Crowdcoin Masternode Setup Guide
on UBUNTU VPS Server

We need at least 1GHz and 2GB of Ram, if you don't have enough ram you can do a swap file

For this you can use these step by step guide here

Before anything   set up initial server using this guide here

List of things that are essential:

1. 1000CRC (+1 CRC to cover any TX fees)
2. IP address
3. And the Obvious a VPS server

Now we are Ready to do the Node

Step 1: Install the packages

```
sudo apt-get install build-essential libtool automake autoconf
sudo apt-get install autotools-dev autoconf pkg-config libssl-dev
sudo apt-get install libgmp3-dev libevent-dev bsdmainutils libboost-all-dev
sudo add-apt-repository ppa:bitcoin/bitcoin
sudo apt-get update
sudo apt-get install libdb4.8-dev libdb4.8++-dev
sudo apt-get install libminiupnpc-dev
```

Step 2: Build the Wallet

Clone the git from here: https://github.com/crowdcoinChain/Crowdcoin

```
sudo apt-get install git
git clone https://github.com/crowdcoinChain/Crowdcoin.git
```

Step 3: Go to the Crowdcoin folder that you have created and execute this :

```
cd Crowdcoin
chmod 755 autogen.sh
./autogen.sh
./configure
chmod 755 share/genbuild.sh
make
```

Step 3: Start Headless Client

```
cd src
./Crowdcoin -daemon
```

Now we are going back to our Windows Wallet the Local wallet that you keep your coins

Step 1: Go to the wallet Tools-> Debug Konsole and enter

```
getnewaddress MN1
```

Copy the address that it give you

Step 2: Send 1000crc to the address that you copied

Wait for 1 Confirmation

Then go to Debug Console again and type

masternode outputs

Now you should see 2 lines

 tx_id

digit

Save these 2 lines to a Text document

I assume you have the debug console open type masternode genkey this is your masternode privat key copy it in a text document we will be needing it later

Step 3: Go to your Crowdcoin data directory it is usualy in

C:\Users\user1\AppData\Roaming\CrowdcoinCore

Open the masternode.conf and type

MN1 IP: 12875 *masternodeprivkey tx_id digit*

 Save and close

Ok now we are going Back to our Server wallet

Go to crowdcoin folder by typing

cd /home/user/.CrowdcoinCore

The *user* corresponds to your computer username in which you are logged in.

```
nano crowdcoin.conf
```

Now copy and paste these


```
rpcuser=user
rpcpassword=pass
rpcallowip=127.0.0.1
listen=1
server=1
daemon=1
staking=0
externalip=IP: 12875
masternode=1
masternodeprivkey=masternodeprivkey
```


Username and pass can be of your choice

IP should be your VPS IP address

The Port should always be 12875

The masternodkey is the one that you have copied paste it there

Now Ctrl+X then Y then Enter

Execute that   `sudo ufw allow 12875/tcp`

    Note that you have to open the port 1287 a5

Now   start the masternode by navigating to your folder


```
cd
cd Crowdcoin/src/
./crowdcoind -daemon
```


Wait 15 minutes

After that go back to the main Wallet then go to Masternode
Tab and click Start Allias and your masternode should be up

        Note1 You must w8 for at least 15 Confimartion before
        starting the masternode

        Note2 You can check the status of your Masternode by going
        to your VPS wallet and typing

`./crowdcoin-cli masternode status`

SENTINEL

Sentinel is a watchdog for your Masternode which communicates to the network that your node is working properly

OK assuming that you are fully synced and have your masternode running on A watchdog status now we will do the sentinel .

Step 1: Instal the prerequisites

      `sudo apt-get update`

      `sudo apt-get install-y git python-virtualenv`

Step 2: Go to the crowdcoincore folder

`cd .crowdcoincore`

Step 3: Clone sentinel

`git clone https://github.com/dashpay/sentinel.git`

`cd sentinel`

Step 4: Create virtual python environment

`sudo apt-get install-y virtualenv`

Step 5: Instal sentinel depencies

`venv/bin/pip install-r requirements.txt`

Step 6: Test sentinel

`nano sentinel.conf`

Uncomment the #dash_conf line at the top and add the path to yours MN crowdcoin.conf

Save and close

Now run:

`venv/bin/python bin/sentinel.py`

You will see a message about not fully sync to the network this is ok: run

`Sudo apt-get install-y virtualenv`

Step 7: Wait the reindex and to fully sync go to crowdcore folder

`cd .crowdcoincore`

`./crowdcoin-cli mnsync status`

Assuming it s fully sync you should see this

`{`

`"AssetID": 0,`

`"AssetName": "MASTERNODE_SYNC_FINISHED",`

`"Atempt": 0,`

`"IsBlockchainSynced": true,`

`"IsMasternodeListSynced": true,`

`"IsWinnersListSynced": true,`

`"IsSynced": true,`

`"IsFailed": false`

`}`

Step 8: now go back to your local wallet and run your masternode

`walletpassphrase <your passphrase> 120`

`masternode start-alias <your label>`

Step 9: Test sentinel

`cd sentinel`

Now run

`venv/bin/python bin/sentinel.py`

It should return nothing   which means it works