BLOCKNODE

Masternode Cold Guide

Version 1.0 - 2018-07-25 - https://blocknode.tech

Contents

What is a Controller-Cold-Setup?

This is the preferred way to setup your Masternodes. The wallet containing the coins do not have to be exposed and you can run it on your local computer.

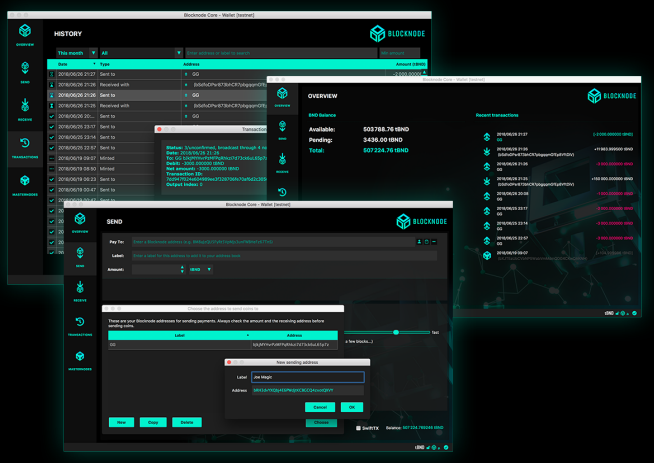
It does not have to run all the time and you are not vulnerable to someone hacking your VPS because all they can do is stop your Masternodes. (not steal your coins)

Before you start...

You will need to have the Blocknode Wallet installed. This is the wallet you can run on your local PC. When the masternodes are connected this wallet can be closed and the PC does not have to run in order for the masternodes to generate rewards.

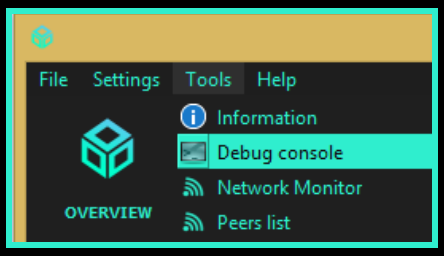
We will create an address, private key and transaction for each masternode (MN in the following) and show the necessary steps for configuration.

Win, Mac & Linux Wallet Download →
github.com/blocknodetech/blocknode/releases



1.

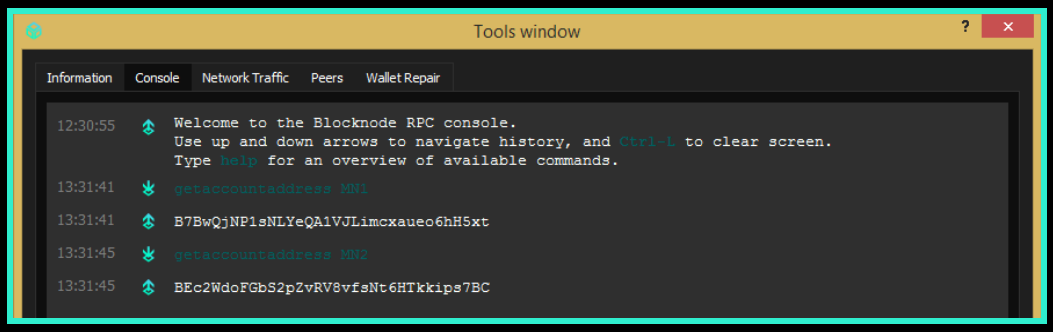
Tools → Debug Console to open debug console.



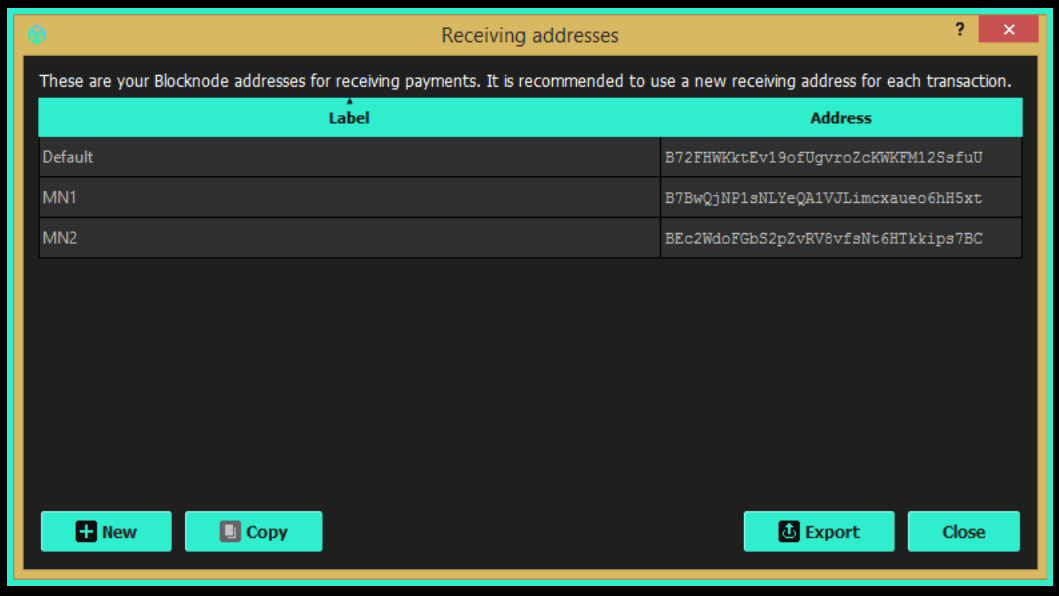
2.

Type “getaccountaddress MN1” and press Enter.

Repeat this step for the amount of masternodes you want to setup as shown. Make sure you count up (MN1, MN2 etc.)



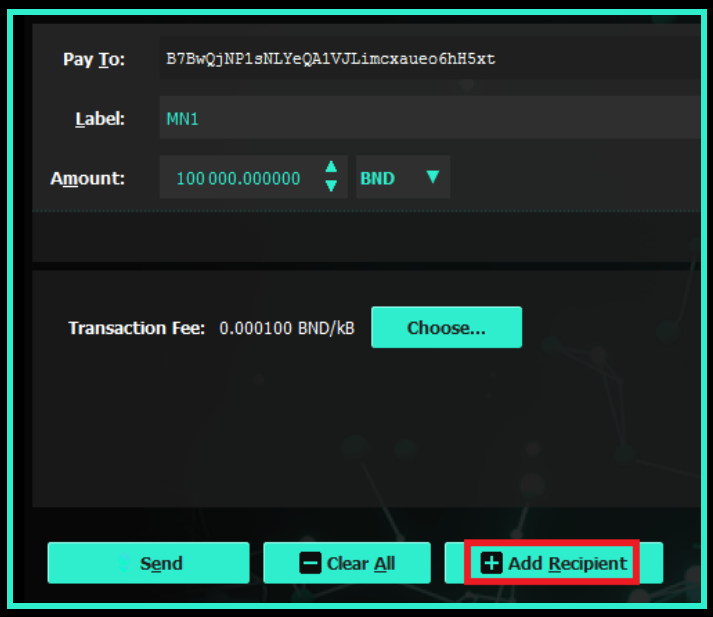
File → Receiving Addresses, to view all your created addresses.



3.

Send exactly **100,000 coins** to each address.

Pro Tip: Use "**add recipient**" to add lines so you can send to all nodes in one transaction if setting up multiple nodes.

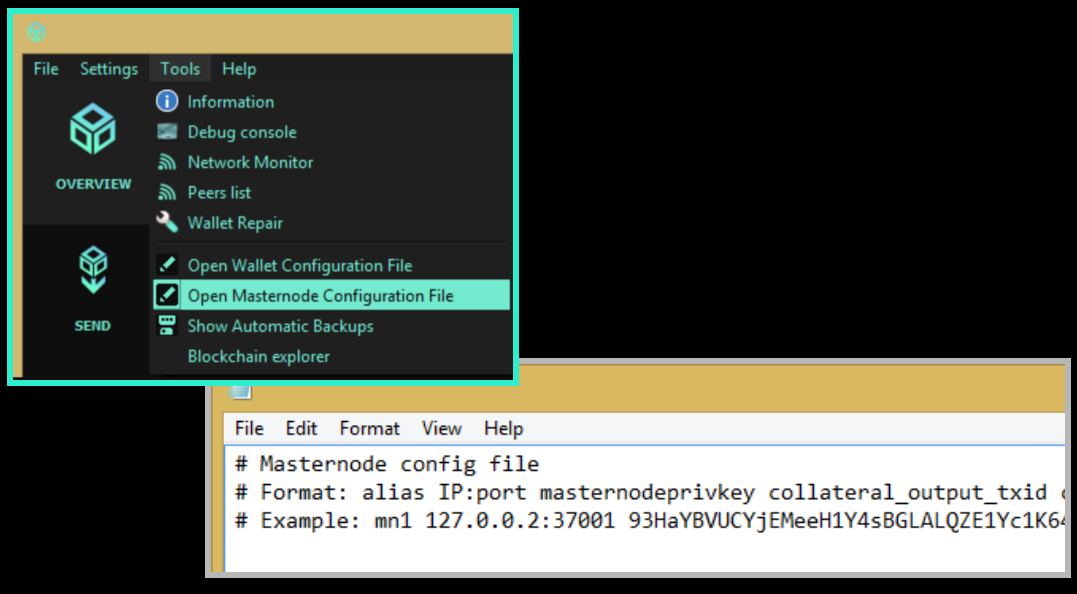


4.

Open Wallet Config

Tools → Open Wallet Configuration File

Your text editor will open with the configuration file.



ATTENTION:

To continue with this step you are going to need to set up a VPS for you node. Refer to the "**Setting up a VPS**" section for more.

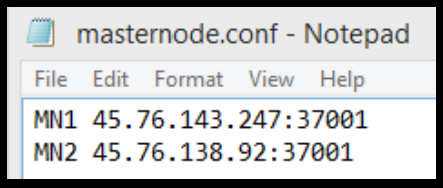
5.

Add new lines to config file

We will now add a line for each MN with the following Format:
"alias IP:port masternodeprivkey txhash outputindex"

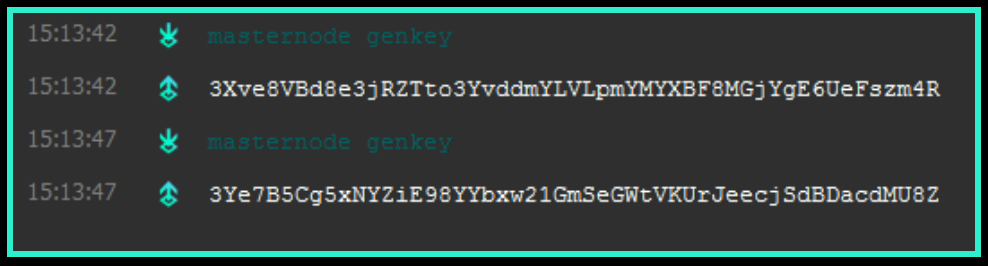
Begin by entering details for **alias** & **IP:port**

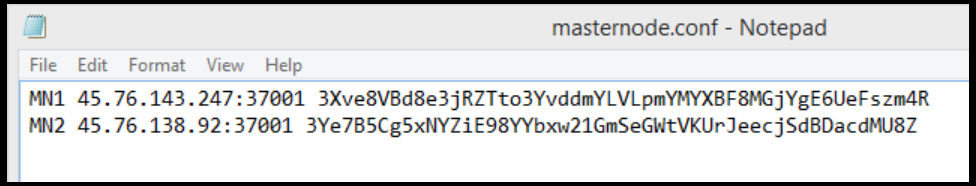
What are these?
- Alias : the name of the MN receiving address (we named them MN1, MN2, …)
- IP : The static IP of your Linux server – if you don't have one right now go to the next section "**Setting up a VPS**" before you continue.
- Port : A port the MN will connect to. The port is **fixed to 37001** and the nodes can only run on **one server**.



Next, how to get the **masternodeprivkey:**

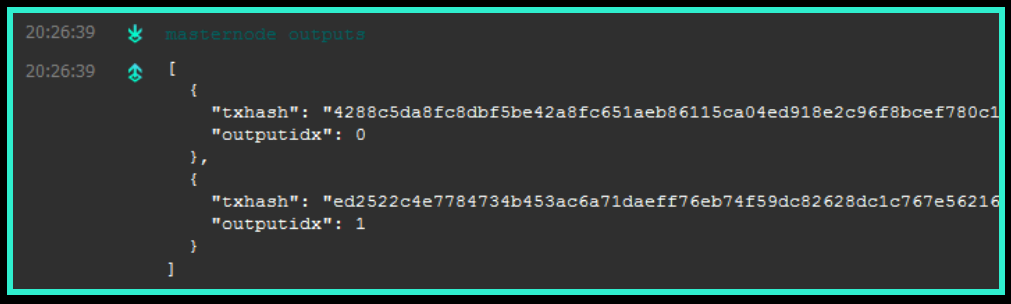
1. **Tools** → **Debug Console**
2. Type "**masternode genkey**" and press **Enter**
   Repeat for every masternode you want to set up.
3. Copy keys to config file. The private keys are used for voting and identify you as the real owner so **do not share them.**



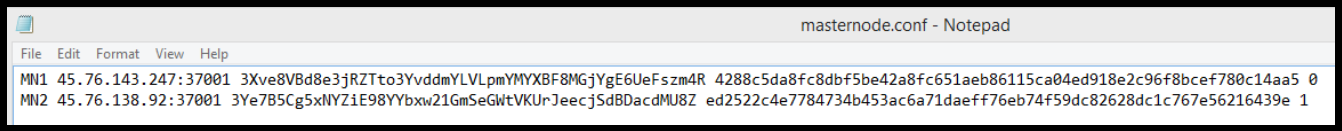


Next we will add **txhash** and **outputindex**

1. Tools → Debug Console, type "**masternode outputs**" and press **Enter**
2. If you send the coins in one transaction the "**txhash**" will be the same. If you add a masternode later, another tuple will be added. So every masternode has a unique pair of txhash and outputindex
3. Copy the information to the config file. Don't forget the index!

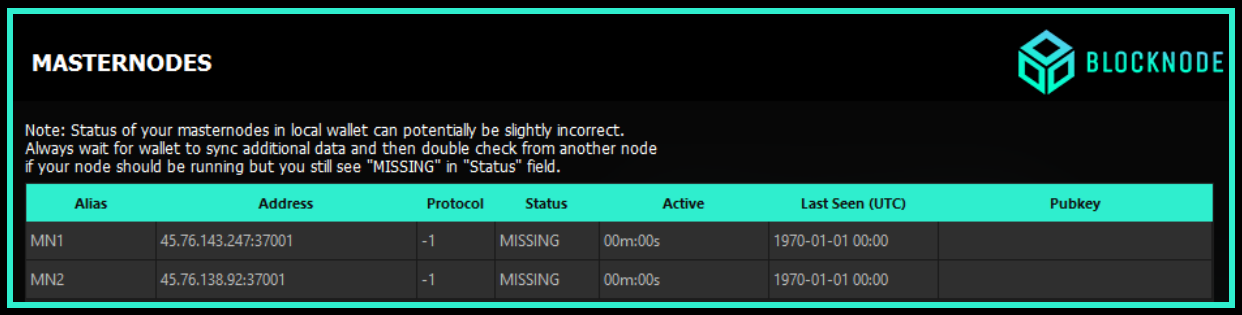


This is what your config **should finally look like!**



6.

Save the file and **restart the wallet**.
Verify now that your Masternodes are showing up in the wallet Masternodes tab.



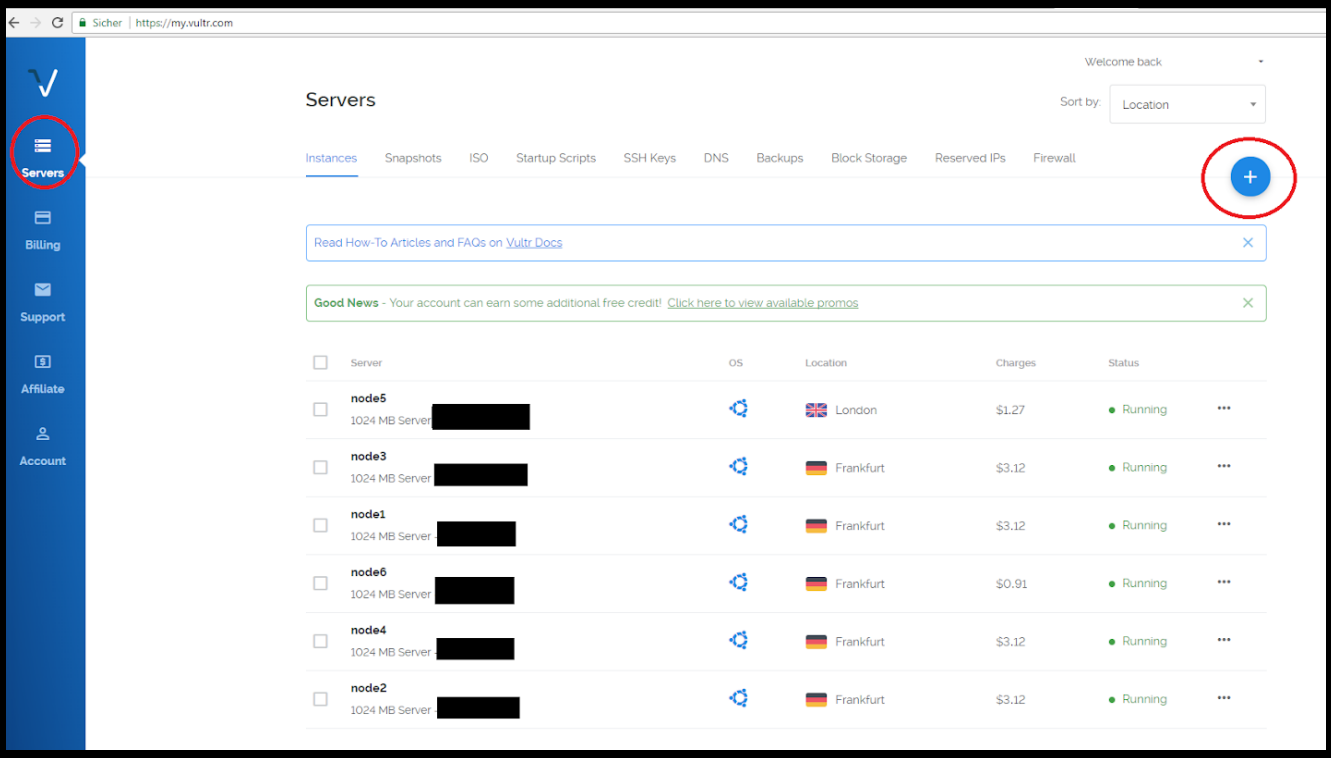
Setting up a VPS

For the cold wallets you first need a Linux VPS. You can get very affordable servers for $5 here: https://www.vultr.com/?ref=7186087. After registration you will be directed to the Dashboard. You have to do the first payment with something else then Bitcoin. After the first payment you can pay the servers in BTC.

1.

Deploy a new server

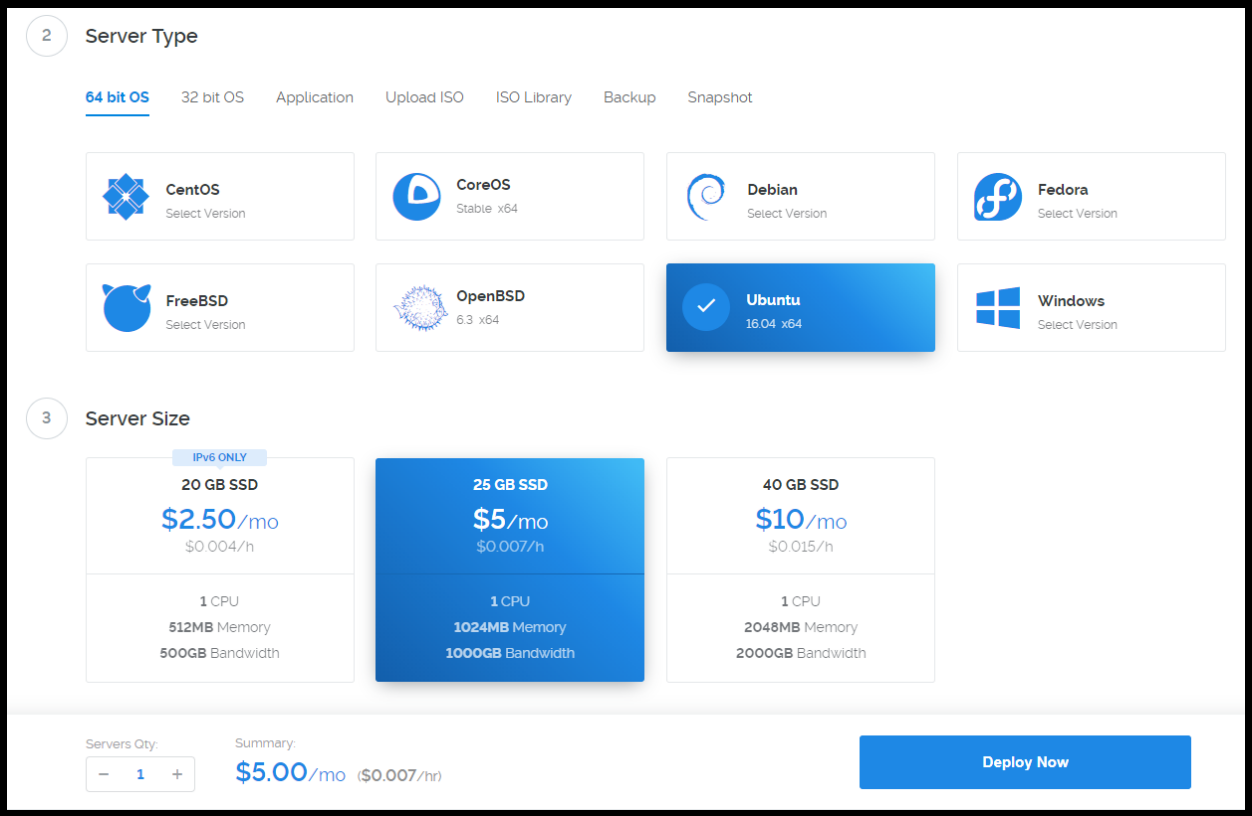
Click on the plus sign, top right, to add new instances.



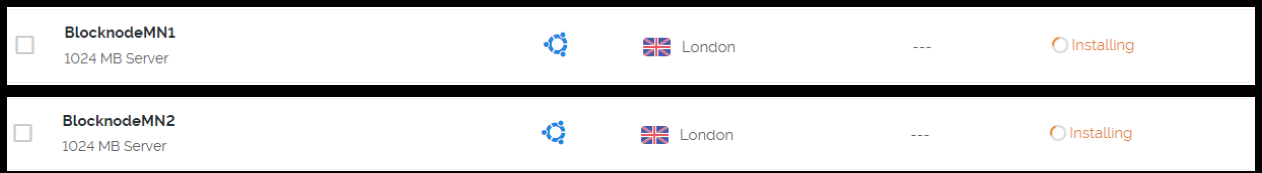
2.

Choose a region near you or one of your preferences.

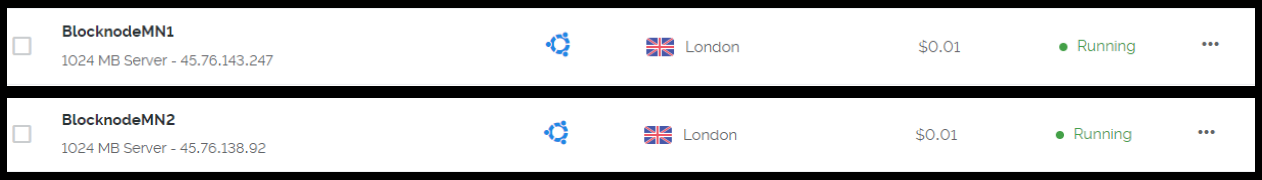
1. As "**Server Type**" choose **Ubuntu and click 16.04** (Important don't take 17.10 and above!)
2. As Server Size choose the **$5 instance with 1GB Ram**. The $2.50 ones now on Vultr only run IPv6 only, so this option is no longer available as this only runs on IPv4.
3. Scroll down and give the node a name.
4. After that click "**Deploy now**"



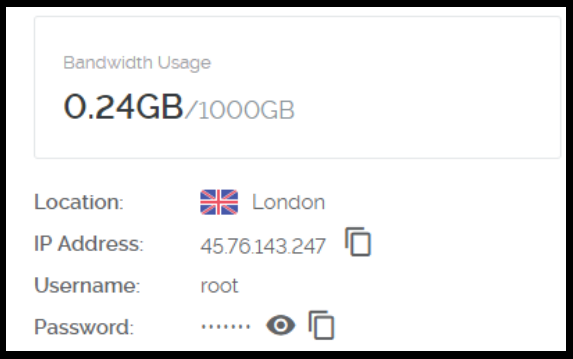
Next you will see the servers installing…



After which they will appear as running…



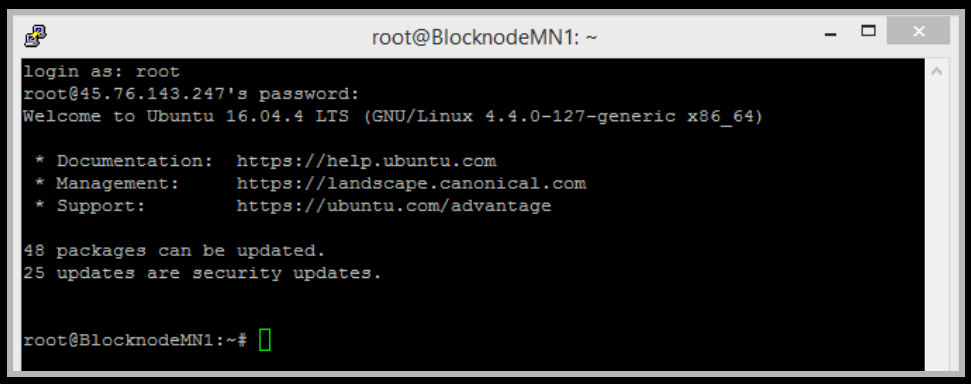
Click on a server to find more information on it…



3.

Connect to your server(s)

a. You will need some SSH tool connect To connect with "**putty**" a basic tool refer to **this guide**.
b. You can use "**Royal-TS**" to manage several connections at once. It's a bit harder getting used too but has real value.
c. You can find username (**root**) and password when you click on the newly created instance. The installation has to finish before!
d. Note: pasting your clipboard is "**right click**"



4.

Automatic server installation and setup.

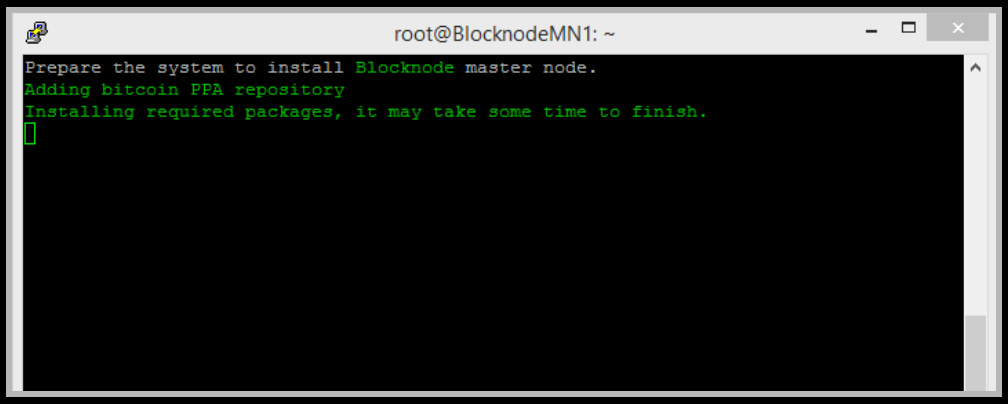
a. Locate the “Download and Execute” script on Github.

   https://github.com/zoldur/Blocknode

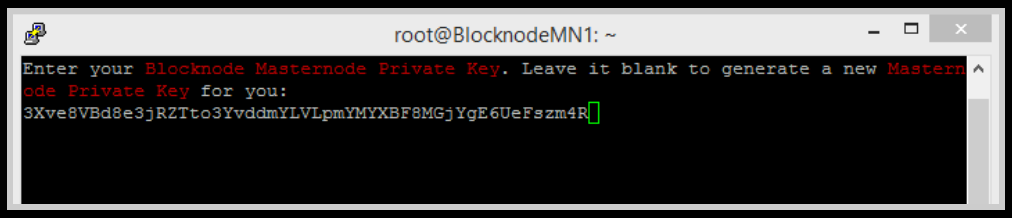
```
wget -N https://raw.githubusercontent.com/zoldur/Blocknode/master/blocknode_install.sh

bash blocknode_install.sh
```

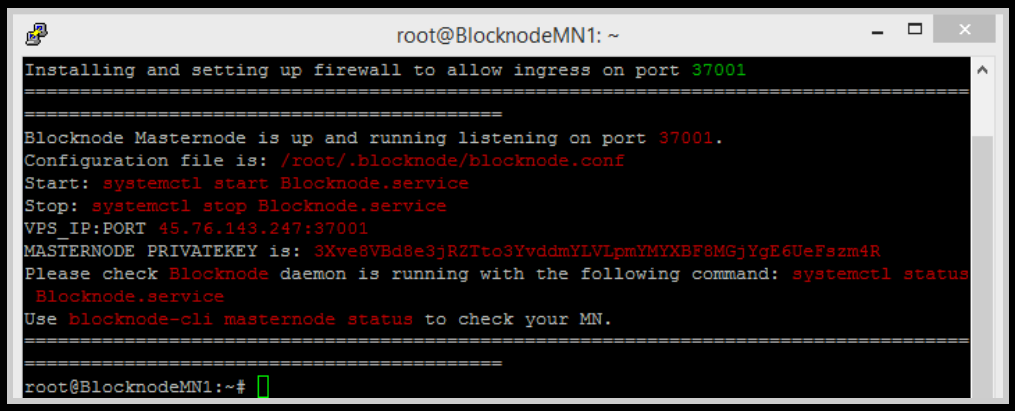
b. Enter the 2 lines of scripts separately to start the setup process. All dependencies and needed programs will be installed (takes a few minutes). This process is interactive and will ask you for your private key.



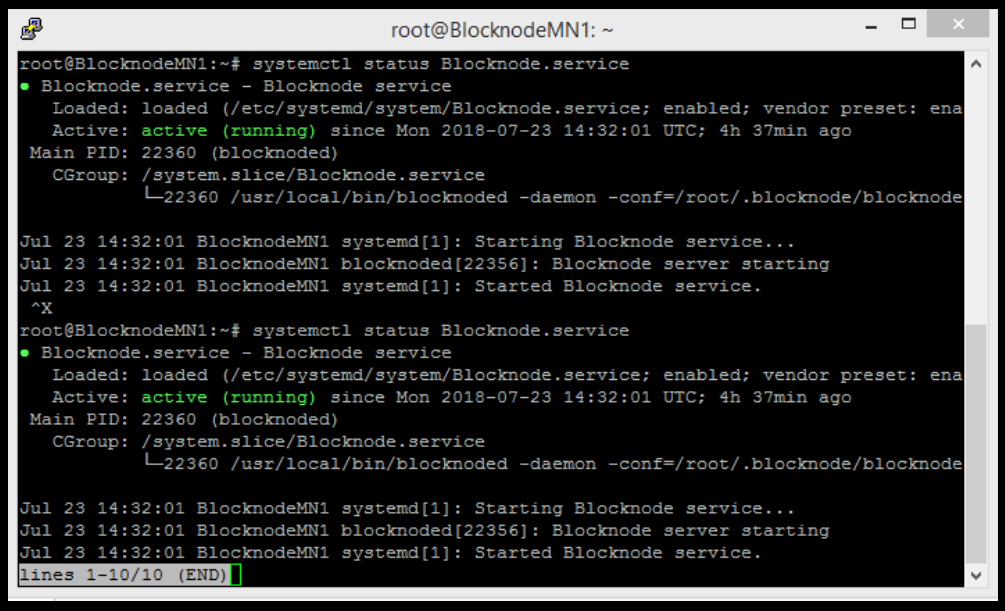
c. **Enter the Private key** (copy/paste) that you generated in your wallet with **"masternode genkey"** in your wallet debug console. Copy this and paste in the console. **Again, don't give this to anyone!**



d. Once complete you will get all information of your masternode setup.



e. "**systemctl status blocknode.service**" will show you if the masternode is active.



f. “**blocknode-cli getinfo**” will show you amount of blocks and connection count!

```
root@BlocknodeMN2:~# blocknode-cli getinfo
{
  "version": 1050200,
  "protocolversion": 70915,
  "walletversion": 61000,
  "balance": 0.000000,
  "zerocoinbalance": 0.000000,
  "blocks": 23338,
  "timeoffset": 0,
  "connections": 16,
  "proxy": "",
  "difficulty": 1563.745954465735,
  "testnet": false,
  "moneysupply": 35186604.311290,
  "zBNDsupply": {
    "1": 0.000000,
    "5": 0.000000,
    "10": 0.000000,
    "50": 0.000000,
    "100": 0.000000,
    "500": 0.000000,
    "1000": 0.000000,
    "5000": 0.000000,
    "total": 0.000000
  },
  "keypoololdest": 1532374859,
  "keypoolsize": 1001,
  "paytxfee": 0.000000,
  "relayfee": 0.000100,
  "staking status": "Staking Not Active",
  "errors": ""
}
```

g. You can check on our discord server bot for the current block ammount or use our Block Explorers - www.coinexplorer.net/BND & explorer.blocknode.tech to see if it full synced with the chain as this command will show you amount of blocks and connection count.

5.
Controlling the masternode

a. "**blocknode-cli masternode status**" to see if everything works.

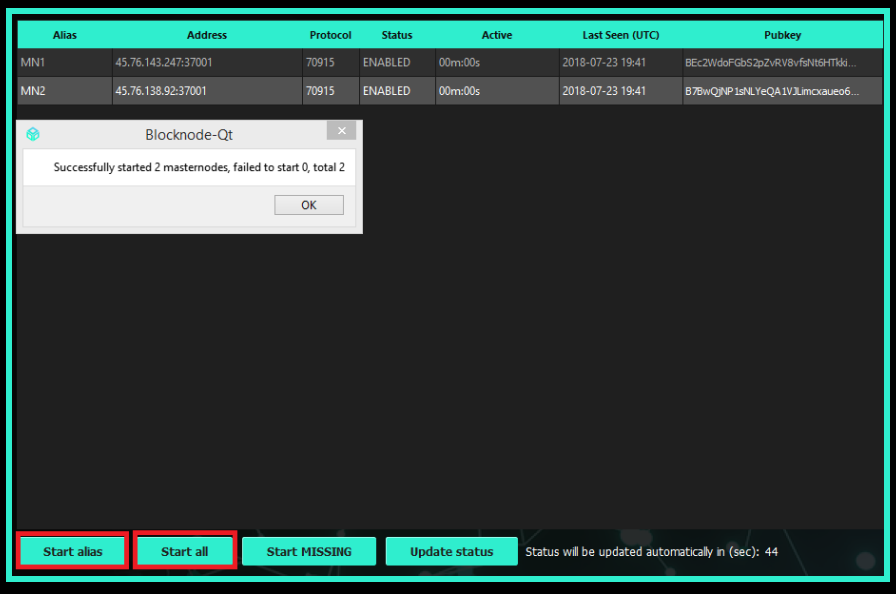
```
root@BlocknodeMN2:~# blocknode-cli masternode status
{
  "txhash": "ed2522c4e7784734b453ac6a71daeff76eb74f59dc82628dc1c767e56216439e",
  "outputidx": 1,
  "netaddr": "45.76.138.92:37001",
  "addr": "B7BwQjNP1sNLYeQA1VJLimcxaueo6hH5xt",
  "status": 4,
  "message": "Masternode successfully started"
}
root@BlocknodeMN2:~#
```

*If you see this error, please click "**start alias, start all**" on your masternode gain in the wallet, as it is not synced correctly.*

```
root@BlocknodeMN2:~# blocknode-cli masternode status
error: {"code":-1,"message":"Masternode not found in the list of available maste
rnodes. Current status: Not capable masternode: Hot node, waiting for remote act
ivation."}
```

b. Sync completely and go to your **desktop wallet** and start MNs in the masternode tab (**unlock** wallet before).

c. Start your masternodes on your Wallet, this should sync it to the VPS



6.

Finished! Well done.

The wallet will shows you that the Masternodes are successfully started and correctly connected to your walle. Repeat this for all MNs to ensure they are running.

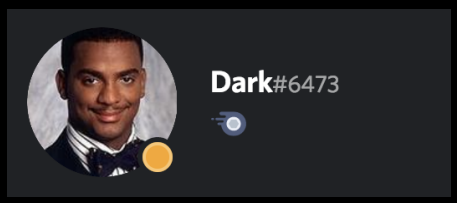
Alias	Address	Protocol	Status	Active	Last Seen (UTC)
MN1	45.76.143.247:37001	70915	ENABLED	32m:54s	2018-07-23 20:31
MN2	45.76.138.92:37001	70915	ENABLED	41m:52s	2018-07-23 20:40

You can close your Desktop Wallet after a while if the time starts counting up.

Special thanks to:

XeZZ - twitter.com/XeZZoR

Zolur - github.com/zoldur



Dark

The Blocknode Team