet you initiate communication and once the masternode is enabled you can safely close your local QT wallet and take it offline. Only your VPS wallet that has no coins will stay online 24/7.

## 1. Requirements

### **5001 QUAN (5000 collateral + 1 to cover any TX fees)**

You can buy coins and withdraw them on some exchanges.

### **VPS server (Ubuntu 16.04)**

You can rent it from Vultr, Digital Ocean and so on.

### **SSH client (e.g. putty[Windows only] <https://www.putty.org/>)**

This is necessary for you to operate the server from the local PC.

## 2. Local PC wallet setup part 1 of 2

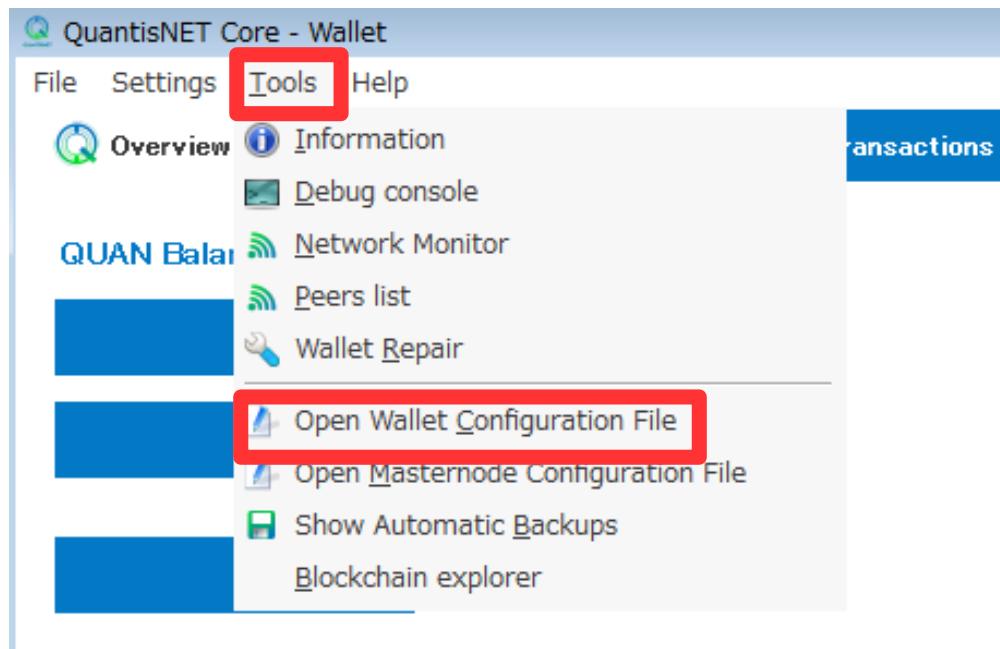
I. Download latest windows wallet from official release: <http://45.76.62.99/files/quantisnet-qt.exe>

II. Run the wallet

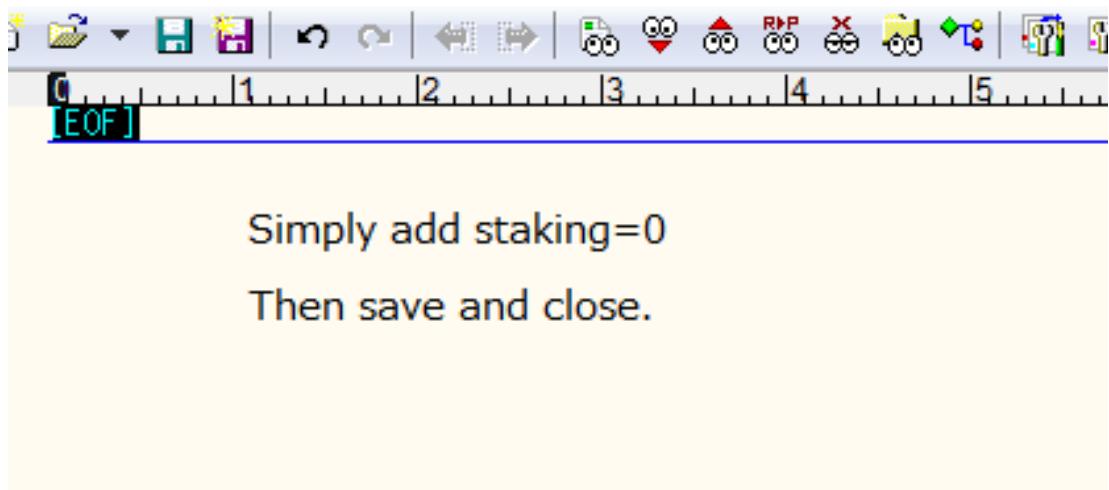


III. Edit quantisnet.conf to stop staking temporarily not to be prevented setup

Click “Tools” and “Open Wallet Configuration File”

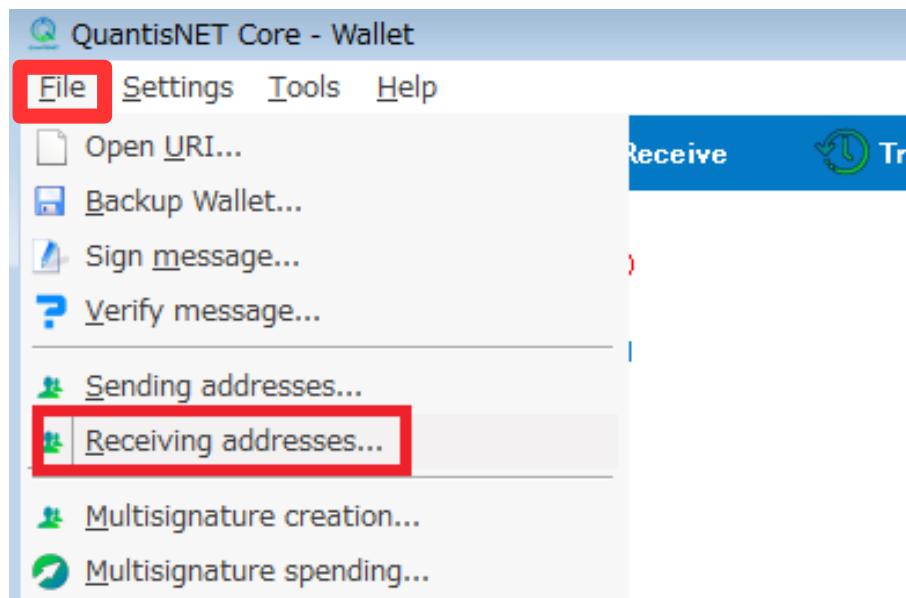


When text editor opend, add staking=0 then save and close the file and restart wallet

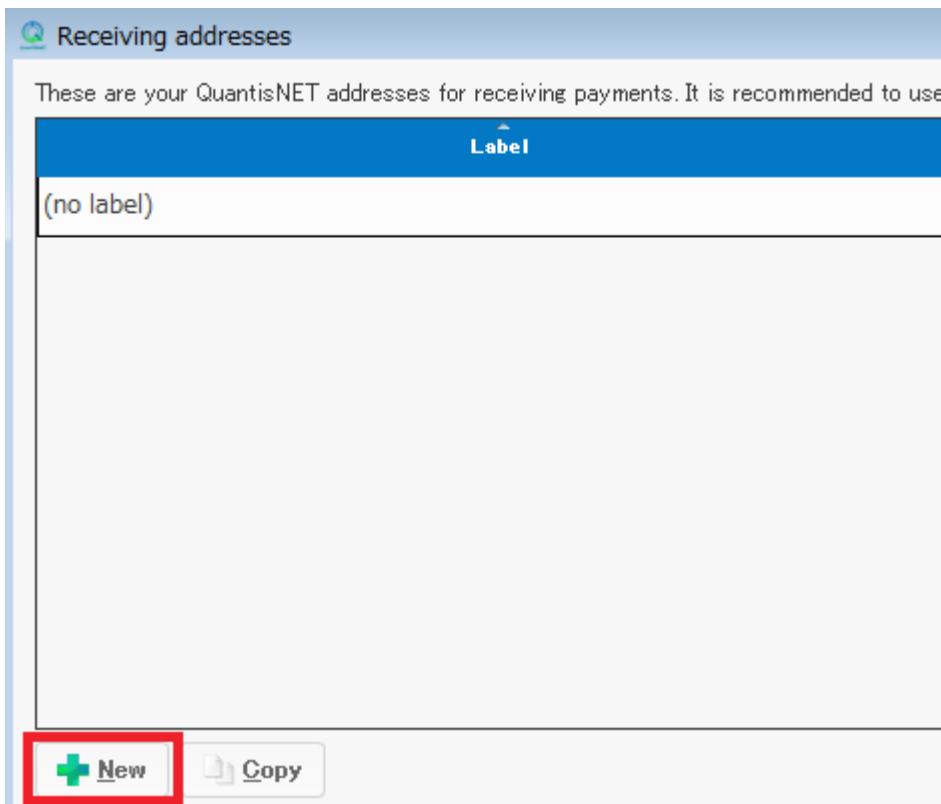




- IV. Wait for the wallet to synchronize  
V. Click "File" → "Receiving addresses..."



- VI. Click "New" and enter label name (e.g. MN01) and click OK





VI. Select the created address and click “Copy” then click “Close”





VII. Click “Send” tab and press Ctrl + V key

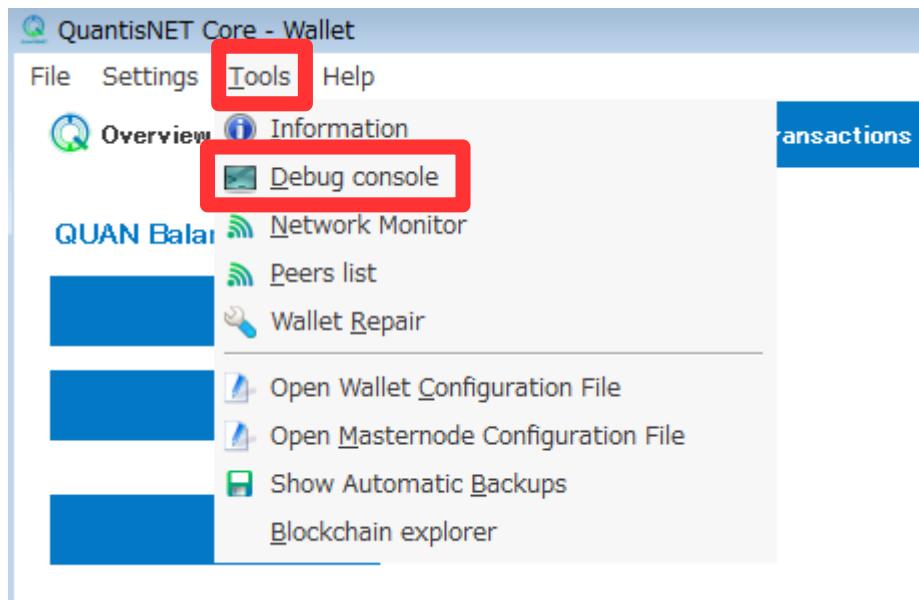
VIII. Then Input 5000 on “Amount” and click “Send”

Notice: Ensure that must be sent exactly 5000 QUAN and do it in a single transaction.

The screenshot shows the QuantisNET Core - Wallet application window. At the top, there is a menu bar with File, Settings, Tools, and Help. Below the menu is a navigation bar with four tabs: Overview, Send (which is highlighted with a red border), Receive, and Transactions. The main area is titled "Coin Control Features". It includes a button labeled "Open Coin Control..." and a note stating "Coins automatically selected". There is a checkbox for "Custom change address" with an input field next to it containing the placeholder "Enter a QuantisNET address (e.g. PCYiHgGJ)". Below this is a "Pay To:" field with the placeholder "Enter a QuantisNET address (e.g. PCYiHgGJ)" and a red overlay text "← Click and press Ctrl + V key". There is also a "Label:" field with the placeholder "Enter a label for this address to add it to your address book". At the bottom, there is an "Amount:" field with a dropdown menu set to "QUAN" and a red overlay text "Input JUST 5000".



IX. Click “Tools” → “Debug console” then enter “masternode genkey”



The screenshot shows the Tools window with the 'Console' tab selected. The window displays the following text:

```
22:35:00 ↗ Welcome to the QuantisNET RPC console.  
      Use up and down arrows to navigate history, and Ctrl-L to clear screen.  
      Type help for an overview of available commands.  
16:40:55 ↗ masternode genkey  
16:40:55 ↗ 3: [REDACTED] private key
```

The command 'masternode genkey' is entered at 16:40:55. The resulting private key is displayed in the console, with the first three characters ('3:') visible and the rest redacted with a black box. The input field at the bottom of the window is empty, indicated by a cursor symbol.

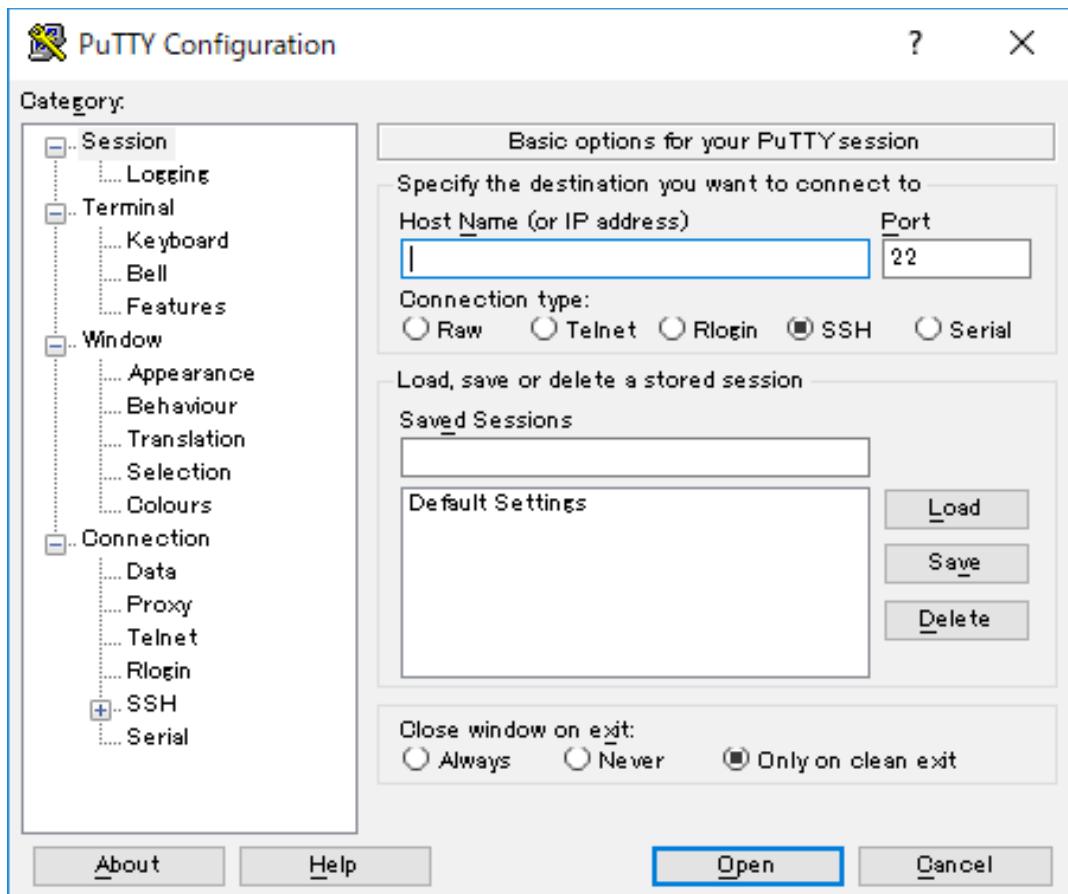
X. Write down the key(or leave the window as it is)

If you use MAC, go to step 4

### 3.Putty setup

putty is here (Windows only)

I. Open putty.exe

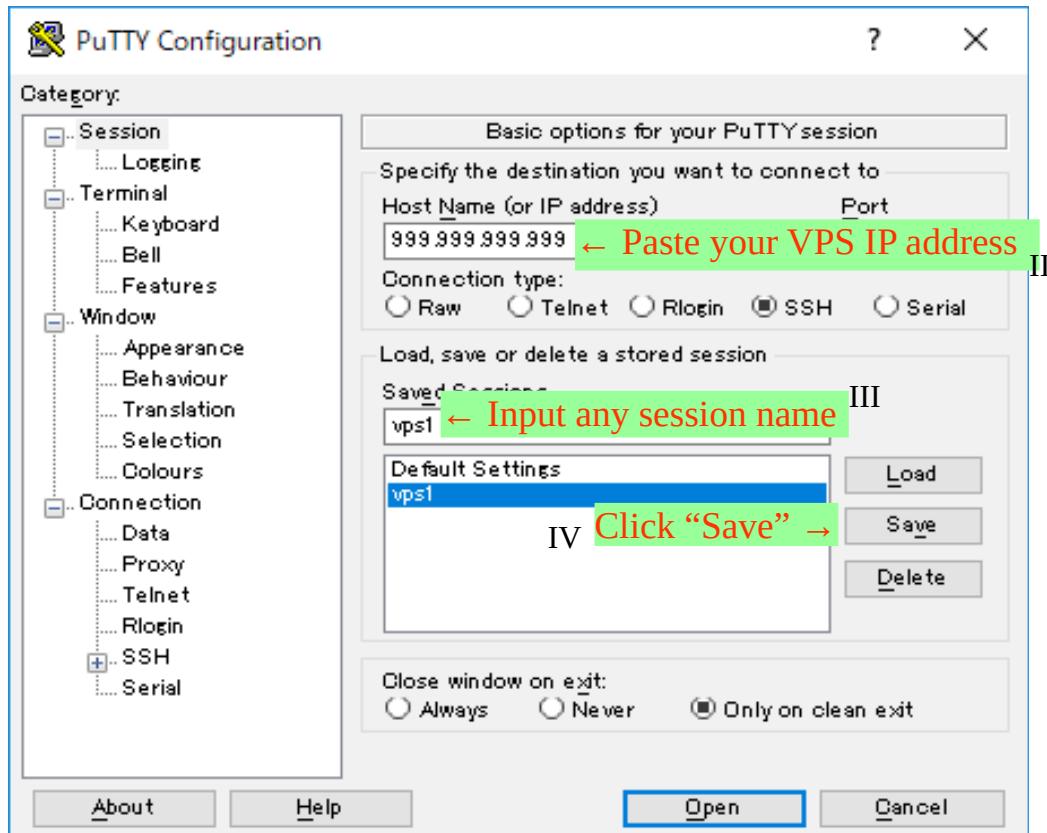




II. Paste your VPS IP address from your VPS management screen

III. Input any session name

IV. Click “Save”

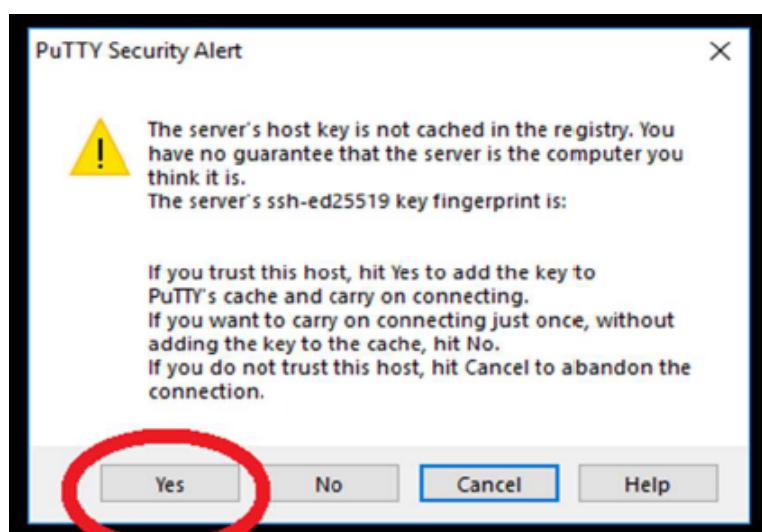


## 4.Login to VPS

I. Double click the session name and login to your VPS as “root”

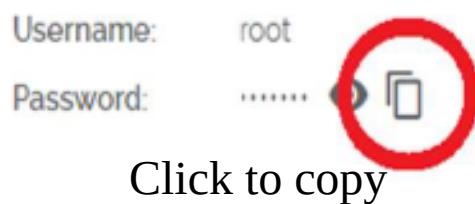
If you use MAC, use “Terminal” instead of putty (Input: ssh root@your vps ip)

II. If you got a security alert message, click “Yes”



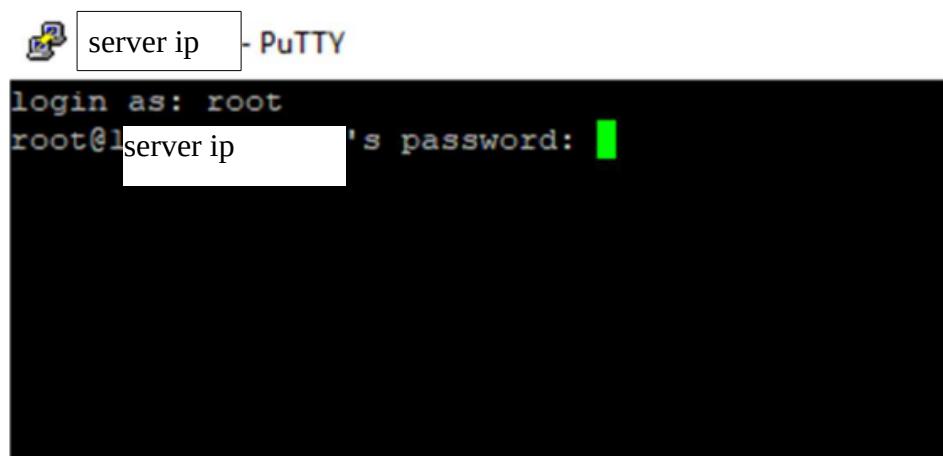


III. In your VPS management screen, copy the server's password



IV. In putty, paste the password

Notice: To paste in putty, right click ONCE (nothing will appear) and press ENTER key



## 5. Running setup script

I. Paste following into putty with right click to download

```
cd ~ && wget -q https://raw.githubusercontent.com/QuantisDev/QuantisNet-Fork-New-Chain/master/quan-mn.sh
```

II. Input: chmod +x quan-mn.sh

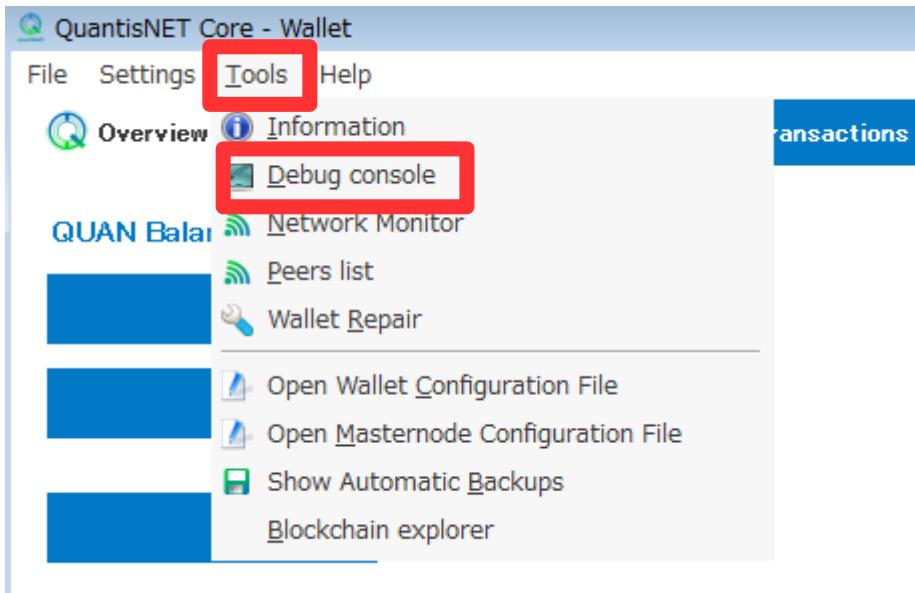
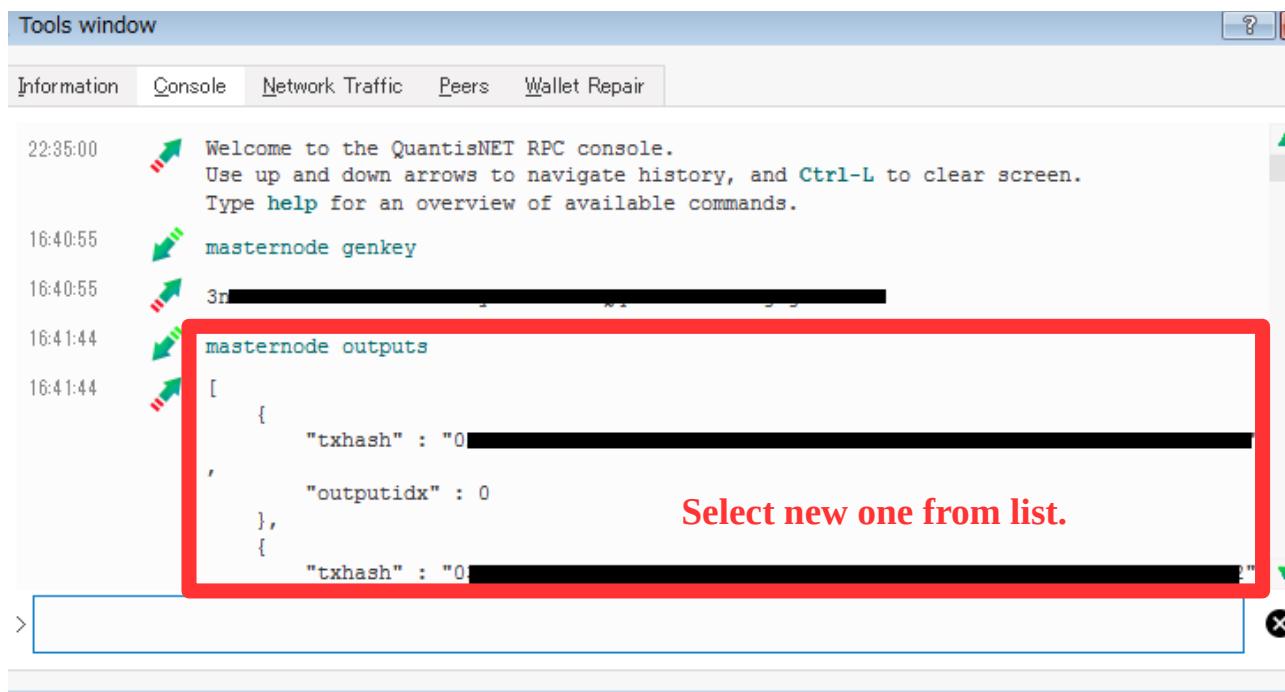
III. Run the script: ./quan-mn.sh

IV. Then follow instructions presented on the screen

```
root@Masternode08:~# cd ~ && wget -q https://raw.githubusercontent.com/QuantisDev/QuantisNet-Fork-New-Chain/master/quan-mn.sh
root@Masternode08:~# chmod +x quan-mn.sh
root@Masternode08:~# ./quan-mn.sh
```

## 6.Local PC wallet setup part 2 of 2

- I. Back to the local wallet
- II. After 1 confirmation, type “masternode outputs” on “Debug console”

The screenshot shows the Tools window with the 'Console' tab selected. The console output is as follows:

```

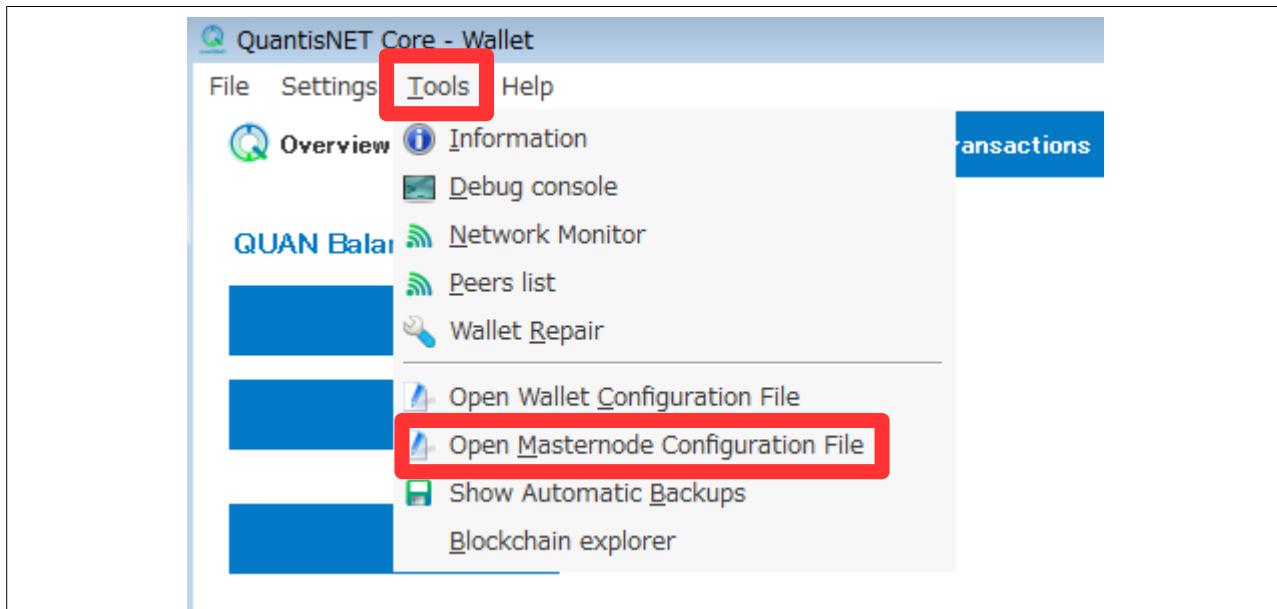
22:35:00    Welcome to the QuantisNET RPC console.
              Use up and down arrows to navigate history, and Ctrl-L to clear screen.
              Type help for an overview of available commands.
16:40:55    masternode genkey
16:40:55    3n[REDACTED]
16:41:44    masternode outputs
16:41:44    [
16:41:44    {
16:41:44    "txhash" : "0[REDACTED]"
16:41:44    ,
16:41:44    "outputidx" : 0
16:41:44    },
16:41:44    [
16:41:44    "txhash" : "0[REDACTED]"

```

A red box highlights the 'masternode outputs' command and its JSON response. A red callout box with the text 'Select new one from list.' points to the second item in the list.



### III. Click “Tools” → “Open Masternode Configuration File”



### IV. Edit the file

label vpsIP:port masternodekey txhash outputidx

(e.g. MN01 123.456.789.0:7771 1234567890asdfghjk d0a362e103f7111489103bb99ea7f08b 1)

Notice: masternodekey(private key), txhash and outputidx are pasted from Debug console

You need to set certain txhash and outputidx

	I0	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	I12	I13	I14
1	MN01	:7771	3oI					J 0						70 1 ↴	
2	MN02	:7771	3											b40 0 ↴	
3	MN03	:7771	3e3											f 0 ↴	
4	MN04	:7771	3o9											c 0 ↴	
5	MN05	:7771	3n											d9 0 ↴	
6	MN06	:7771	3n											56 1 ↴	
7	MN07	:7771	3m											c4 1 ↴	
8															

### V. Save & close masternode.conf and the wallet.

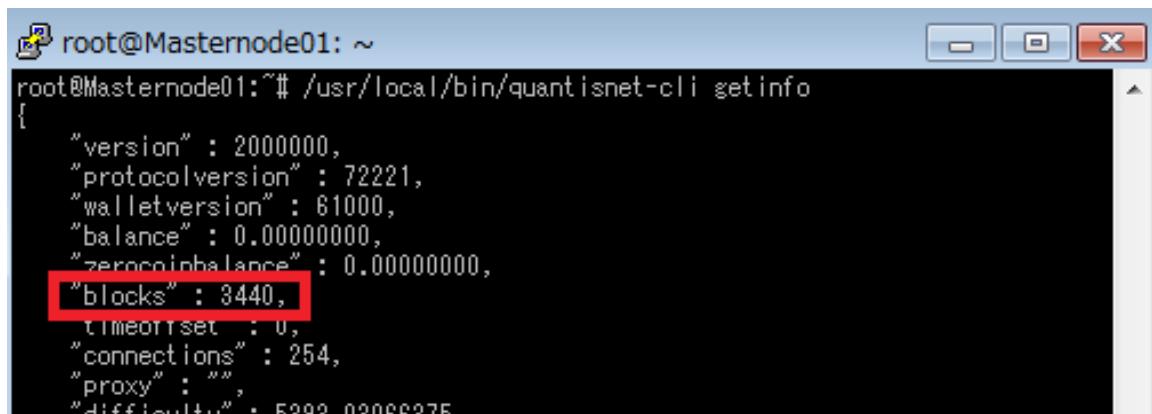
## 7.Starting masternode

I. Start the local wallet and if you have set passphrases, unlock it without checking  
“For anonymization and staking only”

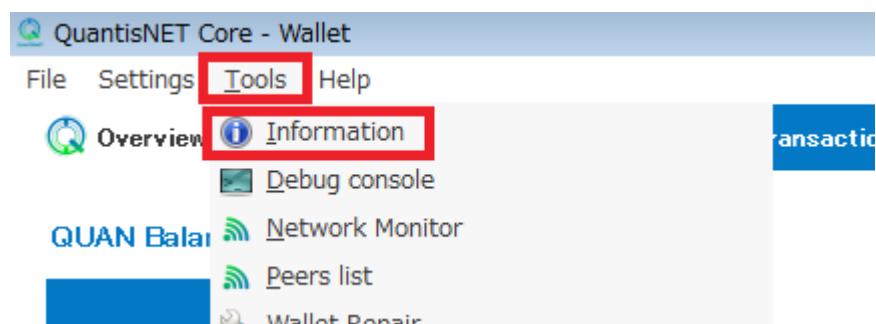
II. Check if both the local and VPS wallets are fully synced

You can check current block with [block explorer](#)

Input: /usr/local/bin/quantisnet-cli getinfo



```
root@Masternode01: ~
root@Masternode01:~# /usr/local/bin/quantisnet-cli getinfo
{
    "version" : 2000000,
    "protocolversion" : 72221,
    "walletversion" : 61000,
    "balance" : 0.00000000,
    "zerocoinalance" : 0.00000000,
    "blocks" : 3440,
    "timeoffset" : 0,
    "connections" : 254,
    "proxy" : "",
    "difficulty" : 5000.00000075
```



Network	
Name	main
Number of connections	32 (In: 0 / Out: 32)
Number of Masternodes	Total: 352 (IPv4: 351 / IPv6: 0 / Tor: 0 / Unknown: 1)
Block chain	
Current number of blocks	3441



III. Click “Masternodes” tab

IV. Go to My “Masternodes”

A screenshot of the QuantisNET Core - Wallet interface. The top navigation bar includes 'File', 'Settings', 'Tools', 'Help', 'Overview', 'Send', 'Receive', 'Transactions', 'Privacy', and 'Masternodes'. The 'Masternodes' tab is highlighted with a red box. Below the tabs, there are two buttons: 'My Masternode' (highlighted with a red box) and 'All Masternodes'. A note below the buttons states: 'Note: Status of your masternodes in local wallet can potentially be slightly incorrect. Always wait for wallet to sync additional data and then double check from another node if your node should be running but you still see "MISSING" in "Status" field.' A table below lists eight masternodes with their details:

Alias	Address	Protocol	Status	Active	Last Seen (UTC)	
MN01	10.0.0.1:7771	72221	ENABLED	2d 10h:43m:11s	2019-01-06 20:10	qd...
MN02	10.0.0.2:7771	72221	ENABLED	2d 10h:36m:42s	2019-01-06 20:11	qd...
MN03	3.23.0.1:7771	72221	ENABLED	2d 10h:48m:24s	2019-01-06 20:10	qd...
MN04	10.0.0.3:7771	72221	ENABLED	2d 08h:30m:16s	2019-01-06 20:05	qd...
MN05	10.0.0.4:7771	72221	ENABLED	2d 03h:57m:06s	2019-01-06 20:05	qd...
MN06	10.0.0.5:7771	72221	ENABLED	2d 03h:55m:53s	2019-01-06 20:04	qd...
MN07	10.0.0.6:7771	72221	ENABLED	2d 03h:57m:29s	2019-01-06 20:06	qd...
MN08	10.0.0.7:7771	-1	MISSING	00m:00s	1970-01-01 00:00	



V. Select Alias what you made at step2

VI. Click “Start alias”

QuantisNET Core - Wallet

File Settings Tools Help

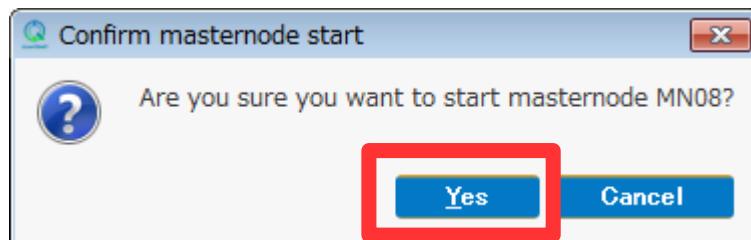
Overview Send Receive Transactions Privacy Masternodes

Note: Status of your masternodes in local wallet can potentially be slightly incorrect. Always wait for wallet to sync additional data and then double check from another node if your node should be running but you still see "MISSING" in "Status" field.

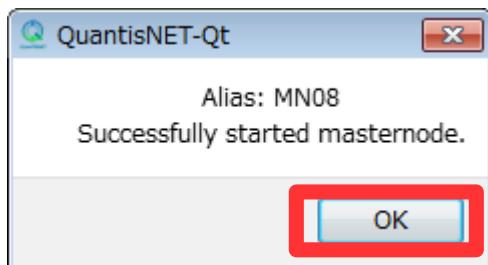
Alias	Address	Protocol	Status	Active	Last Seen (UTC)	
MN01	:7771	72221	ENABLED	2d 10h:43m:11s	2019-01-06 20:10	[REDACTED]
MN02	8:7771	72221	ENABLED	2d 10h:36m:42s	2019-01-06 20:11	[REDACTED]
MN03	7771	72221	ENABLED	2d 10h:48m:24s	2019-01-06 20:10	[REDACTED]
MN04	7771	72221	ENABLED	2d 09h:00m:20s	2019-01-06 20:35	[REDACTED]
MN05	:7771	72221	ENABLED	2d 04h:27m:08s	2019-01-06 20:35	[REDACTED]
MN06	:7771	72221	ENABLED	2d 04h:25m:55s	2019-01-06 20:34	[REDACTED]
MN07	:7771	72221	ENABLED	2d 04h:27m:32s	2019-01-06 20:36	[REDACTED]
MN08	7771	-1	MISSING	00m:00s	1970-01-01 00:00	[REDACTED]

**Start alias** **Start all** **Start MISSING** **Update status** Status will be updated automatically in (sec):

Click “Yes”



Click “OK”





## 8.Checking masternode status

After 10 – 30 minutes, you can confirm that your masternode active time is reflected.

MN08	:7771	72221	ENABLED	10m:10s	2019-01-06 20:49	qS
------	-------	-------	---------	---------	------------------	----

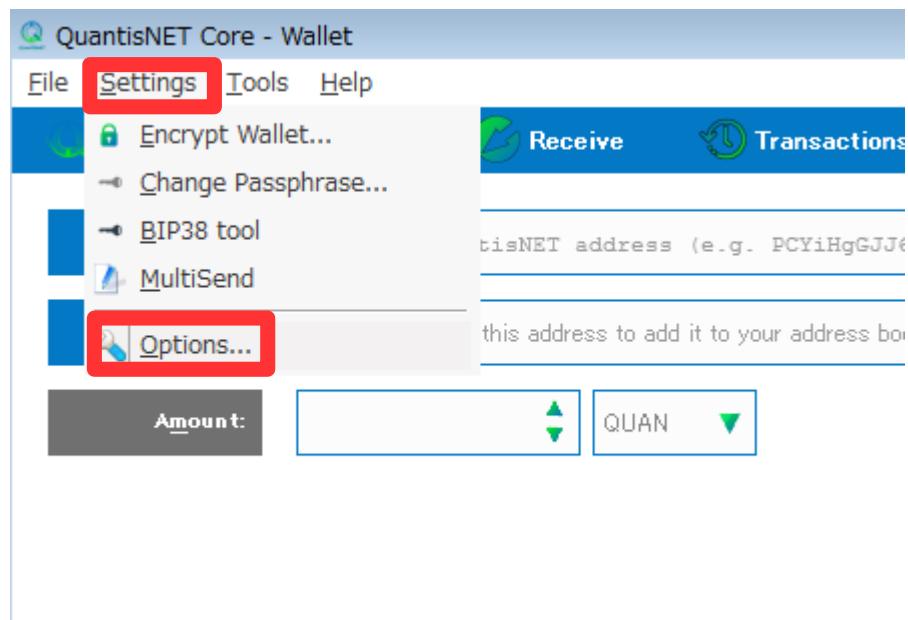
To setup next masternode, go back to step 2-VI

**Setup Complete! You may close PuTTY, Terminal, debug window of the wallet**

Notice: If you hope to get pos rewards, change from “staking=0” to “staking=1” in quantisnet.conf and keep running the wallet

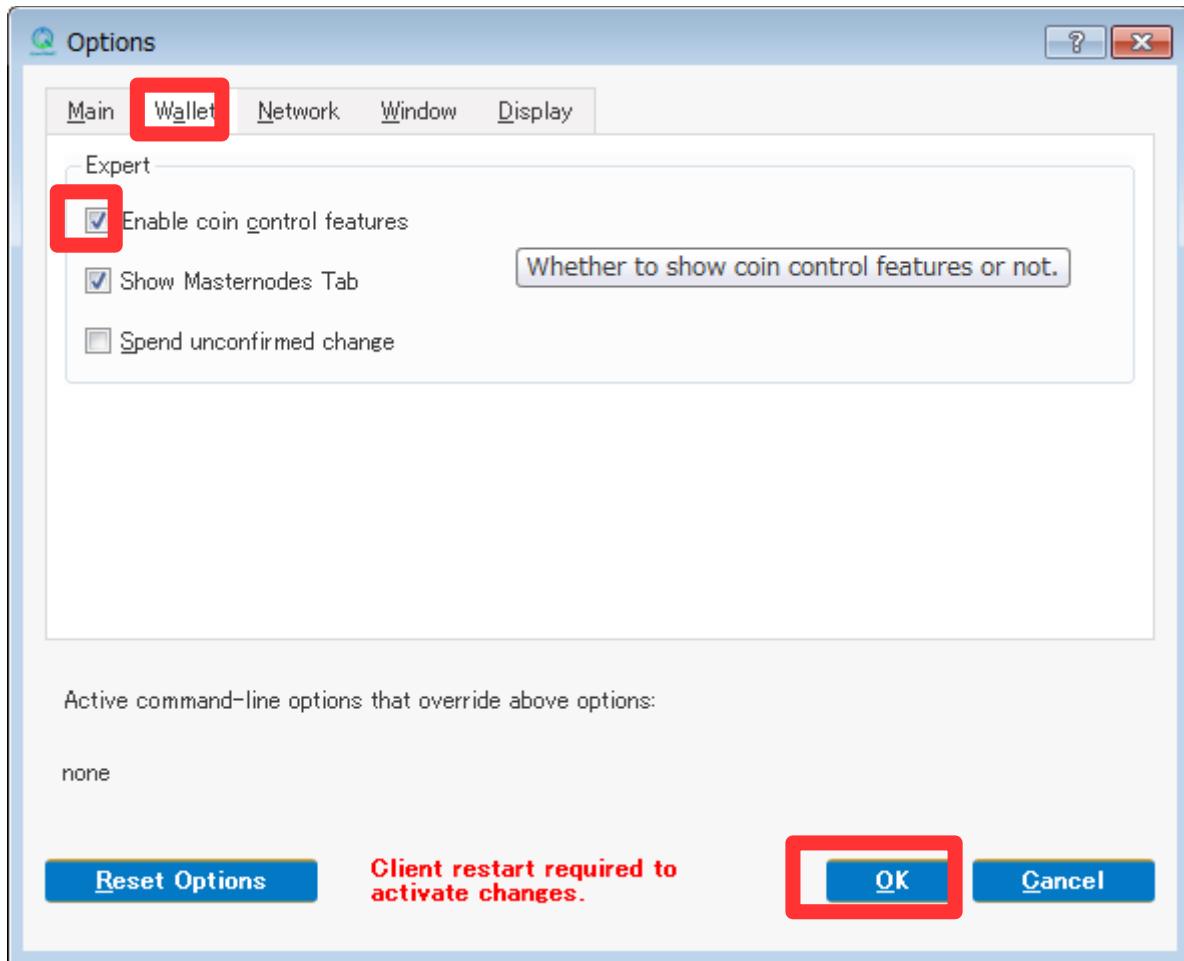
## 9.How to manage balances

- I. Use coin control feature
- II. Click “Settings” → “Options...”

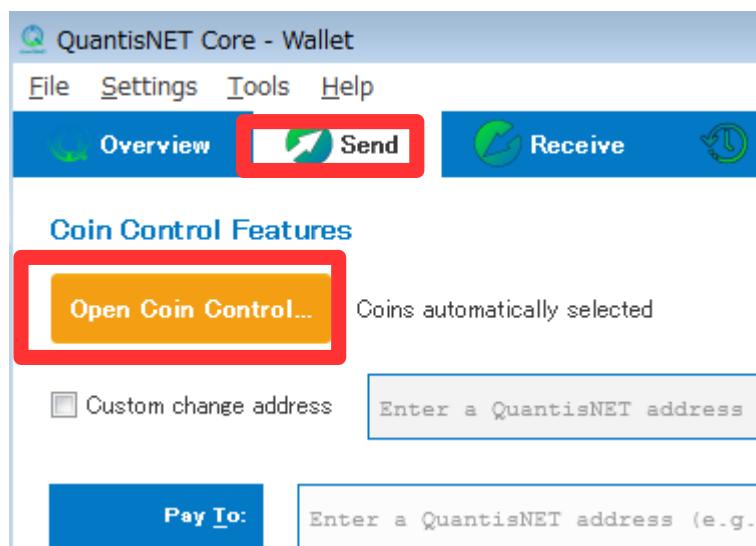




III. Open “Wallet” tab and enable “Enable coin control features” then click OK



IV. Click “Send” tab and “Open Coin Control...”



V. Then you can select balances with left side check boxes



## 10.Usage

To start daemon: /usr/local/bin/quantisnetd

To recover blockchain: /usr/local/bin/quantisnetd -reindex

To stop daemon: /usr/local/bin/quantisnet-cli stop

To check current block: /usr/local/bin/quantisnet-cli getblockcount

To get detail information: /usr/local/bin/quantisnet-cli getinfo

To get command list: /usr/local/bin/quantisnet-cli help

To check masternode status: /usr/local/bin/quantisnet-cli masternode status

Notice: You can continue to watch the informations with adding “watch”

e.g.: watch /usr/local/bin/quantisnet-cli getinfo

To end: Ctrl key + c key

## 11.References

Hot Wallet Node vs Cold Masternodes – What you need to know

<https://coinguides.org/hot-wallet-cold-masternodes/>

## 12.Special thanks To:

@Sizzlorr (setup guide[old chain]: <https://quantisnetworkforum.com/viewtopic.php?f=9&t=13>)

@Chased1K (setup script and guide[old chain]: <https://github.com/Chased1k/quantis>)



## 13. Official links

Website: <https://quantisnetwork.org/>

Explorer: <https://chain.quantisnetwork.org/>

QuantisNet Github: <https://github.com/QuantisDev/QuantisNet-Fork-New-Chain>

QT Wallets: <https://github.com/QuantisDev/QuantisNet-Fork-New-Chain/releases/tag/2.0.0>

Web Wallet Portal <https://webwallet.quantisnetwork.org/satowallet/>

Mobile App / Exchange: <https://satowallet.com/app/>

Masternode Setup Guide: <https://github.com/0sunrise/QuantisNet>

Gin Hosting Platform: <https://p.gincoin.io/>

Trading Exchanges

TradeOgre: <https://tradeogre.com/exchange/BTC-QUAN>

Crex24: <https://crex24.com/exchange/QUAN-BTC>

BiteBTC: [https://bitebtc.com/trade/quan\\_btc](https://bitebtc.com/trade/quan_btc)

Whitepaper: <https://quantisnetwork.org/wp-content/uploads/2019/01/Quantis-WP.pdf>

Audio Version: New Version Coming Soon!

CoinMarketcap: <https://coinmarketcap.com/currencies/quantis-network/>

BitScreener: <https://bitscreener.com/chart/quantis-network>

Investing.com Chart: <https://www.investing.com/crypto/quantis/chart>

Masternodecap.com: <https://masternodecap.com/coins/QUAN>

Nodecheck.io: <https://nodecheck.io/currency/QUAN>

LiveCoinWatch: <https://www.livecoinwatch.com/price/Quantis-QUAN>

Masternodes.pro: <https://masternodes.pro/stats/quan/statistics>

Coinlib <https://coinlib.io/coin/QUAN/Quantis>

CoinGecko <https://www.coingecko.com/en/coins/quantis>

Twitter: <https://twitter.com/QuantisNetwork>

Discord: <https://discord.gg/thtDzqN>

Telegram: [t.me/quantis/](https://t.me/quantis/)

Reddit: <https://www.reddit.com/r/Quantis/>

Quantis Network Forum: <https://quantisnetworkforum.com/>

YouTube: <https://www.youtube.com/channel/UCfLDGUUAH6PcQoxjPWShIIEQ/featured>

FaceBook: <https://www.facebook.com/QuantisNetowrk>

BitcoinTalk: <https://bitcointalk.org/index.php?topic=3354132.0>

Medium: <https://medium.com/@QuantisNetwork>



## 14.Appendix (Manually VPS setup)

This part is only for people who want to compile daemon and setup vps manually.  
Paste followings into putty (one line at a time)  
If you login as root, you don't need to include "sudo".

### Installing the dependencies

```
sudo apt-get update && apt-get upgrade -y  
sudo apt-get dist-upgrade -y  
sudo apt-get install nano htop git curl -y  
sudo apt-get install libzmq3-dev libminiupnpc-dev libssl-dev libevent-dev -y  
sudo apt-get install build-essential libtool autotools-dev automake pkg-config -y  
sudo apt-get install libssl-dev libevent-dev bsdmainutils software-properties-common -y  
sudo apt-get install libboost-all-dev autoconf unzip ufw -y  
sudo add-apt-repository ppa:bitcoin/bitcoin -y  
sudo apt-get update  
sudo apt-get install libdb4.8-dev libdb4.8++-dev -y  
sudo apt-get install libgmp3-dev -y
```

### Firewall setup

```
sudo ufw limit ssh/tcp  
sudo ufw allow 7771/tcp  
sudo ufw enable
```

### Swap file setup

```
cd /var  
sudo touch swap.img  
sudo chmod 600 swap.img  
sudo dd if=/dev/zero of=/var/swap.img bs=1024k count=4000  
sudo mkswap /var/swap.img  
sudo swapon /var/swap.img  
sudo free  
sudo echo "/var/swap.img none swap sw 0 0" >> /etc/fstab  
cd ~/  
mkdir -p ~/bin  
echo 'export PATH=~/bin:$PATH' > ~/.bash_aliases  
source ~/.bashrc
```



## Downloading and Compiling files

```
git clone https://github.com/QuantisDev/QuantisNet-Fork-New-Chain
cd QuantisNet-Fork-New-Chain/src/leveldb
chmod +x build_detect_platform
make clean
make libleveldb.a libmemenv.a
cd ~/QuantisNet-Fork-New-Chain/
chmod +x configure
chmod 777 /share/genbuild.sh
chmod +x autogen.sh
./autogen.sh
./configure
make install
```

## Moving files

```
mv ~/QuantisNet-Fork-New-Chain/src/quantisnetd /usr/local/bin/
mv ~/QuantisNet-Fork-New-Chain/src/quantisnet-cli /usr/local/bin/
```

## Configuration file setup

```
mkdir ~/.quantisnet
echo "rpcuser=user"`shuf -i 100000-10000000 -n 1` > ~/.quantisnet/quantisnet.conf
echo "rpcpassword=pass"`shuf -i 100000-10000000 -n 1` >> ~/.quantisnet/quantisnet.conf
nano ~/.quantisnet/quantisnet.conf
```

Copy the followings, paste it into the conf file and then edit your vps ip and your key.

```
rpcallowip=127.0.0.1
rpcport=7772
listen=1
server=1
daemon=1
logtimestamps=1
masternode=1
masternodeaddr=YOUR VPS IP:7771
masternodeprivkey=YOUR KEY
```

Press Ctrl key + O key then press ENTER to save the conf file and then press Ctrl key + X key to close.

## Starting daemon

```
/usr/local/bin/quantisnetd
/usr/local/bin/quantisnet-cli getinfo
```