

# How to deploy a masternode on VPS

NB each masternode needs a unique IP address, it is not possible to install 2 or more masternodes of the same coin on the same server.

If you want to make more masternodes of the same coin, you need different servers or IPV6 support.

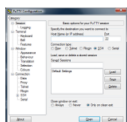
To open a masternode with a VPS we must first install Putty if we use Windows.

So now let's go to the browser and type [www.putty.org](http://www.putty.org)

(We will need Putty to connect to our VPS).

We are now on this page, so click on the link.

As in the following image



## Download PuTTY

PuTTY is an SSH and telnet client, developed originally by Simon Tatham for the Windows platform. PuTTY is open source software that is available with source code and is developed and supported by a group of volunteers.

You can download PuTTY [here](#).

Once this is done we will find ourselves on the download page, and then we choose the download for our operating system (in this case Windows 64-bit x86) and proceed with the installation.

### Package files

You probably want one of these. They include versions of all the PuTTY utilities.

(Not sure whether you want the 32-bit or the 64-bit version? Read the [FAQ entry](#).)

**MSI ('Windows Installer')**

64-bit x86:	<a href="#">putty-64bit-0.76-installer.msi</a>	<a href="#">(or by FTP)</a>	<a href="#">(signature)</a>
64-bit Arm:	<a href="#">putty-arm64-0.76-installer.msi</a>	<a href="#">(or by FTP)</a>	<a href="#">(signature)</a>
32-bit x86:	<a href="#">putty-0.76-installer.msi</a>	<a href="#">(or by FTP)</a>	<a href="#">(signature)</a>

**Unix source archive**

.tar.gz:	<a href="#">putty-0.76.tar.gz</a>	<a href="#">(or by FTP)</a>	<a href="#">(signature)</a>
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Now that we have Putty on our PC, we need a virtual private server (VPS).

To get our VPS we need to purchase it from a hosting provider.

For our guide we chose Vultr.

So let's go to our browser and type [www.vultr.com](https://www.vultr.com)

let's register, connect our credit card or Paypal and we will find ourselves in the control panel.

Now let's choose Cloud Compute.

As in the picture

- Products
- Billing
- Support
- Referral Program

## Deploy New Instance

Thank you for verifying your e-mail!

### Choose Server

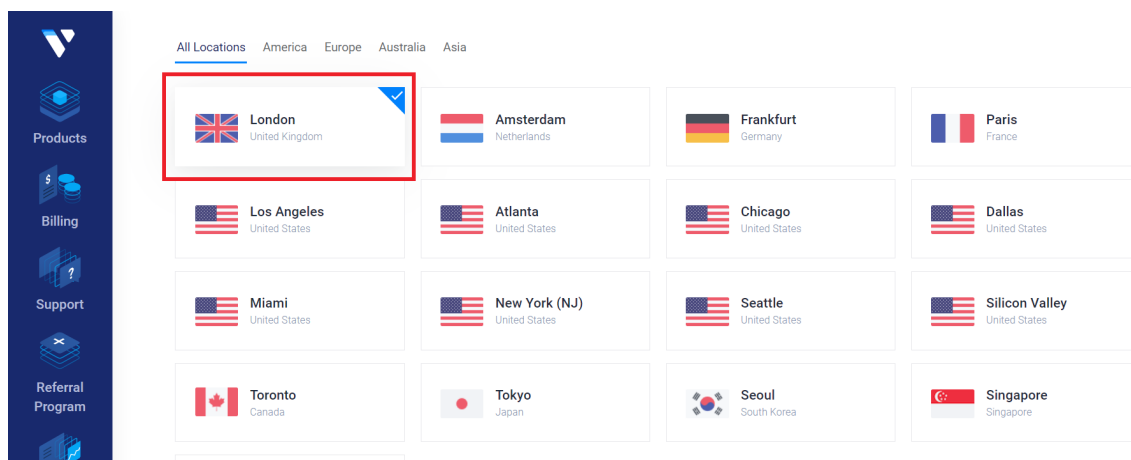
Cloud Compute

High Frequency

Bare Metal

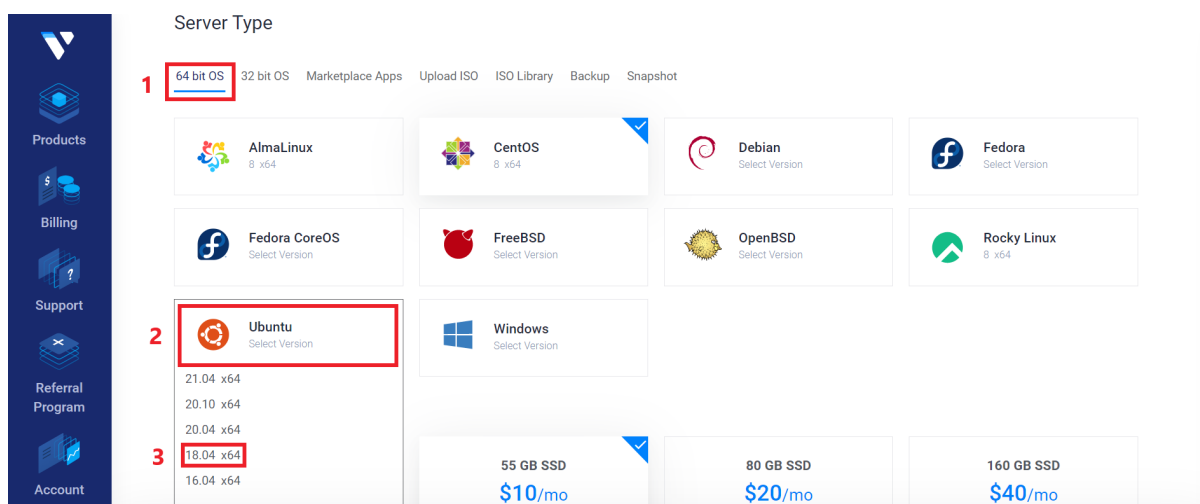
Dedicated Cloud

After that, we choose the server location (it is better to choose it near where we are located) in this case we chose London.



So we choose Server Type

- 64 bit OS
- Ubuntu
- 18.04 x64



Once this is done, let's choose Server Size (which are the technical specifications of our VPS).

In our case we chose the 10 dollar one.

And click on Deploy Now.

As in the picture

**Server Size**

Plan	SSD	Price	Hourly Price	CPU	Memory	Bandwidth
25 GB SSD	25 GB SSD	\$5/mo	\$0.007/h	1 CPU	1024MB Memory	1000GB Bandwidth
<b>55 GB SSD</b>	<b>55 GB SSD</b>	<b>\$10/mo</b>	<b>\$0.015/h</b>	1 CPU	2048MB Memory	2000GB Bandwidth
80 GB SSD	80 GB SSD	\$20/mo	\$0.03/h	2 CPU	4096MB Memory	3000GB Bandwidth
160 GB SSD	160 GB SSD	\$40/mo	\$0.06/h	4 CPU	8192MB Memory	4000GB Bandwidth
320 GB SSD	320 GB SSD	\$80/mo	\$0.119/h	6 CPU	16384MB Memory	5000GB Bandwidth
640 GB SSD	640 GB SSD	\$160/mo	\$0.238/h	8 CPU	32768MB Memory	6000GB Bandwidth

Servers Qty:  Summary: **\$10.00/mo** (\$0.015/hr)

[Additional 22% VAT applicable to your account](#) [Update Settings](#)

**Deploy Now**

We wait for the server installation to complete.

We click on our new server.

As in the picture

**Products**

Instances | Snapshots | ISOs | Scripts | DNS | Block Storage | Objects | Firewall | Network | Load Balancers | Kubernetes

Server added successfully!

[Read How-To Articles and FAQs on Vultr Docs](#)

Good News - Your account can earn some additional free credit! [Click here to view available promos](#)

Search... Sort: Location

	Server	OS	Location	Charges	Status
<input type="checkbox"/>	Cloud Instance		London	\$0.02	Running

Now we will find ourselves on the Server Information page  
At the bottom left we find our credentials.

- IP Address
- Username
- Password

**Server Information**  
95.179.227.15 London Created 4 minutes ago

Overview Usage Graphs Settings Snapshots Backups DDOS

Please note: Your server may still be finishing installing and booting up during the first few minutes of activation. If the server does not ping, you can [view the console](#) to monitor progress.

Bandwidth Usage 0GB / 2000GB	CPU Usage --	Current Charges \$0.02
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Location:  London	CPU: 1 vCore	Label: <a href="#">[Click here to set]</a>
IP Address: 95.179.227.15	RAM: 2048 MB	Tag: <a href="#">[Click here to set]</a>
Username: root	Storage: 55 GB SSD	OS: Ubuntu 18.04 x64
Password: F7+e	Bandwidth: 0 GB of 2000 GB	

We recommend that you save all the necessary data on Notepad because they will be used in the following steps.

\*Untitled - Notepad

File Edit Format View Help

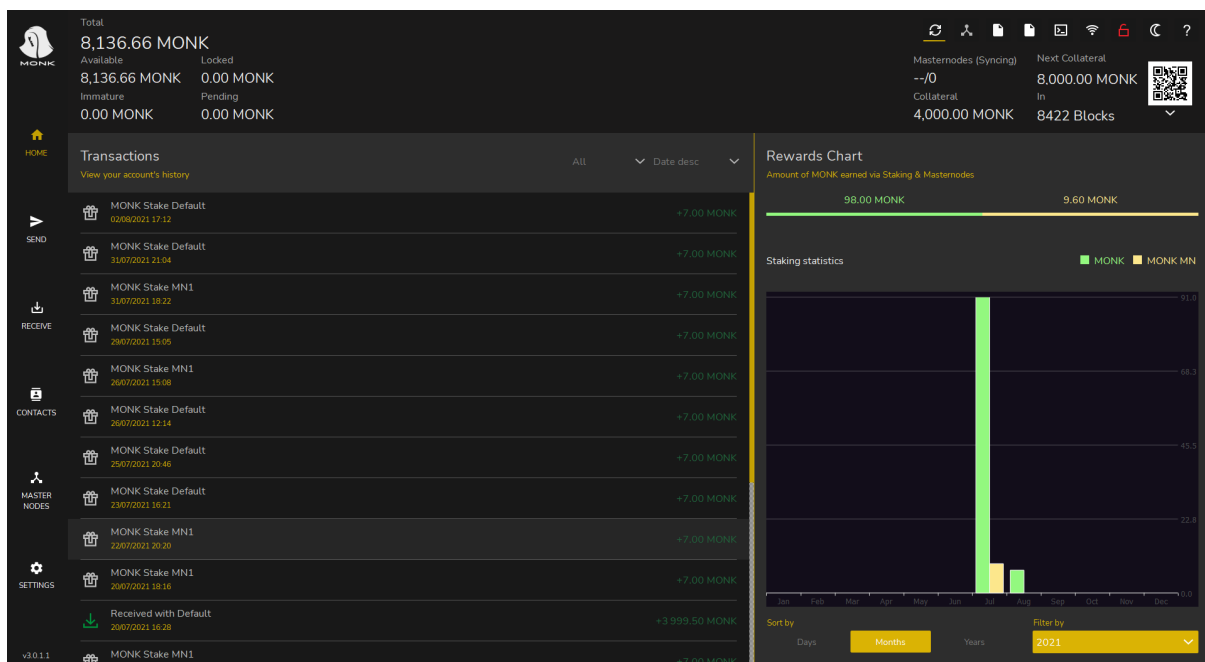
Vultr

IP Address: 95.179.227.15

Username: root

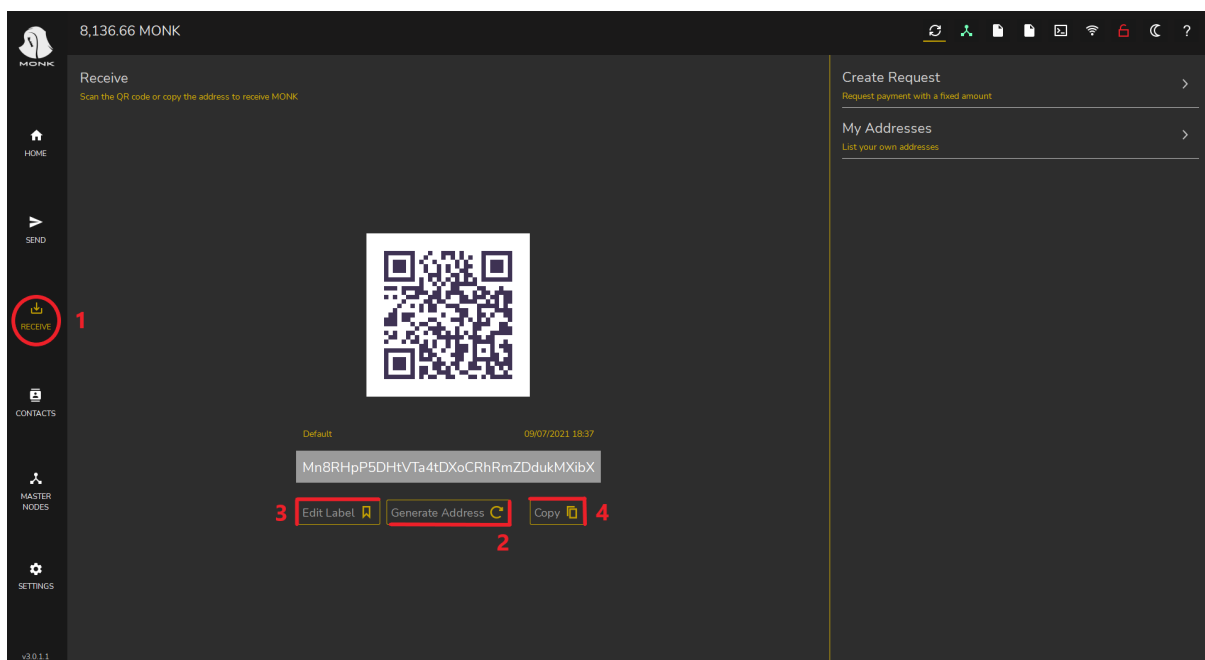
Password: F7+e [REDACTED]

Now let's go to open our wallet (in this case Monk).



Now that we are in our wallet, let's take these simple steps that are necessary to create the so-called collateral transaction.

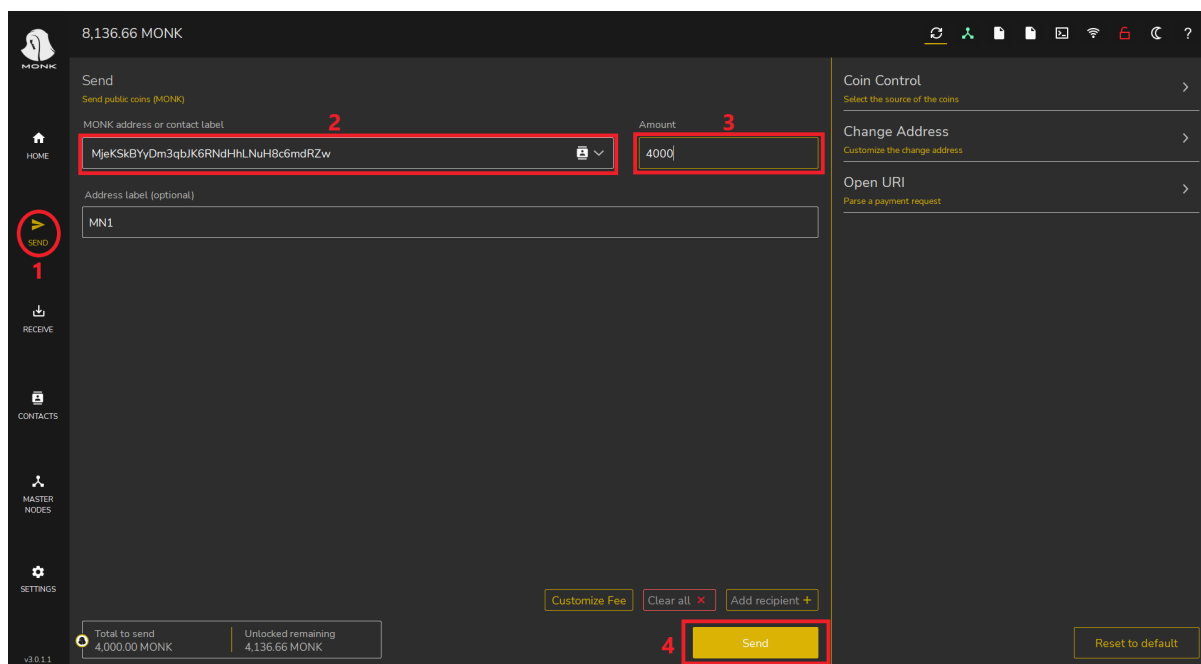
- We click on receive
- We generate a new address
- We modify its label (we have chosen MN1 and remember how we labeled it for later use)
- We copy the address



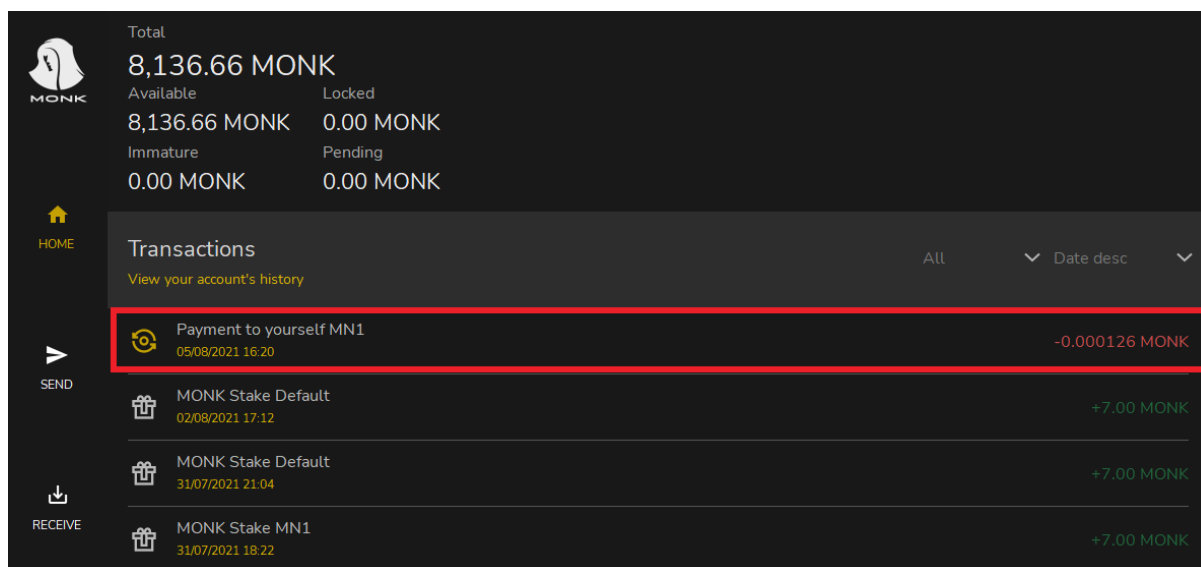
A Monk masternode currently requires 4000 Monk, which we need to send to ourselves, so:

- Click on Send in the left menu
- Paste the previously copied address
- We insert in the amount the exact amount for our masternode (in our case 4000)
- We click send

We just created the collateral transaction!

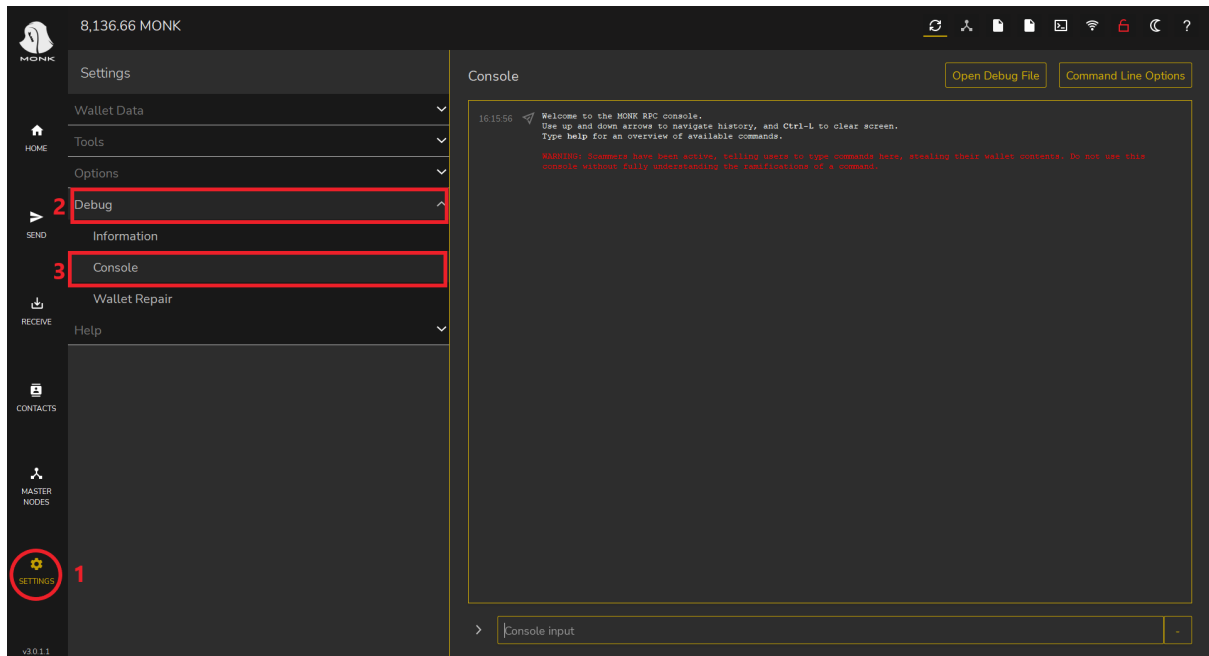


Once we have sent the coins to ourselves, we wait for 15 confirmations (about 15 minutes). In the image we can see the transaction labeled MN1, payment to yourself.



Now let's go to the Debug console

- We click settings
- Debug
- Console



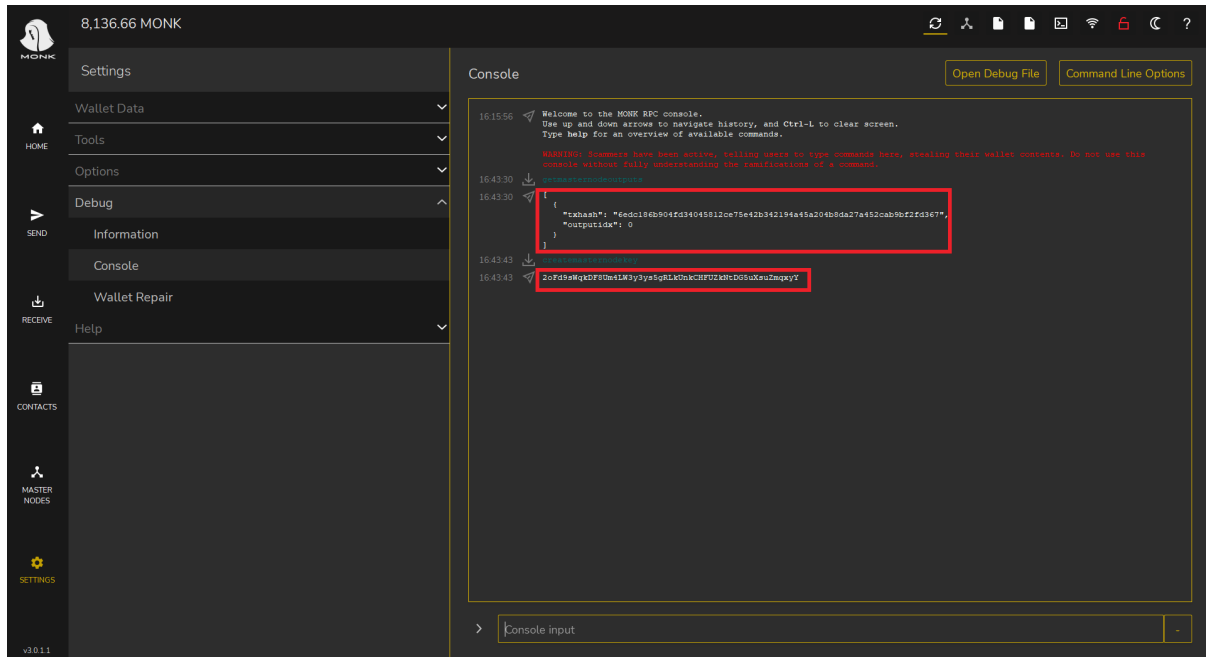


In the debug console we have to type the following commands in the bar below

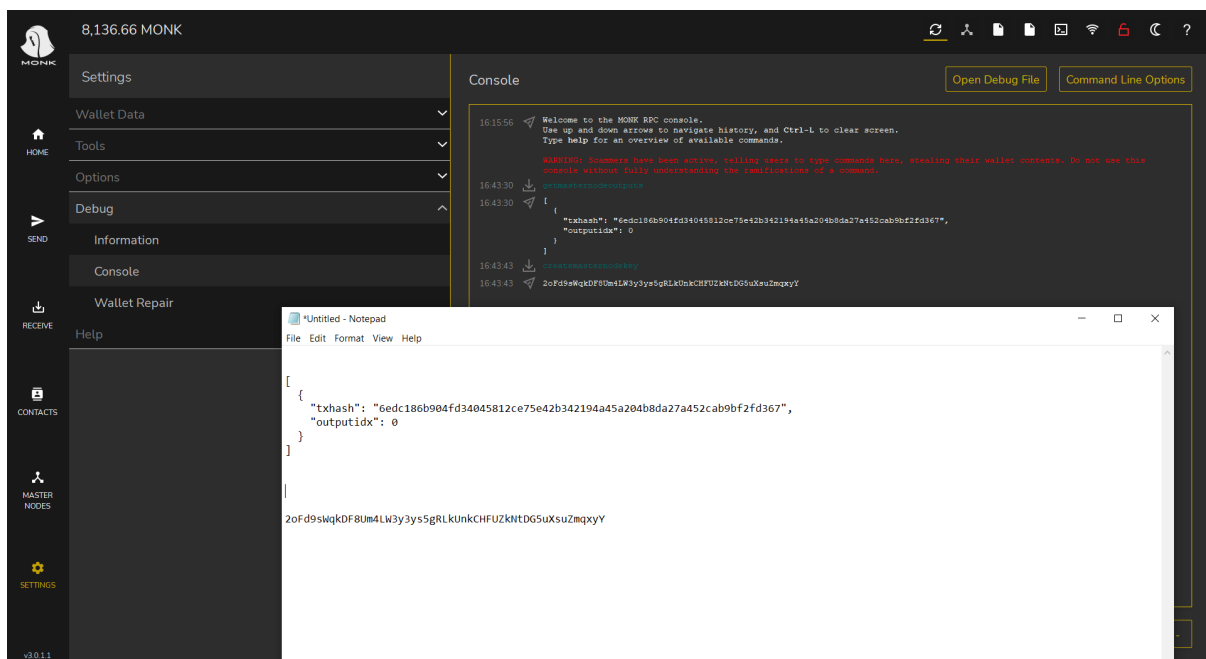
- getmasternodeoutputs
- createmasternodekey

The first command gives us the details regarding our collateral transaction.

The second generates a masternode key.



Then we copy the result of the following commands.  
(We save this information in a Notepad file).



Now we can open Putty (which we had previously downloaded).  
And let's open the Notepad where we saved the server credentials.

- We enter the IP address in the Host Name.
- We click on open.

Vultr guide.txt - Notepad

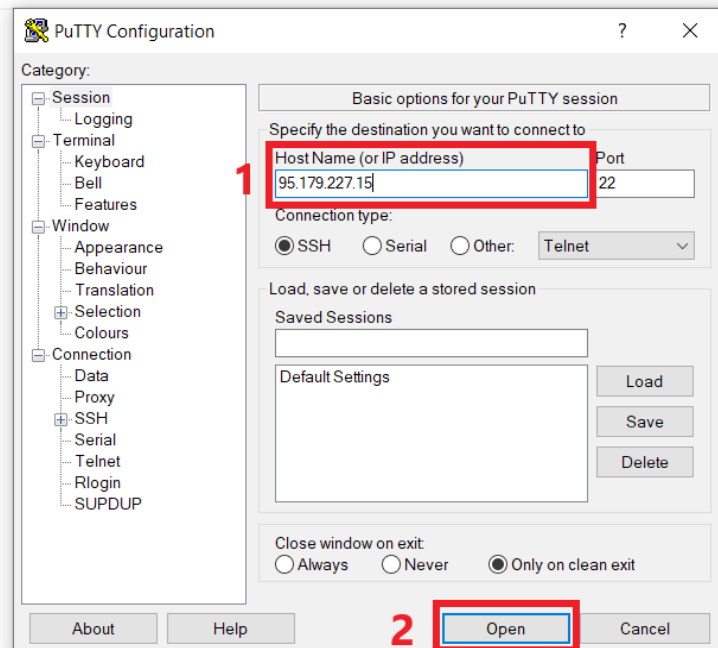
File Edit Format View Help

Vultr

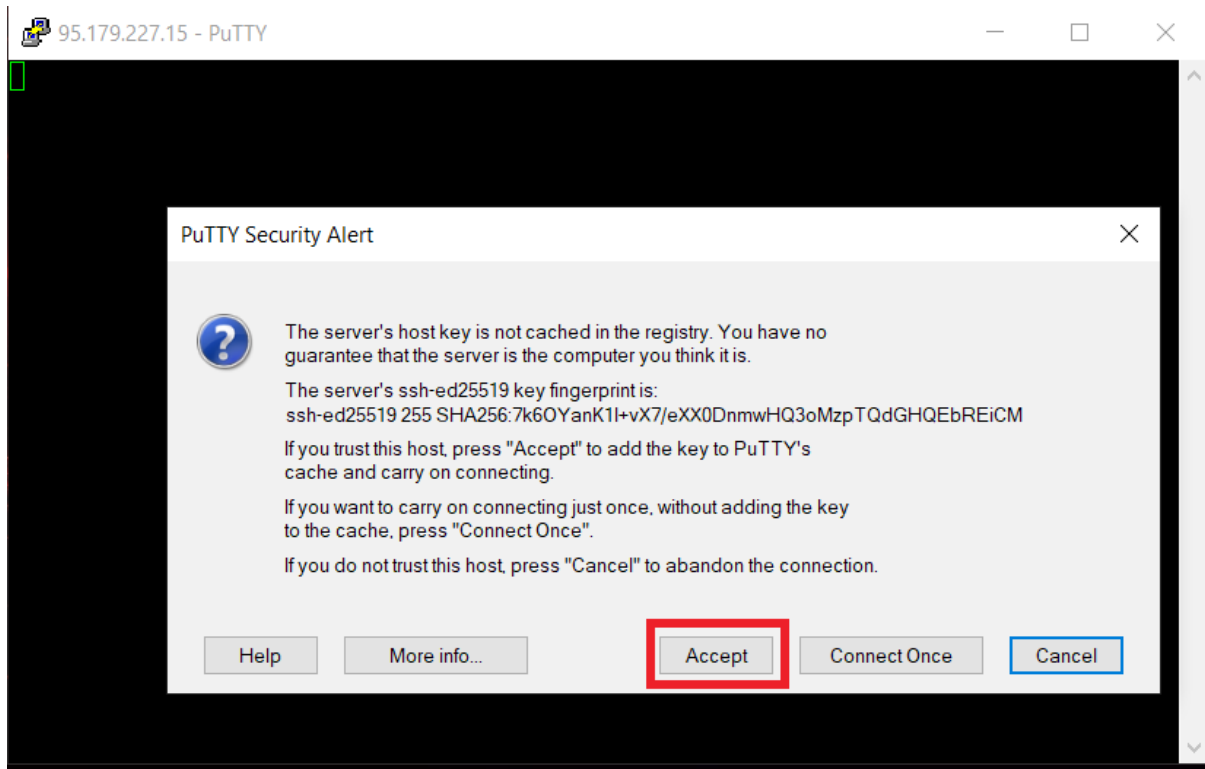
IP Address: 95.179.227.15

Username: root

Password: F7+e [REDACTED]



If this is the first time we connect to the server, click on accept.  
As in the pictured



Now Putty will ask us for the username and password, let's go to the Notepad where we have saved the credentials and insert them.

- login as: root (press enter)
- root@95.179.227.15's password: we put the password

(while we type nothing will appear do not worry it is normal and we press Enter).

We are now on our server (let's leave it open).

```
root@vultr: ~  
login as: root  
root@95.179.227.15's password:  
Welcome to Ubuntu 18.04.5 LTS (GNU/Linux 4.15.0-143-generic x86_64)  
  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:       https://ubuntu.com/advantage  
  
System information as of Fri Aug  6 13:06:40 UTC 2021  
  
System load:  0.0              Processes:      90  
Usage of /:   4.8% of 51.57GB   Users logged in: 0  
Memory usage: 12%             IP address for enp1s0: 95.179.227.15  
Swap usage:   0%  
  
* Super-optimized for small spaces - read how we shrank the memory  
  footprint of MicroK8s to make it the smallest full K8s around.  
  
https://ubuntu.com/blog/microk8s-memory-optimisation  
  
54 updates can be applied immediately.  
31 of these updates are standard security updates.  
To see these additional updates run: apt list --upgradable  
  
New release '20.04.2 LTS' available.  
Run 'do-release-upgrade' to upgrade to it.  
  
Last login: Fri Aug  6 12:58:21 2021 from 95.237.195.250  
root@vultr:~#
```

Let's go to decenomy GitHub, at this link <https://github.com/decenomy/MONK> to download the script to install the masternode (in our case Monk). We click in the contrib folder.

The screenshot shows the GitHub repository page for `decenomy / MONK`. The repository has 16,092 commits and 1 branch. The 'contrib' folder is highlighted with a red box. The repository description is 'Monk Standard Wallet'.

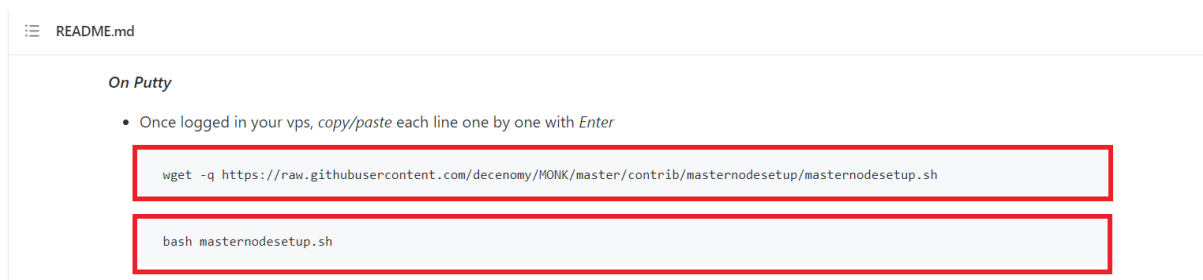
File/Folder	Description	Time Ago
<code>.github</code>	Merges branch 'develop' into MONK-develop	27 days ago
<code>.travis</code>	Replace standard coin name __decenomy__ by monk	3 months ago
<code>.tx</code>	qt: make translate on 4.3 branch	11 months ago
<code>build-aux</code>	build: bump version to 4.3.0rc1	11 months ago
<b><code>contrib</code></b>	Minor fix	21 days ago
<code>depends</code>	Cleans up sapling, sodium, rust and cargo codes remains	4 months ago
<code>doc</code>	Removes extra https:// from github links	27 days ago
<code>qa/rpc-tests/test_framework</code>	Implement SipHash in Python	12 months ago
<code>share</code>	Replace standard coin name __decenomy__ by monk	3 months ago
<code>src</code>	removes the more tightenmn message time verification	20 days ago
<code>test</code>	Replace standard coin name __decenomy__ by monk	3 months ago
<code>.gitattributes</code>	Separate protocol versioning from clientversion	7 years ago

Now we click on masternodesetup

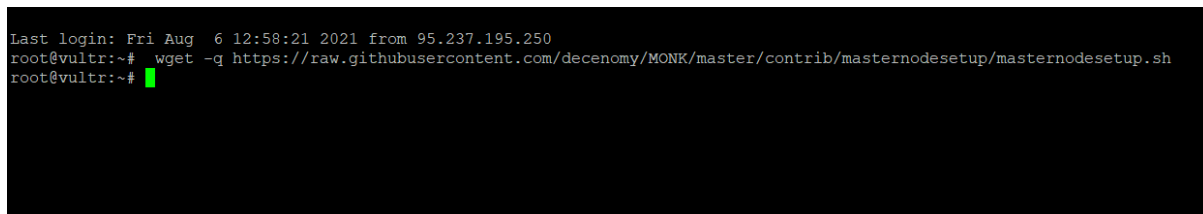
The screenshot shows the GitHub repository page for `decenomy / MONK / contrib`. The repository has 16,092 commits and 1 branch. The 'masternodesetup' file is highlighted with a red box. The repository description is 'Monk Standard Wallet'.

File/Folder	Description	Time Ago
<code>bitrpc</code>	v3.0.0.0	2 months ago
<code>cmake</code>	Cleans up sapling, sodium, rust and cargo codes remains	4 months ago
<code>debian</code>	Removes extra https:// from github links	27 days ago
<code>devtools</code>	Replace standard coin name __decenomy__ by monk	3 months ago
<code>gitian-descriptors</code>	Cleans up sapling, sodium, rust and cargo codes remains	4 months ago
<code>gitian-keys</code>	[Build] Add random-zebra gitian GPG public key fingerprint	2 years ago
<code>init</code>	Contrib: Update init scripts for *nix	3 years ago
<code>innosetup</code>	Merge branch 'develop' of https://github.com/decenomy/DSW into MONK-d...	23 days ago
<code>linearize</code>	v3.0.0.0	2 months ago
<code>macdeploy</code>	Replace standard coin name __Decenomy__ by Monk	3 months ago
<b><code>masternodesetup</code></b>	Minor fix	21 days ago
<code>qos</code>	v3.0.0.0	2 months ago

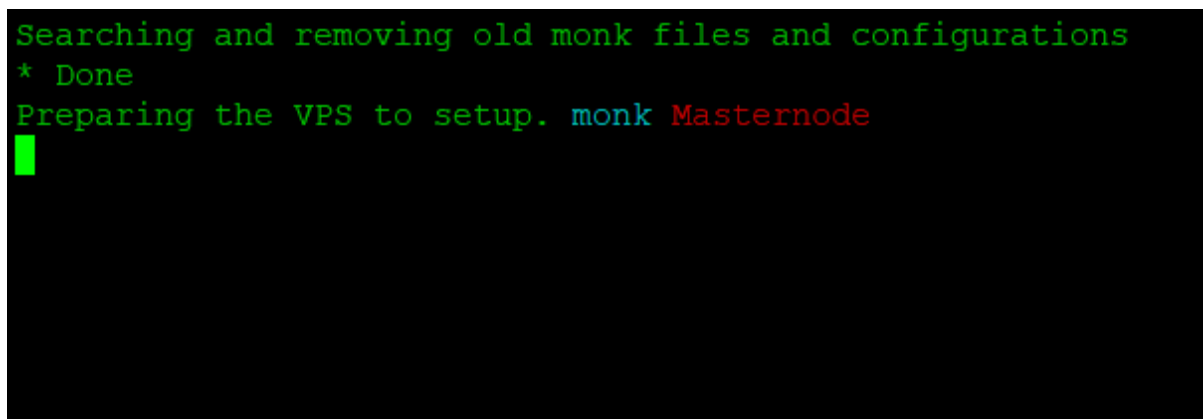
Scrolling down the page we find these commands to insert on Putty.



After copying the first command on GitHub, let's go back to Putty and paste it and hit enter.



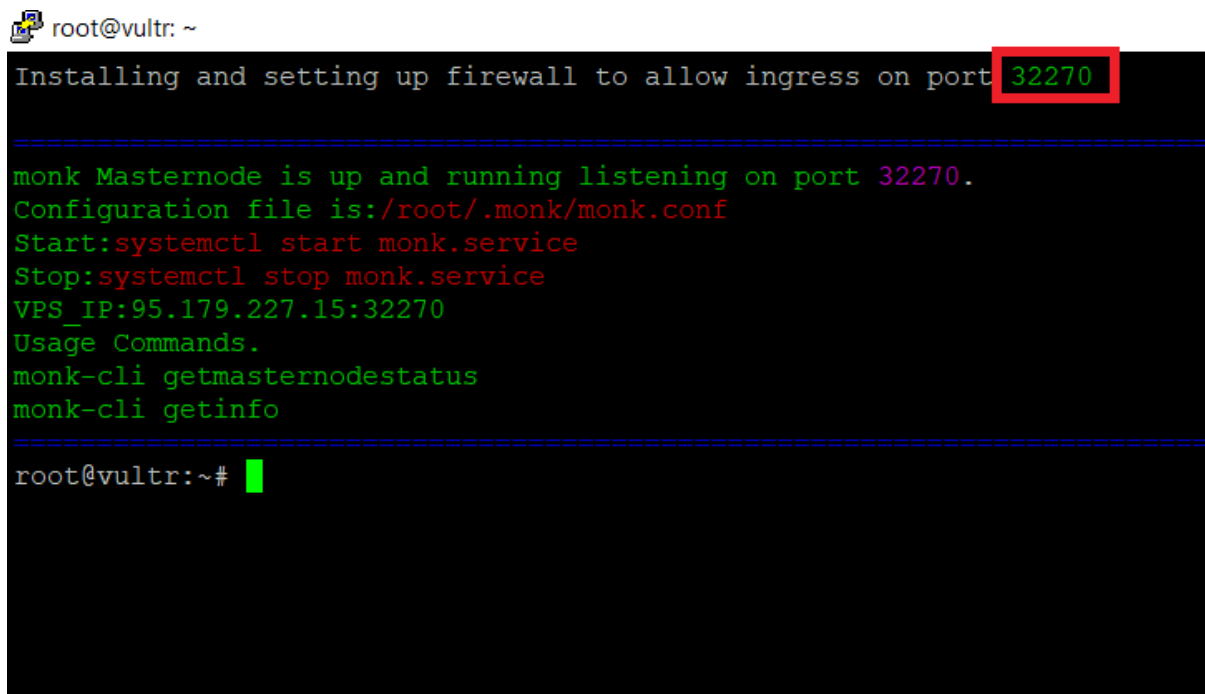
Now we do the same operation with the second command and hit enter.  
The installation of the masternode will then start.



After a short time we will be prompted for the masternode key that we generated earlier (and as I advised you we saved it in Notepad).  
Let's copy and paste it on Putty and press enter.



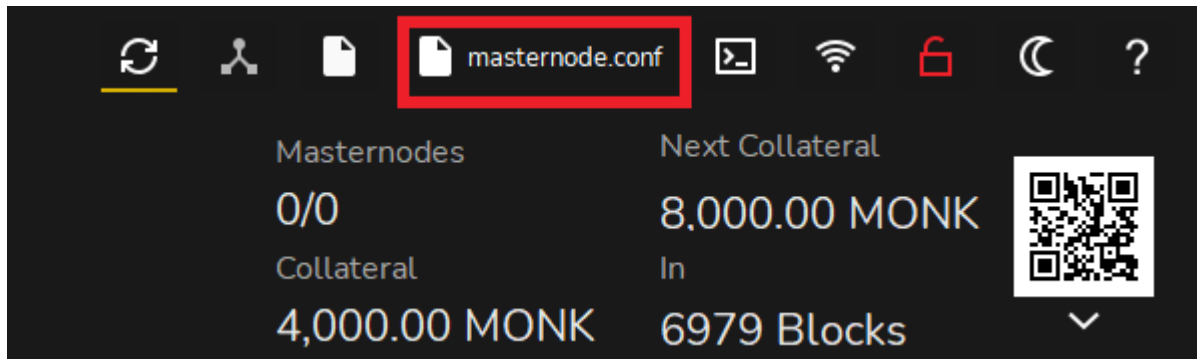
If everything went well we will see this message.  
Remember that the port in this case is 32270 (we will need it in a later step).  
You can see it at the top right in the next image.



While waiting for the wallet on the VPS to complete the synchronization, we can finish the configuration in our local wallet.

In our wallet, go to the top right in the masternode.conf icon and click on it.

As in the picture



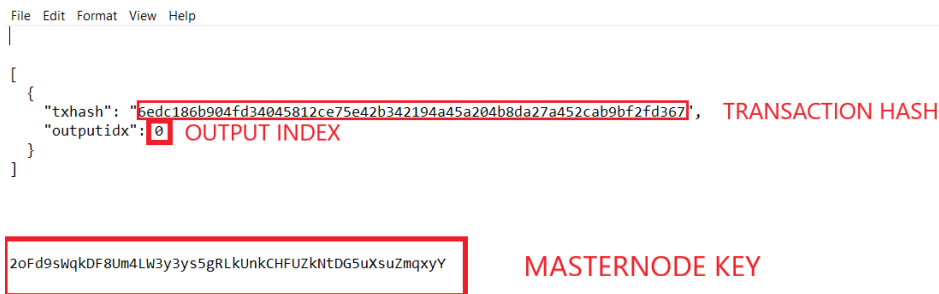


The masternodes configuration file will open in which we must enter the necessary data that will be used to start the masternode.

We must enter the following data:

- Name of the masternode (we had chosen MN1).
- IP address and Server port (the IP address 95.179.227.15 that we find on the Notepad that we had previously saved for Vultr and the port in this case is 32270 as we have seen before).
- Masternode key  
2oFd9sWqkDF8Um4LW3y3ys5gRLkUnkCHFUZkNtDG5uXsuZmqxyY  
(we can find it in the Notepad where we saved it in precedence).
- Transaction hash  
6edc186b904fd34045812ce75e42b342194a45a204b8da27a452cab9bf2fd367  
(the long string of letters and numbers we saved earlier in the Notepad)
- Output index 0

In the image there is a legend showing the last three steps.



```

File Edit Format View Help
[
{
  "txhash": "6edc186b904fd34045812ce75e42b342194a45a204b8da27a452cab9bf2fd367",
  "outputidx": 0
}
]

```

TRANSACTION HASH

OUTPUT INDEX

MASTERNODE KEY

2oFd9sWqkDF8Um4LW3y3ys5gRLkUnkCHFUZkNtDG5uXsuZmqxyY

Now all the above data must be inserted in the masternode.conf file

Taking care to separate them with a space and without a new line

NB The IP and port must be separated by a colon.



```

*masternode.conf - Notepad
File Edit Format View Help
# Masternode config file
# Format: alias IP:port masternodeprivkey collateral_output_txid collateral_output_index
# Example: mn1 127.0.0.2:32270 93HaYBVUCYjEMeeH1Y4sBGLALQZE1Yc1K64xiqgX37tG8DQL8Xg 2bcd3c84c84f87eaa86e4e56834c92927a07f9e18718810b92e0d0324456a67c 0#
MN1 95.179.227.15:32270 2oFd9sWqkDF8Um4LW3y3ys5gRLkUnkCHFUZkNtDG5uXsuZmqxyY 6edc186b904fd34045812ce75e42b342194a45a204b8da27a452cab9bf2fd367 0

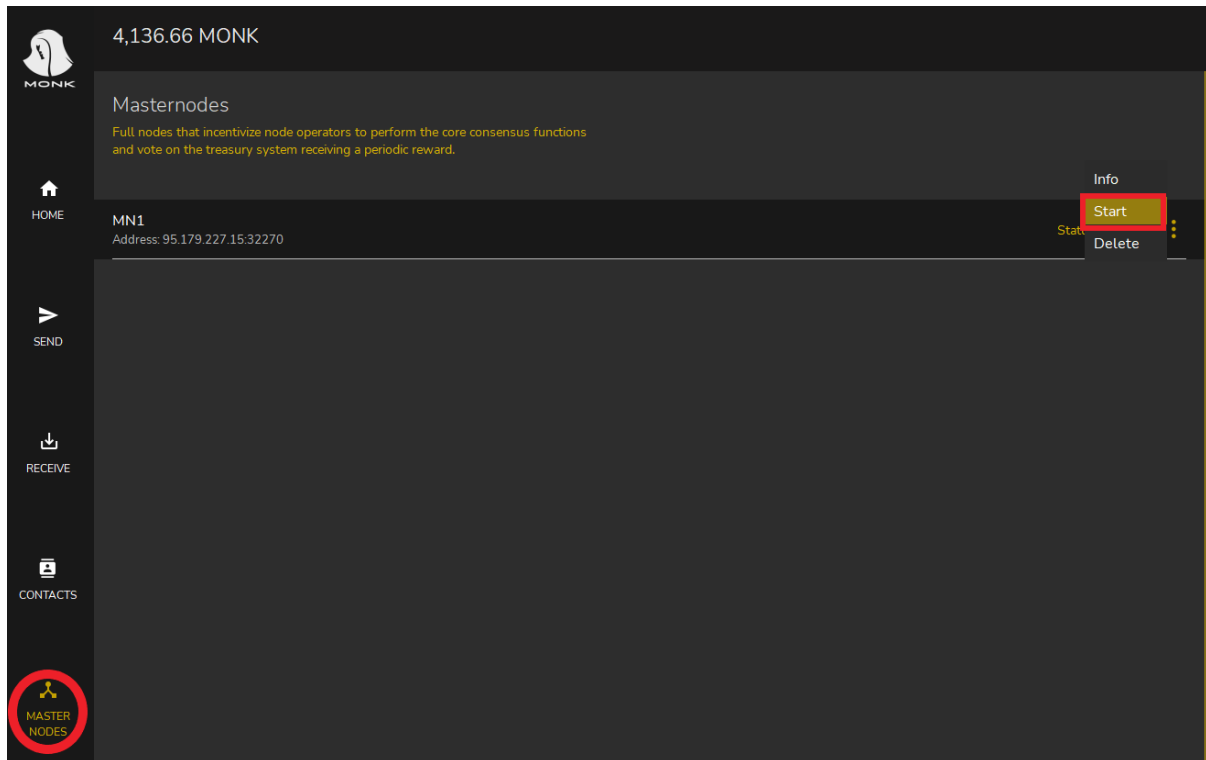
```

We save the file, close the wallet and start it again.

Now let's go to the left menu and click on masternodes.

Then we start our masternode by clicking on the three dots on the right and then on start.

As in the pictured



We now have our masternode!