

CAZCOIN

VPS MASTERNODE SETUP



CAZCOIN

THE UPCOMING E-COMMERCE GIANT

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1. Introduction

CazCoin is an ecommerce platform, with its 'Caz Shop' launched on June 8 2018, it's the first cryptocurrency ecommerce platform! Visit our website to see the platform and be impressed.

As a Masternode and Staking coin, masternode owners and stakers are handsomely rewarded to continuously operate the blockchain. And best of all, if you run your masternode on a VPS service, you don't need to keep your computer on 24/7; just check your wallet when you want to see your rewards!

If setting up a masternode via VPS sounds daunting, another option is to use a hosted masternode service, such as [NodeShare](#).

For the current masternode specifications and ROI, see [Masternodes.Online](#)

2. Requirements

- 50,000.01 Caz Coins. These can be purchased via:
 - [Coinexchange](#); or
 - [Cryptobridge](#).

Note: Check [CazCoin website](#) for up-to-date exchange listings.
- Download the latest CazCoin wallet via the [CazCoin website](#). After it's downloaded, ensure it's fully synced before beginning;
- In your wallet, go to **Settings > Options > Wallet**, and tick the box for 'Enable coin control features' (this helps you select the correct collateral to send);
- A Virtual Private Server (VPS). Explanation for this in Section 3;
- Download and install [Putty](#). This is used to access the VPS and enter commands; and
- Have a Notepad or Word document open for recording details.

Note: Back up your wallet regularly. Do it before and after this process, and after creating new addresses within your wallet.

A good practice is to store the backed-up wallet.dat file on an encrypted USB drive or hard drive and store offsite.

*Sometimes running a masternode is not for the faint-hearted, as on occasions issues can occur that may take time to rectify, but if you're unable to fix them, please feel free to contact the CazCoin admin team on Telegram.

3. Block Rewards?

The block time (time it takes for a new block to be made) is 90 seconds, however the reward structure per block changes depending on where the block count is at (this can be checked at the [CazCoin Explorer](#)). The rewards for masternodes and staking can be seen below.

Block 100 - 345599		Block 345600 - 1036799	
Reward	40	Reward	20
MN Reward	34.28571428	MN Reward	17.14285714
POS Reward	5.71428572	POS Reward	2.85714285
Block 1036800 - 1727999		Block 1728000 - ~	
Reward	10	Reward	5
MN Reward	8.57142857	MN Reward	4.285714285714286
POS Reward	1.42857142	POS Reward	0.714285714285714

4. VPS Preparation

Choose a VPS provider. A cheap and easy to use one is [Digital Ocean](#). Once you've created an account and set-up billing details, creating a 'droplet' (where your masternode sits) takes around a minute.

For your droplet, you will need the following minimum requirements;

- Ubuntu 16.04.
- 1GB Memory.
- 25GB SSD.
- 1TB transfer.
(The minimum droplet on Digital Ocean has all of the above requirements for approx. \$5 a month.)
- Any datacentre region is fine.
- No additional options are required;
- No need to add SSH keys

Hostname: Choose something that you will recognise, especially if you have multiple masternodes, such as 'CazMN1'.

When you've set your droplet up, Digital Ocean (or chosen provider) will email you with login details, including the **VPS IP address** (which is also listed on the Digital Ocean Dashboard).

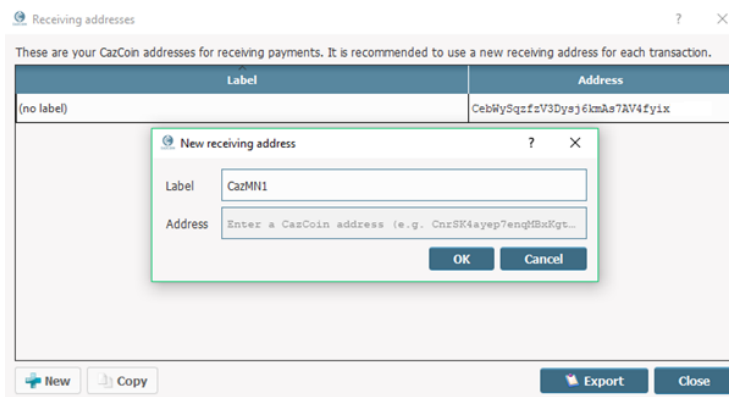
5. Local Wallet Setup

In your local wallet, go to:

- File > Receiving Addresses
- Click New

Here you will label your masternode (otherwise known as your **ALIAS**); something easily recognisable, especially if you have multiple nodes. E.g. 'CazMNI'.

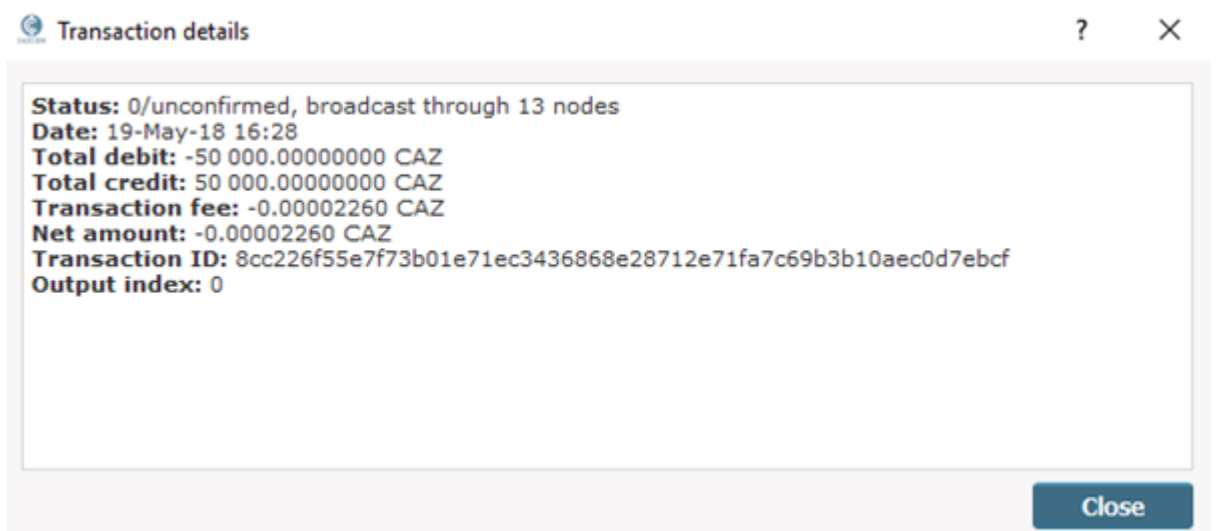
- Click OK to generate an address.



Once you've clicked OK the new address will then be displayed. Copy this address.

- Go to the **Send** menu;
- Paste in the address in the **Pay To** field (the **Label** should then change to show the name you created for your masternode address);
- Click on **Inputs** and select the inputs you'd like to use to send the 50,000 coins you wish to use for your masternode;
Note: If they're unlocked it could be that your wallet was unlocked and staking, if this is the case, lock your wallet and wait for them to become available.
- When you've confirmed the details are correct, click the **Send** button (this is ultimately sending coins to yourself);
- Go to the **Transactions** tab and double click on the transaction you just made; and

Date	Type	Address	Amount (CAZ)
19-May-18 16:28	Payment to yourself	(n/a)	-0.00002260



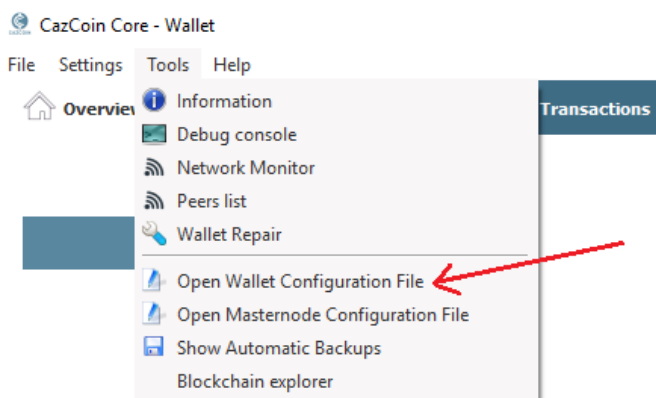
- Record the **TRANSACTION_ID** in Notepad as it will be required. You will also need to wait for 15 confirmations before continuing.

Now we need to generate three pieces of information required to set your configurations up. Do the following:

- Go to **Tools** and click **Debug Console**;
- Type `masternode genkey` – record this in notepad – this is your **PRIVATE_KEY**; and
- Type `masternode outputs` – you'll receive a line which is your **TRANSACTION_ID** plus a single digit after; record this single digit in notepad – this is your **INDEX_ID**.

6. Edit Local Config Files

The next step is to alter your `wallet.config` file. To do this, go to **Tools > Open Wallet Configuration File**



This will open a blank Notepad document. In this document, add the following text:

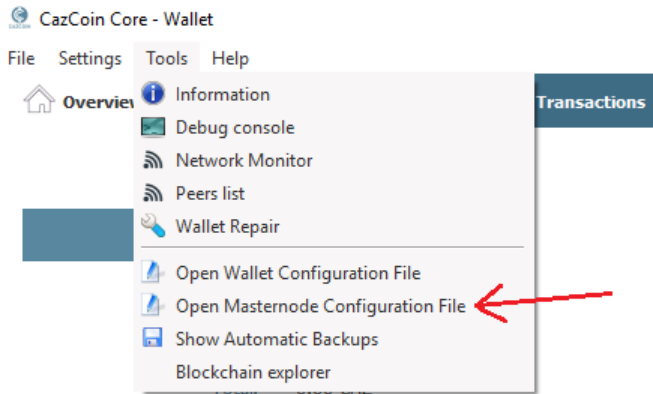
```

rpcallowip=127.0.0.1
rpcuser= cazcoinrpc
rpcpassword=ANYOLDPASSWORD
staking=1
server=1
listen=1
port=17350
masternode=1
masternodeaddr=VPS_IP:17350
externalip=VPS_IP:17350
masternodeprivkey=YOUR_MASTERNODE_PRIVATE_KEY
addnode=45.32.172.67
addnode=185.183.99.19
addnode=45.77.80.117
addnode=185.150.191.23
addnode=108.61.213.14:17350
addnode=144.202.44.113:17350

```

Save this.

Next you need to open the *masternode.conf* file. To do this, go to Tools > Open Masternode Configuration File



This will open a Notepad document with three lines already pre-populated. In this document, add blank line, then on the next line add the following line:

```
ALIAS VPS_IP:17350 PRIVATE_KEY TRANSACTION_ID INDEX ID  
(There is a single space between the items)
```

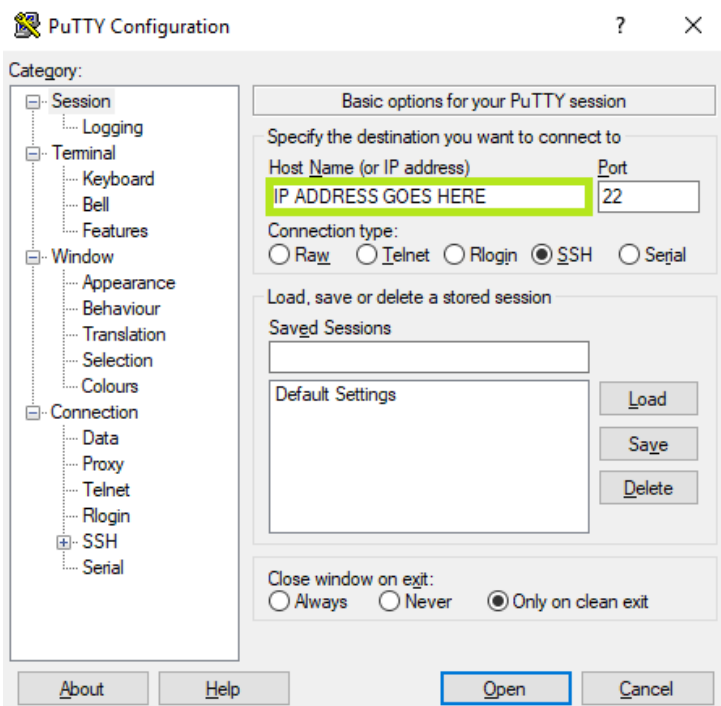
It will end up looking something like the following:

```
# Masternode config file  
# Format: alias IP:port masternodeprivkey collateral_output_txid collateral_output_index  
# Example: mn1 127.0.0.2:17350 93HaYBVUCYjEMeeH1Y4s8GLALQZE1Yc1K64xiqgX37tGBDQL8Xg 2bcd3c84c84f87eaa86e4e56834c92927a07f9e18718810b92e0d0324456a67c 0  
  
CazMN1 115.545.52.15:17350 4gfdg55aeNAGf4gxTaVo56dffgqXGptjK8r5XLQUN1nEP45g8 df8asd82nDD8b2367a8aa80ff6f660ace3e5ffeee7cda87324nd8e73bf 0
```

Save this.

7. VPS Setup

Now is the point you need to log in to your droplet via Putty. When you open Putty, you will see the below screen:



Log in using the **VPS_IP** address you were assigned for your droplet. Enter the IP in to the highlighted field, then click 'Open'.

You will then see the log in screen for droplet.

Login as: `root`

Password: *The temporary password emailed to you from Digital Ocean (or alternative VPS provider).*

Note: You will not be able to see what you are typing when entering the password, but it will work.

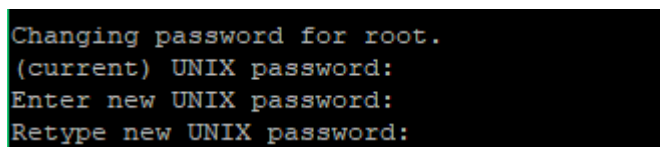
Another alternative is to copy the password from your email, then right click in the screen, which is used to paste, then press enter.



```
204.48.30.37 - PuTTY
login as: root
root@204.48.30.37's password: [redacted]
```

Login screen (where you won't see the password being typed)

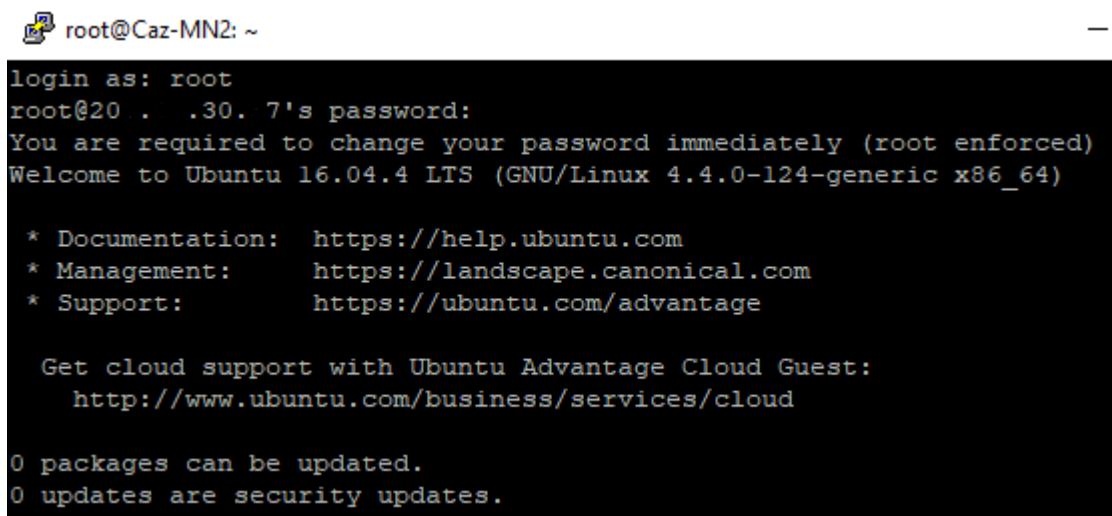
Upon first log in you will be asked to reset your password. Again you will not see what you type:



```
Changing password for root.
(current) UNIX password:
Enter new UNIX password:
Retype new UNIX password:
```

Change password screen

When you've successfully reset your password, you will receive the welcome screen:



```
root@Caz-MN2: ~
login as: root
root@204.48.30.37's password:
You are required to change your password immediately (root enforced)
Welcome to Ubuntu 16.04.4 LTS (GNU/Linux 4.4.0-124-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

Get cloud support with Ubuntu Advantage Cloud Guest:
http://www.ubuntu.com/business/services/cloud

0 packages can be updated.
0 updates are security updates.
```

Welcome screen

Once you've reached this step you will need to start entering the commands to build your VPS. Copy and paste the below commands once at a time, pressing 'Enter' after each. Remember that you can right click in the command window to paste what you've copied:

```
sudo fallocate -l 4G /swapfile
sudo chmod 600 /swapfile
sudo mkswap /swapfile
sudo swapon /swapfile
echo '/swapfile none swap sw 0 0' | sudo tee -a /etc/fstab
```


The next part is to install the Nano text editor:

```
sudo apt-get update
sudo apt-get install nano
```

Now we install dependencies:

```
sudo apt-get install build-essential libtool autotools-dev automake pkg-config libssl-dev libevent-dev
bsdmainutils libboost-all-dev curl
```

Note, the above is ONE line [starting with 'sudo' and ending in 'curl'. This will ask if you want to use XXmb amount of data. Press Y and Enter – This step may take some time.

```
sudo apt install software-properties-common
sudo add-apt-repository ppa:bitcoin/bitcoin
(This will ask if you want to continue – Press Enter)
sudo apt-get update
sudo apt-get install libdb4.8-dev libdb4.8++-dev
sudo apt-get install libminiupnpc-dev
```

The next stage is to build the CAZ wallet on the VPS:

```
wget https://github.com/copicogithub1/cazcoin/releases/download/v.1.0.0/cazcoin-1.0.0-x86_64-linux-gnu.tar.gz
```

Note: the above is a single line, beginning with 'wget' and ending with 'tar.gz'.

```
tar -xvzf cazcoin-1.0.0-x86_64-linux-gnu.tar.gz
rm cazcoin-1.0.0-x86_64-linux-gnu.tar.gz
mv cazcoin-1.0.0 cazcoin
cd cazcoin/bin
./cazcoind
```

The next stage is to open the VPS CazCoin wallet configuration file and enter the same information as with the desktop *wallet.conf* (unless you have multiple masternodes running). Enter:

```
nano ~/.cazcoin/cazcoin.conf
```

The easiest way at this stage is to copy the wallet configuration information from your desktop wallet (unless running multiple masternodes) and right click to paste it in the command window.

To save this configuration, enter the following:

```
CTRL + O
Enter
CTRL + X
```

Now we need to open the masternode configuration file and enter the same details as the desktop wallet's masternode configuration file. Enter:

```
nano ~/.cazcoin/masternode.conf
```

To save this configuration, enter the following:

```
CTRL + O
Enter
CTRL + X
```

Now to start your wallet, type the following:

```
./cazcoind -daemon
```

Once this command is entered it will start to download the CazCoin blockchain, which could take approximately 10-15 minutes.

To check the progress of the download, enter the following:

```
./cazcoin-cli getblockcount
```

Compare the number received from this command with the latest block number on the [CazCoin Explorer](#).

Once the numbers match, to go your desktop wallet, to start your masternode!

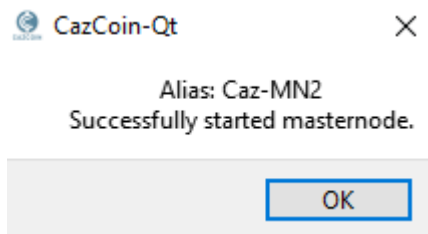
**Note, if you have issues with the blockcount staying at zero, refer to the troubleshooting section below.*

8. Starting the Masternode

If your desktop wallet is still open, close it then reopen it and let it resync.

- Unlock your wallet from the 'Settings' tab
- Go to the 'Masternodes' tab and select the line corresponding to the masternode
- Click 'Start-Alias'
- Click 'Yes' to confirm

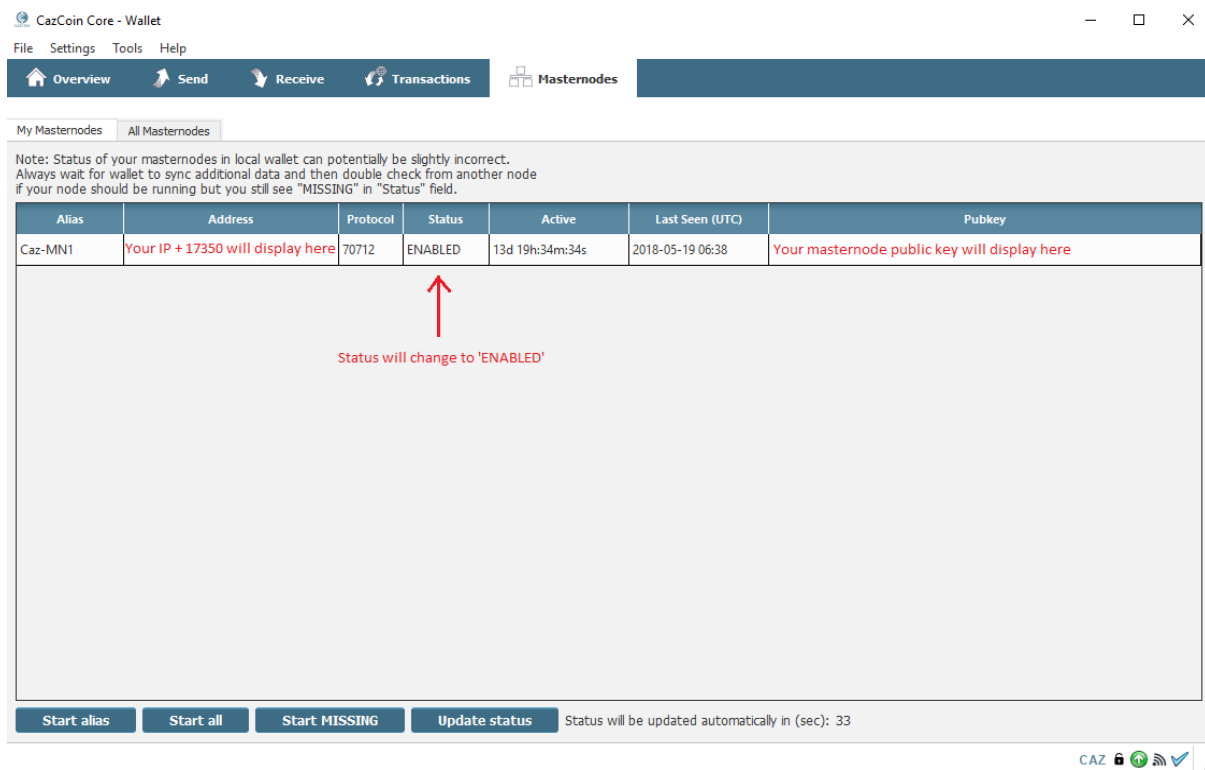
You should now receive the message 'Successfully started masternode.'



However if you receive an error and the status still shows as 'Missing', go to the debug console via the 'Tools' menu and enter the following:

```
Masternode start-missing  
Press enter
```

If the masternode has been set up correctly this should change the status from 'Missing' to 'Enabled'.



To double-check the masternode has started on the VPS, enter the below command which will tell you if your masternode has successfully started:

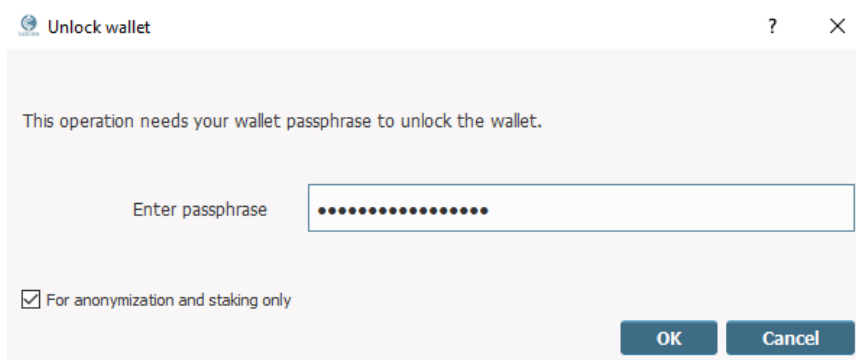
```
./cazcoin-cli masternode status
```

Payout: The time it takes to receive your first masternode payout can vary, but is generally 3-5 hours.

9. Wallet Staking

Once your masternode/s are working on the VPS and you're receiving rewards, you can unlock your local desktop wallet for staking any coins you have above the masternode collateral (note, to do this you must keep your PC on 24/7). To do this:

- Go to **Settings > Unlock Wallet**
- Type in your password and click the tickbox '*For Staking and Optimisation Only*'.



10. Multiple Masternodes

If you're lucky enough to have enough coins for more than one masternode, you can configure your desktop configuration files so that all masternodes will display.

- Each masternode will require its own VPS droplet, as the IP address needs to be unique;
- Each masternode will require a separate Masternode **PRIVATE_KEY** (as per instructions above for single masternode setup);

Once you've generated the required information (**PRIVATE_KEY**, **TRANSACTION_ID**, **INDEX_ID**) etc., you will need to modify your local `masternode.conf` file to add the extra lines for the additional masternode/s. E.g.

```
# Masternode config file
# Format: alias IP:port masternodeprivkey collateral_output_txid collateral_output_index
# Example: mn1 127.0.0.2:17350 93HaYBVUCYjEMeeH1Y4s8GLALQZE1Yc1K64xiqgX37tGBDQL8Xg 2bcd3c84c84f87eaa86e4e56834c92927a07f9e18718810b92e0d0324456a67c 0
Caz-MN1 167.9.20.15:17350 h5vG5aeNAGf4gMjyExTaVokMe1qXGPTjK8r5XLQU 4e7a6af67a8aa80ff6f641260ace3e5ffeee7c8fb101a211e73bf 0
Caz-MN2 24.4.30.37:17350 BPNqkYEF2a1LxsnTbTnPgct2WfS29tmV64aZjRgH5x 8cc226f55e7f73b436868e28712e71fa7c69b3b10aec0ebcfc3b20 1
Caz-MN3 159.03.22.26:17350 3A2QJagH5T8CKyAkV5bcAk4EAN46VkhCmctY 97baea618020e2e04e72d89b86859234da74278a5f84db402775 01
```

In your local `wallet.conf` file you will need to add the additional private key for the additional masternode/s. E.g.

```
rpcallowip=127.0.0.1
rpcuser= cazcoinrpc
rpcpassword=ANYOLDPASSWORD
staking=1
server=1
listen=1
port=17350
masternode=1
masternodeprivkey= PRIVATE KEY HERE FOR MN1
masternodeprivkey= PRIVATE KEY HERE FOR MN2
masternodeprivkey= PRIVATE KEY HERE FOR MN3
addnode=45.32.172.67
addnode=185.183.99.19
addnode=45.77.80.117
addnode=185.150.191.23
addnode=108.61.213.14:17350
addnode=144.202.44.113:17350
```

Note: The configuration files on the VPS will remain the same as if they were a single masternode (i.e. the files on the VPS only need to reflect their own config, not the other masternodes).

Once the additional node has been configured, restart your local wallet, then go to the Masternodes tab and start the masternode, as per previous instructions. If the masternode has been set up correctly this should change the status from 'Missing' to 'Enabled'.

11. Troubleshooting

Masternode not showing as enabled:

If the masternode does not show up as enabled, or you get an error after starting, ensure to go back over and check the config files are correct as per the steps required. Ensure any data you may have copied and pasted is correct, with correct spacing and characters.

Invalid IP Error:

If the masternode is not showing as enabled, and as 'MISSING' in its place, and you get an IP error when starting alias, A solution for this can sometimes be to start it from the debug console.

From the debug console write '`masternode start-missing`' and click enter. This may start the masternode. If it does, the status should go from MISSING to ENABLED.

VPS Blockcount at Zero or Stuck:

When starting the daemon on your VPS, if the blockcount stays at zero (0) and does not go up, do the following:

- Check the addnodes are in the VPS wallet configuration;
- Exit the VPS;
- Log back in to the VPS, then enter:

```
cd cazcoin/bin
./cazcoind -daemon
./cazcoin-cli getblockcount
```

If the issue persists and the block count does not go up, enter the following:

```
./cazcoin-cli stop
./cazcoind -daemon
```

It should then sync with the blockchain.

Can't Sent Collateral to Masternode Address:

If you're unable to send the 50,000 coin collateral to your new masternode receiving address, ensure your wallet is not unlocked and staking, as if the coins have recently staked, you will not be able to send them. If it has, lock your wallet and wait until the coins become available.

Further troubleshooting

Firewall:

If your wallet won't open/continually closes, ensure your antivirus (e.g. Windows Defender) is not blocking the CazCoin program.

If you have further issues, feel free to contact a CazCoin admin on [Telegram](#) or [Discord](#).

12. Where to Buy



Note: Check [CazCoin website](#) for up-to-date exchange listings.

13. Visit Us

www.CazCoin.io



-Masternode instructions developed by **Fever Pitch (@ITK2018)** & **Count (@Countalicious)**-

-Masternode guide developed and compiled by **Count (@Countalicious)**-