# Masternode Guide

Welcome the SearchCoin masternode setup guide.

- Wallet setup

Please remember that a masternode costs 10000 SRCH and you will need 10000 to continue.

Open the wallet and go to the Receive tab at the top.

Now create an address to ‘lock’ your coins in for your masternode. We recommend naming your receive address something like MN1 so if you have multiple you can identify the location of coins in your wallet.

Now send 10000 SRCH to that address via the send tab, make sure its exactly 10000 SRCH, no more, no less.

Next you need to generate a '*MN private key*’. Go to the console located in ‘*Tools -> Debug console*’ and type the following followed by enter:

```
masternode genkey
```

Now in the wallets data directory open up the masternode.conf file on your PC / Mac in a text editor:

- On macOS you will need to show hidden files ( google how to do this ). This is located Users/<your Mac username>/Library/Application support/SEARCHCOIN/
- On Linux this is located in the root directory usually home and in the hidden directory .searchcoin
- On windows this is located in the directory c:\users\{username}\appdata\roaming\searchcoin

You need to add a new line at the bottom with your node name ‘MN1' followed by your IP address, followed by the port :19696, followed by the private key, here is an example, though your private key will be different:

```
MN1 149.28.47.53:19696 Py26m1x2GeAFBuQyCsYNPmDmTAFdHBAf9pThujxJ2dozMQrnGGs
```

This is your Masternode name, plus the IP and port number of your VPS server, followed by the private key.

Next in the Wallet console type the following.

```
masternode outputs
```

You should get something that looks like the following:

```
[
  {
    "txhash": "5e0510a2be1e06b7e4c93ce660eecfc5e0dd387f2de0cf7f24f7ad5f14559da4",
    "outputidx": 0
  }
]
```

Now you need to add the txhash followed by the outputidx to the end of the line in the masternode.conf file.

Note that you can do this for many masternodes, if you wish to run multiple masternodes. Just change the masternode name to MN2, MN3 and so on for each node and add the correct details by repeating the above steps for each node.

Save the file, close and reopen the wallet. Then go to the masternodes tab and you should see status MISSING

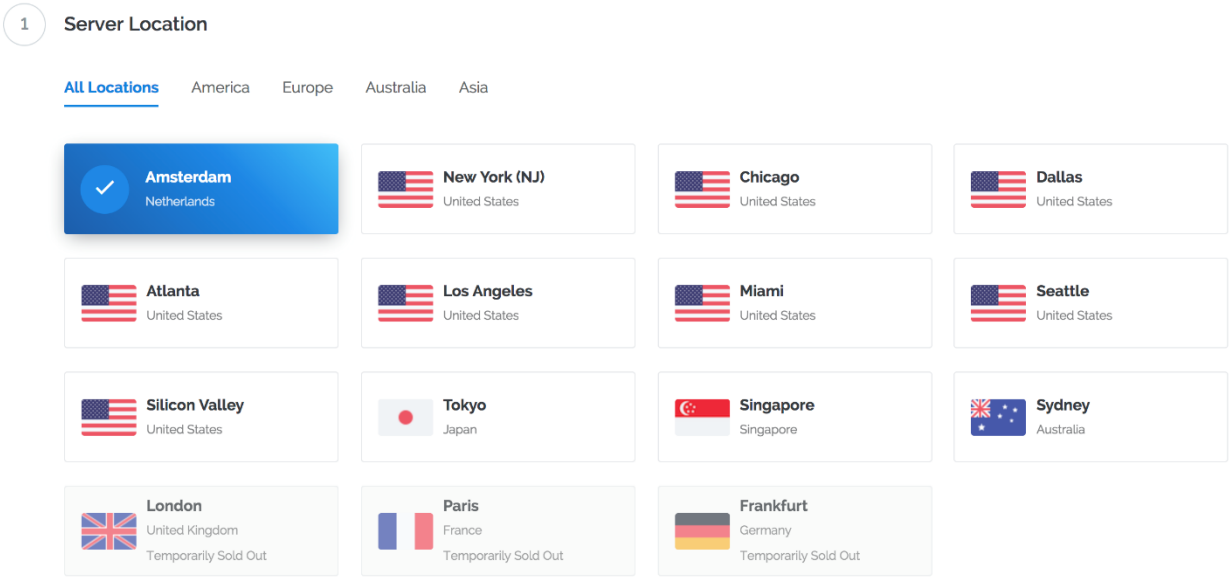
- VPS Setup

Our guide uses Vultr as a VPS provider. Though you may use many others, this has been tested on Digital Ocean and Amazon AWS.

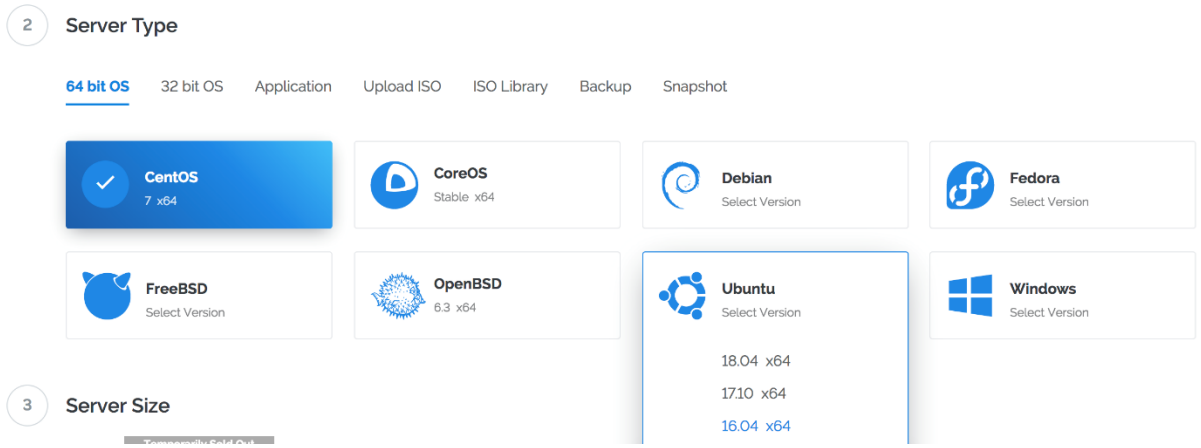
We assume you have setup an account with Vultr, if not go here:
https://www.vultr.com/

Once you have setup an account and logged in, start by creating a new server. Select the server tab on the left and click the large blue + button in the top right of the page.

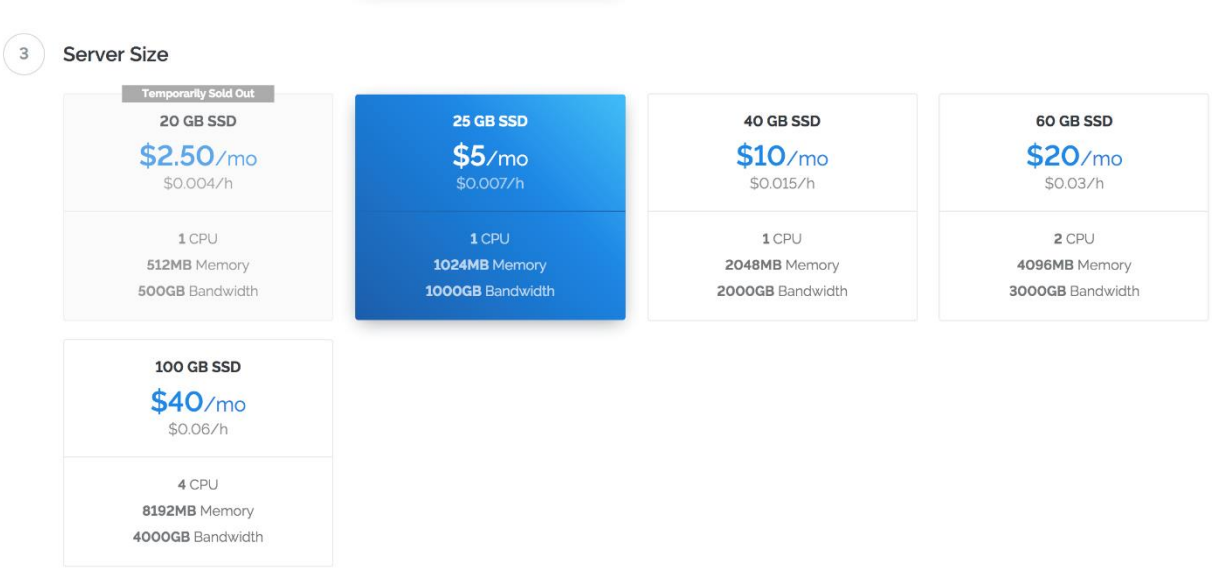
Firstly select your server location. It doesn't matter where you set it up, but we recommend setting it up as close as to where you live to evenly distribute the Masternodes around the planet.




Next you must select your operating system and version. Note we are presently only support Ubuntu 16.04 so you must select the below option highlighted in blue.



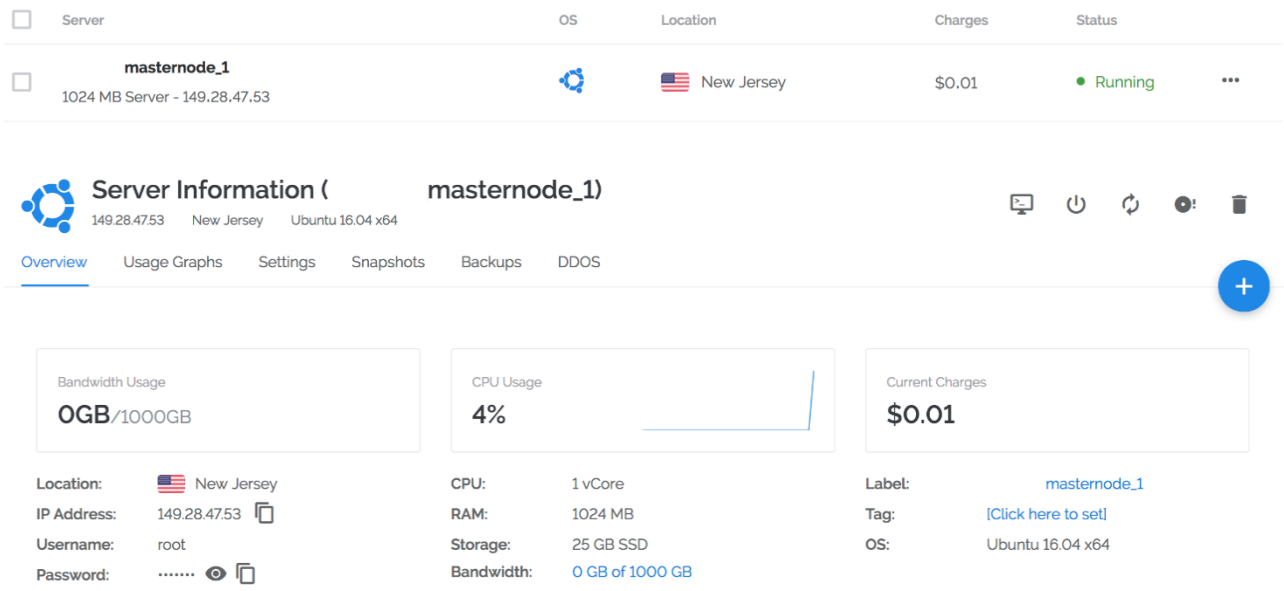

Now you need to select the size of your server. You can select the lowest "Sandbox" server for $2.50, but you will only get 2 of these per account. Note you can setup multiple Masternode's on a single PS, but this document does not cover this. For now we will use a $5 server as below.




Finally pick a name for your Masternode server. Incase you have many Masternodes in the future its good to pick name like below.

Now click the deploy button and you will launch your VPS and be taken to the server list page.

Click on your server, or click on the three dots then 'Server Details'.
Now you should be on the server details page.




As you can see the server is running Ubuntu 16.04. Now the next job is to open up your SSH client. On macOS or Linux you can use Terminal, on windows you can use PuTTY.

Now log into your sever by copying the ip address and password. On macOS and Linux you will type the following but replacing 149.28.47.53 with the IP address of your server.

```
ssh root@149.28.47.53
```

And when asked for you password you will copy your password and paste and press enter. Alternatively on PuTTY you will add your IP address, and password and the user will be root.

Now that you have SSH'd into the server you must install your master node. If asked If asked press Y for yes. if you are prompted to do so, press enter. Simply copy and paste this one line and press enter:

```
wget https://raw.githubusercontent.com/searchcoindev/MN-installer/master/srch-mn.sh && chmod 755 srch-mn.sh && ./srch-mn.sh
```

Then follow the instructions:
Copy and paste the '*MN private key*' you generated above followed by enter.

- Launch your masternode!

Now go back to your wallet, go to the Masternode tab, select your Masternode and press the "Start alias" button and your Masternode should now be started. Or open debug console and enter:

```
startmasternode "alias" "0" "MN1"
```

Congratulations, enjoy the rewards!