



Masternode Setup Guide

What this guide is

This guide is aimed at anyone who wants to run a Reliance masternode on an Ubuntu 16.04 VPS.

What this guide is not

A tutorial for linux. What I mean by that, is that I will not go into details of what the commands are or do. You can google them. If you don't like Linux or are afraid of it, now is your chance to learn a bit :-).

I will **not** make a Windows masternode tutorial!

What you need:

5000.1 REL, 5000 for the node and some change to cover the fees.

A linux VPS with a static public IP address

Some time and a coffee (or a beer)

Support:

Go to discord! :)

Was it useful and you feel generous? You can tip:

REL: RVpbYGeztQCdqkE2tzzR1p4wJDGPWsAGVZ

ETH: 0x9d3b0b133d87e9449ea4287fa4aefa64cb20b867

LTC: LciuWJW9RPfwU6WCx4c2hGeqyKPQWWKhh

BTC: 14Pg9yeNqBC4NP7qUYMA2VkpBaAcqtSJUE

BCH: 15bZRHHHrhtkoEGaoKRcUQUhvQLpDU2FY

Once you have your VPS up and running, I would suggest you create a user and do not run a REL daemon/masternode as root. For the example, the user will be *reluser* As root type:

```
addusr reluser
```

Follow the steps on the screen (password etc.)

When done, add the user to the sudoers:

```
sudo usermod -aG sudo reluser
```

Now lets install the dependencies we will need to compile and run the daemon.

```
sudo apt-get -y update
```

```
sudo apt-get install libssl-dev libdb-dev libdb++-dev libgrencode-dev  
qt4-qmake libqtgui4 libqt4-dev git
```

```
sudo apt-get install libminiupnpc-dev libminiupnpc10 libboost-all-dev  
build-essential git libboost1.58-all-dev
```

```
sudo apt-get install ntp unzip git build-essential libssl-dev  
libdb-dev libdb++-dev libboost-all-dev libgrencode-dev aptitude &&  
aptitude install miniupnpc libminiupnpc-dev
```

If you get:

```
E: Could not open lock file /var/lib/dpkg/lock - open (13: Permission denied)
```

```
E: Unable to lock the administration directory (/var/lib/dpkg/), are you root?
```

Even though you executed as sudo:

```
sudo su
```

And try again. Once installed, go back to your reluser:

```
su reluser
```

```
sudo apt-get install libssl-dev libboost-dev
```

We now need to create a swap file. This is not mandatory but useful since we are going to compile. If your VPS has 4Gb of ram, 1Gb swap file should be enough but we'll make it 2Gb.

It might be useful to check if you already have a swap file already. Issue:

```
Free -h
```

If you have a swap file already, it will be listed there.

Otherwise:

```
fallocate -l 2G /swapfile
```

```
chown root:root /swapfile
```

```
chmod 0600 /swapfile
```

```
sudo bash -c "echo 'vm.swappiness = 10' >> /etc/sysctl.conf"
```

```
mkswap /swapfile
```

```
swapon /swapfile
```

Now go to your home directory & clone the project:

```
cd /home/reluser
```

```
git clone https://github.com/relianceproject/Rel
```

Go to the folder:

```
cd Rel/src
```

And compile:

```
sudo make -f makefile.unix
```

This will take up to 10-15 minutes, so take a break and come back later.

If you get this error:

```
g++: error: /home/reluser/Rel/src/leveldb/libleveldb.a: No such file or directory
```

```
g++: error: /home/reluser/Rel/src/leveldb/libmemenv.a: No such file or directory
```

Then in /home/reluser/Rel where you cloned the project, go in the leveldb folder:

```
cd leveldb
```

```
sudo chmod 775 *
```

```
cd ..
```

And launch again:

```
Sudo make -f makefile.unix
```

When it's done compiling, move the daemon to the bin folder so you can execute it from the command line:

```
sudo cp Reld /usr/local/bin
```

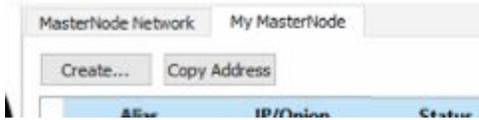
You can now start the daemon by issuing:

```
Reld --daemon
```

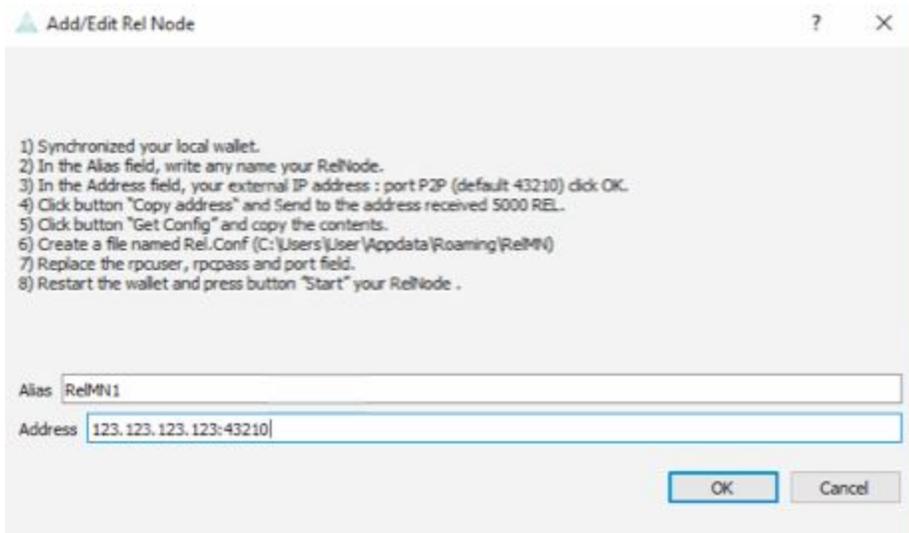
It should say the server started which will create the initial folder under `/home/reluser/.RelMN`

We are done for now for the daemon part.

Go back to your main wallet where you have your coins. Go to the masternode tab and hit the create button under My Masternode:



Give it an alias and a public ip:port pair. This obviously is the public ip of your VPS along with the port your node will listen on. By default, it's 43210:

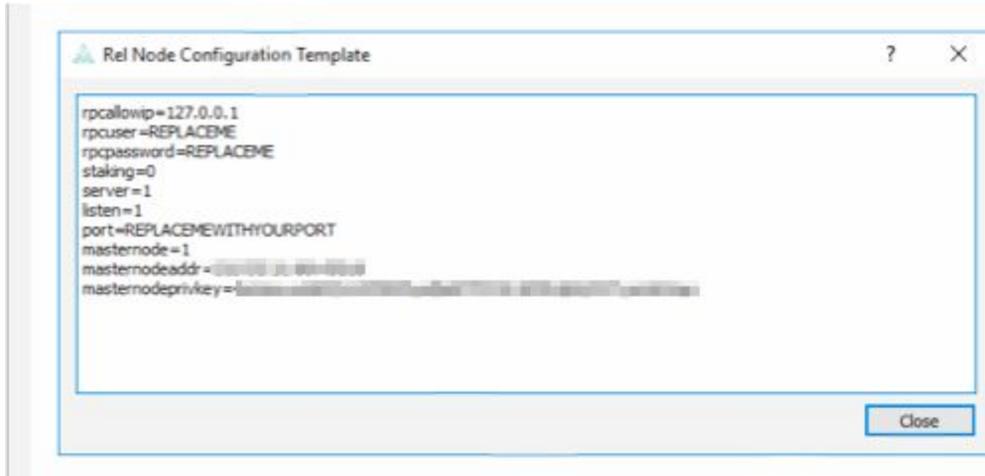


Hit the OK button. As you will have guessed, all you really need to do is follow the instructions.

Now copy the address from the node you created and send 5000 REL to it and wait 11 confirmations:



Unlike other coins, you won't need to edit a masternode.conf file here. Hit the Get Config button which will show everything you will need to start your masternode:



Go back to your VPS and stop your node:

```
Reld stop
```

Then:

```
cd /home/reluser/.RelMN
```

And edit the Rel.conf file. I like to use vim or vi, but you can use any editor you like nano:

```
vim Rel.conf
```

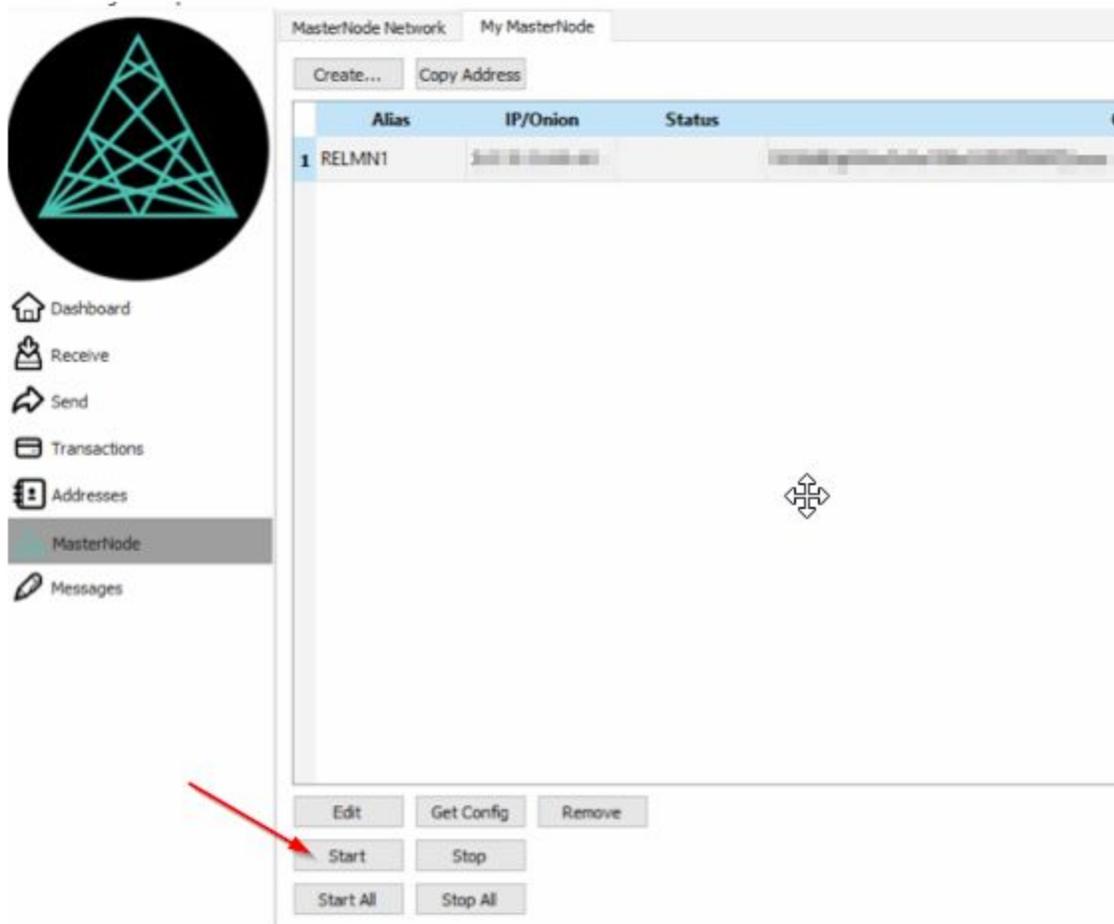
And add whatever information is missing in your conf.file from the screenshot above. It should look something like this:

```
rpcuser=reluser
rpcpassword=relpassword
port=43210
rpcallowip=127.0.0.1
listen=1
daemon=1
server=1
maxconnections=256
externalip=23.95.214.48
masternodeprivkey=
masternode=1
addnode=23.95.214.48:22222
addnode=23.95.214.48:44444
```

Save and quit and restart your node:

```
Reld --daemon
```

Go back to your windows wallet and start your node by clicking the start button:



You should get a message saying the node was successfully started. If not, ensure your wallet is fully unlocked if you encrypted it.

On your vps, you can issue:

```
Reld masternode status
```

```

root@kali:~# Reld masternode status
{
  "vin" : "CTxIn(COutPoint(0a81523cdb, 1), scriptSig=)",
  "service" : "127.0.0.1:8332",
  "status" : 9,
  "pubKeyMasternode" : "0340378925c97cc030da5e552335c6c68e24c2baf6227c270c810999999999999",
  "notCapableReason" : ""
}
root@kali:~#

```

Status should be 9. If you go back to your windows wallet, you should also see your node started in the masternode list in the masternodes tab. As of now, the first rewards should come in after about 20-30 minutes. This will increase as more nodes are brought online.

