



# Quantis Network

Masternode and Staking Guide

by Llama



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*First compile, June 2019*



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## 1. Choosing and Logging into a VPS

### 1.0.1 VPS Providers

- Vultr : <https://www.vultr.com/pricing/>
- Contabo : <https://contabo.com/?show=vps>
- 01VPS : <https://01vps.net/>

Any Virtual Private Server (VPS) provider, not just the ones above, will be appropriate for running your Quantis Network masternode. For this guide, I will be using a Vultr VPS, however as long as you have SSH access to the VPS and it is running Ubuntu 16.04 then this guide will work, simply skip to [subsection 1.0.3](#)

### 1.0.2 Vultr

The Vultr Control panel looks as follows, and the login information is available as indicated below.

The screenshot displays the Vultr VPS Control Panel for server MN1. The interface includes a sidebar with navigation options: Servers, Billing, Support, Affiliate, and Account. The main content area shows the following information:

- Server Information (MN1)**: London, Ubuntu 16.04 x64
- Overview**: Usage Graphs, Settings, Snapshots, Backups, DDOS
- Bandwidth Usage**: 162.73GB/1000GB
- CPU Usage**: 128%
- Current Charges**: \$5.00
- Location**: London
- IP Address**: [Copy icon]
- Username**: root
- Password**: [Masked] [Copy icon]
- CPU**: 1 vCore
- RAM**: 1024 MB
- Storage**: 25 GB SSD
- Bandwidth**: 162.73 GB of 1000 GB
- Label**: MN1
- Tag**: [Click here to set]
- OS**: Ubuntu 16.04 x64

Figure 1.1: Vultr Main VPS Control Panel

### 1.0.3 Logging into the VPS

For windows users, you will need to download Putty from <https://www.putty.org/>. MacOSX users can login using Terminal.

Once downloaded and installed, load putty and insert your VPS IP address in the IP Address box (You can name the session and click save for ease of use in the future)

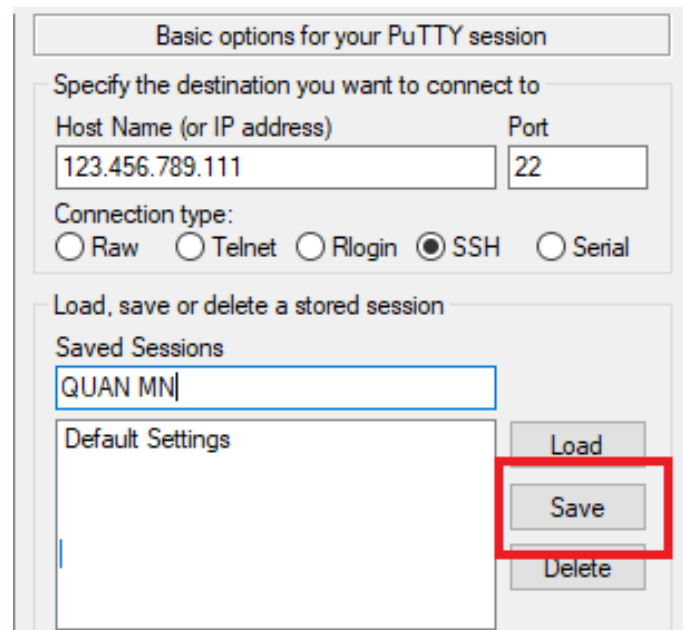
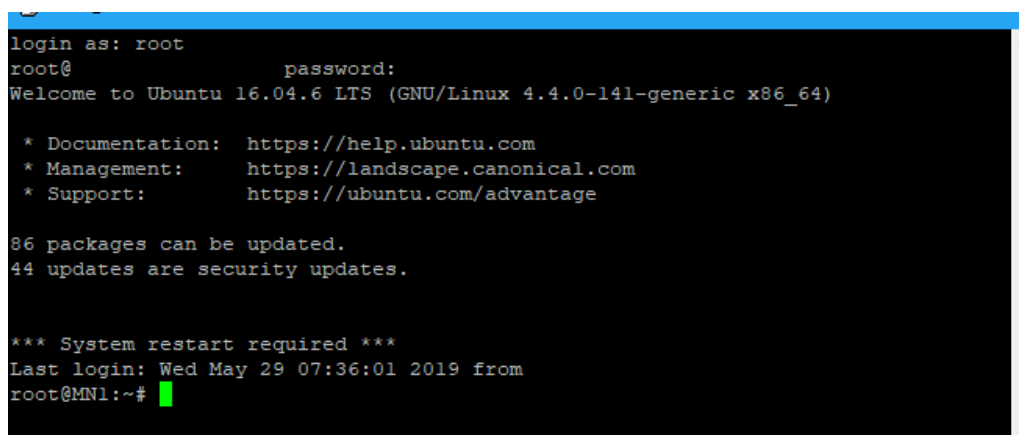


Figure 1.2: PuTTY Login

You will be presented with a "Login as:" box on a black screen. Depending on your VPS provider you should fill in the username they give you, for Vultr I will be logging in as "root".



Copy the password from your VPS provider (see [Figure 1.1](#)) and paste by right clicking on the Putty window. Your window should look similar to this



You are now ready to start on the VPS hosting guide.



## 2. Hosting on a Virtual Private Server

### 2.0.1 Requirements

- 10,000 QUAN + Transaction fees in a local QUAN Wallet (available [here](#)).
- A Virtual Private Server running Ubuntu 16.04. Please see [subsection 1.0.1](#) for a list.
- An SSH Client, for example [Putty for Windows](#)

### 2.0.2 Local Wallet Setup

1. Download and run the latest Windows or OSX wallet from [here](#).
2. Click Tools -> Open Wallet Configuration File
3. Enter the following and save the file.

```
staking=0
```

4. Close, reload the wallet and wait for it to sync.
5. Go to File -> Receiving Addresses and click "New". Label this address MN1, leave the address box empty and click "Ok".

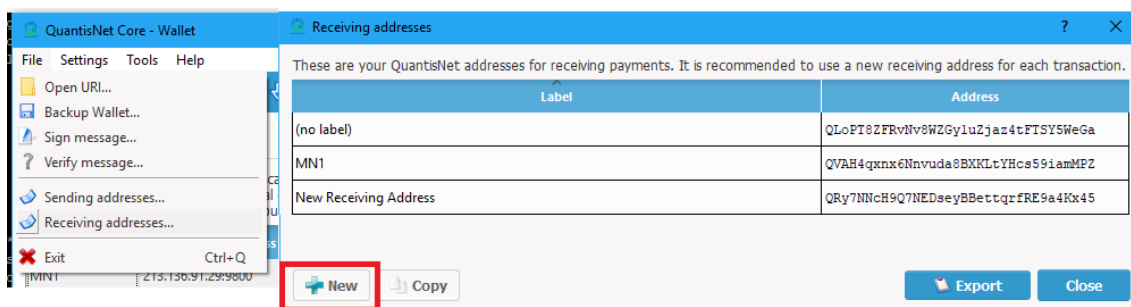


Figure 2.1: Creating a Receiving Address

6. Click the Label you made and select Copy.
7. Go to the Send Tab and paste the address into the "Pay To" box, see [Figure 3.2](#).
8. Enter exactly 10000 into the "Amount" box, and click send.
9. Go to Tools -> Debug Console and type the following, keep note of it.

```
masternode genkey
```

10. Enter the following in the Debug Console, take note of the result.

```
masternode outputs
```



Overview Send Receive Transactions Masternodes

Coin Control Features

Inputs... automatically selected

☐ Custom change address Enter a QuantisNet address (e.g. Q12zE1sPLCBVtRJ2us4QTU2R5ALm5t3YVL)

Pay To: Paste Copied Address Here

Label: Enter a label for this address to add it to your address book

Amount: 10000 QUAN ☐ subtract fee from amount

Transaction Fee: 0.00000000 QUAN/kB Choose... Warning: Fee estimation is currently not possible.

Send Clear All Add Recipient ☐ PrivateSend ☐ InstantSend Balance: 35 361.99999548 QUAN

Show general overview of wallet QUAN HD

Figure 2.2: Example of Send Tab

```

21:45:27 masternode genkey
21:45:27 4ZdqimZ5ShSSBTJ61vtcUrpTA1ZjRD9BVmVqQhA59kRKhiTAQF5
21:45:51 masternode outputs Masternode Private Key
21:45:51 {
21:46:35 masternode outputs
21:46:35 {
Transaction ID                                Index
"dab87caaa862c6f3c64bd0e8ad36316f5ebcad85abb6ba898150ed71a7f3ccb8": "0"

```

Figure 2.3: Example masternode genkey and masternode outputs results

### 2.0.3 Setting up the VPS

1. Log in to the Virtual Private Server. See [subsection 1.0.3](#) for instructions.
2. Enter the following code and follow the instructions. When asked for the masternode private key, either generate a new one or use the one from earlier. If you are using a fresh VPS you will need to select YES to all questions.

```
wget https://raw.githubusercontent.com/QuantisDev/QuantisNet-Masternode-Guide-with-Install-Script/master/quaninstall.sh
chmod +x quaninstall.sh
./quaninstall.sh
```

3. Once the script completes you will be given an IP and the Masternode Private Key again, keep note of the IP:PORT

```
#####
YOUR IP = 123.456.789.111:9801
YOUR PRIVKEY = 4ZdqimZ5ShSSBtJ6lvtcUrpTA1ZjRD9BVmVqQhA59kRKhiTAQF5
#####
```

Figure 2.4: VPSOutput from Successful Install

4. You will now need to wait for the masternode to sync. Type the following code

```
watch quantisnet-cli mnsync status
```

and wait for the screen to display the following. Press CTRL-C when finished (This may take quite some time depending on the length of the chain)

```
{
  "AssetID": 999,
  "AssetName": "MASTERNODE_SYNC_FINISHED",
  "AssetStartTime": 1558794505,
  "Attempt": 0,
  "IsBlockchainSynced": true,
  "IsMasternodeListSynced": true,
  "IsWinnersListSynced": true,
  "IsSynced": true,
  "IsFailed": false
}
```

Figure 2.5: VPS Output for mnsync status

### 2.0.4 Masternode Final Stage

1. On your local wallet, click on Tools -> Open Masternode Configuration File
2. This text file contains three commented out lines to act as a guide for its use, and should look as below
3. For this step you will need the IP Address:Port, Masternode Private Key, and Transaction ID and Transaction Index you copied earlier. I give an example of each below:

```
IP:Port -> 123.456.789.111:9801
Masternode Private Key -> 4ZdqimZ5ShSSBtJ6lvtcUrpTA1ZjRD9BVmVqQhA59kRKhiTAQF5
Transaction ID -> dab87caaa862c6f3c64bd0e8ad36316f5ebcad85abb6ba898150ed71a7f3ccb8
Transaction Index -> 0
```

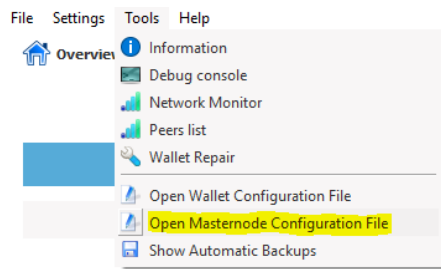


Figure 2.6: Masternode Config Menu

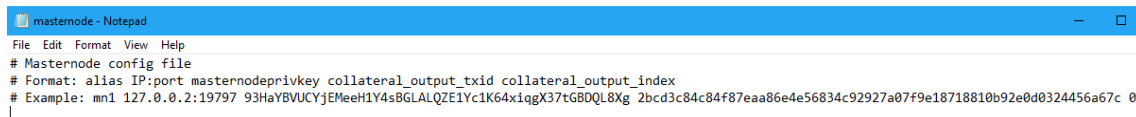


Figure 2.7: Blank masternode.conf

These are from [Figure 2.3](#) and [Figure 2.4](#)

- Using these values you should paste the following into the masternode.conf as a new line

```
MN1 <IP:PORT> <MASTERNODE_PRIV_KEY> <TRANSACTION_ID> <TRANSACTION INDEX>
```

In my case see below, note it should all be on one line it only looks like two due to page size limits.

```
MN1 123.456.789.111:9801 4ZdqimZ5ShSSBtJ61vtcUrpTA1ZjRD9BVmVqQhA59kRKhiTAQF5
    ↪ dab87caaa862c6f3c64bd0e8ad36316f5ebcad85abb6ba898150ed71a7f3ccb8 0
```

- Save the file then head to Settings -> Options and click the Wallet tab, see [??](#). Check the "Show Masternodes Tab" and click okay. Then close the wallet, and reload.
- Once the wallet is reloaded and fully synced, and if mnsync status (see [Figure 2.5](#)) is finished on the VPS, head to the Masternodes Tab ([??](#)), click MN1 and click Start-Alias. If successful a window should appear saying "Masternode Started Successfully".
- Last thing to do is head back to the VPS and type

```
quantisnet-cli masternode status
```

The output should also say "Masternode Successfully Started". If it doesn't, please make sure all steps above were followed, that masternode is completely synced as well as the local wallet. Occasionally it can take a bit of time for the masternode to realise it is started.

### 2.0.5 Keeping your Wallet Tidy

The same as with staking, if left for a long time your wallet can be 'bloated' with many UTXOs (read stacks of coins).

It is a good practise to get in to that after a while when you have received a reasonable number of rewards, to gather these together into larger 'stacks' in your coin control window, using a similar process to here [subsection 4.0.2](#).

If you leave it too long, you will receive an error stating the transaction was too big when

trying to send coins, which can be frustrating to deal with if you were just trying to send a quick payment..



## 3. Hosting on a Masternode Hosting Service

### 3.0.1 Current Quantis Network Hosting Providers

- Pecunia Platform : <https://pecuniaplatform.io/99HOST>
- Gin Platform: <https://gincoin.io/>
- Gentarium : <https://gtmcoin.io/>

### 3.0.2 Setting up to use a Masternode Platform

While the on-site process will differ for each Masternode hosting platform, the general setup in your local wallet will be broadly the same for each one. Follow the steps below and you should be golden for all listed above.

1. Download and run the latest Windows or OSX wallet from <INSERT URL>
2. Click Tools -> Open Wallet Configuration File
3. Enter the following and save the file.

staking=0

4. Close, reload the wallet and wait for it to sync.
5. Go to File -> Receiving Addresses and click "New". Label this address MN1, leave the address box empty and click "Ok".

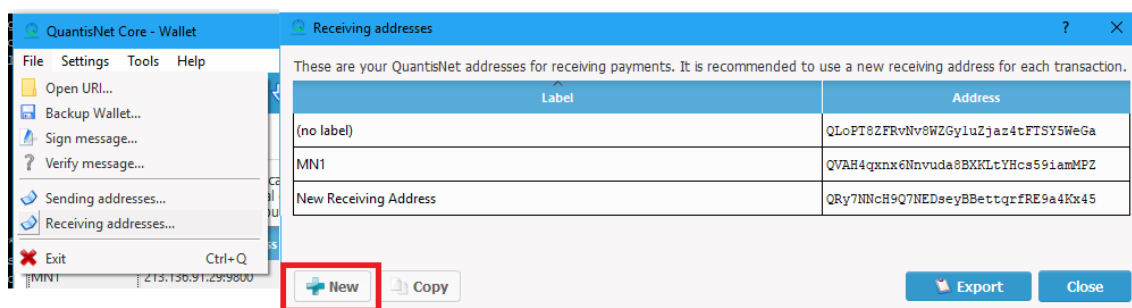


Figure 3.1: Creating a Receiving Address

6. Click the Label you made and select Copy.
7. Go to the Send Tab and paste the address into the Address box.

8. Enter exactly 10000 into the "Amount" box, and click send.

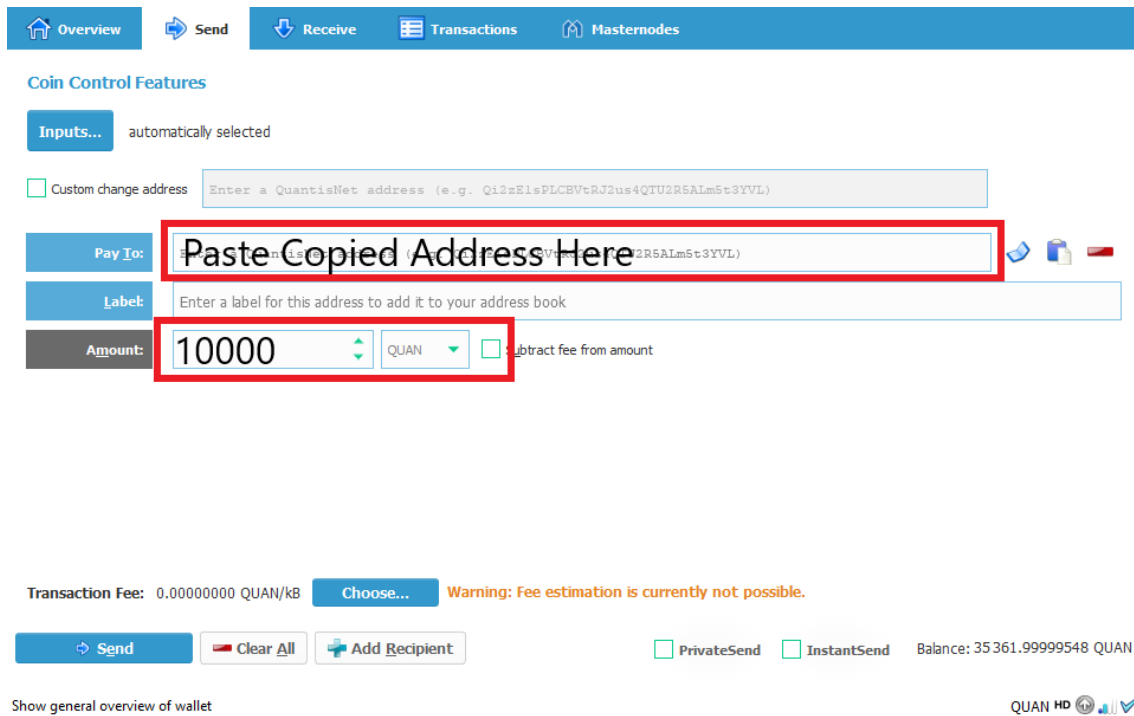
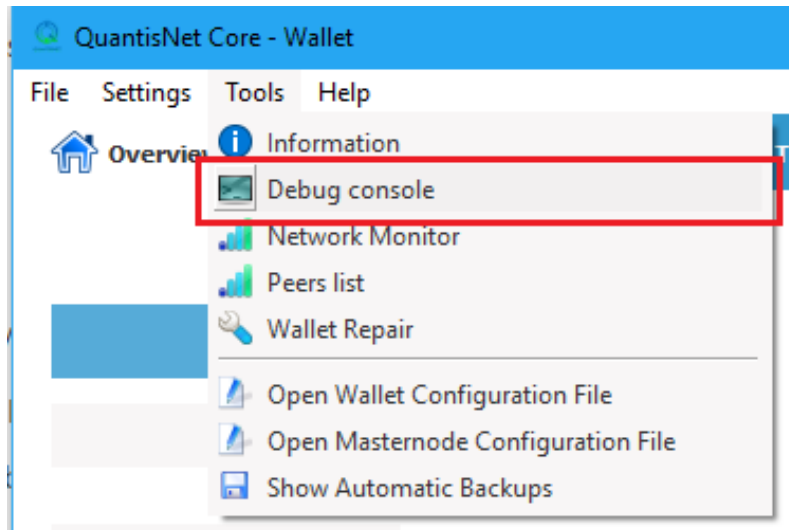


Figure 3.2: Example of Send Tab

9. Click Tools -> Debug Console and type in the following:

masternode outputs



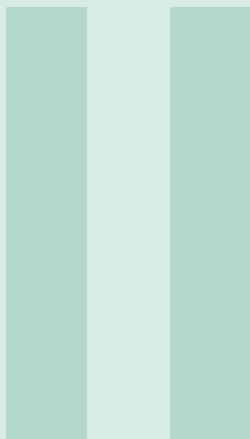
The remainder of the instructions should be provided for you on the website, however if you are confused about how to access the masternode.conf file, see [Figure 2.6](#).

### 3.0.3 Keeping your Wallet Tidy

The same as with staking, if left for a long time your wallet can be 'bloated' with many UTXOs (read stacks of coins).

It is a good practise to get in to that after a while when you have received a reasonable number of rewards, to gather these together into larger 'stacks' in your coin control window, using a similar process to here [subsection 4.0.2](#).

If you leave it too long, you will receive an error stating the transaction was too big when trying to send coins, which can be frustrating to deal with if you were just trying to send a quick payment..



# Staking Guide

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## 4. Setting up your Wallet

### 4.0.1 Enabling Staking

The first thing to do is to make sure you have staking turned on for your wallet. It is on by default, however you may have turned it off if you set up a masternode.

Turning it back on is simple.

1. Head to Tools -> Open Wallet Configuration File
2. If the file is blank, you are probably okay to continue however you may wish to add the line

```
staking=1
```

If your wallet has `staking=0`, replace it with the above. Save and close the document.

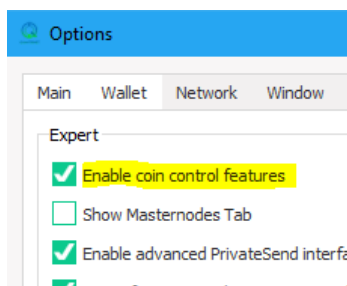
3. Reload the wallet.

### 4.0.2 Splitting up your Coins

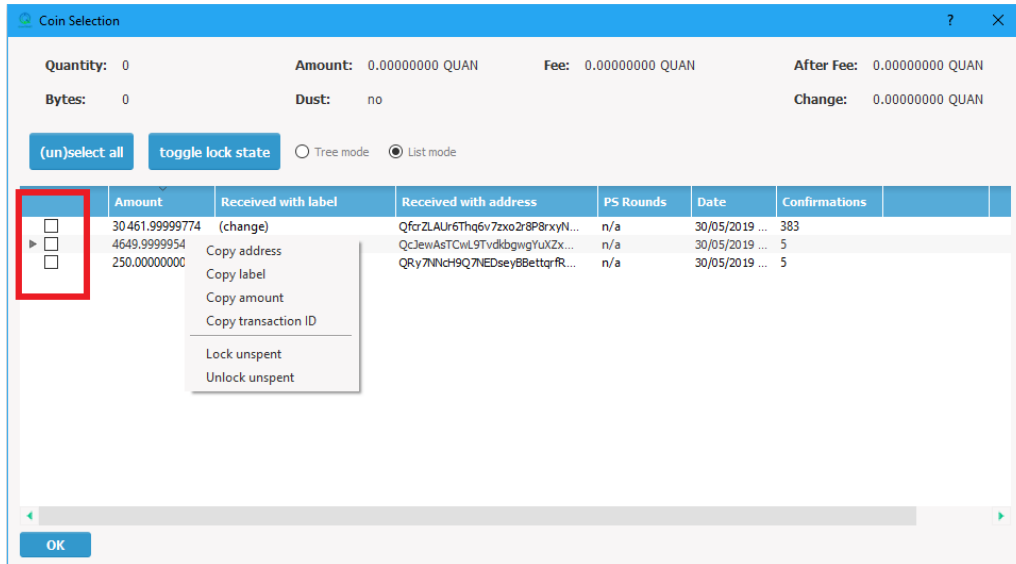
With the way staking works, a larger stack of coins has a higher 'chance' of receiving a staking reward, but when it does it will be put into a 'cooldown period' of 101 confirmations. It is therefore not always the best idea to have one big 'stack' of coins, but rather multiple stacks of a smaller denomination.

The exact 'best' denominations is something to discuss with other Quantis Network users either in Discord or Telegram, however I will show you how to break the coins up.

1. Begin by making sure you have Coin Control features switched on. Head to Tools -> Options and toggle it on.



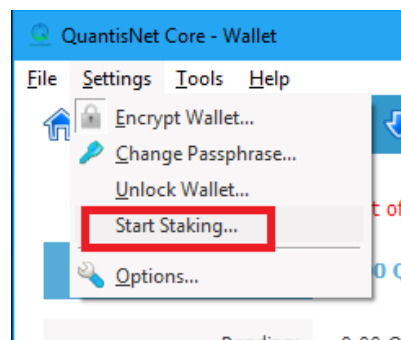
2. Next head to File -> Receiving Addresses and create a new address called "Staking", and a second new address called "Splitting". See [Figure 3.1](#).
3. You will then need to head to the send tab, and select inputs. You should see the window below.



4. Click the box next to the coins you wish to split up, indicated by a red box on the above image.
  - Remember if you are in 'tree' mode you can select ALL coins in a single address easily, where as list mode shows all individual stacks.
  - By clicking a box next to either a whole address or single stack, you are telling the wallet which coins you want to use. Any coins not ticked will not be touched during the transactions.
5. Head back to the basic send tab window and paste in the "Staking" address into the Pay To box.
6. Above the Pay To: box, you will see a "Custom Change Address" checkbox. Tick this box and paste in the "Splitting" address from earlier. This will help keep the coins you are splitting up nicely organised through the process.
7. Set the amount you are happy with in the amounts box, and click send.
8. You now will have to wait for the transaction to confirm. Then repeat the process.

### 4.0.3 Am I staking?

If your wallet is encrypted head to Settings -> Start Staking and type in your password.



This does not unlock your wallet for transactions, but does allow your coins to 'stake' on the network. This is a replacement for the toggle on the usual unlock wallet screen seen in other coins wallets.

Remember your wallet needs to be running and connected to the internet in order for staking to function. Always check for the little green arrow in the bottom right hand corner. If this is present, then staking is working!



#### 4.0.4 Why can't I send my coins?!

This deserves it's very own subsection, as it is something that comes up very often in support requests on Discord and Telegram.

Please remember that whenever your coins receive a staking reward, that stack of coins becomes "Immature" for 101 confirmations and you will not be able to send them until after that point.

#### 4.0.5 Sending coins while Staking

Other than finding that occasionally your staking coins will be immature, the other thing to consider is that when you send a transaction **WITHOUT** using coin control, that the wallet will use your staking coins.

To avoid this you should use coin control whenever sending a transaction, and avoid selecting your "Staking" address.

Also remember that all coins in your wallet, not locked in masternodes, will stake. The only reason I have chosen to use the wallet address "Staking" is for ease of identification of your coins used specifically for staking.

#### 4.0.6 Keeping your Wallet Tidy

The same as with masternodes, if left for a long time your wallet can be 'bloated' with many UTXOs (read stacks of coins).

It is a good practise to get in to that after a while when you have received a reasonable number of rewards, to gather these together into larger 'stacks' in your coin control window, using a similar process to here [subsection 4.0.2](#).

If you leave it too long, you will receive an error stating the transaction was too big when trying to send coins, which can be frustrating to deal with if you were just trying to send a quick payment..